

SCOTTISH HOSPITALS INQUIRY

Hearing Commencing 9 May 2022

Bundle 3 - Governance

Volume 3 (of 3)

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Re-provision of RHSC and DCN at Little France

<p>ITPD: Volume 3 (Part 6 Section 3 Sub-Sections A to E of the Schedule to the Project Agreement) The Board's Construction Requirements</p>	<p>Doc No: Title</p> <p>Revision: Date:</p>	<p>Volume 3 Board's Construction Requirements Rev A March 2013</p>
<p>Author: NHS Lothian (The Board).</p>		

SCHEDULE TO THE PROJECT AGREEMENT

PART 6

Section 3: The Board's Construction Requirements

Sub-Section A: Introduction

Part 6 Section 3 of the Project Agreement encompasses the construction requirements of the Board and is divided into the following Sub-Sections and Appendices:

Sub-Section A Introduction

Sub-Section B Definitions and Abbreviations

Sub-Section C General Requirements

This Sub-Section contains overall philosophy and standards for the design, construction and finish and associated infrastructure, both internal and external for the Works and/or the Facilities.

Sub-Section D Specific Clinical Requirements

This Sub-Section contains design philosophy and specific requirements for each of the Clinical Services to be provided from the Facilities.

Sub-Section E Specific Non-Clinical Requirements

This Sub-Section contains Soft FM summary interface specifications and other Non-Clinical specifications related to the Works and/or the Facilities.

Appendix A Interface with Campus Site and/or Campus Facilities

Part 1 – Interface Construction Matters and Interface Proposals

Part 2 – Interface Proposals Procedure

Part 3 – General Matters

Annex 1 – Form of Notice

Appendix B Interface Output Specification

Appendix C Environmental Matrix

Appendix D Not Used

Appendix E Initial Drainage Proposal

Appendix F Access Strategy

Appendix G Connection Proposal

Appendix H Construction Access Proposal

Appendix I Oversail Strategy

Appendix J Service Proposal

Appendix K Substation Proposal

Appendix L Supplemental Drainage Proposal

Appendix M TMS

SCHEDULE TO THE PROJECT AGREEMENT

PART 6

Section 3: The Board's Construction Requirements

Sub-Section B: Definitions & Abbreviations

- A. Terms used in this Schedule Part 6 Section 3 where defined in the Project Agreement shall have the meanings ascribed to them in the Project Agreement or otherwise shall have the meanings given to them as follows:-.The following abbreviations have been used in this Schedule Part 6 Section 3:

24/7	Twenty four hours a day seven days a week
ACS	ACS Accreditation (formerly CORGI Regulations)
AEDET	Achieving Excellence – Design Evaluation Toolkit
AFD	Action for Disability
AHU	Air Handling Unit
AGSS	Anaesthetic Gas Scavenging System
BCR	Board's Construction Requirements
BEAM	Building Environment Assessment Methodology
BMS	Building Management System
BREEAM	BRE Environmental Assessment Method
BS	British Standard
BSRIA	Building Services Research & Information Association
CAA	Civil Aviation Authority
CAMHS	Child and Adolescent Mental Health Service
CCTV	Closed-circuit television
CDM	CDM Regulations
CEL	Scottish Government Health Directorates Circulars
CEN	European Committee for Standardisation
CHP	Combined Heat & Power
CIBSE	Chartered Institution of Building Services Engineers
COSHH	Control of Substances Hazardous to Health

CP	Code of Practice
CYPH	Children and young peoples hospital which may otherwise be known as RHSC (Royal Hospital for Sick Children)
DCN	Department of Clinical Neurosciences which forms part of the Facilities
DDI	Direct Dial In
DGH	District General Hospital
DHW	Domestic Hot Water
DoE	Department of the Environment
ED	Emergency Department
EMS	Environmental Management System
EN	Euronorm Standards
EPC	Energy Performance Certificate
EU ETS	European Union Emission Trading System
HBN	Health Building Notes
HDL	Health Department Letters
HDU	High Dependency Unit
HFN	Health Facilities Notes
HFS	Health Facilities Scotland
HGN	Health Guidance Notes
HIS	Healthcare Improvement Scotland
HSE	Health & Safety Executive
HSDU	Hospital Sterilisation and Disinfection Unit
HTM	Health Technical Memoranda
HVAC	Heating Ventilation & Air Conditioning
HWS	Hot Water Supply
ICAO	International Civil Aviation Organisation
ICT	Information & Communication Technology

IDS	Intruder Detection System
IES	Illuminating Engineering Society
IEE	Institution of Electrical Engineers
IHT	Institute of Highways & Transportation
IP	Interpenetration Protection rating
IPS	Isolated Power Supply
IT	Information Technology
ITPD	Invitation to Participate in Dialogue
JAA	Joint Aviation Authority
LAN	Local Area Network
LEV	Local Exhaust Ventilation
LPS	Loss Prevention Standard
MAOT	Mobile Air Operations Team
MCA	Maritime and Coastguard Agency
MEL	Management Executive Letter (now known as Health Department Letters – HDL)
MRI	Magnetic Resonance Imaging
MTBF	Mean Time Before Fail
MOD	Ministry of Defence
NBS	National Building Specifications
NEAT	NHS Environmental Assessment Tool
NHBC	National House Building Council
NHS	National Health Service
NHSIA	National Health Service Information Authority
NHSL	NHS Lothian
PA	Public Address system
PBX	Private Branch Exchange
PCIU	Percutaneous Cardiac Investigation Unit

PCP	Project Co's Proposals
PICU	Paediatric Intensive Care Unit
PIR	Passive Infra-red
PoE	Power-over-Ethernet
PPE	Personal Protective Equipment
PPG	Planning Policy Guidance
RBD	Reliability Block Diagram
RDD	Reviewable Design Data
RFFS	Rescue and Fire Fighting Services
RHSC	Children and young peoples' hospital (which may be known as CYPH and/or Royal Hospital for Sick Children) which forms part of the Facilities
SAR	Search and Rescue
SCIEH	Scottish Centre for Infection and Environmental Health
SCIM	Scottish Government Capital Investment Manual
SEHD	Scottish Executive Health Department
SEPA	Scottish Environment Protection Agency
SFPN	Scottish Fire Practice Notes
SFT	Scottish Futures Trust
SGHSCD	Scottish Government Health and Social Care Directorates
SHFN	Scottish Health Facilities Notes
SHGN	Scottish Health Guidance Notes
SHPN	Scottish Health Planning Notes and Scottish Hospital Planning Notes
SHS	Scottish Healthcare Supplies
SHTM	Scottish Health Technical Memoranda
SHTN	Scottish Hospital Technical Notes
SI	International System of Units
SUDS	Sustainable Urban Drainage System

TPO	Tree Preservation Order
UPS	Un-interruptible Power Supplies
VIE	Vacuum Insulated Evaporator
VDU	Visual Display Unit
VoIP	Voice over Internet Protocol (or Voice Over IP)
WC	Water Closet
WRAP	Waste & Resources Action Programme

B. The following additional definitions have been used in this Schedule Part 6 Section 3:

Adaptability Strategy	Means the Adaptability Strategy, provided by Project Co to define their strategy for ensuring appropriate provision for adaptability and flexibility of the Facilities
Appendix A	Means Appendix A (Interface with Campus Site and/or Campus Facilities) annexed to this Sub-Section C of Section 3 (<i>Board's Construction Requirements</i>) of Schedule Part 6 (<i>Construction Matters</i>) as varied, amended or supplemented from time to time in accordance with the Project Agreement;
Benefit Realisation Plan	A benefits realisation plan acts as an overview of the main milestones detailed in each benefit profile. It serves as a management tool to monitor, track and manage the collective set of benefits associated with a project. The key activities (e.g. measurements, evaluations etc), from each benefit should be drawn together to form the consolidated plan. This will provide a centralised resource to help keep track of what needs to be done, when and by whom, to manage the successful realisation of benefits.
Blue Light	Ambulance, police and fire services
Car Park B	The car park which ceases to be used as a car park and is the Site
Certified Wood	Timber certified by Forest Stewardship Council
Corporate Greencode	Corporate GREENCODE® is a suite of software, templates and support materials developed by the NHS for the NHS. It is maintained by Health Facilities Scotland (HFS) to: <ul style="list-style-type: none"> • guide you through the development and implementation of a corporate Environmental Management System (EMS) and

- provide tools to help you run and maintain your corporate EMS.

Council	The City of Edinburgh Council
Design Champion	Person in the Board who promotes the importance of achieving quality in capital developments and in ongoing initiatives to improve both the patient environment and the working lives of staff
Encode	HTM 07-02: EnCO2de – Making energy work in healthcare
Environmental Matrix	Means the Environmental Matrix, which details the room environmental condition requirements of the Board required within each department / unit / space / area. The title is Reference Design Envisaged Solution – RHSC / DCN Environmental Matrix version third issue as set out in Appendix C of this Section 3 (<i>Board's Construction Requirements</i>) of Schedule Part 6 (<i>Construction Matters</i>) (as varied, amended or supplemented from time to time in accordance with the Project Agreement);
Existing CAMHS	Child and Adolescent Mental Health Services currently at the Royal Edinburgh Hospital and Forteviot at the Existing RHSC
Existing DCN	Department of Clinical Neurosciences, Western General Hospital, Edinburgh
Existing RHSC	Royal Hospital for Sick Children, 9 Sciennes Road, Edinburgh
Family Council	Works collaboratively with partners, such as the Board, RHSC reprovision team and other forums, to ensure that the family perspective is integrated into current service provision, including redesign, for Children & Young People (C&YP) services
Firecode	Firecode consists of a number of Health Technical Memoranda (HTM) which consider policy, technical guidance and specialist aspects of fire precautions. Full list of HTM obtained from http://www.dh.gov.uk/en/Publicationsandstatistics/Letterandcirculars/Firecode/DH_609
Good Practice Guidance for selecting materials	The edition of the publication entitled “Good practice in the selection of construction materials” (British Council for Offices (BCO): 2011) or any amended or updated version as at Financial Close.
Green Travel Plan	Means the NHS Lothian Sustainable Development Strategy Green Travel Plan.

HAI SCRIBE	Healthcare Associated Infection System for Controlling Risk In the Built Environment
HEAT	Means Health Improvement Efficiency and Governance, Access to Service, and Treatment Appropriate to Individuals
Hot Core	Direct vertical patient circulations route from Helipad to Emergency Department and from Emergency Department to Operating Theatres.
Identikit	Means NHS Scotland Identity Guidelines
Major Incident	As defined by the Board's Major Incident Strategy Response Plan Strategic Plan Number reference HPT E023 03
NHS Requirements	Means the requirements defined in paragraph 2.3 of this Sub-Section C as the same may be amended from time to time
Nursery	Means former Acorns nursery 51 Little France Crescent Edinburgh EH16 4SA
Project Sponsor	Person who is responsible within the Board for the success of the project
Safety Action Notices	Safety Action Notices were standard priority safety warnings issued in Scotland from 1995 to 2009 when they were superseded by Medical Device Alerts (from the MHRA – Medicine and Healthcare Products Regulatory Agency) and Estates & Facilities Alerts.
Secured by Design	Is the official UK Police flagship initiative supporting the principles of 'designing out crime'
Touch Down Base	A workstation space where staff can access a PC, Telephone, Printer ,radiological examinations, patient monitoring systems, emergency nurse/patient call system and other administrative tools to assist the clinical practitioner in executing their job.
Vistamatic	Glazed secure vision panel

SCHEDULE TO THE PROJECT AGREEMENT

PART 6

Section 3: The Board's Construction Requirements

Sub-Section C: General Requirements

1 Introduction

This document sets out the key design criteria and the core requirement to create a modern facility to re-provide services from the Existing RHSC, Existing CAMHS and the Existing DCN in a single building adjoining the RIE Facilities at the Campus Site. The design shall be enduring and take account of the history, culture and physical requirements of these internationally renowned centres of excellence.

Part 6 Schedule 3 Sub-Section C forms the general construction requirements included in the Board's Construction Requirements. Project Co shall satisfy all the requirements under this Sub-Section C.

This (and subsequent) sections of Sub-Section C of the Board's Construction Requirements outlines the overall aims of the Board with regard to the design quality of the Facilities. This Sub-Section C shall be read in conjunction with, but not limited to the following documents:

The Board's Policies; and

Project Specific Requirements defined in Sub-Sections D and E, and Appendices to this Schedule Part 6 Section 3.

Sub-Section C is divided into the following paragraphs.

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2 Project Wide Requirements

The Board's vision is to provide high-quality, patient-centred services from modern Facilities. The new hospital is a single building supported by the separate energy centre but Project Co may provide other buildings on the Site to house plant and services. Where the term "building" is used, this refers to the RHSC and DCN hospital building. The energy centre and Project Co's other buildings shall meet the relevant requirements of Part 6 Schedule 3 Sub-Section C of the Board's Construction Requirements. The physical design and access to the Facilities shall promote and enhance the delivery of that full range of services, all to the benefit of patients, visitors, public and staff alike. Additionally the design strategy shall respond to the needs and aspirations of a variety of service providers including the NHS, local authorities and other community based services. The wish of the Board is to create a centre of excellence that may be an inspiration to others and set a benchmark of quality of sustainable design.

Project Co shall ensure the design complies with the general ethos detailed here, whilst also addressing the detailed requirements listed in the following clauses. It shall be noted that the requirements detailed are not exhaustive, and it is recognised that specific clinical needs will determine the nature and design of Facilities in some areas.

The Board requires the following matters to be addressed as part of its requirements:

- a) The need for Project Co to maintain leadership throughout to the agreed final design stage and;
- b) The Board's management team will be actively involved and will support both the project team and the clinicians.

Project Co shall support the Board's vision as stated above and develop a partnership with the Board to ensure that these aspirations are met and that Project Co co-operate fully in the evaluation of these criteria with the Board at key stages of the process.

Project Co shall ensure that the design of the Facilities draws upon and endeavours to further develop, improve and exceed current best practice (and Good Industry Practice) standards achieved in other similar schemes, and meets the requirements of the prospective patient groups, staff and the public. This philosophy of design and sustainability shall be extended across all parts of the Facilities including landscaped and external areas as well as the essential patient areas and these endeavours should extend to benefit the wider population of the community.

The Board is keen to actively participate in the design process. To facilitate this, Project Co shall engage the Board in the design and in particular the Reviewable Design Data.

2.1 Approach to Design

The Scottish Parliament has articulated the desire that Scotland becomes "***the best small country in the world***" and has further asserted that the quality of our built environment is a key factor in achieving this. The Scottish Government Health and Social Care Directorates (SGHSCD) believe that improving the quality of our caring environments is crucial to delivering the confident, compassionate Scotland that is aspired to.

The new building will follow the design aspirations and guidance laid out in the Policy on Design Quality for NHS Scotland (2010) to which the Board subscribes and implements through its Design Champion. The DCN will meet the objectives of the DCN stakeholders. Specifically for children and young people it will deliver the quality objectives laid down by the Family Council and other stakeholders in the project. The quality objectives of the children and young people's Family Council are:

- a) The new hospital will be a beautiful place with Children and Young People at the centre of a nurturing, engaged and safe community.
- b) The new hospital will provide systems and spaces that recognise the healing capacity of sustaining everyday lives and provide parallel pathways of care for patients, carers and families.

The DCN part of the Facilities will have a physical link with the existing RIE Facilities specifically with the critical care unit. Project Co should generally design and also satisfy themselves that the Facilities are capable of being so designed so that the construction and operation of the Facilities will all be within the Site subject to the rights granted to Project Co on the RIE Site and/or Bioquarter Site, as applicable, as detailed in Clause 9 (Nature of Land Interests) of the Project Agreement and subject to Appendix A. If any access or other rights are required for the construction and operation of Facilities outwith the Site and on any part of the Retained Site and/or Retained Estate and/or Bioquarter Site then Project Co will be required to notify the Board and seek agreement of the Board for the exercise of any such rights. If Project Co requires any access or other rights outwith the Campus Site and/or Bioquarter Site then Project Co recognises that consent to such rights will be required from the owner and/or operator and/or occupier of the affected property and Project Co will be responsible for obtaining any such consents.

The design will be evaluated against BREEAM 2011 New Construction (SD5073) (with BREEAM ENE1 target of 6 credits (excellent) in accordance with the BREEAM Scheme Document for New Construction (SD5073) Section 6.ENE1).

The design needs to realise the aspirations of the Benefit Realisation Plan.

The Design Champion for the project is the NHS Lothian's Project Sponsor, supported by the Director of Capital Planning and Projects, and the design process is managed by the reprovion project team.

Project Co shall take cognisance of all the architectural and building services implications of the requirements described in the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

2.2 General Requirements of the Board

Architectural and General Design

Project Co shall ensure the Facilities comply with the following general requirements of the Board:

- a) Application of the principles contained within "A Policy on Architecture for Scotland, 2001" and "A Policy on Architecture for Scotland, Public Consultation, Review of Policy" 2006 both published by the Scottish Government;

- b) Adherence to the requirements set out in CEL 19 (2010) “A Policy for Design Quality for NHSScotland, 2010 Revision published by the Scottish Government;
- c) Application of the principles contained in “Improving Standards of Design in the Procurement of Public Buildings”, 2002 published by the Office of Government Commerce;
- d) Application of the principles within the Scottish Government Health and Social Care Directorate's "A Policy on Sustainable Development for NHSScotland 2012". All NHS Scotland bodies engaged in the procurement of new healthcare buildings must carry out independent sustainability accreditation for projects;
- e) Application of the principles contained in “Healthier Places” – Architecture & Design Scotland; and
- f) Application of the principles contained in “A Vision of Health NHSScotland’s agenda for realising value in the developing healthcare estate” – Architecture & Design Scotland

Clinical Design Issues

- a) In-patients and out-patients shall have an appropriate level of privacy and allow an adequate level of observation by staff;
- b) The Facilities shall be designed to handle the projected workload;
- c) The design shall provide and promote a calm, safe working environment and shall contribute to the development of this requirement through the choice of colours, soft furnishings and the visual integration of all safety and security systems;
- d) Entrances and waiting areas shall have a light, spacious and welcoming atmosphere and the main entrances shall be immediately apparent;

General Design Issues

- a) Whilst maintaining an integrated approach to the design of the Facilities, Project Co shall ensure that individual departmental design is age-appropriate and that patient orientation and recognition of location is achieved. Project Co shall consult the Board with respect to the interior design proposals and the Board’s preferences and opinions shall be taken into account in the final choices;
- b) The Facilities shall incorporate the recommendations of "Effective Wayfinding and Signing Systems - Guidance for Healthcare Facilities" 2nd Edition 2005, NHSScotland Signage Guidelines, NHSScotland Identity Guidelines and BS8501:2002. “Graphic symbols and signs – Public information symbols” and have a co-ordinated décor and sign-posting scheme to create a safe and readily-understood patient environment;
- c) The Facilities shall incorporate appropriate standards of security, and minimise the potential for exposure to crime and vandalism. Recognising that particularly vulnerable groups will use the Facilities, security will be designed to meet the needs of all patients, visitors and staff. Vulnerable individuals include, but are not exclusive to, young children, mental health patients, and the frail and elderly. The Facilities shall meet the requirements of Secured by Design. In this respect, as part of the planning process, discussions with the Lothian and Borders Police Architectural Liaison team and Special Branch shall take place, and any comments made reflected in the Facilities as appropriate (see paragraph 3.7 of this Sub-Section C for further guidance). The security arrangements shall require to have regard to, and be compatible with the security arrangements in place for the RIE Site; and
- d) The Facilities shall be designed such that all maintenance and life cycle component replacement procedures can be carried out practically, efficiently and effectively and with minimal disruption to Clinical Services.

All standards, guidance, codes of practice and all other titled requirements that Project Co shall comply with are to be the current version of the requirement or its replacement requirement without the need for a Change. Refer also to paragraph 2.5 below.

2.3 NHS Requirements

In addition to the standards listed in paragraph 2.4 of this Sub-Section C, unless the Board has expressed elsewhere in the Board's Construction Requirements, a specific and different requirement, the Facilities shall comply with but not be limited to the provisions of the NHS Requirements as the same may be amended from time to time:

- a) The themes, issues and recommendations in "Better by Design: Pursuit of Excellence in Healthcare Buildings" by the Department of Health;
- b) New Policy on Design Quality for NHS Scotland published by SGHSCD;
- c) Firecode;
- d) HAI SCRIBE;
- e) HBN;
- f) HFN and SHFN;
- g) HGN and SHGN;
- h) HTM and SHTM;
- i) SHTN;
- j) SFPN;
- k) HDL;
- l) SHPN;
- m) NHS publication 'Performance requirements for building elements used in healthcare facilities';
- n) NHS Scotland & NHS Policies;
- o) Board Policies as scheduled and available in the Disclosed Data as such schedule and Board Policies may be amended from time to time;
- p) Health Department Letters (or Management Executive Letters) as appropriate published by SEHD and SGHSCD;
- q) Safety Action Notices published by NHS Scotland;
- r) Healthcare Improvement Scotland (HIS);
- s) NHS Model Engineering Specifications;
- t) Department of Health publication "Better by Design";
- u) Corporate Greencode;
- v) NHS Scotland Fire Safety Management, incorporating NHS Scotland Firecode;
- w) Hazard Notices issued by NHS Scotland; and
- x) HSC 1999/123;

i. Firecode

Project Co shall ensure the Facilities comply with the NHS Scotland Fire Safety Management - a suite of documents which explains the policy and technical guidance in fire precautions in hospitals and other healthcare premises, comprising the Health Facilities Scotland Fire Safety Policy, the Scottish Health Technical Memoranda (SHTM) and Scottish Fire Practice Notes (SFPN) which all comprise NHS Scotland Firecode, the Fire Safety Documentation Reference Guide and A Model Management Structure for Fire Safety.

Project Co shall prepare proposals in accordance with NHS Scotland Firecode to be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement prior to the submission of the proposals for approval by the Relevant Authority including without limitation building control department.

In the event of a conflict between the requirements of the local building control officers and NHS Scotland Firecode the more onerous requirements shall take precedence. Project Co shall notify the Board as soon as such conflict is known or suspected and shall further advise the Board of Project Co's proposed relevant design solution as early as possible before formal submission for review by the Board. When the more onerous requirement is to be used the Board will have the right to decide what constitutes the more onerous requirement.

Any fire strategy which affects the Site will also have to have regard to, be compatible with and operate in conjunction with the fire strategy and procedures for the RIE Facilities and/or Retained Estate, as applicable.

ii. Health Building Notes (HBN)

Project Co shall take fully into account the guidance and advice included within HBN. Project Co shall ensure the Facilities comply with the requirements of HBN and shall adopt as mandatory any recommendations.

iii. Health Facilities Notes & Scottish Health Facilities Notes (HFN & SHFN)

Project Co shall, in relation to all SHFN and all HFN (except HFN where an SHFN exists with the same number and covering the same subject matter): take fully into account the guidance and advice included within such SHFN and HFN; ensure that the Facilities comply with the requirements of such SHFN and HFN; and adopt as mandatory all recommendations and preferred solutions contained in such SHFN and HFN.

iv. Health Guidance Notes & Scottish Health Guidance Notes (HGN & SHGN)

Project Co shall, in relation to all SHGN and all HGN (except HGN where an SHGN exists with the same number and covering the same subject matter): take fully into account the guidance and advice included within SHGN and HGN. Project Co shall ensure the Facilities comply with the requirements of SHGN and HGN and shall adopt as mandatory any recommendations.

v. Health Technical Memoranda & Scottish Health Technical Memoranda (HTM & SHTM)

Project Co shall, in relation to all SHTM and all HTM (except HTM where an SHTM exists with the same number and covering the same subject matter): take fully into account the guidance and advice included within such SHTM and HTM; ensure that the Facilities comply with the requirements of such SHTM and HTM; and adopt as mandatory all recommendations and preferred solutions contained in such SHTM and HTM.

vi. Scottish Hospital Technical Notes (SHTN)

Project Co shall, in relation to all SHTN take fully into account the guidance and advice included within such SHTN; ensure that the Facilities comply with the requirements of such SHTN; and adopt as mandatory all recommendations and preferred solutions contained in such SHTN.

vii. Scottish Fire Practice Notes (SFPN)

Project Co shall, in relation to all SFPN take fully into account the guidance and advice included within SFPN. Project Co shall ensure the Facilities comply with the requirements of SFPN and shall adopt as mandatory any recommendations.

viii. Scottish Government Health Directorates Circulars (CEL and HDL)

Project Co shall, in relation to all CEL and HDL take fully into account the guidance and advice included within CEL and HDL. Project Co shall ensure the Facilities comply with the requirements of CEL and HDL and shall adopt as mandatory any recommendations.

ix. Scottish Health Planning Notes and Scottish Hospital Planning Notes (SHPN)

Project Co shall take fully into account the guidance and advice included within SHPN. Project Co shall ensure the Facilities comply with the requirements of SHPN and shall adopt as mandatory any recommendations.

x. Sustainability

Project Co shall comply with the requirements set out in "A Policy on Sustainable Development for NHSScotland 2012". This policy supersedes and incorporates NHS HDL (2006)21 "An Environmental Management Policy for NHSScotland".

Project Co shall comply with the requirements set out in HTM 07-02 EnCO2de – making energy work in healthcare.

Project Co's proposals shall facilitate the achievement of an effective Environment Management System; the exemplar tool is Corporate Greencode's objectives.

Project Co's proposals shall allow the Facilities to achieve as a minimum "very good" rating when subjected to a BREEAM 2011 New Construction (SD5073) and BREEAM ENE1 target of 6 credits (excellent) in accordance with the BREEAM Scheme Document for New Construction (SD5073) Section 6.ENE1

assessment.

Council requirements and NHS Policies including CEL 2 (2012), A Policy on Sustainable Development for NHSScotland 2012 to be read in conjunction with “A Sustainable Development Strategy for NHSScotland 2012”, “Sustainable Development in the NHS”, 2001 and, “NHS Estates, Sustainable Development: Environmental Strategy for the National Health Service,” 2005.

xi. General

Project Co shall take fully into account all health building briefings and planning guidance relevant to the briefing, design and construction of an acute general hospital, particularly but not limited to the material published by SEHD and NHS Estates guidance formally promulgated for use in Scotland.

Project Co shall also take fully into account the guidance and advice included within the following publications as the same are amended from time to time:

- a) Enhancing privacy and dignity-achieving single sex accommodation;
- b) National standards of cleanliness for the NHS Scotland;
- c) Quality Guidelines: Access for People with Disabilities (April 2000);
- d) Infection Control in the Built Environment (SHFN 30 & HAI-SCRIBE);
- e) National Standards of cleanliness for the NHS Implementation Guidance Toolkit;
- f) Standards for Environmental Cleanliness in Hospitals; and
- g) Scottish Infection Manual – “Managing the Risk of HAI in NHS Scotland”.

Project Co shall ensure the design of the Facilities incorporates the following requirements;

- a) Minimisation of the need for staff to be with patients in secluded or isolated parts of the building;
- b) The layout of the inpatient units shall discourage patients from leaving the units except when authorised to do so. Project Co shall give due consideration to channelled exit routes that require the negotiation of staffed areas; and
- c) Ease of patient observation by staff.

2.4 Minimum Design & Construction Standards

Project Co shall also ensure that the Facilities comply with Good Industry Practice, NHS Scotland requirements, relevant statutory requirements (including highways) and required consents including, but not limited to, the following as the same may be amended from time to time:

- a) Construction (Design and Management) Regulations 2007;
- b) Management and Safety at Work Regulations 1999;
- c) Health & Safety legislation, including all UK and Scottish Statutory Instruments;
- d) Recommendations of the Health and Safety Executive;

- e) Control of Substances Hazardous to Health (COSHH) Regulations 2002 and amendments;
- f) Manual Handling Operations Regulations 1992;
- g) Health and Safety (Display Screen Equipment) Regulations 1992;
- h) Workplace (Health, Safety and Welfare) Regulations 1992;
- i) BS OHSAS 18000:2007;
- j) Quality Assurance System to BS EN ISO 9000 and 9001;
- k) The Equality Act 2010;
- l) The Climate Change (Scotland) Act 2009;
- m) "Better Public Building" by Department of Trade & Industry;
- n) The Building (Scotland) Act 2003 and its most recent amendments;
- o) The Fire (Scotland) Act 2005 and its most recent amendments;
- p) The Fire Safety (Scotland) Regulations 2006;
- q) The Building (Scotland) Regulations 2004 and its amendments;
- r) The Non-Domestic Technical Handbook 2011 to The Building (Scotland) Regulations 2004 and its amendments
- s) Scottish Fire and Rescue Service and NHS Lothian Fire Officer's requirements and fire safety requirements, including, but not limited to the Board's Fire Strategy, Fire Safety for NHS Scotland 2011, CEL 11(2011), Practical Fire Safety Guide for Healthcare Premises by Scottish Government and NHS Scotland Firecode series;
- t) Minimum requirements of the relevant utilities companies, and the Board;
- u) Requirements of The City of Edinburgh Council's Building Control Officer, Fire Officer and Environmental Health Officer;
- v) Relevant British Standards, Codes of Practice, or equivalent European industry recognised standards;
- w) Eurocodes;
- x) Building Research Establishment Digest Recommendations;
- y) Local Bye-Law and Regulations;
- z) Scottish Centre for Infection and Environmental Health guidance / recommendations;
- aa) Treasury Taskforce Private Finance Technical Note No. 7: How to Achieve Design Quality in PFI Projects;

- bb) The requirements of the National Radiological Protection Board;
- cc) Radiological Protection Act 1970;
- dd) Radioactive Substances Act 1993;
- ee) The Ionising Radiation Regulations 1999;
- ff) The Ionising Radiation (Medical Exposure) Regulations 2000;
- gg) All other bodies and authorities having jurisdiction;

Project Co shall as a minimum achieve the standards detailed in the Patient Rights (Scotland) Act 2011; and

For the avoidance of doubt, Project Co shall provide all fixed fire fighting equipment to comply with statutory requirements and the requirements and recommendations of NHS Scotland Firecode.

2.5 Hierarchy of Standards

If there is any inconsistency within the terms of this Section 3 of Schedule Part 6 (*Construction Matters*) and the Appendices then the provisions of Appendix A, Appendix B (Interface Output Specification), Appendix E (Initial Drainage Proposal), Appendix F (Access Strategy), Appendix G (Connection Proposal), Appendix H (Construction Access Proposal), Appendix I (Oversail Strategy), Appendix J (Service Proposal), Appendix K (Substation Proposal), Appendix L (Supplemental Drainage Proposal) and Appendix M (TMS) shall prevail.

Where contradictory standards / advice are apparent within the terms of this Section 3 of Schedule Part 6 (*Construction Matters*) and the Appendices then subject to the foregoing paragraph then (1) the most onerous standard / advice shall take precedence and (2) the most recent standard / advice shall take precedence. When the more onerous requirement is to be used the Board will have the right to decide what constitutes the more onerous requirement.

Where there is a conflict of interest resulting from the use of the standards / advice Project Co shall involve the Board in the decision making process. The Board shall be entitled to make the final decision regarding the standards / advice to be used for the Facilities including any contradictions that may arise between items (1) and (2) above.

NHS Scotland standards shall take precedence over equivalent NHS England and Wales's standards.

In certain instances, NHS publications include a number of options or alternative solutions. Where the Board has defined their preference specifically, Project Co shall adopt these preferences as a mandatory requirement. Where no Board preference is stated, Project Co shall engage the Board in the design development process to seek and incorporate the Board's preference within the Facilities.

While the Board has placed a clear obligation on Project Co in relation to NHS publications, it also wishes to acknowledge that in certain cases the subject matter, guidance and advice included therein may have been further developed and improved since the date of publication. In this regard, the Board does not wish to limit the use of current best practice or innovation in relation to the adoption of design standards.

For the avoidance of doubt, the Board considers NHS publications reflect minimum standards and any alternatives proposed by Project Co shall provide a similar or enhanced level of service and quality.

2.6 Information Technology & Record Information

Computer aided design shall be applied but not limited to the following:

- a) Calculations and principal energy flow analysis for plant simulation;
- b) All drawn information layouts, schematics, etc.;
- c) “As fitted” and record documentation and drawings;
- d) Electrical, mechanical and communication services;
- e) Landscaping and site planning and;
- f) Traffic modelling and;
- g) All other design or design information which Project Co is obliged to provide the Board in accordance with paragraph 4.5.17 (Completion Requirements) and/or Clause 17.18 and/or 18 of the Project Agreement.

The systems used for computer aided design, including Building Information Modelling, shall be available for use by the Board from the point of commencement of the design for the Facilities and all of the information listed above shall be made available on such systems and maintained fully up to date throughout the Works and as applicable during the Operational Term and made available at all times to the Board. This is required in order to assist with the transfer and integration of new and existing information between the Board and Project Co.

3 General Design Requirements

Project Co shall design the Facilities to address the following issues:

3.1 Character & Innovation

3.1.1 Vision

Cognisance shall be taken of the long and illustrious histories of the Royal Hospital for Sick Children and Department of Clinical Neurosciences in Edinburgh. The new building will effortlessly and efficiently support service delivery, both now and in the future, and the human needs of the people within the building; those on whom the service depends - the staff – and all those it is intended to serve. The design should be valued by the patients, staff, visitors, other users and the local community. It shall have an enduring quality that will outlive transient trends or architectural fashion and will provide a memorable landmark building of which future generations will be proud.

The design shall reinforce a strong positive image of the NHS and be identifiable with its function of care. It shall therefore represent the standards of excellence that the teams of staff at all levels are working to achieve.

The building design shall avoid being a purely utilitarian environment, neither bland nor monotonous and certainly not an “off the shelf shoe box”. Each part shall have a discrete visual identity. All vistas and focal points such as entrances should be instantly recognisable with distinctive visual interest.

It shall recognise the following human and healing aspects enshrined in NHSScotland’s vision for the healthcare estate:

- a) Uplifting – a building that people of the local area are proud of; that is a symbol of the NHS service ethos and the staff: that conveys respect to the patients and which encourages respectful behaviour in return; which offers an “architecture of hope”.
- b) Local – that one size does not fit all: that both the service configuration and the architectural expression should grow from, and support, the community needs and the unique characteristics of the place.
- c) Natural – the importance of daylight and contact with the natural environment; of knowing the time of day and weather; of being able to escape into a garden; of being sustainable and using resources efficiently.

3.1.2 Excellence for Patients

The design of buildings, external and internal appearance as well as the design of the external works, and landscape can have a positive or a negative effect upon patient care, staff experience at the work place and the way NHS healthcare buildings are perceived. Project Co shall develop design solutions which by the use of materials, lighting, shape, scale, mass and form of the building elements make a positive contribution to engendering the well-being of patients, staff and visitors.

3.1.3 Healthcare Excellence

Project Co shall develop building design solutions that:

- a) Reinforces the dependability and reassurance that the NHS means to the local community;
- b) Respects their local environment and at the same time make a positive contribution to the urban context that they are in;
- c) Clearly expresses their function in external and internal appearance;
- d) Allow patient diagnostic and treatment areas to be differentiated in design concept and detail from inpatient areas; and
- e) Reflect that design considerations such as the distribution, size and proportion of windows and the use of materials can reflect the clinical function.

These elements shall be expressed in the scale and mass of the buildings, as well as the disposition of functions, whilst sustaining its effectiveness and efficiency of its use.

3.1.4 Architectural Vision

Project Co shall develop building design solutions, which create an ordered composition of building elements in a stimulating form that successfully combines good standards of space, height, form, scale and use of materials and colours / images with associated functional requirements and the surroundings.

3.1.5 Stimulating Design

Project Co shall develop building design solutions which create a high quality, good working environment, both externally and internally, which shall provide a reassuring, enjoyable, convenient and safe hospital for all patients, their families, visitors and staff. This objective shall not be in conflict with the desire to produce a stimulating design. Project Co shall meet this objective and shall develop a design which will not date and which shall be adaptable in a way that does not destroy the original design vision / concept, whilst sustaining its effectiveness and efficiency of its use.

3.1.6 Design Innovation

The design shall reflect current and developing innovations in healthcare delivery and translate these into an innovative buildings solution including the incorporation of art integral to the architecture.

Innovation in design can range from whole concepts of hospital planning, distribution of functions etc to detail design of components, materials, spaces, use of technology etc.

3.1.7 Recognisable Quality

The Board expects high quality design to match the best national standards of healthcare provision it intends to implement.

Materials shall be substantive and of high quality. They shall be carefully detailed and constructed such that the quality is appreciated throughout the life of the Facilities. They shall retain their appearance within a compatible maintenance regime. For example, detailing of external materials shall be resistant to and shall not cause unsightly staining.

The life cycle plan and design detailing shall allow for replacement of elements of the buildings in a way that does not impair the design quality or adversely affect the service provision.

3.2 Internal Environment

3.2.1 Quality Environment

“You can’t just heal a person with medicine; the environment has to work too.”
Young People’s Advisory Group

The design of the Facilities shall create a sustainable, high quality, good working environment, both externally and internally which will provide a reassuring, relaxing, convenient and safe hospital for all patients, their families, visitors and staff.

The Board anticipate that an interior designer will be included in the Project Co’s design team to secure a clear co-ordination of the interior materials and wayfinding within the Facilities, matching the furniture, furnishings and equipment being procured by the Board.

Communal patient areas, which include spaces such as playrooms and quiet rooms, shall be domestic in design and ambience (whilst ensuring that measures to reduce the risk of transmission of infection and increase safety are not compromised). Public areas such as waiting and reception areas shall be restful, open and be well lit with natural light as far as is

practicable. They shall, as a rule, have views out to landscaped spaces that add quality and orientation.

The design shall allow for an open and friendly environment, but shall ensure privacy and dignity for patients, family members and visitors when required. To achieve this, the following features shall be incorporated:

- a) The ability for patients to see staff working within each section;
- b) The ability for staff to observe patients easily from the Touch Down Base;
- c) Where appropriate, glazed panels to have privacy control;
- d) Doors to all rooms inpatient single rooms shall have large viewing panels with privacy control;
- e) Wards and Units shall function as dedicated patient care areas and must not be designed for use nor used as thoroughfares for access;
- f) Facilities shall be sensitive to the cultural, religious and spiritual needs of patients, family members, visitors and staff;
- g) All non-clinical areas shall be designed to limit incursion into the clinical areas; this may be achieved by separate service entrances;
- h) Reception areas shall be easily accessible to visitors upon entry to the ward, department or unit;
- i) Reception areas shall facilitate dialogue with visitors of varying heights e.g. children, wheelchair users, adults, whilst maintaining staff security and privacy across the reception desk;

Wards shall be designed to maximise the efficiency of working arrangements, ensuring minimal travelling distance whilst treatment is being carried out at bedside and in clinical treatment areas within the ward environment.

Washing and toilet facilities shall be located within bed areas, and sited to allow maximum visibility into the rooms. Visual and acoustic privacy must be positively addressed in the case of shared facilities within bed bays. All washing and shower areas shall be designed to minimise the spread of infection, and meet accessibility codes, for example large doors which open outwards.

A suitable and appropriate, continuous machine cleanable floor surface is required. Refer to paragraph 5.13.2 for flooring.

The use of curtains shall be minimized wherever possible to control infection by utilising screens/blinds within glass which can be operated without touching the blind.

The location of patient entertainment systems shall not be obtrusive.

It is anticipated that ward layouts will maximise views, particularly from bedrooms. Sight lines shall be optimised for all users to enable outward visibility with consideration being given to sill heights. Windows on the ground floor will require special attention in relation to privacy and security. Account shall be taken of external environmental conditions, such as stronger winds at higher levels and window designs shall manage and control these environmental effects. The Board welcomes innovative designs and diverse approaches such as wheelchair and baby-buggy height windows which are inherently safe. Window design and specification must meet the requirements of The Building (Scotland) Regulations 2004 and its amendments and adhere to all relevant minimum NHS Requirements.

Project Co shall provide covered areas, which can be used year-round, as amenity and play space. Project Co shall provide seating and furniture in these areas.

Parents/relatives/carers normally need to take time off work to be with their child/family member in hospital. Access for them to resume normal activities, while remaining close to their child/family member, must be demonstrated within the design, e.g. internet access in quiet internal and external areas for carers.

The internal finishes must be effectively and expertly designed and co-ordinated, and furnishings, furniture and equipment must be of high standard. User representatives, via the Board's Representative must be consulted at appropriate points throughout the design, construction and operational phases to ensure that the processes and solutions are responsive to specific needs, both operationally and aesthetically, as well as maintaining corporate requirements all in liaison with the Board's Project Team.

3.2.2 Light, Colour & Texture

Colour, decoration, works of art and motifs shall be used to facilitate identity of the Facilities; and its designated areas / zones and in addition improve wayfinding. It also shall be used to create an immediate and distinct 'image' of the Facilities to visitors, which is interesting and stimulating. The use of colour shall be co-ordinated with the lighting and be appropriate for the activities in each area; toned down in certain areas e.g., recovery, rehabilitation and quiet areas; but bright and stimulating in others, such as waiting and corridor areas.

Project Co shall propose the colour scheme and any choices available, details of which shall be submitted to the Board for review by the Board in accordance with paragraph 1.2.3 of Schedule Part 8 (Review Procedure), Table of Finishes and clause 12.6 of the Project Agreement.

The design shall provide quiet, comfortable areas with pleasing outlooks easily accessible from clinical areas where patients and their families / visitors can "escape" from the clinical environment. Such areas may facilitate informal discussions with health professionals in the future, and be equipped for play / recreation.

The effective use of light is an essential component of the hospital design. Light should be used both creatively within the building and also externally to light the building and create a sense of presence and beauty. The external lighting is to be designed to illuminate main entrances to the building, for wayfinding in the dark and to promote external design features. The use of external lighting to enhance security arrangements is essential.

The use of both natural daylight and artificial light should contribute towards a high quality environment and also be energy efficient. It shall be possible to adjust lighting for reading, close and clinical work, to suit mood and condition of patient, time of day etc. Emergency lighting is required throughout the Facilities.

Natural light should be provided in public spaces and in occupied private and staff spaces within the building as far as is practicable. Natural and artificial light sources shall be designed to avoid glare and thermal gain. Changes in level shall be well lit and abrupt changes in illumination should be avoided, unless specified as a clinical requirement. Glare on reception desks, signs and notice boards must be avoided. Artificial lighting layouts particularly, but not exclusively, along areas of circulation, shall be designed to avoid the creation of a stroboscopic lighting effect.

Deep plan spaces may prove necessary in certain circumstances. In such cases, the layout must be relieved by the penetration of daylight and sunlight from adjacent courtyards or roof and light shafts.

3.2.3 Internal Spaces

All internal spaces shall be planned in accordance with the requirements of the Specific Clinical Requirements at Sub-Section D with the appropriate adjacencies and layouts.

Some spaces shall be designed to encourage social interaction for patients, visitors and staff.

Public spaces shall be used to integrate the various parts of the building, and shall be designed to avoid being a space joined by long, narrow corridors.

3.2.4 Internal Wayfinding

Design solutions shall incorporate an integrated, comprehensive wayfinding strategy that enables patients, visitors and staff to self-navigate with ease and lack of stress throughout the buildings.

The integration of works of art into the wayfinding strategy is encouraged by the Board.

The wayfinding strategy shall be designed to meet the needs of staff, patients and visitors. Routes shall be clearly defined to ensure that parts of the buildings that are restricted to staff are not used as short cuts by patients and visitors. The use of enclosed internal courtyards as an integral part of a route shall be considered.

Internal signage shall be easily understood and consistent throughout the journey from the entrance to the department reception and on to rooms. It shall not create a clutter and the use of pictograms and graphic art is encouraged.

Proposals should be developed which acknowledge the multi-sensory process used in wayfinding and which address the needs of people with impairment in touch, smell, sight or sound.

The wayfinding strategy shall embrace the Identikit toolkit guidelines published by NHS Scotland and be able to interface with what is in use within the Campus Site and Bioquarter Site.

3.3 Urban & Social Integration

3.3.1 Sense of Place

The Facilities shall be designed to complement and enhance the quality of the design in the locality in which it is sited. It shall create a welcoming, inclusive and vibrant environment, and shall enable easy access by the communities and groups who will use it.

The Facilities shall be organised to establish a continuity of building frontage and a clear definition of public and private spaces. When approaching the building the viewing of service areas or more “industrial” looking parts of the Facilities shall be avoided.

3.3.2 Neighbourhood & Community

Project Co shall ensure they are considered a responsible 'good neighbour' throughout design, construction and operation periods. The Facilities shall add value to the neighbourhood and wider community, and not detract nor be a nuisance or a burden to the environment.

The design shall reflect the importance of the Project in healthcare terms and it shall be seen as a leading edge community resource reflecting the objectives of a modern NHS.

Project Co shall provide Facilities whose overall visual impact contributes to improving civic design, and is sensitive to their relationship with the surroundings.

Careful consideration shall be given to the height of the buildings in relation to adjacent developments.

3.3.3 Site Fit

New buildings, parking areas, other infrastructure and services shall be located with regard to the existing landscape and topography. Amenity space shall be planned around the buildings at appropriate places.

The design of the Facilities shall identify areas of the Site as possible expansion zones.

3.3.4 Hard & Soft Landscaping including Garden Spaces

Project Co shall design, as an integral part of the Facilities, a hard and soft landscaping scheme that will enhance the environment of the Facilities.

The landscaping scheme shall be of a high quality and shall assist in knitting the Facilities into their surroundings. It must also provide an interlinked network of attractive public spaces for amenity and circulation for use by patients, staff and visitors.

These will form an essential clinical part of the external environment, and must be integrated with the other aspects of the external environment, building entrance areas; car parking; access roads; pavements / footpaths; and service / delivery areas. The landscape design should support and enhance the separation of pathways of pedestrians, public vehicles and delivery vehicles.

The soft landscape design and choice of plants should assist in providing a therapeutic environment and be sympathetic to the character of the existing landscape.

External hard and soft landscaping (including courtyards) shall be designed for therapeutic use and provide patient's, staff and visitors access. The landscape scheme shall facilitate security of pedestrians and avoid 'No-Go' areas. A comprehensive and integrated landscape strategy shall be developed for appropriate formal and informal treatment of public and private areas.

Project Co shall provide all the external equipment required for the external areas. Details of the extent, type and location of such equipment shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement. Notwithstanding the foregoing, the Board reserves the right to fund specific equipment from Charitable Funds and

depending on the type of specific equipment thus funded such equipment shall be governed by Schedule Part 11 (Equipment Schedule).

3.4 Citizen Satisfaction

3.4.1 Design Concept

The visual forms shall enhance the sense of place and shall exploit to best advantage the environmental qualities of the Facilities and the Retained Site and the Retained Estate.

3.4.2 Scale & Proportion

Appropriate scale and proportions shall reflect the human scale, suitable for child and adult users of the hospital, adjoining urban surroundings and the existing buildings / structures at the Campus Site. Plant rooms, lift, stair towers and the helipad shall express form and function, but they shall not be perceived as dominating and oppressive.

3.4.3 Composition

The composition of the buildings shall be complete, cohesive and well balanced in massing. The visual form shall enhance the Site and sense of place.

The overall form of the buildings shall be designed to demonstrate the individual functional needs of each part of the Facilities. These parts shall harmonise with each other and the overall site, and the concept of facilities for different age and patient groups with distinct identities shall be fully explored by Project Co.

3.4.4 Aesthetics

The overall visual form of the buildings shall combine good standards of space, height, form and scale. The form of the building shall appeal to the aesthetic senses of patients, visitors and staff as follows:

- a) The lines of the design shall clearly define forms and surfaces of the buildings;
- b) The skyline shall reflect the mass of the buildings but not be out of scale and dominating;
- c) The sky line shall not be monotonous.
- d) The solid forms shall be in scale and have harmonious shapes; and
- e) The interplay of light and shade shall add to the definition of the building form and the balance between solid and glazed elements needs to be incorporated into the design.

3.4.5 The Arts

The Board will be entitled to approve the whole art content in the Project and Project Co shall submit any artwork to the Board as Reviewable Design Data for review by the Board in

accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement before any art work is commissioned.

Project Co is required to demonstrate how art is an inherent element of the design and how it has been integrated into the building fabric such that there is differentiation between the identities of the RHSC, CAMHS and DCN areas.

The incorporation of art, its use for way finding and the enhancement of the overall therapeutic environment must be an essential requirement of the design. Work has been initiated by the Board to develop an arts strategy to support the design of a hospital, and its environs, that will promote health and wellbeing. In consultation with the Board, Project Co shall carefully consider the outputs from the 2010-2014 charitably funded Artists in Residence Programme within the RHSC and CAMHS. Documents relating to the Board's arts requirements are set out in the Disclosed Data. Project Co shall provide and install the art.

Project Co shall give careful consideration to the co-ordination and siting of artwork, so that it is multi-age appropriate, child-safe and interactive. Project Co shall ensure that all artwork conforms to the infection control standards appropriate to its location. Integration of artwork within the interior design should enhance identity at all levels – Facilities wide, departmental, main public spaces and circulation routes. To facilitate the utilisation of walls and other surfaces as art or for art, the design and positioning of engineering outlets, controls and sensors requires particular consideration. The internal wall construction and surface finishes within the Facilities shall allow for the flexible display of Artwork. Project Co's lighting design shall include for the use of illumination and spotlighting of the artwork features, or as art itself.

Project Co's design shall provide space for:

- Live arts performance and associated forms of presentation;
- The display of artwork created by children in RHSC and for the display of art competition work
- Health promotional events; and
- Public events, appeals and merchandising for fundraising / charity promotions.
- Artworks to be displayed on a rotational basis.
- Project Co shall ensure that the Facilities, where appropriate, incorporate innovative design and artworks as an integral part of the Facilities. Project Co shall:
 - a) Create and designate spaces within the Facilities (both internal and external) which will be appropriate for the integration of artwork into the designs, and ensure that these locations incorporate suitable building services and the relevant parts of the Facilities are suitably designed and constructed in all respects for the provision for placing or fixing such items such that they are displayed to their best advantage;
 - b) Liaise with the Board (or nominated representative) as ideas for arts are developed in conjunction with service users and staff, and, in conjunction with the Board, identify a shortlist of suitable artists that works may be commissioned through; and

- c) Commission such artists whose artwork has been submitted to the Board as Reviewable Design Data and approved by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement, and take full responsibility for ensuring their works are integrated into the Facilities, also ensuring that the contractor and designers involved are integrated into this process from the outset such that the creative opportunities are maximised and that functional, cost and arts programme issues are anticipated and resolved.

Project Co shall take an active and supportive role in implementing an arts and environment programme for the Facilities.

Project Co's design shall integrate such artwork features as are being transferred from the Existing RHSC and Existing DCN into the overall design philosophy for the Facilities. A schedule of the large and heavy items to be transferred, including those items to be built into the new building fabric, is detailed in the Disclosed Data. A schedule detailing the more portable items to be transferred is included in Schedule Part 11 (Equipment Schedule).

The artworks proposals shall embrace (where applicable) the Identikit toolkit identity guidelines published by NHS Scotland.

3.5 Uses

3.5.1 Service Philosophy

The service philosophy is contained in Sub-Sections D and E of Section 3 of this Schedule Part 6.

The design shall deliver a solution, which fully reflects the special needs for each patient group whether they be attending hospital on a planned or on an unplanned basis. Clinical activity is considered further under these headings:

- a) Unscheduled Care;
- b) Scheduled Inpatient care;
- c) Out-patient and Medical Day Care;
- d) Critical Care Services;
- e) Theatre and Day Surgery;
- f) Clinical Support Services;
- g) Child and Adolescent Mental Health Service.

These are detailed in the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

The Project shall promote integrated ways of working and delivering services for both primary and secondary care, and for the NHS, local authorities and other community based services.

3.5.2 Clinical & Non Clinical Functionality

The Facilities shall be designed to accommodate the Clinical, Non-Clinical and other functions ascribed to them in terms of space, environment and the efficient and safe operation of equipment, as defined in the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

The design of the Facilities shall:

- a) Function efficiently, effectively and economically to achieve the optimum balance between capital cost of the Facilities and the Board's operating costs and to meet and satisfy all of the requirements and obligations set out in these Board's Construction Requirements to ensure that the Facilities are sustainable well into the future and as a minimum for the whole of the Operational Term or to meet the Handback Requirements, whichever is the longer period;
- b) Demonstrate that the design fully reflects the special needs for each patient group in terms of access, functional relationships and planning;
- c) Interface easily with other service providers in particular the wider services provided by the Board;
- d) Foster the provision of patient-focussed acute services; and
- e) Permit and encourage service integration across the care spectrum/community.

The design shall be able to do this in terms of environment, scale, comfort privacy, reassurance, style and security.

3.5.3 Design for Therapy

The Board places a high priority on how the design of the Facilities impacts, both mentally and physically, on the treatment experience for patients, families, visitors and staff. It is therefore essential that Project Co develops a clear strategy which is interpreted through the design of the Facilities and focuses on providing an environment that takes every opportunity to enhance the experience of every person who comes in to contact with it.

This paragraph 3 shall be read in conjunction with the requirements for infection control. Whilst it is expected that there is a balance to be drawn between design for therapy and infection control requirements, the requirements of one over the other shall not preclude the use of well thought out design and good quality solutions.

3.5.4 Patient Privacy and Dignity

To achieve appropriate levels of privacy, Project Co shall provide Facilities which allow adequate space around patients. This may include space for families, and other visitors to sit with patients, adequate space between chairs, and seating in rest bays along corridors to provide rest places along the route of the patient / visitor journey. The privacy afforded to patients, staff, families and visitors shall not be compromised by inappropriate or inadequate sound reduction measures in the design or in the build standard.

Sill heights for windows shall enable outward visibility, in particular for children, patients in wheelchairs and in beds. Special consideration shall be given to the needs of those with impaired mobility and those with poor sight. Some doors and internal glazed screens shall

require vision panels or other glazing systems, which may be obscured or controlled for privacy. The ability to use vision panels which allow objects / small children on the other side to be viewed are required in those areas as defined in the Room Data Sheets.

3.5.5 Age Appropriate Care

The age range of children routinely attending the RHSC paediatric facility will be 0 – 16 years, and a number of young people aged from 17 to 18 years of age also will attend. CAMHS patients routinely attend until they are 18 sometimes older therefore the building, particularly within the Inpatient areas, will offer a variety of facilities to meet the needs of infants, pre-school age, 5-10 year olds, 10-13 year olds and 13-16/18 year olds. Adolescents in RHSC have access to a social space designed specially for this age group, CAMHS inpatient areas are to accommodate 12-18 years olds. The DCN facility provides services to adults.

Age specific facilities will be provided within the appropriate areas.

3.5.6 Single Room Accommodation

DCN and CAMHS will have 100% of inpatient spaces in single rooms, and in the RHSC approximately 59% of inpatient spaces will be in single rooms, which will facilitate the management of the privacy and dignity of patients and families, and infection control.

Challenges for the design of single room accommodation, particularly within longer term inpatient facilities, includes many adolescents preferring to be in a single room for privacy, however consideration is to be given to provide additional space for social, educational and IT facilities.

3.5.7 Functional Relationships

The design shall offer all users of the Facilities the highest level of efficiency in their operations by way of relationships and adjacencies between functional units.

The general inter-relationship of wards and departments is fundamental to good design, ensuring patients and families can receive effective care and that staff can go about their business efficiently.

The grouping and disposition of departments shall take into account the importance of enabling easy flow of the three main groups of traffic:

- a) Patient, family, visitor and staff traffic arriving at the hospital;
- b) Patients' and staff traffic between clinical departments (in and out patient areas) and central diagnostic departments, particularly theatres and radiology.
- c) Service traffic – good design will ensure that distances for service traffic are kept to a minimum with innovative use of vertical routes e.g. service lift;

3.5.8 Work Flows & Logistics

Workflows within and between departments shall be direct and the routes for patients and staff as short as possible. Internal traffic cross-flows which could be inefficient or conducive to the transmission of micro-organisms either through airborne or other means shall be minimised.

The movement of people and the distribution of supplies and waste shall be carefully considered. Circulation routes shall be clear and appropriately sized.

Patterns of movement within the hospital shall be clear, unambiguous and logical for patients, families, visitors and staff. The adjacency patterns will minimise travel time and distances for patients, families, visitors and staff, with clear and coherent signposting to support a natural flow of pedestrian traffic.

Use shall be made of art in creating focal points, and supporting wayfinding both for internal and external areas.

The route for patients to be taken to the RIE Facilities and RHSC Emergency Departments from the helipad is through the Hot Core. There is to be a controlled link to the RIE Facilities from the ground and first floors of the Facilities building.

All signposting and instructions must be readily accessible and capable of being understood by the community that the hospital serves.

Provision is to be made for deliveries being accommodated at a loading area / bay. These will arrive in a range of different vehicle types, and the deliveries will be off-loaded into an adjacent Goods Receipt Area. Provision is also to be made for mail to be delivered directly into a Mail Room, catering supplies delivered directly into a Catering Store, and linen will be delivered straight into a linen store.

3.5.9 Manual Handling

Project Co shall ensure that the working environment of staff shall be designed in such a way that where they are required to manually handle inanimate objects / patients and / or transport patients, due consideration shall be given to the obligations within the Manual Handling Operations Regulations 1992 (as amended). This shall extend to the provision of mechanical devices including fixed (i.e. ceiling mounted tracking hoist systems) or mobile hoists including appropriate allocation of space and structural capacity.

3.5.10 Adaptability & Expansion

Project Co shall ensure that the physical arrangement of the buildings allows for growth and change of Clinical Services in the future, as far as is practical. The provision for such are detailed in the Adaptability Strategy.

The design shall consider the means for departments to be used flexibly, adapted or expanded. National policy, clinical advancements and technological changes will impact on the way services are provided in the future, and the Facilities need to be sufficiently flexible to handle these advances. The design shall demonstrate that potential change or expansion has been considered by the provision of adequate space either at the external perimeter and / or between functions and departments.

The structural grid, construction technique, structure, service penetrations and engineering services strategy shall demonstrate that the design proposals for expansion, adaptation and flexibility are co-ordinated.

The provision of engineering, telecommunications and building services shall be appropriate for the provision of anticipated changes in medical equipment.

The architectural flexibility shall reflect the overall Adaptability Strategy.

Project Co shall ensure that the design of the internal enclosing walls, screens and ceilings and their relationship to the environmental servicing strategy present a co-ordinated and consistent approach throughout, capable of accepting change at a later date with the minimum of disruption to the building structure and main mechanical and electrical plant installations and associated services.

Project Co shall ensure that the Facilities' structure and envelope, services, partitioning, ceiling, and flooring systems are consistent with a co-ordinated methodology which facilitates future flexibility for re-planning and change in the layout of departments, rooms, services outlets and equipment.

The internal divisions and environmental servicing strategy shall provide a co-ordinated and consistent approach throughout and shall readily accept change with the minimum disruption to the building structure and main mechanical and electrical and plant installations. In particular, it shall be possible to install or relocate fittings, fixtures, equipment and service outlets with minimum disruption to the use of the Facilities.

Building structures shall be designed by Project Co to facilitate ease of alteration to the internal layout of the buildings, or to its plant, services or equipment, during the lifetime of the buildings. This shall be achieved by:

- a) Selecting structural forms in which future builderworks holes for building services distribution, both vertically and horizontally (including ductwork), or equipment, may be cut simply and economically and maintaining the fire safety integrity without significant additional work;
- b) Providing knock out panels to permit the formation of holes not exceeding 150x150mm through suspended floors, adjacent to 50% of the internal columns on all floors. These knock out panels shall be positioned close to columns distributed across all areas of each floor;
- c) Designing the floors for imposed loadings that will permit the reallocation of space within the Facilities, so that each area of floor is structurally capable of supporting the imposed loads of offices, wards, corridors, general storage areas or waiting areas, together with their appropriate partition walls, finishes, ceilings, services and medical equipment;
- d) Providing removable access panels within the structure, where these are required for the installation, maintenance, repair and removal of plant, services or equipment;
- e) Constructing internal room walls such that they can be readily removed or altered i.e. the structure is not reliant on the walls for structural stability; and
- f) Designing plant space and riser space so that future change can be accommodated.

Project Co shall ensure that the Facilities do not have perimeter upstand beams and all perimeter beams shall be designed to allow a clear 300mm services zone above the ceilings and below the perimeter beams, unless otherwise agreed with the Board.

3.6 Spaces

3.6.1 Floor Layouts

The design of departmental and unit layouts shall reflect the demand for space defined by occupancy and usage as described in the Board's Construction Requirements Part 6 Section 3 Sub-Section D (Specific Clinical Requirements), Sub-Section E (Specific Non Clinical Requirements). Where areas and shape of rooms results in undesirable spaces, Project Co shall discuss with the Board alternative solutions, which may or may not result in shared space providing a more appropriate environment as well as optimising the available use of space. These may include locker rooms, sitting areas, seminar rooms etc

3.6.2 Equipment Requirements

Project Co shall identify and provide all necessary connections and infrastructure (including supply, extraction and removal of waste) for all items of equipment identified in Schedule Part 11 (Equipment Schedule). For the avoidance of doubt, this obligation specifically includes specialist service requirements, including for example 3-phase electrical supply, surge protection, special water supply requirements and separation of contaminated waste.

Project Co shall provide a suitable environment for each item of equipment; this shall take into account lighting, temperature and ventilation requirements. Project Co shall design the Facilities to allow for the provision and safe use of the Group 1, Group 2A, Group 2B and Group 3 Equipment.

For reasons relating to standardisation, compatibility, staff familiarity and product quality the Board shall be entitled to choose items of equipment which shall be proposed and submitted by Project Co to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Irrespective of the party responsible for the supply, installation, maintenance and replacement of each item of equipment (as detailed in the Schedule Part 11 (Equipment Schedule)), Project Co shall provide Facilities that satisfy the following criteria:

Allow equipment and associated systems to be installed, commissioned, operated, maintained and replaced in accordance with;

- a) Good Industry Practice;
- b) Manufacturer's instructions;
- c) The Board's specific supplementary requirements; and
- d) The Board's, and statutory health and safety requirements;

In order to:

- a) Allow equipment and associated systems to operate efficiently, effectively and in accordance with their intended function for the whole of its design life;
- b) Take due account of the impact on the environmental conditions within the Facilities. For the avoidance of doubt, this obligation includes (but is not limited to) impact of heat gain and loss, and ventilation; and
- c) Take due account of the potential impact of future equipment changes through either updating or replacement. In particular, allowance for equipment of different sizes, weights, service requirements or environmental impacts.

- d) Allow the Board to provide their Clinical Services and Non Clinical Services with a minimum of disruption during installation, commissioning, operation, maintenance and replacement.

A number of specialist engineering systems will be required within the Facilities and each shall be fully integrated within the design proposals. Specialist systems shall be incorporated where appropriate to enhance the operation of the equipment and the Facilities.

The construction, structure, plant and services shall be designed to meet the Board's Construction Requirements and the specific requirements for special equipment and associated services. The design of the Facilities shall meet these requirements with regard to wall, ceiling and floor loads, structural movement and deflections, the need for special floors, wall and ceiling supports, ceiling grids and other such measures to allow for the installation of special equipment and associated services.

3.6.3 Room Data Sheets

Project Co shall provide Facilities that, as a minimum, meet all the requirements specified in the Room Data Sheets included in this Schedule Part 6 Section 6. Room Data Sheets not included in Schedule Part 6 Section 6 shall be provided through RDD.

Project Co shall provide fully developed Room Data Sheets submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

As part of the commissioning process, Project Co shall be responsible for demonstrating compliance with the requirements included within the Room Data Sheets.

For the avoidance of doubt, Project Co shall provide mechanical ventilation, comfort cooling and air conditioning to suit the functional requirements of each of the rooms in the Facilities. Irrespective of the ventilation requirements in Room Data Sheets, where rooms are clearly intended to be occupied and / or become internal spaces during design development and natural ventilation is not possible, mechanical ventilation and / or extract ventilation shall be provided as appropriate to suit the function of the space.

3.6.4 Interior Design

Project Co shall develop an interior design strategy to cover all areas of the Facilities and shall present this to the Board for its consideration. The integration of works of art is considered by the Board to be an essential element of any such interior design strategy.

Proposals shall be presented by Project Co in room-by-room schedules with samples of finishes, colours, lighting fittings, materials as appropriate, and signage, supplemented by colour sketches or coloured computer images submitted to the Board for review in accordance with paragraph 1.2.3 of Schedule Part 8 (Review Procedure), Table of Finishes and clause 12.6 of the Project Agreement. Project Co shall agree with the Board a programme for submission of this information allowing sufficient time for consultation with the users, and for incorporating feedback into the final scheme.

Where Project Co includes internal planting displays, these must comply with the Board's infection control requirements, and associated irrigation and atmospheric controls shall be provided.

3.6.5 Space Standards

“Many factors can contribute to engendering a sense of ease, for instance:- the degree of natural light, brightness and airiness, colour and texture, an easily understood layout with clearly defined focal points, uncluttered signage and a clear distinction between the realms of public and private space, maintaining patient dignity”.

SEHD 2006

Project Co shall provide designs which are efficient, economical and flexible for immediate and future use, and which can be managed efficiently to cope with seasonal and strategic variations in activity.

The internal and external space provision shall be equal to or greater than that prescribed in codes of practice, regulations and guidance related to hospital buildings.

Appropriate space provision shall be made for circulation, waiting and sub-waiting space and for the movement of patients, pedestrians and the storage and transportation of goods.

Individual departments shall be designed to allow formal and informal discussion, therapy and interaction within each clinical environment - such as in consultation rooms, therapy and rehabilitation rooms, waiting areas and receptions. The design shall also support the creation of a learning environment for informal and formal teaching of staff, students, patients and their families.

Project Co shall provide space to allow informal discussion, therapy and interaction within open and reception areas in the clinical environment, such as areas of rehabilitation, consultation and main waiting / reception areas. Consideration shall also be given to making use of open areas such as courtyards and corridor recesses within clinical areas and main circulation routes for 'break-away' space.

Project Co shall recognise that the perception patients' and staff of the spaces created may assist with their feeling of belonging and of not being intimidated, and may help with their orientation, mobility, confidence, privacy and their ability to socialise.

3.6.6 Ward Configuration

Where required, wards shall be configured to meet the requirements of single sex wards providing privacy and dignity to patients.

The layout of the wards shall facilitate the separation and zoning of patients into clinical groups to respond to seasonal variations in activity, case mix, and practice and to deal with infectious conditions.

Space around beds shall comply with Department for Health Adult in-patient accommodation: Planning and design manual: Version 2.5: England and HBN 23 Hospital Accommodation for Children and Young People (2005) providing adequate space for health care professionals, teaching requirements, visitors and multi-pieces of equipment to be located near to the patient within the bed area. Additional space shall be allowed for engineering and building services zones. There shall be a minimum of 3.6m between bed centres.

The Touch Down Bases are sited throughout the clinical ward area to ensure optimum observation of patients and equipment in single and four bedded wards. The ratio of Touch Down Base should be 1:4 beds depending on design of ward.

3.7 Security & Control

Security of patient, staff, families and other visitors is of utmost priority. The design of the Facilities shall ensure maximum protection and minimise exposure to crime in internal and external areas.

Special care shall be given by the Project Co to the control and monitoring of access points used by the public and staff from public circulation spaces particularly those which may be quiet and sparsely populated during out-of-hours services.

Particular attention shall be given to the security of routes used during the hours of darkness by staff between pedestrian access points to the Site, car-parking areas and entrances to the Facilities.

Access control systems shall be provided to restrict access to certain areas of the hospital to relevant staff members, patients and visitors as appropriate in paragraph 9.19. Access controls shall be based around the following requirements:

- a) Provision of high resolution CCTV or appropriate technology at all entry and exit points, reception areas, main entrance and such other areas as are defined in paragraph 9.19;
- b) Systems to provide of out-of-hours security infrastructure to accommodate varying working hours, particularly evening and night-time working;
- c) Security systems that are consistent with other Board facilities and policies, including main door or departmental access systems linked to staff identity badges;

Points of entry and reception points shall be minimised and allow for natural supervision and/or monitoring of movement and entry.

There shall be minimal isolated vistas and dead-end spaces to design out the potential for crime. The provision of security lighting must be effective and efficient but not overbearingly bright.

Design of roadways, paths and parking areas shall take into account the safety of staff, patients and the public. Landscaping will soften the hospital site, be attractive and calming but be designed with security and safety in mind.

External areas and courtyards must be safe, secure and capable of being used in varying weather conditions.

All external access routes and entrances to the Facilities shall prevent the risk of wind funnels.

3.7.1 Secured by Design

Project Co shall meet the requirements of "Secured by Design", and in particular the recommendations of the Secured by Design - Hospitals guide.

Project Co shall endeavour to ensure that their approach to security and control of the Facilities will be structured in a way which will allow the Board the flexibility to seek compliance with the requirements of the Secured by Design initiative at a later date.

3.7.2 Safer Parking Scheme

Project Co shall where possible adhere to the principles of the British Parking Association's Safer Parking Scheme Documents and Guidelines.

Project Co shall endeavour to ensure that their approach to security and control of the parking facilities will be structured in a way which will allow the Board the flexibility to seek compliance with the requirements of the Safer Parking Scheme initiative at a later date, and achieve the "Park Mark Safer Parking Award". Safe routes for pedestrians should be incorporated.

3.8 Site Access & Circulation

A traffic assessment has been undertaken on behalf of the Board to ascertain and evaluate the impact of the development on transport patterns. Project Co shall validate the recommendations of this report and secure agreement with The City of Edinburgh Council for its proposals.

The Board requires to see, as far as reasonably practical, the clear separation of access for services, supplies, and waste removal vehicles from patients' and visitors' access points and entry points for the Facilities. In addition as RIE is an operating hospital adequate access to the RIE must be maintained at all times during construction and operation of the Facilities.

In the planning and design of the Facilities and of the Site layout, Project Co shall endeavour to ensure as far as is reasonably practical that routes used by pedestrians are segregated from routes used by moving road vehicles and any tug trains or similar deployed in the operation and maintenance of the Facilities. Project Co through the location of suitable external seating shall provide "rest areas" in safe positions along the main pedestrian routes.

External wayfinding shall be consistent with the principles currently adopted on the RIE Site, and Bioquarter Site or as modified at some future date, and be appropriate for the different age range of patients involved.

For the RHSC Paediatric facility there will be separate entrances required for the following departments:-

- a) For the Emergency Department (ED);
- b) Main hospital entrance for patients, staff and visitors;
- c) Child and Adolescent Mental Health Service (CAMHS);

Clinical Neurosciences

- a) Route for emergency patient transfers via RIE Facilities Emergency Department;
- b) Main hospital entrance for patients, staff and visitors;

The defined routes for construction plant and construction access roadways shall comply with the provisions of paragraph 4 and Appendix A.

Project Co shall undertake all necessary works associated with the following specific requirements:

3.8.1 Design for Disability

The design shall comply with the requirements of the Equality Act 2010, and take full consideration of HBN 00-02 "Sanitary Spaces", SHFN14 "Disability access", SHFN20 "Access audits for primary healthcare facilities", HFN 21 "Car Parking" and Standards of Care for Dementia in Scotland: Action to support the change programme, Scotland's National Dementia Strategy. Further guidance is provided in BS 8300:2009 Design of buildings and their approaches to meet the needs of disabled people - Code of practice.

Doors and lifts are required to be of a width and length to allow wheelchair access (often with additional attached equipment) and patients being transferred on trolleys and beds with attached clinical equipment, and this is also essential for children being transported in prams and buggies. Automatic doors along patient pathways are essential to ensure that staff pushing patients and /or equipment on trolleys, wheelchair users and parents/carers with children in prams/buggies can move rapidly and smoothly. Automatic doors will improve access for wheelchair users, those with reduced mobility, impaired vision and other disabilities. Automatic doors will minimise damage caused to doors and walls by trolleys and cages.

Entrances to the Facilities shall be clearly identified to promote ease of wayfinding and distinctive 'landmarks' shall be incorporated into the design particularly for the main entrances.

The Facilities' environment, both externally and internally, shall be designed to be accessible to everyone. The journey on to the Site, from pedestrian / vehicle routes, through the main receptions, into the Facilities and to the desired locations shall follow a safe, logical and clear system.

Attention shall be paid in the design to all aspects of the physical environment relating to the accessibility of the Facilities as follows:

- a) Access to buildings, such as level or ramped entry;
- b) Emergency evacuation arrangements, in particular for the visually impaired, the disabled and the frail, such as fire refuges or alternative escape routes for people with mobility impairments;
- c) The accessibility of external paths and landscaping and the location of "rest areas" on all external routes;
- d) Circulation within buildings, including their interior layout;
- e) Effective lighting and signage and colour or tone contrast on doors to aid orientation;
- f) Desks, laboratory benches, work surfaces and reception desks with varying or flexible heights;
- g) Appropriate seating;
- h) Accessible toilets; and
- i) Convenient but controlled 'free' proximity parking.

Project Co shall ensure that the Project design draws upon and endeavours to further develop improve and exceed current best practice and standards achieved in other similar

projects, and incorporates full accessibility for the prospective patient groups, staff and public. This shall include aspects of both physical environment and visual and audio aids to enable full and unrestricted use of the Facilities for all groups. This philosophy of design shall be extended across all parts of the Facilities including access to the landscaped and external areas as well as the essential patient treatment and residential areas.

Project Co shall ensure the design complies with the general accessibility ethos detailed above, whilst also addressing the detailed requirements listed elsewhere. It shall be noted that the requirements detailed are not exhaustive, and it is also recognised that specific clinical needs will determine the nature and design of Facilities in some areas.

In particular it is highlighted that the Facilities will be used by a high proportion of wheelchair users. Project Co shall ensure that the fire strategy and design of the Facilities take full account of this.

In meeting the overarching obligations with respect to accessibility, Project Co shall comply with the following non-exhaustive list of standards:

- a) BS8300:2009 Design of buildings and their approaches to meet the needs of disabled people – Code of practice;
- b) SHFN 14 Disability Access;
- c) SHFN 20 Access audits for primary healthcare Facilities; and
- d) HFN 21 Car parking.

BS8300:2009 “Design of buildings and their approaches to meet the needs of disabled people – Code of practice”; is also the document most widely referred to by consultants advising on general building design in relation to the Equality Act 2010. Project Co shall therefore refer to this document and give full regard to its standards. It will, however, be necessary to match the standards of BS8300:2009 “Design of buildings and their approaches to meet the needs of disabled people – Code of practice” with others laid down in NHS guidance notes.

For the avoidance of doubt, specific accessibility requirements listed in this Schedule Part 6 Section 3 shall take precedence over the standards laid down in BS8300:2009 “Design of buildings and their approaches to meet the needs of disabled people – Code of practice”.

3.8.2 Vehicular Access

Road widths, turning circles, waiting bays and lay-bys shall be designed so that they are suitable for hospital and emergency traffic including service vehicles and are designed for the convenience of staff and the public. These routes shall link the main access points on Old Dalkeith Road/ Little France Crescent to the principal vehicle routes and entrance points to the Facilities. It shall be noted that some of these routes may be required to connect seamlessly into and be compatible with roads, turning circles, bays and lay-bys which are outside the Site boundary.

3.8.3 Pedestrian Access

Project Co shall provide routes to the Facilities and to adjacent parts of the Campus Site from Old Dalkeith Road and Little France Crescent which are safe and convenient for pedestrians and cyclists to use. These routes shall link the main access points on Old Dalkeith Road / Little France Crescent to the principal patient, visitor and staff entrance points to the Facilities. It shall be noted that some of these routes may be required to connect

seamlessly into and be compatible with and reflect pedestrian desire lines and pathways which are outside the Site, subject to the requirements of paragraph 4, Appendix A and Clause 9 (Nature of Land Interests) of the Project Agreement.

Pedestrian routes to the building shall be as direct as possible to reduce the temptation to use or create unauthorised entrances and exits. Project Co through the location of suitable external seating shall provide “rest areas” along the main pedestrian routes.

Pedestrian emergency exits from the buildings shall be used for that purpose only and appropriate measures shall be taken by the Project Co to ensure that they cannot be used for accessing the buildings.

3.8.4 Cycle Routes

Special attention shall be given to the maintenance and extension of existing safe cycle routes. Project Co shall carry out works to form a cycle path and reconfigure the landscaped areas within the Yellow Area (Cycle Path Works) subject to providing a method statement for these works which method statement will form part of the relevant Interface Proposal, and complying with the requirements of Section 2 (Operational Construction Issues) and paragraphs 1 to 4 and 8 of Section 5 (Access Areas, Drainage and Substation) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Access Strategy and/or where applicable any Access Strategy agreed and/or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A.

The reconfigured cycle path shall terminate at Little France Crescent and to the access to the Site from Old Dalkeith Road Project Co shall provide appropriately located bicycle security and staff changing facilities. It shall be noted that some of these routes may be required to connect seamlessly into and be compatible with existing cycle routes which are outside the Site boundary but within the Campus Site.

3.8.5 Emergency Vehicle Access

Project Co shall provide clear and well defined routes for emergency vehicles such as ambulance, fire and police. The Emergency Department access will require 2 distinct entrances: one for emergency patients and one for ambulant patients.

Ambulances will most frequently use the Emergency Department entrance and the entrance to DCN. Waiting and queuing of ambulances at these locations will require to be considered by Project Co.

The design of the Facilities by Project Co shall take into account the unimpeded continued routing of “blue-light” emergency ambulance traffic into the ED in the Facilities and the RIE Facilities and around the Campus Site. Special provision shall be made for manoeuvring, unloading and waiting of ambulances and other emergency vehicles at the Emergency Department for the Facilities and the RIE Facilities.

3.8.6 Service Vehicle Access

Service traffic shall be separately routed to the loading bay area(s). Project Co shall provide a holding facility for three of the longest lorries to wait for access to the service ramp to the basement of the building. Access to the holding area, VIE compound, energy centre and basement of the building will be controlled as defined in paragraph 7.5 of this Sub-section C.

In such areas safe segregated routes for pedestrians will be clearly identifiable and these will not be in conflict with vehicular movements.

3.8.7 Road Markings & Signage

Project Co shall undertake all necessary road, footpath and car parking markings and signage works within the Site boundary.

3.9 Car Parking & Drop-off / Pick-up

3.9.1 Car Parking

Car parking to replace the car parking spaces in Car Park B have been provided elsewhere at the Campus Site. Car Park F will provide additional car parking to meet the essential needs of the Campus Facilities.

Project Co shall provide a strategy for parking which demonstrates control of access to onsite and close proximity parking.

From the Actual Completion Date, Patients and Visitors to the Facilities will have access to Car Park E.

3.9.2 Emergency Department Parking

Project Co shall provide as a minimum 24 free spaces for emergency visitors to the ED for the Facilities and the RIE Facilities. Of these spaces:

- a) 50% must be of a size for disabled or parent and child parking, and marked as appropriate.
- b) 50% must be non-disabled spaces for short term parking for emergency visitors to the ED facilities.

These will be provided in a way that is clear to users that they are for short term stay and they will be located so as not to cause access issues elsewhere.

Access controls will be provided as detailed in paragraph 7.5 of this Sub-section C.

3.9.3 Disabled and Parent and Child Parking

The design of the Facilities shall recognise the importance of providing sufficient disabled parking spaces and drop-off points as close to the entrances as possible.

In addition to the disabled and parent and child parking provision at the ED, Project Co shall provide as a minimum:

- a) 40 free disabled parking spaces for RHSC indicating that they are for Disabled and Parent and Child Parking; and.,
- b) 20 free disabled parking spaces for DCN marked accordingly.

Access controls will be provided as detailed in paragraph 7.5 of this Sub-section C.

The design of the Facilities shall recognise the importance of providing sufficient disabled parking spaces and drop-off points as close to the entrances as possible.

3.9.4 Drop-off / Pick-up Arrangements

Project Co shall provide designated, covered “drop-off / pick-up” area(s) directly adjacent to the principal entrances to the Facilities including the ED entrance. This shall allow direct access to the Facilities, for a wide range of vehicles including private cars, taxis, ambulances and patient transport vehicles. The design should discourage any other use other than drop-off in this area.

4 Site Specific Requirements

4.1 Site Boundary

The Site is currently in the ownership of the Scottish Ministers and is part of the Campus Site.

Refer to other site boundary issues detailed in other parts of this paragraph 4 and paragraph 7 of this Sub-Section C (in particular paragraph 7.3).

4.2 Travel Plan

In line with the Board’s obligations under Policy Statement 3 of SEHD’s “Environmental Management Policy for NHS Scotland”, the Board will prepare a Green Travel Plan for the Facilities, which aims to reduce the impact on the environment of travel by staff, patients and visitors to and from the Facilities, and travel by staff during work at the Facilities.

The scope of this Green Travel Plan is in line with the Integrated Transport White Paper ‘Travel Choices for Scotland’ and ‘Scotland’s Transport: Delivering Improvements’.

Project Co shall assist the Board in developing the integrated Green Travel Plan to take account of the impact of the Facilities.

Project Co shall ensure that the proposals for Site access and circulation, pathways and car / cycle parking are discussed and agreed with the Board in the context of the Green Travel Plan.

Guidance is available within the SEHD document, ‘Travel Plans: An Overview, September 2002’.

For the avoidance of doubt, the Board is responsible for the development of the Green Travel Plan.

4.3 Existing Services

4.3.1 RIE Enabling Works

The Board has identified the following enabling works (the “RIE Enabling Works”) which will be required to be carried out on the Campus Site to meet planning requirements. These key

enabling works will be carried out by or on behalf of the Board by or on behalf of Consort. These works do not form part of the Project and it is intended they are completed or substantially completed prior to any part of the Project commencing on Site. The key enabling works are described here for information purposes only and form part of Disclosed Data so that Project Co is aware of them and takes them into account in planning for the Project.

- a) Flood Protection Works: which means the enhancement of existing flood protection measures at the Campus Site;
- b) Road Infrastructure Works: which means changes to the road and transport infrastructure at the Campus Site, including but not limited to the creation of a public transport terminus to the east of RIE Facilities, new bus stances and revision of existing car parking;
- c) VIE Relocation Works: which means relocation of the existing VIE plant and gas governor serving the RIE Facilities to another location on the RIE Site. Separate VIE plant is required for the Facilities;
- d) Link Building Works: which means the building which is to be part of the RIE Facilities to which the new Facilities will be connected at ground and first floor levels;
- e) Service Diversion Works: which means the disconnection of certain services such as electricity, water, gas, that serve the RIE Facilities and are currently located on under or over the Site and such services which are disconnected will be relocated in positions outwith the Site to new positions within the RIE Site. However Project Co should note that not all redundant services are being removed and grubbing up of any disconnected and redundant services will be the responsibility of Project Co, as part of the Works. Project Co should have regard to the following services which are expected to continue to be present at the Site namely the County sewer (which it is believed runs from south to north in the western area of the Site) the storm water system (which serves Car Park B), the utilities services for the Nursery including water, gas, power, telecommunication and drainage, the Sewers referred to in paragraph 6.1.1 and gas pipe referred to in paragraph 6.1.2; further the following services are expected to be present and possibly connected namely bases for medical gases, equipment, apparatus, pipes, conduits and the like relating to disconnected, non functioning and/or redundant services under the Site, manholes and slabs for parking equipment. Project Co shall carry out any protection and diversion works associated with any further existing services located within the Site but this list is not exhaustive and Project Co must satisfy itself as to the conditions of the Site. This may include (but not be restricted to) electric cables; telecommunications cables and equipment; gas mains and apparatus; sewerage mains / drainage pipes; and water mains;
- f) Sewer Diversion Works: which means the diversion of trunk sewers currently located in the Site to positions outwith the Site to new positions within the RIE Site save for a section of Sewer referred to in paragraph 6.1.1 which will continue to run under the Site; and
- g) Clinical Facilities: Reconfiguration/alteration of a number of clinical facilities within RIE Facilities;

4.3.2 Flood Works

- a) Off-Site Flood Protection Works – It is proposed to construct flood defence walls (approximately 1000mm high) to both sides of the Niddrie Burn in the Nether Craigour area upstream of the Old Dalkeith Road bridge to provide improved flood protection to dwellings at Little France Mills and to the Campus Site and Campus Facilities. These works will be procured under a separate contract and do not form part of the Project and are expected to be carried out in the areas shown on the indicative plan [RHSC-DCN-FP-001](#) which forms part of the Disclosed Data.

4.4 Demolition and Site Clearance Requirements

Notwithstanding paragraph 4.3 above, Project Co shall be responsible for the all demolition and site clearance of the Site including without limitation all structures such as the Nursery, services and removal of disconnected services. The work that Project Co shall carry out will include but is not limited to the following:

- a) The identification and removal of all structures, including the Nursery, hardstandings and the like occupying the Site.
- b) The identification and protection of live (and/or used) services in, under, on, over the Yellow Area, the Orange Area, the Service Strip, the Foul Service Strip, the Substation Site, Substation Access Area and the Substation Cable Route.
- c) The identification, decommissioning, removal and / or protection / relocation of live (and used), live (and redundant) or redundant (and disconnected) services in, under, on, over, crossing the Site; and
- d) The identification and removal of underground services, old foundations, drainage runs, basement structures and other below ground obstructions present following demolition of previous structures occupying the Site.

The Board has provided Disclosed Data. Whilst the Board believes that the information presented here is representative of the position on Site, Project Co is required to draw its own conclusions with respect to overall allowances required and the accuracy of the Disclosed Data. Other obstructions, contamination and services not yet identified may be present at the Site.

Where in connection with the Project, Project Co requires to carry out any demolition, Project Co shall carry out all demolition in accordance with BS 6187:2000 “Code of Practice for Demolition” and the following:

- a) Issue a method statement identifying the scope and methodology for undertaking the demolition works in Project Co's Proposals and to be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement;
- b) Break up and remove off-site all structures, foundations, temporary accommodation, and other below ground and surface obstructions in accordance with, but not limited to, BS5228, 2009 “Code of practice for noise and vibration control on construction and open sites.”;

- c) Decommission and / or break up and remove all redundant underground structures, chambers and redundant surface water and foul water drains, telecommunications, electric cables, gas mains, water mains and ducts within the Site. For the avoidance of doubt, this obligations includes for making safe all redundant works left in-situ, and sealing of voids, where left, against vermin;
- d) Protect remaining live services against damage or disruption; and
- e) Minimise vibration and noise produced by the demolition works, and agree appropriate limits for such with the Board to be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Project Co shall allow the Board to carry out independent monitoring that shall include but not be limited to air pollution, noise, and vibration.

4.5 Construction Phase Requirements

4.5.1 General

The permanent and temporary Works and all construction operations for the Project should, save where expressly provided otherwise, generally be designed and constructed so that they can be carried out and where appropriate replaced, repaired, renewed and maintained on and from within the Site.

The Site is part of the Campus Site and Project Co has to be aware of and plan and programme the Works and Operations having regard to the other activities and operations ongoing at the Retained Site and Retained Estate.

At some points it may be necessary temporarily for Project Co to enter or have access across other parts of the Retained Site and/or Retained Estate for construction activities in accordance with and subject to the requirements detailed in this Sub-Section 3 and Appendix A Appendix B (Interface Output Specification) and Appendix E (Initial Drainage Proposal) and the Interface Proposals and in accordance with Clause 9 (Nature of Land Interests) of the Project Agreement. Project Co shall be responsible for identifying and implementing all necessary working practices to satisfy statutory requirements in relation to their construction activities. The construction of the Facilities shall be registered with the Considerate Constructors Scheme. The Contractor shall be registered with the Considerate Constructors Scheme.

Project Co shall undertake the role of Client and appoint a Principal Contractor and CDM Co-ordinator under the Construction (Design & Management) Regulations 2007 and appropriate amendments for the duration of the Works.

Project Co shall also comply with the obligations of the “Contractor” as laid down in the Board’s “NHS Lothian Estates Operation Policy For Control of Contractors”.

Project Co shall at all times work within the hours permitted by The City of Edinburgh Council in granting planning permission for the Facilities.

Precautions shall be taken to avoid infestation of the Works by rats, mice and other vermin. When drains are being laid, precautions shall be taken to avoid the entry of rodents, including providing temporary stoppers to pipe ends and setting manhole covers in position

as the work proceeds. Pipes and cables passing through the foundation walls shall be properly built in.

Project Co shall take all necessary precautions to prevent the outbreak and spread of fire. Project Co shall provide and maintain suitable and adequate fire fighting equipment at points within and adjacent to the Works. Project Co shall comply with the requirements of the Fire Prevention on Construction Sites: The Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation. Bonfires on the Sites will not be permitted.

Project Co. shall not use the Site during the Works for any purpose other than carrying out the Works.

There are helicopter operations to and from the existing helipad facility currently operating from RIE Site. Project Co shall comply with CAA requirements on construction sites close to a helipad. In particular Project Co's tower cranes will require to have aviation lights to indicate the cranes location to the helicopters using the existing helipad.

Project Co shall provide, for the duration of the construction phase, Personal Protective Equipment for visiting Board staff (and other approved visitors), and use of Project Co facilities for meetings etc.

Project Co shall provide the Board with temporary site accommodation for Board staff and advisors for the duration of the Construction Phase.

Project Co shall provide, remove and pay for all associated consumption of the temporary utilities required to construct the Works.

4.5.1A Clean Roads and Footpaths

Project Co shall adequately maintain approaches to the Site and/or any other roads and/or footpaths within the Campus Site which it is using or accessing and keep such free from mud and debris or materials to the Board's satisfaction. All vehicles must be cleaned, with any mud or loose debris removed, prior to the vehicles leaving the Site. Project Co shall provide facilities for washing down vehicles before leaving the Site and/or the Campus Site, to avoid contamination of the surrounding roads. Any contamination of surrounding roads, pavements, cycle paths etc. by site traffic shall be removed.

4.5.2 Site Access

Construction Access over the Yellow Area

If Project Co requires to carry out works to form a construction access to the Site over the Yellow Area Project Co shall provide a method statement for these works which method statement will form part of the relevant Interface Proposal and shall construct the works and comply with the requirements of Paragraph 1 of Section 1 (Construction Access) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Construction Access Proposal.

Works and Access during the Operational Term

Project Co shall maintain, repair, replace and renew the Facilities. Where in connection with the carrying out of works of maintenance, repair, replacement and renewal to the Facilities

Project Co needs to access the RIE Site and/or RIE Facilities any such works and access shall be carried out in accordance with Section 2 (Operational Construction Issues) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A, and the Interface Proposals and where applicable Paragraph 1 (Access Strategy) of Section 2 (Access Areas, Amended Drainage Proposal and Amended Substation Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A. This is without prejudice to any other more onerous requirements detailed in the Board's Construction Requirements which may apply to other works being carried out in the RIE Site including without limitation:-

Where:-

- a) the works are to repair, maintain, replace and renew service media serving the Facilities located within the Service Strip or the Foul Service Strip Project Co shall also comply with the provisions of Section 6 (Service Strip and Foul Service Strip) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Service Proposal and where applicable any Amended Service Proposal agreed or determined pursuant to Section 3 (Amended Service Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A; and/or
- b) the works are to repair, maintain, replace and renew interface links between the fire alarm and security systems, PTS and ICT and the Joint, Project Co shall also comply with the provisions of Section 7 (Link Building) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A, the Interface Output Specification and the Connection Proposal; and
- c) the works are to repair, maintain and (where necessary) replace and renew the electricity cable on the Substation Cable Route Project Co shall comply with the provisions of paragraph 3 of Section 2 (Operational Construction Issues) and paragraph 7 of Section 5 (Access Areas, Drainage and Substation) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Substation Proposal; and/or
- d) otherwise comply with any other requirements in relation to Access Areas otherwise referred to in this Section 3 (*Board's Construction Requirements*).

4.5.3 Board Major Incident Support

Project Co shall support the Board in dealing with a Major Incident. Project Co's support will be as required by but not limited to the Board's Major Incident Strategy Response Plan Strategic Plan Number reference HPT E023 03.

4.5.4 Restrictions and Requirements for Storage of Waste on Site

Project Co is required to demonstrate a waste management programme for the Works to minimise all site waste disposal to landfill, and to maximise reuse/recycling of timber, metal, plastic, paper and other waste arising. Project Co will liaise with all suppliers to ensure the minimum of packaging is used for deliveries of goods and materials to site. Any unavoidable packaging waste is to be recycled through an authorised waste recycler. When surplus excavated material and building spoil and rubbish cannot be recycled Project Co is to dispose of it to a licensed tip and be transported by an approved waste transportation company, and shall fully comply with all Law governing the controlled disposal of waste material. No materials shall be disposed of on Site by any other means. All spoil and waste materials that arise from the construction of the Works shall only be stored on Site until disposed off site. Project Co shall take cognisance of the location of the air intakes for the Retained Estate when assessing the locations for spoil and waste material stockpiles and

comply with the requirements of paragraph 4.5.12 in selecting the location for spoil and waste material stockpiles. No burning of any materials is permitted on or near the Site.

Project Co shall meet all statutory waste management regulations and local byelaws in relation to the storage of waste on site including but not limited to the Environmental Protection Act, Environmental Protection (Duty of Care) Regulations 1991, Hazardous Waste Regulations 2005 and WEE Directive.

The storage of waste during construction works shall cause no harm to neighbours and/or other building users at the Retained Site and particular attention is required to the location of waste storage areas in relation to windows and ventilation air intakes in the surrounding buildings.

Waste storage areas must be secure and shall be constructed such that they limit the possibility of leakages and contamination.

4.5.5 Site boundary treatment requirements

Project Co shall provide a site boundary that is secure and prevents unauthorised access to the Site at all times.

Around the perimeter of the Site Project Co shall provide a solid painted hoarding which extends from ground level to a minimum of 2.4m and shall provide visual screening of the Site. Corporate signage shall be restricted to the entrances and exits of the Site and in every case there shall be an NHS Lothian sign located next to each of the contractor's corporate signs. There shall be no other advertising on the hoarding or on tower cranes / construction equipment. Artwork created by or on behalf of the Board may be displayed on such crane and/or construction equipment as appropriate as proposed by the Board to Project Co. and approved by Project Co such approval not to be unreasonably delayed or withheld. All NHS Lothian signage shall comply with the recommendations of "Effective Wayfinding and Signing Systems - Guidance for Healthcare Facilities" 2nd Edition 2005, NHS Scotland Signage Guidelines and NHSScotland Identity Guidelines.

Project Co shall provide two waterproof public information project boards for external display. Project Co shall discuss and propose to the Board the content, size and location of these signs for approval by the Board such approval not to be unreasonably delayed or withheld. .

4.5.6 Site signage restrictions and requirements

Project Co shall obtain approval of the content and layout of the main site signboard/s from the Board such approval of the Board not to be unreasonably delayed or withheld subject to complying with the aftermentioned requirements. That part of the signage which refers to the Board shall follow the recommendations of "Effective Wayfinding and Signing Systems - Guidance for Healthcare Facilities" 2nd Edition 2005, NHS Scotland Signage Guidelines and NHS Scotland Identity Guidelines. The signboard/s shall contain the project title, the names of the Board, Project Co and the Principal Contractor. No additional advertising will be permitted on these signs beyond the standard consultant signboards.

4.5.7 Signage outside the Site

Project Co shall provide signage, but not in the Yellow Area, to the Emergency Department of the Royal Infirmary of Edinburgh that requires to be clearly visible from Old Dalkeith Road. Project Co shall ensure that existing RIE Facilities signage is replicated or reinforced if

temporarily obscured by the construction of the Facilities. Project Co shall replicate or reinforce existing RIE Facilities signage that is obscured by the Works.

4.5.8 Site Accommodation and Compound

Project Co will be entitled to use Car Park E for a site compound during the Construction Phase for the Works, subject to complying with the provisions of Section 3 (Site Compound/Car Park E) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A.

Project Co shall provide a site compound that is secure and prevents unauthorised access at all times. The existing services that run under, on and over Car Park E are to be located by Project Co. A record drawing of the existing services shall be provided to the Board prior to the commencement of construction of the Works. Project Co shall provide and obtain all necessary consents for temporary services to the site accommodation and compound and pay for their use.

Project Co shall be permitted to erect a sign stating their name and the project title at the entrance to the compound. No additional advertising will be permitted.

4.5.9 Restrictions and requirements on vehicles accessing the Campus Site road network

Project Co shall comply with paragraph 4.5.2. Notwithstanding the foregoing and any other requirements applying to any works, where any works and/or activities are or require to be carried out in any part or parts of the Access Areas, Project Co shall comply with paragraphs 2 to 4 of Section 5 (Access Areas, Drainage and Substation) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Access Strategy and where applicable any Access Strategy agreed or determined pursuant to Section 2 (Access Areas, Amended Drainage proposal and Amended Substation Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A and also in accordance with Clause 9 (Nature of Land Interests of the Project Agreement).

Project Co shall ensure that all contractors attending the Site are made aware of the heightened level of care and consideration required when carrying out work in an operational hospital in order to mitigate any detrimental effect on patient care, Board staff and the general public.

Project Co shall propose, discuss and agree with the Board a strategy for providing unimpeded Blue Light access to the RIE Emergency Department and other appropriate departments / units during construction of the Works. Project Co shall ensure that at all times during the construction and commissioning of the Works that free and unimpeded access is maintained for Blue Light emergency traffic through the Orange Area to the adult Emergency Department of RIE and through the Orange Area to the Percutaneous Cardiac Investigation Unit (PCIU) within the RIE. This includes the ambulance access which will encroach upon the Site, the stretcher drop off entrance and the ambulant entrance at the adult Emergency Department of the RIE. Provisions will also have to be made on the Site and Campus Site as required, to provide a minimum of five ambulance drop off parking spaces. The spaces are to be such that a stretchered patient can be taken directly into the adult Emergency Department of the RIE from an ambulance parked at any of these five spaces. Ambulances must also be able to pull out from any of the five spaces without hindrance to any other parked ambulance. Project Co shall plan construction and commissioning of the Works so as to accommodate these requirements including without limitation the TMS and/or Access Strategy and/or the requirements of Section 2 (Access

Areas, Amended Drainage Proposal and Amended Substation Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A.

Project Co shall agree with the Board revisions to the Blue Light traffic access/egress routes during the construction period.

Where construction traffic is required to access the Orange Area and any other part of the Campus Site road network, Project Co shall be responsible for ensuring that drivers observe the 15mph speed limit, that all vehicles have a valid MOT (if required), have the appropriate comprehensive insurance and that all drivers hold a valid UK driving licence.

A vehicle "Civil Penalty Notice Scheme" operates on the Campus Site.

4.5.10 Construction works further information

A. Construction works on the Site but connecting to other parts of the RIE Facilities

Fire connection and the Joint

As set out in paragraph 4.5.1 the new Facilities shall be delivered as a standalone new build. However, the Facilities will be physically linked to the RIE Facilities at ground and first floor levels. The part of the RIE Facilities to which the Facilities will be linked is called the Link Building.

The Link Building is part of the RIE Facilities. Project Co will be responsible for designing and constructing the Facilities to physically link to the RIE Facilities at the Link Building interface point as more particularly detailed in the Interface Output Specification. Project Co shall carry out the works to connect the Facilities to the Link Building subject to and in accordance with:

- a) Section 7 (Link Building) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A;
- b) Interface Output Specification; and
- c) the Connection Proposal.

Project Co shall design and construct the fire alarm in accordance with the provisions detailed in paragraph 3.7.

Project Co shall construct the Joint. The Joint shall form part of the Facilities.

B. Construction works outside the Site – Off Site Works

(a) Works outside the Site but within the Campus Site, and maintained by Project Co

There shall be building services links between the Facilities and the RIE Facilities in respect of building services and other connections in terms of: -

- a) infrastructure associated with ICT;
- b) a pneumatic tube system (PTS);
- c) foul drainage connections.

The above matters form part of the RIE Works

- a) Access road for the Substation Works in the Substation Access Area

(i) Project Co will design and build a new PTS system which will run from the Facilities to the pharmacy and laboratories within the RIE Facilities. Project Co will design and build an ICT Data Network system which will run from the Facilities to link to the Board's ICT equipment/systems within the RIE Facilities. The Board will advise Project Co of the route for the PTS and ICT within the RIE Facilities. Project Co will be responsible for replacing, repairing, renewing and maintaining the PTS and ICT. Project Co shall provide design, construction and other information which information will form part of Project Co's applicable Interface Proposal for approval by the Board and shall design build, construct, replace, renew and maintain in accordance with:

- Section 7 (Link Building) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A
- The Interface Output Specification; and
- The Connection Proposal.

(ii) Service Strip

There may also be connections into some existing infrastructure for foul water drainage. If Project Co requires to connect the foul water drainage systems for the Facilities into the existing foul water drainage systems for the RIE Site and/or RIE Facilities then foul water drainage systems must be designed and constructed by Project Co such that they may be connected to foul water drainage systems only at the agreed connection points in the Initial Drainage Proposal and/or within the Foul Service Strip. Project Co will be responsible for replacing, repairing, renewing and maintaining the foul water drainage systems serving the Facilities and the connections. Project Co shall provide design, construction and other information which shall be part of Project Co's applicable Interface Proposals to the Board for approval, about the foul water drainage systems serving the Facilities. Project Co shall comply with the requirements for installing, maintaining, repairing, renewing and replacing foul water drainage systems subject to and in accordance with:-

- Section 2 (Operational Construction Issues) and Section 6 (Service Strip and Foul Service Strip) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A; and
- The Access Strategy; and
- The Service Proposal; and
- The Supplemental Drainage Proposal; and where applicable
- any Access Strategy and/or Amended Drainage Proposal and/or Amended Service Proposal as applicable agreed or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) and Section 3 (Amended Service Proposal) of Part 2 (Interface Proposals Procedure) of this Section 3 (*Board's Construction Requirements*) of Schedule Part 6 (*Construction Matters*) (as varied, amended or supplemented from time to time in accordance with the Project Agreement).

As regards design and construction, maintenance, repair, replacement, and renewal of any electrical, gas and water connections these must all be independent services serving the Facilities and shall not connect into any such services serving the Retained Site and/or Retained Estate. However wherever any such services have to be installed and cannot be installed on the Site they may be installed on the RIE Site, the locations for such services are however restricted to certain areas of the RIE Site namely the Service Strip. Project Co will be responsible for design and construction and replacing, repairing, renewing and maintaining such services serving the Facilities. Project Co shall provide such design,

construction and other information which shall be part of Project Co's applicable Interface Proposals for approval by the Board and Consort about the services and shall comply with:-

- Section 2 (Operational Construction Issues) and Section 6 (Service Strip and Foul Service Strip) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A; and
- The Access Strategy; and
- The Service Proposal; and where applicable
- any Access Strategy and/or Amended Service Proposal agreed or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) and Section 3 (Amended Service Proposal) of Part 2 (Interface Proposals Procedure) of this Section 3 (*Board's Construction Requirements*) of Schedule Part 6 (*Construction Matters*) (as varied, amended or supplemented from time to time in accordance with the Project Agreement).

(iii) Access road for Substation Works in the Substation Access Area: if Project Co chooses to construct a substation on the land outlined in blue on Plan 4 in accordance with Paragraph D below then Project Co shall design and construct and thereafter maintain, repair, replace and renew the access road an access road thereto in the Substation Access Area and shall comply with the requirements for the access road detailed in paragraph D below.

C. Construction works outside the Site but within the Campus Site but not maintained by Project Co – the Retained Estate Handback Infrastructure which comprise Hospital Square Works, Cycle Path Works and Surface Drainage Works

The Board has identified the following works which will be required to be carried out outwith the Site on the RIE Site. These works comprise Hospital Square Works, Cycle Path Works and Drainage Works. These works will be carried out by Project Co and upon completion will not be maintained by Project Co but once completed will form part of the Retained Estate Handback Infrastructure. These works include:

Hospital Square Works:

- (a) The design and construction of new roadway, hard and soft landscaping works to the area between the Chancellor's Building, RIE Facilities and the redline boundary to the north and east of the Site;
- (b) Emergency Departments: The design and construction of new roadways, hardstandings and parking areas at the new entrance to the RIE Facilities and the Facilities' emergency departments including without limitation.
 - Roundabout at the termination of the road north of the link to the RIE Facilities.
 - RIE Day Surgery/PCIU ambulance drop off that will have access to the roundabout referred to in item a) above.
 - Taxi rank and drop off set back from the road outside Ann Rowling Clinic
 - Drop off set back from the road opposite the taxi rank and drop off referred to in item c) above.

- Roundabout at the RIE Facilities entrance for access to the DCN proximity parking and RIE Facilities Day Surgery/PCIU ambulance drop-off.
 - The ambulance drop-off for the RHSC ED from Old Dalkeith Road. This shall have a minimum of 5 ambulance drop off spaces for the Adult and Paediatric Ambulance ED. The layout shall prevent Project Co's Operational Term vehicles from stopping ambulances from having access to the ED ambulance drop off spaces for the ED within the Facilities and RIE ED. For the avoidance of doubt there may also be element of these works carried out on the Site in which case any such elements are part of the Facilities and not Retained Estate Handback Infrastructure.
 - Emergency visitor parking for the RHSC ED from Old Dalkeith Road. For the avoidance of doubt there may also be element of these works carried out on the Site in which case any such elements are part of the Facilities and not Retained Estate Handback Infrastructure.
 - Link to the existing Adult Ambulant Entrance to the RIE ED and its 6 ambulance drop off spaces.
- (c) Project Co shall create an access to the basement of the Facilities, the VIE Compound and energy centre at the Site from Old Dalkeith Road.

Drainage Works:

There may also be connections into some existing surface water drainage. If Project Co requires to connect the surface water drainage systems for the Facilities into the existing surface water drainage systems on the RIE Site then surface water drainage systems must be designed and constructed by Project Co such that they may be connected to surface water drainage systems at the agreed connection points in the Initial Drainage Proposal. Project Co shall provide design, construction and other information which shall be part of Project Co's applicable Interface Proposals to and for approval by the Board about the surface water drainage systems serving the Facilities and Project Co shall comply with Section 5 (Access Areas, Drainage and Substation) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A, the Initial Drainage Proposal, the Supplemental Drainage Proposal, the Access Strategy and where applicable any Access Strategy and/or Amended Drainage Proposal agreed or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A,

Cycle Path Works:

For details of the cycle works see paragraph 3.8.4 of this Sub-Section C.

D. Construction works outside the Campus Site and maintained by Project Co

Substation Works – Project Co shall be responsible for getting a dedicated HV power source for the Project via a dedicated Scottish Power substation. The Board has identified the Substation Site as the possible location for a dedicated substation for the Project.

If Project Co chooses to locate the substation on the Substation Site then Project Co shall provide design, construction and other information which shall be part of Project Co's applicable Interface Proposals to and for approval by the Board about the substation and access thereto which access may be formed only on the Substation Site and Project Co shall comply with the provisions regarding the Substation Access and cables in paragraphs 6 to 8

of Section 5 (Access Areas, Drainage and Substation) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Substation Proposal.

If a substation is constructed on the Substation Site then in order to get power from the substation to the Site the Board has identified a route for the HV power cable, the Substation Cable Route, on the Bioquarter Site. The cable route to the Facilities may enter the Site via the Service Strip (shown shaded yellow and hatched in black on Plan 2) and the cable route may not cross the Retained Site at any other point. In constructing the cable on the Substation Cable Route, Project Co shall be responsible for all design, construction, maintenance, repair, replacement and renewal and shall comply with paragraphs 2 and 4 of Section 2 (Operational Construction Issues) and paragraphs 1 to 3 and 6 to 8 of Section 5 (Access Areas, Drainage and Substation) and Section 6 (Service Strip and Foul Service Strip) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Access Strategy and Substation Proposal and the Service Proposal and where applicable any Access Strategy and/or Amended Service Proposal agreed or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) and/or Section 3 (Amended Service Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A.

4.5.11 Workmanship, Construction Accuracy & Tolerances

Project Co shall ensure that general workmanship conforms to current revisions of BS 8000: Series "Workmanship on Building Sites", which covers typical building construction activities. Where specialist design proposals require construction activities outside the scope of this document, Project Co shall propose specific quality procedures relating to these activities based on Good Industry Practice current at the time, as a minimum.

Project Co shall ensure that workmanship for all construction and component assemblies is to the highest standards in every respect. Work is to be true to detail with sharp profiles, straight and free from defects, marks, waves or flaws of any nature impairing strength, performance or appearance.

The buildings and the external works shall be designed and set out by Project Co in accordance with BS 5606:1990 "Guide to Accuracy in Building".

In some situations the tolerances identified in BS 5606 may not be appropriate for the particular elements or combination of elements in the Facilities. Where special levels of accuracy are required in relation to Project Co's proposals these shall be stated by Project Co. Project Co shall consider the recommended procedure set out in Figure 8, Section 3, Appendix B, of BS 5606.

Project Co shall identify critical dimensions and setting out points on all its drawn information.

4.5.12 Control of Noise, Vibration and Dust

Project Co will ensure that unacceptable dust and pollution as a result of construction works or any other activities undertaken on the Site is not created at locations where patients, staff, visitors or members of the public might be exposed to pollutants and areas adjacent to ventilation intakes on the Campus Site (in particular intake vents at the existing operating theatres at the RIE Facilities and at the University Facilities). The ambient air quality standards to be met are as outlined in the table below:

Ambient air quality standards

Pollutant	Averaging Period	Air Quality Objective	
		Concentration ($\mu\text{g}/\text{m}^3$)	Allowance
Nitrogen Dioxide (NO ₂)	1-hour	200	18 per calendar year
	Annual	40	-
Particulates (PM ₁₀)	24-hour	50	35 per calendar year
	Annual	40	-
	Annual	18	-
Particulates (PM _{2.5})	Annual	12	-
		25	-
		15% reduction	-

Project Co shall comply as a minimum with the mitigations detailed in the Planning in Principle – Environmental Statement dated July 2011 and Addendums dated August 2011 and October 2011. Project Co shall comply with BS 5228-1:2009 Code of practice for noise and vibration control on construction and open sites Part 1: Noise and BS 5228-2:2009 Code of practice for noise and vibration control on construction and open sites Part 21: Vibration. Project Co shall comply with Control of Noise (Code of Practice for Construction and Open Sites) (Scotland) Order 2002. Project Co shall comply with the noise controls set in HAI-SCRIBE 2 review.

Project Co shall ensure that the design and installation of any plant, machinery or equipment shall be such that any associated noise complies with N25 when measured within any nearby living apartment, and no structure borne vibration is perceptible within any nearby living apartment.

The attention of Project Co is drawn to the provisions of Sections 60 and 61 of the Control of Pollution Act 1974, with reference to the control of noise in relation to any demolition or construction works. Where such works are adjacent to occupied property, Project Co shall ascertain from the Site neighbours what requirements or restrictions, if any, shall apply, particularly in relation to Aspergillus. The restrictions may relate to the type of construction plant to be used, siting of construction plant, methods of working to be adopted, the hours of work permissible and may, in addition, impose a maximum noise level that must not be exceeded.

With regard to piling operations, the Board considers it essential that steps are taken by Project Co to limit the effects of noise and vibration. Project Co is required therefore to demonstrate through the selection of the method of piling that full consideration has been given to this requirement.

Project Co shall at all times ensure that the appropriate silencers and/or noise suppression apparatus are correctly fitted to construction plant and equipment.

Project Co shall fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by the manufactures of the compressors, tools or vehicles but in any event to the requirements of BS 5228-1:2009.

Any equipment of a semi-permanent nature used by Project Co, which produces noise on a regular basis, shall be positioned to cause the minimum disturbance to adjacent areas. Project Co shall ensure absolute care is taken at all times throughout the course of the Works to prevent the egress of water, dust, debris or any microbiological contamination out

of the Site and into adjacent buildings. In particular, Project Co shall establish any specific requirements for the control of dust.

Project Co shall ensure that all of the contractor and subcontractor's workforce are trained on the pollution and noise reduction measures in operation during the Works.

4.5.13 Meetings with Consort during the Construction of the Works

Project Co shall attend meetings with the Board and Consort during the construction of the Works. The Board shall manage the meetings including chairing and preparing the minutes except for the fortnightly Health and Safety Group meetings that Consort chair and minute. Project Co shall have the same lead person or a named deputy, at all meetings. The meetings that Project Co shall attend are to be agreed with the Board.

4.5.14 Meetings with Immediate Neighbours

Project Co shall attend meetings with the Board and all immediate neighbours during the construction of the Works. Project Co shall manage the meetings including chairing and preparing the minutes Project Co shall have the same lead person, or a named deputy, at all meetings. The meetings that Project Co shall attend are to be agreed with the Board.

4.5.15 Meetings with the Board during the Construction of the Works

Project Co and the Board shall agree the day-to-day; week-to-week meetings to be attended by Project Co and the Board. The purpose, timing, structure, management and content of the meetings are to be agreed by the Board and Project Co. Project Co shall have the same lead person at all meetings as far as possible or a named deputy.

4.5.16 Restrictions on Images and Videos during Construction of the Works

Project Co are required to obtain the Board's agreement prior to the use of CCTV cameras, webcams and the like to take images, videos and the like of the Works whether on or outside the Site.

4.5.17 Completion Requirements

On completion of the Works, Project Co shall provide the Facilities as clean to comply with the Completion Criteria. During the Post-Completion Commissioning Project Co shall provide the Facilities to a "clinically clean" standard of satisfaction of the Board's Head of Service Infection Control. Project Co shall liaise with the Board's Head of Service Infection Control in terms of agreeing the process and standards required to achieve the appropriate level of cleanliness for each location within the Facilities. Project Co shall demonstrate how the proposals facilitate the control and management of an outbreak and spread of infectious diseases in accordance with SHTM 03-01 and SHFN 30.

Project Co shall adopt a systematic and thorough approach to the commissioning of the Facilities including the setting to work, testing and providing the handover documentation for the same.

Project Co shall approach the commissioning activities as an entirely separate procedure undertaken by Project Co and ensure all activities interface with the buildings themselves, building services and equipment provisions.

Project Co shall ensure that the ability to commission the systems and installations is considered at an early stage and is designed into the Facilities and is an inherent part of the overall buildings solution.

During the design stage Project Co shall detail outline commissioning periods required on-site such that these are built into the Programme and Outline Commissioning Programme.

During the Construction Phase Project Co shall ensure that installations comply with the design intent of the drawings and that all installation and commissioning activities at the Facilities are performed correctly. This shall include ensuring physical access is easily achievable to all commissioning stations and devices.

By the date for Project Co to make available the principal operation and maintenance manual set in Clause 18.5 of the Project Agreement, Project Co shall provide to the Board a complete set of electronic records representing the design, construction, testing and commissioning and completion of the “as-constructed” Facilities that include the routes of all building services. This shall include, but not be limited to, a full set of as-built records, drawings, specifications and the like and the documents in the Completion Criteria, incorporating all changes to the design and all remedial works during construction. The documents and drawings format(s) and [] number of copies are to be provided by Project Co. For the purposes of Clause 17.18 and 18 of the Project Agreement all final as-built records for the Facilities shall include, as a minimum:

- a) Design information including all relevant design calculations, parameters, assumptions, standards, specifications, product data sheets for all components and parts, including details of the influence on the design of actual construction methods, including any change or remedial works during construction.
- b) As built drawings for all component parts of the Facilities;
- c) Testing & Commissioning records for all discrete components, subsystems, systems and the Facilities as a whole;
- d) Operating and Maintenance manuals;
- e) Health and Safety File;
- f) Full set of design, construction, testing and commissioning and completion records/certification.
- g) All other information that is required to be collated under the Construction (Design and Management) Regulations 2007 as amended from time to time.

Project Co shall provide to the Board, at the Actual Completion Date, a certificate confirming that the Facilities comply with the requirements of NHS Scotland Firecode.

Construction records and all information relevant to the construction of the Facilities shall be stored in a secure electronic data room created specifically for this purpose by Project Co for access after completion. The system for storage of data and information shall be designed by Project Co and shall generally be compatible with the Board's existing systems. The format of the data room and the system for storage of data shall be designed by Project Co and submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement. Project

Co shall be responsible for management and administration of the data room for the Project Term.

4.5.18 Oversailing Activities

When Project Co intends to oversail any part of the Retained Site and/or Retained Estate in connection with the Works and/or any works in the Operational Term then Project Co shall comply with the Oversail Strategy and Section 4 (Oversail) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and/or where applicable any Additional Oversail Strategy agreed or determined pursuant to Section 1 (Oversail) of Part 2 (Interface Proposals Procedure) of Appendix A.

5 General Construction Requirements

5.1 Schedule of Life Expectancies

The buildings, including building services components, shall be designed with materials, components and techniques that are readily available, reliable, sustainable and easily maintainable in use. The Board supports buildings constructed using components with proven technology, with high life expectancy, leading to minimum cost in use.

Good Industry Practice for a design life at the Actual Completion Date for the elements listed below shall as a minimum be:

a) Structure, including substructure	70 years
b) Floor Structure	70 years
c) Roof Structure	70 years
d) Drainage and below ground civil engineering infrastructure	70 years
e) External Walls	70 years
f) External Openings, windows and door	25 years
g) Roof Finishes	25 years
h) External finishes	25 years*
i) External Hard Surfaces	20 years
j) Internal partitions including openings	25 years
k) Internal Doors	25 years
l) Internal finishes (excluding soft flooring)	15 years*
m) Soft flooring	12 years
n) Internal fixtures and fittings	15 years
o) Engineering plant	CIBSE Guidance

p) Engineering services distribution systems

CIBSE Guidance

*excluding painted finishes

Project Co shall demonstrate that the design life proposed for any element will be achieved.

Materials and components forming part of the Facilities, which require maintenance and replacement within the life of the Facilities, shall be selected, located and fixed in such a way as to minimise future inconvenience, disruptions and to avoid temporary closure of the Facilities.

5.2 Infection Prevention & Control

The Board requires the highest priority on infection prevention and control to be given in relation to the movement of goods and in particular the segregation as far as is reasonably practical of clean linen, food trolleys and the removal of waste, soiled linen and empty food trolleys.

Project Co shall ensure all aspects of the Facilities allow for the control and management of any outbreak and/or spread of infectious diseases in accordance with the following:

- a) Infection Control in the Built Environment: Design and Planning (SHFN 30);
- b) Scottish Infection Manual – “Managing the Risk of HAI in NHS Scotland”;
- c) Health Facilities Scotland – Healthcare Associated Infection – System for Controlling Risk in the Built Environment (2007)
- d) Guidance provided by Clinical Standards Board NHS HIS;
- e) Textiles and Furniture (SHTM 87);
- f) Ventilation in Healthcare Premises (SHTM 03-01);
- g) “Guidance on Prevention and Control of Clostridium difficile Infection (CDI) in healthcare settings in Scotland” Health Protection Scotland, 2009; and
- h) NHS Lothian Infection control web based manual
<http://www.nhslothian.scot.nhs.uk/Services/A-Z/InfectionControl/Pages/default.aspx>;

5.3 Thermal Requirements

Project Co shall ensure the buildings’ envelopes complies with Section 6 of 2011 Non-domestic Technical Handbook to The Building (Scotland) Amendment Regulations 2010 and the following criteria:

- a) The entire building envelope shall be thermally broken and no details that allow cold bridging shall be used;
- b) The whole building envelope shall be provided with a continuous air and vapour tight skin layer with a vapour resistance of not less than 200 Mns/g when tested in accordance with BS 3177. This barrier shall be on the accommodation side of any insulation and may be formed of differing materials at different parts of the construction provided that continuity is maintained in all places. The vapour barrier material shall be non-combustible;

- c) The building fabric shall include passive design measures to limit summer temperatures to figures given within the Environmental Matrix; and
- d) The work to the fabric to achieve the above standards shall include but not be limited to enhanced window performance, high solar performance glazing systems, brise soleil and enhanced thermal insulation value.

5.4 Acoustics

Project Co shall define the acoustic criteria to be adopted on a room-by-room, and corridor-by-corridor basis with reference to SHTM 08-01: Acoustics. Project Co shall be responsible for demonstrating compliance with the agreed criteria.

Project Co shall endeavour within their design, to minimize the transfer of noise, dust and vibration throughout the Facilities. In particular, the design shall take account of the potential for disruption to the clinical function of the Facilities caused by noise, dust, vibration or other nuisance, however caused, as a result of future modifications / remedial works that may be required to the Facilities.

Project Co shall demonstrate in their design, how it shall address the issue of undesirable noise transmission in patient waiting areas. Project Co shall endeavour to minimise and mask ambient noise sufficiently to preserve patient privacy, confidentiality and maintain a calming atmosphere.

Project Co shall ensure that the acoustic design of the Facilities shall give due consideration to the requirements of the deaf and hard of hearing. In particular the level of background noise shall be such that it does not cause particular difficulty for those with such conditions.

In addition, Project Co shall ensure all specialist audiology sound-proofing in accordance with the Board's Construction Requirements this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements), Sub-Section E (Specific Non Clinical Requirements) and this Schedule Part 6 Section 6 (Room Data Sheets) are designed into the Facilities.

5.5 Room Mock-ups

Project Co shall provide the design of the room mock-ups including the 1:50 floor plan with loaded floor, walls and ceiling including details showing Equipment. The design for the mock-ups shall include the detailing for the floor finishes including skirting interface. Project Co will provide accommodation for, and full scale mock-ups of the following rooms, as a minimum, for use in the design development and approval process:

- a) Touch Down Base;
- b) Adult Single Bedroom with ensuite;
- c) Paediatric Single Bedroom with ensuite
- d) Paediatric Four Bedded room;
- e) Clean Utility Out Patient Department and
- f) Clean Utility In-patients

These shall be built with all services, equipment, doors and windows. They shall include the floor, wall and ceiling finishes. The services and equipment do not need to be live. Group 3 equipment will be provided by the Board for Project Co to install into the rooms.

The design and construction of the room mock-up shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement. They shall be provided in a timely manner, to ensure they add value to the design development and approval process.

5.6 Integration with Engineering Services

Internal walls, partition systems, ceiling voids and service risers shall be capable of integrating services, e.g. wiring, plumbing, medical gases and service terminals as required without detriment to the performance of any building services and other Facilities performance criteria such as fire resistance or acoustic properties. Engineering Services shall be co-ordinated such that satisfactory means of maintenance access is provided which minimises the potential for disruption to the Board's operations.

5.7 Building Envelope

The building envelope includes all external wall, façade and roof cladding elements associated with the Project. Project Co shall design the building envelope to provide a high quality enclosure to the accommodation and shall provide resistance to impact damage and intruder break-in, either by cutting or disassembly of the wall components. It shall incorporate an external finish which is essentially self-cleaning irrespective of the frequency of maintenance. Whilst selection of all materials and construction techniques is the responsibility of Project Co, there are a number of key criteria which must be satisfied by Project Co, as follows:

- a) All selected materials shall be compatible with each other;
- b) All selected materials shall be subject to the approval of The City of Edinburgh Council as part of the overall planning approval process;
- c) The selected materials shall have a verifiable life expectancy in line with the criteria set out in paragraph 5.1 and certain specific elements, such as sealants, which may have a design life of less than the period stated, shall be identified and submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement and shall be the subject of a planned maintenance programme for replacement;; and
- d) Any cladding systems chosen for use on this Project shall be designed and constructed to resist silently, without detriment to the required performance or appearance, the action of the elements including wind, rain, hail, snow, ice, solar radiation, temperature changes, moisture movement, structural movements, construction tolerances, thermal movements, the internal environment of the buildings and dead or imposed loads. The systems shall include the necessary provisions to enable regular cleaning from outside and regular routine maintenance to take place, without disturbance to the activities within the buildings, in accordance with the current provisions of the amended Workplace (Health, Safety and Welfare) Regulations 1992 and Ability to Open Windows Safely guidance.

Project Co shall ensure that the buildings are constructed and the design is detailed to limit air infiltration to minimum levels to reduce energy consumption and improve internal environmental conditions.

Performance demonstration tests for all roof and wall elements shall be carried out by Project Co in accordance with the following:

Project Co shall ensure all testing of mock-up assemblies of parts of the buildings construction are completed satisfactorily before work starts on the Site in relation to the building envelope.

Project Co shall arrange for the testing of all completed wall and roof assemblies to prove compliance with the requirements of The Building (Scotland) Regulations 2004 and its amendments

Project Co shall ensure that the external hard and soft landscaping around the buildings shall allow access for the appropriate maintenance / cleaning system and equipment utilising the hierarchy of control measures included within the Work at Height Regulations 2005 as amended. Appropriate provisions shall be incorporated by Project Co to allow the safe use of the appropriate maintenance / cleaning system including but not limited to safe access to the workplace and equipment. The structural frame and external skin of the buildings shall be designed by Project Co to accommodate the loading requirements of access equipment and operatives, where the cleaning and maintenance system uses this method.

Project Co shall design the buildings' envelope to prevent rainwater entry into the building structure and the internal accommodation. Where water penetrates cladding elements, as part of the functional design and construction techniques, Project Co shall ensure it is controlled and drained externally.

5.8 Internal Areas

Project Co shall ensure that the internal areas of the buildings shall allow access for the appropriate maintenance / cleaning system and equipment utilising the hierarchy of control measures included within the Work at Height Regulations 2005 as amended. Appropriate provisions shall be incorporated by Project Co to allow the safe use of the appropriate maintenance / cleaning system including but not limited to safe access to the workplace and equipment. The internal frame and internal skins of the buildings shall be designed by Project Co to accommodate the loading requirements of access equipment and operatives, where the cleaning and maintenance system uses this method.

5.9 Ceilings Heights & Voids

The floor to ceiling heights, or the floor to the underside of ceiling mounted plant where there are no ceilings, shall be designed to accommodate the nature and use of the accommodation.

Project Co shall provide ceiling heights and voids that provide an interface between the mechanical and electrical services installations and the accommodation below with the integration of service outlets, lighting, grilles and other fittings.

Project Co shall configure the design, wherever possible, to accommodate future flexibility.

The Board accepts that there will be a limited number of areas where future flexibility will be less easily achieved. These areas may include (but not be limited to): operating theatres; shielded rooms; and rooms designed to accommodate heavy imposed loads.

An appropriate and safe void allowance above all ceilings shall be provided, including appropriate and safe points of access for maintenance of services. These shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement. The void

allowed shall be adequate for the proper co-ordination and installation of engineering, cabling (including IT) and other services.

Co-ordination with the electrical, mechanical and communication services shall be an inherent part of the ceiling and building design. Within each area the installation of the engineering services provision shall be co-ordinated with the ceiling layout and allow simple relocation if required.

Suspended ceilings shall be readily demountable without suffering damage or becoming soiled and shall be easily cleaned. Frequently accessed voids shall be fitted with robust hinged locking doors or hatches.

Project Co shall ensure that the void above the ceiling is fully accessible from below, unless otherwise agreed by the Board, and adequate for the proper installation and co-ordination of the services, and for their future maintenance, repair and replacement. Allowance shall be made by Project Co for the installation of additional services in the future wherever possible. Where the design does not include the need for ceiling voids for services there shall be an allowance made by Project Co for a dedicated zone for the installation of ceilings and services at a later date.

Project Co shall ensure that the ceiling layouts are co-ordinated with the drainage, mechanical and electrical services installations. Project Co shall demonstrate its solution to this requirement prior to the commencement of construction.

Ceiling mounted booms required for patient support and monitoring systems in theatres, Paediatric Intensive Care Unit (PICU), treatment or x-ray rooms shall be co-ordinated with the ceiling layouts.

Project Co shall ensure the design and construction provide flexibility in terms of fixtures and fittings, i.e. locations of individual pieces of equipment can be readily changed and not unduly restricted by the type of construction.

Project Co shall ensure that the ceiling voids are designed to accommodate the specific requirements of the fire strategy for the Facilities – and in particular, the provision of cavity fire-barriers within compartments.

5.10 Corridor Widths and Heights

Corridor widths and heights shall satisfy the relevant guidance provided by:

- a) BS8300:2009
- b) The Equality Act 2010;
- c) SHFN14 “Disability Access”;
- d) HBN 00-04;
- e) SHTM 81; and
- f) Other relevant statutory guidance.

The hospital streets are to have a minimum unobstructed width of 3 metres. Other corridor widths shall be as defined by the nature and use of the accommodation. Corridor heights shall be as defined by the nature and use of the accommodation. Main interdepartmental

corridors in areas that patients may travel in beds shall be of sufficient width to allow two beds, with any attached equipment, to pass. The corridors width and height shall allow the installation, removal or replacement of clinical and non clinical equipment. Minimum widths and heights shall apply along the whole length of the corridor.

5.11 Door Widths and Heights

Clear widths and heights of all door openings in addition to satisfying the requirements of The Building (Scotland) Regulations 2004 and The Building (Scotland) Amendment Regulation 2011, shall comply with the guidance of BS 8300:2009, SHTM 81, SHTM 58 and the relevant section of HBN 40. Door widths shall be identified in the relevant Room Data Sheet.

The door opening widths and heights in clinical areas shall be sufficient to allow the safe passage of a four section profiling electric bed with associated equipment and escort alongside.

Notwithstanding the above, Project Co shall be responsible for establishing, through detailed consultation with the Board, additional specific requirements for door widths and heights in all areas of the Facilities. Consideration shall be given to providing sufficient door width in areas where the Board's operations rely on the use of larger items of equipment such as waste containers and regeneration trolleys.

Door widths, heights and door configuration shall be provided to allow for the delivery and removal of equipment to each area.

5.12 Windows

Project Co shall ensure that due consideration is given to the location and extent of glazing on external walls with regard to solar gain and heat loss. Solar control glazing, or appropriate solar shading, shall be used on windows on east, west and south facing elevations. The use of blinds or other device placed between secondary glazing or double sashes shall not be considered appropriate solar shading.

Courtyards, and courtyard elevations, shall be designed by Project Co so that daylight to usable room spaces at the lowest level of the courtyards is adequate for normal tasks within the rooms.

The Board wish to see the use of natural daylight contributing towards the achievement of a high standard of environmental quality.

Natural light shall be provided in public spaces and in occupied private and staff spaces within the Facilities as far as is practical. Natural and artificial light sources shall be designed to avoid or minimise glare.

Window area and sill height, privacy and security requirements will require special consideration for ground floor accommodation to allow sufficient daylight and views out whilst maintaining privacy from people outside the building.

Where transparent window glass requires to be rendered translucent for reasons of privacy either by obscure glazing or by the use of applied reflective films, then consideration shall be given to the effect of internal artificial lighting during the hours of darkness. This particularly, but not exclusively, applies to all patient areas situated at or adjacent to external public spaces.

Project Co shall provide all windows with a security rating classification of 2 or 3 for manual intervention attack when tested in accordance with Loss Prevention Standard LPS 1175 : Issue 6 : Table 4: May 2007 and shall meet the relevant performance standard in the appropriate British Standard. Glazing and glazing sizes shall be kept to the minimum compatible with the requirements of lighting, surveillance and visibility.

Where possible all windows shall be designed by Project Co to be cleaned both externally and internally from the inside, unless otherwise agreed by the Board. Project Co shall ensure no portions of windows, either fixed or opening shall come below the level of worktops or desks included in the Schedule Part 11 Equipment Schedule.

Project Co shall ensure opening windows are provided with good quality well-fitting seals and shall be capable of opening at the top and bottom of the frame and shall be fitted with restrictors to give a maximum opening of not more than 100mm in normal use. The effect of such restrictors shall be taken into account by Project Co when calculating the effect on efficient and effective natural ventilation requirements for the room. Project Co shall ensure all windows required for ventilation shall be provided with controllable trickle ventilators within the head of the frame or with two stage key lockable handles giving 5 – 10mm ventilation gap. The opening lights of the windows, and any control devices, shall not interfere with the location or operation of blinds or curtains. All windows and fittings shall be compliant with anti-ligature requirements.

External sills shall be designed to prevent birds from roosting.

Project Co shall ensure that locking devices, to enable the windows to be released for cleaning purposes, shall be by key or other device such that the locks cannot be released by unauthorised persons.

Project Co shall ensure that all handles or control gear shall be placed at levels which enables them to be operated by staff standing on the floor without the use of loose poles, and which do not conflict with the location of the adjoining construction elements, including blinds and curtains. Where windows are placed over worktops or desks, or where the operation as described above is not achievable, mechanical or electrical means of opening shall be provided by Project Co with controls located in a suitable position within the room concerned.

Project Co shall test the windows and other external opening assemblies (louvres and doors) in accordance with the following.

- a) BS EN 1027:2000 Windows and Doors – Watertightness – Test Method;
- b) BS EN 12210:2000 Windows and Doors – Resistance to Wind Load - Classification; and
- c) The Test Report Format contained in the withdrawn standard - BS 5368, Part 4: 1986 (EN86).

5.13 Finishes

5.13.1 General Finishes

Project Co shall select finishes on the basis of the following:

- a) Accessibility;

- b) Appropriateness;
- c) Durability;
- d) Robustness;
- e) Compatibility;
- f) Maintainability;
- g) Suitability for life cycle replacement;
- h) Co-ordination with other finishes;
- i) Suitability for infection control;
- j) Health and Safety attributes;
- k) Life Expectancy set out in paragraph 5.1;
- l) Easy of future maintenance; and
- m) Appearance.

All wall finishes and backgrounds shall be selected and installed in accordance with the NHS Requirements set in paragraph 2.3, and appropriate British and European Harmonised Standard Specifications and Codes of Practice. The Board's requirements are identified in this Schedule Part 6 Section 6 (Room Data Sheets) and the finishes listed in the table set out in paragraph 1.2.3 of Schedule Part 8 (*Review Procedure*).

Areas of the Facilities that are subject to potential damage from trolleys, vehicles, beds or other similar traffic shall have adequate protection to comply with SHTM 69 as a minimum.

The finishes detailed in the Table of Finishes in accordance with Schedule Part 8 Review Procedure and shall demonstrate the finished quality standards of certain specific fittings and finishes that will be constructed by Project Co during the design and construction stages. Project Co will create these mock-ups that will form the benchmark for quality control of site operations.

Project Co shall also select finishes which do not give rise to offensive odours developing. Accordingly, finishes shall be selected with due regard to usage, potential spillage and cleaning regimes (details provided in Sub-Section E) and health and safety issues in relation to performance and cleaning regime.

Project Co shall ensure that all floor, wall and ceiling finishes include adequate provision for movement joints, in accordance with current recommendations, to cater for any movements of the structure and/or the background material of the finish. Project Co shall ensure that the location and detail of the joints shall be fully co-ordinated with the overall interior design. Project Co shall indicate the position of all movement joints on drawings to be submitted as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

The use of inspirational colour patterning, motifs and texture shall be considered by Project Co in appropriate areas throughout the building. Where carpeted areas are required due consideration shall be given by Project Co to the use of durable wool-rich carpets if appropriate to the room function.

Project Co shall submit to the Board for review by the Board in accordance with paragraph 1.2.3 of Schedule Part 8 (Review Procedure), Table of Finishes and clause 12.6 of the Project Agreement the decoration for the Teenage Cancer Trust accommodation.

Where possible, internal surfaces shall allow cleaning and repair of elements that may be vandalised, with the minimum of effort.

5.13.2 Flooring

Project Co shall ensure all level, stair treads and nosings, and inclined flooring shall meet the following minimum slip resistance requirements:

- a) "Pendulum Test Value" of 36 or greater (when either dry or contaminated); and
- b) "Rz surface micro-roughness (microns μm)" of 20 μm or greater for water-wet, low activity pedestrian areas.

Project Co shall procure that test results in the "installed" condition are independently verified by the Health & Safety Laboratory, Buxton, Derbyshire. The pendulum test shall be performed using a pendulum-coefficient of friction instrument with "Four-S" rubber (Standard Simulated Shoe Soil) and Slider 55 rubber, in accordance with approved HSE test methodology.

For the avoidance of doubt, the obligation to follow the pendulum-coefficient of friction methodology is a specific obligation and is derived from the HSE, which is their preferred method of test.

Project Co shall ensure that all entrances to the Facilities incorporate sufficient length of appropriate floor matting designed to remove contaminants including water, dirt and leaves from footwear, trolley wheels etc. A water evaporation system such as a hot air curtain shall be provided at each entrance.

All floor finishes shall comply with SHTM 61 and have low absorption, low radius of ignition and low dirt retention.

Project Co shall comply with all of the recommendations provided in SHS Safety Action Notice SAN(SC)05/08.

Project Co shall prepare a Flooring Finish Selection Matrix in accordance with SHTM 61, 2009 in order to demonstrate to the Board that the selected finishes are suitable for their locations.

The particular conditions in the plaster suite accommodation shall be taken into account when selecting floor finishes.

5.14 Partitions

Project Co shall ensure partitions address special construction requirements including x-ray protection and gamma ray shielding i.e. concrete or lead. It is important that Project Co comply with the shielding requirements from the Board's Radiation Protection Advisor.

Partitions shall be designed to take account of following criteria:

- a) Structural strength of overall partition, and adequacy of support for fittings, fixtures and equipment, both planned and future;
- b) Sound reduction;
- c) Fire resistance;
- d) Moisture resistance;
- e) Resistance to biological infection;
- f) X-ray shielding;
- g) Gamma ray shielding; and
- h) Protection from damage.

5.15 External Materials

Project Co shall ensure that selected materials are robust and durable. The choice of materials for cladding and external surfaces shall comply with the performance levels of the Board's Construction Requirements and provide an appropriate design solution in terms of quality, scale, colour, texture, serviceability, statutory and environmental requirements.

5.16 Architectural Hardware

The locking system shall be fully suited across the Facilities, and shall interface with swipe card/other entry systems where provided. The locking system shall interface with the Board's existing 'swipe card' or other electronic entry systems currently employed at the RIE Facilities. Particular requirements with respect to electronic door access / security requirements are contained in paragraph 9.19.6.

5.16.1 Ironmongery

Project Co shall provide ironmongery which shall enhance the overall quality of the interior design concept. Project Co shall ensure ironmongery is of robust construction suitable for its specific purpose and usage characteristics and in accordance with the Room Data Sheets. For ease of use by elderly or disabled persons Project Co shall ensure handles are colour contrasted with the door background colour and of easy grip design.

Samples of all the ironmongery products shall be prepared in accordance with paragraph 2.3 and paragraph 5.5. The lock suiting information is to be provided as Reviewable Design Data for review in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement post Financial Close. This is so that details of lock suiting will be submitted by Project Co to the Board to allow adequate time for discussion and amendment if necessary before the fittings are required for installation in the buildings. All door closers shall be fully adjustable.

5.16.2 Blinds & Curtains

Project Co shall select blinds and curtains to relate to the overall interior design concept and to the specific requirements for each in relation to colour, pattern, material, fire resistance,

non-flammability, opacity, light reflectance and light absorption. Blinds and Curtains shall be Class O rated. Windows in clinical areas shall be fitted with disposable curtains. Windows in non-clinical areas shall be fitted with blinds that are of the non-disposable type.

Project Co shall ensure that materials for blinds and curtains shall also comply with the requirements of the Board's Head of Service Infection Control for cleaning, washing and maintenance, and comply with SHFN 30 and SHTM 87 and relevant Safety Action Notices. All blinds and curtains shall be compliant with anti-ligature requirements.

The locations and fixings for both blinds and window curtain tracks shall be co-ordinated by Project Co with the window and internal window sill design from the outset of the building design development and the fixings shall be designed by Project Co to take the proposed maximum loadings possible for the tracks concerned. Curtain tracks shall be designed by Project Co to overlap the window openings so that they do not allow light to pass into the room when drawn. Controls for blinds and curtains shall be co-ordinated by Project Co with the window design and its opening gear, including any operating handles, levers or stays that may be required and shall be located conveniently for staff or patients to operate as appropriate.

Project Co shall fix bed curtain tracks at the height recommended in the relevant guidance and Project Co shall ensure bed curtain tracks are co-ordinated with other service outlets and the window positions, where applicable. An adequate ventilation gap must be provided by Project Co at the curtain head.

Where Project Co are required to provide "vistamatic" blind type controls to observation panels, doors and screens, appropriate sight lines shall be maintained into single bedrooms and counselling / interview rooms.

Where blinds are required for privacy reasons, but are deemed not to meet the infection control criteria for a particular area then Project Co shall provide an alternative means of ensuring that privacy is maintained.

5.17 Hand Washing Facilities

Project Co shall ensure that all hand washing facilities comply with CEL 03 (2012) Water sources and potential infection risk to patients in high risk units and in clinical areas are provided with sensor taps and electronic valves to the supply spouts and that they shall conform to SHTM64 in all relevant respects; particularly;

- a) Single spout mixer to achieve correct temperature;
- b) Water temperature thermostatically controlled; and
- c) Supply and waste connections to concealed services.

5.18 Staircases, Ramps, Balustrades, Walkways, Escalators & Lifts

Where staircases, ramps, balustrades, walkways, escalators and lifts are provided in addition to those required to satisfy means of escape criteria, these shall be designed to relate to the anticipated capacity of use and clearly designated for public, staff or service circulation.

Where ramps are provided in addition to those required to satisfy means of escape criteria these shall be suitable for independent and/or assisted wheelchair users, trolleys and ambulant disabled people.

Dependent on the nature and configuration of the Project Co's design proposals, Project Co may be required to provide staircases for fire fighting access, smoke control, dry and wet riser provision agreed with The City of Edinburgh Council's Building Control Department and the Scottish Fire and Rescue Service.

Particular attention shall be given to evacuation lifts where there may be a high percentage of wheelchair users on upper floors.

Any passenger or bed / passenger lifts required for vertical transportation shall have a minimum clear entrance of 1300 mm.

5.19 Soft Landscaping Requirements

Project Co shall incorporate areas of soft landscaping into the Facilities to complement both buildings and hard landscaped areas' of the Site and the adjacent areas of the Retained Site in accordance with the requirements of paragraph 7.1.

5.20 Wayfinding & Signposting

Wayfinding shall be so designed to meet the needs of different groups of people coming onto the Site, such as children, the elderly, the physically and visually impaired, as well as for service delivery purposes and contractors.

Signs shall be consistent to the end of the journey, identify functional specialities to facilitate the separation of different clinical zones.

Signposting from parking areas to entrances shall be clear and unambiguous.

Project Co shall observe the guidance and advice referred to in paragraph 2.2 General Design Issues item b.

Non-specialist language shall be used. Consideration shall be given to the use of iconic and pictorial signs as an alternative to written words.

5.21 Wall Protection

Project Co shall establish the most suitable form of protection at the most effective height location and orientation that shall prevent direct impact with the building fabric, its fixtures and fittings. SHTM 69 provides guidance and recommendations on this subject.

Project Co shall undertake a detailed review of those pieces of mobile equipment both Clinical and Non-Clinical, that are expected to be used by the Board and Project Co within the Facilities. This review shall include a process of risk assessment and shall be organised to determine the type and extent of protection that is required to the building fabric. Project Co shall submit the findings of the review to the Board as Reviewable Design Data for review by the Boards (in particular the Board's Radiation Protection Adviser) in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement. Project Co shall comply with the findings of the review including providing the design and construction required by the review.

Project Co shall be required to demonstrate that the proposal provides the most effective height, location and orientation of protection that shall prevent direct impact with the building fabric.

Mobile equipment currently used by the Board includes (but is not limited to) the following, however Project Co shall be responsible for establishing a comprehensive schedule of all mobile equipment and associated dimensions sufficient to inform the design:

- Cots / Incubators / Beds / Patient Trolleys / Mobile X Ray Machines / Resuscitation Trolley's / Mobile Ultrasound Machines / Mobile EEG / Retrieval Team Equipment / Mobile Hoists / Wheelchairs / Food Trolleys / Mortuary Box / Supply delivery trolleys / Cleaning Equipment - Hoovers/Washers / Disposal Holder collection trolleys / Linen Trolleys / Sterile Supply Trolleys

Project Co shall endeavour to minimise the extent of impact damage incurred by ensuring corridors are free of awkward corners / obstructions. Project Co shall ensure that doors in corridors are of sufficient width to accommodate all forms of hospital traffic and shall, where necessary, be designed to be held in the open position or to automatically open where appropriate.

A combination of some or all of the following forms of protection would be deemed appropriate in corridors and hospital streets:

- a) Crash rails;
- b) Defensive coves; and
- c) Corner treatment and reinforcement.

Exposed services such as ducts, radiators and pipework can be badly damaged when struck by trolleys etc. Project Co shall incorporate measures to avoid damage to these elements.

5.22 Static Discharges

Project Co shall seek to eliminate, by choice of material coupled with control of the environment the release of static charge, in accordance with the recommendations contained in SHGN Static Discharge (1999).

Project Co shall co-operate with the Board in the production of relevant risk assessments in accordance with HTM 00-07 "Resilience planning for the healthcare estate".

5.23 Standardisation & Prefabrication

The use of standardised / prefabricated elements and building components to achieve good quality control, ease and speed of installation and flexibility for future use is welcomed. Their use shall ensure Operational Functionality can be achieved and offering value for money.

In order to take advantage of the repetitive nature of construction, maximise productivity and efficiency and minimise construction periods and waste, consideration shall be given to off-site prefabrication. It shall specifically be applied to repetitive elements e.g., sanitary assemblies, bathrooms or complex equipment such as plant assemblies.

Project Co shall adopt standardised and / or pre-fabricated components and elements of construction which improve product quality, guarantee consistency of performance enhance efficiency of maintenance, and provide flexibility for future changes, ease of replacement and value for money.

5.24 Materials

Project Co shall ensure that all materials incorporated into the works shall comply with the requirements of The Construction Products (Amendment) Regulations 1994, and all other parts of the Board's Construction Requirements.

Project Co shall ensure that all products and materials to be incorporated into the Facilities shall be of sound and satisfactory quality and unless otherwise agreed by the Board shall be new. Project Co shall not construct the Works utilising substances which are hazardous to health, including but not limited to substances referred to as being hazardous to health and safety in The Control of Substances Hazardous to Health Regulations 2002 and The Control of Substances Hazardous to Health (Amendment) Regulations 2004.

Where materials and components are not specifically identified as complying with The Construction Products (Amendment) Regulations 1994, Project Co shall ensure that they comply with the relevant British Standards, Eurocodes and Codes of Practice. Where materials and components are available in varying qualities complying with two or more of the relevant regulations or standards, the higher quality products shall be used.

Project Co shall ensure that the whole quantity of each product and material required to complete the Works is of a consistent type, size, quality and overall appearance and is fit for its intended purpose. Project Co shall ensure all products and materials are handled, stored, prepared and used or fixed strictly in accordance with the manufacturers' written instructions or recommendations and not be damaged when incorporated into the Works.

Project Co shall not construct the Works utilising substances which are hazardous to health, including but not limited to substances referred to as being hazardous to health and safety in "The Control of Substances Hazardous to Health (Amendment) Regulations 2004"

Project Co shall ensure that:

- a) the materials selected or specified by or on its behalf for use in the Facilities (or any part or parts thereof) are in accordance with the guidance contained in the Good Practice Guidance for selecting materials and this paragraph 5.24; and
- b) there shall not be specified for use nor shall there be incorporated or used in connection with the Facilities any materials or substances which are expressly prohibited by the Project Agreement or any part of it or which are generally known not to be in accordance with British or European Standards and Codes of Practice at the time of specification or use (as applicable), or any materials or substances which are deleterious to health and safety or to the durability of buildings and/or other structures and/or finishes and/or plant and machinery in the particular circumstances in which they are used, or any materials or substances identified as deleterious, unsatisfactory or unsuitable in the relevant circumstances in the Good Practice Guidance for selecting materials and, in addition to and separate from the foregoing, any substances or combination of substances publicised prior to the time of construction in any Building Research Establishment Limited ("BRE") publications issued as part of the BRE Professional Development service which the BRE recommend are not used for building purposes or for the type of buildings comprised in the Project.

Project Co shall obtain confirmation that all timbers are "Certified Wood".

Project Co shall certify at the Actual Completion Date that none of the materials, products or constructions defined as not being appropriate above have been used in the construction of the Facilities, or incorporated in them, other than where specific written consent from the Board has been obtained. Project Co shall also notify the Board of any other material which

may become designated as prohibited at any time after incorporation into the project, during the Project Term.

5.25 Sustainability

Project Co shall promote sustainable development by demonstrating an integrated approach to the social, environmental and economic well-being of the area served, now and for future generations. The Facilities shall also reflect the objectives of any local agenda strategy supported by The City of Edinburgh Council including Edinburgh Standards for Sustainable Building (2010).

Project Co shall design the Facilities to support the environmental services and to conserve and utilise energy in line with the Climate Change Scotland Act 2009 and the public sector duty to meet national targets of 42% reduction of CO₂ emissions arising from burning of fossil fuels and 80% by 2050. NHSScotland HEAT targets on energy conservation and CO₂ emissions are in place to meet the requirements of this public sector duty. The design of the environmental control system shall be co-ordinated and integrated with the design of the structure and the occupied areas in order to maximise the control and flexibility of the installations.

A grey water recycling scheme should be assessed for applicability in this project.

Project Co shall promote sustainable development by demonstrating an integrated approach to the social, environmental and economic well-being of the area served, now and for future generations. Project Co shall ensure that the design and completed Facilities comply with the recommendations of Local Agenda 21, including reflecting the objectives of any Local Agenda 21 strategy supported by The City of Edinburgh Council.

The Facilities shall, as far as reasonably practicable, deliver benefits to the environment. Project Co shall:

- a) Implement a strategy to meet the BREEAM requirements outlined in 5.25.1 below;
- b) Minimise waste during construction and operation;
- c) Using Corporate Greencode, implement an Environmental Management System (EMS) for accreditation aligned to ISO 14001;
- d) HTM 07-07 Sustainable Health and Social Care Buildings: Planning, design, construction and refurbishment;
- e) Reduce the use of fuels which contribute to ozone depletion, global warming, air and water pollution and depletion of non-renewable resource;
- f) Respect the local landscape and protect natural habitat and species and comply with the UK Biodiversity Action Plan;
- g) Avoid sources of ionising and electromagnetic radiation to the extent determined by the relevant HTM;
- h) Avoid any design features associated with sick building syndrome;
- i) Maximise the opportunity for waste minimisation and re-cycling;
- j) Maximise efficient and effective removal and transport of waste;
- k) Adopt maintenance regimes which maintain optimum performance;
- l) Where possible avoid the use of harmful building products and processes; and
- m) Explore the use of prefabricated elements to achieve good quality control, ease and speed of installation and flexibility for future use;

- n) Project Co shall comply with the relevant NHS Requirements, including, but not limited to:
1. The development of a Local Environmental Strategy in line with sustainable development in NHS;
 2. New environmental strategy for the National Health Service;
 3. Corporate Greencode;
 4. Good Corporate Citizenship Assessment Model (GCCAM);
 5. Carbon/ energy management in healthcare; and
 6. The Board's target of utilising some 20% of renewable energy sources shall be achieved by Project Co.

Project Co shall design the Facilities to support the environmental services and to conserve and utilise energy. The design of the environmental control system shall be co-ordinated and integrated with the design of the structure and the occupied areas in order to maximise the control and flexibility of the installations.

5.25.1 BREEAM

Project Co shall ensure that the Facilities achieve as a minimum a "Very Good" rating when assessed against BREEAM 2011 New Construction (SD5073).

Under the BREEAM 2011 New Construction (SD5073) there are now mandatory requirements specifically under energy, CO2 emissions, water and ecology. In addition, BREEAM embraces energy efficiency and passive design strategies for ventilation and thermal control to enhance internal comfort. The Facilities shall therefore also meet a BREEAM ENE1 target of 6 credits (excellent) in accordance with the BREEAM Scheme Document for New Construction (SD5073) Section 6.ENE1

BREEAM requires a design stage assessment, carried out and completed before construction starts on site, by Project Co. In addition a post construction review is required at completion carried out by Project Co. The post construction review assesses "as built" specifications and actual construction practice on site and shall maintain the 'Very Good' rating.

BREEAM Pre-assessment is in the Disclosed Data..

5.26 Energy Strategy

Project Co shall provide Facilities that achieve an optimum level of energy and utility conservation. Project Co shall:

- a) Minimise internal areas requiring mechanical ventilation;
- b) Minimise direct solar gain to avoid air conditioning/comfort cooling;
- c) Maximise daylight factors in staff, patient and visitor areas;
- d) Maximise utilisation of plant and systems;
- e) Maximise control and flexibility of the installations; and
- f) Ensure that the Facilities are designed and built to facilitate their operation in accordance with the Corporate Greencode.

Project Co shall provide Facilities that achieve a maximum water consumption target of 170,000 litres/bed/year and include measures that they propose to allow the Board to minimise consumption.

Project Co shall take due account of developments in Information and Medical Equipment Technology and any potential impact that this technology may have on the Energy Strategy for the buildings. Particular attention shall be paid to potential opportunities for heat gain within the Facilities provided due to the installation of additional or higher performance plant and equipment.

5.27 Fire Planning Strategy

Project Co shall demonstrate in the design for the Facilities a clear understanding of the policies and principles underlying fire safety in NHS premises.

In all cases the proposed fire strategy shall be fully co-ordinated and be agreed with the Scottish Fire and Rescue Service, The City of Edinburgh Council's Building Control Department and the Board's Fire Officer. Any proposals which deviate from the stated requirements of The Building (Scotland) Regulations 2004 and The Building (Scotland) Amendment Regulations 2011, SHTM 81 and SHTM 82, shall be supported by a specialist fire engineer's report which provides a clear understanding of the risks and protection measures to be included. Calculations and supporting information shall also be provided.

5.28 Storage of Gas Cylinders

Project Co shall ensure that all gas cylinders, whether they are connected to external supplies or not, are stored in accordance with SHTM 2023.

Signage must be sited and designed in accordance with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS 5499-10:2006 Safety signs, including fire safety signs - Part 10: Code of practice for the use of safety signs, including fire safety signs and the Health and Safety at Work Act 1974.

5.29 Radiation Protection

Project Co shall be responsible for the design and build of clinical and support facilities where exposure to ionising radiation might occur. This includes the use of x-rays, CT scanners and gamma cameras, and radioactivity (both in the form of sealed and unsealed sources).

Areas where ionising radiation is used shall require the walls, ceilings, floors, doors and screens to act as radiation shields. The design of the Facilities shall be compatible with specialised operational procedures, employed by the Board in order to ensure the health and safety of staff, patients and the public in radiation areas.

Project Co shall comply with the requirements of the Board's Radiation Protection Advisor to ensure that the Facilities combined with the Board's working practices provide adequate radiation protection.

Project Co shall submit proposals for providing screening to rooms containing radiology or other equipment emitting ionising radiations. These must be submitted to the Board as Reviewable Design Data for review by the Boards (in particular the Board's Radiation Protection Adviser) in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

5.29.1 The Designing-in of Radiation Protection

Adequate restriction of the radiation exposure of patients, staff and the public cannot be achieved by considering in isolation either the design of the Facilities, or the working practices to be adopted within it. The inter-relationship of the design of the Facilities and systems of work will be crucial in determining whether or not procedures can be completed quickly and efficiently and thus with the minimum irradiation of staff. Accordingly Project Co shall comply with the requirements of the Board's Radiation Protection Advisor and the operational managers of the relevant services.

Dedicated x-ray rooms and other appropriate areas require the walls, ceilings, floors, doors and screens to be shielded.

X-ray rooms and other appropriate areas are controlled areas whenever an exposure is in progress. The usual practice is to use electrical signs that illuminate at the room entrances when an exposure is underway.

Diagnostic x-rays are taken in other areas, e.g. operating theatres. The workload and x-ray energies involved will determine the amount of shielding required.

5.29.2 Work with Radioactive Materials

Project Co shall make provision so that arrangements can be made to monitor waste prior to being removed for disposal and linen prior to being sent for laundering.

A combination of shielding and speed of operation is required to avoid causing high radiation exposures to patients, staff and others.

Unsealed-source therapy also leads to the production of solid items and waste contaminated with radioactivity (e.g. clothing, food remnants, linen etc). Some can be disposed of by disposal or by maceration. The rest will need to be stored by Project Co in a secure shielded store away, from clinical area, until the radioactivity decays to background levels.

5.29.3 Transport, Delivery & Collection of Radioactive Materials

The arrangements for delivery, collection and storage of radioactive materials need to guarantee the safety of the materials in transit at all times. Appropriately trained staff must be used for moving radioactive packages both within the Facilities and by road. This shall require provision of short term parking.

Project Co shall give consideration to establishment of designated routes for the frequent transport of radioactive sources.

5.30 Static Magnetic Field Protection

The siting and planning of facilities for the use on patients of magnetic resonance imaging (MRI) shall pay particular attention to the characteristics of the equipment required and the need to screen unwanted radio signals from interfering with the MRI equipment and conversely the signals arising from the MRI equipment interfering with equipment elsewhere.

In areas where it is proposed to install MRI equipment Project Co shall ensure that effective magnetic fringe field protection is provided around such areas in accordance with the equipment suppliers' recommendations. Project Co shall discuss and agree proposals as

Reviewable Design Data for review in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement for any such screening with the Board prior to the installation of the MRI equipment.

The design of the Facilities shall be compatible with the specialised operational procedures employed by the Board in order to ensure the health and safety of staff, patients and the public in areas where this type of equipment is to be installed.

Project Co shall ensure that adequate provision for the removal, and replacement, of the equipment is provided and Project Co shall be responsible for agreeing with the equipment supplier reinforced routes through the Facilities, suitably sized access panels in walls, suitable ceiling heights, corridor widths and door openings to facilitate equipment replacement.

The design of the Facilities internally and externally, the patient journey and the construction of the buildings shall recognise the hazards associated with the powerful magnetic fields generated by the imaging equipment.

5.31 Electromagnetic Interference Protection

The siting and planning of facilities for the use on patients of Electroencephalography (EEG) and Evoked Potential Recordings shall pay particular attention to the characteristics of the equipment required and the need to screen unwanted electromagnetic signals from interfering with the EEG and Evoked Potential Recordings equipment and conversely the signals arising from the EEG and Evoked Potential Recordings equipment interfering with equipment elsewhere. Project Co shall comply with the requirements of SHTM 06-01.

Areas where electromagnetic interference will occur shall require the walls, ceilings, floors, doors and screens to act as electromagnetic interference shields. Project Co shall submit proposals for providing screening to rooms containing (EEG) and Evoked Potential Recordings equipment or other equipment emitting electromagnetic interference. These must be submitted to the Board as Reviewable Design Data for approval in accordance with Schedule Part 8 Review Procedure.

The design of the Facilities shall be compatible with the specialised operational procedures employed by the Board in order to ensure the health and safety of staff, patients and the public in areas where this type of equipment is to be installed.

The design of the Facilities internally and externally, the patient journey and the construction of the buildings shall recognise the hazards associated with electromagnetic signals generated by the EEG and Evoked Potential Recordings equipment.

5.32 Facilities Maintenance

The Project Co shall provide Facilities that ensure that the maintenance and replacement of services, finishes, components, elements, systems, furniture and equipment can be carried out effectively within the requirements of clinical operations and functionality.

Project Co shall ensure that the access routes within the buildings shall allow access for the appropriate maintenance / cleaning system, and equipment utilising the hierarchy of control measures included within the Work at Height Regulations 2005 as amended. Appropriate provisions shall be incorporated by Project Co to allow the safe use of the appropriate maintenance / cleaning system including but not limited to safe access to the workplace and equipment. The structural frame, floors and internal walls of the buildings shall be designed

by Project Co to accommodate the loading requirements of access equipment and operatives, where the cleaning and maintenance system uses this method.

5.33 Pest Control

Project Co shall incorporate pest control measures and measures to prevent pest entry to the Facilities.

6 Civil & Structural Engineering Requirements

Project Co shall in carrying out the Works comply with the following non-exhaustive list of civil & structural engineering requirements.

Project Co shall take cognisance of all the civil engineering and structural implications of the requirements described in the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

For the avoidance of doubt the hierarchy of standards and advice detailed in paragraph 2.5 shall apply to this paragraph 6.

6.1 General Requirements

Project Co shall ensure that the design and construction of the civil and structural engineering elements of the buildings and external works meets the following criteria:

- a) Be fit for their intended purpose;
- b) Be fully co-ordinated with the design of the building fabric, finishes, services, facades, internal walls, medical equipment and existing Site features, including buildings / structures;
- c) Include the design and construction of any secondary framing necessary for the support of plant, services, ceiling mounted tracking hoist systems, other lifting equipment or medical equipment;
- d) Provide adequate space for the distribution of services, while maintaining the required finished floor levels and the floor to ceiling heights called for in the Room Data Sheets, and elsewhere in this Schedule Part 6 Section 3 Sub-Section C;
- e) Maximise the clear zone above the ceilings for services to the degree consistent with overall economy for the Board;
- f) Provide fire resistance required by the appropriate SHTM and HTM, and the requirements of the Scottish Technical Standards;
- g) Be economically adaptable to meet changing clinical needs; and
- h) Require minimum maintenance and be designed to accommodate maintenance requirements for services, equipment and building fabric.

6.1.1 Sewers under the Site

Project Co requires to be aware of the Sewers serving the RIE Facilities and other neighbouring properties on and off the Campus Site part of which Sewers are located within part of the Site as shown coloured green in drawing number AS/209592/X(52)X/01P1 entitled

"Zone For Diverted Scottish Sewers to South of Site" which forms part of the Disclosed Data, and Project Co shall ensure that:

- a) No buildings or other erections are to be constructed nor any trees, shrubs, bushes or other plants or vegetation planted, grown, cultivated or permitted to grow over the route of the Sewer or within a lateral distance measuring from the centre line thereof which are likely to adversely affect the Sewer or would impair safe and reasonable access thereto (which shall be not less than 6 metres);
- b) No underground works will be undertaken within a lateral distance measuring from the centre line thereof which may adversely affect the Sewer or would impair safe and reasonable access thereto (which shall be not less than 6 metres).
- c) Access shall be provided at all times to the Board and any Board Party and Consort and any Consort Party to the extent required to maintain, repair and renew the Sewer and in accordance with the requirements in Clause 9 (Nature of Land Interests) of the Project Agreement (as varied, amended or supplemented from time to time in accordance with the Project Agreement; and
- d) Project Co shall be fully responsible for the consequences of failing to comply with these requirements and the losses which may be suffered or incurred by the Board and/or any Board Party and/or Consort and/or any Consort Party as a result of any act or omission of Project Co and/or a Project Co Party exercising any of the rights and/or performing any of its obligations and/or failing to do so and the provisions of Clause [49.1.6] of the Project Agreement shall apply.

6.1.2 Gas Pipe under the Site

Project Co requires to be aware of the possibility of the gas pipe serving the RIE Facilities part of which may be located within part of the Site and Project Co shall ensure that:

- a. No buildings or other erections are to be constructed nor any trees, shrubs, bushes or other plants or vegetation planted, grown, cultivated or permitted to grow over the route of such service media or within a lateral distance measuring from the centre line thereof which are likely to adversely affect the service media or would impair safe and reasonable access thereto (which shall be not less than 6 metres);
- b. The provisions of paragraph (a) above shall also apply to any service media being located within a lateral distance of 15 metres from the gas pipe measuring from the centre line thereof;
- c. Access shall be provided at all times to the Board and any Board Party and Consort and any Consort Party to the extent required to maintain, repair and renew the gas pipe and in accordance with the requirements in Clause 9 (Nature of Land Interests) of the Project Agreement (as varied, amended or supplemented from time to time in accordance with the Project Agreement; and
- d. Project Co shall be fully responsible for the consequences of failing to comply with these requirements and the losses which may be suffered or incurred by the Board and/or any Board Party and/or Consort and/or any Consort Party as a result of any act or omission of Project Co and/or a Project Co Party exercising any of the rights and/or performing any of its obligations and/or failing to do so and the provisions of Clause [49.1.6] (Indemnities) of the Project Agreement shall apply.

6.2 Architectural / Structural Interface

Structural floors shall be designed to have penetrable zones co-ordinated with the modular framework for partitions and services.

For the avoidance of doubt, structural timber floors shall not be permitted.

Columns shall be located in-so-far, as is reasonably practical to coincide with corridor walls in order to minimise intrusion into rooms or corridors. The relationship of columns, ducts and walls shall permit clear internal room surfaces and not obstruct equipment or fittings.

As far as practical, the walls to vertical service shafts shall be non-load bearing and therefore maximising opportunity for future services installation, alteration and maintenance.

The elevation design shall facilitate distribution of services at the building perimeter.

6.3 Performance Standards

Unless otherwise agreed with the Board, Project Co shall ensure that all structural elements are designed in accordance with current revisions of the following standards:

- a) Eurocode 0 – BS EN 1990:2002 – Basis of structural design;
- b) Eurocode 1 Series – BS EN 1991 Actions on structures;
- c) Eurocode 2 Series – BS EN 1992 Design of concrete structures;
- d) Eurocode 3 Series – BS EN 1993 Design of steel structures;
- e) Eurocode 4 Series – BS EN 1994 Design of composite steel and concrete structures;
- f) Eurocode 5 Series – BS EN 1995 Design of timber structures;
- g) Eurocode 6 Series – BS EN 1996 Design of masonry structures;
- h) Eurocode 7 Series – BS EN 1997 Geotechnical design;
- i) Eurocode 8 Series – BS EN 1998 Design of structures for earthquake resistance;
- j) Eurocode 9 Series – BS EN 1999 Design of aluminium structures;
- k) BS 8500-1:2006 – Concrete: Complementary British Standard to BS EN 206-1. Part 1 Method of specifying and guidance for the specifier;
- l) BS 8500-2:2006 – Concrete: Complementary British Standard to BS EN 206-1. Part 2 Specification for constituent materials and concrete;
- m) BS 8102:2009 – Code of practice for protection of below ground structures against water from the ground;
- n) BS 8204 – Screeds, bases and in-situ floorings;
- o) BS 5606:1990 – Guide to accuracy in building; and

p) BS 8000 – Workmanship on building sites.

Note: Eurocodes 0 to 9 – Corresponding National Annexes shall be used where applicable for Nationally Determined Parameters (NDP).

Construction tolerances, unless otherwise stated by the Board shall be no greater than those specified in Tables 1 and 2 of BS 5606. Where the operational constraints of the buildings require special levels of construction accuracy then Project Co shall be responsible for establishing and designing for these.

The performance of components shall be in accordance with the appropriate British Standards and Eurocodes.

Project Co shall ensure that building structures are designed to resist imposed, roof and wind loads not less than those required by current revisions of Eurocode 1 Series – Actions on structures. Project Co shall ensure that building structures are designed to carry the loads of heavy plant, the helipad and helicopters and medical equipment (including ceiling mounted tracking hoist systems) in their permanent positions and any loads that will be imposed upon the structures during the installation, removal or replacement of such heavy items. This requirement may involve the design of ‘strong routes’ through the buildings and / or specially strengthened areas of the roof onto which heavy items can be lifted. These areas and routes shall be identified by Project Co in their design as Reviewable Design Data for review in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement for agreement by the Board. Consideration by Project Co shall also be given to selection of floor screeds which shall have adequate strength and resilience to resist abrasion and indentation from the use of medical equipment.

Project Co shall ensure that any measures considered necessary shall be taken to protect the buildings from ingress of naturally occurring ground gases.

6.4 Loadings & Structural Flexibility

The Facilities’ structural flexibility shall reflect the overall Adaptability Strategy designed by Project Co. Despite any connection to the RIE Facilities the Facilities are to be free standing and must not rely on any other buildings outwith the Site for support.

Project Co’s structures shall be designed to cater for the dead loadings associated with the chosen materials for the structure, finishes, partitions and cladding to the buildings. As a minimum, it shall also be designed for the imposed loads as specified in current British Standards and Eurocodes. The design shall also take into account the need for specialist measures to allow for the installation of special equipment and associated services. Structural deflections shall be limited as necessary for the proper installation and functioning of specified equipment.

Project Co shall account for (but not be limited to) the following loading schedule:

- a) General floor loadings;
- b) Point loads for Clinical equipment and Services;
- c) Impact loads;
- d) Vibration loads;

- e) Special plant foundation loads; and
- f) Service loads.

Project Co shall take account of concentrated point loads from both mobile and stationary plant and equipment. The structure shall incorporate reasonable measures to accommodate updated versions of such machinery without major disruption. In addition, Project Co shall ensure that floors and supporting structures have the capacity for retro fitting lifting devices for all fixed items of plant and equipment weighing 35kg or more.

The Room Data Sheets have indicative details on anticipated items of heavy equipment.

For the avoidance of doubt, the Board recognise that no upper limit has been identified and this information will be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement on a departmental / unit / area basis.

Project Co shall take cognisance of the requirements in specified areas for ceiling mounted tracking hoist systems etc with point loads ranging from 375 kg to 750 kg. The structural capability and configuration of these areas shall allow the Board complete flexibility for re-configuration and extension of this equipment and / or retro-fitting of future lifting equipment in these areas.

Project Co shall take account of the need for special screeds, raised or lowered floors, ceiling grid support grids and other such measures to allow for the installation of special equipment and associated services.

Project Co shall ensure that specific areas of the Facilities satisfy particular requirements of the Board's operations or equipment in those areas. Relevant constraints may include but are not limited to maximum allowable structural deflections, differential settlement, vibration and the meeting of any specific tolerances. Project Co shall be responsible for establishing and resolving and seeking approval of any such constraints by submitting details to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Project Co shall take account of dynamic loads from general movement of people through to activities such as aerobics, dance or other rhythmic activities that can give rise to adverse harmonic effects that affect the design.

Lateral stability bracing systems shall not obstruct or hinder clinical or non-clinical or any other use and/or operations at the Facilities and without limitation shall not obscure the windows or doors.

The vibration response of the buildings shall comply with the requirements of SHTM 08-01 Acoustics and be compatible with the requirements of the equipment to be installed.

With respect to the Facilities, Project Co shall:

- a) Take due account of future flexibility of the Facilities (in terms of future change of use and / or relocation of equipment);
- b) Specifically make allowance for future flexibility of ceiling mounted tracking hoist equipment in specified areas, including the requirement for re-configuration, extension and / or retro-fitting of lifting equipment i.e. the whole of the specified area shall be structurally capable of accommodating hoist equipment;

- c) Make specific allowance for items of particularly heavy equipment and / or other onerous loading conditions; and
- d) Make specific allowance for installation, transfer and / or removal routes for heavy equipment throughout the Facilities.

Parts of the structure potentially subject to damage from trolleys or vehicles shall be designed with adequate protection to prevent such damage from occurring.

Structural deflections shall be limited as necessary for the proper installation and functioning of special mobile, rail mounted, or fixed equipment.

Project Co shall include, within the design, provision for removal, replacement and upgrading of installed plant and equipment. As part of this element of design, a comprehensive replacement strategy shall be prepared for implementation. This strategy shall, wherever possible, consider how these works can be undertaken whilst minimizing disruption to the function of the completed Facilities.

6.5 Foundations & Sub-structure

All foundations shall be designed by Project Co to Eurocodes to comply with current Codes of Practice taking into account the loadings to be sustained, prevailing ground conditions and the effects of any settlement on new superstructure and on links to adjacent buildings. Proposed solutions shall take account of adjacent foundations or structures and engineering services below ground. Despite any connection to the RIE Facilities the Facilities are to be free standing and must not rely on any other buildings outwith the Site for support.

6.6 Movement Joints

Structural movement joints shall not be located through:

- a) Theatre rooms;
- b) Treatment and surgery rooms;
- c) X-ray and imaging rooms;
- d) Pharmacy manufacturing rooms;
- e) Kitchens and food preparation areas;
- f) Any room with (now or in the future) with ceiling mounted tracking hoists or other similar lifting equipment;
- g) Any other room requiring a sterile environment; and
- h) Any rooms where there is a risk of biological or other hazard, or risk of penetration by water, grease / oil, or other hazardous or detrimental substance.

Lateral stability bracing systems shall not obstruct or hinder clinical or non-clinical operations and shall not obscure the windows or doors.

6.7 Building Super-Structure & Envelope

Vertical, oblique and lateral loadings from the external walls must be safely transmitted through the structure to the load bearing strata. When under maximum design stress, joints shall maintain full water exclusion properties and design appearance. Despite any connection to the RIE Facilities, the Facilities are to be free standing and must not rely on any other buildings outwith the Site for support.

Project Co shall provide the means for replacing the x-ray equipment during the Operational Term through the external envelope of the rooms housing the x-ray equipment including intermediate support if the equipment is to be transferred into the building from the exterior at upper floors. The external structural solution for the replacement of x-ray equipment shall not adversely impact on architectural appearance of the Facilities. Project Co shall provide the means of replacing the x-ray equipment to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

In addition to providing safe, aesthetically pleasing and durable structures, the structural design must enable the required clear spaces to be achieved with adequate provision of services taking into account maintenance and replacement during the operational life of the buildings. The design must consider construction methods and future maintenance and demolition of the structures and make provision for these to be carried out safely.

The environmental criteria to be applied in confirming the design performance shall be assessed and confirmed by Project Co. Formal testing of elements of the construction by a recognised testing authority will be required as part of the approval process.

6.8 Fire & Corrosion Protection

Project Co shall provide fire protection to all elements of structure and ensure fire ratings are in compliance with space use and the more onerous of Scottish Technical Standards / the Board's requirements. When the more onerous requirement is to be used the Board will have the right to decide what constitutes the more onerous requirement.

6.9 Durability & Maintainability

All elements of the structure shall be capable of withstanding potential deterioration due to weather, ground conditions, wear and tear, and accidental damage relevant to their location and environment.

Where the requirement for maintenance is less than the required life expectancy of the element(s) practical and realistic arrangements shall be designed into the construction of the Facilities to allow for any necessary repairs, replacements, and painting etc. to be carried out safely without compromising the operational activities within and around the Facilities.

6.10 Other Performance Requirements

Project Co shall ensure that all building elements and retaining structures shall incorporate appropriate means to resist the passage of dampness, both into the building structure and fabric, and into the accommodation, including the resistance to any hydrostatic pressure. Project Co shall ensure that all such construction shall be in accordance with the requirements of The Building (Scotland) Regulations 2004 and its amendments, BS 8102 and Code of Practice CP 102 for Protection of Buildings against Water from the Ground.

6.11 Drainage

Project Co shall design and provide separate foul and surface water drainage systems in accordance with the requirements of The Building (Scotland) Regulations 2004 and its amendments.

Project Co shall be responsible for liaising with Scottish Water to agree connection requirements to the surrounding public sewers and for compliance with relevant provisions of paragraph 4 and paragraph 6.1.1 as regards sewers.

Project Co shall provide, where necessary within the on-site drainage network any isolators, grease traps, retention traps, interceptor tanks and other such devices necessary to prevent the discharge of any potentially dangerous or otherwise contaminative materials to the public sewers.

Foul and surface water drainage shall be designed on separate systems and shall discharge into the existing systems, subject to necessary approvals and for compliance with relevant provisions of paragraph 4 as regards surface water drainage.

Surface water discharge shall be in accordance with the following requirements:

- a) A SUDS system designed and constructed in accordance with the Regulations and the guidance contained in 'SUDS: Design Manual for Scotland and Northern Ireland';
- b) Water Environment (Controlled Activities) (Scotland) Regulations 2005;
- c) A public sewer provided under the Sewerage (Scotland) Act 1968 and amendments;
- d) An outfall to a watercourse that complies with any notice and / or consent by SEPA.

SUDS features shall be designed as an integral part of the landscaping.

The drainage systems shall be designed to require no regular maintenance other than the cleaning of gully traps etc. and access for maintenance shall be provided to all drainage runs.

All drainage shall be designed to avoid the risk of local flooding and flooding of the system into which they discharge and/or to properties and/or land served by such systems. Flooding of electrical equipment areas and areas where stray current leakage may occur in the presence of water shall be prevented.

Drainage shall be sufficient to ensure that no areas of standing water occur. The drainage systems shall be capable of coping with, as a minimum, the foul loading and the storm event specified by the relevant authority and shall be considered an integral part of the public sewerage system. The drainage system shall be capable of taking such detritus as may normally arise during the operation of the system and during normal and winter maintenance conditions and those within the design criteria of the relevant authority.

A free passage of air shall be maintained through the foul drainage system.

Flat roofed areas wherever possible shall be drained to eaves gutters. Where such roof is enclosed, without eaves, it shall be drained by a minimum of two grated roof outlets and rainwater pipes, which shall be designed to pass the design rate of run-off assuming one outlet or 33 per cent of the outlets are out of use, whichever is the greater number.

Project Co shall design the drainage system in such a way as to minimise the requirement for internal manholes.

Project Co shall construct the drainage installation such that it complies with the Initial Drainage Proposal and shall comply with relevant provisions of paragraph 4 as regards drainage installation.

7 External Works

Project Co shall design and construct an external works environment for the Facilities that fully integrate with the buildings.

Project Co shall design the external works for ease of navigation around the site by staff, patients and visitors.

Project Co shall appoint an appropriately qualified professional and prepare a comprehensive hard and soft landscaping scheme.

In preparing the hard and soft landscaping scheme for the external works, Project Co shall ensure that due account is taken of the Board's requirements with respect to the integration of artwork.

Project Co shall select external works materials on the basis of the following:

- a) Accessibility;
- b) Appropriateness;
- c) Durability;
- d) Robustness;
- e) Compatibility;
- f) Maintainability;
- g) Suitability for life cycle replacement;
- h) Co-ordination with other finishes; and
- i) Suitability for infection control
- j) Health and Safety attributes
- k) Life Expectancy set in paragraph 5.1;
- l) Easy of future maintenance;
- m) Appearance.

In preparing the hard and soft landscaping scheme for the external works, Project Co shall ensure that due account is taken of the Board's requirements with respect to the integration of artwork.

Project Co shall carry out landscaping works outwith the Site boundary in the Yellow Area and Hatched Orange Areas in accordance with the relevant provisions of paragraph 4. All landscaping works shall be compatible with the adjacent parts of the external environment at the Retained Site.

Project Co shall seek advice from the Board to seek to minimise the risk of crime and vandalism on the Facilities. This advice shall be pro-actively sought by Project Co as part of the design process.

Project Co shall seek advice from Lothian and Borders Police's crime prevention representative on the proposals for external works to minimise the risk of crime and vandalism on the Site and the Facilities.

Where possible, Project Co shall ensure that external surfaces allow easy cleaning of vandalised elements, with the minimum of effort.

Project Co shall provide the following principal elements:

7.1 Soft Landscaping Requirements

Project Co shall design, as an integral part of the Facilities, a soft landscaping scheme that will enhance the environment of the Facilities.

The soft landscaping shall be easy to maintain, and plants and shrubs shall reach a state of maturity within three years of Actual Completion Date.

The design of landscaping and selection of plants and shrubs shall aid the reduction in risk of crime.

Project Co shall ensure that the landscaping and gardens are designed in accordance with the following:

7.1.1 General

Project Co shall involve the Board in the decision making process for all proposed planting for the Facilities details of which shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with paragraph 1.2.3 of Schedule Part 8 (Review Procedure), Table of Finishes and clause 12.6 of the Project Agreement.

Project Co shall carry out accurate site surveys prior to design of soft landscape to determine site levels and identify on survey drawings all existing features including any existing mature trees.

Project Co shall by reference to their own ground investigation data; confirm the need for imported topsoil or whether amelioration of existing soil is sufficient to support their soft landscaping proposals. Project Co shall then provide new or utilise existing soils, as appropriate.

Project Co shall carry out any necessary remedial measures to suit planted areas and hard landscaped areas.

7.1.2 Soil Preparation & Topsoil

Soil preparation shall be carried out by Project Co in accordance with BS 4428:1989, Code of practice for general landscape operations (excluding hard surfaces). Project Co shall ensure care is taken with the use of weed-killers. Project Co shall ensure that all topsoil complies with BS 3882:2007, Specification for topsoil and requirements for use.

7.1.3 Trees

Project Co shall ensure that any work to existing trees, whether or not covered by Tree Preservation Orders, shall only be undertaken with the appropriate licence as stipulated by the Tree Preservation Order or with the approval of The City of Edinburgh Council.

Project Co shall ensure that tree protection complies with BS 5837:2012, Trees in relation to design, demolition and construction - Recommendations. A register of the existing trees shall be made including giving each tree a unique number. Before construction commences Project Co shall take photographic records of the existing trees on and adjacent to the Site. The photographs shall record the trees' unique number. A site plan shall record the position of the existing trees noting their unique number.

7.1.4 Shrubs & Groundcover

Project Co shall ensure that all shrubs shall comply with BS 3936 Part 1:1992, and shall be planted to BS 4043: 1989.

Project Co shall ensure that shrub and groundcover protection complies with BS 5837:2012, Trees in relation to design, demolition and construction - Recommendations. A register of the existing shrubs and groundcover shall be made including giving each shrub and area of groundcover a unique number. Before construction commences Project Co shall take photographic records of the existing shrubs and areas of groundcover on and adjacent to the Site. The photographs shall record the shrubs and areas of groundcover's unique number. A site plan shall record the position of the existing shrubs and areas of groundcover noting their unique number.

7.1.5 Planting & Watering

Project Co shall ensure that planting and watering is carried out while soil and weather conditions are suitable for relevant operations.

7.1.6 Turf

Project Co shall ensure that turf is in accordance with BS 3969:1998, Recommendations for Turf for general purposes. Turf shall be free from undesirable grasses and weeds.

Project Co shall avoid grass in courtyards, unless the courtyard is very large. If provided Project Co must ensure there is a suitable, sufficiently wide access away from occupied areas for bringing mowing machinery to the turfed areas.

7.1.7 Health & Safety Considerations

Project Co shall ensure that all weed-killer / pesticides and herbicides and any other chemicals used in association with the landscape works preparation comply with SEPA regulations, the COSHH Regulations, and any other relevant regulations applying to hospital sites.

7.2 Therapy Gardens

The landscaping and therapy gardens provide an opportunity to soften the whole image of the Facilities by a visual presentation of quality and sensitivity that relates to pleasure and emotion rather than the essential clinical impressions that will inevitably be gained by users and visitors.

The gardens shall be easily accessible from the units / departments. It shall be secure and provide space for therapy and privacy. The needs of the patients will be varied and descriptions of their needs can be found in the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements) for the individual departments / units.

Certain parts of the therapy gardens shall be open for general use; other parts shall be private for use by specific patient groups.

The therapy gardens shall be available 24/7, 365 days a year. Attention shall be paid to the lighting of the gardens to allow use after dark and to enable the gardens to be enjoyed in the evenings when viewed from inside the building. Attention shall also be paid to providing covered / heated areas to allow the external environment to be enjoyed in different weather conditions.

All paved areas shall be wheelchair accessible and constructed using non-slip materials. Handrails shall be provided at intervals to allow ambulant disabled people equal access to the gardens. There shall be a number of paved areas thus allowing a number of 'walks' throughout the garden areas, away from the road network and car parks. Kerbs to the paved areas are necessary to avoid the risks of wheelchairs becoming stuck in soft earth.

Seating shall be provided throughout the garden areas. This shall be of a range of styles and heights so that it suits the needs of all service users. Protection from wind and some covered areas shall be provided throughout the garden(s).

7.3 Site Boundary Requirements

No work shall commence on Site until the details of the proposed boundary treatment have been submitted to and approved by The City of Edinburgh Council.

Project Co shall provide boundaries to the Facilities, which provide security, appropriate visual screening and essential maintenance access. Project Co shall engage the Board in the design process for all boundaries details of which are to be submitted to the Board as Reviewable Design Data for review by the Board in accordance with paragraph 1.2.3 of Schedule Part 8 (Review Procedure), Table of Finishes and clause 12.6 of the Project Agreement.

Where appropriate, proposals for the Site boundary treatment shall comply with the relevant parts of BS1722: Fencing.

7.4 Site Access & Circulation

Always subject to complying with the relevant provisions of paragraph 4 and Clause 9 (Nature of Land Interests of the Project Agreement as regards access for pedestrian and vehicular access on and around the Campus Site, the entrances and exits to the Facilities shall be clearly defined and signed; their design shall enhance ease of movement from and to the public roads. The road system shall be designed to facilitate safe, convenient routes

separating transportation groups as far as practical. Attention is to be given to provide clear and well defined routes for emergency vehicles, fire, police and ambulance. The requirements of the Firecode in relation to 'Site Access' shall be considered.

All of the access requirements shall satisfy the requirements of the Board and The City of Edinburgh Council.

Project Co shall define as Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement and seek agreement of The City of Edinburgh Council for the creation of additional pedestrian and / or emergency road access points to suit the specific requirements of the final design.

The colour of the road surfaces shall be black and all footpaths shall satisfy the requirements of the Board details of which are to be provided as Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement, and the requirements of The City of Edinburgh Council.

Project Co shall also provide suitably robust signage for easy site navigation during construction and operational phases.

7.5 Roads, Footpaths, Cycleways & Car Parking

Project Co shall ensure the following as a minimum:

- a) Parking for vehicles is to be as close as possible to relevant parts of the Facilities served and the diminishing of the visual impact of parking by appropriate planting shall not impinge on individual parking places;
- b) Direct routes from parking areas to the building entrances are provided; and
- c) Appropriate and secure cycle storage.

Project Co shall provide as a minimum a network of private roadways on the Site and at the Campus Site providing access to:

- a) Car parking;
- b) The delivery entrance(s) to the Facilities, waste compounds and service infrastructure; and
- c) A taxi / car / ambulance drop off and layover bay.

Project Co shall ensure that all roads, delivery and refuse collection areas have sufficient headroom above them to allow for the passage of appropriate delivery and refuse collection vehicles and are designed to provide sufficient space to allow efficient manoeuvring of such vehicles without undue difficulty, risk of impact or adverse effect of exhaust fumes on occupants of the buildings. Project Co shall ensure that all roads, car parks and other areas that may be used by fire fighting appliances shall have sufficient headroom for such vehicles equipped with fire fighting appliances and are designed to allow their efficient manoeuvring. Project Co shall submit details of the types of delivery vehicles which require to be considered in the design to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Where areas of car parks are required to be traversed by vehicles heavier than 2500kg for maintenance or access purposes, the sub-base, base and surfacing of these areas shall be specifically designed by Project Co for these heavier loads.

Roads, delivery and refuse collection areas, and car parks, together with their supporting groundworks and structures, shall be designed by Project Co to provide full and sufficient access for inspection, maintenance and repair of roads, car parks, delivery and refuse collection areas, structures, underground and underground drainage and sewerage, including existing drainage items such as manhole covers and drains and sewers. Where access for maintenance, repair or replacement of underground services is required under the terms of an easement, the design of all elements affecting the exercise of such an easement or servitude shall also be in accordance with the requirements of the party that has the right to exercise the servitude or easement. See also drainage requirements detailed at paragraphs 4, 6.1.1, 6.11, 8.7.20 and 10.3 of this Sub-Section C.

Project Co shall also comply with the following criteria:

- a) Finish: to be macadam, hot rolled asphalt or, if approved by the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement, block paving. Project Co shall provide a black finish to roads, green finish to cycle routes and a red finish to pedestrian routes (subject to agreement with The City of Edinburgh Council);
- b) Kerbs: to comply as a minimum standard with BS.1339:2003 "Concrete paving flags - Requirements and test methods". Dropped, flush, kerbs shall be provided at all pedestrian crossing locations;
- c) Pedestrian crossings: details of types, locations, lighting and controls shall be Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement;
- d) Markings: to The Traffic Signs Regulations and General Directions 2002 and all Chapters of The Traffic Signs Manual and details of such shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement;
- e) Gradients: All gradients shall comply with the provisions of The Building (Scotland) Regulations 2004 and its amendments as applicable. No gradient in excess of 1:20 shall be allowed in parking areas (other than access roadways), and 1:15 on pedestrian staff, patient and visitor access paths from parking areas to the building entrances; and
- f) Parking bays: comply with the SHFN 20, HFN 21 and the item on gradients above. Variation from the standard (to make optimum use of the space for example) may be desirable and Project Co shall submit details to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Designs shall cater for the access and parking needs of pedestrians and the physically disadvantaged. This shall involve catering for visitors and staff using different modes of transport in adapted vehicles and with multiple aids / equipment.

Accessible parking bays shall incorporate a minimum additional 1.2m section to the end of each bay. This is to allow tailgate access by disabled people without the need to set down ramps or lifts within the main circulation routes of car parks. The first and last accessible parking bays in a row of 'in line' spaces shall be provided with a minimum clear area of 1.2m to both sides.

Parking for the transport requirements of deliveries and waste disposal, ambulances, fire appliances and other specialist and emergency vehicles shall be segregated from public and staff parking.

Car parking provision shall take into account the following requirements:

- a) Drop off points;
- b) Dedicated parking for those with disabilities, the elderly and those with small children located close to the clinical areas, especially for those with limited mobility and eyesight;
- c) Automated controlled entry / egress barrier arms to service vehicles access defined in paragraph 3.8.6 of this Sub-Section C, emergency department parking defined in paragraph 3.9.2 of this Sub-Section C, RHSC Disabled Parent and Child Parking and DCN Disabled Parking defined in paragraph 3.9.3 of this Sub-Section C shall be installed by Project Co. Care shall be taken that the location and design of the control mechanism has sufficient capacity to cope with peak flows and that there shall be clearly defined instructions. The controlled barrier to the proximity parking shall be provided with a height gauge to prevent unwanted high-sided vehicles from entering and shall be well lit at all times;
- d) Appropriate parking for on-call clinical night staff as near as practical to the controlled night entrance(s) for staff; and
- e) Project Co shall design and provide appropriate signage external to the Facilities to ensure ease of navigation around the Site.

7.6 Hard Landscaping Requirements

Project Co shall incorporate into the Facilities all associated hard landscaping for the Site, including but not limited to the following;

- a) Access and hardstanding for emergency and delivery vehicles;
- b) Access for building maintenance and window cleaning;
- c) Access and circulation for, visitors and patients both on foot, bicycles, in cars or on public transport;
- d) Parking for vehicles and bicycles including disabled facilities;
- e) Drop-off facilities including lay-bys and bus/transport stops;
- f) Service areas, as appropriate;
- g) Accommodation for building services plant, waste and materials management, as appropriate;
- h) Amenity areas for staff, patients and visitors;
- i) Suitable pathways and paving;
- j) Protection against noise and environmental pollution;
- k) Security provisions, as appropriate;
- l) Appropriate Site boundary treatment;
- m) Walls, fencing, gates / barriers and hedgerows as appropriate along the Site Boundary and at particular locations inside the Site;
- n) CCTV surveillance of the building perimeter, to all car parks, pedestrian routes, therapy gardens, courtyards, roof terraces, external play areas and helipad;
- o) External lighting;

- p) Suitable means of shelter against adverse weather conditions at entrances, bus / transport waiting, and drop off locations and covered links provided, as appropriate;
- q) Automatic vehicle access barriers, as appropriate; and
- r) Fire hydrants.

All hardstanding, Site roads, paths, car parks, cycleways, and footpaths etc shall be designed and constructed so as to be free from standing water.

8 Mechanical & Electrical Engineering Requirements

Project Co shall provide the Works to comply with the Environmental Matrix.

Project Co shall in carrying out the Works comply with the following non-exhaustive list of mechanical & electrical requirements.

Project Co shall provide mechanical and electrical systems that help create a “state-of-the-art” building with innovative design. Project Co shall provide an engineering system that utilises the latest technology to create a high quality working environment that will provide a reassuring, enjoyable and convenient hospital for all patients, their families, visitors and staff. Project Co shall ensure the services network is efficient, effective, flexible and unobtrusive. Project Co shall ensure that the system is easy to maintain and shall maximise the opportunities for flexible adaptation and extension of the Facilities.

Electrical, mechanical and communication services shall be designed to be an integral and co-ordinated part of the design. Services shall be clearly identified at regular intervals and at all locations where maintenance access is required.

The location of engineering and utility services shall be co-ordinated with the structure and not constrain or conflict with Operational Functionality. Access to all services shall facilitate ease of maintenance which shall be safe and able to be effectively undertaken. There shall be provision for space to give flexibility for future re-planning and / or re-modelling of the Facilities.

The Board requires the buildings to be designed to achieve an optimum level of autonomy along with energy and utility utilisation. The energy centre shall be for the sole use of the Facilities. The services provided from the energy centre shall be provided from sources solely on the Site.

Project Co shall take cognisance of all the building services implications of the requirements described in the Board’s Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

For the avoidance of doubt the hierarchy of standards and advice detailed in paragraph 2.5 shall apply to this paragraph 8.

8.1 Minimum Engineering Standards

In addition to the publications in paragraph 2 of this Sub-Section C Project Wide Requirement, Project Co shall ensure that the design, construction and selection of components for the mechanical and electrical works comply with, including but not limited to, the following design reference documents :

- a) NHS Scotland Firecode;
- b) All current relevant legislation and Codes of Practice by CIBSE;
- c) All current relevant legislation by HVAC;
- d) All current relevant British Standards;
- e) European Harmonised Standard Specifications and Codes of Practice;
- f) ACS Accreditation (formerly CORGI Regulations);
- g) Gas Safety Regulations;
- h) The Management, Design and Operation of Microbiological Containment laboratories. HSE 2001
- i) Biological Agents: Managing the Risks in Laboratories and Health Care Premises HSE 2005
- j) Biological Agents: The Principles, Design and Operation of Containment Level 4 Facilities.
- k) Water Research Centre Codes;
- l) The Water Supply (Water Quality) (Scotland) Regulations 2010;
- m) Electricity at Work Regulations 1989;
- n) BS 7671:2008 (IEE Wiring Regulations);
- o) The control of legionella bacteria in water systems approved Code of Practice;
- p) The Electrical Equipment (Safety) Regulations 1994; and
- q) Electromagnetic Compatibility Regulations 2006.

The design of the environmental control system shall be co-ordinated and integrated with the design of the structure and the occupied areas as to maximise the control and flexibility of the Facilities.

The following is a non exhaustive list of SHTM's, HBN's and HTM's applicable to the Facilities:

- a) SHTM 64: Building Components Series Sanitary Assemblies:
- b) SHTM 2010 Parts 1 - 6: Sterilization;
- c) SHTM 2023: Access and accommodation for engineering services;
- d) SHTM 2030: Washer-disinfectors
- e) SHTM 2031: Clean steam for sterilization
- f) SHTM 2035: Mains signalling;
- g) SHTM 02-01 Parts A and B: Medical gas pipeline systems
- h) SHTM 03-01: Ventilation in Healthcare Premises;
- i) SHTM 04-01 Parts A - G: The control of Legionella, hygiene, 'safe' hot water, cold water and drinking water systems;
- j) SHTM 06-01: Electrical services supply and distribution;

- k) SHTM 06-02: Electrical safety guidance for low voltage systems;
- l) SHTM 06-03: Electrical safety guidance for high voltage systems;
- m) SHTM 08-01: Specialist Services – Acoustics;
- n) SHTM 08-02: Specialist Services – Lifts;
- o) SHTM 08-03: Specialist Services - Bedhead Services;
- p) SHTM 08-04: Pneumatic Tube Transport Systems;
- q) SHTM 08-05: Parts A to D: Building Management Systems;
- r) SHTM 08-06: Specialist Services - Pathology Laboratory Gas Systems;
- s) HBN 00-07: Resilience Planning for Healthcare Establishments;
- t) HTM 07-02: EnCO2de; and
- u) HTM 07-03: Transport Management and Car Parking.

Project Co shall consider the requirement for ligature resistance fittings and fixings within the building services provision in appropriate areas (identified or otherwise in the Specific Clinical and Non-Clinical Requirements), and generally in keeping with Good Industry Practice.

8.2 Infection Control

Mechanical and Electrical equipment selections and designs shall take cognisance of HAI-SCRIBE in its entirety.

8.3 Engineering Services Interface with Building Fabric

Project Co shall ensure that co-ordination of the electrical, mechanical and communication services shall form an inherent part of the Facilities design.

Services provision, e.g. luminaires, fire alarms, and mechanical services, shall be co-ordinated with the ceiling layout and allow simple relocation if required.

Access to services shall be provided and the services clearly identified at regular intervals and at all locations where maintenance access is required, for example at valves and electricity connection points. Access to building services shall be in accordance with SHTM 2023: Access and accommodation for engineering services.

The positioning of sockets, light switches, alarm buttons and fire “break-glass” panels etc shall be consistently located throughout the Facilities and to specifications set out in BS8300 (unless specific clinical needs take precedence). The positions shall be detailed and shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Structural design shall ensure that structures are co-ordinated to ensure the logical and sequential installation and maintenance of services. For example the use of columns adjacent to vertical service voids shall be minimised.

8.4 Unrestricted Access to Patients

Project Co shall take due consideration of the servicing strategy for highly serviced areas. This shall be inclusive of but not limited to bed areas where clinical staff require 360° free access. Project Co shall not gain access to services above beds for maintenance purposes

8.5 Performance Standards

8.5.1 Energy Performance Certificate

Project Co shall ensure that the Facilities shall operate to achieve an Energy Performance Certificate (EPC) rating of C or better.

Project Co shall provide and display the Energy Performance Certificate (EPC) for each building in the Facilities.

8.5.2 Thermal Comfort

Where maximum internal summer time temperature calculations indicate that the internal temperature will exceed those limits set out in the Environmental Matrix, Project Co shall provide means of reducing the temperature rise.

Measures shall be assessed, modelled and implemented to demonstrate that the internal air temperature of any room or area does not exceed the maximum acceptable level of 25°C for more than 50 hours per annum.

For any room or area that does not meet this criterion, there should be a hierarchy of remedial action to prevent the high temperature by passive means as a priority, adopting a suitable means of comfort cooling as a last resort.

8.5.3 Air Quality

i. Internal

Air quality in all areas shall take account of occupancy levels, internal pollutants, heat gains, external pollutants and atmospheric conditions and shall be controlled to provide adequate comfort and fresh air levels appropriate to the functions of each department area.

Particular attention shall be given to the risk of cross infection within the hospital / healthcare environment and shall be such as to minimise the spread of infection. Project Co shall demonstrate through submission of information to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement, how the proposals facilitate the control and management of an outbreak and spread of infectious diseases, and in particular shall comply with the requirements of SHTM 03-01 (Ventilation in Healthcare Premises). In order to reduce cross-contamination, the design of the Facilities shall incorporate 100% fresh air supply systems only.

Project Co's demonstration referred to above is to cover all aspects of the building, its services, spatial relationships, soft and hard FM proposals and incorporate requirements of the Board's Infection Control Team.

Project Co shall provide natural ventilation wherever possible, except where:

- a) The level of outside noise is unacceptable;
- b) Safety or security features must be provided;
- c) Unpleasant smells are generated either inside or outside the building;
- d) Where inflows of air are undesirable;
- e) Clinical requirements, as detailed in the Room Data Sheets, do not allow in areas such as isolation rooms, where positive or negative pressure are required; and
- f) Areas which are air-conditioned.

ii. External

- a) The Project Co shall comply with the requirements of City of Edinburgh Council and other statutory bodies regarding airborne emissions from the Site and shall undertake all studies necessary to prove that emissions and their dispersal will not have any adverse impact on the local community or staff, patients and visitors to the Campus Site.

8.5.4 Vibration

Project Co shall ensure that building services plant and equipment are suitably isolated from the building structure in order to prevent the transmission of vibration. Project Co shall comply with the guidance on the satisfactory magnitude of building vibration with respect to human response given in BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings Part 1 Vibration sources other than blasting. Project Co shall comply with the following vibration limits detailed below:

- a) Plant rooms on occupied floors 0.015 m/s^2 ;
- b) Plant rooms above and below occupied floor levels 0.050 m/s^2 ;
- c) Remote plant rooms 0.100 m/s^2 ;
- d) No structure borne vibration is perceptible within any nearby living apartment.

8.5.5 Acoustics

To allow the effective control of building services noise in the provision of a satisfactory acoustic environment Project Co shall satisfy the following criteria (with reference to British Standards and Minimum Health Planning Standards in particular SHTM 08-01 Acoustics.

- a) Careful selection of plant and equipment;
- b) Good installation;
- c) Correct operation and maintenance;

- d) Be such that any associated noise complies with NR25 when measured within any nearby living apartment.

8.6 Incoming Services

8.6.1 General

Project Co shall be responsible for the provision of all new utilities and the energy supply infrastructure to and from the Facilities (whether this is internal or external to the Site boundary), including:

- a) Confirmation of the capacity of the proposed system;
- b) Liaison with potential suppliers;
- c) System development and planning;
- d) Any supplies modifications to the periphery of the Site;
- e) Any supplies modifications within the Site;
- f) Metering and sub-metering of supplies;
- g) Strategic planning;
- h) Emergency systems; and
- i) Power factor correction.

Project Co shall carry out the work outwith the Site boundary in accordance with the relevant provisions of paragraph 4.

8.6.2 Security of Incoming Supplies

Project Co shall provide back up to respond to the failure of the incoming supply of electricity, gas and water supplies to the Facilities.

In particular, Project Co shall provide 100% standby generator capacity for electrical services in accordance with the requirements and recommendations of SHTM 06-01. For the avoidance of doubt, Project Co shall also ensure that the Facilities are provided such that all the requirements detailed in SHTM 06-01 are satisfied.

Project Co shall ensure that energy, water, power supplies, medical gases and communication supplies to and within the Facilities are maintained by agreement with the utility suppliers, the Board, and where necessary by providing standby sources of supply (e.g. dual fuel boilers etc).

Project Co shall develop a strategy to ensure the security of the supply. Project Co shall be required to demonstrate the feasibility of the strategy to the satisfaction of the Board.

Project Co shall investigate adequacy, and provide the Board a report on location and number of connections of local town's water supply, gas and electrical supplies around and to the Site. Project Co shall ensure their town's water, gas, electrical and data/telecommunication connections to the Site maintains an adequate, autonomous and robust service and shall submit full connection details with the proposals.

The incoming gas supply shall be housed in a stand alone gas meter house of adequate size to accommodate the gas supply with gas meter, twin governor gas streams with associated valves and where each stream is sized to meet full Facilities capacity.

8.6.3 Provision for Isolation

Project Co shall ensure that all sections of the supply mains, whether supplying electricity, gas or fluids, can be taken out of service for maintenance without interrupting the supply to the Facilities or to any part of the Retained Estate and/or Retained Site.

Project Co shall provide external isolation of water supplies to the new Facilities. Local isolation of the water supply to all sanitary appliances, and at the final equipment connection points, shall also be provided.

8.7 Mechanical Systems

The Project Co shall design, supply, install, test, commission, operate and maintain all mechanical building services necessary to support the Clinical Services at the Facilities. The following systems are indicative of those anticipated by the Board but are not exhaustive and sole responsibility shall be Project Co's to determine all necessary systems are included.

Systems shall be design, supplied, installed, tested, commissioned, operated and maintained all in accordance with the regulations and standards.

8.7.1 Building Management Systems & Controls

Project Co shall provide a building management system (BMS) to be installed to allow easy, remote, monitoring of measured values and control set points. Communication with (and between controllers) will utilise the main hospital data network and therefore the data traffic between controllers and dependency on the network shall be minimised. There will not be a requirement for CCTV video or sound files to be transferred, via the network, and therefore it is not envisaged that a high data bandwidth will be needed. All BMS systems generally have the same functionality and therefore the choice of manufacturer shall be the responsibility of Project Co, but consideration should be given to existing systems that are currently on the network which are "Sigma" from Schneider Electric or "Desigo" from Siemens.

Should multiple BMS systems/suppliers be used Project Co shall require to fully integrate these into a single 'master' BMS system and to provide training to the Board in the areas required for 'read only' access.

Project Co shall ensure all plant can be operated in automatic mode (via a BMS) or manual mode should a corruption in BMS software occur. Furthermore, physical bypasses shall be provided where appropriate for maintaining service, for example at control valves.

Project Co shall install a new digital BMS that controls all mechanical systems. The BMS should not be considered as a "life & limb system" and should only control the mechanical systems but should interface to the other systems such as lighting. Monitoring of security, CCTV, lifts etc will only be of an information type and BMS will not be relied upon to deliver "life alarms". Also, future replacements of systems should be considered at this point and one system should not control everything. Systems do become obsolete (and manufacturers fail) and if one system were to be used for "everything" then all the system could be compromised and need changing at the same time. This would be a very costly exercise with multiple complications. If "interfaces" were to be used between separate systems the

problem of catastrophic failure is avoided with only one system compromised making it easier to manage during restoration of services.

It shall assist in minimising energy consumption. Project Co shall ensure that the Facilities have a hard-wired link between the BMS and fire alarm and other life safety systems to enable plant shutdown if required during fire situations as well as complying with the relevant provisions of paragraph 3 and 4 as regards fire, security, and CCTV. Project Co shall ensure that the BMS is capable of producing energy consumption reports to the Board's requirements. The Board shall have full access to all new graphics which shall be fully visible to the Board with 'read only' rights to the BMS. The BMS front-end shall be internet enabled to allow secure access from any internet based PC without the need for further licences.

Project Co only shall have control and adjustment of BMS settings.

The BMS system shall be designed, installed and commissioned in accordance with the manufacturers' instructions and industry best practise. The following documents shall also be taken into consideration:

- a) Standard Specifications for BMS, AG 9/2001, BSRIA;
- b) Library of system control strategies, AG 7/98, BSRIA;
- c) Automatic control, CIBSE Commissioning Code C: 2001;
- d) Specifying building management systems, TN 6/98, BSRIA; and
- e) SHTM 08-05.

The Board controls philosophy is to provide a safe, healthy and comfortable environmental condition in the Facilities, whilst focusing on energy conservation measures. Project Co shall ensure that the controls effectively deliver the requirements of the Board. Project Co shall adopt Good Industry Practice in the application of BMS controls.

Project Co shall ensure that an energy and life cycle cost conscious approach is adopted for all stages of the BMS. Project Co shall ensure that this includes the initial design of a system through to final commissioning; the planned maintenance; and the servicing of the plant.

Project Co shall ensure that the programming of the outstations shall be carried out in a consistent, structured manner. Project Co shall ensure that strategies shall be kept as simple and as uniform as possible. Project Co shall ensure that the BMS incorporates the following non-exhaustive list of full functionality and monitoring points;

- a) The control and timing of heating, cooling and ventilation plant to ensure optimum energy and environmental performance, including multiple temperature zone controls, zone valves and individual area and room temperature sensors.
- b) Optimum start of heating, cooling and ventilation plant to minimise the operational costs of achieving desired values by occupation time.
- c) Optimum stop of heating, cooling and ventilation plant to minimise the operational costs of running plant during the required occupancy period.
- d) Facility to program night set back set points for individual areas, individual optimisers, individual time schedules and areas that require heating continuously but not consistently.

- e) Protection for the mechanical plant and building fabric during external frost conditions.
- f) Protection for the building fabric, from condensation, when the mechanical plant is timed off.
- g) Protection for the mechanical plant and building fabric during severe external air low temperatures.
- h) Provision to automatically shut off heating plant when the external air temperature has risen above a pre-determined set value. The plant will automatically restore normal operation when the external air temperature falls to below a separate pre-determined value.
- i) Weather compensation of any heating circuit dependant on external air temperature. This compensated set value will be accessible for easy adjustment.
- j) Weather compensated heating circuits will also have room temperature influence to raise (and lower) the calculated set point with reference to a room temperature set point.
- k) Where dual plant has been installed this shall be able to be automatically duty cycled by the BMS on a weekly or hours-run basis. Failure of the duty plant shall notify the system and automatically (after a short period of time) bring on the standby plant.
- l) All ventilation plant and air handling units shall be individually monitored and controlled through the BMS.
- m) All extract fans shall be individually timeclock controlled and monitored through the BMS.
- n) Representative graphic slides will be required for all the controlled plant on the system. A hierarchical structure shall be adopted that allows other relative slides to be directly accessed from the current slide. These slides shall match the standard slides for the respective existing systems details of which shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.
- o) The system shall automatically flag-up alarms for remote interrogation. Essential critical alarms shall be also routed via SMS texts to an out-of-hours "on call" mobile phone. Great care shall be given to selection of the alarms that are deemed to be essential critical alarms.
- p) The current state of plant, temperatures, set-values etc shall be accessible from a simple, intuitive index tree structure on the BMS "front-end" interface.
- q) Application of energy metering, via the BMS, will allow Renewable Heat Incentive and energy saving schemes and to be implemented. This will require heat meters to be installed on each plate heat exchanger and heating circuit and connected into the BMS via MODBUS type interface. These meters may be used for fiscal purposes and would assist in providing information as to energy use.
- r) The BMS shall monitor but not control the fire alarm system. The fire alarm system shall be hard-wired to the heating/ventilation plant to switch the plant off when required. The BMS input from the fire alarm system would mirror the action of the fire alarm hard-wired connection to also switch the plant off to prevent nuisance alarms from being generated.
- s) The BMS shall monitor the control circuit state within each control panel and on failure of the control circuit would switch off the demands for the connected plant. This will assist in identifying the control circuit state and also in preventing the system

from being swamped by nuisance alarms. Care shall be taken that the control circuit failure does not give the impression that a fire alarm event has happened.

- t) The automatic start-up of plant (timed on, restoration of fire alarm or control circuit) will be staged in over a period of a few minutes to prevent surges on the supply to the control panels.
- u) The BMS will status monitor other systems such as medical gas alarm, fire alarm fault, security system fault, lift motor fault etc but will NOT be expected to carry out any function with this information. All the systems connected will have their own strategy that will not be affected by the operation of the BMS.
- v) The BMS will monitor common fault alarms for security, smoke dampers, CCTV, staff attack, disabled alarms and nurse call.
- w) Local independent cooling systems serving IT rooms will be controlled by their own control system to the dictates of their own, independent, temperature control sensor. The BMS will have a dedicated sensor located beside the control sensor for monitoring purposes only. Information from the cooling system such as “Running” and “Failure” will be connected into the BMS.
- x) Boilers and Chillers independent control systems will have electronic interfaces to connect to the respective BMS. This is envisaged to be a MODBUS connection that will allow operational data – such as temperatures, conditions, set values, run-times and alarms to be “mapped” onto the BMS as real values.
- y) Fans and pumps will be inverter driven and speed set via an analogue output from the BMS. This will allow trim to be applied to reduce operational costs as and when possible. Independent pump (and fan) speed control should be avoided as remote speed control, by BMS, is unlikely to be achievable.
- z) Information from inverter drives used for fans and pumps such as running state and trip state will be echoed back to the BMS via connections internal to the respective control panels. These signals will also illuminate indicators on the control panel facia.
- aa) Piped across pumps and fans will be differential pressure switches that will provide indications of actual running condition of the plant. These conditions will be echoed back to the BMS via connections internal to the respective control panels. These signals will also illuminate indicators on the control panel facia.
- bb) The BMS will be programmed with settable operational user levels to allow the filtering of functionality to be determined dependant on users experience and training.
- cc) Where local room temperature controllers are utilised they shall be integrated with the BMS to allow the BMS to monitor the current characteristics of the controller. Characteristics such as current room temperature, actual room set-point, controller state, valve positions etc. It should also be possible to set values into the controllers remotely from the BMS. Examples of the set values are: Enabling the controller, main set values, lower set point limit, upper set point limit. Every room controller will be represented individually on the BMS to allow specific rooms default conditions to be set remotely. The BMS software shall be written to allow for night set-back room temperature set points to be applied if required.
- dd) Electricity metering shall be provided on specific distribution boards and connected into the BMS via MODBUS type interface.
- ee) All renewable/LZC technology systems shall be individually metered and connected into the BMS via MODBUS type interface to permit the Board to monitor record and maximise financial benefits from each system.
- ff) The BMS shall be capable of monitoring the hot and cold water temperatures, including stored cold water and volume records.

gg) The BMS shall be capable of monitoring the UPS/Emergency generators.

hh) The BMS shall be capable of remote monitoring of all critical fridge/freezers.

For clarity "multiple temperature zone controls" throughout this BMS section refers to BMS connected equipment to allow for zoning throughout the building to ensure that each department and on a floor-by-floor basis can be time controlled via the BMS to allow for current (and future) changes to departmental occupational / heating requirements.

The BMS will include all the required control equipment (Fan / pump starters, sensors, valve actuators, pressure switches, pressure transducers, relays, power wiring, control wiring, network wiring, hand over-ride switches, panel indicator lamps, all other associated control panel items, site specific software including graphic slides) to provide a complete working system control system.

Project Co shall ensure the BMS is set up in a way that enables the monitoring of points on a continuous basis by the Board in order to facilitate trend analysis. Project Co shall ensure that this includes temperature profiles, valve positions and plant operation periods. Project Co shall ensure that it is possible to obtain historic data on specified points for a period of at least 14 days in order to facilitate fault diagnosis in the event of a problem.

Project Co shall ensure that the monitoring of domestic hot water and cold water (including tanks and end-of-line outlets) is continuous and carried out throughout the Facilities (not just at central plant) in order to demonstrate compliance with the Board's Legionella prevention strategy and conforms to relevant legislation, and NHS guidance.

Project Co shall ensure that the BMS is installed to control all plant where there is an operational requirement or a life cycle cost benefit, including but not limited to:

- a) Boiler plant;
- b) Air handling plant;
- c) Ventilation plant;
- d) Cooling plant;
- e) Domestic hot water plant;
- f) Duty/Standby control; and
- g) Lighting interior and exterior (localised control shall also be considered).

Project Co shall ensure that all major plant items shall be designed and controlled to provide "real time" status monitoring, including run, fault, and alarm reporting. Project Co shall ensure that this includes boilers, pumps, pressurisation units, air handling plant, fans and air conditioning. Project Co shall provide a modular boiler system for the Facilities which will be of a dual fuel nature with storage capacity to meet the Board's statutory civil contingency requirements, which is 200 hours of peak winter demand.

Project Co shall ensure that the requirements of the following paragraphs are incorporated into the proposed Building Management System for the Facilities;

i. Zone Control

Project Co shall ensure the Facilities are capable of individual temperature control for all patient areas; to be achieved with the use of BMS controlled zone controls. Areas of 24-hour operation shall be independently controlled from non 24 hour areas to ensure optimum efficiency and in discrete areas consideration shall be given to localised zoning depending on the orientation of the buildings. Proper consideration is required to the level and extent of temperature sensing and monitoring devices to provide both accurate and cost effective zonal control.

ii. Optimisation & Compensation

Project Co shall ensure Good Industry Practice is adhered to regarding control regimes incorporating time, optimisation and weather compensation.

iii. Smart Metering

Project Co shall ensure the use of meters giving high accuracy at low flow rates and that metering points give consumption in SI units including any time bands as appropriate. Project Co shall ensure data collection and report production is by electronic systems.

Project Co shall allow sub-metering of electricity, heating and domestic water usage for each individual department / unit.

Project Co shall allow sub-metering of electricity usage for each individual department / unit and as required to satisfy the requirements of Section 6 of the Scottish Technical Standards.

As a minimum all incoming utilities shall be metered. In addition, any relatively large use of electricity, such as DHW trace heating, external lighting or mechanical plant, shall be metered separately and in line with BREEAM Healthcare stipulations.

The metering equipment shall be located at the most appropriate location for easy manual accurate reading to be taken of the load and reading should also be relayed to a central meter station in the energy centre.

Project Co shall make provision to allow the regular monitoring and reporting procedures to be implemented during the Operational Term. The installation of sub-metering is required and is to be introduced to allow accurate departmental energy usage and costing information to be obtained.

The Board believes that the feedback of information on consumption levels is essential to ensure that any adverse variances are recognised and a course of remedial action initiated. The system shall be designed and installed so that monitoring can be carried out on a continuous basis to enable energy consumptions to be data logged and profiled.

The system shall be designed and installed to permit calibration/accuracy checks on all meters (primary and sub) on an ongoing basis as an integral part of the services commissioning and prior to project completion to ensure BMS accuracy.

The BMS shall be installed to automatically read and provide trend analysis to a range of energy / water meters. All meters including those of the utility supply companies and internal sub-meters shall be automatically read by the BMS at pre-determined intervals. Project Co shall ensure that the BMS is capable of reading utility meters on a continuous basis in order to facilitate trend analysis. The energy metering shall include (but not limited to):

Electricity

- a) Main incoming HV supply;
- b) Main LV Switchboard;
- c) External lighting (separate sub-meter for car park lighting);
- d) All distribution boards with separate meters for power and lighting;
- e) Departmental power and lighting;
- f) HVAC control panels;
- g) Cooling plant;
- h) Standby electrical energy sources, rotating and static; and
- i) Tenant areas (if provided).

For the purpose of energy estimates, hours run meters shall be provided for all Air Handling Unit (AHU) fans.

Water

- a) Main incoming water supply; and
- b) Internal sub-meters.

Gas

- a) Main incoming gas supply; and
- b) Internal sub-meters.

Oil

- a) Delivered to Site; and
- b) Used on Site, by individual pieces of equipment.

iv. Smart Meter Type

The new smart meters must be capable to 'store measured energy consumption data for multiple time periods; and at least half hourly' and they must 'provide remote access to such data by the licensee'. The meter shall allow access to data to be available in a day + one.

The metering shall be provided by an independent provider of metering and data services. This will allow the supplier to be changed without being bound by any metering and data services, and without losing meter data during the supplier change over.

v. Communication Protocol

In recognition of the advances being made in building management systems, Project Co shall ensure that the BMS platform is compatible with a range of diversified core systems and standard protocols such as BACnet, LonTalk, Modbus, and OPC. The use of these standard

communication protocols will allow for more effective integration and help prepare for future devices and technologies. It will also facilitate the use of communication between different manufacturers control equipment.

vi. User Interface

Project Co shall ensure that once installed and commissioned the 'smart' meters have a BMS user interface that is sufficiently user friendly to facilitate multi-user access, without the need for the users to be controls or software specialists. Project Co shall meet the requirements of the Board in so far as that; the Board envisages that navigation around the BMS, via the "front end" will be by a combination of floor plans, plant & equipment graphics and drop down menus or "software" knobs.

Project Co shall provide the Board with a system capable of remote off-site access through the BMS from a number of locations, in order that it can monitor internal and utility consumptions / trends. Software access to be security password controlled.

Project Co to prepare and present sample software tutorial on BMS graphics (Graphical User Interface) to the Board/end user as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement at a time suitably in advance of project completion to allow software/graphic modifications in line with the Board comments.

vii. System Selection

Project Co shall ensure that all materials and equipment used are standard components, regularly manufactured for this and/or other systems and not custom designed specially for this project. Project Co shall ensure that all systems and components have been thoroughly tested and proven in actual use, for at least two years, within other NHS establishments of a similar size and complexity to this one. All components and/or systems shall be type tested and carry the CE mark.

Project Co shall confirm that both the hardware and software will be fully supported for a minimum period of 15 years from the Actual Completion Date. Future compatibility shall be supported for no less than 10 years from the Actual Completion Date. Compatibility shall be defined as the ability to upgrade existing field panels to current level of technology, and extend new field panels on a previously installed network.

8.7.2 Towns Water Connection to the Site

Project Co shall provide a secure as possible single towns water connection to the Site from the local Scottish Water network exploring opportunities for and if feasible incorporate dual supplies to ensure increased site resilience and subject to complying with the relevant provisions of paragraph 4.

8.7.3 Site Mains Water, Fire Water, Quality & Distribution

Project Co shall develop the Site potable and fire water networks as separate systems, each arranged in a ring with adequate valving to achieve robustness in continuity of supply.

Project Co shall filter the Site potable water to the criteria set out in SHTM 04-01 Parts A - G and commensurate with the piping material proposed.

In determining the pipework material the Project Co shall take cognisance of the latest best practice in the Scottish NHS.

8.7.4 Fossil Fuels

Project Co shall be responsible, in conjunction with Transco in determining the philosophy for the provision of fossil fuels to the Site. Options that Project Co may consider are un-interruptible gas or the provision of dual fuel burners and a heating oil standby facility. Irrespective of the option proposed by Project Co the availability criteria described elsewhere in Clause 9 and Schedule Part 14 (Payment Mechanism) of the Project Agreement and/or the Services Specifications will be strictly adhered to.

8.7.5 Heating System

Project Co shall provide all heating systems required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and to:

- a) Zone and control heating circuits to provide an efficient and comfortable environment;
- b) Provide valve isolation such that isolation of circuits/sub-circuits shall have minimal disruption to the remaining departments;
- c) Provide 24 hour occupied (and unoccupied) wards and departments with a night set-back facility;
- d) Provide temperature and ventilation night set-back facilities so that when departments are unoccupied they will have frost and anti-condensation protection.

Project Co shall provide high efficiency, low NOx heat generation and heating water distribution plant, serving good quality heat emitters to ensure satisfactory heat distribution within the area served. Project Co shall arrange heat emitters and all heating pipework such that in all areas, the surface temperature limits as laid down in SHTM 04-01 Parts A - G are not exceeded. Project Co shall not utilise heating pipework as a heat emitter within patient areas.

Project Co shall pay particular attention to effective use of warm air curtains in entrance / draft lobbies.

8.7.6 Domestic Water Services

The water supply system for the Facilities shall include a new dedicated supply from Scottish Water's off site infrastructure and also incorporate on-site bulk water storage (24-hours) and subject to complying with the relevant provisions of paragraph 4.

Treatment of potable cold water supplies is considered undesirable and the provision of a wholesome supply from Scottish Water's mains with the minimum of storage and handling is the preferred approach.

Project Co shall design and install the domestic cold and hot water supply installations to fully comply with the requirements of SHTM 04-01 Parts A - G. Project Co shall include for all specialist treatment plant that may be necessary. Project Co shall provide water sampling points as required by SHTM 04-01 Parts A - G with due regard for clinical requirements and provision of Clinical Services.

Secure local isolation shall be provided by Project Co at all sanitary appliances, and at final connection points to equipment. Project Co shall provide secure external isolation to the buildings.

Project Co shall provide plumbed in water dispensers at ward level in accordance with Schedule Part 11, Equipment Schedule. The installation of ice machines is prohibited.

Project Co shall provide plumbed water to specialist services such as, but not limited to, washing machines in specialised units and dishwashers in ward areas in accordance with the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements), and in particular Schedule Part 11, Equipment Schedule.

Project Co shall provide plumbed water to all vending machines as required throughout the Facilities in accordance with the Board's Construction Requirements Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements), and in particular the Schedule Part 11, Equipment Schedule.

The Project Co's attention is drawn in particular to SHTM 04-01 Parts A - G concerning pipework materials and standards of filtration to be used in Scottish health care facilities.

All clinical hand washing facilities shall be provided with automatic sensor taps. In order to assist in achieving the water consumption target (see paragraph 5.26 of this Sub-Section C) Project Co shall consider the use of low flush toilets and insert spray caps where appropriate to taps to ensure the conservation of the water supply. Project Co shall install systems into the urinal facilities to reduce the flush requirements.

As required within SHTM 04-01 Parts A - G, no flexible or braided hoses shall be permitted for final connections between domestic water distribution pipework and appliances/outlets.

Project Co shall consider the environmental benefits and economic viability of greywater recycling on Site and if beneficial to the project shall incorporate such a system into the building services and flood abatement philosophy for the Site. Project Co shall describe fully its mode of operation and integration into the Site.

Project Co shall evaluate the benefits and feasibility of rainwater harvesting for process areas only which if adopted, Project Co shall ensure that the rainwater from the roof of the Facilities and hardstandings is collected, stored and re-used for toilet flushing purposes and if appropriate separated to serve supply points for irrigation of the external areas of the proposed Facilities.

Project Co shall ensure that the recycling facility for the separate greywater and rainwater systems allows for appropriate filtration and complies with any flood abatement philosophy for the site.

8.7.7 Hot Water Supply

Appropriate operational engineering systems for hot water and steam shall be included in the design of the Facilities.

Domestic hot water systems shall be designed to provide adequate flow to satisfy maximum demand whilst minimising stored hot water and energy consumption. The provision of some storage is desirable to minimise the impact of hot water generation on boiler power.

Project Co shall install Type 3 (in accordance with NHS Model Engineering Specification D08) thermostatic mixing valves at all HWS outlets to comply with SHTMs and SHGNs except where 60°C water is a particular requirement so that the mandatory requirements for the control of Legionella and other bacteria within the system are met.

Energy efficient hot water boilers shall be provided in all staff rest rooms and kitchen areas.

8.7.8 Mechanical Ventilation & Air Conditioning

The heating, ventilation and air conditioning systems shall be logically designed to operate efficiently incorporating heat recovery and providing local control where required. Project Co should ensure avoidance of simultaneous heating and cooling, either by the ventilation system itself or between the ventilation system and any other heating and cooling system,

The energy and power systems shall be appropriately designed to provide fully integrated designs in terms of the incorporation of engineering services into the building fabric and external spaces.

The need to maintain comfort conditions in accordance with the Room Data Sheets in all areas but particularly in clinical areas is of paramount importance and Project Co shall develop strategies for achieving these conditions together with minimum energy consumption.

Project Co shall provide natural and mechanical ventilation, comfort cooling, and air conditioning to suit the Facilities and clinical requirements and provision of the Clinical Services. Project Co shall provide a climate control facility in clinical and staff areas which are provided with comfort cooling (if applicable). The use of low carbon solutions is anticipated for such requirements.

Project Co shall provide the air lock to the first floor of the Link Building to the RIE Facilities in accordance with the Interface Output Specification, the Connection Proposal and relevant provisions or Paragraph 4 concerning any connections to the Link Building.

Project Co shall ensure heat gain from all equipment and personnel is allowed for in sizing and selection of the systems.

Project Co shall demonstrate how the proposals facilitate the control and management of an outbreak and spread of infectious diseases in accordance with SHTM 03-01, SHFN 30 and HAI-SCRIBE.

Project Co demonstration is to cover all aspects of the building, its services, spatial relationships, Soft and Hard FM proposals (as appropriate) and incorporate requirements of the Board's Infection Control Team.

Project Co shall ensure that ventilation systems installed in areas classified as hazardous are designed to relevant standards.

Where grilles or diffusers are used within rooms Project Co shall ensure they are:

- a) Arranged to avoid draughts; and
- b) Designed to minimise noise intrusion into the space.

Project Co shall incorporate provision to include humidification to the AHU plant at a future date.

8.7.9 Combined Heat and Power

Project Co shall consider the environmental benefits and economic viability of Combined Heat and Power (CHP) and if beneficial to the project shall incorporate CHP into the building design, avoiding any 'dumping' of heat or export of power off-site. Project Co shall describe fully its mode of operation and integration into the mechanical and electrical services to demonstrate their assessment and viability.

8.7.10 Medical Gases

Project Co shall provide all medical gases required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific-Non Clinical Requirements), such as but not limited to:-

- a) Oxygen Vacuum Insulated Evaporator (VIE) shall be for the sole use of the Facilities. The Oxygen VIE shall be provided from sources solely on the Site.
- b) Nitrogen provided on the Site
- c) Nitrogen oxide provided on the Site;
- d) Medical air 4 bar;
- e) Surgical air 7 bar; and
- f) 50% oxygen / 50% nitrous oxide provided on the Site.

Medical gas bottles, plant areas and stores shall be accommodated within suitably designed buildings / rooms / enclosures with good access, natural ventilation and satisfactory noise emissions control.

All medical gas installations which serve clinical departments shall be connected to essential electrical supplies.

The status of the central medical gas plant shall be monitored by an alarm system with a status signal to an alarm panel located in a manned office. The panel shall also report the alarm to the BMS.

Project Co shall install the piped medical gases in accordance with SHTM 02-01 and "Model Engineering Specification C11".

Project Co shall install outlets as defined in this Schedule Part 6 Section 6 (Room Data Sheets).

Project Co shall provide a medical gas distribution system sized to accommodate the demand of the Facilities at the Actual Completion Date and handover, with the capacity to accommodate an increase in demand (flow and consumption) of no less than 25% throughout the Facilities.

Project Co shall ensure that the provision of medical gases to the point of use is continuous. Where Project Co are providing medical gases via cylinders they shall provide manifold systems with automatic change over from duty to standby to no less than two equal banks of cylinders. The capacity of such arrangements should be in line with that outlined within SHTM 02-01 and "Model Engineering Specification C11" along with necessary alarm systems to alert staff as to a fault conditions.

Project Co shall ensure that adequate points of isolation exist to all medical gas systems.

8.7.11 Medical & Dental Vacuum

Project Co shall provide medical and dental vacuum systems as required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements).

Medical and dental vacuum plant areas and stores shall be accommodated within suitably designed buildings / rooms / enclosures with good access, natural ventilation and satisfactory noise emissions control.

Installations shall be connected to essential electrical supplies and shall be in compliance with SHTM 02-01.

The status of the central medical and dental vacuum plant shall be monitored by an alarm system with a status signal to an alarm panel located in a manned office. The panel shall also report the alarm to the BMS.

8.7.12 Anaesthetic Gas Scavenging System

Project Co shall provide an active Anaesthetic Gas Scavenging System (AGSS) as required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements).

AGSS plant areas and stores shall be accommodated within suitably designed buildings / rooms / enclosures with good access, natural ventilation and satisfactory noise emissions control.

The installation shall be connected to essential electrical supplies.

The status of the AGSS shall be monitored by an alarm system with a status signal to an alarm panel located in a manned office. The panel shall also report the alarm to the BMS.

8.7.13 Non-Medical Gases

Project Co shall provide all non-medical gases required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific-Non Clinical Requirements).

Non-medical gases shall be provided as either bottled or piped installations as deemed appropriate.

Gas bottles, plant areas and stores shall be accommodated within suitably designed buildings / rooms / enclosures with good access, natural ventilation and satisfactory noise emissions control.

All critical non-medical gas installations i.e. certain laboratories etc shall be connected to essential electrical supplies.

The status of the central non medical gas plant shall be monitored by an alarm system with a status signal to an alarm panel located in a manned office. The panel shall also report the alarm to the BMS.

Project Co shall install the non medical gases in accordance with SHTM 08-06, SHTM 02-01 and "Model Engineering Specification C11".

Project Co shall install outlets as defined in Schedule Part 11, Equipment Schedule.

Project Co shall provide a non medical gas distribution system sized to accommodate the anticipated demand of the Facilities at the Actual Completion Date having regard to Schedule Part 11 (Equipment Schedule) and the Room Data Sheets, with the capacity to accommodate an increase in demand (flow and consumption) of no less than 25% throughout the Facilities.

Project Co shall ensure that the provision of non medical gases to the point of use is continuous. Where Project Co are providing non medical gases via cylinders they shall provide manifold systems with automatic change over from duty to standby to no less than two equal banks of cylinders.

Project Co shall ensure that adequate points of isolation exist to all non medical gas systems.

8.7.14 Bedhead Services

Project Co shall provide bed head services as defined in the Schedule Part 11, Equipment Schedule. Project Co shall ensure that bedhead services are designed and installed in accordance with SHTM 08-03.

8.7.15 Sterilisation

Project Co shall provide clean steam and associated sterilisation plant and distribution systems as required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements). Plant and associated systems shall be designed to SHTM 2031 and SHTM 2010. Discharges to drain are to be treated / managed in accordance with SEPA requirements.

8.7.16 Special Water Services

Project Co shall provide all special water services required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements), such as but not limited to:

- a) Special supplies such as de-ionised water to laboratory equipment;
- b) Special supplies such as de-ionised water to equipment washers / disinfection equipment; and
- c) Special supplies for Renal Dialysis.

8.7.17 Laboratory Gases

Project Co shall provide all laboratory gases required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements), such as but not limited to:-

- a) Nitrogen; and
- b) Carbon Dioxide.

All pipework shall be distributed in ventilation spaces within the ceiling void with maximum permissible separation from the electrical services and hot pipe services. Natural gas installation in the building shall comply with the all current Gas Safety Regulations, incorporating emergency manual / automatic isolation in each room with gas draw-offs. Reinstatement of natural gas following emergency isolation shall also follow an inherently safe regime.

8.7.18 Local Exhaust Ventilation Systems

Project Co shall provide all LEV systems including but not limited to that required to support the provision of catering, workshop and maintenance facilities on Site.

8.7.19 Fume Cupboard & Micro-biological Safety Cabinets

Project Co shall provide fume cupboard and both CAT II and CAT III microbiological safety cabinet exhaust systems as required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements). Systems shall comply with NHS Specifications and Guidance documentation which shall include a matched supply system into the room(s) containing fume cupboards and micro-biological safety cabinets. Fume cupboard design and installation shall be to BS EN 14175.

Microbiological Safety Cabinet design and installation shall be to BS EN 12469: 2000 Biotechnology - performance criteria for microbiological safety cabinets and BS 5726: 2005 Microbiological safety cabinets.

8.7.20 Drainage

Project Co shall provide all necessary drainage to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements) and their aspirations regarding reduced water consumption which shall include but not be limited to:

- a) General foul water drainage;
- b) General surface water drainage;
- c) Kitchen drainage, inclusive of grease traps;
- d) Laboratory drainage;
- e) Radioactive waste;
- f) Drainage from areas handling radio isotopes, or other contaminants such as silver;
- g) Bedpan disposal system; and
- h) Drainage from oil bund areas, inclusive of oil interceptors.

Project Co shall consider the environmental benefits and economic viability of greywater recycling on Site and if beneficial to the project shall incorporate such a system into the building services and flood abatement philosophy for the Site. Project Co's Proposals shall describe fully the system's mode of operation and integration into the Site.

Project Co shall ensure all drainage discharges from Site are strictly in accordance with the limits set by SEPA.

Drainage systems shall be provided which function reliably with the minimum of blockages, leaks etc. Materials and jointing systems with a proven track record shall be chosen.

The design of the system shall be such as to create the minimum disruption in the event of blockages.

Project Co shall construct the drainage installation such that it complies with the “Initial Drainage Proposal” and the Supplemental Drainage Proposal and the relevant provisions regarding drainage in paragraph 4.

8.7.21 High Specification Air Conditioning Systems

Project Co shall provide high specification, full function and close control air conditioning systems to support the Board’s Clinical Output Specification that are contained in Board’s Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements), such as but not limited to:

- a) Laminar flow rooms and / or operating theatres; and
- b) Areas handling radio isotopes or other radiological contaminants.

Air conditioning systems installed in the above areas shall be higher specification air conditioning systems with standby motors belted up in accordance with SHTM 03-01, 04-01 and NHS Model Engineering Specification C04.

8.7.22 Ventilation and Air Conditioning of Isolation Rooms

Project Co shall provide air conditioning systems to Isolation Rooms to support the Board’s Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements), NHS Standard Infection Control Precautions (SICPs) and maintaining strict positive / negative pressure differentials.

Ventilation and air conditioning systems for these rooms shall be designed and installed in accordance with SHTM 03-01, 04-01 and NHS Model Engineering Specification C04. Project Co shall demonstrate how the proposals facilitate the control and management of an outbreak and spread of infectious diseases.

8.7.23 Pneumatic Air Tube Transport System

Project Co shall provide a pneumatic air tube transport system for the Facilities with links to the RIE Facilities. The locations to be served in the Facilities are indicated on the RHSC Pneumatic Air Tube Transport System Requirement Table and DCN Pneumatic Air Tube Transport System Requirement Table below and, as required to support the Board’s Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements). All of the Facilities pneumatic air tube transport system stations shall deliver to and receive from the laboratories and pharmacy located within the RIE Facilities, Rooms G5119 and S6107 respectively. In addition to the provision of the system within the Facilities, Project Co will also be responsible for the installation of the link to and the system including supporting plant within the RIE Facilities in accordance with predetermined routes advised by the Board. The installation must be consistent with the overall communications policy of the hospital. Project Co shall ensure the pneumatic air tube transport system shall be designed and installed in accordance with SHTM 08-04: Specialist services Pneumatic tube transport systems: Part A: Overview and management responsibilities and Part B: Design considerations and good practice guide. The system shall be 160 mm diameter multiple carrier microprocessor controlled with all associated infrastructure comprising two transmission tubes (one to and one from the RIE Facilities) accommodating up to five carriers travelling simultaneously in any direction. Notwithstanding the foregoing, the system

shall be designed to take a minimum of 21 transactions per hour (not including the return of capsules). The system will have a 70% maximum system capacity.

Project Co shall design and construct the Pneumatic Tube System in accordance with the Appendix B (Interface Output Specification) and the relevant provisions of paragraph 4 as regards the PTS.

RHSC Pneumatic Air Tube Transport System Requirement Table

Ref	Department	Pneumatic Air Tube Delivery System Required and Number	Location
RHSC SPECIFIC DEPARTMENTS			
A	<i>Front Door - ED / Assessment Ward</i>		
A1	Emergency Department	2	1 Laboratory Area and 1 outside Resuscitation Room
A2	Paediatric Acute Receiving Unit - 34 Beds	1	Central Location Staff Base
B	<i>Critical Care / HDU / Neonatal Surgery</i>		
B1	PICU and HDU's - 24 Beds	2	1 close to Room 5/8 and the other close to Room 14
C	<i>RHSC In Patient Pathway / Ward Care</i>		
C1.1	Medical Inpatients - 23 Beds	1	Staff Base Central location
C1.2	Surgical Long Stay Inpatients -15 Beds	1	Staff Base Central location
C1.3	Neuroscience Inpatients - 12 Beds	1	Staff Base Central location
C1.4	Haematology / Oncology Inpatients & Daycases - 17 Beds & 2 Chairs	1	Staff Base Central location
C1.8	Surgical Short Stay Inpatients - 14 Beds	1	Staff Base Central location
C1.9	Inborn Metabolic Disorders Lab	1	
D	<i>RHSC Ambulatory Care</i>		
D1	RHSC Main Outpatients	2 - (1 Ground Level 1 First Level)	In corridor In the D1 Area Reception Area
D9	Medical Day Care Unit - 5 Beds	1	Reception Area
H	<i>Academic</i>		
H2	Clinical Research Facility	1	Close to reception area

DCN Pneumatic Air Tube Transport System Requirement Table

Ref	Department	Pneumatic Air Tube Delivery System Required and Number	Location
DCN SPECIFIC DEPARTMENTS			
L	DCN In Patient Pathway / Ward Care		
L1	DCN Acute Care - 24 Beds	1	Staff Base closest to Resuscitation Room
L2	DCN Inpatients - 43 Beds	1	Near to MD Staff Office closest to PIU
M			
M	DCN Out Patient Departments		
M1	DCN Outpatients	1	Reception Area
JOINT DEPARTMENTS			
P	Combined Theatres		
P1	Operating Theatres & RHSC Surgical Day Case Unit	2	1 located close to reception area in DCN & RHSC end
Q			
Q	Combined Radiology		
Q1	Radiology	1	Located close to DCN Reception Area

8.8 Electrical Systems

8.8.1 Main & Sub-Main Distribution

Project Co shall provide a main and sub-main distribution system for the new Facilities incorporating all connections from the utility provided HV supply, LV main switchgear, sub-main cabling and distribution boards as required, to provide separate essential and non-essential supplies to power and lighting throughout the Facilities designed in accordance with SHTM 06-01 and SHTM 06-02 respectively.

The utility provided HV Supply shall include a new Scottish Power substation that may be located adjacent to Car Park F on the Substation Site. Project Co shall comply with the relevant requirements for the substation and cables detailed in paragraph 4 the relevant Interface Proposals and Appendix A.

A new HV board and standby generators shall be housed within a new energy centre which shall supply via an 11kV ring new HV Substations located within the building.

The design of the LV Distribution shall ensure that redundancy is provided throughout the Facilities and include features such as dual fed distribution boards.

Project Co shall incorporate no less than 25% spare capacity (for the Facilities as designed) to the main distribution switchgear, standby generator etc within the Facilities and size the installations (all distribution panels, containment, risers etc.) to accommodate additional future spare requirements.

Project Co shall provide automatic power factor correction equipment in accordance with SHTM 06-01.

8.8.2 Standby Generation

Project Co shall provide a standby mains failure generator system for the Facilities to provide 100% power in the event of loss of the mains supply and comply with requirements set out in paragraph 8.6.2 of this Sub-Section C.

The standby generator design shall be based on a N+1 arrangement.

The system shall include for controls to operate and maintain the generator inclusive of facilities to automatically synchronise with the switchboard.

The provision of services to modern healthcare facilities is critical to its continuous operation and proposals shall include adequate resilience and support systems in all areas of the design.

Project Co shall ensure all critical services shall be maintained in the event of:

- a) A primary supply failure;
- b) A main distribution failure; and
- c) A local distribution or equipment failure.

Loss of any critical service shall not disrupt the operation of the Facilities and sufficient no break back-up systems shall be included to assure continuity of services.

In sizing the generators Project Co shall include the 25% spare electrical capacity identified for the general power distribution systems.

Project Co shall ensure the quality of generated supply is to be compatible with the requirements of specialist clinical equipment.

8.8.3 Electrical Small Power

Project Co shall provide socket outlets throughout the Facilities to provide for general facilities, cleaner's requirements and for connection of particular items and portable equipment as required throughout the Facilities. Project Co shall provide power supplies suitable for personal domestic appliances (e.g. hairdryer) in changing rooms. Segregation shall be provided between "clean" and "dirty" power supplies.

Project Co shall provide all necessary single and three phase power supplies for plant and equipment.

8.8.4 Lighting

The lighting installation shall be designed by Project Co to comply with the latest versions of the following publications and all other relevant guidance including CIBSE Lighting Guides and in particular LG2

Project Co shall provide the lighting levels and uniformity of light suitable for the task to be carried out and in accordance with the appropriate guidelines. The Board requires a lighting design / installation which provides good uniformity over the task area i.e. $\geq 80\%$.

Project Co shall ensure that luminaires are complete with an appropriate high efficiency diffuser / controller and be suitable for the application for which they are proposed.

Project Co shall incorporate the use of daylight into the lighting design. Project Co shall design and orientate the building such that the daylight can be used to best effect, supplemented by the artificial lighting system to provide the appropriate levels of illumination.

8.8.5 Interior Lighting

All access routes to plant areas shall be lit to provide safe access for maintenance.

Hazardous areas shall be provided with the appropriate classified luminaires.

All light switches for public areas shall be provided such that they cannot be operated by unauthorised persons.

Whilst the lighting design must be functional for clinical use, Project Co shall ensure that the overall lighting concept will produce an aesthetically pleasing environment. All lighting equipment shall be co-ordinated with the building structure. Project Co shall aim to use a mixture of fittings and retail lighting techniques to create a welcoming atmosphere and balanced visual environment.

Project Co shall provide and install the most energy efficient form of lighting to provide occupiers with improved visual comfort while reducing noise levels and running costs.

Project Co shall ensure that corridor lighting is multi circuited to facilitate use of 100% or 50% of the luminaires. Where the corridor is over 15 metres in length, consideration shall be given by Project Co to zoned lighting and the use of presence detection sensors to maximise efficiency.

Night lighting shall be provided within all corridors either by individual fittings or by selective switching of the general corridor wall/ceiling luminaires. Project Co shall ensure night lighting in corridors shall not spill into patient bedrooms, or other bedded areas.

Luminaires shall be located to provide ready access for lamp changing and maintenance, whilst still providing the recommended level and quality of illumination to the area.

Night lighting shall be provided at nurse stations, patient bed areas and locations where call systems are installed.

Artificial illumination shall be provided to Treatment (activity / consulting) Rooms, etc by fully recessed, hermetically sealed modular light fittings, switched at the room door positions. Treatment Room luminaires which provide the general lighting shall be controlled by at least two circuits depending on the arrangement of fluorescent tubes in each fitting. The design of these luminaires by Project Co must provide ease of access for lamp changing.

Luminaires, their colour and material finish shall be selected to co-ordinate with the architectural intent throughout the circulation areas. Low wattage 2700K luminaires to be used in particular rooms shall be selected on their ability to create a calm and “homely” atmosphere. Project Co shall consider the inclusion of wall mounted luminaires and /or uplighters.

All lamps used in clinical areas shall have as a minimum a colour rendering capability of ≥ 85 CRI. For practical reasons consideration shall be given by Project Co to using the same luminaire in both clinical and non-clinical spaces within the same ward. A reading light with an on/off switch shall be provided at each bedhead location. Project Co shall provide an additional switch on the nurse call handset.

Where luminaires of the fully recessed type (modular and / or downlighter) are installed within fire rated ceilings, they shall be provided with a one hour rated fire canopy. Project Co shall also ensure that they maintain the integrity of the ceiling and that the canopies are tested to “BS 476 Fire tests on building materials and structures Parts 20 and 23, clause 5. Project Co shall also ensure that all canopies meet the requirements of Class O materials”.

Luminaires with prismatic diffusers installed on fire escape routes shall be fitted with flame retardant diffusers to TP(a) classification in Part B (Fire safety) of the Building Regulations in England: Light Diffusers and Wall Coverings, minimum Class 3 surface spread of flame.

Bed head observational lighting (watch lighting) shall be provided where specified in high dependency and critical care wards. The observational lighting shall be separately switched and controlled from the general lighting. Refer to Schedule Part 11, Equipment Schedule for details of where observational lighting is required

Wall or ceiling mounted examination lighting shall be provided where specified in intensive therapy, high dependency and coronary units. Refer to Schedule Part 11, Equipment Schedule for details of where examination lighting is required

Laser and x-ray warning lights shall be provided outside theatres, major treatment rooms and x-ray rooms and interfaced with the laser / x-ray machines

Food factory type luminaires shall be provided in areas in which food is prepared, cooked and stored.

Ensure that in the entrance areas, functional lighting is supplemented by additional lighting to enhance the interior and create an aesthetically pleasing environment.

Plant areas, roof void areas, ducts, lift motor rooms, shafts and similar utility areas shall be additionally illuminated utilising suitably IP rated luminaires.

Project Co to provide over-mirror lights in all male and female changing rooms, where indicated in the Schedule Part 11 (Equipment Schedule).

8.8.6 Exterior Lighting

The perimeter, including any main entrance canopies and pedestrian walkways, to all buildings shall be lit by the use of LED energy efficient luminaires mounted on walls, columns and/or bollards. All on-site access roads, footpaths and cycle ways shall be lit to levels compatible with the adjacent roads. The lighting shall satisfy the requirements of BS EN 13201 and BS 5489:2003 Code of practice for the design of road lighting. Lighting shall be provided to all direction signs around the Site where these are not adequately illuminated by external lighting.

All access routes to plant areas shall be lit to provide safe access for maintenance.

All wall mounted luminaires shall be fed by back entry. Cable runs on the outside of buildings shall not be permitted.

All external columns, bollards etc. shall be provided with fused cut-outs and termination facilities for cabling.

All luminaires shall be wired on multiple circuits to avoid loss of light to whole areas in the event of a mains/circuit failure.

Project Co shall illuminate the main entrances, the buildings perimeter and pedestrian walkways by use of energy efficient luminaires, wall, column and / or bollard mounted. The installation shall achieve the requirements of BS EN 13201 and BS 5489:2003 Code of practice for the design of road lighting, providing external lighting for safety and security purposes.

When selecting luminaires, Project Co shall give consideration to light pollution, vandalism, security, energy efficiency and local residents' needs.

Project Co shall control external lighting to minimise energy consumption, by photocell or movement sensor, the lamp type selected must be sympathetic to frequency of switching dictated by the control means. Project Co shall consider the use of solar powered lighting.

8.8.7 Lighting Control & Wiring

Project Co shall provide automatic control of lighting control using natural light level sensing. Control lighting for unoccupied periods by use of the BMS scheduling capability, with movement sensing override for safety. Project Co shall provide a safe minimum light level at all times.

Project Co shall ensure that the lighting design incorporates a flexible switching arrangement to allow for varying activities within each room and for cleaning purposes. Switches for public areas shall be positioned by Project Co so that unauthorised persons cannot switch the lighting.

Lighting within all WC's, Staff WC's and changing rooms shall be controlled via passive infrared sensors/movement detectors or similar, with adjustable time control facilities.

Lighting within clinical areas shall be manually controlled.

Project Co shall arrange the circuiting of luminaires to control groups of fittings in order to provide flexibility of switching arrangements. Such a facility is particularly important in large spaces where the level of daylight is not uniform and artificial lighting is likely to be needed for long period in areas remote from windows.

Project Co shall provide alternative circuits together with two-way or intermediate switching at all section doors and corridor direction changes for lighting in corridors and circulation areas.

Where multi-gang lighting control switches are required Project Co shall provide a label fixed to the grid under the switch plate, indicating the switches are fed from different supplies.

Project Co shall wire lighting circuits within rooms/areas on the same phase as the general power circuits.

8.8.8 Emergency Lighting

Project Co shall connect the emergency lighting to addressable self-monitoring control panels with each luminaire containing an interface unit that will be monitored and controlled by the control panel which shall report to the BMS system. Project Co shall ensure that the emergency luminaires are automatically tested in accordance with the requirements of the British Standards.

The emergency luminaires may be of either the maintained or non-maintained variety. Project Co shall ensure that they are powered by a suitable battery supply connected by an auto-changeover switch or utilise self-contained battery packs within luminaires (3-hour rated). Project Co shall ensure that the emergency luminaires will be automatically energised in the event of a failure to the local lighting circuit.

Project Co shall comply with the requirements of BS 5266 Emergency Lighting and European Legislation CEN/TC 169 WG3 Emergency Lighting of Buildings.

8.8.9 Standby Lighting

Project Co shall provide 100% standby lighting via the generator to enable normal activities to continue during the loss of a normal mains supply.

Project Co shall ensure that the quality of standby lighting is equal to that of the normal lighting at the task points.

8.8.10 Uninterruptible Power Supplies

Project Co shall provide Uninterruptible Power Supplies (UPS) to serve life-support equipment within area and rooms listed in the UPS Required Table below and the requirements of Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) in accordance with SHTM 06-01 Electrical Services. UPS to be provided to individual rooms shall be as stated on the Room Data Sheets. Project Co shall provide UPS for the Helipad and the NHS Lothian Server Room's ventilation/cooling. The UPS shall provide a no-break supply during loss of normal mains power supply and subsequent emergency generator power supply. The UPS System shall be of modular parallel design and will have N+1 redundancy. UPS requirements for the NHS Lothian Server Room are detailed in the Responsibility Matrix within paragraph 9.7.

UPS Required Table

Level	Area	Rooms
Basement		
Ground Floor	Emergency Department	Resuscitation Room(s) 4 Major Treatment Rooms
	Co-Joined Radiology	MRI Rooms CT Rooms Gamma Camera Rooms Control Rooms
First Floor	Co-Joined Theatres	9 Theatres and anaesthetic rooms MRI Room Angiogram Interventional Room Recovery Spaces
	Critical Care	24 Cubicle Spaces
	DCN Acute Care	Receiving / Resuscitation Room
Second Floor	Ehealth	Server Room's ventilation/cooling
Third Floor	Medical In-Patients	Transitional Care Rooms
Fourth Floor / Roof	Helipad	Helipad RFFS Accommodation Helipad Fire Suppression System Lighting to Helipad; Helipad ramp and Helipad stairs

These units shall provide one hour standby duration in accordance with relevant Health Planning Standard documents.

8.8.11 Lifts

Project Co shall provide bed passenger lifts (suitable for inclusion of at least one hospital bed (orthopaedic bed)), goods lifts, service lifts (dumb waiters), general passenger lifts and evacuation lifts for emergency conditions within the buildings in accordance with but not limited to SHTM 08-02, SFPN 3 and SHTM 81. All lifts provided for the movement of patients shall be supplied from the essential services supply in accordance with SHTM 06-01.

Three of the lifts in the DCN / 'Hot' core are to provide access to helipad located on the roof. Two in number Patient Bed lifts and one in number FM lift shall serve the roof area that the helipad is located on. The lifts are to have call buttons at roof level and key operated access to the roof from inside the lifts.

RHSC Patient Bed and Passenger lifts shall not stop at floors that are exclusively served by DCN departments with manual override.

DCN Patient Bed and Passenger lifts shall not stop at floors that are exclusively served by RHSC departments with manual override.

Project Co shall give consideration to the following in the provision of lifts:

- a) The lifts shall be vandal / damage proof but aesthetically pleasing and appropriately sized - (min size for bed and associated equipment);
- b) A minimum of one lift shall be sized to accommodate the lifting of the major component parts of medical equipment for replacement during maintenance with particular attention given to lifting the MRI scanner components to and from the ground and upper floors. Project Co shall require to liaise with relevant clinical and estates staff to identify the most onerous components during the design stage. When the more onerous components are to be used the Board will have the right to decide what constitutes the more onerous component.
- c) Banks of lifts shall be appropriately controlled to maximize movement;
- d) Collective controls of groups of lifts shall be used;
- e) All floors including plant levels shall be served
- f) Project Co's control rooms shall be easily accessible and designed to minimise the need for artificial cooling;
- g) Emergency hands free telephones in lifts shall be accessible to the blind, partially sighted, deaf and wheelchair users. Telephones shall be linked to lift car audio inductive loop;
- h) Lifts for people and goods shall be separated;
- i) Dedicated lifts are required for theatres or swipe controlled staff access override; and
- j) Disabled friendly controls, information etc (wheelchair accessible height of buttons, tactile numbers, voice messages, and visual alarm) shall be incorporated in the lift design.

8.8.12 Escalators

Where Project Co provides escalators within the buildings they shall adhere to the requirements of all relevant British Standards and in particular with BS EN 115 Safety of escalators and moving walks.

8.9 Lightning Protection & Earthing

Project Co shall provide a lightning protection system for the protection of the structure, the contents and occupants. The lightning protection installation shall be in accordance with the latest version of BS EN62305 Protection against lightning. The lightning protection system shall comprise of air termination network, down conductors, earth termination network and all required equi-potential bonds.

Project Co shall provide a system of earthing that shall ensure sufficient and fast operation of protective systems in the case of earth faults.

The earthing system shall comply with BS7671:2008 Requirements for electrical installations (IEE Wiring Regulations), BS7430:1998 Code of Practice for earthing and with the Electricity at Work Regulations 1989.

The earthing system shall comprise of earth electrode system, main and supplementary earth bars, main and supplementary equi-potential bonding.

8.10 Fire Detection & Suppression Systems

Project Co shall ensure that the fully addressable automatic fire detection system for the Facilities is fully compliant with the performance criteria laid down under SHTM 82 (including Supplement A) and the latest revisions to BS 5839. The design of the Facilities shall be in full accordance with HTM 05-02, including both vertical and horizontal compartmentation and evacuation routes. All circulation doors shall be installed with integrated electro-magnetic door hold open devices with all security door locks interlocked for evacuation in a fire condition.

Project Co shall provide sprinkler protection to those departments surrounding High Dependency departments (above, below and adjacent on the same level) as required by SHTM 82 Section 3.

Project Co shall ensure that the system must be an L1 fully addressable analogue system incorporating an auto-dialler / monitoring facilities with the capability for remote site monitoring via an internet PC connection. The system should also be provided with a full 2 way communication link to the RIE Facilities, subject to the details being agreed with the Board and Consort as part of the Project Co's Proposals and/or as Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement and provided. Project Co shall carry out the necessary connection work to the fire alarm system at the interface with the Link Building in accordance with the Interface Output Specification for the Link Building, the Connection Proposal and the relevant provisions of paragraph 4.

The system shall be equipped with sufficient sounders to maintain sound outputs in different areas in accordance with SHTM 82, and incorporate visual strobe indicators for a fire condition in accordance with the requirements of the Equality Act 2010. Project Co will provide voice evacuation announcements and shall agree with the Board if manual voice evacuation or pre-programmed announcements are to be provided as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Project Co shall ensure that the Facilities are divided into zones by ward / department / unit area as well as by floors with mimic or repeater panels at each nurse station (or equivalent) and at least one panel per floor located in a central circulation area. In the event of fire the Facilities shall be capable of individual zone evacuation with all other zones receiving awareness signalling. Project Co shall ensure that all fire alarm panels are capable of giving details of system status for fire, fault, and alarm conditions including full text descriptions of location. All panels shall be capable of data / event logging and report generation. Manual call points must be provided at every exit and staircase with no point in the building being more than 30m travel from a call device.

Materials and equipment shall be the catalogued products of manufacturers regularly engaged in production and installation of automatic fire detection systems and shall be manufacturer's latest standard design that complies with the Board's Construction Requirements.

Project Co shall ensure that this system will have a documented history of compatibility by design for a minimum of 15 years. Future compatibility shall be supported for no less than 10 years. Compatibility shall be defined as the ability to upgrade existing systems to current level of technology, and extend new field panels on a previously installed network.

Project Co shall take into account the need for maintaining patient security during alarm testing i.e. the testing regime shall not allow for ordinarily secure doors to open as a result of routine testing.

Project Co to provide fire suppression systems in NHS Lothian Server and Node rooms, IPS Room and main HV and LV switchrooms.

Fire hose reels are not acceptable within the Facilities. For the avoidance of doubt, Project Co shall provide all fixed fire fighting equipment to comply with statutory requirements and the requirements and recommendations of NHS Scotland Firecode.

Project Co shall review requirements for fire hydrants with The City of Edinburgh Council's Building Control Department and Scottish Fire and Rescue Service.

The fire systems for the Facilities will have to be designed and constructed and replaced, repaired, renewed and maintained such that they may be connected to, communicate and operate with the fire systems at the RIE Facilities. It is envisaged that such connections and a control box for the fire systems will be proximate to the Link Building. The rights to make and replace, repair, renew and maintain such connections are subject to design, construction and other information being provided as part of Project Co's applicable Interface Proposal for approval by the Board and Project Co shall comply with the requirements for installing, maintaining, repairing, renewing and replacing interface links between the fire alarm system within the Facilities with those within this RIE Facilities as part of the RIE Works subject to and in accordance with:

- a) Section 7 (Link Building) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A;
- b) Interface Output Specification; and
- c) Connection Proposal.

8.11 Information and Communications Technology

Refer to paragraph 9.

8.12 Engineering Flexibility & Zoning

Heating, ventilation, electrical and medical gas zoning shall be configured to promote flexibility in order to enable re-modelling and re-planning to be undertaken at a future date.

All engineering services shall be zoned with isolation and safety provision, for the whole of the Facilities and for individual wards and departments. Project Co shall also ensure that zoning accounts for:

- a) The requirement for "dirty" / "clean" separation;
- b) Solar movement; and
- c) The necessity for isolation of part of the Facilities without affecting the entire Facilities.

8.13 Services Capacity Reserve

In accordance with Good Industry Practice, all plant, plant spaces and building services systems shall be specifically designed and provided with defined reserve capacity allowances and future expansion capabilities for the Facilities (e.g. distribution boards with 25% spare capacity for the buildings as designed).

In addition to the reserved capacity allowances in relation to the building as defined in this Sub-Section C, Project Co shall also ensure reserve capacity, service termination, zoning and general arrangement supports any future extension of the building that may be an optional feature of Project Co's Proposals.

8.14 Service Routes

All service voids, risers and other spaces shall allow for installation of additional services and shall provide a defined reserve of a minimum 25% of useable area through routing cross sectional area. All isolating valves and other items requiring particular access shall be positioned at convenient locations with permanent access provision and which do not impede execution of the clinical functions or and/or provision of the Clinical Services in the space.

Services shall be arranged in a clearly zoned spatial hierarchy in ceiling voids, risers and plant spaces.

Access to services shall not be given in clinical areas.

All service voids, risers, plant rooms and other service / plant spaces shall be designed to easily facilitate the future removal of building services within each space.

In order to minimise potential disruption to the Board due to maintenance of building services, Project Co shall where practicable route services through common spaces such as corridors and avoid through routing within department areas.

All new ductwork shall be provided to allow cleaning of internal surfaces and components to be undertaken as detailed in the HVCA Document TR19 Cleanliness of Ventilation Systems.

8.15 Commissioning & Testing

All buildings, services and equipment shall be commissioned by Project Co to ensure that all they are compliant with the quality and performance specifications, including manufacturer's recommendations, and that all systems operate to the Board's satisfaction.

Project Co shall as a minimum commission the Facilities in accordance with the 'Guidance to Engineering Commissioning' published by The Institute of Hospital Engineers (1995).

Project Co shall be responsible for demonstrating and certifying to the Board the successful completion of all commissioning testing, and compliance with all relevant standards.

Project Co shall provide a comprehensive set of Operation and Maintenance Manuals (in hard and electronic forms) for all installed and commissioned equipment in a format specified in paragraph 4.5.17 and in accordance with the requirements in Clauses 17.18 and 18 of the Project Agreement.

Project Co shall provide such staff training as is deemed necessary by the Board details of training proposed shall be submitted to the Board as Reviewable Design Data for review by

the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

9 Information and Communications Technology (ICT) Requirements

9.1 Introduction

The Board recognises the importance of information and communication in the provision of Clinical Services and Non-Clinical Services and Operational Services in the modern health care environment; having the right information available and efficient means of communication enables improved efficiency. There is an increasing reliance on ICT infrastructure to meet these requirements both in terms of performance and availability.

This specification is intended to co-ordinate the various aspects of ICT provision within the Board's operations. The specification does not describe all individual systems and their operation in great detail, but identifies the various information and communication systems, the Board's current strategies for their development and maintenance, the obligations placed on Project Co.

9.2 Overall Requirements

Project Co shall design, construct, manage and maintain a comprehensive, resilient and robust ICT infrastructure for the Facilities. For avoidance of doubt, this includes the detailed requirements set out in the Interface Output Specification and Connection Proposal and relevant provisions of paragraph 4 and in the Schedule Part 11, Equipment Schedule.

Particular consideration shall be given to how ICT can be used to aid patient and staff flow throughout the Facilities.

Project Co shall provide only those ICT systems that are fully compatible with the Board's operational IT systems. For avoidance of doubt, it is the responsibility of Project Co to ensure the full integration and compatibility of the ICT systems. Project Co shall comply with the NHS Lothian E-Health Strategy.

Although this paragraph 9 will be of prime interest to the ICT designer, there is information contained here that Building Services designers and Architects may require for their designs.

9.3 User / Functional Requirements

Project Co shall liaise with the Board to robustly identify and capture all User and Functional Requirements required within each ICT system to support key departmental operational requirements.

Project Co shall ensure that these captured user and technical requirements are contained within the subsequent design and selection of appropriate and compatible manufacturer products and systems.

9.4 System Availability

Project Co shall design each ICT system to meet the System Availability targets set by the Board. This shall include the provision of appropriate hardware and software redundancy within the system design.

9.5 System Assurance

Project Co shall demonstrate that the proposed ICT design solutions comply with the Board's User and Functional Requirements.

Project Co shall submit a Reliability Block Diagram (RBD) for each ICT system to demonstrate that the Board's System Availability targets are met. This shall highlight the Mean Time Before Fail (MTBF) data for each hardware component of the system and show the required hardware and software redundancy implemented within the design.

Project Co shall be responsible for the overall system integration of the telecommunications system, ensuring that all aspects of the system design and installation meet the Board's requirements

9.6 Minimum Engineering Standards

In addition to the publications in paragraph 2 Project Wide Requirement, Project Co shall ensure that the design, construction and selection of components for the ICT works comply with, but not limited to, the following design reference documents:

- a) All current relevant British Standards;
- b) European Harmonised Standard Specifications and Codes of Practice;
- c) Applicable NHS Requirements
- d) Electromagnetic Compatibility Regulations 2006;
- e) ISO/IEC 11801:2002 Information Technology - Generic Cabling for Customers Premises;
- f) BS EN 50173-1: 2011 (Information Technology – Generic Cabling Systems)
- g) BS EN 50174-1: 2009 (Information Technology – Cabling Installation Part 1 Specification and Quality Assurance)
- h) BS EN 50174-2: 2009 (Information Technology – Cabling Installation Part 2 Installation Planning and Practices inside Buildings)
- i) BS EN 50174-3:2003 (Installation technology. Cabling installation. Installation planning and practices outside buildings)
- j) BS 6701:2010 Telecommunications equipment and telecommunications cabling. – Specification for installation operation and maintenance.
- k) BS 7718: 1996 Code of Practice for Installation of Fibre Optic Cabling.
- l) BS 7430: 1998 Code of Practice for Earthing
- m) BS EN 50310: 2000 Application of Equipment Bonding and Earthing in Buildings with Information Technology Equipment
- n) TIA/EIA-568 B-SET: 2001 (Commercial Building Telecommunications Cabling Standards).

- o) TIA/EIA-569 B-SET: 2004 (Commercial Building Standard for Telecommunications Pathways and Space).
- p) TIA/EIA-606-A: 2002 (Administration Standard for commercial Telecommunications Infrastructure)
- q) TIA/EIA-607: 1994 (Commercial Building Grounding and Bonding Requirements for Telecommunications)
- r) TIA/EIA-TSB67: 1995 (Transmission Performance Specifications for Field Testing of Unshielded Twisted Pair Cabling Systems)
- s) ISO/IEC 11801:2002/Amd 2:2010/Cor 1:2010 (Information Technology – Generic Cabling for Customer Premises)
- t) Relevant technical specifications (or equivalent) in the following order of precedence;
- u) British Standards transposing European Standards;
- v) European technical approvals;
- w) common technical specifications;
- x) International Standards; or
- y) other technical reference systems established by the European standardisation bodies.
- z) If the technical specifications referred to in u) are insufficient to meet the ICT requirements, Project Co shall make reference to the following technical specifications (or equivalent):
 - aa) British Standards;
 - bb) British technical approvals;
 - cc) British technical specifications relating to the design, calculation and execution of the work or works and use of the products; or
 - dd) DfT publications, standards and technical memoranda.
 - ee) Relevant OFTEL and DTI Standards, Publications and Regulations.
 - ff) Relevant Legislation.

In complying with any standard, Project Co shall equally comply with any published amendments and revisions issued up to Financial Close.

9.7 Responsibilities Matrix

Responsibilities for the delivery of aspects of the various ICT systems are set out in the table below:

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
1. Information Technology (IT)				
System management	N/A	N/A	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)
System architecture, design	Project Co to Board approval	Project Co	Board	Project Co
Hardware (inc. PCs, printers)	Board	Board	Board	Board
Hubs, servers/switches	Board	Board	Board	Board
NHS Lothian Server Room	Project Co to Board approval	Project Co	Board	Board
NHS Lothian Node Rooms	Project Co to Board approval	Project Co	Board	Board
Containment	Project Co to Board approval	Project Co	Project Co	Project Co
Cabling and faceplates	Project Co to Board approval	Project Co	Project Co	Project Co
Testing & Commissioning of Project Co Equipment	N/A	Project Co (with Board in attendance)	Project Co	Project Co
Testing & Commissioning of Board Equipment	N/A	Board	Board	Board
IT dedicated UPS	Project Co (infrastructure only) to Board approval - Board to provide as a part of Hardware	Project Co (infrastructure only) - Board to provide as a part of Hardware	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)
Final connections to hardware, hubs, UPS, external links and other equipment	N/A	Board	Board	Board
Facilities for seminar rooms, presentation spaces, reception areas, offices	Project Co (infrastructure only) to Board approval, refer Schedule Part 11, Equipment Schedule	Project Co (infrastructure only) / Board (equipment)	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)
Links to Other Organisations	Project Co (infrastructure only) to Board approval	Project Co (infrastructure only) / Board (equipment)	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)
Video Conferencing links/facilities – external, internal	Project Co (infrastructure only) to Board approval, refer Schedule Part 11, Equipment Schedule	Project Co (infrastructure only) / Board (equipment)	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
2. Telephone System				
System management	N/A	N/A	Board	Board
System architecture/design	Board	Board	Board	Board
PBX System	Board	Board	Board	Board
Operator Console	Board	Board	Board	Board
Hand sets	Board	Board	Board	Board
Pagers / staff location system	Board	Board	Board	Board
Containment	Project Co to Board approval	Project Co	Project Co	Project Co
Cabling and faceplates	Project Co to Board approval	Project Co	Project Co	Project Co
Testing & Commissioning of Project Co Equipment	N/A	Project Co (with Board in attendance)	Project Co	Project Co
Testing & Commissioning of Board Equipment	N/A	Board	Board	Board
Final connections to PBX system	N/A	Board	Board	Board
Telephone System dedicated UPS	Project Co (infrastructure only) - Board to provide as a part of Hardware	Project Co (infrastructure only)	Board	Board
3. Bedhead Services				
System management	N/A	N/A	Project Co	Project Co
System architecture/design	Project Co to Board approval	Project Co	Project Co	Project Co
Nurse Call	Project Co to Board approval (see 4. Nurse Call)	Project Co (see 4. Nurse Call)	Project Co	Project Co
Medical gases	Project Co	Project Co	Project Co	Project Co
Electrical supply	Project Co	Project Co	Project Co	Project Co
Bed lighting	Project Co	Project Co	Project Co	Project Co
ICT – Clinical (Data Outlet(s))	Project Co	Project Co	Project Co	Project Co
ICT – Patients/Public (Data Outlet(s))	Project Co	Project Co	Project Co	Project Co
Voice Outlet	Project Co	Project Co	Project Co	Project Co
Patient Entertainment Systems (TV and Radio facilities)	Project Co (containment and wiring only)	Project Co	Board	Board

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
3. Bedhead Services (Cont'd)				
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
4. Nurse Call				
System management	N/A	N/A	Project Co	Project Co
System architecture/design	Project Co to Board approval	Project Co	Project Co	Project Co
Nurse Call System	N/A	Project Co	Project Co	Project Co
Containment and cabling	Project Co to Board approval	Project Co	Project Co	Project Co
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
5. Fixed Induction Loops				
System management	Project Co	Project Co	Project Co	Project Co
System architecture/design	Project Co to Board approval	Project Co	Project Co	Project Co
System provision	N/A	Project Co to install complete system with potential for expansion	Project Co	Project Co
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
6. Security Systems				
6.1 CCTV				
System management	N/A	N/A	Project Co	Project Co
System architecture / design	Project Co to Board approval	Project Co	Project Co	Project Co
CCTV cameras, detectors, scanners, access units	Project Co to Board approval	Project Co	Project Co	Project Co
Monitors, multiplexes, control equipment hardware and software, recording equipment, servers	Project Co to Board approval	Project Co	Project Co	Project Co
CCTV Equipment Room(s)	Project Co to Board approval	Project Co	Project Co	Project Co

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
6.1 CCTV (Cont'd)				
Containment and cabling	Project Co to Board approval	Project Co	Project Co	Project Co
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
Final connections to hardware	Project Co to Board approval	Project Co	Project Co	Project Co
6.2 Access systems (to be integrated with alarm system)				
Doors and restricted areas	Project Co	Project Co	Board	Project Co
Hold open devices to minimise door damage & fire risk, and optimise "openness" of internal spaces	Project Co	Project Co	Project Co	Project Co
6.3 Alarms (to be integrated with access control system)				
Intruder	Project Co to Board approval	Project Co	Board	Project Co
Personal safety alarms	Project Co to Board approval	Project Co	Board	Project Co
Equipment alarms (Board)	Project Co to Board approval	Project Co	Board	Project Co
Equipment alarms (Project Co equipment)	Project Co	Project Co	Project Co	Project Co
Lift alarms, link to emergency base (REM or similar)	Project Co to Board approval	Project Co	Project Co / Board	Project Co
Patient Tagging	Project Co to Board approval	Project Co	Board	Project Co
Equipment Tagging	Project Co to Board approval	Project Co	Board	Project Co
7. Wireless Network				
System management	N/A	N/A	Board	Project Co
System architecture / design	Project Co to Board approval	Project Co	Project Co	Project Co
Wireless Network Cabling Infrastructure	Project Co to Board approval	Project Co	Project Co	Project Co
Containment and cabling	Project Co to Board approval	Project Co	Project Co	Project Co
Wireless Access Points (Inclusive of Wireless Surveys)	Project Co to Board approval	Project Co	Project Co	Project Co

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
7. Wireless Network (Cont'd)				
Wireless Access System (LAN Controllers, Wireless Control System and network interface / firewalls. This list is not exclusive).	Board	Board	Board	Board
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
Final connections to wireless network	N/A	Board	Board	Board
8. Intercom				
System management	N/A	N/A	Project Co	Project Co
System architecture/design	Project Co to Board approval, refer to Sub-section D Specific Clinical Requirements	Project Co	Project Co	Project Co
Intercom System	N/A	Project Co	Project Co	Project Co
Containment and cabling	Project Co to Board approval	Project Co	Project Co	Project Co
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
9. Video Telemetry				
System management	N/A	N/A	Project Co	Project Co
System architecture/design	Project Co to Board approval, refer to Sub-section D Specific Clinical Requirements	Project Co	Project Co	Project Co
Video Telemetry System	N/A	Project Co	Project Co	Project Co
Video Recording Equipment	N/A	N/A	Board	Board
Containment and cabling	Project Co to Board approval	Project Co	Project Co	Project Co
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
10. Others				
Public Area Phones	Project Co (infrastructure and equipment except handset) / Board (handset)	Project Co (infrastructure and equipment except handset) / Board (handset)	Project Co (infrastructure and equipment except handset) / Board (handset)	Project Co (infrastructure and equipment except handset) / Board (handset)

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
10. Others (Cont'd)				
Television / radio, common areas/patient information systems – Groups 2A, 2B and 3 Equipment as per Schedule Part 11, Equipment Schedule	Project Co (infrastructure only) to Board approval, refer Schedule Part 11, Equipment Schedule	Project Co (infrastructure only) / Board (equipment)	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)
11. Building Management System (BMS)				
System management	Project Co	Project Co	Project Co	Project Co
System architecture/design	Project Co to Board approval	Project Co	Project Co	Project Co

Where in the foregoing table any item is stated to be for the Board approval then all information relating to such item shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

9.8 Structured Cabling System

The Structured Cabling System (SCS) shall be a single fully integrated design to provide the physical connectivity for the following systems, as a minimum:

- a) data network;
- b) voice network.

Project Co shall provide a data network infrastructure capable of supporting as a minimum but not limited to the following systems:

- a) On-line clinical and non-clinical information systems.
- b) Internet, intranet and email services; and
- c) Patient Entertainment System

Project Co shall provide a voice network infrastructure that is capable of supporting, but not limited to the following systems:

- a) Conventional voice;
- b) Voice over internet protocol (passive provision for future VoIP installation);
- c) Modem and fax services;
- d) Phone to the bedhead;
- e) Public area telephones; and

- f) Public taxi ordering telephones.

Project Co shall provide the necessary resilience within the voice and data network designs.

9.8.1 Cabling

The Board's requirement for structured cabling is Cat 6a.

All cabling installed shall allow for a minimum of 25% spare capacity.

Cables, which pass through the infrastructure of a building shall be suitably protected against damage. Through walls and floors this shall involve an appropriate type of sleeve, through any form of metalwork or stiff plastic then a rubber grommet shall be used.

9.8.2 Data Patch Panels

Project Co shall take cognisance of the ICT requirements and provide patch panels accordingly.

9.8.3 Data Outlets

The data and voice outlets shall be RJ45 and shall utilise lead-frame technology for improved performance and reduced depth. The outlet contacts shall be silver-plated and positioned at 45° to the copper core of the cable to increase the number of possible re-terminations and provide a gas tight seal.

The outlets shall be appropriate for the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non Clinical Requirements); and the rooms / spaces identified.

9.9 NHS Lothian Server and NHS Lothian Node Rooms

Project Co shall provide all NHS Lothian Server and NHS Lothian Node Rooms and any other ICT equipment rooms required to serve the ICT systems to be provided for the Facilities.

No Project Co equipment shall be installed within any NHS Lothian Server Room or NHS Lothian Node room.

The final size and location of the NHS Lothian Server and NHS Lothian Node Rooms shall be dependent upon Project Co's final design the details of which shall be Reviewable Design Data (e.g. physical restrictions of cable run lengths etc).

Project Co shall ensure that the environmental conditions in the NHS Lothian Server and NHS Lothian Node Rooms are sufficient to allow for safe operation and working on plant and equipment. Project Co should also avoid the use of basement spaces due to the risk of flooding. No water, steam or waste services shall be located either in or directly above NHS Lothian Server / NHS Lothian Node Rooms due to risk of water damage. Project Co shall install security bars / shutters on the windows.

9.10 Wireless Network

Project Co shall provide 100% wireless network coverage throughout the Facilities.

Project Co shall establish the required number of Wireless Access Points by means of a comprehensive wireless access survey of the Facilities.

Each Wireless Access Point shall be Power-over-Ethernet (PoE) and provided with a double data outlet mounted below the ceiling,. Project Co shall provide the wireless equipment at each Wireless Access Point, with the cabling used to connect the wireless access points to the Board's Wireless Access System.

9.11 External Services

Routes shall be provided by Project Co from two independent external access points (ducts) to the NHS Lothian Server Room. These shall be of a size suitable for external grade multi-core fibre cable(s), and copper multi-core cable(s). Project Co shall ensure that the Board is granted free access to these ducts at all times so that it may access communications services provided by any third party it wishes to nominate.

9.12 Helpdesk

Project Co will establish a Helpdesk in the RHSC building all in accordance with the requirements of Schedule Part 12 Section 1 with associated infrastructure to receive and respond to calls. The helpdesk and infrastructure should also have the facility to receive and redirect calls to the NHSL Estates Helpdesk as necessary.

9.13 Communication & Connectivity with the RIE Facilities

9.13.1 Infrastructure

Project Co shall provide a 24 core single mode fibre optic cable from the NHS Lothian Server Room in the Facilities to the RIE Facilities. The connection will be to the Communications Rooms 1 and 2 and Server Rooms 1 and 2 in the RIE Facilities. Project Co shall provide 2 x fibre backbone cabling (Topology: - Diverse Star; Type: - OS1 - 9 micron; Cores: - 24 for each type with 100% expansion capacity to be provided in the cable tray runs).

9.13.2 System Connectivity/Interfaces between the Facilities and RIE Facilities

Project Co shall provide links for the Data network to the RIE Facilities. Project Co shall comply with the requirements of the Interface Output Specification, Connection Proposal and the relevant provisions of paragraph 4.

9.14 Induction Loop

The design of the Facilities shall include a system of induction loops with suitably located dedicated sockets and signage in areas such as reception areas, bedded bays, single, treatment, consulting, counselling and interview rooms. Additionally, the design shall reflect these requirements in areas such as offices where staff may require this facility.

Project Co shall provide induction loop or infrared systems in accordance with the Equality Act 2010 requirements. The final provision and locations are to be submitted as Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement, dependent upon the final design solutions. The Board would prefer to see a building-wide system installed but experience has shown that this often raises issues of confidentiality.

Project Co shall therefore ensure the provision of portable hand held systems for use by visitors that shall be made available at Enquiry/Information Desks at the Entrances. This shall ensure that the parts of the Facilities not provided with induction loops or infrared systems are made accessible to all users.

The “ear” symbol denoting the presence of an induction loop shall be prominently displayed. A sign shall explain clearly to people using hearing aids how they can benefit from the induction loop.

Alternatively, proven systems that do not raise issues of patient confidentiality can be proposed by Project Co to provide Facilities wide coverage as appropriate.

9.15 Public Address System

No requirement for a general public address system within the Facilities.

9.16 Intercom

Project Co shall provide an intercom system for the Facilities to meet the requirements of Board’s Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and other areas highlighted in Schedule Part 11 Equipment Schedule and Board’s Construction Requirements Part 6 Section 6 Room Data Sheets.

9.17 Video Telemetry

Project Co shall provide a video telemetry system within the Facilities to meet the requirements of the Board’s Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) in the rooms identified. The video telemetry system shall be provided over fibre optic connections between the relevant departments.

9.18 Public Telephone Ordering Service

Project Co shall install the telephone system for the public to make free phone calls to order a taxi and contact other organisations that may include Traveline Scotland, Smokeline and NHS24. The Board will determine the organisations to be contacted by the public telephone ordering service. Project Co shall provide a telephone system that shall accommodate new or replacement telephone numbers during the Operational Term. The public telephone ordering service is to be provided in the DCN reception and RHSC reception. The Board will provide the telephone handsets and signage for the handsets as Board Equipment in accordance with the relevant provisions of Schedule 11, Equipment Schedule. The Board will arrange the taxi ordering service prior to Completion and during the Operational Term.

9.19 Security

9.19.1 General

Project Co shall provide security systems specifically designed to meet the requirements of each department / unit and shall comply with the Interface Output Specification, the Connection Proposal and relevant provisions of paragraph 4.

The systems shall present a secure and reassuring environment for patients, staff, families and visitors by providing appropriate security measures within the particular restraints imposed by clinical demand and personal freedom. The design of the Facilities shall ensure maximum protection and minimize exposure to crime in internal and external areas.

Project Co shall provide the required control, monitoring and recording equipment within the security office. The security system needs to allow for the security officer to be able to respond to alerts (staff attack and fridge/freezer alarms) when not in the security office.

The design for all security systems shall be in line with the general principles of the approach suggested by Secured by Design.

Local alarm annunciation shall be provided within wards and at the central security desk.

The Board will monitor the CCTV system, including controlling access to, and the disclosure of, CCTV images.

9.19.2 Panic Alarm System

Project Co shall provide a panic alarm system, which will provide total coverage for the Facilities. The system shall be capable of emitting both audible and visual warnings to alert staff and security to the fact that there is an attack or a situation has arisen in which patients, visitors or other staff members are in danger. Service requirements shall dictate where the alarm is annunciated but as a general guide the panic alarm shall raise an alarm locally and at the security office. The system shall be capable of highlighting the exact location of the staff member in distress.

The system shall be inclusive of personal panic alarms for all staff.

9.19.3 Nurse Call Systems

Project Co shall provide a comprehensive nurse call system at all bed locations (and ensembles), nurse stations, toilets and showers, TV Rooms and all other areas frequented by patients (refer to Schedule Part 11, Equipment Schedule for details). The system must be capable of emitting both audible and visual warnings for the following situations:

- a) To summon a nurse (Patient to Nurse);
- b) To highlight a medical emergency (Nurse to Nurse); and
- c) To highlight a non-medical emergency (Nurse to Nurse).

Project Co shall ensure that both visual and audible warnings are sited in positions that enable the appropriate staff to respond to the exact location of the call both efficiently and effectively. Project Co shall ensure that the warnings, both visible and audible, shall be

specific to the type of emergency and must be consistent throughout all areas of the Facilities. The system incorporates a two-way hands free voice communication system with paging facility.

Project Co shall provide systems that comply fully with the requirements of relevant Health Planning Standards in particular SHTMs, HTMs, SHBNs and HBNs. In addition these systems shall interface fully with the information technology system to enable on-screen alerts at locations details of which are to be submitted as Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Project Co shall ensure that the nurse call button / cord meet the need of the particular patient that may be required to use the Facilities. Patients may have cognitive problems or have difficulties with mobility. The Nurse Call units for all patients shall be provided with safety cords.

9.19.4 Patient and Equipment Tagging System

Project Co shall provide patient and equipment tagging to the locations detailed in RHSC and DCN Patient and Equipment Tagging System Requirements Table. Details of the method of tagging are to be submitted as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

RHSC and DCN Patient and Equipment Tagging System Requirements Table

Ref	Department	Patient Tagging	Equipment Tagging
RHSC SPECIFIC DEPARTMENTS			
A	<i>Front Door - A&E / Assessment Ward</i>		
A1	Emergency Department		√
A2	Paediatric Acute Receiving Unit - 34 Beds	√	√
A3	PARU / Emergency / Radiology Shared Support		√
A4	Adult Link		
B	<i>Critical Care / HDU / Neonatal Surgery</i>		
B1	PICU and HDU's - 24 Beds	√	√
C	<i>RHSC In Patient Pathway / Ward Care</i>		
C1.1	Medical Inpatients - 23 Beds	√	√
C1.2	Surgical Long Stay Inpatients -15 Beds	√	√
C1.3	Neuroscience Inpatients - 12 Beds	√	√
C1.4	Haematology / Oncology Inpatients & Daycases - 17 Beds & 2 Chairs	√	√
C1.5	Med / Surg / Neuro / Haemo Shared Support	√	√
C1.6	Adolescent Shared Accommodation	√	√
C1.7	Paediatric Neurophysiology	√	√

Ref	Department	Patient Tagging	Equipment Tagging
C1.8	Surgical Short Stay Inpatients - 14 Beds	√	√
C2	RHSC Wards Support Areas		√
C3	Special Feeds Unit	√	√
C4	Sleep Lab	√	
C5	Classrooms		
D	<i>RHSC Ambulatory Care</i>		
D1	RHSC Main Outpatients		√
D2	Cardiology & Respiratory		√
D3	Orthoptics		√
D4	Audiology		√
D5	Paediatric Dentistry		√
D6	RHSC Therapies		√
D7	Plastics Dressings Clinic		√
D8	Social Work		
D9	Medical Day Care Unit - 5 Beds	√	√
D10	Ambulatory Care Shared Support		
E	<i>O-Zone</i>		
E1	POD		√
F	<i>Child and Adolescent Mental Health</i>		
F1	Child & Adolescent Mental Health Services - 12 Beds	√	√
G	<i>Clinical Support</i>		
G2	Equipment Library		√
H	<i>Academic</i>		
H1	Child Life & Health		√
H2	Clinical Research Facility	√	√
H3	Clinical Education Suite		√
I	<i>Facilities / Infrastructure Support Services</i>		
I1	RHSC Entrance		√
I2	Bed & Toy Stores		√
J	<i>Patient / Family Support</i>		
J1	Bereavement Suite		√
J2	Spiritual & Pastoral Care		√
K	<i>Family Facilities</i>		

Ref	Department	Patient Tagging	Equipment Tagging
K1	Family Support		√
K2	Family Hotel - Ronald McDonald	√	√
DCN SPECIFIC DEPARTMENTS			
L	DCN In Patient Pathway / Ward Care		
L1	DCN Acute Care - 24 Beds	√	√
L2	DCN Inpatients - 43 Beds	√	√
M	DCN Out Patient Departments		
M1	DCN Outpatients		√
M2	DCN Therapies		√
M3	Programmed Investigations Unit		√
M4	DCN Neurophysiology		√
N	DCN Support Space		
N1	DCN Entrance		√
N2	DCN Wards / Health Records Support		
JOINT DEPARTMENTS			
P	Combined Theatres		
P1	Operating Theatres & RHSC Surgical Day Case Unit	√	√
Q	Combined Radiology		
Q1	Radiology	√	√
R	Office / Admin Support Services		
R1	Clinical / Management Suite		√
R2	Health Records		√
S	Combined Facilities / Infrastructure Support Services		
S1	Kitchen		√
S2	e-Health Infrastructure		
S3	Domestic Services		√
S4	Materials Management		
S5	Central Staff Changing		
S6	Estates		
S7	Restaurant		
S8	Sterile Supplies Store		√
S9	Helipad Support		√

Ref	Department	Patient Tagging	Equipment Tagging
<i>T</i>	<i>Combined Plant</i>		
T1	Node Room		

9.19.5 Alarms & Intruder Detection System

Project Co shall provide an Intruder Detection System (IDS) within the Facilities to provide out of hours security cover. This shall be provided by PIR Detectors located within the corridors, and rooms with ground floor windows internally adjacent to any roof access points. In addition Project Co shall ensure that restricted areas have door contacts available for monitoring unauthorised entry.

Project Co shall ensure that the proposed alarm systems for the Facilities include lifts, refrigeration equipment and other critical equipment. Project Co shall ensure that the alarm systems can be monitored on Site and also remotely outwith the Facilities.

9.19.6 Security Access Control

Project Co shall provide a comprehensive access control system to all external access doors and to internal doors requiring restricted access including access control doors to NHS Lothian Server and NHS Lothian Node Rooms, Main entrance doors to Departments, FM and Patient Bed Lifts, Helipad and each ward bay. Project Co shall provide a comprehensive access control systems to meet the requirement of the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements). In addition other areas with restricted access as defined by the Board.

Ward access control doors shall also be fitted with a video entry door access system. All video entry camera shall be suitable for viewing of visitors in wheel chairs.

Project Co shall ensure the system includes all necessary power supplies, card readers, actuators, egress buttons and emergency "break-glass" release units.

The system installed by Project Co shall be separate from the Board's data network.

Project Co shall provide door entry video intercom systems to the main entrance door and the delivery entrance.

9.19.7 External CCTV

Project Co shall provide a comprehensive colour CCTV system covering all external access points, car parking and external pedestrian circulation routes around the Site.

The system installed by Project Co shall be separate from the Board's data network.

The design shall also take cognisance of the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

Project Co shall ensure that the system comprises a multi-channel digital recorder with a recording frame per second for each camera which is in accordance with a detailed engineering specification to be agreed with Lothian and Borders Police.

The digital recorder shall also control playback of images onto a CCTV monitor.

All recorded images should be of sufficient quality to be used for evidential purposes.

9.19.8 Internal CCTV

Project Co shall provide a comprehensive colour CCTV system covering all corridors, entrances, lift lobbies, First Floor link to the RIE Facilities, Emergency Department, hospital street and other areas where members of the public gather or areas where access is to be restricted i.e. wards.

The system installed by Project Co shall be separate from the Board's data network.

The design shall also take cognisance of the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

Project Co shall ensure that the system comprises a multi-channel digital recorder with a recording frame per second for each camera which is of sufficient quality to allow recorded images to be used for evidential purposes.

The digital recorder shall also control playback of images onto a CCTV monitor.

9.19.9 Monitoring of CCTV Images

All internal and external CCTV camera images shall be transmitted back to the CCTV monitoring equipment located within the security office to be provided within the Facilities.

9.19.10 Clinical Equipment

Each ward drug fridge shall be alarmed to warn of common faults. The sounder shall be located locally for ward fridges in areas manned 24/7 or located in the Security base when the area is not manned 24/7.

Each Ultra Low Temperature freezer, laboratory fridge and laboratory freezer in H1 Child, Life and Health, H2 Clinical Research and U1 Inborn Metabolic Disorders Laboratory shall be alarmed to warn of common faults. The sounder shall be located locally for fridges and freezers in areas manned 24/7 or located in the security office when the area is not manned 24/7.

9.19.11 Car Park Barriers

Project Co shall provide all power and control wiring associated with vehicle access barriers and shall be compatible with card solutions in use on other Board sites.

9.20 TV & Radio Facilities

Project Co shall provide the infrastructure for reception and distribution of television and radio for use by patients, visitors and staff. This shall include external aerials / dishes, containment and cabling / distribution and the like to enable Freeview TV services and Radio Lollipop Radio services to be distributed throughout the Facilities.

Television and radio will primarily be required for individual rooms and spaces as set out in the Schedule Part 11, Equipment Schedule.

10 Helipad Requirements

Project Co shall provide a rooftop helipad sited such that it gives direct access to the DCN 'Hot' core.

10.1 Minimum Compliance Requirements

In addition to the publications in paragraph 2 (Project Wide Requirement), Project Co shall ensure that the helipad shall be sited, constructed and maintained in accordance with the compliance requirements contained in:

- a) HBN15-03 Hospital Helipads;
- b) The Air Navigation Order 2009, as amended;
- c) International Civil Aviation Organisation (ICAO) Annex 14 Volume II, as amended;
- d) ICAO Doc 9261-AN/903 Heliport Manual;
- e) Civil Aviation Authority (CAA) Safety Regulation Group CAP 168 Licensing of Aerodromes; as amended;
- f) CAA Safety Regulation Group CAP 437 Offshore Helicopter Landing Areas - Guidance on Standards;
- g) CAA Safety Regulations Group CAP 789 Requirements and Guidance Materials for Operators;
- h) CAA CAP 637 Visual Aids Handbook;
- i) Joint Aviation Authority (JAA) Joint Aviation Requirements JAR-OPS 3: Commercial Air Transportation (Helicopters);
- j) National Fire Protection Association (NFPA) 418 Standard for Heliports

10.2 Helicopter Operators

The helipad shall be designed to accommodate helicopters provided by the following helicopter operators:

- a) Scottish Ambulance Service Air Ambulance
- b) Ministry of Defence (MOD),
- c) Maritime and Coastguard Agency (MCA),
- d) Police Helicopters,
- e) all other emergency service providers, and
- f) their replacements.

Project Co shall consult with the helicopter operators during the design, construction and operation of the helipad and this will only be done through the Board. Project Co will have no direct contact with the helicopter operators.

10.3 Helipad Requirement

The helipad shall be designed to permit daytime landings, night-time landings and take offs and flights affected by poor visibility and low cloud. The helipad will require to pass inspection by the Civil Aviation Authority and Mobile Air Operations Team (MAOT) before the Actual Completion Date particularly with regard to compliant visual aids, lighting and Rescue and Fire Fighting Services (RFFS) provision for the helicopters to be served. Adequate space shall be made available for critical engineering services such as fire fighting, helipad access and helipad lighting. Electrical equipment providing power to the helipad must be supported by an Uninterrupted Power Supply (UPS) provided by Project Co. The lighting shall not cause a trip hazard.

The helipad will be constructed at least 3 metres above the roof with at least one ramp. The ramp(s) shall provide a landing at least 1 metre below the level of the helipad on which RFFS personnel can stand with their fire-fighting equipment to observe the arrival and departure of helicopters. The helipad shall be constructed from fire resistant materials. The helipad's drainage shall be separate from both the surface water and foul water drainage systems and shall only pass into the public drainage system once it had passed through a petrol/fuel interceptor.

The patient route from the helipad to the RIE Facilities and RHSC Emergency Departments will be through the Hot Core. There are to be two patient bed lifts, an FM lift and a stair in the Hot Core serving the helipad. The lifts are to have call buttons at the roof of the building (proximate to the helipad) and have key operated access to the roof from the interior of the lifts. Access to the roof area from the lifts and the stair will have security access control. The lifts and stair core structure must terminate below the level of the helipad.

Project Co shall appoint an aviation design specialist with expertise in designing helipads. The Board shall be consulted on the selection and appointment of the aviation design specialist. Project Co shall appoint an aviation design specialist. Project Co shall incorporate the advice and recommendations of the aviation design specialist in meeting the requirements of Schedule Part 6 Construction Matters.

For the avoidance of doubt the Board shall be "the person" referred to in paragraph 2.8 of HBN 15-03 being "the person in charge of an area intended for taking off and landing must cause to be in operation such lighting as will enable the pilot to identify the landing area and direction, and to make a safe landing and takeoff". The Board will provide the trained person for night operations. Project Co shall provide all hardware for the lighting requirements of the helipad. The Board will provide at least one trained person for night operations.

Contrary to paragraph 2.9 of HNB 15-03 the helipad will operate at night, with low visibility and in all levels of cloud cover. The helipad will be provided with Helicopter Approach Path Indicator (HAPI) that complies with CAA CAP 637 Visual Aids Handbook.

There is no requirement for refuelling of helicopters. Helicopters will not be based at the helipad.

The helipad is to be category H2 in terms of ICAO Annex 14 Volume II, Chapter 6 and is to have RFFS to H2 RFFS Standard to comply with CAA Safety Regulations Group CAP 789. Project Co shall ensure that the helipad is sufficiently robust to accommodate the largest of

these helicopters in common use in the UK. In terms of HBN 15-03 item 11.9 the helicopter operator is Air Ambulance.

The RFFS facilities will be provided by Project Co during construction and during the Operational Term. The risk assessment to justify the scale of RFFS facilities and standards will be carried out by the Board and provided to Project Co.

The accommodation for male and female RFFS personnel to store, lay out and put on their protective equipment quickly is to be located on the floor serving the helipad. A drench shower to allow PPE to be cleaned / decontaminated before the RFFS personnel enter the building is to be located by the external entrance to the accommodation for male and female RFFS personnel.

Project Co shall provide the means for CCTV viewing of the whole of the helipad from monitors located in the Security Office. In addition when the helipad is in operation Project Co shall provide the means for CCTV viewing of the whole of the helipad from monitors located in the accommodation for the RFFS personnel.

The Board will provide the RFFS personnel. The RFFS personnel are not expected to spend long periods on the helipad. The Board will provide the RFFS medical equipment. The Board will be required to make contact with the CAA to inspect the (RFFS) and lighting.

The stores for the rescue and medical equipment, complementary fire-fighting agents and dedicated patient trolley and a Unisex WC shall be located on the floor serving the helipad.

The name of the hospital to appear to the pilots is "RIE".

The Board will produce the Development Control Plan that refers to the helipad.

Project Co shall have responsibilities in regard to HBN 00-07: Resilience Planning for the Healthcare Estate for the helipad. Details of the helipad are to be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

The Board should include specific risks created by helicopters using the hospital helipad in their overall site risk assessments.

The Board shall provide the Helipad Operation Manual and audit the helipad routinely for compliance with the Manual.

10.4 Helipad Permissions

The Board will prepare the details for and obtain the necessary permission for the helipad from the Scottish Ministers (in their capacity as land owners). The Board will make the Police aware of the helipad's presence prior to Financial Close.

PART 6

Section 3: The Board's Construction Requirements

Sub-Section D: Specific Clinical Requirements

This Schedule Part 6 Section 3 Sub-Section D forms the Specific Clinical Requirements included in the Board's Construction Requirements Specification. Project Co shall satisfy all the requirements under this Sub-Section D.

It contains design philosophy and specific requirements for each of the clinical services to be provided from the Facilities.

PART 6

Section 3: The Board's Construction Requirements

Sub-Section E: Specific Non-Clinical Requirements

This Schedule Part 6 Section 3 Sub-Section E forms the Specific Non-Clinical Requirements included in the Board's Construction Requirements Specification. Project Co shall provide Facilities which interface with all the requirements under this Sub-Section E.

PART 6

Section 3: The Board's Construction Requirements

Appendix A: Interface with Campus Site and/or Campus Facilities

PART 6

Section 3: The Board's Construction Requirements

Appendix B: Interface Output Specification

PART 6

Section 3: The Board's Construction Requirements

Appendix C: Environmental Matrix

PART 6

Section 3: The Board's Construction Requirements

Appendix D: Not Used

PART 6

Section 3: The Board's Construction Requirements

Appendix E: Initial Drainage Proposal

PART 6

Section 3: The Board's Construction Requirements

Appendix F: Access Strategy

PART 6

Section 3: The Board's Construction Requirements

Appendix G: Connection Proposal

PART 6

Section 3: The Board's Construction Requirements

Appendix H: Construction Access Proposal

PART 6

Section 3: The Board's Construction Requirements

Appendix I: Oversail Strategy

PART 6

Section 3: The Board's Construction Requirements

Appendix J: Service Proposal

PART 6

Section 3: The Board's Construction Requirements

Appendix K: Substation Proposal

PART 6

Section 3: The Board's Construction Requirements

Appendix L: Supplemental Drainage Proposal

PART 6

Section 3: The Board's Construction Requirements

Appendix M: TMS

From: [Mike Baxter](#) [REDACTED]
To: [Currie, Brian](#)
Cc: [Graham, Iain](#); [Potter, Carol](#)
Subject: RE: RHSC + DCN - Little France - A+DS Role
Date: 23 April 2013 14:07:22

Brian

I would not expect our position on NDAP to change on this project going forward and therefore I would expect HFS to contribute via the planning process. With regard to the type of review that would have been conducted via HFS as part of the Design Assessment Process I would expect to challenge this as part of the questioning around the FBC. I will also pursue these issues through my role on the Programme Board.

Trust this is helpful

Mike Baxter
Deputy Director (Capital and Facilities)
Directorate of Finance, eHealth and Pharmaceuticals
Scottish Government Health and Social Care Directorates
[REDACTED]

From: Currie, Brian [REDACTED]
Sent: 23 April 2013 09:13
To: Baxter M (Mike) (Health)
Cc: Graham, Iain; Potter, Carol
Subject: RHSC + DCN - Little France - A+DS Role

Mike

We have arranged a series of meetings between each individual bidder and CEC Planning, as you are aware, as we progress through competitive dialogue.

A+DS, as a statutory consultee, are part of this process however they have informed us that they are to seek clarification from yourself on their role on this project.

Given that this project was off and running before the "Vision of Health" initiative was launched, it has always been our understanding that A+DS will have no role other than as part of the statutory town planning process. This has been the case to date.

We have not envisaged them playing a part through the NHSScotland Design Assessment Process (NDAP) with HFS for example.

Would be grateful for your view?

Regards

Brian

Brian Currie
Project Director
RHSC + DCN - Little France
NHS Lothian
56 Canaan Lane, Edinburgh, EH10 4SG



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thead. Ma 's e is gun d'fhuair sibh seo le gun fhiosd', bu choir cur às dhan phost-d agus lethbhreac sam bith air an t-siostam agaibh, leig fios chun neach a sgaoil am post-d gun dàil.

Dh'fhaodadh gum bi teachdaireachd sam bith bho Riaghaltas na h-Alba air a chlàradh neo air a sgrùdadh airson dearbhadh gu bheil an siostam ag obair gu h-èifeachdach neo airson adhbhar laghail eile. Dh'fhaodadh nach eil beachdan anns a' phost-d seo co-ionann ri beachdan Riaghaltas na h-Alba.

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A bright new future: A project to re-provide services from the Royal Hospital for Sick Children, Child and Adolescent Mental Health Service and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France

“Re-provision of RHSC and DCN at Little France”

INVITATION TO PARTICIPATE IN DIALOGUE

Volume 1

Revision A

Contract Notice Ref: 386758-2012 (2012/S 235-386758)

Lothian Health Board

Waverley Gate

2-4 Waterloo Place

Edinburgh

EH1 3EG

www.nhslothian.scot.nhs.co.uk

Issue and Revision Record:

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A	11 March 2013	ITPD issue

IMPORTANT NOTICE

The Invitation to Participate in Dialogue and any subsequent Invitation to Submit Final Tender (together the “**Invitation**”) has been prepared for the purpose of providing certain information to Bidders invited to participate in the competition for the design, build, finance and maintenance of a project to enable the re-provision of services from the Royal Hospital for Sick Children, Child and Adolescent Mental Health Service and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France (“**the Project**”).

In no circumstances shall the Board or their advisers, consultants, contractors, servants or agents incur any liability or responsibility arising out of or in respect of the issue of the Invitation.

Nothing in the Invitation shall be construed as legal, financial or tax advice.

Any summaries or descriptions of documents or contractual arrangements contained in any part of the Invitation cannot be and are not intended to be comprehensive, nor any substitute for the underlying documentation (whether existing or to be concluded in the future), and are in all respects qualified in their entirety by reference to them.

No legal relationship or other obligation shall arise between any Bidder and the Board unless and until the NPD Project Agreement has been formally executed in writing by the Board and the successful Bidder and any conditions precedent to its effectiveness have been fulfilled.

In this notice, references to the Invitation shall include all information contained herein and any other information (whether written, oral or in machine-readable form) or opinions made available by or on behalf of the Board, their advisers, consultants, contractors, servants or agents in connection with the Invitation or the Project including, without limitation, any additional information made available by the Board throughout the Dialogue Period.

Scots law shall be applicable to the Invitation and the Scottish Courts shall have exclusive jurisdiction.

Each Bidder's acceptance of delivery of the Invitation constitutes its agreement to, and acceptance of, the terms set forth in this Important Notice.

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1 INTRODUCTION

1.1 Purpose of Invitation to Participate in Dialogue

This Invitation to Participate in Dialogue (ITPD) is being issued to the three successful candidates (each of whom shall be a Bidder) shortlisted by the Board following completion of the Pre-Qualification Questionnaire initiated by the Office Journal of European Union (OJEU) notice *ref.386758-2012 (2012/S 235-386758)* published on 5 December 2012. The ITPD describes the Board's needs and requirements and sets out how Dialogue will be conducted.

1.2 Structure of the Invitation to Participate in Dialogue

The ITPD comprises four volumes of information as follows:

- 1.2.1 **Volume 1** contains background information on the Project, the conditions of participation, the arrangements for the Dialogue, the Informal Submissions that Bidders must provide during the Dialogue Period, Draft Final Tender requirements, envisaged Final Tender requirements and how the Board intends to evaluate the Final Tender, award the Project and communicate with Bidders.
- 1.2.2 **Volume 2** contains the contractual requirements which are set out in the NPD Project Agreement and schedules, (which include the draft Payment Mechanism) and Articles of Association.
- 1.2.3 **Volume 3** contains the specific technical requirements of the Board for the Project including construction (clinical and non-clinical) requirements and Facilities standards, equipping requirements and facilities management requirements.
- 1.2.4 **Volume 4** comprises of details of the Data Room available to Bidders during the Tender Period.

1.3 Definitions within Invitation to Participate in Dialogue

1.3.1 In terms of the interpretation of the ITPD, unless the context otherwise requires:

- (a) The masculine includes the feminine and vice-versa;
- (b) The singular includes the plural and vice versa;
- (c) The words "include" and "including" shall be construed without limitation;
- (d) Any reference to a person includes a reference to an individual, company, authority, board, association or other legal entity;
- (e) Any reference to any directive, statute or statutory provision shall include any directive, statute, or statutory provision which amends or replaces or has amended, replaced consolidated or re-enacted it and shall include any subordinate legislation made under any directive or statute;
- (f) Save as otherwise provided herein, any reference to a Volume shall be a reference to a Volume of the ITPD to; and

(g) Save as otherwise provided herein, any reference in this Volume 1 to a section shall be a reference to a section of this Volume 1.

1.3.2 The terms used in these instructions to Bidders shall, where the same have been defined in the NPD Project Agreement, bear the same meaning as in the NPD Project Agreement unless otherwise defined hereunder:

Additional Documentation Submission has the meaning given to it in Appendix C(i) of Volume 1 of the ITPD;

Ancillary Agreements means the Memorandum and the Articles of Association;

Annual Service Payment has the meaning given to it in the NPD Project Agreement;

Bidder means each of

- B3 (*herein referred to as Bidder A*);
- Integrated Health Solutions (Lothian) (*herein referred to as Bidder B*); and
- Mosaic (*herein referred to as Bidder C*)

and **Bidders** shall be construed accordingly;

Bioquarter Site has the meaning given to it in the NPD Project Agreement;

Board has the meaning given to it in the NPD Project Agreement;

Board's Construction Requirements has the meaning given to it in the NPD Project Agreement;

Board Services has the meaning given to it in the NPD Project Agreement;

Briefing Meeting has the meaning given to it in paragraph 4.4 (Briefing Meeting and Q and A Sessions) of Volume 1 of the ITPD;

CAMHS means the Child and Adolescent Mental Health Service currently provided from the Royal Edinburgh Hospital, Morningside Place, Edinburgh.

Campus Facilities has the meaning given to it in the NPD Project Agreement;

Campus Site has the meaning given to it in the NPD Project Agreement;

Certificate of Non-Collusion and Non-Canvassing means the certificate of that name set out in Appendix H of Volume 1 of the ITPD;

CEC means the City of Edinburgh Council;

City Development means the department of City Development within the City of Edinburgh Council;

Conject means the Conject information channel, formerly known as BIW, provided by Conject Ltd, a web based construction collaboration portal utilised on the project by the Board.

Conject User Manual means the user manual for Conject set out in Volume 4 of the ITPD;

Consort has the meaning given to it in the NPD Project Agreement;

Core Evaluation Team means the principal assessment body for procurement, for Pre-Qualification Questionnaire, Dialogue and evaluation of the Final Tender;

Data room means the secure electronic data storage room that will be provided via Conject;

DCN means the Department of Clinical Neurosciences currently provided from the Western General Hospital on Crewe Road South, Edinburgh;

Dialogue means the competitive dialogue conducted in accordance with the Regulations;

Dialogue Meeting means a meeting between the Board and a Bidder during the Dialogue Period;

Dialogue Period means the period between the date of issue of the ITPD and the date of issue of the notification from the Board that Dialogue has been concluded;

Dialogue Period Bulletin means a communication during the Dialogue Period of that name described in paragraph 4.11.2 (Communication Protocol) of Volume 1 of the ITPD;

Dialogue Period Query means a communication during the Dialogue Period of that name described in paragraph 4.11.2 (Communication Protocol) of Volume 1 of the ITPD;

Draft Final Tender means the submission made by a Bidder during the Dialogue Period in accordance with Appendices A, B and C of Volume 1 of the ITPD;

Enabling Works has the meaning given to it in paragraph 2.7.5 (Enabling Works) of Volume 1 of the ITPD;

Economic Cost has the meaning defined in paragraph 5.7.1 (Economic Cost) of Volume 1 of the ITPD;

Energy Centre means a dedicated autonomous energy centre to be provided as part of the Project;

Expiry Date has the meaning given to it in the NPD Project Agreement;

Environmental Matrix means the matrix contained in ITPD Volume 3, Schedule Part 6, Section 3, Appendix C;

Equalisation Adjustment has the meaning described at paragraph 5.7.1 (c) (Economic Cost) of Volume 1 of the ITPD;

Equipment Schedule means the document named such in Volume 3 of the ITPD;

Equipment Responsibility Matrix means the document named such in Volume 3 of the ITPD;

Facilities has the meaning given to it in the NPD Project Agreement;

Family Hotel has the meaning given to it in Schedule Part 6, Section 3, Sub-section D (Specific Clinical Requirements);

FOISA has the meaning given to it in the NPD Project Agreement;

Full Business Case or FBC means full business case of the Board;

Financial Close has the meaning given to it in the NPD Project Agreement;

Financial Model means an electronic model used for the purposes of this procurement as produced by a Bidder in support of the Bidder's Financial Submission (or by the Board in the case of the Shadow Bid Financial Model), having the attributes defined at paragraph 3.9 of this document;

Financial Proformas means the contents of Annex 1 to Appendix B of Volume 1 of the ITPD;

Financial Submission means the elements of a Bidders proposals relating to financial issues as defined in Appendix B of Volume 1 of the ITPD and as relating to the Final Tender, Draft Final Tender and all other submissions required during the Dialogue Period;

Final Tender means a submission made by a Bidder in response to an Invitation to Submit Final Tender;

Final Tender Period means the period between the date of issue of the notification that Dialogue has been concluded and the date of the Final Tender;

Generic Rooms has the meaning given to it in paragraph 2.5.2 (Room Layouts) of Volume 1 of the ITPD;

GICs means guaranteed investment certificates

Group 1 Equipment has the meaning given to it in the NPD Project Agreement;

Group 2A Equipment has the meaning given to it in the NPD Project Agreement;

Group 2B Equipment has the meaning given to it in the NPD Project Agreement;

Group 3 Equipment has the meaning given to it in the NPD Project Agreement;

Gross Internal Floor Area means the area of a building measured to the internal face of the perimeter walls at each floor level. The rules of measurement of gross internal floor area are defined in the latest edition of the RICS Code of Measuring Practice;

Hard FM has the meaning given to it in paragraph 2.11 (Facilities Management: Services to be provided by Project Co) of Volume 1 of the ITPD;

Helpdesk has the meaning given to it in the Service Level Specification contained in Volume 3 of the ITPD. ;

Indicative Elements of the Reference Design has the meaning given to it in paragraph 2.6 (Indicative Elements of the Reference Design) of Volume 1 of the ITPD;

Informal Submission has the meaning given in paragraph 4.2.3 (Timetable and Dialogue Meetings) of Volume 1 of the ITPD;

Information Provided means the information provided to the Bidders by the Board or its advisers during the Dialogue Period;

Interface Proposals has the meaning given to it in the NPD Project Agreement;

Invitation to Participate in Dialogue or ITPD means this document as more particularly described in paragraph 1.2.1 of Volume 1 of the ITPD as updated by the Board from time to time;

Invitation to Submit Final Tender or ISFT means the document(s) which may be issued by the Board to any shortlisted Bidders inviting them to submit their Final Tender;

IRR means internal rate of return;

Key Rooms has the meaning given to it in paragraph 2.5.2 (Rooms Layouts) of Volume 1 of the ITPD;

Key Stage Review the validation to be carried out by the Scottish Futures Trust on behalf of the Scottish Government at key stages of the procurement process;

Link Building has the meaning given to it in the NPD Project Agreement;

Mandatory Reference Design Requirements has the meaning given to it in paragraph 2.5 (Reference Design and Mandatory Reference Design Requirements) of Volume 1 of the ITPD;

Medical School means the University of Edinburgh Medical School, Chancellor's Building, 49 Little France Crescent, Edinburgh, EH16 4SB;

MLA means mandatory liquid assets;

NPD means non-profit distributing;

NPD Articles of Association means the mandatory articles of association of Project Co, which are prescribed by the SFT;

NPD Model means the non-profit distributing model ascribed by the Scottish Government which represents a development of the traditional PFI model;

NPD Project Agreement means the contract set out in draft form at Volume 2 of the ITPD as updated from time to time and issued to all Bidders who remain in Dialogue with the Board at the relevant time;

NPV means net present value;

OBC means Outline Business Case of the Board relating to the Project;

Operational Functionality has the meaning given to it in the NPD Project Agreement;

Payment Mechanism has the meaning given to in it the NPD Project Agreement;

NPD Project Agreement Submission has the meaning given to it in Appendix C(i) of Volume 1 of the ITPD;

Plan 2 has the meaning given to it in the NPD Project Agreement;

Plan 4 has the meaning given to it in the NPD Project Agreement;

Planning Permission in Principle or PPIp means planning permission in principle granted to the Board by CEC in relation to the Site;

Preferred Bidder means the Bidder identified by the Board after evaluation of each of the Final Tenders with which the Board wishes to enter into the NPD Project Agreement;

Pre-Qualification Questionnaire means the document of that name issued on 5 December 2012;

Price Evaluation means the process set out in paragraph 5.7 (Price Evaluation) of Volume 1 of the ITPD;

Price Evaluation Mark has the meaning given to it in paragraph 5.7.2 (Price Evaluation Mark) of Volume 1 of the ITPD;

Project has the meaning given to it in the NPD Project Agreement;

Public Interest Director has the meaning given to it in paragraph 3.2.1(b) (Public Interest Director) of Volume 1 of the ITPD;

Quality Evaluation Mark has the meaning given to it in paragraph 5.6 (Quality Evaluation Criteria) of Volume 1 of the ITPD;

Query Proformas means the document provided within Appendix D of Volume 1 of the ITPD;

Reference Design means the preliminary designs prepared by the Board and their advisers and contained in the Data Room;

Reference Design Elements means the documents referred to within Appendix E of Volume 1 of the ITPD;

Reference Design Schedule of Accommodation has the meaning given to it in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation) of Volume 1 of the ITPD

Regulations mean The Public Contracts (Scotland) Regulations 2012;

RIE Facilities has the meaning given to it in the NPD Project Agreement;

RIE Project Agreement has the meaning given to it in the NPD Project Agreement;

Royal Hospital for Sick Children and Department of Clinical Neurosciences means the premises and associated infrastructure proposed to be constructed as part of the Project and includes CAMHS;

RHSC means the Royal Hospital for Sick Children currently located at 9 Sciennes Road, Edinburgh EH9 1LF;

Schedule of Accommodation has the meaning given to it in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation) of Volume 1 of the ITPD;

Schedule of Operational/Design Notes means document contained in Volume 4 of the ITPD (Data Room);

Service Strip has the meaning given to it in the NPD Project Agreement;

SFT means the Scottish Futures Trust;

SFTs Standard Form NPD Project Agreement means the form of project agreement issued by SFT on in June 2012, and as amended by SFT from time to time;

Site Survey means the survey of the Site to be procured by the Board and set out in paragraph 2.16 (Surveys and Dialogue Period Ground Investigations);

Soft FM Interface Specification means the specification contained in Volume 3 of the ITPD, Part 6, Section 3;

Solution means a solution developed by each Bidder in regard to the Project during the Dialogue Period;

Submission means either or all of the Informal Submission, Draft Final Tender and/or Final Tender where the context requires

Surplus has the meaning given to it in the NPD Project Agreement;

Technical Cost Proformas means the proformas included in Annex 1 to Appendix A of Volume 1 of the ITPD;

Tender Period means either the Dialogue Period or any Final Tender Period;

User Guide means the SFT user guide in relation to standard project agreements (hub DBFM and NPD Model); version 2 dated June 2012 as amended from time to time;

VAT means value added tax;

VFM means value for money;

VIE means vacuum insulated evaporator.

1.4 Overview of Project

The Project shall be to design, build, finance and maintain a new facility to re-provide services from the Royal Hospital for Sick Children, Child and Adolescent Mental Health Service and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France

In accordance with the Scottish Government's NPD initiative, the Board is now seeking to procure through Dialogue a partner who will form a NPD company (the "**Project Co**") for the delivery of the Project.

The Project shall be based at the Campus Site. The Campus Site shall comprise the Retained Site (i.e. the site of the existing hospital and university buildings) and the Site (i.e. the site for the new Facilities) together with the Retained Estate (i.e. the existing hospital and university buildings) and the Facilities (i.e. the new hospital). The Retained Estate and Retained Site form part of an earlier

PFI project entered into between the Board and Consort in 1998. Consort therefore operate (on behalf of the Board) the Retained Estate and the Retained Site.

The intention is that the Project shall construct standalone Facilities on the Site within the Campus Site at Little France as far as is practically possible. However, there shall be a physical link between the Facilities and the Retained Estate via a Link Building between the Facilities and the RIE Facilities at ground and first floor levels.

The Project will co-locate services currently provided at the RHSC located at Sciennes Road, Edinburgh, CAMHS at the Royal Edinburgh Hospital and DCN at the Western General Hospital, Edinburgh. Planning Permission in Principle has been received in respect of the Project.

This Project is regulated and governed by the Public Contracts (Scotland) Regulations 2012 and any contract awarded shall be to the Bidder who can offer the most economically advantageous tender in accordance with the Dialogue procedure.

1.5 Project Objectives and Drivers

1.5.1 The Board has developed a strategic clinical framework to underpin its approach to delivering Scotland's vision for sustainable, quality health care services and a healthier future for everyone.

The framework sets out the Board's principles for planning and delivering services and care in Lothian, and identifies how, through integrated working with partners and redesigning service around and with people, the Board will promote good health and deliver safer, more effective, person-centre healthcare.

The key principles are to:

- focus on prevention and early intervention to help people keep well and anticipate care needs;
- take a whole system approach to planning and managing integrated pathways of care, working with partner agencies in local authorities and voluntary sector;
- reduce unnecessary variation in the way patients are cared for;
- deliver services with the appropriate mix of staff skills, ensuring viable clinical staff rotas;
- reduce spend on property and buildings as hospital stays reduce, to release money for direct patient services;
- question active treatment which will not extend life or quality of life;
- identify services that are not sustainable in the longer term and proactively plan a new way of delivering care;
- make sure we stop procedures and treatments which add no clinical value; and
- maximise the opportunities for use of new technologies to support health and healthcare.

The framework focuses on six strategic aims:

1. prioritise prevention, reduce inequalities and promote longer healthier lives for all;
2. put in place robust systems to deliver the best model of integrated care for our population – across primary, secondary and social care;
3. ensure that care is evidence based, incorporates best practice and innovation, and achieves sustainable care pathways for patients;
4. design healthcare systems to reliably and efficiently deliver the right care at the right time in the most appropriate setting;
5. involve patients and carers as equal partners, enabling individuals to manage their own health and wellbeing and that of their families; and

6. use resources – skilled people, technology, buildings and equipment - efficiently and effectively.

1.5.2 The Board is committed to increasing social capital and addressing inequalities, deriving benefit for the communities, such as through proactive application of community benefits clauses in its procurement processes.

1.5.3 Specific factors driving the need for change in children’s and young people’s services and clinical neurosciences are:

- (a) The age and limitations of the current premises;
- (b) The increase in age range of patients to be seen in the facility, up to age 16 years old, or 18 in some specialities.
- (c) The need to deliver sustainable specialist services whilst meeting the challenge of relatively small numbers of patients and small numbers of clinical experts;
- (d) The national policy for Paediatric Intensive Care Units in Scotland, which have been commissioned under NHS National Services since 2007, sited in two hospitals for children and young people;
- (e) The need to deliver neurosurgery on the same site as adult and children’s emergency departments; and
- (f) The need to maintain strong links with the University of Edinburgh’s Division of Clinical Neuroscience and their planned Institute of Neuroscience at Little France.

1.5.4 Clinical benefits of integrating the services into one building, supporting the Board’s and national strategic ambitions include:

- (a) The ability to deliver paediatric and adult neurosurgery in the same theatre suite, maximising the utilisation of specialist equipment (e.g. intra-operative MRI) and expert staff, with direct internal access to age-appropriate critical care and wards;
- (b) Mental health services on the same site as acute hospital services for children and young people, supporting their physical as well as psychological care;
- (c) Joint-working and economies of scale in high-cost specialist clinical areas such as theatres and radiology; and
- (d) The opportunity to improve emergency access to services by incorporating a helipad on the roof of the Facilities.

1.6 Project Governance

1.6.1 The terminology used to describe project governance arrangements is as defined by the “Scottish Capital Investment Manual Programme and Project Organisation Guide”.

1.6.2 The Investment Decision-Maker is Lothian Health Board, which is ultimately accountable for the Project.

1.6.3 The Board’s Finance and Resources Committee (F&RC) has established a Project Steering Board, chaired by the Project Owner, who is NHS Lothian’s Director of Finance.

1.6.4 The F&RC routinely receives minutes of the Project Steering Board. The Project Owner shall provide assurance to the F&RC on key aspects of project governance and internal control, and progress reports on the delivery of key project milestones.

1.6.5 The Project Owner shall alert the F&RC in the event of any trend towards cost escalation or delay, or any radical changes to the objectives of the Project. The Project Owner shall make recommendations to the F&RC on action to take in these circumstances.

- 1.6.6** The Project Owner has the executive responsibility for decision-making relating to the project. All decisions must be consistent with Board strategies, policies and procedures and delegated budgets or in line with any agreed derogations.
- 1.6.7** The Project Director has responsibility for delivering the project within the governance parameters set out.
- 1.6.8** Project Steering Board remit shall be:
- To assist the Project Owner and Project Director in the decision-making process for issues relating to the Project;
 - To support the Project Owner and Project Director in preparing submissions to the F&RC, to satisfy that Committee's assurance needs on governance and internal control and monitoring of key performance milestones;
 - To serve as the Capital Management Group, with delegated authority to approve capital enabling works for the Project up to £250k, and will be the first place to review schemes higher than £250k; and
 - To be the arbiter of matters arising from the implementation of the Project Design and the Strategic Delivery Programme.
- 1.6.9** Project Steering Board Membership:
- Project Owner (chair)
 - Project Director
 - Medical Director
 - Non-executive member(s) of Lothian NHS Board
 - A representative from the service
 - Project Clinical Director
 - Director of Capital Planning and Projects
 - Associate Director of Finance
 - Project Operational Lead
 - Communications Manager
 - A representative from the Lothian Partnership Forum
 - A representative from the South-East & Tayside Regional Planning Group (SEAT)
 - A representative from the Scottish Government
 - A representative from the Scottish Futures Trust
- 1.6.10** The Project Owner, as chair of the Project Steering Board, shall decide whether a meeting should proceed in the event of absence of any members. The Project Owner may designate a member to chair a Project Steering Board meeting in their absence. However if the Project Steering Board is considering any business in its capacity as a Capital Management Group then the quorum is the Project Owner plus one member of Lothian Health Board, or if the Project Owner is not present, two members of Lothian Health Board.
- 1.6.11** The Project Director is supported by a project team comprising clinical experts and experienced NHS managers from capital planning, service management, finance and communications. Staff representation is fully integrated into the project with a full-time Partnership member of the team.
- 1.6.12** The Board's team are supplemented by specialist expertise from external financial, legal and technical advisers.

1.6.13 A Project Management Executive supports the Project Director in the day to day running of the Project and reporting on progress to the Project Steering Board.

1.7 Programme

The following table sets out the key target milestones for the Project.

Task	Date
Issue Invitation To Participate In Dialogue	12/03/13
Briefing Meetings	w/c 18/03/13
Board to propose draft Site Survey	22/03/13
Bidders to provide comments in relation to draft Site Survey	05/04/13
Dialogue Meeting 1	w/c 01/04/13
Dialogue Meeting 2	w/c 29/04/13
Dialogue Meeting 3	w/c 27/05/13
Dialogue Meeting 4	w/c 24/06/13
Dialogue Meeting 5	w/c 22/07/13
Draft Final Tender submission	26/08/13
Dialogue Meeting 6	w/c 23/09/13
Close dialogue	30/09/13
Invitation to Submit Final Tenders	11/10/13
Final Tender submission	11/11/13
Identify Preferred Bidder	13/01/14
Commercial and Financial Close	07/08/14
Construction commences	18/08/14
Completion date (target)	17/03/17
Hospital opening date	15/05/17

2 TECHNICAL OVERVIEW

2.1 Introduction

This section provides an overview of the technical requirements of the Project. In relation to all technical information provided by the Board, the Board reserves the right to amend all such information during the course of the Dialogue Period, including without limitation the Mandatory Reference Design Requirements, Board's Construction Requirements and Equipment provisions.

2.2 The Site

The planned location for the new Facilities is at Little France, in the south east of Edinburgh, home to the RIE Facilities and the University of Edinburgh Medical School and adjacent to the Edinburgh Bioquarter Site development.

The site is bounded on the north by the Medical School, on the east by the RIE Facilities, to the south by existing commercial and residential buildings on Old Dalkeith Road and to the west by the Queen's Medical Research Institute and the main entrance road serving the Campus Site at Little France.

Also to the west of the Campus Site is an area of rising ground which slopes up to Craigmillar Castle. The view from the south-east over the site to the castle, with Arthur's Seat in the distance, is considered by City of Edinburgh Council (CEC) to be an important view on the southern approach to the city. The Site of the new Facilities is wholly within the red line boundary set out in Plan 1.

2.2.1 The Royal Infirmary of Edinburgh

The RIE Facilities is a major acute teaching hospital and has more than 900 inpatient beds. As described above the RIE Facilities were procured under a PFI contract between the Board and Consort in 1998 and was opened in 2003.

It is home to Scotland's busiest maternity unit – some 6000 babies are born at the RIE Facilities' "Simpson Centre for Reproductive Health" each year – and to Scotland's busiest emergency department.

With a 24-hour emergency department, it provides a wide range of acute medical and surgical services for patients from across the Lothian region and specialist services for people throughout the south east of Scotland and beyond.

2.2.2 University of Edinburgh

The Chancellor's Building, adjoining the RIE Facilities, is part of the University of Edinburgh Medical School and houses teaching facilities, the medical library and research laboratories. It is currently home to the Multiple Sclerosis and Euan MacDonald Motor Neurone Disease research centres. The Chancellor's Building was constructed by Consort under the terms of the RIE Project Agreement.

The University opened its Queen's Medical Research Institute in 2005 which represented a major milestone in the history of biomedical research in Edinburgh. The Queen's Medical Research Institute houses over 600 researchers and aims to tackle a wide range of diseases at the most fundamental cellular level. Facilities include MRI and other modern imaging technologies and supporting infrastructure.

The University's Scottish Centre for Regenerative Medicine was opened in the Edinburgh Bioquarter Site in 2011. The Anne Rowling Building is the most recent addition to the University's facilities and lies between the Chancellor's Building and the site proposed for the new Facilities

2.3 Stand Alone Requirements

Subject to Clause 9 (Nature of Land Interests) including without limitation Schedule Part 5 (Land Matters) of the NPD Project Agreement, Appendix A of the Board's Construction Requirements and/or the Interface Proposals all buildings, facilities, services and associated works required to deliver the Project shall be contained within the Facilities and/or the Site and shall not be reliant upon any other buildings, facilities or services on the Retained Facilities and/or Retained Site (the "**Stand Alone Requirements**"). For the avoidance of doubt the following dedicated and autonomous elements shall be provided on the Site as part of the Project;

- (a) an Energy Centre;
- (b) the FM goods service yard; and
- (c) Hard FM spaces.

2.4 Design and construction elements

2.4.1 Overview

The specific requirements for the Facilities to be provided are set out in the Board's Construction Requirements. This comprises: -

- General Requirements;
- Specific Clinical Requirements; and
- Specific Non-clinical Requirements.

The Board's Construction Requirements are set out in Section 3 of Volume 3 of the ITPD and will ultimately form Section 3 of Schedule Part 6 (Board's Construction Requirements) of the NPD Project Agreement.

Using the work undertaken to date, the Board is seeking innovative proposals to meet its requirements.

The focus must be on providing age appropriate Facilities in a safe, caring and healing environment. This includes suitable Facilities for babies and young children, an adolescent inpatients zone, and accommodation for the adult population of DCN.

Areas for children, young people and adults should have their own identity within the integrated Facilities. At all times, the ethos, environment and needs of these different specialist areas has been considered in planning departmental relationships and patient pathways and this must be maintained.

Effective delivery of clinical services relies on close adjacencies between related specialties and disciplines. The design brief specifies that routes between departments should minimise travel time and distances for patients and staff in order to maximise clinical safety and efficiency.

The design will incorporate clearly identifiable, friendly and secure children's entrances to their outpatient and ward areas. There will be a separate main entrance to the DCN facilities. Recreation space and public facilities outside the wards will also be segregated as far as is practical.

The Board welcomes and will encourage Bidders to bring innovation, and expertise from within the UK and/or overseas to develop their own design proposals but it should be noted that certain elements of the design as they relate to aspects of Operational Functionality are mandatory, as described below and in Appendix E (Reference Design Elements) of Volume 1 of the ITPD.

2.4.2 Facilities to be provided

Facilities required for the Project include:

- (a) inpatient wards;
- (b) day case facilities;
- (c) outpatient clinics;
- (d) emergency department;
- (e) operating theatres;
- (f) radiology and physiology departments;
- (g) rehabilitation facilities;
- (h) support department;
- (i) roof top helipad; and
- (j) dedicated energy centre and goods delivery yard.

2.5 Reference Design and Mandatory Reference Design Requirements

The use of Reference Design in NPD projects is being promoted by the SFT and the Scottish Government.

A Reference Design for the Project has been developed and comprises mandatory elements and indicative elements.

The mandatory elements of the Reference Design (the “**Mandatory Reference Design Requirements**”) are those elements of the Reference Design relating to Operational Functionality. The definition used in the NPD Project Agreement is being applied to define the agreed Operational Functionality included in the Reference Design and is generally set out in the following constituents of the Reference Design:

- 1:500 Departmental Adjacency Layouts;
- 1:200 Departmental Layouts; and
- 1:50 Generic and Key Room Layouts.

Other areas of Operational Functionality are contained in other components within the Reference Design. Full details of the Mandatory Reference Design Requirements are set out in Appendix E (Reference Design Elements).

Bidders are required to develop design proposals which comply with the Mandatory Reference Design Requirements.

For the avoidance of doubt, the Board will not enter into any Dialogue on alternative solutions to the Mandatory Reference Design Requirements. Bidders’ proposals must be developed to comply with these Mandatory Reference Design Requirements. Bidders will be fully responsible for all elements of the design and construction of the Facilities including being responsible for verifying and satisfying themselves that the Mandatory Reference Design Requirements can be designed, built, and operated to meet the Board's Construction Requirements.

Following completion of the Reference Design some further adjustments were developed by the Board. These are set out in the Schedule of Proposed Adjustments contained in Volume 4 of the ITPD. Bidders are expected to address these adjustments during the Dialogue Period and incorporate them with their Final Tender. Bidders are required to provide a full breakdown of all costs (capex and opex) relating to item U1 “RHSC Specialist Paediatric Biochemistry Laboratory” included in the schedule.

2.5.1 Schedule of Accommodation and Reference Design Schedule of Accommodation

A schedule of accommodation has been developed by the Board to meet their requirements (the “**Draft Schedule of Accommodation**”). While the Draft Schedule of Accommodation is not mandatory in itself, the areas set out within it are considered to be minimum areas. These minimum areas will only apply to elements which affect the Operational Functionality. Areas such as service spaces (including risers) and Hard FM spaces will be for the Bidders to determine since responsibility and risk for these non operational spaces will ultimately rest with Project Co.

A further schedule of accommodation is included as part of the Reference Design; this has been developed based on the room areas achieved, as drawn, in the Reference Design (the “**Reference Design Schedule of Accommodation**”). Bidders are required to meet the minimum floor areas specified in the Draft Schedule of Accommodation however the Reference Design Schedule of Accommodation contains rooms where the area is less than the minimum requirements set out in the Draft Schedule of Accommodation. If Bidders cannot achieve the minimum floor areas for these rooms then it is acceptable, subject to agreement with the Board, for the rooms to be provided at the size achieved in the Reference Design. For the avoidance of doubt this will only apply to those individual rooms and not rooms of the same type or designation. Bidders will be expected to develop a schedule of accommodation which will form part of their proposals (the “**Schedule of Accommodation**”).

Circulation and communication space indicated in the Reference Design is also considered to be indicative but any corridor widths specified will be treated as minimum requirements. This is also outlined paragraph 5.10 (Corridor Widths and Heights) of the Board’s Construction Requirements. Therefore minimum corridor widths set out in the Reference Design are considered to be Mandatory Reference Design Requirements.

Any courtyards and terrace spaces are to be treated as communications spaces. These should be indicated on the Schedule of Accommodation submitted by Bidders but excluded from the measure of Gross Internal Floor Area.

2.5.2 Room Layouts

The 1:50 layout drawings included in the Reference Design cover the generic and key rooms only. Generic rooms are those rooms that are replicated more than four times across the Facilities (“**Generic Room**”). Key rooms are those that have critical operational requirements which the Board has identified for more detailed consideration and development at this early stage (“**Key Room**”). These include major spaces in the emergency department, operating theatre, radiology and outpatients departments. There are:

- 1839 rooms in total;
- 222 are covered under 88 Key Room types; and
- 756 are covered by 31 Generic Room types.

The Reference Design is developed in full at 1:500 and 1:200 scales. At 1:50 scale, where individual room layouts are detailed, the coverage is 53% of the total number of rooms (equating to 43% of the net floor area).

During Dialogue Bidders will be required to develop 1:50 layout drawings for the rooms identified in the table below which will form part of their proposals.

Table: 1:50 Layout Drawings to provided by the Bidders		
Room Reference	Room Designation	Department
G - A1 - 028/029	Resuscitation Bay	Emergency Department
G - E1 - 001	The Pod/Multi-functional activity zone	Outpatient Area
G - D2 - 013	Lung Function Laboratory	Cardiology and Respiratory
1 - D6 - 053-4	Rehabilitation Rooms	Therapies
1 - J1 - 003	Body Viewing	Bereavement Suite
2 - R1 - 001-055	All	Clinical Management Suite
3 - H3 - 001	Workshop/Tutorial 3	Clinical Education Suite
3 - C1.1 - 042	Clean Utility	Medical In-patients
4 - H1 - 018	Molecular Biology Laboratory	Child Life and Health
4 - H1 - 027	Physiological Laboratory	Child Life and Health
4 - H1 - 016	Tissue Culture Store	Child Life and Health

The Preferred Bidder will be required to develop 1:50 layout drawings for all remaining rooms prior to Financial Close.

2.5.3 Room Data Sheets

Standard format Room Data Sheets have not been prepared by the Board for the Project. The specific room requirements (the “**Room Information**”) are detailed in a combination of the following documents:

- The Board’s Construction Requirements;
- The Environmental Matrix;
- The Schedule of Operational/Design Notes;
- The Equipment Schedule;
- The Equipment Responsibility Matrix;
- The Draft Schedule of Accommodation; and
- The Operational Functionality elements of the Reference Design.

During Dialogue Bidders will be required to develop Room Data Sheets, incorporating the Room Information, for those rooms for which 1:50 layout drawings have been prepared. For the avoidance of doubt this shall include all Key Rooms and Generic Rooms in addition to those rooms identified in the table at paragraph 2.5.2 above. The Room Data Sheets will form part of the Bidders proposals. The Preferred Bidder will be required to complete Room Data Sheets for all remaining rooms prior to Financial Close.

2.6 Indicative Elements of the Reference Design

During the preparation of the Mandatory Reference Design Requirements, other information has been generated both as a by-product of preparing the Reference Design itself and as a general Project requirement as follows:

- (i) FM goods handling and distribution;
- (ii) Structural engineering solutions;
- (iii) Building services engineering solutions;
- (iv) Servicing strategies and space allocations; and
- (v) Hard FM solutions and space allocations.

This constitutes the “**Indicative Elements of the Reference Design**”.

Such information is issued to the Bidders for “information only” so that they may understand the intent of the Reference Design. Bidders must however refer to the Board’s Construction Requirements for the detailed requirements for all such Indicative Elements of the Reference Design for which they will ultimately carry the risk. Bidders are advised that the Board’s Construction Requirements will always take precedence over the Reference Design for matters which do not define Operational Functionality. The full distinction between Mandatory Reference Design Requirements and Indicative Elements of the Reference Design are set out in Appendix E (Reference Design Elements).

2.7 Interface and Enabling Works

Introduction

The section is an overview of:

1. General background and information about the Works – see paragraph 2.7.1;
2. Works to be designed, constructed and replaced, repaired, renewed and maintained by Project Co as part of the Project. Sometimes these works are on the Site or on the RIE Site or Campus Site or even off the Campus Site – see paragraphs 2.7.2 and 2.7.3;
3. Works to be designed and constructed by Project Co as part of the Project but not intended to be replaced, repaired, renewed and maintained by Project Co – see paragraph 2.7.4;
4. Works which are being carried out by others and not intended to form part of the Project but are taking place at the Campus Site or off the Campus Site but which are nevertheless pertinent to the operations at the Campus Site as a whole – see paragraph 2.7.5;

2.7.1 General information relevant to the Works

The permanent and temporary Works and all construction operations for the Project should, save where expressly provided otherwise, generally be designed and constructed to enable them to be carried out and where appropriate replaced, repaired, renewed and maintained on and from within the Site.

The Site is part of the Campus Site and Project Co has to be aware of and plan and programme the Works having regard to the other activities and operations ongoing at the Campus Site.

At some points it may be necessary temporarily for Project Co to enter or have access across other parts of the Campus Site for construction activities and the Board has secured a number of rights for Project Co in respect of such other parts of the Campus Site.

As well as operations on the Site, Project Co will be entitled to use Car Park E for a site compound during the Construction Phase for the Works, subject to a number of restrictions on use as detailed

in Section 3 (Site Compound/Car Park E) of Appendix A of the Board's Construction Requirements and Clause 9 (Nature of Land Interests) including with limitation Schedule Part 5 (Land Matters) of the NPD Project Agreement. Further, in the event any activities on the Site involve oversailing any part of the Retained Site and/or the Retained Facilities then Project Co will require to develop an Oversail Strategy as detailed in Section 4 (Oversail) of Appendix A of the Board's Construction Requirements.

Where any construction and/or replacement, repair, renewal or maintenance activities are permitted at the Campus Site but off the Site then these activities are restricted to and must be carried out in accordance with the rights secured for such activities which rights are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement and such rights are subject to a number of conditions being met which conditions are further detailed in Appendix A (Interface with Campus Site and/or Campus Facilities) of the Board's Construction Requirements. Further restrictions on conditions and other information governing design, construction and replacement, repair, renewal and maintenance activities are detailed in the Board's Construction Requirements and Services Requirements.

Please also refer to the Interface Proposals which require to be developed by Bidders during the Dialogue Period.

2.7.2 Links with RIE

(a) Link Building

As set out in paragraph 2.3 (Stand Alone Requirements) the new Facilities shall be delivered as a standalone new build. However, the Facilities will be physically linked to the RIE Facilities at ground and first floor levels. The part of the RIE Facilities to which the Facilities will be linked is called the Link Building.

The Link Building is being constructed as part of the key enabling works described in paragraph 2.7.5 (Enabling Works). Its construction is not intended to be part of the Project and it is intended to be completed prior to the Works commencing on Site. The Link Building shall ensure improved clinical functionality and service delivery, particularly between the emergency departments, operating theatres and critical care departments in the RIE Facilities and the Facilities. Project Co will be responsible for designing and constructing the Facilities to physically link to the RIE Facilities at the Link Building interface point as set out in Appendix B (Interface Output Specification) of the Board's Construction Requirements.

(b) RIE Works within the Campus Site but outside the Site boundary and maintained by Project Co

There shall also be building services links between the new Facilities and the RIE Facilities in respect of building services and other connections in terms of: -

- infrastructure associated with ICT;
- a pneumatic tube system (PTS);
- fire alarm system; and
- foul drainage connections.

A new PTS will be designed and built which will run from the Facilities to the pharmacy and laboratories within the RIE Facilities. An ICT system will be designed and built which will run from the Facilities to link to the Board's ICT equipment/systems within the RIE Facilities. The Board will

advise Project Co of the route for the PTS and ICT within the RIE Facilities. The Board will procure that Project Co will be given access to the RIE Facilities for the installation of the PTS and ICT and Project Co will be responsible for replacing, repairing, renewing and maintaining the PTS and ICT which have been installed as part of the Works. The Board will procure access for constructing, replacing, repairing, renewing and maintaining, PTS and ICT within the RIE Facilities, such rights of access are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement but are subject to design, construction and other information being provided to and approved by the Board and Consort about the PTS and ICT systems as detailed in Section 7 (Link Building) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of Appendix A. For more information about these systems please also see sections Appendix A of the Board's Construction Requirements.

The fire system for the Facilities will have to be designed and constructed and replaced, repaired, renewed and maintained such that they will be connected to, communicate and operate with the fire system at RIE Facilities. It is envisaged that such connections and a control box will be proximate to or within the Link Building. The rights to make and replace, repair, renew and maintain such connections are subject to design, construction and other information being provided to and approved by the Board and Consort about the fire system for the Facilities as detailed in Section 7 (Link Building) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of such Appendix A. For more information about these systems please also see paragraph 4 of the Board's Construction Requirements.

(c) Service Strip / Foul Drainage

There may also be connections into some existing infrastructure for foul drainage. If Project Co requires to connect the foul drainage systems for the Facilities into the existing foul and surface water drainage systems for RIE Facilities then foul drainage systems must be designed and constructed by Project Co such that they may be connected to foul drainage systems only at the agreed connection points in the Initial Drainage Proposal or within the Foul Service Strip shown shaded yellow and hatched black on Plan 2A serving the RIE Facilities. The Board will procure that Project Co will be given access to specified places and connections points on the RIE Site. Project Co will be responsible for replacing, repairing, renewing and maintaining the foul drainage systems serving the Facilities and the connections. The Board will procure access for Project Co constructing, replacing, repairing, renewing and maintaining the foul drainage systems serving the Facilities and connections as are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement, but are subject to design, construction and other information being provided to and approved by the Board and Consort about the foul drainage systems serving the Facilities as detailed in Section 6 (Service Strip and foul Service Strip) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of such Appendix A. For more information about these systems please also see paragraphs 4, 6 and 8 of the Board's Construction Requirements and the Initial Drainage Proposal

A list of Interface Proposals from Bidders is required during Dialogue for those elements of the new Facility which may have to interface with the existing RIE Facilities and infrastructure serving RIE. These are detailed in Appendix A of the Board's Construction Requirements and summarised in Appendix C (iv) (Interface Proposals) of Volume 1 of the ITPD.

As regards design and construction of any electrical, gas and water connections there must all be independent services serving the Facilities and are not intended to connect into any such services serving RIE Facilities or the rest of the Campus Site and/or Campus Facilities. However wherever any such services have to be installed on the RIE Site, the locations for such services are restricted to certain areas, including the Service Strip which is shown shaded yellow and hatched black on Plan 2. Project Co will be responsible for design and construction and replacing, repairing, renewing and maintaining such services serving the Facilities. The Board will procure for Project Co access

for such rights of access for constructing replacing, repairing, renewing and maintaining such services as are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement but are subject to design, construction and other information being provided to and approved by the Board and Consort about the services as detailed in Section 6 (Service Strip and Foul Service Strip) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of such Appendix and for more information about these systems please also see paragraphs 4, 6 and 8 of the Board's Construction Requirements.

2.7.3 Other Works outside Campus Site

The Board has identified other works (the Off Site Works on the Bioquarter Site) which will be required to be carried out, by Project Co, outwith the Campus Site. This may include the provision of a dedicated Scottish Power Substation for the Project which may be located adjacent to Car Park F at the Campus Site in the area outlined in blue on Plan 4 although Project Co is invited to suggest alternative locations for any suitable power source outwith the Campus Site. If required, access to the Substation, if constructed adjacent to Car Park F detailed above, for construction and ongoing maintenance may be via the area shaded blue and hatched black on Plan 4. The cable route to the Facilities will be agreed with the Board and may enter the Site via the Service Strip (shown shaded yellow and hatched in black on Plan 2) and the cable route may not cross the RIE Site at any other point.

2.7.4 Retained Estate Handback Infrastructure

The Board has identified the following RIE Works which will be required to be carried out on the Campus Site but outwith the Site boundary. These works shall result in the Retained Estate Handback Infrastructure and shall be Works carried out by Project Co but upon completion will not be maintained by Project Co but by or on behalf of the Board by or on behalf of Consort. These Works include the design and construction of:

- (a) Hospital Square Infrastructure;
- (b) Cycle Path Infrastructure; and
- (c) Drainage Infrastructure.

The Retained Estate Handback Infrastructure is more fully described in paragraph 4 of the Board's Construction Requirements.

2.7.5 Enabling Works

(a) RIE Enabling Works

The Board has identified the following enabling works (the "**RIE Enabling Works**") which will be required to be carried out on the Campus Site to meet planning requirements for the Project. These key enabling works will be carried out by or on behalf of the Board by or on behalf of Consort. These works are not intended to form part of the Project and it is intended they are completed or substantially completed prior to any part of the Works commencing on Site. The key enabling works are described here for information purposes only.

- (i) Flood Protection Works: which means the enhancement of existing flood protection measures at the Campus Site;

- (ii) Road Infrastructure Works: which means changes to the road and transport infrastructure at the Campus Site , including but not limited to the creation of a public transport terminus to the east of RIE Facilities, new bus stances and revision of existing car parking;
- (iii) VIE Relocation Works: which means relocation of the existing VIE plant serving RIE Facilities to another location on the RIE Site. Separate VIE plant is required for the Facilities;
- (iv) Link Building Works: which means the building which is to be part of RIE Facilities to which the new Facilities will be connected at ground and first floor levels described in paragraph 2.7.1(a) above;
- (v) Service Diversion Works: which means the diversion of certain services such as electricity, water, gas, that serve RIE Facilities and are currently located on under or over the Site to positions outwith the Site to new positions within the RIE Site. However Project Co should note that not all redundant services are being removed and grubbing up of any diverted and redundant services will be the responsibility of Project Co as part of the Works. For the avoidance of doubt there shall be no diversion of the County sewer, the crèche's sewer and connection, the crèche's storm water sewer which it is believed run under the Site;
- (vi) Sewer Diversion Works: which means the diversion of trunk sewers currently located in the Site to positions outwith the Site to new positions within the RIE Site;
- (vii) Clinical Facilities: Reconfiguration/alteration of a number of clinical facilities within RIE Facilities; and
- (viii) Way Finding: which means the installation of new comprehensive way-finding measures across the Campus at Little France (new signage and directional indicators as necessary).

(b) Flood Works

Off-Site Flood Protection Works – It is proposed to construct flood defence walls (approximately 1000mm high) to both sides of the Niddrie Burn in the Nether Craigour area upstream of the Old Dalkeith Road bridge to provide improved flood protection to the Campus Site. These works will be procured under a separate contract and do not form part of the Project.

2.8 BREEAM

Bidder's designs must achieve, as minimum, a "Very Good" BREEAM rating in line with the requirements for healthcare facilities as set out in the BREEAM Scheme Document for New Construction (SD5073) 2011. The designs must also achieve a minimum of 6 credits ("Excellent" rating) in accordance with the BREEAM Scheme Document for New Construction (SD5073) Section 6.0 ENE1.

2.9 Sustainable Design and Quality

Bidders are required to promote sustainable development by demonstrating an integrated approach to the social, environmental and economic well-being of the area served, now and for future generations. The Facilities will reflect the objectives of any local agenda strategy supported by the CEC and also satisfy the requirements of all health and social care guidance notes, as set out in Board's Construction Requirements associated with sustainability and environmental performance.

2.10 Community Benefits

The Board recognises the importance of sustaining the community and delivering against social considerations. As well as providing significant training and employment opportunities for the full Project Term, the Project also has the potential to drive significant initiatives relating to regeneration, sustainability and social benefits, aligning with the Board's strategic objectives.

Community Benefits clauses set out within Clause 73 (Community Benefits) of the NPD Project Agreement support this agenda. Provisions relevant to training and appropriate measures regarding supply chain contracts and engagement with small and medium sized enterprises and supported businesses are recognised as examples of the elements that may be taken into account. Project Co will work in partnership with the Board and where appropriate, the Edinburgh Partnership and the agencies listed in paragraph 3.6 of Appendix I to deliver the Board's requirements in respect of both the Construction Phase and Operational Term of the Project.

Please refer to Appendix I and section B6 of Appendix A(ii) of Volume 1 of the ITPD which set out the Board's approach to social considerations/Community Benefits and how Bidder proposals in these areas will be taken into account.

2.11 Facilities Management - Services to be provided by Project Co

The interface of facilities management (FM) services provided across the Campus Site will be addressed through the Little France Campus Working Group.

Project Co will be required to provide the Services which shall be a proactive facilities management and lifecycle replacement service. The key elements of the Services shall include, but not be limited to:

- Contract management;
- Performance management and monitoring via a helpdesk facility;
- Programmed ,maintenance and unprogrammed maintenance work of the mechanical, electrical and building fabric components of the Facilities;
- Procurement and management of Utilities;
- Lifecycle replacement of the mechanical, electrical and building fabric components of the Facilities, including all floor coverings;
- Hard landscaping maintenance;
- External façade cleaning / window cleaning; and
- Periodic cleaning of vents, extractors and luminaires.

For the avoidance of doubt, Bidders should note that the following items are excluded from the Services and will be delivered by the Board (or third party providers):

- Portable Appliance Testing; and
- Redecoration of walls and ceilings.

The detailed requirements for above are set out in Volume 3 of the ITPD and will ultimately become Schedule Part 12 (Service Requirements) of the NPD Project Agreement.

2.12 Services to be provided by the Board

Delivery of all Clinical Services in the Facilities will be the responsibility of the Board.

It is anticipated that soft FM services will be provided by a combination of the Board and third party providers contracted with the Board. There will be a number of operational interfaces not only with the Board's team but also the FM staff working within the RIE Facilities and so Project Co shall be required to adopt a collaborative approach to interfaces so that hard and soft facilities services are provided by Project Co, the Board and the RIE FM team effectively and in adherence with Board policies. Key to the success of that relationship will be the quality of the team and clarity of the agreement between the parties.

To assist Bidders in developing their proposals and understanding the interfaces with the Board and third party providers, information on the Board's proposed delivery strategies has been provided within Schedule Part 6 (Board's Construction Requirements), section 3, Sub-section E (Specific Non-Clinical Requirements) of the NPD Project Agreement covering items such as but not limited to:

- Linen Services;
- Waste Management/ Disposal;
- Materials Management;
- Porter Services;
- Catering Services;
- Routine, Periodic and Specialist cleaning;
- Domestic Services; and
- Delivery basement.

In addition the Board will be responsible for the maintenance and lifecycle replacement of Equipment that the Board is responsible for as set out in paragraph 2.15 (Equipment) and the Board Services.

2.13 ICT

The Project includes the design, construction and maintenance of comprehensive and robust infrastructure (e.g. containment, cabling and node rooms) for the Facilities in accordance with the requirements of the Board's Construction Requirements.

The Board will install hardware (e.g. servers, PCs, printers, scanners), make the final connections (at the application and in computer rooms) and commission the operational system. Future management of the telephone system and IT helpdesk will not form part of Project Co's scope of the Services. Instead, the telephone system and switchboard will be managed by the Board. The IT helpdesk service will also be provided by the Board.

A responsibility matrix relating to the ICT installations is contained in the Board's Construction Requirements.

2.14 Retail opportunities

The provision of catering and retail services within the Facilities does not form part of the Project. Catering and retail services shall be provided by the Board and associated parties (such as voluntary and/ or charitable organisations). These will be part of the Board Services.

2.15 Equipment

2.15.1 Equipment documentation

The following documents are contained within Volume 3 of the ITPD, which outline the Board's requirements in relation to Equipment and associated responsibilities:

- (a) Equipment Schedule which shows all Equipment (Group 1, Group 2A, Group 2B and Group 3) which will be installed or anticipated to be installed in the Facilities presented on a room by room basis; and
- (b) Equipment Responsibility Matrix which shows for each different item of Equipment, the split of responsibilities between Project Co and the Board.

2.15.2 Groups of Equipment

Equipment included for the Project will include new equipment replacement, transfer and fit out of existing equipment, upgrade of existing equipment and new equipment included in developments.

(a) Group 1 Equipment

This is Equipment fixed to the building fabric (including fixed furniture e.g. cabinets, boards, blinds, brackets, shelves, TV brackets and illuminators) and/or attached to, or forming part of the building services (e.g. sanitary ware, sockets, outlets IT and medical, theatre lights, luminaries and pendants etc).

Project Co will generally be responsible for all Group 1 Equipment including specification, procurement, installation, maintenance and Lifecycle Replacement. However, the Board shall specify the details (both quantities and specification) for certain key items of Group 1 Equipment which are more clinical in nature (e.g. pendants in theatres and critical care).

The quantities specified for Group 1 Equipment in the Equipment Schedule are considered to be indicative by the Board. However, such quantities of Group 1 Equipment represent the minimum quantities acceptable to the Board. The exception to this are those items of Group 1 Equipment which the Board wish to specify – these are identified on the Equipment Schedule and will be considered to be mandatory.

(b) Group 2A Equipment

Project Co will only be responsible for the installation of Group 2A Equipment (and the installation of the replacement equipment at lifecycle intervals). The Board will be responsible for all other aspects of Group 2A Equipment (such as specification, procurement, maintenance and Lifecycle Replacement). Project Co will be responsible for designing Facilities which allow the Board to carry out their obligations in relation to Group 2A Equipment (including operation).

(c) Group 2B and Group 3 Equipment

The Board will be wholly responsible for all Group 2B and Group 3 Equipment including specification, procurement, installation, maintenance and Lifecycle Replacement. Project Co will not be responsible for any aspect of Group 2B or Group 3 Equipment however will be responsible for designing Facilities which allow the Board to carry out their obligations in relation to Group 2B and Group 3 Equipment (including operation).

Equipment included for the Project will include new Equipment replacement, transfer and fit out of existing equipment, upgrade of existing Equipment and new Equipment included in developments.

2.16 Surveys and Dialogue Period Ground Investigations

The ground investigation surveys which have been carried out to date are summarised in Volume 4 Data Room Contents. Warranties are not provided for these surveys.

The Board intends to procure a Site Survey which shall be made available to all Bidders. Bidders shall be invited to review and comment on a draft scope for the Site Survey. Bidders shall be required to submit their comments within the timescale set out in paragraph 1.7 (Programme) of Volume 1 of the ITPD. When the scope is agreed, the Board shall instruct the Site Survey, incorporating any agreed Bidder comments in accordance with paragraph 1.7 (Programme) of Volume 1 of the ITPD.

The Board shall not warrant this Site Survey. However, the Board shall procure that the party engaged to carry out the Site Survey provides a reliance letter to the Preferred Bidder in respect of the Site Survey.

2.17 Planning

An application for Planning Permission in Principle (PPiP) for the "erection of a Children's Hospital, including Department for Clinical Neurosciences (DCN) and ancillary facilities, helipad, associated enabling development including energy centre, Vacuum Insulated Evaporator (VIE), car parking, revised access and public transport arrangements, public realm works and landscaping, (car parking, access and public transport arrangements in detail)" at Edinburgh Royal Infirmary, 51 Little France Crescent, Edinburgh, EH16 4SA was submitted to the CEC on the 29th July 2011.

The application (Reference 11/02454/PPP) was approved by CEC on 5th April 2012, subject to a number of conditions, and the conclusion of a Section 75 legal agreement.

The application was supported by a suite of information including a Design and Access Statement, which included the principles of design, sustainability, scale and massing. The application was also accompanied by an Environmental Statement in accordance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011.

A subsequent stand alone permission (Reference 12/00479/FUL) was granted by CEC on 4 June 2012, for development of revised public access and revised public transport arrangements, associated car park remodelling, public realm works and landscaping. This followed the conclusion of a separate Section 75 legal agreement.

Various background papers relating to the application for PPiP and the application for Planning Permission, including Section 75 legal agreements are available within the Data Room.

In order to efficiently manage the pre-application consultation process for the approval of the detailed scheme, the Board and their representatives will agree a schedule of meetings with CEC Planning and Building Standards at which Bidders will be required to present their proposals and discuss planning and related issues. Any such meetings will be coordinated by the Board and their representatives and will be attended by the Board's representatives as appropriate. The details for these meetings will be agreed with each of the Bidders early in the dialogue process. No direct contact should be made with the CEC Planning and Building Standards, unless first agreed with the Board.

Other stakeholders, including Historic Scotland, Scottish Natural Heritage and Architecture and Design Scotland, will also be invited to be involved in this pre-planning process, to assist the Board in reviewing and assessing the Submissions.

The Preferred Bidder, once appointed, will be responsible for obtaining approval of the detailed scheme, in compliance with the conditions of the PPiP. This will require approval of matters specified in conditions. This will be required prior to Financial Close. The Board expects Bidders to

have satisfied themselves before submitting their Solutions that their proposals will secure detailed planning consent.

2.18 Artwork

The integration of art into the architecture and landscape to enhance the hospital environment is an essential requirement of the design. The Board welcomes innovative proposals for interactive art and wayfinding throughout the Facilities. Project Co will appoint artists to work with the Board on developing an arts strategy for the Project. Project Co shall carefully consider the arts strategy for the Board, including artworks and artefacts from the existing buildings that have been identified for transfer, and outputs from the 2010-2014 charitably funded Artists in Residence Programme within the RHSC and CAMHS.

The Board will be responsible for approving the whole art content in the Project and Project Co shall engage the Board fully in this process before any art work is commissioned.

2.19 Family Hotel

The Family Hotel is to provide “home away from home” accommodation for the families of children receiving in patient care in hospital. This accommodation is free of charge to families at the point of delivery, and aims to provide a supportive environment, and enable the whole family to be able to spend time together and close to their sick child.

It will provide overnight accommodation for families as well as facilities for parents whose children are resident on the wards, as outlined in the Specific Clinical Requirements section K2 (Family Hotel).

2.20 Achieving Excellence Design Evaluation Toolkit (AEDET)

An initial AEDET assessment has been carried out on the Reference Design which can be found in the Data Room. During Dialogue it is the intention of the Board to carry out further AEDET assessments using the information provided by the Bidders. The AEDET assessment will be undertaken by the Board with the key project stakeholders. The AEDET reviews will not be evaluated but the outcome of the process will be passed back to the Bidders during the Dialogue prior to Dialogue Meeting five, purely as an informative tool to assist Bidders develop their proposals. Bidders are, however, reminded that their proposals shall ultimately be evaluated by the Board in accordance with paragraph 5 (Tender Evaluation and Contract Award Criteria) of Volume 1 of the ITPD.

3 COMMERCIAL OVERVIEW

3.1 Introduction

This section provides an overview of the commercial aspects of the Project.

3.2 NPD Structure

The Project will be delivered using the Scottish Government's NPD Model. The NPD Model was developed and introduced as an alternative to, and has since superseded, the traditional private finance initiative or "PFI" model in Scotland. It has been used in the education (schools) and health sectors. The NPD Model has been fine-tuned since it was first introduced and this section summarises the basic principles that will underpin the NPD Model as it will apply to the Project.

The NPD Model is defined by three core principles:

- Enhanced stakeholder involvement in the management of projects;
- No dividend bearing equity; and
- Capped private sector returns.

Projects funded using NPD Model principles will pay a fixed return to the holders of the junior or risk-bearing debt of the Project Co. All other distributions to equity (i.e. the holders of the shares and junior debt of the Project Co) will be prohibited. Surpluses arising after satisfying all precedent lines in the cash cascade, subject to any agreed buffer, will be payable to the Board as a rebate against unitary charge service payments. In this way, returns to investors are capped at the level bid during the procurement process.

Although contractors and funders are expected to earn a normal market rate of return as in any other form of privately-finance PPP deal, the NPD Model seeks to eliminate uncapped equity returns associated with the traditional PFI model and limit these returns to a reasonable rate set in competition.

3.2.1 Key features of the NPD Model:

These key features include:

- (a) **Corporate structure:** The Board will contract with a special purpose vehicle (referred to in the NPD Project Agreement as "**Project Co**") which will be majority owned and controlled by the private sector investors. The Board will own a "golden share" in the Project Co which gives it certain controls over the corporate, governance and management structures within the Project Co. Project Co's articles of association must incorporate the mandatory NPD articles, produced by the SFT, that enshrine the fundamental principles of the NPD Model;
- (b) **Public Interest Director:** One of the Project Co's directors will be nominated by the SFT and will bring an independent voice to Project Co's board and shall ensure a greater degree of transparency and accountability to stakeholders (the "**Public Interest Director**");
- (c) **Refinancing:** Under the NPD Model the Public Interest Director has the right to instigate a refinancing on the same basis as the Board may instigate a refinancing under SoPC4 guidance;

- (d) **Capped Returns:** This shall ensure that a “normal” level of investment return is made by the private sector and that these returns are transparent;
- (e) **Surpluses:** Surpluses generated by Project Co shall be reinvested in the public sector; and
- (f) **Transparency:** The public interest shall be represented in the governance of the NPD structure, which increases transparency and accountability and facilitates a more pro-active and stable partnership between public and private sector parties.

SFT has provided a suite of contractual documents, comprising a NPD Project Agreement and articles that will be adopted for use in this Project, appropriately amended for project and NHS-specific issues. These are included at Volume 2 of the ITPD.

Further information on the NPD Model is available from the SFT website: www.scottishfuturestrust.org.uk.

3.2.2 Benefits of NPD Model

The NPD Model retains the benefits of traditional PFI structures, such as:

- (a) optimum risk allocation;
- (b) whole-life costing;
- (c) maximised design efficiencies;
- (d) robust programming of lifecycle maintenance and facilities management;
- (e) performance-based payments to the private sector;
- (f) single point delivery system, reducing interface risk for the public sector client; and
- (g) improved service provision.

Also produces additional benefits, as set out in paragraph 3.2.1 above.

3.3 Overview of NPD Project Agreement

The NPD Project Agreement reflects the SFT's Standard Form NPD Project Agreement, with additional project specific amendments which have been agreed by SFT. In terms of these project specific amendments, please refer to paragraph 3.6 (Project Specific Changes) below. The NPD Project Agreement and its schedules shall regulate the relationship between the Board and Project Co.

The Board expects Bidders to accept the positions within the NPD Project Agreement which reflect the SFT's Standard Form Project Agreement. However, the Board acknowledges that the project specific amendments to the NPD Project Agreement may be amendments worthy of discussion between the Board and Bidders. Bidders are requested to raise all comments (including all Sub-contractor comments and/or anticipated Senior Funder comments) in relation to the NPD Project Agreement prior to Dialogue Meeting 3 and, if accepted by the Board and SFT (pursuant to the derogations process), such comments may form part of the relevant Submissions.

The SFT's Standard Form NPD Project Agreement is derived from other standard documentation in use in PFI projects; in particular SoPC4 and the Scottish Standard Health PPP Contract, therefore its principles will be familiar to those actively involved in the PPP market.

3.4 General Approach in relation to NPD Project Agreement

The Preferred Bidder will be expected to enter into the NPD Project Agreement with the Board in the form of the draft NPD Project Agreement set out in Volume 2 of the ITPD with the exception of any agreed derogations sanctioned by the Board and SFT.

In terms of the Dialogue, all matters relating to the NPD Project Agreement should be raised by Bidders, their Sub-contractors and/or their potential Funders during the Dialogue Period. Depending on the approach to funding adopted for Final Tender, as set out in paragraph 3.8.6 (Due Diligence) an appropriate level of due diligence on behalf of Funders should be carried out during the Dialogue Period. Only matters in relation to fine tuning and clarification of the NPD Project Agreement shall be addressed once the Dialogue Period has closed. Other than fine tuning and clarification issues, any issues which are not raised during the Dialogue Period will not be considered by the Board after the Dialogue Period has closed.

The Board will also require the Direct Agreements to be substantially in the form set out in the draft NPD Project Agreement

To the extent that Bidders, their potential Funders, diligence teams and/or Sub-contractors have concerns about the terms of the draft NPD Project Agreement or any of the other key project documents including the Ancillary Agreements, these must be raised with the Board prior to the start of Dialogue Meeting 3.

3.5 Derogation Procedure

The Board has agreed with SFT the required project/sector specific changes to the SFT's Standard Form NPD Project Agreement prior to issue of the ITPD. Thereafter, any further changes proposed to the NPD Project Agreement by Bidders during the Dialogue Period will, if acceptable to the Board, require SFT's approval through a derogation procedure to be managed by the Board. The Board and SFT's expectation is that any such derogations will be minimal. The Board will engage with the SFT on project/sector specific changes throughout the Dialogue Period, and will aim to provide feedback to Bidders on proposed amendments as soon as possible. A final decision on all Bidders amendments to the NPD Project Agreement shall be reached between the Board and SFT, and communicated to the relevant Bidders, prior to close of the Dialogue Period.

3.6 Project Specific Changes to NPD Project Agreement

3.6.1 A number of project/sector specific amendments have been agreed with SFT and are set out in the NPD Project Agreement.

The key project specific amendments include:

- a) **Lifecycle** Additional lifecycle drafting has been added at Clause 23A (Lifecycle Replacement) of the NPD Project Agreement to provide the Board with greater visibility in terms of lifecycle replacement.
- b) **TUPE** The Board does not envisage that the Transfer of Undertaking (Protection of Employment) Regulations 2006 (TUPE) will apply to the Project or to any current Board staff. SFT's alternative drafting set out in Form 2 of Appendix 2 of the User Guide has therefore been added at Clause 25 (No Employee Transfer) of the NPD Project Agreement. In addition, Clause 26 (Pensions) of the NPD

Project Agreement has been deleted.

- c) **Board's right to stop Project Operations** In terms of Clause 13A, a new clause has been added permitting the Board to instruct Project Co to stop performing the Project Operations in the event of a (i) Stop Incident; (ii) potential impact upon Clinical Services, and/or (iii) the occurrence of a Major Incident. In terms of (ii) and (iii) a Compensation Event shall be available to Project Co if the Board instructs stopping the Project Operations on one of these grounds. In terms of (i), the consequences of this Board instruction shall be treated in a similar way to Clause 13 in relation to opening up of the Works.
- d) **Indemnities** Additional limbs of the indemnity have been added in relation to breach of the Interface Proposals and/or breach of Appendix A of the Board's Construction Requirements and a breach of certain Reserved Rights. These are project specific requirements of the Board and primarily relate to Site issues which may have a wider impact upon the operation of the Campus Site.
- e) **Insurance** The Board has undertaken a review of the insurable and uninsurable risks that may emanate from the Project. The insurance provisions and minimum requirements have been set out in Clause 53 (Insurance) and Schedule Part 15 (Insurance Requirements) of the NPD Project. In addition, waiver of subrogation option has been added at Clause 53.6 (Subrogation and Vitiating) of the NPD Project Agreement. Bidders shall be required to price this option as part of its Draft Final Tender and Final Tender as indicated in Financial Proformas 1a and 4.
- f) **Community Benefits** SFT's drafting set out in Form 5 (Community Benefits) of the User Guide has been added at Clause 73 (Community Benefits) of the NPD Project Agreement (see 2.10, Appendix I and section B6 of Appendix A(ii) for further detail on how the Board is taking social considerations/Community Benefits into account in this procurement.
- g) **Interface** (i) *Interface*: Appendix A of the Board's Construction Requirements sets out the specific interface issues between the Facilities and the Retained Estate. Appendix A of the Board's Construction Requirements also requires Bidders to prepare certain Interface Proposals to address these specific interface issues.

(ii) *Interface Proposals*: The Interface Proposals shall include Bidder's proposals relating to construction access, operational access, oversail strategy, access areas strategy, drainage and substation proposals, service strip and foul service strip proposals and connection to the Link Building proposals. These Interface Proposals shall form part of Bidders Submissions and shall also form part of both the Draft Final Tender and Final Tender. The requirements for the Interface Proposals are more fully described in Appendix A of the Board's Construction Requirements, but shall be subject to conditions set out in Schedule Part 5 (Land Matters) of the NPD Project Agreement. However, for ease of reference, a list of Interface Proposals has been set out in Appendix C (iv) (Interface Proposals) of Volume 1 of the ITPD.

(iii) *Little France Campus Working Group*: The Board has established a Little France Campus Working Group in which Project Co will be required participate in. The purpose of this group is to support all parties on the Campus Site in order that they can work in partnership to deliver their responsibilities under Health and Safety legislation and the Construction (Design and Management) Regulations 2007 to ensure the safety of patients, staff and visitors and the operation of services on the Campus Site.

- h) **Payment Mechanism** The NPD Project Agreement schedule has been amended to reflect the acute healthcare nature of the accommodation and incorporates the use of sessions as opposed to days as an element of the deduction formula for unavailability, in addition to the application of a gearing mechanism to the derivation of Service Unit values.

3.7 Articles of Association

Project Co will be a private company limited by shares with the Articles of Association contained in Volume 2 of the ITPD which sets out the mandatory NPD provisions including membership of Project Co, the rights of the members, voting rights and controls on how revenue is to be used.

3.8 Financial Aspects of the Project

In this Section, the ITPD sets out the following:

- (a) key financial aspects of the Project that the Board considers to be of fundamental importance;
- (b) financial assumptions to be made by bidders;
- (c) submission requirements at each stage; and
- (d) the process by which financial evaluation of Final Tenders will take place.

3.8.1 Affordability

The Board has developed a shadow bid Financial Model that produces an Annual Service Payment as derived from technical cost inputs that reflect the Reference Design and a set of assumptions

that reflects current economic factors and funding market conditions. This model has been used to ensure that the Project is affordable to the Board.

The Board will be responsible for meeting the proportion of the Annual Service Payment related to Hard Facilities Management (Hard FM) services and 50% of the lifecycle maintenance expenditure. The Scottish Government will meet the remaining proportion of the Annual Service Payment via revenue support.

Bidders should note that Scottish Government revenue support for a proportion of the Annual Service Payment is capped in relation to the construction cost of the Project. The construction cost cap will include all construction related costs, including design fees. It has been set at an uninflated amount of £137,757,000 (based on a 3Q 2011 base date) plus an inflation allowance calculated by reference to the BCIS All-in Tender Price Index from the base date of 3Q 2011 to the index forecast at the assumed construction mid-point of 4Q 2015. The indices at 18 February 2013 are 3Q2011 (final) 220 and 4Q 2015 (forecast) 237 giving a current inflation allowance of £10,645,000 and a total current construction cap of £148,402,000. All figures are net of VAT.

The construction cap supported by the Scottish Government will be adjusted during the Dialogue Period to reflect changes in BCIS All-in Tender Price Index for the forecast of the index at 4Q 2015 and bidders are expected to monitor movements in the index for the purposes of formulating their proposals. The Board will advise bidders in the ISFT of the level of Scottish Government's cap as at that date based on the most recently published BCIS Index forecast and it will be fixed at that date. In the shadow bid Financial Model, the Board has assumed Hard FM and Life Cycle Costs of £29 per m² and £27 per m² respectively, at current prices.

The Board will be responsible for meeting other costs such as soft facilities management services, utility costs and rates.

The Board reserves the right to set aside any Bid that exceeds the construction cap, except where the Board has specifically agreed that a higher construction cost is acceptable.

3.8.2 Value for Money

It is essential that the Board can demonstrate that the Project remains value for money throughout the procurement process. Provision of revenue support by the Scottish Government will be dependent upon the Board being able to demonstrate to the SFT and Scottish Government that Bidder proposals are based on costs that are competitive and represent value for money.

The Board is also required to submit a Full Business Case to the Scottish Government prior to Financial Close. This needs to clearly demonstrate that the Project will deliver value for money and will be affordable to the Board over the duration of the contract. The Full Business Case requires to be approved by the Scottish Government to allow the Project to proceed.

3.8.3 Funding Approach

Due to the current volatility of the funding market, the Board has devised an approach to the funding elements of Bidders' solutions that provides for the flexibility required to allow Bidders to respond to developments in the market as Dialogue progresses. This approach is set out below.

Submissions Prior to Final Tender

It is the Board's intention to devise and issue a standard term sheet containing funding terms relevant in the current funding market that Bidders should use in developing the financial elements of the Draft Final Tender and any relevant financial submissions required during the Dialogue

Period. This standard term sheet will be issued no later than three weeks before any relevant submission date.

Final Tender Stage

At the Final Tender stage the Board reserves the right to request either:

- a) A **Fully Funded Solution** that covers the full duration of the NPD Project Agreement. In this option, it would be the Bidder's responsibility to identify and propose a form of funding for the Project that is both deliverable and offers the best possible Value for Money to the Board. Should Bidders consider that this is not achievable this must be discussed during Dialogue. In preparing Final Tenders on this basis, Bidders should clearly demonstrate to the Board that a competitive process has been undertaken in order to identify the preferred funder and/or chosen funding route, and that funder due diligence has been completed. The pricing developed will be evaluated to determine whether a funding competition will be required at Preferred Bidder stage; or
- b) A solution based on a **Standard Term Sheet** to be issued by the Board should this prove to be preferable based on prevailing market conditions at that time. Should this option be pursued Bidders would be required in any case to have engaged diligence teams on behalf of potential funders, whose reports would be included within the Final Tender submissions. Once a Preferred Bidder is appointed a funding competition would be carried out to identify the preferred funding solution.

The Board will inform Bidders of the preferred option at the earliest possible opportunity during Dialogue.

Bidders should note that as a condition of Scottish Government support for the project the Board reserves the right to instruct a funding competition at any point during the procurement.

Bidders are also reminded that the Scottish Government reserves the right to consider alternative funding, financing and / or contractual arrangements to support the delivery of the project. The Board will provide updates to Bidders during dialogue should any such alternatives emerge.

3.8.4 Funder Commitment and Exclusivity

Bidders are required to demonstrate the strongest possible evidence of funder support for the proposals contained in the Final Tender. The Final Tender should include the provision of term sheets and letters of support as necessary and as specified in Appendix B. A clear statement on the level of internal approval that the project has received from the respective lending organisations should be made. In addition the details of any further approvals that would be required prior to Financial Close should be fully disclosed.

The Board requires that Bidders do not appoint funders on an exclusive basis during the Dialogue Period. During the Dialogue Period, Bidders will be required to confirm that no exclusivity arrangements have been signed with their potential funders. Failure to adhere to this requirement may result in the down-selection of that Bidder. Advice as to exclusivity in the Final Tender period will be provided during the Dialogue Period.

3.8.5 European Investment Bank Involvement

Bidders should note that initial discussions have taken place with the European Investment Bank (EIB) regarding their potential involvement in the Project. The potential involvement of EIB will be discussed with Bidders during the Dialogue Period.

3.8.6 Due Diligence

By Final Tender, Bidders are required to demonstrate that a detailed due diligence over their submission has been carried out on behalf of Funders or potential Funders. At that stage the Board will require assurances that the Funders have been involved in the due diligence process and fully support the submission.

Bidders are encouraged to progress their due diligence at the earliest opportunity.

3.8.7 Surpluses

In developing the Project the Board has assumed no prescribed levels of Surpluses are required to be paid during the concession period. Bidders should assume that any and all Surpluses that are generated will be paid to the Board as a rebate against the Annual Service Payment.

Any Surpluses produced by a Bidder's Financial Model will be included in the evaluation of price by applying 7% nominal discount rate in calculating the NPV of such Surpluses. Bidders should note that this discount rate is higher than that which will be used to evaluate the Annual Service Payment (6.09%). This approach reflects the Board's preference for a lower and certain Annual Service Payment as opposed to an equivalent and less certain Surplus.

Any Surpluses forecast in Bidders' Financial Models should reflect the level of cash buffer that has been bid (see below) and the full impact of the funding terms being used for Final Tenders, as these will affect the likelihood and timing of Surplus Payments actually being made to the Board.

Evaluation strategies should allow for risk adjustment of forecast Surpluses where appropriate.

3.8.8 Cash Buffer

Bidders may retain a cash buffer (over and above Funders' reserves and covenants) in their Financial Models in order to deal with unexpected events that arise during the Project. Surpluses are required to be paid out only to the extent that these exceed the cash buffer. The cash buffer should be set at a level that is no higher than two months' worth of the indexing element of the monthly Annual Service Payment. The cash buffer itself should index. Bidders are free to propose a lower level of cash buffer, as this will allow an earlier release of surpluses which will be evaluated more favourably through the NPV calculation described above.

Bidders' Financial Submissions should clearly identify Surpluses available for distribution to the Board. Such Surpluses should be defined as:

- (a) any Surpluses bid and included in the Financial Model over the operational period, including the period post repayment of debt;
- (b) positive cash balances forecast in the Financial Model at the Expiry Date;
- (c) any Debt Service Reserve Account (DSRA) or Maintenance Reserve Account (MRA) balance released on repayment of debt (if not used to retire debt).

Payments of Surpluses to the Board should be assumed to take place on the last day of the relevant accounting period applicable.

3.8.9 Interest Rate Risk

The Scottish Government will take the risk of changes in the reference interest rate (e.g., the underlying London Interbank Borrowing Rate (LIBOR) rate) up to Financial Close subject to approval and conditions of the FBC.

3.8.10 Foreign Exchange Risk

The Board will not accept any foreign exchange risk. Such risks should be absorbed entirely by Bidders.

3.8.11 Third party income

The Board does not anticipate that any third party income will be available within the Project and none should be assumed within Financial Submissions.

3.8.12 Capital and charitable contributions

The Board does not intend to inject any capital contributions into the project at this time. However, The Board wishes to reserve the right to make such an injection should this prove practical and desirable at a later point in the Dialogue Period.

It is likely, however, that charities associated with the Board will wish to make a charitable contribution to the Project. This may take a number of forms:

- (a) A contribution in the form a lump sum payment to cover the cost of construction of specific areas within the building that the charity wishes to support, such as the Family Hotel. For the avoidance of doubt, such areas are already included within the Service Level Specification and Reference Design and will form part of the new Facilities and Services whether or not a charitable contribution is made.
- (b) A donation that will allow the specification of certain areas in the new Facilities to be enhanced over and above the level of Board's requirements currently contained within Volume 3 of the ITPD. Should such a donation be forthcoming, the Board would seek to amend the Board's requirements as required.
- (c) A donation that funds the purchase of specific assets such as equipment or artwork.

At present, the size and nature of such contributions is not known. Where the value and timings of such contributions has an impact upon the level of borrowing that Bidders will require at Financial Close, the Board is to provide a firm commitment of the injection of these contributions to all Bidders prior to close of Dialogue so that Final Tenders and Financial Models can be prepared on the correct basis.

3.8.13 Indexation

The Annual Service Payment will be indexed on an annual basis. The Payment Mechanism contains the formula for applying the inflation adjustment. Bidders should note that the affordability assessment assumes that approximately 20% of Annual Service Payment payments are subject to indexation in line with the cost inputs used in the shadow bid Financial Model.

The Board does not expect that a Bidder's funding solution will require the use of RPI hedging instruments. Any relevant financial submissions should clearly demonstrate the proportion of costs that are fixed and the proportion subject to inflation. Bidders should set a rate of Annual Service Payment indexation that creates a natural hedge position given their cost structure. Bidders are required to develop their proposals on the basis of the use this natural hedge and to provide inflation sensitivities that demonstrate this as set out in the Financial Proformas contained in Annex 1 to Appendix B.

3.8.14 Validity of Submission

Bidders are required to price their Submissions anticipating a Financial Close of 7 August 2014. Bidders are required to maintain underlying construction, operating, FM and Project Co's costs for a period of three months from the target Financial Close date with no adjustment for inflation, meaning that should Financial Close be reached prior to 7 May 2015, the bid price will not be adjusted for the effects of inflation.

Bidders are also obliged to use all reasonable endeavours to mitigate the impact of any cost increases post validity period.

Bidders must specify which cost index or indices they require costs to be inflated in the post validity period.

3.8.15 Pass Through Costs

The Board will retain price risk associated with the defined pass through costs, those being insurance, rates and utility costs, as set out in the NPD Project Agreement. However, Bidders should note that the Board will review such costs in each Bidder's solution and allow for these in the Equalisation Adjustment (see below) as part of the Price Evaluation process. Financial Pro-forma 1a should be used to set out the pass-through costs proposed by the Bidder.

3.8.16 Accounting and Tax Treatments

Bidders are required to satisfy themselves generally as to their own tax position under existing tax legislation, including any issues surrounding IFRS, the application of any capital allowances and revenue relief against corporation tax and the treatment of Surplus payments. All assumptions in respect of tax and accounting should be set out clearly in the Financial Model.

Bidders will be required to demonstrate within their Submissions that the most beneficial treatments have been adopted and that the Board has received the full benefit thereof by way of reduced Annual Service Payment. It is anticipated that a composite trade tax treatment will produce the lowest Annual Service Payment and, based upon this assumption, the NPD Project Agreement will be drafted accordingly. If Bidders can demonstrate a more beneficial tax and accounting treatment they should advise what changes would be required to the NPD Project Agreement to accommodate the alternative approach.

3.9 Financial Model

3.9.1 Key assumptions

Bidders are requested to note the following assumptions within their Financial Models, in addition to those noted in Section 3.8 above:

- (a) For the purposes of their Submission, Bidders will be provided with a LIBOR swap rate assumption no later than three weeks before the submission date of any relevant

Submissions. Should a Bidder elect to provide a capital market solution, the Board will provide an appropriate reference rate on the same timescale.

- (b) RPI should be assumed as 2.5%.
- (c) The Financial Model should be prepared in accordance with UK GAAP or IFRS.
- (d) The date of Financial Close should be assumed to be 7 August 2014.
- (e) The Financial Model should cover an operational period of twenty-five (25) years plus the construction period, with each year end assumed to be 31 March.
- (f) The discount rate to be used in calculating all NPV figures should be 3.5% real and 6.0875% nominal.
- (g) All costs in the Financial Model should assume a price base date as at Financial Close with a first indexation point of the 1 April subsequent to Financial Close.
- (h) The Bidders NPV calculation should discount cash flows back to the base date as at Financial Close.
- (i) Annual Service Payment payments should assume 100% performance.
- (j) Cash flows should be assumed to occur at the midpoint of each semi-annual period.
- (k) Surpluses are as defined in Section 3.8.6 and should be treated as indicated.
- (l) Public Interest Director fees are to be included in the financial submission of £15,000 per annum, subject to indexation.
- (m) Construction insurance costs are to be included within the Financial Model.
- (n) Pass-through costs (operational insurance costs, utilities costs and rates) are to be excluded from the Financial Model but should be shown separately within the Bidder's Financial Submission in Financial Proforma 1a. In the case of energy costs, Bidders should use the input unit price assumptions provided in the Proforma to generate the pass through cost, based on the projected energy usage inherent in the Bidder's proposals. All such pass-through costs will be evaluated as part of the Equalisation Adjustment.
- (o) All assets will revert to the Board on expiry for nil consideration.
- (p) No third party income should be included in the Financial Model.
- (q) No capital contributions should be assumed unless otherwise informed.

3.9.2 Financial model format

Bidders must submit financial projections for each year of the NPD Project Agreement in the form of a computer Financial Model, which will become the Financial Model as defined in the Draft NPD Project Agreement.

The Financial Model must adhere to the following requirements:

- (a) The Financial Model must be prepared using Microsoft Excel (2003 or later);

- (b) The Financial Model should be free of error, including circular references or hard-coded values in non-input areas;
- (c) The Financial Model should be transparent, with the logic of all calculations capable of being followed through the model, with no hidden macros or password protected areas;
- (d) Financial projections should be presented on a monthly basis during the construction period and on a semi annual basis during operations (for each period ending 30 September and 31 March);
- (e) All values should be expressed in £ sterling and to £'000's;
- (f) The Financial Model should identify input capital expenditure and operating costs which should be referenced to costs in the Technical Cost Proformas as required under Annex 1 to Appendix A and Financial Proformas as required under Annex 1 to Appendix B;
- (g) The Financial Model should incorporate all of the Financial Proformas provided at Annex 1 to Appendix B, linked to worksheets in the Bidder's Financial Model so that the Proforma contents update automatically and can be reconciled to worksheets in which model calculations are performed;
- (h) The Financial Model should be capable running sensitivities in all the key areas of risk that funders are likely to focus on. As a minimum this should include the following:
 - (i) Delay to Financial Close;
 - (ii) Capital cost increases;
 - (iii) Construction programme delays;
 - (iv) Operational cost increases;
 - (v) Lifecycle cost increases;
 - (vi) Insurance cost increases;
 - (vii) Interest rate changes;
 - (viii) Inflation rate changes;
 - (ix) Corporation tax and VAT rate changes; and
 - (x) Deductions relating to the Payment Mechanism.

It is assumed that the Financial Model will be independently verified by the Bidder/Senior Funder as part of the process leading to Financial Close. Bidders are required to accept the risk that the model audit may prove the Annual Service Payment to be incorrect, and that they may not pass any additional costs on to the Board.

The Board will require sight of the Financial Model auditor's opinion letter that Bidder will obtain prior to Financial Close. For the avoidance of doubt the Board does not require a duty of care from the model auditors.

Bidders must submit three (3) CD copies of the Financial Model. The disks must be free of viruses. The Financial Model must include a print option macro.

During the Dialogue and evaluation phase, the Board may request Bidders to run key sensitivities and provide the results to the Board for analysis. Bidders' Financial Models must have the necessary functionality in order to undertake these sensitivities.

3.9.3 Model Databook

The Bidder is required to provide a databook and user guide supporting the Financial Model for any relevant Submission. The databook should include the following details as a minimum:

- Summary of the content of the Financial Model, on a sheet by sheet basis;
- A table of location of inputs to the Financial Model with the cell/sheet reference and source;
- Copies of source documents (e.g. construction cashflow);
- An explanation of the methodology used to generate the financial projections;
- A definition of how the financial ratios are calculated, (which must be consistent with the Funders' term sheets), and that the underlying values are confirmed as acceptable to funders in their support letter;
- Details of the mechanisms contained in the Financial Model and an explanation of how key tasks in the Financial Model are carried out;
- A statement of the accounting policies applied to the Financial Model and their compliance with the relevant accounting standards; and
- A detailed statement of the assumptions used in relation to tax.

3.10 Insurance

3.10.1 The Board has undertaken a review of the insurable and uninsurable risks that may emanate from the Project. Insurance provisions and minimum requirements have been set out in the NPD Project Agreement (at Clause 53 (Insurance), Schedule Part 15 (Insurance Requirements)) and Schedule Part 25 (Insurance Proceeds Account Agreement) in accordance with NHS Board requirements relative to NPD Projects in Scotland.

3.10.2 Insurances required under the Project will be reviewed and may be revised by the Board in line with Board strategy towards treatment of insurable risks in the Project, Project technical solutions and commercial considerations.

3.10.3 A waiver of subrogation option has been added at Clause 53.6 (Subrogation and Vitiation) of the NPD Project Agreement. Bidders are asked to identify separately the costs associated with this waiver in Part C (Waiver of subrogation for Consort and Consort Parties) of Appendix G (Insurance Response Matrix) of Volume 1 of the ITPD.

3.10.4 It is envisaged that the insurance provisions will be fully agreed and the insurance costs breakdown fixed prior to the close of Dialogue.

Insurance Response Requirements

3.10.5 For the purposes of demonstrating compliance with the Board's requirements, and to assist in evaluation, Bidders are required to provide completed versions of the insurance matrices set out in Part 1 (Insurance Cost Matrix) and Part 2 (Insurance Technical Matrix) of Appendix G (Insurance Response Matrix) of Volume 1 of the ITPD, clearly identifying where:

- (i) there will be full compliance with the Board's insurance requirements; and

- (ii) the Bidder proposes alternative solutions to satisfy the Board's requirements and the rationale for these.

3.10.6 Bidders should ensure transparency in both the Financial Model and ITPD Submission. Bidders are required to provide detailed Required Insurances premium calculations and full details of associated Project insurance related costs in accordance with the format set out in Part 1 (Insurance Cost Matrix) of Appendix G (Insurance Response Matrix) of Volume 1 of the ITPD. Bidders are required to complete the Part 2 (Insurance Technical Matrix) of Appendix G (Insurance Response Matrix) of Volume 1 of the ITPD in a manner which is consistent with their mark-up of the NPD Project Agreement.

4 COMPETITIVE DIALOGUE PROCESS

4.1 Introduction

- 4.1.1 The Board has elected to use Dialogue to award the Project in accordance with Regulation 18 of the Regulations. Therefore, Dialogue commences upon the issue of the ITPD.
- 4.1.2 It is envisaged that the Dialogue process will comprise a series of meetings leading to submission of the Final Tender, as more fully described in this section. The Board intends to continue the Dialogue until it is satisfied that Solutions from one or more Bidders are capable of meeting the Board's requirements.
- 4.1.3 During Dialogue, the Board will:
- a) discuss aspects of the NPD Project Agreement, the other key project documents including the Ancillary Agreements and the proposed risk allocation with the Bidders;
 - b) ensure equality of treatment among the Bidders and in particular, will not provide information in a discriminatory manner which may give any Bidder an advantage over another; and
 - c) not reveal to the other Bidders, Solutions proposed or any confidential information communicated by a Bidder without that Bidder's agreement.
- 4.1.4 Bidders are required to provide the following Submissions during the Dialogue Period:
- a) Informal Submissions; and
 - b) Draft Final Tender.

At the close of Dialogue, Bidders will be invited to submit their Final Tender.

- 4.1.5 Each Bidder is required to develop only one Solution and provide Submissions in accordance with the requirements of this paragraph 4 (Competitive Dialogue Process).

4.2 Timetable of Dialogue Meetings

- 4.2.1 A series of monthly meetings have been scheduled to take place with each Bidder on the dates indicated in the table below. The Board may vary the timetable or terminate or alter the Dialogue process in any way at its sole discretion.

Activity	Week	Bidder A	Bidder B	Bidder C
Dialogue Opens				
Issue ITPD	0	12/03/13		
Briefing Meeting \ Q and A Sessions	1	Tue 19/03/13	Wed 20/03/13	Thu 21/03/13
Informal Submission 1	2	Mon 25/03/13	Tue 26/03/13	Wed 27/03/13
Dialogue Meeting 1	3	Tue 02/04/13	Wed 03/04/13	Thu 04/04/13
Informal Submission 2	6	Mon 22/04/13	Tue 23/04/13	Wed 24/04/13
Dialogue Meeting 2	7	Tue 30/04/13	Wed 01/05/13	Thu 02/05/13
Informal Submission 3	10	Mon 20/05/13	Tue 21/05/13	Wed 22/05/13
Dialogue Meeting 3	11	Tue 28/05/13	Wed 29/05/13	Thu 30/05/13
Informal Submission 4	14	Mon 17/06/13	Tue 18/06/13	Wed 19/06/13
Dialogue Meeting 4	15	Tue 25/06/13	Wed 26/06/13	Thu 27/06/13
Informal Submission	18	Mon 15/07/13	Tue 16/07/13	Wed 17/07/13
Dialogue Meeting 5	19	Tue 23/07/13	Wed 24/07/13	Thu 25/07/13
Draft Final Tender Submission	24	26/08/13		
Dialogue Meeting 6	28	Tue 24/09/13	Wed 25/09/13	Thu 26/09/13
Dialogue Closes				
Invitation to Submit for Final Tenders	30	11/10/13		
Submission of Final Tenders	35	11/11/13		

4.2.2 Each monthly Dialogue Meeting (Dialogue Meetings 1-6) shall involve the Board spending time with each Bidder. The format of such monthly meetings shall be:

- (a) Initial meeting between the Board's full Core Evaluation Team and Bidder's team;
- (b) The initial meeting shall (if required) break out into a series of sub-meetings concentrating on legal, technical and financial aspects of Bidder's proposals;
- (c) The sub-meetings shall re-convene for a final wrap up meeting with the Board's full Core Evaluation Team and Bidder's team.

4.2.3 In advance of each Dialogue Meeting, Bidders are invited to submit specific material related to the agenda topics to be discussed ("**Informal Submissions**") as more fully set out in paragraph 4.5.3. These Informal Submissions by Bidders prior to the Dialogue Meetings shall enable the Board and its advisers to:

- (a) review the work undertaken by Bidders since the previous Dialogue Meeting;
- (b) provide any meaningful and relevant comments to the Bidders; and

- (c) avoid any time disconnect between the Board's comments and the development of Bidders' Solutions.

4.2.4 The Informal Submissions referred to in paragraph 4.2.3 above shall be required to be uploaded onto Conject in advance of each Bidder's Dialogue Meeting as outlined in the table at paragraph 4.2.1.

4.3 Dialogue and the Core Evaluation Team

4.3.1 Formal Dialogue Meetings will generally be chaired by one of the following members of the Board's team, who represent the following interests in evaluation:

- Brian Currie (Project Director)
- Iain Graham (Commercial and Legal)
- Janice MacKenzie (Clinical and Service Users)
- Carol Potter (Finance)
- Jackie Sansbury (Operations and Commissioning)

4.3.2 Upon commencement of Dialogue, Bidders will have the opportunity to comment on the title and purpose of each meeting and to suggest changes they believe could be made in order to make the Dialogue more economic, efficient and effective.

4.3.3 Each Bidder will be required to attend the scheduled meetings set out at paragraph 4.2.1. However, Bidders can propose alternative dates no later than twenty (20) Business Days before a meeting is scheduled to take place and must explain to the Board (in broad terms) the reasons why this proposed change is necessary.

4.3.4 The Board will consider alternative dates proposed by Bidders provided this does not compromise its obligation to conduct an open, fair and transparent dialogue and subject to availability of the Board personnel and advisers.

4.3.5 The Board will confirm if they can accommodate an alternative date no later than fifteen (15) Business Days before a meeting is arranged to take place.

4.3.6 Where the Board is unable to accommodate an alternative date proposed by a Bidder, the Bidder is required to attend the original scheduled meeting as set out in paragraph 4.2.1.

4.3.7 The Board may, subject to the availability of its relevant resources and at its sole discretion and in accordance with the Regulations, meet Bidders in addition to the scheduled meetings before the submission of the Draft Final Tender. If the Board considers that additional meetings are required, these will be arranged by the Board and notified to the Bidders accordingly.

4.3.8 The Board will provide Bidders with a draft agenda for a scheduled or additional Dialogue Meeting no later than ten (10) Business Days before the date a Dialogue Meeting is arranged to take place. A draft agenda will include the following:

- (a) Title;
- (b) Date and time;
- (c) Chairperson and Scribe;
- (d) Attendees;

- (e) Purpose;
- (f) Parts of the ITPD to be discussed, and
- (g) Parts of a Bidder's Solution to be discussed and any supporting information that would make a discussion more meaningful.

4.3.9 Bidders are required to provide the supporting information requested by the Board and advise the Board of any changes or additions to be made to the draft agenda, together with any requests for clarification to facilitate discussions no later than six (6) Business Days before the date of a Dialogue Meeting.

4.3.10 The final agenda agreed by the Board and a Bidder will be circulated by the Board to all attendees no later than five (5) Business Days before a Dialogue Meeting.

4.3.11 The number of attendees at a meeting should be kept to a minimum and reflect the purpose and subject matter to be discussed.

4.3.12 The Board will endeavour to communicate a record of the actions that were agreed by the Board and a Bidder during a meeting no later than four (4) Business Days after a Dialogue Meeting takes place.

4.3.13 This information exchange will not constitute any decision by the Board and will be limited to a record of:

- (a) the parts of a Solution presented and specified by a Bidder at the Dialogue Meeting; and
- (b) any actions arising out of the Dialogue Meeting.

4.3.14 Nothing in this information exchange is, or should be, relied upon as a promise or representation as to the Board's ultimate decision in relation to the Dialogue for the Project.

4.3.15 Notwithstanding that the Board may not have objected to nor rejected a Bidder's Solution during the Dialogue Period, such Solutions shall not be considered by the Bidder to have been approved by the Board.

4.4 Briefing Meeting/ Q and A Session

4.4.1 A separate initial briefing meeting (the "**Briefing Meeting**") will be held with each of the three Bidders.

4.4.2 This will be an opportunity for each Bidder to meet the Project Owner, the Core Evaluation Team and members of the Board's project team, including its advisers. The Board will make a presentation to provide Bidders with an overview of the Project and in particular the detail and importance of the Reference Design and the demarcation between Mandatory Reference Design Requirements and Indicative Elements of the Reference Design.

It is envisaged that the agenda for the Briefing Meeting will include:

- (a) Introduction and purpose/agenda (*Project Director*);
- (b) Strategic context (*Project Owner/Director of Capital Planning*);
- (c) Clinical context/Reference Design (*Clinical Lead/Project Director*);

- (d) Operational context (*Operations Lead/Director of Capital Planning*);
- (e) Commercial issues (*Board Legal and Financial Advisers*);
- (f) Programme and process (*Project Director/Commissioning Lead*);
- (g) Q and A (*Bidders*).

4.4.3 The number of attendees from each of the Bidder's teams to the Briefing Meeting will be limited to a maximum of fifteen (15) each. Confirmation of the Bidder's attendees will be requested by the Board in advance.

4.4.4 In advance of the Briefing Meeting, Bidders will be invited to submit questions to the Board using Conject.

4.5 Dialogue and associated submission

4.5.1 It is envisaged that there will be five (5) Dialogue Meetings prior to submission of the Draft Final Tender. Initially the Dialogue will focus on the strategic direction of the Project and development of Bidders' proposals, including technical, financial and legal proposals. The Dialogue will then aid Bidders in developing Solutions capable of meeting the Board's requirements and refining them prior to submission of the Draft Final Tender. Informal Submissions, which shall not be evaluated, will be required in advance of the Dialogue Meetings to support the Bidders proposals. Feedback will be given to Bidders at each stage of the Dialogue and will inform the basis for the remaining Dialogue. The objective of Dialogue is to ensure Bidders are clear on the Board's requirements and allow each Bidder to develop a Solution that is capable of meeting the requirements set out in the ITPD. Dialogue will also be the opportunity for Bidders to explore innovative proposals and aspects of their approach that will add value with the Board.

4.5.2 The schedule of formal Dialogue Meetings and corresponding dates for Dialogue Meetings are set out in paragraph 4.2.1 above.

4.5.3 The proposed agenda topics and submission requirements for each Dialogue Meeting are set out in the following appendices to Volume 1 of the ITPD:

- (a) Appendix A (i) (Technical Agenda Topics and Informal Submission Requirements) and (ii) (Submission Requirements);
- (b) Appendix B (i) (Financial Agenda Topics and Submission Requirements); and
- (c) Appendix C (i) (Legal Agenda Topics) and (ii) Submission Requirements and Evaluation).

It should be noted that this is a proposed guide to the agenda topics and submission requirements during Dialogue. Bidders may suggest changes, but this will require the agreement of the Board.

4.5.4 With each technical submission, Bidders are also required to provide a completed Annex 2 to Appendix A (ii) – "Schedule of Design Deliverables for Technical Meetings during Dialogue Period" confirming the supporting drawings and information that Bidders are providing to support the Submission Requirements of the ITPD. Bidders should note that all drawings must be submitted at least once before submission of the Draft Final Tender

4.5.5 Throughout Dialogue the Board intends to provide Bidders with any updates to the NPD Project Agreement, its schedules and other project documents including the relevant Ancillary Agreements as set out in Volume 2 of the ITPD.

4.6 Draft Final Tender

- 4.6.1 Bidders are required to submit a Draft Final Tender on or before noon on the date set out in the programme at paragraph 4.2 (Timetable of Dialogue Meetings) or such other dates as notified by the Board to the Bidders.
- 4.6.2 The Board will review the Draft Final Tenders to ensure compliance with the tender requirements set out within the ITPD. A final Dialogue Meeting will then take place as indicated on the programme at paragraph 4.2.1 (Timetable of Dialogue Meetings). This Dialogue will provide feedback to Bidders on the content of their Draft Final Tender and clarify any outstanding points.

4.7 Conditions for closing Competitive Dialogue

It is expected by the close of Dialogue, the terms of the NPD Project Agreement will have been agreed in all material respects. Once Dialogue has been closed, the Board shall invite each Bidder to submit a Final Tender.

4.8 Final Tender

- 4.8.1 Once Dialogue has closed, the Board will issue an Invitation to Submit Final Tender to each Bidder. The requirements for this Invitation to Submit Final Tender are broadly set out in Appendices A, B and C of Volume 1 of the ITPD. However the Board reserves the right to amend or modify the requirements for the Invitation to Submit Final Tender.
- 4.8.2 The Invitation to Submit Final Tender shall set out the following:
- (a) date for receipt of the Final Tender by the Board;
 - (b) conditions of the Final Tender;
 - (c) the submission requirements of the Final Tender; and
 - (d) the methodology which the Board will use to evaluate the Final Tender.
- 4.8.3 The Preferred Bidder shall only be permitted to fine tune and clarify aspects of its Final Tender in line with the requirements of procurement law.

4.9 Submission requirements for the Draft Final Tender and Final Tender

- 4.9.1 Each Bidder shall ensure that its Submissions are provided using UK English, with all values expressed in UK Sterling/GB Pounds, using formats as specified in Submission Requirements.
- 4.9.2 Bidders shall ensure that one (1) electronic copy of the Draft Final Tender and/or Final Tender are delivered electronically via Conject in accordance with the Conject user manual contained in Volume 4 of the ITPD and two (2) hard copies are also delivered by receipted mail or by hand to:

RHSC and DCN Project Director
Project Offices
NHS Lothian
56 Canaan Lane

Edinburgh
EH10 4SG

- 4.9.3 The packages shall be clearly marked for the attention of the Project Director, Re-provision of RHSC and DCN at Little France.
- 4.9.4 No package should bear any mark indicating the Bidder's identity. If more than one package is delivered, they all shall carry some random unifying code number and an indication of the number of packages in total (e.g. 1 of 2, 2 of 2).
- 4.9.5 Each Bidder shall obtain a signed receipt acknowledging delivery of the Submission.
- 4.9.6 The Draft Final Tender and/or Final Tender shall be submitted no later than noon on the date for the relevant submission set out in the programme at paragraph 4.2 (Timetable of Dialogue Meetings) of Volume 1 of the ITPD or such other date as notified by the Board to the Bidders.
- 4.9.7 Submissions or requests received after specified dates and times shall not be accepted for consideration and shall be returned unopened to the sender unless there are extenuating circumstances beyond the control of the Bidder in which case on being satisfied that such extenuating circumstances existed, the Board may at their discretion accept such submission.
- 4.9.8 Draft Final Tender and Final Tender submissions shall not be accepted by email or facsimile unless otherwise instructed by the Board.
- 4.9.9 Each Bidders' Draft Final Tender and/or Final Tender shall be presented in three volumes – volume 1: Technical response; volume 2: Financial response; and volume 3: Legal response. The content required in each section is defined in the following appendices to Volume 1 of the ITPD:
- (a) Appendix A (ii) (Submission Requirements);
 - (b) Appendix B (i) (Financial Agenda Topics and Submission Requirements);
 - (c) Appendix C (ii) (Submission Requirements and Evaluation); and
 - (d) Appendix G (Insurance Response Matrix).
- 4.9.10 Each hard copy volume of a Bidders' Draft Final Tender and/or Final Tender shall be filed in a separate folder with its contents clearly marked on the outside with Bidder's name, volume number, folder number and copy number for example Volume 2, folder 1 of 3, copy 1.
- 4.9.11 Each folder shall contain an index list for that folder which shall be bound immediately inside the cover, including the page numbers of each folder.
- 4.9.12 Each page of each volume shall be numbered clearly and sequentially.
- 4.9.13 Submissions shall not include any loose pages.
- 4.9.14 Drawings shall be numbered and a drawing list shall be included as part of the index list under the appropriate heading.
- 4.9.15 Drawings shall not be larger than A1 size and shall be clearly referenced, folded and inserted into pockets within the appropriate volume.

- 4.9.16 Each Bidder shall nominate and mark one copy of the Draft Final Tender and/or Final Tender as the master copy. The master copy of the Submission shall be used as the primary source of reference during the evaluation process.
- 4.9.17 Bidders shall provide Draft Final Tender and Final Tender Submissions that contain all the elements required and necessary for the performance of the NPD Project Agreement on the basis of the Solution presented and specified by Bidders during the Dialogue Period and accepted by the Board and SFT under the derogations process.
- 4.9.18 Draft Final Tenders and/or Final Tenders must be completed under the headings, using the tables and information supplied by the Board, and shall follow the order and numbering contained in Appendices A, B and C of this Volume 1 of the ITPD.
- 4.9.19 Draft Final Tenders and/or Final Tenders that include key information that has not been presented and specified by Bidders during the Dialogue Period and/or the Board has previously confirmed is not capable of meeting the mandatory requirements will not be accepted by the Board.
- 4.9.20 Bidders should provide such information as is necessary to enable the Board to evaluate whether a Draft Final Tender and/or Final Tender is capable of meeting the Board's requirements.
- 4.9.21 The Board are entitled to modify Appendices A, B and C, of Volume 1 of the ITPD, the Board's requirements set out in Volume 1 of the ITPD generally, and/or require Bidders to omit specific aspects of a Solution at their absolute discretion where not agreed by the Board during the Dialogue Period pursuant to the parameters set out in the NPD Project Agreement, the Board's Construction Requirements and/or SFT under the derogations process subject to ensuring equality of treatment amongst all Bidders.
- 4.9.22 General information such as marketing and promotional information will not be accepted by the Board and all information provided by Bidders must be specific to the information that is requested.
- 4.9.23 Bidders are required to provide a Draft Final Tender and/or Final Tender that are acceptable to all legal entities (including, where relevant, any Senior Funders and relevant subcontractors) that are involved in the development of a Solution and the preparation of Draft Final Tender and/or Final Tenders.
- 4.9.24 Bidders shall note that the Board shall reserve its position on the acceptability or otherwise of the Draft Final Tender and/or Final Tender.

4.10 Conject (BIW)

- 4.10.1 The Project will use Conject during the ITPD process. Conject, formerly known as BIW, is a web-based construction collaboration portal. Procedures utilising Conject shall include:
- (a) Data room access;
 - (b) Dialogue queries and Dialogue Period bulletin responses;
 - (c) Bid clarification queries and responses;
 - (d) Submitting Informal Submissions; and

(e) Submitting completed Draft Final Tenders and Final Tenders.

4.11 Communication Protocol

4.11.1 All information and communication flows between the Board and Bidders outwith Dialogue Meetings will be via Conject. The process for information and communication flows between the Board and Bidders including queries, bulletins, submissions, and request for clarifications is set out in paragraph 4.11.2.

4.11.2 Information and communication flows between the Board and Bidders will be categorised as follows:

(a) Dialogue Period Query (Confidential/Not Confidential – see paragraph 4.12) prepared by a Bidder and communicated to the Board;

(b) Dialogue Period Bulletin (Confidential/Not Confidential - see paragraph 4.12) prepared by the Board and communicated to a Bidder (either in response to a Dialogue Period Query or otherwise);

(c) Dialogue Period Submission prepared by a Bidder and communicated to the Board; and

(d) Request for clarification prepared by the Board and communicated to a Bidder in response to a Dialogue Period Submission.

4.11.3 Please refer to Appendix D of Volume 1 of the ITPD for template form to be used by Bidders when sending a Dialogue Period Query. Please also refer to Appendix D of Volume 1 of the ITPD for template forms to be used by the Board when providing a Dialogue Period Bulletin.

4.11.4 The Board is entitled to decline to respond to any other form of information and communication flow sent by a Bidder.

4.11.5 Bidders may communicate a Dialogue Period Query to the Board no later than ten (10) Business Days before the date of any Submission.

4.11.6 The Board will endeavour to provide a Dialogue Period Bulletin in response to a Dialogue Period Query by no later than five (5) Business Days before the date of any Submission.

4.11.7 Receipt of information and communications flows between the Board and Bidders will be recorded in accordance with Conject User Manual.

4.11.8 Additionally, the Board reserve the right to issue additional information at any time during the Dialogue Period. The Board may exercise the option to postpone the return of the Draft Final Tender or Final Tender in the event that additional information is issued which has a bearing on the Draft Final Tender or Final Tender.

4.12 Commercially sensitive and confidential information

4.12.1 If a Bidder considers a communication or any part of its submission to be commercially sensitive and wishes it to be treated by the Board as confidential they should make it clear in the relevant section of the Dialogue Period Query template form and explain in concise terms what harm may result from its disclosure.

- 4.12.2 If the Board does not agree that a communication is commercially sensitive, the Bidder will be invited to withdraw this communication. In the event that this invitation is declined, the Board will distribute a response to all Bidders.
- 4.12.3 If the Board agrees that a communication is commercially sensitive it will be treated in the strictest confidence by the Board subject to an entitlement to share such communication with the relevant members of the Board's Project team including advisers and key stakeholders for the purposes of preparing a confidential response.
- 4.12.4 Any Dialogue Period Bulletin prepared by the Board in response to a Dialogue Period Query which is not commercially sensitive will be distributed to all Bidders.
- 4.12.5 During the Dialogue Period, the Board may:

- (a) seek to establish the feasibility of a Bidder's Solution relevant to an aspect of the Project including obtaining the view of a third party, for example in relation to the interface with existing RIE Facilities; and/or;
- (b) where not viewed as commercially sensitive by a Bidder, look to adapt its requirements to reflect, whether in whole or in part information provided and/or elements of a particular Bidder's Solution.

Both of the above may involve the passing of information to a third party.

- 4.12.6 In relation to paragraph 4.12.5 a) above, the Board shall adopt a process whereby it shall use its reasonable endeavours to procure that:
- (a) any third party recipient of information will require to sign a confidentiality undertaking prior to receipt of any information;
 - (b) the Bidder will be provided with a consent request, prepared separately from other Dialogue documentation, in which it may detail information it is prepared to disclose to a third party, including any potentially competing third party, relevant to its proposals, and seeking consent for such disclosure; and
 - (c) Following receipt of such a consent request, a Bidder may at all times refuse or agree to disclose information to a third party.
- 4.12.7 In relation to paragraph 4.12.6(b) above, the Board will use its reasonable endeavours to seek the express consent of a Bidder as to whether a specific aspect of that Bidder's Solution can be adopted by the Board as a requirement for all Bidders to meet. A Bidder may withhold consent to the Board adopting such a requirement on the grounds that the Bidder has developed such requirement as part of its Solution and considers this requirement to be commercially sensitive and not capable of being disclosed to the other Bidders.

4.13 Building Information Modelling (BIM)

Building Information Modelling (BIM) is being increasingly used within the industry. The use of BIM is being encouraged by central government and the Board expect that Bidders will use BIM for the development and implementation of their proposals.

Bidders shall prepare a BIM execution plan for review by, and agreement with, the Board. The BIM execution plan must be prepared in accordance with BS1192 and shall be

submitted as part of the Bidder's Informal Submission during the Dialogue Period and form part of their Final Tender. Appendix J contains further details of the Board's BIM requirements for the Project.

5 TENDER EVALUATION AND CONTRACT AWARD CRITERIA

5.1 Introduction

- 5.1.1 This section outlines the approach to the evaluation methodology for the Final Tenders. The Informal Submissions and Draft Final Tender shall not be evaluated by the Board. These Informal Submissions and Draft Final Tenders shall be used as tools during the Dialogue Period for Bidders to set out their Solutions to the Board and for subsequent feedback on whether aspects of the Informal Submissions and Draft Final Tenders meet the Board's requirements set out in the ITPD. Bidders should note that there shall be no down selection of Bidders during the Dialogue Period.
- 5.1.2 Contract award will be on the basis of the offer, contained in the Final Tender, which is the most economically advantageous as set out in paragraphs 5.6 (Quality Evaluation Criteria), 5.7 (Price Evaluation) and 5.8 (Combining Price and Quality Evaluation), also in accordance with Part 5 of the Regulations.

5.2 Overview of Evaluation Process

- 5.2.1 The Final Tender evaluation will comprise the following steps:
- (a) Completeness and compliance check – as more fully set out in paragraph 5.3 (Compliance and Completeness);
 - (b) Compliance with the Stand Alone Requirements – as more fully set out in paragraph 5.4 (Compliance with Stand Alone Requirements);
 - (c) Evaluation of Funding Proposals - as more fully set out in paragraph 5.5 (Deliverability of Funding);
 - (d) Evaluation of all of the Quality Evaluation Criteria on a pass/fail basis - as more fully set out in paragraph 5.6.2 (Quality Evaluation Criteria)
 - (e) Evaluation of those Quality Evaluation Criteria that are evaluated on a scored basis - as more fully set out in paragraphs 5.6.3 (Quality Evaluation Criteria) which will result in a mark out of 40 being awarded to each Bidder;
 - (f) Price Evaluation (including commercial aspects) – as more fully set out in paragraph 5.7 (Price Evaluation), which will result in a mark out of 60 being awarded to each Bidder; and
 - (g) Combination of Price Evaluation Mark and Quality Evaluation Mark, resulting in a mark out of 100 being awarded to each Bidder, as more fully set out in paragraph 5.8 (Combining Price and Quality Evaluation).

Should a Final Tender fail any of the steps set out in paragraphs 5.2.1 (a), (b), (c) or (d) above then no further evaluation will be carried out and the Final Tender will be deemed to be non-compliant.

- 5.2.2 Bidders should note that Board's requirements as referred to in Table B and Table C of paragraph 5.6 (Quality Evaluation Criteria) means all requirements of the Board as set out in Volume 2 and Volume 3 of (and any requirements referred to within) this ITPD, and as may

be supplemented, varied and/or refined (and disclosed by the Board to Bidders during Dialogue).

5.3 Compliance and Completeness

- 5.3.1 The Board will check each Final Tender for compliance and completeness to establish if it has been prepared and submitted in accordance with and meets the requirements set out in the Invitation to Submit Final Tender.
- 5.3.2 The Board is entitled to disqualify a Bidder if a Final Tender is not prepared and submitted in accordance with the requirements set out in the Invitation to Submit Final Tender. The Board's decision on this matter will be final.
- 5.3.3 The Board is entitled, but not obliged, to seek clarification from Bidders at any time in respect of incomplete and ambiguous information contained in a Final Tender.
- 5.3.4 In the event the Board receives incomplete or ambiguous information in a Final Tender or response to a request for clarification the Board is entitled to disqualify a Bidder and the Board's decision on this matter will be final.
- 5.3.5 The Board may request a Bidder to clarify a Final Tender received, but such clarification, specification and/or fine tuning shall not involve material changes to a Final Tender when such clarifications, specifications or fine tuning are likely to distort competition or have a discriminatory effect.

5.4 Compliance with Stand Alone Requirements

- 5.4.1 The Board will check each Final Tender for compliance with the Stand Alone Requirements as identified in paragraph 2.3 (Stand Alone Requirements). Non compliance with the Stand Alone Requirements will result in the Final Tender being deemed to be non-compliant.

5.5 Deliverability of Funding

Bidders should assume for the purposes of Final Tender that the deliverability of the funding proposals will be evaluated on the following broad basis:

- (a) acceptability of proposed guarantees to be put in place to support the Project Co/consortium structure;
- (b) extent of Funders due diligence completed and demonstration of a robust process for conclusion of the Funders due diligence; and
- (c) extent of demonstrated support of Funders (including assessment of the quality of letters of support and any conditions of financing) and summarily for providers of any junior debt.

However the Board will provide additional guidance to Bidders as to the specific requirements of Final Tenders in relation to funding during the Dialogue Period and will confirm how such requirements will be evaluated at this stage. The evaluation of funding proposals shall be assessed on a pass/fail basis. A pass will be awarded where the Board is satisfied that proposals demonstrate acceptability against each of the above criteria, as such

criteria may be changed by the Board and notified to the Bidders during the Dialogue Period. It is the Board's intention that, during Dialogue and Draft Final Tender stages, Bidders will be made aware of elements of the proposed solution they are developing which are unlikely to achieve a pass.

5.6 Quality Evaluation Criteria

- 5.6.1 The Quality Evaluation Criteria (QEC), the basis for evaluation and, where relevant, their weightings are included in Table A below. Bidder's should note that Appendix A (ii) of the ITPD sets out for Bidder's (under the column "Submission Requirement") a description of technical aspects which the Board require, or where indicated anticipate Bidders should provide in their Submissions. Please note, however, that the individual submission requirements (for example, the bulleted points) are not and should not be treated by Bidders as sub-evaluation criteria. Bidder's are reminded that the QEC are as set out in Table A (duplicated in the first, second and third columns of Appendix A (ii) for ease of reference) and responses to each QEC will be evaluated only in accordance with this paragraph 5 and no other basis.
- 5.6.2 The Board are keen to ensure that the Bidder appointed Preferred Bidder is able to deliver the highest quality in respect of all of its requirements. Therefore in the first instance, all QEC will be evaluated on a pass/fail basis. Primarily the QEC will be evaluated in accordance with the pass/fail criteria set out in Table B of this paragraph 5.6. However, in some instances the Board's requirements for a QEC are not set out in Volume 2 and Volume 3 of the ITPD and as such Table B shall not apply. In those cases the QEC shall be evaluated by the Board based on the pass/fail criteria set out in the column headed "Pass / Fail Guidance" (where relevant) in Appendix A(ii) of the ITPD. It is the Board's intention that, during Dialogue and Draft Final Tender stages, Bidders will be made aware of elements of the proposed solution they are developing which are unlikely to achieve a pass in accordance with the relevant criteria, as set out in Table B or Appendix A (ii).
- 5.6.3 Following the pass/fail evaluation the Board will then carry out a detailed assessment of the remaining Final Tenders to evaluate some of the QEC based on a scored evaluation. The scored assessment shall only apply to those QEC flagged as "scored" in Table A of this paragraph 5.6. Each of these scored QEC shall be given a score of between 5 and 10 in accordance with the scoring system set out in Table C of this paragraph 5.6. The score for each QEC will then be multiplied by the QEC Weighting and divided by 10 to give a weighted score. The weighted score for each QEC will be added to give a total score for Quality out of 40 (the **Quality Evaluation Mark**).

Table A – Evaluation Basis and Weightings for Quality Evaluation Criteria

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
A – Executive Summary			Not Scored	
B – Strategic and Management Approach (5%)				
	B1	Clarity, robustness and quality of understanding of policy framework and approach to addressing these.	Scored	0.16
	B2	Clarity, robustness and quality	Scored	0.32

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
		of approach to contribution to delivering the Board's 'vision' and associated performance management regime		
	B3	Clarity, robustness and quality of understanding of Project outcomes and approach to contribution of delivering these	Scored	0.57
	B4	Clarity, robustness and quality, of approach to partnership and collaborative working with the Board and its partners	Scored	0.81
	B5	Clarity, robustness and quality of approach to staff development including recruitment, training, induction and HR issues	Scored	0.32
	B6	Clarity, robustness and quality of approach to delivering community benefits	Scored	0.32
	B7	Clarity, robustness and quality of approach to integration of design with facilities management considerations	Scored	0.32
	B8	Clarity, robustness and quality of approach to consortia management arrangements including approach to sub contractors	Scored	0.57
	B9	Quality of proposed personnel	Scored	0.32
	B10	Clarity, robustness and quality of approach to continuity throughout the Project	Scored	0.32
	B11	Acceptable organisational diagrams for each stage of Project	Pass/Fail	
	B12	Clarity, robustness and quality of approach to health and safety	Scored	0.81
	B13	Acceptable approach to environmental, quality and health and safety management systems	Pass/Fail	
	B14	Clarity, robustness and quality of approach to management of design development including integration with the Board and its partners	Scored	0.16
	B15	Acceptable	Pass/Fail	

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
		programme from appointment as Preferred Bidder to Financial Close		
C – Approach to Design & Construction (23%)				
	C1	Clarity, robustness and quality of approach to meeting the stakeholders requirements in their design	Scored	2.64
	C2	Clarity, robustness and quality of approach to design quality	Scored	1.85
	C3	Clarity, robustness and quality of architectural and landscape design	Scored	2.64
	C4	Clarity, robustness and quality of approach to delivering innovation	Scored	2.64
	C5	Clarity, robustness, and quality of approach to adaptability and flexibility	Scored	2.64
	C6	Clarity, robustness and quality of way finding and signage proposals	Scored	1.06
	C7	Clarity, robustness and quality of interior design proposals	Scored	2.64
	C8	Clarity, robustness and quality of M&E engineering design proposals	Scored	1.06
	C9	Clarity, robustness and quality of natural and artificial lighting proposals	Scored	1.06
	C10	Clarity, robustness and quality of energy management proposals	Scored	1.85
	C11	Clarity, robustness and quality of equipment proposals	Scored	1.06
	C11A	Compliance with Minimum Level of Group 1 Equipment	Pass/Fail	
	C12	Compliance With Mandatory Reference Design Requirements	Pass/ Fail	
	C13	Acceptable approach to achieving planning permission	Pass/ Fail	
	C14	Acceptable vertical and	Pass/ Fail	

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
		horizontal movement strategy		
	C15	Acceptable ICT strategy	Pass/ Fail	
	C16	Acceptable fire planning strategy	Pass/ Fail	
	C17	Acceptable structural design proposals	Pass/ Fail	
	C18	Acceptable services, utilities and infrastructure proposals	Pass/ Fail	
	C19	Acceptable approach to achieving required BREEAM rating	Pass/ Fail	
	C20	Acceptable post Preferred Bidder stage design development proposals and design programme	Pass/ Fail	
	C21	Compliance with Board's Construction Requirements	Pass/ Fail	
	C22	Acceptable design life proposals	Pass/ Fail	
	C23	Acceptable construction programme and approach to monitoring	Pass/ Fail	
	C24	Clarity, robustness and quality of construction methodology	Scored	1.85
	C25	Acceptable approach to commissioning and handover	Pass/ Fail	
	C26	Acceptable approach to quality and environmental management systems	Pass/ Fail	
	C27	Acceptable approach to health and safety management	Pass/ Fail	
	C28	Acceptable approach to compliance with CDM regulations	Pass/ Fail	
	C29	Robustness of technical costs	Pass/ Fail	
	C30	Acceptable list of summary assumptions, clarifications and derogations	Not Scored	
	C31	Acceptable Interface Proposals	Pass / Fail	
D – Approach to Facilities Management (12%)				
	D1	Clarity, robustness and quality of approach to management and administration of the Services and Contract	Scored	2.50
	D2	Acceptable approach to integration with Board policies and operation	Pass/ Fail	

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
	D3	Acceptable approach to ensuring quality management	Pass/ Fail	
	D4	Acceptable approach to ensuring environmental management	Pass/ Fail	
	D5	Acceptable approach to ensuring health and safety management	Pass/ Fail	
	D6	Acceptable approach to interfacing with the Board for undertaking works outside of access times	Pass/ Fail	
	D7	Clarity, robustness and quality of approach to partnership and resources including liaison, resources and supply chain management	Scored	2.50
	D8	Acceptable approach to business continuity planning	Pass/ Fail	
	D9	Acceptable fire safety policies and procedures	Pass/ Fail	
	D10	Clarity, robustness and quality of approach to performance and information management including; Helpdesk, programme maintenance lifecycle, performance monitoring, monitoring and records, regular reports and information requests, building services and statutory testing	Scored	4.50
	D11	Acceptable approach to un-programmed maintenance	Pass/ Fail	
	D12	Clarity, robustness and quality of approach to service elements including; utilities management and grounds maintenance services	Scored	2.50
	D13	Robustness of technical costs	Pass/ Fail	
	D14	Acceptable list of summary assumptions, clarifications and derogations	Not Scored	
	D15	Acceptable approach to mobilisation of Facilities Management services	Pass/ Fail	

Table B – Pass / Fail Criteria for Quality Evaluation Criteria

	Pass / Fail Criteria
Pass	<p>The Bidders approach:</p> <ul style="list-style-type: none"> • demonstrates a satisfactory understanding of the Board's requirements; and • delivers a satisfactory level of compliance with the Board's requirements.
Fail	<p>The Bidders approach:</p> <ul style="list-style-type: none"> • fails to demonstrate a satisfactory understanding of the Board's requirements; or • fails to deliver a satisfactory level of compliance with the Board's requirements.

Table C – Scoring System for Quality Evaluation Criteria

Scoring Range	Categorisation	Description
5 – 10		
5	Satisfactory	<p>The Bidder's approach:</p> <ul style="list-style-type: none"> • demonstrates a satisfactory understanding of all aspects of the Board's requirements; and/or • proposes a solution which performs satisfactorily in complying with the Board's requirements.
6-7	Good	<p>The Bidder's approach:</p> <ul style="list-style-type: none"> • demonstrates a satisfactory understanding of all aspects of the Board's requirements and a detailed and good understanding of some aspects of the Board's requirements; and/or • proposes a solution which performs well against the Board's requirements.
8-9	Very Good	<p>The Bidder's approach:</p> <ul style="list-style-type: none"> • demonstrates a detailed and very good understanding of all aspects of the Board's requirements; and/or • proposes a solution which, performs very well against the Board's requirements.

Scoring Range 5 – 10	Categorisation	Description
10	Excellent	<p>The Bidder's approach:</p> <ul style="list-style-type: none"> • demonstrates an exceptional understanding of all aspects of the Board's requirements; and/or • proposes a solution which performs very well in complying with the Board's requirements and excels in complying with some of the Board's requirements.

5.7 Price Evaluation

5.7.1 Economic Cost

The Economic Cost of the Submission will be determined by calculating the Net Present Value (NPV) of each Financial Submission over the period of the NPD Project Agreement using the following components:

- (a) NPV of Annual Service Payment - The proposed total Annual Service Payment stream in the Bidder's Financial Model, taken from Financial Pro-forma 1 and verified against the Financial Model, prepared using the assumptions and specifications set out in paragraphs 3.8 and 3.9. The NPV will be calculated using the Treasury real discount rate of 3.5% (6.0875% nominal);
- (b) NPV of Surpluses - The forecast level of surpluses in the Bidder's Financial Model, as presented in Financial Proforma 2 and verified against the Financial Model will be deducted from the NPV of the total Annual Service Payment. Due to the more uncertain nature of the surplus payments the NPV will be calculated using a real discount rate of 4.39% (7.0% nominal);
- (c) Equalisation Adjustment - Any additional material related costs and revenues to be borne by the Board as a result of any Financial Submission, including the pass-through costs of energy and utilities, rates and insurance costs as set out in Financial Pro-forma 1. The impact of such costs will be estimated by the Board and expressed as an NPV of the adjustments made, discounted at a real rate of 3.5%. Where an Equalisation Adjustment (other than the pass-through costs) has been made, the nature of and rationale for the adjustment will be disclosed to the Bidder; and
- (d) Quantifiable Bidder Amendments - The Economic Cost will include an amount that reflects the deemed value (whether positive or negative) of any (i) amendments, caveats or qualifications to the NPD Project Agreement or specification that affect the risk profile of the Project or (ii) elements of the Financial Submission, that have or, in the reasonable opinion of the Board may have, a significant and quantifiable financial impact on the Board (a '**Quantifiable Bidder Amendment**'). For this purpose, the deemed value of the Quantifiable Bidder Amendment will be the estimated financial impact to the Board of the risk occurring multiplied by the estimated probability of that risk being realised. Such values will be converted to an NPV using the 3.5% real discount rate.

Where any such Quantifiable Bidder Amendments and/or Equalisation Adjustments are identified, these will be discussed and the deemed value shared with each Bidder during Dialogue.

5.7.2 Price Evaluation Mark

The Economic Cost derived from the components described in paragraph 5.7.1 will be scored as shown in the table below, with the Bidder with the lowest Economic Cost scoring the maximum 60 (the **Price Evaluation Mark**).

Deviation from lowest Economic Cost	Price Evaluation Mark
<=0.25%	60
>0.25%, <=0.50%	59.75
>0.50%, <=0.75%	59.625
>0.75%, <= 1.00%	59.5
>1.00%, <= 1.50%	59.25
>1.50%, <=2%	59
>2%, <=3%	58.5
>3%, <=4%	58
>4%, <=5%	57.5
>5%, <=6%	56.5
>6%, <=7%	55.5
>7%, <=8%	54.5
>8%, <=9%	53.5
>9%, <=10%	52.5
>10%, <=11%	50.5
>11%, <=12%	48.5
>12%, <=13%	46.5
>13%, <=14%	44.5
> 14%, <= 15%	42.5
> 15%, <= 16%	40.5
> 16%, <= 17%	37.5
> 17%, <= 18%	34.5
> 18%, <= 19%	31.5

Deviation from lowest Economic Cost	Price Evaluation Mark
> 19%, </= 20%	28.5
> 20%, </= 21%	24.5
> 21%, </= 22%	20.5
> 22%, </= 23%	16.5
> 23%, </= 24%	12.5
> 24%, </= 25%	8.5
> 25%	0

5.8 Combining Price and Quality Evaluation

For each Bidder, the Price Evaluation Mark (out of 60) will be added to the mark for the Quality Evaluation Mark (out of 40) to give a total mark out of 100. The Final Tender with the highest combined mark will be deemed by the Board to be the most economically advantageous tender.

6 GENERAL PROCUREMENT RULES

6.1 Introduction

This section outlines the general procurement rules applying to the Project competition in addition to those set out in section 4 (Competition Dialogue Process) relevant to submission requirements and elsewhere within the ITPD.

6.2 Information provided to Bidders – Confidentiality and Crown Copyright

By receiving the ITPD, each Bidder agrees to keep confidential the ITPD to Participate in Dialogue and all of the Information Provided.

Bidders shall not reproduce the ITPD in any form (including photocopying or storing by electronic means) or any other Information Provided for any purpose other than that specifically necessary to make a Submission without the specific written permission of the Board.

The ITPD and Information Provided may be made available to a Bidder's members, employees and professional advisers directly involved in the appraisal of such information (who must be made aware of the obligation of confidentiality) but shall not, either in whole or in part, be copied, reproduced, distributed or otherwise made available to any other party in any circumstances without the prior written consent of the Board, nor may it be used for any other purposes than that for which it is intended.

The ITPD (including any copies and or any supplemental or referenced documents) and any Information Provided is and shall always remain the property of the Board who is entitled to demand their return and/or destruction at any time.

6.3 Information provided to Bidders - Warnings / Disclaimers

While the Information Provided has been prepared in good faith, it does not purport to be comprehensive nor to have been verified by the Board or any of their advisers. Neither the Board nor any of their agents or advisers accept any liability or responsibility for the accuracy, adequacy or completeness of any opinions, commentary, information and documentation contained in the ITPD or of any other opinions, commentary, information and documentation made available during the Tender Period or in respect of any Final Tender. No representation or warranty, express or implied, is or will be given by the Board or any of their agents or advisers with respect to such opinions, commentary, information and documentation. Any liability therefore is hereby expressly disclaimed.

It is not warranted that the Information Provided shall identify or provide Bidders with Solutions for the attainment of the Board's requirements. It is the responsibility of each Bidder to develop their proposals to ensure that they satisfy the Board's requirements.

Bidders must obtain for themselves at their own responsibility and expense all information necessary for the preparation of their Submissions during the Tender Period and in respect of any Final Tender.

Bidders must complete and provide all information in accordance with the conditions and requirements of the ITPD.

6.4 Restrictions on the Use of the Invitation to Participate in Dialogue

The ITPD and subsequent Information provided should not be considered as an investment recommendation made by the Board or any of its advisers or agents to any of the Bidders. Each person to whom the ITPD is issued should make its own independent assessment of the Project competition and all matters relevant to that competition and to the Project after making such investigation and taking such professional advice as it deems necessary.

Nothing in the ITPD is, or should be, relied upon as a promise or representation as to the Board's ultimate decision in relation to the Project competition and/or the award of a public contract.

6.5 The Board's Right to Terminate

Bidders' attention is drawn to the fact that, by issuing the ITPD, the Board is in no way committed to accepting any Final Tender or identifying a Preferred Bidder.

The Board reserves the right, in its absolute discretion, to terminate, cancel or abandon the Project competition at any time before the execution of the NPD Project Agreement without giving prior notice to Bidders. In the event that the Project competition is so terminated, the Board will have no liability whatsoever to a Bidder, their subcontractor(s), their funders, the advisers to the Bidder or adviser(s) to any subcontractor(s) or funders for any costs incurred in connection with the Project competition.

6.6 Board's right to vary the process

The Board reserves the right, at its discretion, and subject to compliance with procurement law requirements:

- 6.6.1 to change the basis of, terms of or the procedure for, the process, including the timing, form and substance of the procedure of the Project competition. Under no circumstances shall the Board incur any liability in respect thereof;
- 6.6.2 to issue supplementary documentation at any time during the Project competition in order to clarify any matter and/or amend any aspect of the Information Provided;
- 6.6.3 amend the Board's requirements, Mandatory Reference Design Requirements, NPD Project Agreement and/or any other aspect of the Board's procurement documentation.

Any changes shall be communicated to Bidders as quickly as possible.

6.7 Conduct and Conflicts of interest

The Board wishes to avoid or resolve any conflicts of interest or other matters which may compromise its legal obligations relevant to conducting an open, transparent, fair and non-discriminatory competitive procurement. A Bidder must, accordingly, ensure that its participation in the Project competition that may lead to the award of a contract does not in any way compromise the Board's performance of its obligations.

A Bidder must consider these matters carefully on an ongoing basis and ensure that its actions are not capable of compromising the Board's ability to meet its obligations.

If in doubt, a Bidder must declare a potential conflict of interest and inform the Board of the measures the Bidder intends to implement to avoid it occurring.

The Board and Bidders will seek to agree the measures that are necessary to avoid any conflicts of interest or potential conflicts of interest arising.

In the event that an agreement cannot be reached and the Board considers its obligations in relation to the procurement are compromised, the Board reserves the right to disqualify a Bidder from the Project competition. The Board's decision on this matter will be final.

Each Bidder shall ensure that all relevant entities involved in its participation in the Project competition, including, without limitation, consortia members, subcontractors and all relevant technical, financial and legal advisers, are aware of the provisions of this paragraph 6 and do not breach any of the provisions set-out herein

6.8 Canvassing and contacts

Except as provided in the ITPD, Bidders shall not approach staff of the Board or staff of the Board's advisers or contractors with a view to obtaining information or clarification in respect of any part of their Submission or solution or attempting to support or enhance their prospect of being identified as the Preferred Bidder. Any such approach or attempted approach by a Bidder may lead to the Bidder's disqualification.

Bidders are required to complete a Certificate of Non-Collusion and Non-Canvassing as part of their Final Tender.

6.9 Disqualification/Rejection of Bidders

In accepting delivery of the ITPD, each Bidder agrees to abide by the provisions and conditions that it contains, or which are set out in any subsequent Information Provided in relation to the Project competition, in all and any dealings or communications, during the course of the Dialogue and in respect of any Final Tender or otherwise in relation to the Project.

The acceptance of the ITPD by a Bidder will imply acceptance of its provisions by Bidders without qualification. Any attempt to qualify provisions, either expressly or impliedly, may result in the Bidder being disqualified.

The Board reserves the right to reject or disqualify a Bidder where:

- 6.9.1 a Bidder's Submission is submitted late, completed incorrectly, incomplete or fails to include a Solution capable of meeting the Board's requirements; and/or
- 6.9.2 the Bidder or any person or entity involved with the Bidder's participation in the Project competition is guilty of serious misrepresentation in relation to any aspect of the Project competition; and/or
- 6.9.3 there is a change in identity, control, financial standing or other factor impacting on the selection and/or evaluation process affecting the Bidder including, where the Bidder is a consortium, changes relevant to Consortium membership and members, and such changes shall be addressed in accordance with paragraph 6.13; and/or
- 6.9.4 the Bidder or any person or entity involved with the Bidder's participation in the Project competition contravenes any of the terms of the ITPD or terms set out in any subsequent Information Provided, including within the Invitation to Submit Final Tenders; and/or

- 6.9.5 the Board becomes aware that information provided by the Bidder or any person or entity involved with the Bidder's participation in the Project competition is intentionally or unintentionally false, misleading or incorrect; and/or
- 6.9.6 the Bidder or any entity involved with the Bidder's participation in the Project competition prejudices the Project competition by failing to take steps to address a conflict of interest or other matters which impact negatively on the Board's ability to meet its procurement law obligations.

6.10 Costs

All work undertaken and costs incurred by Bidders in relation to any stage of the Dialogue relating to the Tender Period and any Final Tender, or otherwise in relation to the Project, shall be at each Bidder's own risk and expense.

6.11 Freedom of Information

FOISA and the Environmental Information (Scotland) Regulations provide significant and important rights to access information and the Board supports FOISA's and the Environmental Information (Scotland) Regulations' underpinning principles by encouraging behaviour which is open, transparent and increases public participation. Accordingly, all information submitted to the Board may be disclosed by the Board in response to a request under FOISA and the Environmental Information (Scotland) Regulations or in response to Legislation requiring the disclosure of information by the Board. The decisions of the Board in the interpretation thereof shall be final and conclusive in any dispute, difference or question arising in respect of disclosure. The Board may also decide to include certain information in the publication scheme which it maintains under FOISA and the Environmental Information (Scotland) Regulations.

Further, the Board may also disclose all information submitted to them to the Scottish or United Kingdom Parliament or any other department, office or agency of Her Majesty's Government in Scotland or the United Kingdom, and their servants or agents.

If a Bidder considers that any of the information to be provided is commercially sensitive, it shall be obliged to identify it and explain to the Board (in broad terms) what harm may result from its disclosure. Bidders should be aware that, even where it has indicated that information is commercially sensitive, the Board may be required to disclose it and as such reserves the right to do so.

Bidders should also note that the receipt of any material marked 'confidential' or equivalent by the Board should not be taken to mean that the Board accept any duty of confidence by virtue of that marking.

The Board may publish, on the Scottish Government and the Board's websites, the names and contact details of Bidders who have been issued with the ITPD.

6.12 Collusion

Any collusion between Bidders, their subcontractors or advisers will lead to the exclusion of the Bidders involved at the discretion of the Board.

Bidders shall be required to sign the Certificate of Non-Collusion and Non-Canvassing and to submit it no later than five (5) Business Days from the date of issue of the ITPD.

6.13 Changes in Bidder Circumstances

Each Bidder is required immediately to bring to the Board's notice any change in the identity of any organisation, consortium member or entity identified and evaluated in its pre-qualification submission since the submission of the Pre-Qualification Questionnaire and such change may only be made with the prior written agreement of the Board. Any additional information provided by a Bidder pursuant to the requirements of this section will be evaluated in accordance with the selection criteria in respect of such information in the Pre-Qualification Questionnaire. The Board has selected the Bidders on the basis of information provided by them concerning their eligibility, the economic and financial standing, technical and professional ability. The Board reserve the right to withdraw the selection of a Bidder at any time if the Board concludes that a Bidder is ineligible, no longer satisfies the minimum standards of economic and financial standing or technical and professional ability or is otherwise required by its procurement law obligations to reject the Bidder.

6.14 Non Compliance

Any Submission provided without the Bidder complying with the requirements of the ITPD or any Invitation to Submit Final Tender may be rejected by the Board.

6.15 Publicity and Media Statements

Bidders shall obtain the Board's specific written permission (on form, content and purpose) before any statements or other disclosures regarding their involvement in the procurement of the Project are made public (media, seminars, websites, conferences, promotional material etc).

6.16 Variant Bids

In accordance with the OJEU Notice, Bidders should be aware that no variant bids will be permitted.

Appendix A (i) –Technical Agenda Topics and Informal Submission Requirements

Bidders should note that the table below is a proposed guide to the agenda topics during Dialogue. It may however be subject to change to reflect the outcome of Dialogue and bidder specific issues. Bidders may suggest changes, but this will require the agreement of the Board.

With each Technical submission, Bidders are also required to provide a completed Annex 2 of Appendix A (ii) – “Schedule of Design Deliverables for Technical Meetings during Dialogue Period” confirming the supporting drawings and information that Bidders are providing in support of the Bid Submission Requirements. Bidders should note that all design deliverables must be submitted at least once before the Draft Final Tender submission.

Technical

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
Meeting 1	<p><u>Strategic</u> Understanding, Vision, Understanding outcomes, Collaborative working</p> <p><u>Design</u> General approach to design covering stakeholders requirements, strategic approach to design, architectural and landscape strategy, innovation and adaptability/flexibility. Planning permission, Approach to BIM and development of drawings</p> <p><u>Equipment</u> Approach to equipment.</p> <p><u>Facilities Management</u> Approach to FM and integration with Board policies</p> <p><u>Costs</u> Approach to development of Capex and Opex</p>	<p>B1, B2, B3, B4.</p> <p>C1, C2, C3, C4, C5, C12, C13</p> <p>C11</p> <p>D1, D2.</p> <p>C29, D13</p>
Meeting 2	<u>Strategic</u>	

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	<p>HR issues, Community Benefits, Integration of Design & FM Meeting 1 update.</p> <p><u>Design</u> Approach to M&E, daylighting and artificial lighting and energy management. Update from Meeting 1.</p> <p>Initial draft proposals for layout and architecture and development of BIM.</p> <p><u>Construction</u> Approach to construction methodology and programme</p> <p><u>Interface Proposals</u></p> <p><u>Facilities Management</u> Approach to FM QA, Environmental Management, Health & Safety and out of hours working. Update from Meeting 1</p> <p><u>Costs</u> Report on development of Capex and Opex with draft costs.</p>	<p>B5, B6, B7</p> <p>C8, C9, C10</p> <p>C23, C24</p> <p>C31</p> <p>D3, D4, D5, D6</p> <p>C29, D13</p>
Meeting 3	<p><u>Strategic</u> Consortia management, proposed personnel, organisation, maintaining continuity. Update from Meeting 2</p> <p><u>Design</u> Approach to vertical and horizontal movement, ICT, fire, structural engineering and site services and utilities.</p>	<p>B8, B9, B10, B11</p> <p>C14, C15, C16, C17, C18</p>

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	<p>Update from Meeting 2</p> <p>Developed proposals for layout and engineering – further development of BIM.</p> <p><u>Construction</u> Update on approach to construction methodology and programme.</p> <p><u>Interface Proposals</u> Update from meeting 1.</p> <p><u>Equipment</u> Draft proposals for equipment strategy including group 1 equipment.</p> <p><u>Facilities Management</u> General FM management proposals and approach to FM partnering, business continuity, fire strategy.</p> <p>Update from Meeting 2.</p> <p><u>Costs</u> Report on development of Capex and Opex with further developed costs.</p> <p><u>Insurance</u> Report on insurance in accordance with Appendix G (Insurance Response Matrix)</p>	<p>C23, C24</p> <p>C31</p> <p>C11</p> <p>D7, D8, D9, D10</p> <p>C29, D13.</p>
Meeting 4	<p><u>Strategic</u> Consortia approach to health and safety, H&S, QA and environmental management systems, design management programme for period from Preferred Bidder to</p>	B12, B13, B14, B15

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	<p>Financial Close.</p> <p>Update from Meeting 3.</p> <p><u>Design</u> Wayfinding, interior design, comparison with reference design, planning permission, BREEAM.</p> <p>Update from Meeting 3.</p> <p>Further development of BIM with draft versions of submission drawing requirements.</p> <p><u>Construction</u> Final approach to construction methodology and programme, commissioning and handover, QA, construction health and safety and CDM.</p> <p><u>Equipment</u> Review of final equipment proposals.</p> <p><u>Facilities Management</u> Approach to services elements, unprogrammed maintenance. Assumptions made and mobilisation proposals.</p> <p><u>Costs</u> Report on development of Capex and Opex with further developed costs.</p> <p><u>Insurance</u> Update from Meeting 3.</p>	<p>C6, C7, C12, C13, C19</p> <p>C23, C24, C25, C26, C27, C28</p> <p>C11</p> <p>D11, D12, D14, D15.</p> <p>C29, D13.</p>
Meeting 5	<p><u>Strategic</u> Update on Meeting 4 and final review.</p>	

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	<p><u>Design</u> Review of final response to general approach to design covering stakeholders' requirements, strategic approach to design, architectural and landscape strategy, innovation and adaptability/flexibility.</p> <p>Final review of BIM and draft versions of all drawing submission requirements.</p> <p><u>Construction</u> Compliance with BCRs, design life proposals, assumptions, clarifications and derogations. Final update on programme, commissioning and handover, QA, construction health and safety and CDM.</p> <p><u>Equipment</u> Feedback on final equipment proposals</p> <p><u>Facilities Management</u> Review and update on FM proposals.</p> <p><u>Costs</u> Report on finalisation of Capex and Opex with final draft costs.</p> <p><u>Insurance</u> Update from Meeting 4.</p>	<p>C1, C2, C3, C4, C5</p> <p>C20, C22, C30</p> <p>C23, C24, C25, C26, C27, C28</p> <p>C11</p> <p>C29, D13.</p>
Meeting 6	Feedback on Draft Final Tender submission.	

Appendix A (ii) – Submission Requirements

The technical Submissions submitted by the Bidders shall be structured following the same numbering reference system as set out in the “Quality Evaluation Criteria and Reference” and the “Submission Requirement Reference” in the table below.

In relation to the technical Submission Requirements for C (Approach to Design and Construction), subject to the requirements of paragraph 4 of Volume 1 of the ITPD and to encourage and facilitate innovative technical solutions, Bidders are permitted to submit its responses in a format (e.g. written responses, drawings or other representations) which they consider most appropriate to best demonstrate an understanding of the Board's requirements and/or a solution which complies with the Board's requirements. However, as a minimum, the Board would require all design deliverables set out in AP1.1 and AP1.2 to be submitted as part of the Submission Requirements for C (Approach to Design and Construction) and each response (C1 to C31) should refer to which Design Deliverables within AP1.1 and AP1.2 support the response.

The technical submission requirements submitted by the Bidders in response to section C (Approach to Design and Construction) below will ultimately form part of Project Co's Proposals in accordance with the NPD Project Agreement.

The technical submission requirements submitted by the Bidders in response to section D (Approach to Facilities Management) below will ultimately form part of the Method Statements in accordance with the NPD Project Agreement.

The technical submission requirements submitted by the Bidders in response to section B (Strategic and Management Approach) below will form part of Project Co's Proposals and/or the Method Statements in accordance with the NPD Project Agreement.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
A. Executive Summary					
A1	Not Scored	n/a	A1.1	<p>Bidders must submit an Executive Summary of their Final Tender. The Executive Summary shall include:</p> <ul style="list-style-type: none"> • An overview of the Bidders' approach to the Project; • The Bidders' understanding of the Project, key Board requirements and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>the main factors, as determined by the Bidder that will influence the deliverability of the Project. In addition a concise statement describing the Bidders' approach to address the factors identified;</p> <ul style="list-style-type: none"> • An indication of what the Bidders bring to the Project by way of skills or innovative solutions to meet their own criteria for success; • An overview of the Bidders' accepted list of key assumptions or clarifications • An overview of the Bidders' proposed design solution and integration with the Site; and • An overview of the Final Tender from a financial perspective, including a summary of capital costs, the Unitary Payment and funding structures. 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B. Strategic and Management Approach					
B1. Clarity, robustness and quality of understanding of policy framework and approach to addressing these.	Scored	0.16	B1.1	Bidders must submit proposals setting out their understanding of the relevant local and national health policies and describe how these strategic issues have been included within the Bidders' Final Tender submission, in particular with respect to the delivery of solutions specific to this Project.	To Pass, Bidders will be required to demonstrate a clear understanding of national health policies specific to the Project.
B2. Clarity, robustness and quality of approach to contribution to delivering the Board's 'vision' and associated performance management regime	Scored	0.32	B2.1	Bidders must submit proposals setting out how their proposals will enhance and contribute to the Board's vision. Bidders should explain their role in delivering the Board's vision, and include proposed performance management mechanisms for demonstrating Project Co's contribution to the achievement of this vision.	To Pass, Bidders will be required to demonstrate that they will contribute to the Board's vision.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B3. Clarity, robustness and quality of understanding of Project outcomes and approach to contribution of delivering these	Scored	0.57	B3.1	Bidders must submit proposal setting out their understanding of the Project outcomes (as outlined in the Boards benefits realisation plan) and how their proposals will contribute to the delivery of outcomes/benefits with specific details of how the Bidder has already addressed these in their Final Tender submission, or how they will be addressed after Final Tender submission. Bidders must also outline what they offer by way of skills and/or innovative solutions to deliver these outcomes/benefits.	To Pass, Bidders will be required to demonstrate that they understand the Project outcomes and will contribute to these.
B4. Clarity, robustness and quality, of approach to partnership and collaborative working with the Board and its partners	Scored	0.81	B4.1	<p>Bidders must submit a method statement outlining their approach to collaborative working and developing and maintaining a successful long term partnership with the Board and its partners, (i) in the period from Preferred Bidder appointment to Financial Close; (ii) throughout the construction period; and (iii) operational period of the contract confirming in their proposals:</p> <ul style="list-style-type: none"> • What they believe to be the factors critical to achieving a successful relationship (both short term and long term); 	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to collaborative working.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> • Their understanding of the key interface issues and how they intend to manage these and integrate with the existing relationships; • How they will develop and maintain a full understanding of the Boards' objectives including matters identified during Dialogue; • How their objectives can reflect and adapt to the Board's goals as they evolve over time; and • The manner in which they will conduct themselves that accords with the culture of the Board, local communities and other key stakeholders to the Project. 	
B5. Clarity, robustness and quality of approach to staff development including recruitment, training, induction and HR issues	Scored	0.32	B5.1	<p>Recruitment The Bidders must submit proposals setting out details of the following:</p> <ul style="list-style-type: none"> • Approach to recruitment and vetting of staff, including as appropriate relevant security clearances (e.g. Disclosure Scotland, Protection of Vulnerable Groups Scheme etc); • Procedures for working in areas with children or vulnerable persons; and 	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to staff development.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			<p>B5.2</p> <p>B5.3</p>	<ul style="list-style-type: none"> • Details of its employment policy and evidence that employees and prospective employees are treated fairly irrespective of race, gender, religion, disability or background. <p>Human Resources Issues The Bidders must submit proposals setting out:</p> <ul style="list-style-type: none"> • Details of their Occupational Health approach for staff having come into contact with high risk person or areas. <p>Training and Induction The Bidders must submit proposals setting out:</p> <ul style="list-style-type: none"> • Details of any achievement in relation to the Investors In People initiative (or equivalent); • Details of the Bidder’s employee development and appraisal system; • Details of its own and its supply chain’s training policy and procedures, including an indication of the training to be offered to the on-site staff specific to this Contract and a statement of the percentage of their annual turnover which is spent on staff training; 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> • Details of induction programme and ongoing training for staff, specifically working with HV systems and Legionella control; and • Details of induction programme for sub-contractors. 	
B6. Clarity, robustness and quality of approach to delivering community benefits	Scored	0.32	B6.1	Bidders must submit their proposals to deliver community benefits as part of the Project in accordance with Clause 73 (Community Benefits) of the NPD Project Agreement and Appendix I of Volume 1 of the ITPD. These should include specific proposals covering economic, environmental and social benefits related to the Project during both the construction and operational stages of the Project.	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to community benefits (including complying with the minimum targeted recruitment numbers set out in Appendix I Section 2.1).
B7. Clarity, robustness and quality of approach to integration of design with facilities management considerations	Scored	0.32	B7.1	Bidders must submit proposals demonstrating how a consistent and a coordinated approach will be developed and assured between the building design and FM solutions. Bidders shall take account of the hard FM site interface issues and integration with the soft FM which will be provided by the Board. Bidders responses shall include specific	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to integration of design with facilities management.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>proposals on:</p> <ul style="list-style-type: none"> • How their design development process will consider and incorporate the FM aspects at each stage of the process from pre financial close through to construction; and • The method by which design coordination issues will be managed and FM interface issues raised with the Board and its partners. 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B8. Clarity, robustness and quality of approach to consortia management arrangements including approach to sub contractors	Scored	0.57	B8.1	<p>Bidders must submit proposals setting out details of how its consortium will be managed, setting out the key roles and their responsibilities including technical roles within their consortium they have identified as key to the Project during contract finalisation, construction and operational stages and Project Co's role in leading the project management. This shall include team leaders for all principal disciplines, both before and after financial close, and may include but not be limited to the following:</p> <ul style="list-style-type: none"> • Project and programme management; • Risk management; • Design; • Works; • Services; and • Quality, safety and environmental management including HAISCRIBE and BREEAM. 	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to consortia management proposals.
		B8.2	<p>Where any element of the Works and/or Services are to be provided by subcontractors other than the Contractor or Service Provider(s) Bidders must submit details of:</p> <ul style="list-style-type: none"> • The selection process undertaken for such sub contractors that are confirmed at the time of submitting Final Tender, and/or the selection process (including timescales) that will be undertaken for 		

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>those subcontractors yet to be confirmed; and</p> <ul style="list-style-type: none"> The manner in which performance of the sub contractors will be secured and integrated within the overall performance requirements of the Board's output specifications. 	
B9. Quality of proposed personnel	Scored	0.32	B9.1	Bidders must submit a summary curriculum vitae (maximum of two pages per person) of the personnel proposed for the roles identified in B8 above which shall include (as a minimum) details of key experience, education and professional status.	To Pass, Bidders will be required to demonstrate that their key personnel have satisfactory levels of experience.
B10. Clarity, robustness and quality of approach to continuity throughout the Project	Scored	0.32	B10.1	<p>Bidders must submit proposals setting out their continuity plan for all stages of the project. The key matters to be addressed will include:</p> <ul style="list-style-type: none"> how any changes in personnel between their pre and post financial close teams will be managed and communicated; describe how as part of the design development process they view Project Co's role in ensuring design continuity and knowledge transfer. This will include how they will achieve design team continuity throughout the whole design development, construction and operational phases considering the consortium team and design organisations, and the key personnel 	To Pass, Bidders will be required to demonstrate that there will be continuity throughout the Project.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>working within each of those organisations. The continuity plan shall address proposals for the role of design staff on-site during the development and the Works phase; and</p> <ul style="list-style-type: none"> the submission should particularly address the issue of consistency of personnel throughout the project and the need for procedures to deal with knowledge transfer to ensure smooth transition when required. 	
B11. Acceptable organisational diagrams for each stage of Project	Pass/Fail	n/a	B11.1	<p>Bidders must submit organisation diagrams for the consortium including the lines of communication with the Board and other key stakeholders for each of the phases of the project including:</p> <ul style="list-style-type: none"> contract finalisation (appointment of Preferred Bidder to Financial Close); construction and commissioning period; and operational term. 	To Pass, Bidders will be required to demonstrate a clear organisational structure for each stage of the Project.
B12. Clarity, robustness and quality of approach to health and safety	Scored	0.81	B12.1	<p>Bidders must submit a detailed health and safety strategy which the Bidder proposes to adopt to comply with in fulfilling their health and safety obligations throughout the project, covering the following phases:</p> <ul style="list-style-type: none"> contract finalisation (appointment of 	To Pass, Bidders will be required to demonstrate they will adopt a robust approach to health and safety.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>Preferred Bidder to Financial Close);</p> <ul style="list-style-type: none"> • construction and commissioning period; and • operational term. <p>In particular, the proposals should address Project Co’s leadership role and key project roles throughout and particularly in the delivery and management of the Project on a 24/7 operational site, addressing key issues such as:</p> <ul style="list-style-type: none"> • The Boards requirements; • Operational continuity requirements of the RIE Facilities; • Obligations to connect to and maintain critical service connections; • Traffic management – construction and operational access/ egress; • Compliance with HaiScribe requirements; • Construction activity; • Linking to a live operational major health facility; • Proximity to live operational general hospital facility (24/7) and medical school; • Security issues; • Access and maintenance requirements of the project; • Pollution control; • Noise, dust, water egress, and vibration issues and the like; and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> • Details of business continuity plans. 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B13. Acceptable approach to environmental, quality and health and safety management systems	Pass/Fail	n/a	B13.1	Bidders must submit proposals setting out how Project Co intends to set up, manage, maintain, work towards and gain accreditation of its environmental, health and safety and quality management systems including specific proposals on: <ul style="list-style-type: none"> • The systems to be developed and implemented; • How these systems will be put in place; • The process for the development of the systems; • Interim measures while the systems are being developed; and • Timescales for accreditation. 	To Pass, Bidders will be required to demonstrate that they will adopt an acceptable approach to management systems.
			B13.2	As a minimum Bidders must submit proposals setting out the following aspects of their environmental, health and safety and quality management systems: <ul style="list-style-type: none"> • Proposed document management systems; • Verification procedures for design work; • Detailed change control procedures for each stage of the Project; • Procedures and a programme for carrying out Project reviews; and • Description of the procedures to co-ordinate and manage the design process including the interface between design teams and continuity of design team members (as set out in B10). In addition, 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			B13.3	<p>a statement of how and when design changes will be reviewed and commented on by Project Co/ Service Provider.</p> <p>Bidders must submit proposals demonstrating that they operate an accredited Health and Safety management system complying with the OHAS 18001 standard.</p>	
B14. Clarity, robustness and quality of approach to management of design development including integration with the Board and its partners	Scored	0.16	B14.1	<p>Bidders must submit proposals setting out :</p> <ul style="list-style-type: none"> • Their approach to managing the Project's design development, with particular emphasis on development post Final Tender, including proposals for interface with specific sub-groups harmonising with the current Board Project structure. The submission should include a description of the procedures to co-ordinate and manage the design process and to interface with key stakeholders, including document management, verification of design, change control during design development and design reviews; and • The management and review structures and procedures that will be put in place by the Bidder to manage potential conflicts, delays, changes in the Board's goals and other issues at each key design stage of the Project. 	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to management of design development including a commitment to working with the Board.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B15. Acceptable programme from appointment as Preferred Bidder to Financial Close	Pass/Fail	n/a	B15.1	<p>Bidders must submit a week by week programme covering the contract finalisation period from appointment of Preferred Bidder until Financial Close with a detailed breakdown of the key tasks to be completed by the end of each week with the critical path and key milestones shown. Bidders shall supplement the programme with commentary on, as a minimum, the following matters:</p> <ul style="list-style-type: none"> • Mechanisms that will be adopted to ensure that the critical path for the technical, legal and commercial activities will remain on programme, and therefore that the overall Project programme is maintained; • Confirmation of key inputs, timescales and required by dates for the Board to review/approve Bidder submissions during contract finalisation; • Confirmation that their overall programme to Financial Close, is achievable; and • Key risks to the Project proceeding on programme shall also be identified, with a brief commentary on how the Bidder proposes to mitigate each risk. 	To Pass, Bidders will be required to submit a logical and deliverable programme.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C. Approach to Design & Construction					
C1. Clarity, robustness and quality of approach to meeting the stakeholders requirements in their design	Scored	2.64	C1.1	<p>The Bidders must submit proposals setting out their approach to meeting the stakeholders requirements in their design.</p> <p>For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Evidence that they are sensitive to the co-location of the RHSC and DCN and that they will take advantage of this arrangement to maximise their design; ii. Evidence that they are aware of the wide range of stakeholders associated with these departments and that they understand and will cater for all their requirements in their design; iii. Evidence that their bid will deliver a nurturing, engaged and safe community that supports the well being of all patients, carers, families, visitors and staff; iv. Evidence that their design will provide a healing environment that will assist the Board in its core obligation to 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>deliver clinical care to users of both the RHSC and DCN;</p> <ul style="list-style-type: none"> v. Evidence that their design will include particular consideration of the proposed external spaces, therapy gardens and landscaping, communal patient areas for example quiet and television rooms, public areas; vi. Evidence that their design will adequately address security requirements; vii. Evidence that their design will fully incorporate infection control requirements and HAI Scribe; and viii. In particular for the RHSC and CAMHS, we would expect the Bidders to demonstrate how the design will be developed to achieve: <ul style="list-style-type: none"> i. Facilities that are a beautiful place with children and young people at the centre of a nurturing, engaged and safe community; ii. Facilities that are reassuring, relaxing, convenient and safe with the needs of children and young people and those with disabilities expressly addressed; and iii. Facilities that provide an 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>appropriate balance of internal and external play areas.</p> <p>In relation to the DCN, we would anticipate Bidders shall demonstrate how similar qualities to the above (ix (i – iii)) but also in addition, how the design will be developed to achieve a nurturing, quiet and relaxing environment for its patients.</p>	
C2. Clarity, robustness and quality of approach to design quality	Scored	1.85	C2.1	<p>Bidders must submit proposals setting out their approach to achieving design quality. This must be provided as set out in C2.1 – C2.3 below:</p> <p>Bidders must submit proposals setting out how the design will be developed to integrate the architectural, mechanical, electrical and civil and structural engineering aspects of the design to present a cohesive innovative design which meets all the Board’s construction and stakeholders’ requirements (including infection control and HAI Scribe requirements). The submission shall utilise all Mandatory Reference Design Requirements to deliver a solution across all disciplines.</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C2.2 C2.3	<p>Bidders must submit proposals setting out their design analysis of both the site and the Board's requirements as depicted in the Board's Construction Requirements. The review of the site shall identify, as a minimum, opportunities, constraints and access and planning issues.</p> <p>Bidders must submit proposals setting out a clear statement summarising what they understand to be the key strategic issues relating to the project and demonstrate how the design proposals have dealt with these specific project issues, and any impact their proposals will have on such matters.</p>	
C3. Clarity, robustness and quality of architectural and landscape design	Scored	2.64	C3.1	<p>Bidders must submit proposals setting out their approach to architecture and landscape design. This should be provided as set out in C3.1 – C3.3 below:</p> <p>Bidders must submit proposals setting out their approach to architecture design. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. How the design will deliver world class architectural design practice in delivering Facilities that support the Board's clinical needs and a design 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>which provides a high level of creativity;</p> <p>ii. How the design will provide an ordered composition of building elements in a stimulating form that successfully combines good standards of space, height, form, scale and use of materials and colours / images with associated functional requirements and the surroundings;</p> <p>iii. How the design will address the interests of stakeholders, including (but not limited to) clinicians, patients (and their representatives, families and carers), health commissioners, Local Government, and the local community;</p> <p>iv. How the design will deliver architectural quality and demonstrates how this will be provided;</p> <p>v. How the design will deliver the lines of sight and views from windows which are suitable for children and young people;</p> <p>vi. How the design will provide age and ability appropriate art and way finding design which is integrated into the design solution;</p> <p>vii. How the design will fully consider all aspects of safety in all areas and a description of how risks have been removed through design innovations;</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C3.2	<p>viii. How the design will fully address control of infection and HAI Scribe; and</p> <p>ix. How the design will minimise cleaning and maintenance of all elements of the Facilities by choice of materials, layout and orientation and shows how such activities can be carried out safety and without disruption to clinical activities.</p> <p>Bidders must submit proposals demonstrating how they will deliver high quality architectural buildings, and high quality finishes and component parts. As well as the architectural drawings and supporting information, Bidders shall provide specific details in detailed specification format to include the following:</p> <ul style="list-style-type: none"> i. Internal and external doors and door furniture, also showing proposed pattern of vision panels; ii. Washing and toilet facilities; iii. Reception desks and touchdown bases; iv. Communal patient areas, which include spaces such as playrooms, television rooms and quiet rooms v. External therapy gardens and external covered play and seating areas vi. Floor and wall coverings; vii. Natural and artificial lighting 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C3.3	<p>particularly in key public areas, artwork and key clinical areas such as theatres;</p> <p>viii. Samples of worktops and wall cupboards shall be provided for approval by the Board; and</p> <p>ix. Juxtaposition of main external finishes / cladding.</p> <p>Bidders must submit proposals setting out their approach to external hard and soft landscaping (including courtyards and therapy gardens) which shows how the design will be developed for therapeutic use and how it provides patient and staff access and how it enhances the environment of the Facilities. The proposals should demonstrate how the principle elements of external landscaping will be designed. to:</p> <ul style="list-style-type: none"> i. Complement the RHSC and DCN buildings and the neighbouring RIE; ii. Minimise the risk of vandalism and crime; iii. Facilitate security of pedestrians and avoided 'no-go' areas in their design. Ensure site safety and link with the Green Travel Plan; iv. Minimise maintenance and operation costs; v. Ensure easy maintenance and cleaning whilst minimising health and safety issues; 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				vi. Provide appropriate fire safety routes for all users; vii. Incorporate SUDS and other sustainable features; viii. Incorporate art work; and ix. Incorporate lighting, heating, seating, canopy and wind protection arrangements which are appropriate for young children and less disabled people. For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) those items listed in (i) – (ix) above.	
C4. Clarity, robustness and quality of approach to delivering innovation	Scored	2.64	C4.1	Bidders must submit proposals setting out their approach to delivering innovation. This should be provided as set out in C4.1 – C4.4 below: Bidders must submit proposals setting out where it will be, or has been possible to provide innovative solutions to meet the Board’s requirements. Innovation in design can range from whole concepts of hospital planning, distribution of functions etc to the building solution (e.g. use of prefabricated units) to detail design of components, materials, spaces, use of technology and art etc. Bidders must show how their design reflects current and developing innovations	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C4.2	<p>in healthcare delivery and construction generally and translate these into an innovative building solution.</p> <p>Bidders must submit proposals setting out how their design, using innovation, will optimise the sustainability of the Facilities. Bidders must provide details of their strategy to show how it will optimise energy, water and utility consumption, minimise waste production, implements a strategy to meet the Board's BREEAM requirements including carbon reduction and other positive activities described in the Board's Construction Requirements to provide a sustainable development.</p>	
			C4.3	<p>Bidders must submit proposals setting out how an innovative approach to the provision of ICT in the Facilities in line with the Board's Construction Requirements and FM Output Specifications has been delivered.</p>	
			C4.4	<p>Where areas of innovation are identified Bidders must submit supporting evidence, where possible, with examples from other schemes where this has proved successful. Bidders must provide information to show the benefit, cost and risk for each innovation so the Board can assess them separately.</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C5. Clarity, robustness, and quality of approach to adaptability and flexibility.	Scored	2.64	C5.1 C5.2	<p>Bidders must submit proposals setting out their approach to adaptability and flexibility. This should be provided as set out in C5.1 and C5.2 below:</p> <p>C5.1 Bidders must submit proposals setting out an adaptability strategy which shall describe what features have been incorporated to facilitate future adaptation of use and/or expansion, technological changes, changes in national policy, national and local planning, clinical advancement and seasonal or future strategic variations in use. It is expected that particular reference shall be made to potential changes in the delivery of surgical and radio diagnostic services given the rapid evolution of developments in these disciplines. All design disciplines i.e. architectural, mechanical and electrical, structural and environmental, must be considered.</p> <p>C5.2 Bidders must submit proposals setting out their approach to adaptability and flexibility. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ol style="list-style-type: none"> i. How the interior spaces may be re-arranged in future if a change of use were to occur; 	

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				<ul style="list-style-type: none"> ii. How the building's services and external infrastructure have been designed to allow this adaptability; iii. How the building structure and envelope, services, partitioning, ceiling, and flooring systems and construction technique has been designed to allow this adaptability; iv. How the main electrical installations can accommodate changes over and above the 25% capacity increase (requested in Section 3 Board's Construction Requirements) with minimal structure disruption; and v. How the environmental services strategy will co-ordinate with the adaptability and flexibility strategy. 	
C6. Clarity, robustness and quality of way finding and signage proposals	Scored	1.06	C6.1	<p>Bidders must submit proposals demonstrating their way finding strategy. For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) how it has been developed to:</p> <ul style="list-style-type: none"> i. Suit the needs of the particular patient mix for the Facilities i.e. children, young people and adults using different services, as well as staff and visitors; ii. Include internal and external signage 	

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				<p>and signage outside the site boundary relevant to the Facilities. External signage shall include proposals for the wider RIE site, pedestrians, vehicles and street signage;</p> <ul style="list-style-type: none"> iii. Integrate with the art strategy and lighting strategy for the Facilities; iv. Take cognisance of patient journey times and take steps to minimise such journey times; v. Minimise the transmission of micro-organisms and separates clean and contaminated traffic and material streams; vi. Include hand hygiene signage; vii. Include no smoking signage; viii. Make reference to sample or exemplar site information provided by The Board; and ix. Make use of signage in the floor. 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C7. Clarity, robustness and quality of interior design proposals	Scored	2.64	C7.1	<p>Bidders shall submit their interior design proposals. This must be provided as set out in C7.1 and C7.2 below:</p> <p>For both the RHSC and DCN sectors of the Facilities Bidders must submit proposals setting out how their design has been developed to include:</p> <ul style="list-style-type: none"> i. Interior design proposals and illustrations for each distinct area of the Facilities, paying particular attention to the interior design solutions for public, patient and key staff areas; ii. Communal patient areas that are light, spacious and provide a welcoming atmosphere and which are domestic in design and ambience with the main entrance being immediately apparent; iii. Public areas which are restful, open and well lit with natural light and have views out to landscaped spaces that add quality and orientation; iv. An open and friendly environment, that shall ensure privacy and dignity for patients, family members and visitors when required; v. The incorporation of art in the proposals. Bidders shall provide the name(s) of the artists whom will undertake the work; 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C7.2	<ul style="list-style-type: none"> vi. Integration with their lighting strategy and equipment strategy; vii. Integration with maintenance, cleaning, operation and sustainability; viii. Integration with way finding and signage proposals and how the way finding and signage within the RHSC and DCN links with the way finding within the existing RIE; ix. How the interior materials within the Facilities match the furniture, furnishings and equipment being procured by the Board; and x. Facilities which have a safe and secure environment which is not created via visible security features e.g. security cameras. Safety in design shall also take consideration of anti-ligature, child safety, and Child and Adolescent Mental Health Service whilst maintaining access and ambience. <p>For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) those items listed in (i) – (x) above.</p> <p>Bidders must submit proposals setting out how their interior design for the RHSC has been developed to provide:</p> <ul style="list-style-type: none"> i. Age and ability appropriate signage throughout the Facilities; 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C7.3	<p>ii. A nurturing, relaxed and safe environment in the patient, communal and public areas; and</p> <p>iii. Furniture, windows and lines of sight which are appropriate for young children and children in pushchairs and wheelchairs.</p> <p>Bidders must submit proposals setting out how their interior design submission for the DCN provides a nurturing, quiet and relaxed environment in the patient, communal and public areas.</p>	
C8. Clarity, robustness and quality of M&E engineering design proposals	Scored	1.06	C8.1	<p>Bidders must submit proposals setting out their approach to M&E engineering services design. This must be provided as set out in C8.1 – C8.3 below:</p> <p>Bidders must submit proposals setting out the engineering services design for each element of the scheme in sufficient detail to demonstrate compliance with the Board's Construction Requirements. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. An engineering design, control and operational philosophy statement; ii. Details of principal M&E system selections; 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C8.2	<p>iii. The definition of plant areas and zones both internal and external to the Facilities; and</p> <p>iv. Schematics and written proposals for major plant provision.</p> <p>Bidders must submit proposals setting out how their design will be developed to include the following:</p> <ul style="list-style-type: none"> i. Building services which support the Board’s business, safety and security and life critical services under supply failure scenarios. Specific details shall be provided relating to standby facilities and mains service redundancy; ii. An autonomous energy centre and associated plant; iii. How temperature, ventilation and comfort for occupants will be maintained in accordance with the minimum criteria and how, if possible, these criteria will be improved; iv. How the quality of the environment and prevention of sick building syndrome shall be ensured; v. How mechanical and electrical design is integrated with architectural, structural and civil aspects as outlined above in C2 and C4; vi. How sustainability has been incorporated into their design, 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C8.3	<p>including details of the maintenance and operation philosophy for all mechanical and electrical equipment;</p> <p>vii. Proposals for external services, including details of the main routes (including proposed connections to existing services), intakes and off-site reliance of these services and how this interfaces with adjacent sites (this is also discussed in C18 below);</p> <p>viii. Details of the main source of heating energy; and</p> <p>ix. Details of mechanical and electrical innovations including costs as described in C4.</p> <p>The following information should be also be provided to help demonstrate the design proposals noted above, including:</p> <p>x. An environmental conditions / room provisions matrix for both mechanical and electrical services for each room in the Facilities; and</p> <p>xi. Major plant life cycle statements and design life, including an explanation of the Bidder's lifecycle philosophy to support the lifecycle costing analysis completed in the technical costs proforma;</p> <p>Whilst Bidders are required to undertake their own design, the Board has provided a</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				draft Environmental Matrix as part of the ITPD documentation. Bidders must confirm acceptance of the Board's Environmental Matrix, highlighting any proposed changes on an exception basis.	
C9. Clarity, robustness and quality of natural and artificial lighting proposals	Scored	1.06	C9.1	<p>Bidders must submit proposals setting out their approach to natural and artificial lighting within the Facilities. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. The balance of natural and artificial light; ii. How the environment created by the lighting design will support the well being of patients, carers, visitors and staff; iii. How it will be functional for clinical use; iv. How it will produce an aesthetically pleasing environment; v. How it will be co-ordinated with the building structure and how it will integrate with other areas e.g. mechanical and electrical design, interior design and architecture; vi. How it will include sustainability and energy efficiency; vii. How the interior lighting philosophy will include room usage and warning 	

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				<p>signs, night lighting, security emergency signage and emergency lighting, lighting control and wiring philosophy, standby lighting; and</p> <p>viii. How the external lighting philosophy will minimise light pollution for the neighbours including the RIE, assist to minimise vandalism, assist to improve security, and take account of local residents' needs.</p>	
C10. Clarity, robustness and quality of energy management proposals	Scored	1.85	C10.1	<p>Bidders must submit proposals setting out their approach to energy management. This should be provided as set out in C10.1 and C10.2 below.</p> <p>Bidders must submit an energy model, complete with supporting information, demonstrating how their design solution will achieve an optimum level of energy and utility conservation (linked with the requirement for a sustainable development in C4) and show that their design fulfils the following:</p> <ul style="list-style-type: none"> i. The building energy performance will achieve a minimum of 6 credits for ENE.01 in the BREEAM assessment. ii. The water consumption for the Facilities will not exceed 170,000 litres/bed/annum (Part 6 Section 3: The Board's Construction 	

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			C10.2	<p>Requirements);</p> <p>iii. 20% of energy is provided by renewable energy sources (Part 6 Section 3: The Board's Construction Requirements); and</p> <p>iv. The inclusion of passive design strategies for ventilation and thermal control. The environmental control system is to be co-ordinated and integrated with the design of the structure and the occupied areas in order to maximise the control and flexibility of the installations.</p> <p>In addition Bidders must submit an analysis of their design solution which demonstrates energy consumption proposals along with cost estimates of specific measures or innovations to be introduced.</p> <p>For information purposes only in addition to the model referred to above a dynamic thermal energy model is to be submitted which should comply with the parameters set out in Appendix F of the ITPD Volume 1.</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C11. Clarity, robustness and quality of equipment proposals	Scored	1.06	C11.1	<p>Bidders must submit proposals setting out their approach to equipment. This must be provided as set out in C11.1 and C11.2 below.</p> <p>Bidders must submit the following: :</p> <ul style="list-style-type: none"> i. A commentary showing how the Group 1 Equipment scheduled by the Board varies from their own assessment of Group 1 Equipment needs. This shall be done by providing a mark-up of the Group 1 Equipment included in Equipment Schedule contained in Volume 3 of the ITPD. It should be noted that the quantity of Group 1 Equipment specified by the Board is considered to be a minimum; ii. A commentary on any aspect of the proposed equipment responsibilities regime suggested in paragraph 2.15 (Equipment) of the ITPD Volume 1. that is not considered to represent best value to the Board, and suggestions as to alternative profiles of responsibility, if any, that may enhance this; iii. A commentary setting out their proposals to select equipment suppliers and how the required level of quality is to be achieved in the equipment for which they will be 	

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			C11.2	<p>responsible for supplying and any improvement in the level of quality being proposed. Samples of worktops and wall cupboards shall be provided for approval by the Board to support this; and</p> <p>iv. Their approach to working alongside the Board to allow the Groups 2A, 2B and 3 Equipment to be installed and how this process will be managed.</p> <p>Bidders must submit a fully priced Schedule of Group 1 Equipment, the total sum for which should be clearly identifiable in the Technical Cost Proforma requested at C29 below.</p>	
C11A Compliance with minimum level of Group 1 Equipment	Pass / Fail	n/a	C11A.1	Bidders must provide confirmation that they will comply with the minimum level of Group 1 Equipment as set out in the Equipment Schedule and Equipment Responsibility Matrix.	
C12. Compliance With Mandatory Reference Design Requirements	Pass / Fail	n/a	C12.1	Bidders must submit proposals demonstrating how their design complies with the Mandatory Reference Design Requirements.	

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C13.Acceptable approach to achieving planning permission	Pass / Fail	n/a	C13.1 C13.2	<p>Bidders must submit proposals setting out their approach to achieving planning permission. This must be provided as set out in C13.1 and C13.2 below.</p> <p>Bidders must submit proposals demonstrating compliance including a methodology for achieving planning approval accordance with paragraph 2.17 of Volume 1 of the ITPD. This should include the following:</p> <ul style="list-style-type: none"> i. Community requirements; ii. Policy of the local planning authority; iii. Development Framework requirements; and iv. "Good neighbourliness". <p>Bidders are required to (in conjunction with the Board) participate in planning consultation meetings with the City of Edinburgh Council regarding planning requirements. From these consultations Bidders must submit evidence to demonstrate that the granting of approvals for the scheme will be achieved in the Preferred Bidder stage and confirm any perceived obstacles / project risks (both known and unknown) in this regard shall be clearly drawn to the Board's attention.</p>	To Pass, Bidders will be required to demonstrate that the granting of approvals for the scheme will be achieved

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C14. Acceptable vertical and horizontal movement strategy	Pass / Fail	n/a	C14.1 C14.2 C14.3	<p>Bidders must submit proposals setting out their vertical and horizontal movement strategy. This must be provided as set out in C14.2 – C14.3 below.</p> <p>Bidders must submit proposals setting out a coherent strategy which shows how their design has been developed for managing different categories of traffic and materials within the Campus Site. This shall include the movement of people and vehicles and the distribution of supplies and waste and the separation of clean and contaminated traffic and materials during transportation, storage and at drop off points.</p> <p>Bidders must submit proposals setting out how their design has been developed to minimise travel time and distances for patients, staff, and material transmission of micro-organisms either through airborne or other means to support and segregate a natural flow of pedestrian and vehicular traffic.</p> <p>Bidders must submit proposals setting out how their design has been developed to include a strategy for the following:</p> <ul style="list-style-type: none"> i. Wheelchair users, less able users and transportation of small children and babies that will use the Facilities; 	

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				<ul style="list-style-type: none"> ii. Incorporation of fire fighting lift(s) to maintain evacuation use for the less able, small children and babies in an emergency situation; and iii. The route required by people and materials from the helipad, the RIE and the Facilities. 	
C15. Acceptable ICT strategy and Bidders proposals, compliant with Board's requirements	Pass / Fail	n/a	<p style="text-align: center;">C15.1</p> <p style="text-align: center;">C15.2</p> <p style="text-align: center;">C15.3</p>	<p>Bidders must submit proposals setting out their approach to a compliant ICT strategy. This must be provided as set out in C15.1 – C15.4 below.</p> <p>Bidders must submit proposals setting out their ICT strategy and demonstrating an understanding of the Board's requirements for information management and technology (M&T).</p> <p>Bidders must submit proposals setting out a detailed methodology demonstrating how it will ensure compliance with the Board's Construction Requirements, define clear interfaces of responsibility as necessary, and how they will take overall responsibility for the coherence and compatibility of systems such that they will operate to suit the Board's needs.</p> <p>Bidders must submit proposals setting out the number, location size and specification</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C15.4	<p>of IT / communications rooms.</p> <p>Bidders must submit proposals setting out how the Board's routing, fire suppression, ventilation and connectivity to the RIE requirements has been specifically addressed.</p>	
C16. Acceptable fire planning strategy	Pass / Fail	n/a	C16.1 C16.2	<p>Bidders must submit proposals setting out their fire planning strategy. This must be provided as set out in C16.1 and C16.2 below.</p> <p>Bidders must submit proposals setting out their strategic fire strategy, demonstrating how the design will be developed to consider fire compartmentation and horizontal and vertical evacuation strategies.</p> <p>Bidders must submit proposals setting out how their fire planning strategy has been developed. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. The implications on staff and users in the event of a fire; ii. A clear understanding of the policies and principles underlying fire safety in NHS premises, compliance with NHS 	

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				<p>polices and principles and full agreement and coordination with Lothian and Borders Fire and Rescue Service, The CEC Council's Building Control Department and the Board's Fire Officer;</p> <p>iii. Compliance with: The Building (Scotland) Regulations 2004 and The Building (Scotland) Amendment Regulations 2011, SHTM 81 and SHTM 82;</p> <p>iv. How a Fire Engineering solution has been developed (if it has been proposed), to what extent it has been agreed with the regulatory authorities and how the Board will not be exposed to any additional risks (programme, quality or cost) should the solution need to be amended or abandoned during the course of the development and finalisation of proposals;</p> <p>v. Integration of their fire strategy with the fire strategy for the RIE Facilities to ensure they are compatible and operate in conjunction and how the fire strategy issues at the Link with the RIE Facilities are to be addressed;</p> <p>vi. Details of external and internal access and circulation routes, including a safety and security statement for each element of the scheme with particular reference to the different patient types</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>using the Facilities; and</p> <p>vii. Details of how the particular issues in the surrounding areas of high fire risk such as the helicopter landing pad are to be addressed.</p>	
C17. Acceptable structural design proposals	Pass / Fail	n/a	<p>C17.1</p> <p>C17.2</p>	<p>Bidders must submit proposals setting out their approach to structural design. This must be provided as set out in C17.1 - C17.3 below.</p> <p>Bidders must submit proposals setting out a statement of the structural design philosophy which shall demonstrate how their design has been developed including a methodology for ensuring a safe, aesthetically pleasing and durable structure.</p> <p>Bidders must submit proposals relating to the following elements:</p> <ul style="list-style-type: none"> i. Substructure; ii. Structural frame solution, including grid arrangements; iii. Ground, suspended floor slab and roof construction; iv. External wall and internal partition construction; v. Fire protection strategy and proposed methods to be adopted ; and vi. Methods for dealing with floor penetrations both during new build 	

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			C17.3	<p>works and to accommodate future potential needs.</p> <p>Bidders must submit the following:</p> <ol style="list-style-type: none"> i. A schedule and/or drawings demonstrating the dead and imposed loading design criteria (both uniformly distributed and concentrated loads) adopted for all areas of the Facilities; ii. Specification of construction and materials to be utilised in the hard external works e.g. roads, pavements etc.; iii. Details of their proposals for co-ordinating structure with space requirements and distribution of services taking into account maintenance and replacement during the operational life of the buildings; iv. Details of opportunities for the future expansion of Clinical Services and Non-Clinical Services. The Bidders shall ensure that the physical arrangement of the Facilities allows for growth and change of clinical services in the future, as far as is practical for example partition moves and additional service runs both vertically and horizontally. The cost implications of structural solutions to future proof the Facility by creating 'soft spots' (refer also to C5 above) shall also be 	

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				<p>included; and</p> <p>v. A detailed description of the design of the drainage system, taking into account matters such as the design itself, allowable discharge into the public sewers, the need or otherwise for surface water attenuation and the incorporation of drainage to existing buildings within the site drainage proposals.</p>	
C18. Acceptable services, utilities and infrastructure proposals	Pass / Fail	n/a	C18.1	Bidders must submit proposals setting out their mains service infrastructure strategy for the site, and defines principal service routes external to the buildings. This shall also demonstrate adequacies of capacities including details of these provided by Utility providers.	
C19. Acceptable approach to achieving required BREEAM rating	Pass / Fail	n/a	C19.1	<p>Bidders must submit proposals setting out their approach to achieving the required BREEAM rating. This must be provided as set out in C19.1 and C19.2 below.</p> <p>Bidders must submit a draft BREEAM assessment of their proposals with supporting commentary. Bidders shall demonstrate how they will achieve, as a minimum, a “Very Good” rating in line with the requirements for healthcare facilities as</p>	

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			C19.2	<p>set out in the BREEAM Scheme Document for New Construction (SD5073) 2011.</p> <p>Where assumptions with respect to certain elements within these assessments have to be made (i.e. such details that would ordinarily be developed during the Preferred Bidder or post Financial Close period) the basis for these assumptions, including substantiation, must be set out in the Bidders proposals.</p>	
C20. Acceptable post Preferred Bidder stage design development proposals and design programme	Pass / Fail	n/a	C20.1	<p>Bidders must submit proposals setting out their approach to design development and design programme. This must be provided as set out in C20.1 and C20.2 below.</p> <p>Bidders must submit proposals setting out their approach to be adopted to manage the design process (taking account of the design review procedures to be implemented). For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Further development of 1:500, 1:200 and 1:50 design drawings and other design details and how these will be developed in conjunction with the Board's project team, user groups, specialist advisers and other project 	To Pass, Bidders will be required to demonstrate clear proposals setting out a robust process, supported with a logical and deliverable programme, for the development process both up to, and beyond, Financial Close.

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			C20.2	<p>stakeholders, to achieve sign off to the proposals;</p> <ul style="list-style-type: none"> ii. Further development of the specifications and engineering related drawings and how these will be developed in conjunction with the Board's project team to achieve sign off of the proposals; iii. The anticipated level of involvement that the Board will have in the design development process, and the number of main design iterations anticipated; iv. Outline proposals for change control, confirmation of technical queries and other design related management tools; and v. Further development of interior design proposals to the satisfaction of the Board incorporating patient groups. <p>Bidders must submit a design programme to Financial Close and thereafter to design completion. This shall:</p> <ul style="list-style-type: none"> i. Show the proposed programme for the development of the design drawings and specifications (supplemented by samples and models as appropriate) and other technical schedules to the NPD Project Agreement; ii. Clearly indicate the expected number of design drawings and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				specifications; iii. Clearly define periods allowed for the Board's consideration of proposals; and iv. Demonstrate how and when sign off of the Board's Construction Requirements will be achieved in this period by the Preferred Bidder, and how this sign off relates to development and sign off of Project Co Proposals.	
C21. Compliance with Board's Construction Requirements	Pass / Fail	n/a	C21.1	Bidders must confirm their compliance with the Board's Construction Requirements. If as their design has been developed there are specific areas of the Board's Construction Requirements that Bidders would seek to change, these shall be scheduled and provided in support of the statement. The Board shall not be required to accept any proposed amendments.	
C22. Acceptable design life proposals	Pass / Fail	n/a	C22.1	Bidders must submit a schedule of design life proposals against the elements listed in section 5.1 (Schedule of Life Expectancies) of the Board's Construction Requirements.	
C23. Acceptable construction	Pass / Fail	n/a		Bidders must submit proposals setting out their construction programme and approach	To Pass, Bidders will be required to demonstrate a

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programme approach and to monitoring			<p>C23.1</p> <p>C23.2</p>	<p>to monitoring. This must be provided as set out in C23.1 and C23.2 below.</p> <p>Bidders must submit a high level programme, for the Works, comprising a network and linked bar chart programme covering all of the main and key elements of design, construction, testing, commissioning and completion and covering the period from Financial Close to Post Completion Commissioning.</p> <p>The programme must include as a minimum, the following information:</p> <ul style="list-style-type: none"> i. Sequencing of activities showing logic links, restraints and constraints; ii. Key activity durations; iii. Critical paths, including the identification of critical dependencies of activities and float; iv. Key and other target milestones; v. Planning approval, and other statutory consents; and vi. Proposed Relevant Service Transfer Dates. <p>Bidders shall submit proposals setting out how they shall manage and monitor the programme, including their approach to minimising the effects of delays and unforeseen circumstances.</p>	<p>logical and deliverable construction programme supported with a robust process for programme management.</p>

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C24. Clarity, robustness and quality of construction methodology	Scored	1.85	C24.1 C24.2 C24.3 C24.4	<p>Bidders must submit their construction methodology proposals. This must be provided as set out in C24.1 - C24.10 below.</p> <p>Bidders must submit proposals setting out in sufficient detail how they will deliver the development including their construction strategy, proposals and method statements. Bidders shall address in detail how the Works phase of the project will be managed including a methodology covering day to day management.</p> <p>Bidders must submit proposals setting out in sufficient detail how they shall mitigate the egress of water, dust, debris or any microbiological contamination out of the Site and into adjacent buildings i.e. how they will ensure they are a considerate contractor.</p> <p>Bidders must submit proposals setting out in sufficient detail how they will follow the provisions of Sections 60 and 61 of the Control of Pollution Act 1974, with reference to the control of noise due to any demolition or construction works in particular for works adjacent to an occupied property i.e. RIE and other occupiers of the wider estate.</p> <p>Bidders must submit proposals setting out in</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>sufficient detail how they will not only adhere to legal obligations but how they will ensure that “at all times the requirements and reasonable wishes and safety of the immediate neighbours to the Campus Site (including the Royal Infirmary of Edinburgh, Little France site) are respected” with particular consideration to key locations such as A&E and operating theatres.</p>	
			C24.5	<p>Bidders must submit proposals to set out in sufficient detail how they will ensure that they will integrate with and not inhibit the RIE pedestrian, vehicular, cycle, service vehicular and emergency vehicular movements, access routes and parking during construction and during operation of the Facilities. The submission must set out how they will ensure site safety at all times.</p>	
			C24.6	<p>Bidders must submit proposals, in sufficient detail, setting out how continuity of utility supplies and operational continuity of the immediate neighbours is to be maintained at all times. The Bidders submission shall also provide outage protocols in case these safeguards fail to protect the neighbours</p>	
			C24.7	<p>Bidders must submit proposals, in sufficient detail, setting out a detailed methodology demonstrating their proposals for the safe and compliant disposal of surplus excavated</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C24.8	material, all building spoil, demolition waste and rubbish. Bidders must submit proposals of their site office set up. This shall describe in particular how they are to be serviced and how safe access and egress will be provided.	
			C24.9	Bidders must submit proposals setting out in sufficient detail their approach to storage of materials. This shall describe in particular how materials will be delivered to, stored, and then transferred to the Site for incorporation in the Works.	
			C24.10	Bidders must submit proposals setting out in sufficient detail their construction phasing and access methodology which shall demonstrate how the proposals have been developed to address the Site constraints and interfaces with the wider site. Bidders must include their proposals for creation of a temporary construction access over the Yellow Area (as shown on Plan 2). Bidders must submit details of location of access and methodology for its construction. This will form part of the management procedures for the Works as regards satisfying town planning matters as detailed in the ITPD. Further details are set out in paragraph 1 (Construction Access over	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				Yellow Area) of Section 1 of Part 1 of Appendix A of the Board's Construction Requirements.	
C25. Acceptable approach to commissioning and handover	Pass / Fail	n/a	C25.1	<p>Bidders must submit proposals setting out a commissioning programme, supported by a methodology demonstrating how this will be developed and agreed in conjunction with the Board. For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) how they will provide the following:</p> <ul style="list-style-type: none"> i. Management of interfaces with the Board and the Board's contractors and other parties e.g. Consort for the Link Building and obtaining such other parties consents\approvals as required; ii. How they will carry out commissioning activities both before and after the Actual Completion Date; iii. Access for the Board during the Works including access for equipment installation (Groups 2A, 2B and 3) and the Board's Contractors; iv. A "zero defects" culture in order to deliver the scheme with few or no snagging items at the Actual Completion Date. Bidders shall outline a contingency plan for 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>investigating and rectifying any defects which could still occur despite all best endeavours of the Project Co. In addition proposals should be submitted outlining how snagging items will be closed out after the Actual Completion Date;</p> <p>v. Facilities handover including how they shall interface and assist the Board with their decanting, familiarisation and training for the Facilities and proposals on how they shall work closely with the Board in developing an occupation plan;</p> <p>vi. Facilities which are “Clinically Clean” to the satisfaction of the Board’s Head of Service Infection Control. Bidders shall demonstrate within their response:</p> <ul style="list-style-type: none"> ▪ How they propose to interface with the Board’s Head of Service Infection Control to agree the process and standards required to achieve the appropriate level of clinical cleanliness for each location within the Facilities; ▪ How this will be managed in terms of the sign-off of the Facility and handover process; ▪ How this will conform with HAI Scribe; and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> ▪ Details of any specialist contractors that may be used as part of this process. 	
C26. Acceptable approach to quality and environmental management systems	Pass / Fail	n/a	C26.1	<p>Bidders must submit proposals setting out their approach to construction quality and environmental management systems. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following:</p> <ol style="list-style-type: none"> i. Confirmation that they will complete the Works in accordance with the requirements of BS EN ISO 9001 and 14001 or any equivalent standard; ii. Details of proposed quality assurance and environmental management systems (i.e. a system synopsis); iii. Details of their approach to developing the quality and environmental management systems, including key dates; iv. Where individual quality and environmental management systems of the designers, contractor, service provider and Project Co are to be used, a statement regarding how these separate systems will be integrated to form a coherent overall quality management system. For the avoidance of doubt, the Board requires Project Co (in addition to their 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>sub-contractors) to adopt and implement a compliant system;</p> <p>v. Details of their approach for monitoring quality during construction (this may be by reference to a similar system implemented on a similar scheme); i.e. compliance with current revisions of BS 8000: Series "Workmanship on Building Sites, BS 5606:1990 "Guide to Accuracy in Building". and other activities based on Good Industry Practice current at the time, as a minimum;</p> <p>vi. Details of their approach for auditing the quality and environmental management systems. This shall include details of the independent, internal and external audits of Project Co and its sub-contractors; and</p> <p>vii. A description of how the proposed systems will integrate with their strategies for risk mitigation.</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C27. Acceptable approach to health and safety management	Pass / Fail	n/a	C27.1	<p>Bidders must submit proposals setting out their health and safety management system. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Confirmation that they will adopt and implement an accredited health and safety management system complying with the requirements of OHAS ISO 18001. For the avoidance of doubt the Board requires that Project-Co adopt and implement a compliant system; ii. Details of all proposed designers, sub-contractors, and suppliers confirming that they operate and accredited health and safety management system complying with OHAS 18001 standards covering all aspects of the project as applicable. Copies of current certificates from an accredited third-party assessment body showing that systems are compliant should be provided; iii. Details of the approach for auditing designers, contractors, sub-contractors and suppliers of their health and safety management systems. This should include details 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>of internal, external and independent audits of Project-Co;</p> <ul style="list-style-type: none"> iv. Proposals for managing occupational health that will be implemented; v. Key dates for development of the system; vi. Safety in design and how Bidders have removed risks through design innovations; vii. Potential constraints on their Works activities when considering the health and safety of their immediate neighbours and other members of the public that may be affected by the Works. This shall include construction traffic management plan within the Campus at Little France and restrictions on the movement of water, dust, vibration, noise and micro-organisms; viii. How any risks to health and safety will be managed and mitigated throughout the Works; ix. How they plan to deal with the potential occurrence of below ground services crossing the Site, in addition to the removal of other below ground obstructions that may still be present from previous demolition works; x. Methodology for the use of 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				overhead cranes; xi. The removal of waste material; xii. Compliance with HAI Scribe; xiii. Storage, transportation and handling of gas cylinders (for construction use); and xiv. How their proposals facilitate the control and management of an outbreak and spread of infectious diseases in accordance with HTM 2025 and SHFN 30.	
C28. Acceptable approach to compliance with CDM regulations	Pass / Fail	n/a	C28.1	Bidders must submit proposals setting out their approach to achieving compliance with the CDM regulations. This must be provided as set out in C28.1 and C28.2 below. Bidders must submit proposals setting out how they will comply with the requirements of the Construction (Design and Management) Regulations 2007. Particular reference shall be made to Project Co's role as Client, in addition to proposals to cover discharging the duties of CDM Coordinator, Designer and Principal Contractor under the Regulations. Bidders shall also include the methodology to demonstrate how they will deal with potential commercial and other conflicts between their constituent parts with respect to compliance with the Regulations and shall provide the following:	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> i. A competency submission for the individual who will be leading the role of CDM co-ordinator, in accordance with CDM ACOP L144 “Managing Health and Safety in Construction”; ii. A Health and Safety document to identify how the requirements of Appendix 4 of the ACOP L144 “Managing Health and Safety in Construction” will be applied on the project; iii. The format of the Pre- Construction Information relating to the project to address the requirements of Appendix 2 of the CDM ACOP L144 “Managing Health and Safety in Construction”; iv. The contents and structure of the Construction Phase Plan relating to the project to address the requirements of Appendix 3 of the CDM ACOP L144 “Managing Health and Safety in Construction”; v. Details of the induction process to address the requirements of section 184 and 185 of the CDM ACOP L144 “Managing Health and Safety in Construction”; vi. The format to be used for the Health and Safety File to address the requirements of section 263 of the 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C28.2	<p>CDM ACOP L144 “Managing Health and Safety in Construction”; and</p> <p>vii. Details of the process for managing health and safety in Design including hazard elimination and risk reduction, principles of prevention, provision of information and management of the Design process as required by the CDM ACOP L144 “Managing Health and Safety in Construction”.</p> <p>Bidders must submit proposals setting out how they have complied with the CDM duties during the Dialogue Period and provide a design risk assessment which is to be updated as the design is progressed.</p>	
C29. Robustness of technical costs	Pass / Fail	n/a	C29.1	Bidders must submit fully completed technical cost proformas contained in the ITPD. All information requested must be provided. Bidders’ completed proformas shall be provided in the same MS Excel format to allow direct comparison between bids.	To Pass, Bidders will be required to demonstrate that their technical costs are robust for the scope of works to be delivered.
C30. Acceptable list of summary assumptions, clarifications and derogations	Not Scored	n/a	C30.1	Bidders must submit a consolidated schedule of all assumptions, clarifications and qualifications made in respect of their ITPD Bids. Whilst it is encouraged that such references are also made in the	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				appropriate locations throughout Bidders' submissions, it is a mandatory requirement of the ITPD Submission that all such matters are also summarised in a single location.	
C31. Acceptable Interface Proposals	Pass / Fail	n/a	C31.1	Bidders must submit proposals setting out their approach to meeting the interface issues as described in Appendix A of the Board's Construction Requirements (subject to the conditions set out in Clause 9 (Nature of Land Interests) including without limitation Schedule Part 5 (Land Matters) of the NPD Project Agreement).	

Appendix AP1.1 – Design Deliverables

Appendix AP1.1	<p>Design Deliverables</p> <p>Bidders shall provide the following design submission requirements (as given in the Volume 1 of the ITPD):</p> <p>1. Project Overview</p> <p>1.1 - Bid Drawings Schedule</p> <p>2. Approach to Design & Construction - Architectural & Landscaping Design</p> <p>2.1 - Architectural Drawings Schedule</p> <p>2.2 - Outline Architectural Specification supporting the design concept and setting out the proposed materials, finishes and components to be used. Outline Specification shall be included for all components as detailed in the BCIS Elemental Analysis</p> <p>2.3 - Development Control Plan</p> <p>2.4 - 1:1000 Site Plans</p> <p>2.5 - 1:500 Location/Site Plan</p> <p>2.6 - 1:200 Site Layouts</p> <p>2.7 - Landscaping Proposal Specifications</p> <p>2.8 - Landscaping Proposal Drawings</p> <p>2.9 - 1:200 Architectural general arrangement floor plans, sections and elevations</p> <p>2.10 - 1:500 Architectural departmental adjacencies</p> <p>2.11 - 1:100 Architectural elevations including building elevation/facade showing appropriately rendered:-fenestration, exterior materials, louvers and cast shadows</p> <p>2.12 - 1:100 Architectural sections denoting floor to ceiling heights, suspended ceilings, raised access floors and floor levels</p> <p>2.13 - 1:100 Departmental and 1:50 room layouts</p> <p>2.14 – 1:200 Architectural drawings detailing (i) movement strategy, (ii) user flow diagrams at all principal circulation locations, (iii) movement interfaces and (iv) analysis of key nodal points.</p> <p>2.15 - 1:50 Architectural sections through Roof and Plant Room</p>
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- 2.16 - 1:100 Architectural proposals relative to the clinical requirements and infection control.
- 2.17 - 1:200 Architectural drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.
- 2.18 - DDA Proposals including drawings, analysis and proposals.
- 2.19 - AEDET assessment drawings
- 2.20 - 1:50 Architectural design response detailing interfaces with existing RIE
- 2.21 - 1:100 Architectural drawings and visualisations for the Pod proposals
- 2.22 – 1:50 Architectural elevations and visualisations showing the Entrances

3. Approach to Design & Construction - Interior Design Proposals

- 3.1 - Quality, appropriateness and proposals for RHSC interior design supported by architectural drawings of how the layout and the design proposed addresses:
 - 3.1.1 - Signage
 - 3.1.2 - Patient, communal and public areas
 - 3.1.3 - Appropriateness of facilities for users
- 3.2 - Loaded 1:50 room layout drawings for the RHSC indicating interior design proposals and demonstrating the coordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.
- 3.3 - Quality, appropriateness and proposals for DCN interior design supported by architectural drawings of how the layout and the design proposed addresses:
 - 3.3.1 - Signage
 - 3.3.2 - Patient, communal and public areas
 - 3.3.3 - Appropriateness of facilities for users
- 3.4 - Loaded 1:50 room layout drawings for the DCN indicating interior design proposals and demonstrating the coordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.
- 3.5 - Internal Perspectives at eye level that demonstrate form and setting of the key internal architectural areas,

distinguishing or innovative features which demonstrate the design quality of the proposals

3.6 – Drawings and visualisations to demonstrate the integration of Artwork into the interior design concept.

3.7 – Sample boards to demonstrate the proposed interior finishes, colour and textures. Boards to include RHSC and DCN wards, the Pod, Atrium and CAMHS.

4. Approach to Design & Construction - Civil & Structural Proposals

4.1 - Structural Drawings Schedule

4.2 - Civil Engineering Drawings Schedule

4.3 - Outline Structural Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components as in accordance with the NBS Specification

4.4 - 1:500 Site plan layout indicating all manholes, gully positions for all site drainage

4.5 - 1:500 Site plan layout indicating all positions for surface water drainage

4.6 - 1:500 Site plan layout indicating all positions for foul water drainage

4.7 - 1:500 Site plan layout indicating all positions for water mains

4.8 - 1:500 Site plan layout indicating all positions for roads, footpaths and finished levels

4.9 - 1:100 structural general arrangement foundation plans

4.10 - 1:100 structural general arrangement plans including floor and roof plans indicating all column and beam locations and sizes and all structural elements

4.11 - 1:100 structural sections through the building showing structural elements and service zones

4.12 - Confirmation of Geotechnical surveys, reports, studies undertaken in addition to the Geotechnical survey in the data room

4.13 - Confirmation of other site surveys, reports, studies undertaken in addition to the information already located in the data room

4.14 - Confirmation of any vibration monitoring / prevention proposals.

4.15 - 1:100 drawings for Helipad

4.16 - Outline Structural Specification supporting the Helipad design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification

5. Mechanical & Electrical Services

- 5.1 - Building services (mechanical) drawings schedule
- 5.2 - Building services (electrical) drawings schedule
- 5.3 - Outline Building services (mechanical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification
- 5.4 - Outline Building services (electrical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification
- 5.5 - 1:500 site plan layout indicating all mechanical services , utilities supplies, natural gas mains, water supply and fire mains
- 5.6 - 1:500 site plan layout indicating all electrical utilities supplies, electrical mains, data and communications ducts
- 5.7 - 1:200 internal services concept schematic and zoning plans for both heating and ventilation; indicating of heating and ventilation in each room
- 5.8 - 1:100 mechanical general arrangement floor plans showing extent of services, distribution routes, mechanical plant acoustic treatment, plant areas, etc
- 5.9 - Mechanical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed :
 - 5.9.1 - Plant strategy
 - 5.9.2 - Distribution strategy
 - 5.9.3 - Incoming gas and water services (including metering and sub-metering)
 - 5.9.4 - Environmental design considerations
 - 5.9.5 - Heat sources
 - 5.9.6 - Natural Ventilation strategy
 - 5.9.7 - Mechanical Ventilation strategy
 - 5.9.8 - Mechanical cooling
 - 5.9.9 - Mechanical air conditioning

	<ul style="list-style-type: none"> 5.9.10 - Specialist ventilation strategy 5.9.11 - Domestic hot and cold water system 5.9.12 - Space Heating System 5.9.13 - Space Cooling System 5.9.14 - Building Energy and Management System 5.9.15 - Dry Risers 5.9.16 - Soil and Waste System (above and underground) 5.9.17 - Rainwater pipework and distribution 5.9.18 - Specialist drainage 5.9.19 - Sanitary ware and appliances 5.9.20 - Dry Risers 5.9.21 - Natural Gas Installations including Laboratory Gases 5.9.22 - Medical Gas Installations 5.9.23 – Pneumatic Tube System 5.9.24 - Mechanical Commissioning Strategy 5.10 - 1:100 electrical general arrangement floor plans showing extent of services, distribution routes, plant areas, etc 5.11 - Electrical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed: <ul style="list-style-type: none"> 5.11.1 - Incoming electrical services 5.11.2 – Metering and Sub-metering 5.11.3 - Mains distribution including standby generation facilities 5.11.4 - Earthing, Bonding and Lightning protection 5.11.5 - Containment systems 5.11.6 - Small power installation 5.11.7 – Lighting and Emergency Lighting
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- 5.11.8 - Specialist lighting
- 5.11.9 - Lighting control systems
- 5.11.10 - Uninterruptible Power Supplies
- 5.11.11 - Telecommunications and I.T.
- 5.11.12 - Nurse Call System
- 5.11.13 - Fire Detection and Suppression System
- 5.11.14 - Staff Attack / Induction Loop
- 5.11.15 - Security system
- 5.11.16 - Access Control system
- 5.11.17 - CCTV system
- 5.11.18 - Public address system
- 5.11.19 - Digital TV and Radio Installation
- 5.11.20 – Patient / Equipment Tagging
- 5.11.21 – Induction Loop
- 5.11.22 – Bedhead Services
- 5.11.23 - Electrical Commissioning Strategy

5.12 - 1:50 mechanical and electrical services sections to illustrate use of ceilings, natural daylight, ventilation strategies, cooling and heating strategies, lighting strategy, acoustic strategy, specialist installations strategy, services concept

6. Lift Provisions

6.1 - Lift and Escalator Drawings Schedule

6.2 - Outline Building Services (lift and escalator provision) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification. Traffic flow analysis to be included.

7. Environmental Services and Energy Management Strategy

7.1 - Natural Ventilation drawings and proposals

8. Fire Strategy

8.1 - 1:100 Fire Strategy drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.

8.2 - Outline Fire Strategy Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification

9. Security Strategy

9.1- 1:100 Security drawings in support of security strategy and how the security proposals support the design concept

9.2 - Outline Security Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification

10. Acoustic Strategy

10.1 - Outline Acoustic Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification

11. Adaptability, Flexibility and Expandability Strategy

11.1 - Architectural adaptability drawings in support of the overall adaptability strategy.

11.2 - Strategy and drawings showing how the design of the new RHSC and DCN demonstrates innovation, flexibility, consideration of whole life design and is capable of absorbing reasonable change in the future without excessive public, patient or clinical disruption.

AP1.2	<p>Specifications</p> <p>Bidders shall provide specific details on their proposed suite of specifications for the Works. These details shall include, but not be limited to the following:</p> <ul style="list-style-type: none">i. The industry recognised specifications proposed, with specific commentary on the extent of application of those to each main discipline (civil / structural, M&E, architectural etc);ii. Inclusion of either Project specific specifications for each main discipline, or example specifications used on other projects that are representative of the level of detail and clearly demonstrate the proposed level of quality that will apply to this scheme: andiii. A statement confirming that all such specifications (including fully completed framework specifications) will be fully drafted by the Preferred Bidder prior to Financial Close. <p>For the avoidance of doubt, the Board is expecting Bidders to adopt both general, and where required, specific specifications to cover all components, materials, workmanship etc. For example the NBS framework could be utilised for mainstream building elements, however may need to be supplemented by specific standards and specifications relevant to particular Bidder proposals (e.g. piling, steelwork erection, infrastructure works).</p>
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Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
D. Approach to Facilities Management					
D1. Clarity, robustness and quality of approach to management and administration of the Services and Contract	Scored	2.50	D1.1	<p>Bidders must submit proposals setting out their proposed approach to managing and administering both the Services and the NPD Project Agreement itself. The Bidder is also required to provide a detailed proposal for the management, liaison and interfacing with the Board and the other Board service providers, these being Authority Parties.</p> <p>The importance to the Board of a holistic approach to the delivery of Services under the NPD Project Agreement cannot be overstated. The success of this will be dependent upon the quality of the general management of the Project.</p> <p>Bidders must submit the following:</p> <ol style="list-style-type: none"> i. Full Method Statements for the management and administration of the Project Agreement and Services contained therein; ii. Location of the members of Project Co's administration team (i.e. on or off site); iii. Details of Bidder's proposed managerial structure, indicating the roles and responsibilities of each manager, supervisor and team member; iv. Details of how material changes to the management structure of Project Co will be 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>communicated to the Board;</p> <p>v. Details of how changes to working practices and / or Service delivery timings will be communicated to the Board; and</p> <p>vi. Details of how it is proposed to electronically manage Services management and administration to improve delivery.</p>	
D2. Acceptable approach to integration with Board policies and operation	Pass / Fail	n/a	D2.1	<p>Bidders must submit proposals setting out how they will comply, integrate and align their methodologies with the Board's policies, operation and procedures for the delivery of Services to the Facilities. This must include the following:</p> <p>i. Details of how it will ensure that the Services are delivered in accordance with the requirements of the Health planning Standards/NHS Requirements as detailed within paragraph 2.3 of Volume 3 of the ITPD.</p>	
D3. Acceptable approach to ensuring quality management	Pass / Fail	n/a	D3.1	<p>Bidders must submit proposals setting out their Method Statements for quality management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <p>i. Description of any quality management systems or policies the Bidder has for the Services or would put in place for the Services;</p> <p>ii. Interface with the Board's Quality</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>Assurance representatives</p> <ul style="list-style-type: none"> iii. Process to ensure that Project Co's advisers are continually aware of any relevant legislative changes and procedures for communicating these changes to the Board as appropriate; iv. Proposals for carrying out audits, including the provision of their proposed audit programme for the Services; and v. Details of the Bidder's proposals for the escalation of activities following a major incident including interface with the Board. 	
D4. Acceptable approach to ensuring environmental management	Pass / Fail	n/a	D4.1	<p>Bidders must submit proposals setting out their Method Statements for environmental management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Interface with the client's environment representatives; ii. Process to ensure that Project Co's advisers are continually aware of any relevant legislative changes and procedures for communicating these changes to the Board as appropriate; iii. Details of their approach to ISO 14001 and shall describe any relevant experience of implementing such systems for other local authority or NHS clients of the Bidder; iv. Bidder's environmental policy statement, and shall state explicitly whether they have, or 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>are working towards developing an environmental strategy;</p> <ul style="list-style-type: none"> v. Bidder's environmental management system, for their own organisation and/or for this project; vi. Structure of the environmental management system; vii. Details of the Bidder's approach and commitment to use of ethical and sustainable materials; viii. Proposals for carrying out audits, including the provision of an indicative audit programme for the Services; and ix. Details of the Bidder's proposals for the escalation of activities following a major incident, including interface with the Board. 	
D5. Acceptable approach to ensuring health and safety management	Pass / Fail	n/a	D5.1	<p>Bidders must submit proposals setting out their Method Statements for health and safety management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Procedure for disseminating hazard and safety warnings; ii. Methodology for the development and maintenance of the health and safety system relevant to the Services; iii. Interface with the Board's health and safety representatives; iv. Process for maintaining effective overall control of all site activities and the 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>coordination of and liaison with all staff such that there are suitable integrated arrangements to allow compliance with the Health and Safety at Work Act 1974;</p> <p>v. Process to ensure that Project Co's advisers are continually aware of any relevant legislative changes and procedures for communicating these changes to the Board as appropriate;</p> <p>vi. Process to ensure constant access to health and safety professionals for both its own staff and the Board's nominated representatives;</p> <p>vii. Develop bespoke risk assessments recognising the services being delivered at the RIE and University on the wider Campus.</p> <p>viii. A copy of the Bidder's Health and Safety policy and a description of their approach to ISO 9001 and ISO 18001 or similar systems;</p> <p>ix. Proposals for carrying out audits, including the provision of an indicative audit programme for the Services; and</p> <p>x. Details of their proposals for the escalation of activities following a major incident including interface with the Board.</p>	
D6. Acceptable approach to interfacing with the Board for undertaking	Pass / Fail	n/a	D6.1	<p>Bidders must submit proposals setting out their approach to interfacing with the Board for undertaking works outside of access times. This must include the following:</p> <p>i. How they will ensure that any Works and</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
works outside of access times				<p>Services proposed to be undertaken outside agreed Access Times are agreed with the Board's Representative prior to commencement; and</p> <p>ii. How Works and Services will be managed and carried out in accordance with Permit to Work System.</p>	
D7. Clarity, robustness and quality of approach to partnership and resources including liaison, resources and supply chain management	Scored	2.50	<p>D7.1</p> <p>D7.2</p> <p>D7.3</p>	<p>Bidders must submit proposals setting out their approach to partnership and resources including liaison, resources and supply chain management. This must be provided as set out in D7.1 – D7.3 below.</p> <p>Bidders must submit proposals setting out their approach to communications with the Board or its representatives. This shall include their proposed appropriate interfaces, frequency, nature and structure of meetings and reporting.</p> <p>Bidders must submit proposals setting out:</p> <p>i. Details of storage, maintenance and disposal of plant, equipment, materials, consumables, packaging and chemicals used in the delivery of the Services;</p> <p>ii. Details of suitably qualified staff and availability to meet the requirements of this NPD Project Agreement.</p> <p>Bidders must submit proposals setting out:</p> <p>i. Details of how the supply chain will be managed;</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> ii. Proposed approach to delivery of Services through the supply chain; iii. Method of creating a successful integrated Services team. 	
D8. Acceptable approach to business continuity planning	Pass / Fail	n/a	D8.1	<p>Bidders must submit proposals setting out their approach to business continuity planning. This must include the following:</p> <ul style="list-style-type: none"> i. Details of its approach to business continuity planning including: <ul style="list-style-type: none"> a. Its approach to the creation and maintenance of its own business continuity plan and disaster recovery plans for the required Services; b. The proposed approach to supporting the Board's "Business Continuity; and c. Details of who within the management team will have overall responsibility for business continuity. ii. Details of its proposed training procedures for staff who will participate in emergency procedures; iii. Details of its proposals for testing Business Continuity Plans at the property; iv. Details of its proposals for the escalation of activities following a major incident (and\ or at the request of the Board); v. Details of its own, internal Business Continuity (e.g. those plans related to its own survival as a business following a major incident); and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				vi. Details of the existing arrangements for testing its own, internal Business Continuity Plans.	
D9. Acceptable fire safety policies and procedures	Pass / Fail	n/a	D9.1	Bidders must submit proposals setting out their approach to fire safety policies and procedure. This must include the following: <ul style="list-style-type: none"> i. Details of its fire safety policy ii. Details of fire safety and security systems and procedures to be implemented on site including their approach to the Helipad. iii. Approach to ensuring an integrated fire safety strategy for the overall site, including appropriate interfaces with the Board and other Third Party organisations i.e. Authority Parties. 	
D10. Clarity, robustness and quality of approach to performance and information management including; helpdesk, programme maintenance lifecycle, performance monitoring,	Scored	4.50	D10.1	Bidders must submit proposals setting out their approach to performance and information management, This must be provided as set out in D10.1 – D10.8 below. <p>Bidders must submit proposals setting out details of their proposed computer-aided facilities management (CAFM) system and how they will provide an asset management and reporting capability. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Call receipt and management and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
monitoring and records, regular reports and information requests, building services and statutory testing			D10.2	<p>escalation;</p> <ul style="list-style-type: none"> ii. Management information; iii. Reporting; iv. Incident management; v. Alarm management; vi. Maintenance scheduling; vii. Asset data maintenance; viii. Helpdesk interface protocol with the Board and/or third party's; ix. Proposed staffing and location of the helpdesk; x. Interface between the helpdesk and other aspects of the CAFM system; xi. Reporting procedures and frequency of reporting; and xii. Enabling the Board to gain access to the data held within the BMS in a format/ method agreeable to the Board. <p>Bidders must submit proposals setting out their approach to programme maintenance lifecycle. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. The information and delivery strategy which will be utilised in establishing a Programmed Maintenance planner; ii. Confirmation that the Bidder recognises that certain works will need to be undertaken out of normal working hours/ during the 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>weekends to minimise the impact on the Board's operations, and without additional cost to the Board;</p> <ul style="list-style-type: none"> iii. Method of establishing and updating their 5-year Maintenance Lifecycle plan; iv. Details on the provision of all specialist sub-contractors for programmed maintenance and lifecycle; v. Details of how it will ensure that the delivery of all Services will underpin the required hygienic/infection control standards for the facility, specifically compliance with HAI Scribe standards; vi. Details on staffing and management of the Service; vii. Details on how planned, reactive and statutory works are to be monitored for both quality and safe methods of work. This should include works that are undertaken by directly employed staff and any sub-contractors; viii. Details of proposals to assess staff roles and responsibilities, skill requirements, competency, training arrangements and review procedures; ix. Details on its approach to planned, reactive and statutory maintenance including prioritising business critical equipment and systems at all premises together with details on how any planned maintenance that is not achieved by the planned date is addressed; x. Sample of proposed Service Report to be used for this Contract; 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			D10.3	<p>xi. Details on interface with Board's cleaning service when carrying out Programmed Maintenance;</p> <p>xii. Schedule for cleaning of all internal and external panes of glazed areas of the Facilities envelope; and</p> <p>Schedule of planned external façade cleaning service.</p> <p>Bidders must submit proposals setting out details of their proposed delivery strategy and key activities. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following service areas:</p> <ul style="list-style-type: none"> i. Mechanical maintenance ii. Electrical maintenance iii. Plumbing iv. Lift maintenance v. Fire safety system/ equipment vi. Internal / external fabric of the Facilities vii. Periodic electrical testing and inspections viii. Lift inspections ix. Pressure vessel x. Pressure systems (written schemes) xi. Water systems risk assessments xii. Fire risk assessments xiii. Water sampling / testing 	
			D10.4	<p>Bidders must submit proposals setting out their approach to performance monitoring. This must include the following:</p> <ul style="list-style-type: none"> i. Description of how the performance of the 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			D10.5	<p>Service will be self-monitored;</p> <p>ii. Approach to customer feedback and complaints handling;</p> <p>iii. Sample customer feedback form.</p> <p>Bidders must submit proposals setting out their approach to monitoring and records. This must include the following:</p> <p>i. Details on how the Bidder will ensure all certificates, appropriate documentation and records in relation to the Project are stored in accordance with appropriate legislation and the Board's policies; and</p> <p>ii. Details on how the Bidder will ensure all records in relation to the Project are maintained accurately and kept up-to-date.</p>	
			D10.6	<p>Bidders must submit proposals setting out their approach to regular reporting and information request. This must include the following:</p> <p>i. Procedures for ensuring that the reports are appropriately tailored to the Boards requirements, including the completion period for such reports;</p> <p>ii. Details on how it will ensure that reports are accurate and produced in line with agreed timescales;</p> <p>iii. Details of the types of reports that they are currently producing for other clients.</p>	
			D10.7	<p>Bidders must submit proposals setting out their approach to building services. This must include</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			D10.8	<p>the following:</p> <ul style="list-style-type: none"> i. Approach to commissioning new Plant and Equipment; ii. Details on how hardware and software licenses will be kept up to date; iii. Details on how to ensure all Equipment/ Assets used in the delivery of the Services are maintained properly and safe to use. <p>Bidders must submit proposals setting out their approach to statutory testing.</p>	
D11. Acceptable approach to un-programmed maintenance	Pass / Fail	n/a	D11.1	<p>Bidders must submit proposals setting out their approach to Un-programmed Maintenance Works. This must include the following:</p> <ul style="list-style-type: none"> i. Meeting the relevant Rectification Period; and ii. Meeting the standards required. 	
D12. Clarity, robustness and quality of approach to service elements including; utilities management and grounds maintenance services	Scored	2.50	D12.1	<p>Bidders must submit proposals setting out their approach to service elements including utilities management and grounds maintenance. This must be provided as set out in D12.1 and D12.2 below.</p> <p>Bidders must submit a detailed methodology describing their approach to utilities management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Proposals to ensure an adequate continuous 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			D12.2	<p>supply of energy is available;</p> <ul style="list-style-type: none"> ii. Proposals for interface with the Board to ensure no interruptions in the supply of Utilities to the Facilities; iii. Proposals for procurement of Utilities for the Board which demonstrate value for money; iv. Maintenance approach to ensure all external Utility infrastructures within the Site is fully functional; v. Method of monitoring Utilities/carbon consumption and how usage will be analysed and used; vi. Sample Utility consumption report; vii. Proposals for improving energy/ carbon efficiency; and viii. Details on Utility energy profile audit. <p>Bidder must submit proposals setting out their approach to grounds maintenance. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Methodology for Grounds Maintenance Service and indicative programme for Planned Maintenance; ii. Approach to gritting and de-icing during adverse weather; iii. Approach to ensuring the Helipad is reasonably clear of ice and snow; iv. Interface with third parties in ensuring a holistic approach to the safe use of the Campus access and egress routes. 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
D13. Robustness of technical costs	Pass / Fail	n/a	D13.1	Bidders must submit fully completed technical cost proformas for the Services contained in the ITPD. All information requested must be provided. Bidders' completed proformas shall be provided in the same MS Excel format to allow direct comparison between bids.	To Pass, Bidders will be required to demonstrate that their technical costs are robust for the scope of works to be delivered.
D14. Acceptable list of summary assumptions, clarifications and derogations	Not Scored	n/a	D14.1	Bidders must submit a consolidated schedule of all assumptions, clarifications and qualifications made in respect of their ITPD Bids. Whilst it is encouraged that such references are also made in the appropriate locations throughout Bidders' submissions, it is a mandatory requirement of the ITPD Submission that all such matters are also summarised in a single location.	
D15. Acceptable approach to mobilisation of Facilities Management services	Pass / Fail	n/a	D15.1	<p>Bidders must submit proposals setting out their approach to mobilisation of facilities management services. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> <li>i. A draft mobilisation plan using MS Project showing the activities to be performed, interdependencies between activities, the allocation of resources and where Board input is required; <li>ii. Details of their proposed structuring and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>resourcing for mobilisation. This should include the names and CVs of the proposed mobilisation management team, indicating relevant experience;</p> <p>iii. Details of proposed communications with the Board during mobilisation. This shall propose appropriate interfaces and the frequency, nature and structure of meetings and reporting;</p> <p>iv. Approach to recruitment of staff, including as appropriate relevant security clearances;</p> <p>v. Detailed proposals for the establishment of the Helpdesk service that clearly demonstrates an understanding of the operational and technical interfaces with Board Services;</p> <p>vi. Proposals for installation and population of the CAFM system describing (as applicable) how installation shall be effected and how data will be migrated and tested; and</p> <p>vii. Method of vetting staff and acquiring the necessary and appropriate security clearances.</p>	

Annex 1 to Appendix A – Technical Cost Proforma

Design and Construction and FM Technical Cost Proforma.

Annex 2 to Appendix A – Design Deliverables Proforma**Re-provision of RHSC and DCN at Little France****Schedule of Design Deliverables for Technical Meetings during the Dialogue Period**

Instructions to Bidders:

1. The design deliverables listed below are those scheduled in Section C (Appendix AP1.1 & AP1.2) of the Submission Requirements detailed in Appendix A (ii) of Volume 1 of the ITPD.
2. Bidders shall complete the table below to indicate what drawings they will submit at each Dialogue Meeting in support of the Submission Requirements. This is in addition to each disciplines drawing schedule.
3. All drawings must be submitted during the Dialogue Period prior to submission of the Draft Final Tender.
4. The Final Tender shall include the design deliverables developed to RIBA Plan of Work Stage D.

Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
AP1.1									
	1	Project Overview							
	1.1	Bid Drawings Schedule						✓	✓
	2	Approach to Design & Construction - Architectural and Landscaping Design							
	2.1	Architectural Drawings Schedule						✓	✓
	2.2	Outline Architectural Specification supporting the design concept and setting out the proposed materials, finishes and components to be used. Outline Specification shall be included for all components as detailed in the NBS Specification						✓	✓
	2.3	Development Control Plan						✓	✓
	2.4	1:1000 Site Plans						✓	✓
	2.5	1:500 Location/Site Plan						✓	✓
	2.6	1:200 Site Layouts						✓	✓
	2.7	Landscaping Proposal Specifications						✓	✓
	2.8	Landscaping Proposal Drawings						✓	✓
	2.9	1:200 architectural general arrangement floor plans, sections and elevations						✓	✓
	2.10	1:500 architectural departmental adjacencies						✓	✓
	2.11	1:100 architectural elevations including building elevation/facade showing appropriately rendered:- fenestration, exterior materials, louvres and cast shadows						✓	✓
	2.12	1:100 architectural sections denoting floor to ceiling heights, suspended ceilings, raised access floors, floor levels						✓	✓
	2.13	1:100 departmental layouts and 1:50 room layouts						✓	✓
	2.14	1:200 Architectural drawings detailing (i) movement strategy, (ii) user flow diagrams at all principal circulation locations, (iii) movement interfaces and (iv) analysis of key nodal points.						✓	✓
	2.15	1:50 architectural sections through Roof and Plant Room						✓	✓
	2.16	1:100 architectural proposals relative to the clinical requirements and infection control.						✓	✓
	2.17	1:200 architectural drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.						✓	✓
	2.18	DDA Proposals including drawings, analysis and proposals.						✓	✓
	2.19	AEDET assessment drawings						✓	✓
	2.20	1:50 Architectural design response detailing interfaces with existing RIE						✓	✓

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Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
	2.21	1:100 Architectural drawings and visualisations for the Pod proposals						✓	✓
	2.22	1:50 Architectural elevations and visualisations showing the Entrances						✓	✓
	3	Approach to Design & Construction - Interior Design Proposals							
	3.1	Quality, appropriateness and proposals for RHSC interior design supported by architectural drawings of how the layout and the design proposed addresses:							
	3.1.1	- Signage						✓	✓
	3.1.2	- Patient, communal and public areas						✓	✓
	3.1.3	- Appropriateness of facilities for users						✓	✓
		Loaded 1:50 room layout drawings indicating interior design proposals and demonstrating the co-ordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.						✓	✓
	3.2	Quality, appropriateness and proposals for DCN interior design supported by architectural drawings of how the layout and the design proposed addresses:							
	3.2.1	- Signage						✓	✓
	3.2.2	- Patient, communal and public areas						✓	✓
	3.2.3	- Appropriateness of facilities for users						✓	✓
	3.3	Loaded 1:50 room layout drawings indicating interior design proposals and demonstrating the co-ordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.						✓	✓
	3.4	Internal Perspectives at eye level that demonstrate form and setting of the key internal architectural areas, distinguishing or innovative features which demonstrate the design quality of the proposals.						✓	✓
		Drawings and visualisations to demonstrate the integration of Artwork into the interior design concept						✓	✓
		Sample boards to demonstrate the proposed interior finishes, colours and textures. Boards to include RHSC and DCN Wards, the Pod, Atrium and CAMHS.						✓	✓
	4	Approach to Design & Construction - Civil & Structural Proposals							
	4.1	Structural Drawings Schedule						✓	✓
	4.2	Civil Engineering Drawings Schedule						✓	✓
	4.3	Outline Structural Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS specification						✓	✓

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Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
	4.4	1:500 Site plan layout indicating all manholes, gully positions for all site drainage						✓	✓
	4.5	1:500 Site plan layout indicating all positions for surface water drainage						✓	✓
	4.6	1:500 Site plan layout indicating all positions for foul water drainage						✓	✓
	4.7	1:500 Site plan layout indicating all positions for water mains						✓	✓
	4.8	1:500 Site plan layout indicating all positions for roads, footpaths and finished levels						✓	✓
	4.9	1:100 structural general arrangement foundation plans						✓	✓
	4.1	1:100 structural general arrangement plans including floor and roof plans indicating all column and beam locations and sizes and all structural elements						✓	✓
	4.11	1:100 structural sections through the building showing structural elements and service zones						✓	✓
	4.12	Confirmation of Geotechnical surveys, reports, studies undertaken [in addition to the Geotechnical survey in the data room						✓	✓
	4.13	Confirmation of other site surveys, reports, studies undertaken [in addition to the information already located in the data room						✓	✓
	4.14	Confirmation of any vibration monitoring / prevention proposals.						✓	✓
	4.15	1:100 drawings for the Helipad						✓	✓
	4.16	Outline Structural Specification supporting the Helipad design concept including proposed materials and components to be used. Outline specification shall be included for all components in accordance with the NBS specification.						✓	✓
	5	Mechanical & Electrical Services							
	5.1	Building services (mechanical) drawings schedule						✓	✓
	5.2	Building services (electrical) drawings schedule						✓	✓
	5.3	Outline Building services (mechanical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification						✓	✓
	5.4	Outline Building services (electrical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification						✓	✓
	5.5	1:500 site plan layout indicating all mechanical services , utilities supplies, natural gas mains, water supply and fire mains						✓	✓
	5.6	1:500 site plan layout indicating all electrical utilities supplies, electrical mains, data and comms ducts						✓	✓
	5.7	1:200 internal services concept schematic and zoning plans for both heating and ventilation; indicating of heating and ventilation in each room						✓	✓

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Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
	5.8	1:100 mechanical general arrangement floor plans showing extent of services, distribution routes, mechanical plant acoustic treatment, plant areas, etc.						✓	✓
	5.9	Mechanical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed :						✓	✓
	5.9.1	- Plant strategy						✓	✓
	5.9.2	- Distribution strategy						✓	✓
	5.9.3	- Incoming gas and water services (including metering and sub-metering)						✓	✓
	5.9.4	- Environmental design considerations						✓	✓
	5.9.5	- Heat sources						✓	✓
	5.9.6	- Natural Ventilation strategy						✓	✓
	5.9.7	- Mechanical Ventilation strategy						✓	✓
	5.9.8	- Mechanical cooling						✓	✓
	5.9.9	- Mechanical air conditioning						✓	✓
	5.9.10	- Specialist ventilation strategy						✓	✓
	5.9.11	- Domestic hot and cold water system						✓	✓
	5.9.12	- Space Heating System						✓	✓
	5.9.13	- Space Cooling System						✓	✓
	5.9.14	- Building Energy and Management System						✓	✓
	5.9.15	- Dry Risers						✓	✓
	5.9.16	- Soil and Waste System (above and underground)						✓	✓
	5.9.17	- Rainwater pipework and distribution						✓	✓
	5.9.18	- Specialist drainage						✓	✓
	5.9.19	- Sanitary ware and appliances						✓	✓
	5.9.20	- Dry Risers						✓	✓
	5.9.21	- Natural Gas Installations including laboratory gases						✓	✓
	5.9.22	- Medical Gas Installations						✓	✓
	5.9.23	- Pneumatic Tube System							
	5.9.24	- Mechanical Commissioning Strategy						✓	✓
	5.10	1:100 electrical general arrangement floor plans showing extent of services, distribution routes, plant areas, etc						✓	✓
	5.11	Electrical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed :						✓	✓
	5.11.1	- Incoming electrical services						✓	✓
	5.11.2	- Metering and Sub-metering						✓	✓
	5.11.3	- Mains distribution including standby generation facilities						✓	✓
	5.11.4	- Earthing, Bonding and Lightning protection						✓	✓
	5.11.5	- Containment systems						✓	✓
	5.11.6	- Small power installation						✓	✓
	5.11.7	- Lighting and Emergency Lighting						✓	✓
	5.11.8	- Specialist lighting						✓	✓

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Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
	5.11.9	- Lighting control systems						✓	✓
	5.11.10	- Uninterruptible Power Supplies						✓	✓
	5.11.11	- Telecommunications and I.T.						✓	✓
	5.11.12	- Nurse Call System						✓	✓
	5.11.13	- Fire Detection and Suppression System						✓	✓
	5.11.14	- Staff Attack / Induction Loop						✓	✓
	5.11.15	- Security system						✓	✓
	5.11.16	- Access Control system						✓	✓
	5.11.17	- CCTV system						✓	✓
	5.11.18	- Public address system						✓	✓
	5.11.19	- Digital TV and Radio Installation						✓	✓
	5.11.20	- Patient / Equipment Tagging						✓	✓
	5.11.21	- Induction Loop						✓	✓
	5.11.22	- Bedhead Services						✓	✓
	5.11.23	- Electrical Commissioning Strategy						✓	✓
	5.12	1:50 mechanical and electrical services sections to illustrate use of ceilings, natural daylight, ventilation strategies, cooling and heating strategies, lighting strategy, acoustic strategy, specialist installations strategy, services concept						✓	✓
	6	Lift Provisions							
	6.1	Lift and Escalator Drawings Schedule						✓	✓
	6.2	Outline Building services (lift and escalator provision) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification. Traffic flow analysis to be included.						✓	✓
	7	Environmental Services and Energy Management Strategy							
	7.1	Natural Ventilation drawings and proposals						✓	✓
	8	Fire Strategy							
	8.1	1:100 Fire Strategy drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code						✓	✓
	8.2	Outline Fire Strategy Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification						✓	✓
	9	Security Strategy							
	9.1	1:100 Security drawings in support of security strategy and how the security proposals support the design concept						✓	✓

Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
	9.2	Outline Security Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification						✓	✓
	10	Acoustic Strategy							
	10.1	Outline Acoustic Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification						✓	✓
	11	Adaptability, Flexibility and Expandability Strategy							
	11.1	Architectural adaptability drawings in support of the overall adaptability strategy						✓	✓
	11.2	Strategy and drawings showing how the design of the new RHSC and DCN demonstrates innovation, flexibility, consideration of whole life design and is capable of absorbing reasonable change in the future without excessive public, patient or clinical disruption						✓	✓
AP1.2		Specifications as described.						✓	✓

Appendix B (i) – Financial Agenda Topics and Submission Requirements

1. Dialogue Meeting 1: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation for Financial Meeting 1	<ul style="list-style-type: none"> • Funding strategy • Approach to surpluses/buffers • Risk capital 	A Submission covering the following topics: <ul style="list-style-type: none"> • intended funding strategy, addressing 11 and 12 in Financial Submission requirements below. • intended approach to surpluses/buffers, addressing 7 below; • approach to risk capital addressing 15 below.
Financial Meeting 1	<ul style="list-style-type: none"> • Funding strategy • Approach to surpluses/buffers • Risk capital 	Presentation of Submission described above.

2. Dialogue Meeting 2: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation for Financial Meeting 2	<ul style="list-style-type: none"> • Hedging • Payment Mechanism • Funder commitment and diligence • Meeting updates 	A Submission covering the following topics: <ul style="list-style-type: none"> • approach to hedging (18 below). • Bidder initial views of payment mechanism, addressing 21 below; • Level of funder commitment obtained to date, progress on due diligence and approach between now and close to these issues, addressing 17, 19 and 20 below; • Update on progress on areas discussed in Meeting 1, where relevant.
Financial Meeting 2	<ul style="list-style-type: none"> • Hedging • Payment mechanism • Funder commitment and diligence • Meeting 1 updates 	Presentation of Submission described above

3. Dialogue Meeting 3: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation Financial Meeting 3	<ul style="list-style-type: none"> • Financial Model • Tax and accounting • Bid validity 	A Submission covering the following topics: <ul style="list-style-type: none"> • The Financial Model, its structure and operation; • Key model inputs and assumptions; • Key model outputs, including presentation of initial

	<ul style="list-style-type: none"> • Databook • Sensitivities • Working capital • 	<p>Annual Service Payment to proposals and response to 1, 8 and 9 below:</p> <ul style="list-style-type: none"> • Update as required on other areas.
Financial Meeting 3	<ul style="list-style-type: none"> • Outstanding issues 	<p>Presentation of Submission described above. Discussion of outstanding issues.</p>

4. Dialogue Meeting 4: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation for Financial Meeting 4	<ul style="list-style-type: none"> • All other areas of Financial Submission 	A Submission covering all remaining areas of Financial Submission not covered in previous meetings, addressing 2, 3, 4, 5, 6, 9, 10, 14, 16 and 22 below.
Financial Meeting 4	<ul style="list-style-type: none"> • All other areas of Financial Submission 	Presentation of Submission described above.

5. Dialogue Meeting 5: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation for Financial Meeting 5	<ul style="list-style-type: none"> • Update on previous Submissions • Identification of areas requiring Dialogue prior to Draft Final Tender 	<p>A written update of any changes to previous Submissions.</p> <p>A schedule of areas requiring further Dialogue before Draft Final Tenders are invited.</p>
Financial Meeting 5	<ul style="list-style-type: none"> • Update on previous Submissions • Identification of areas requiring Dialogue prior to Draft Final Tender 	Presentation of Submission described above.

6. Dialogue Meeting 6: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation for Financial Meeting 6	<ul style="list-style-type: none"> • Update on previous Submissions • Identification of areas requiring Dialogue prior to 	<p>A written update of any changes to previous Submissions.</p> <p>A schedule of areas requiring further Dialogue before Final Tender is invited. The Board will provide a schedule to Bidders setting out its view of these areas</p>

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	Final Tender	which Bidders should annotate, expand and amend as required.
Financial Meeting 6	<ul style="list-style-type: none"> • Update on previous Submissions • Identification of areas requiring Dialogue prior to Draft Final Tender 	Presentation of Submission described above.

In order to ensure comparability in Submissions received, Bidders are requested to provide the financial information outlined below and to cross reference this to their Submission documentation. If Bidders believe that certain information is not applicable this should be clearly indicated within their responses.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
Financial Model Response				
1	The Bidder is required to submit a Financial Model which complies with the format requirements set out in section 3.9.2.	Required as part of Submission for Dialogue Meeting 3.	Required. Bidders should populate a Financial Model using standard terms as provided by the Board.	Required. Bidders should populate a Financial Model using actual terms provided by chosen funding providers.
2	The Bidder should provide confirmation that they are prepared to underwrite the tax and accounting adopted within the Financial Model	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
3	<p>Bidders should identify assumptions in relation to taxation including the following:</p> <ul style="list-style-type: none"> • Bidders must specify the corporation tax rates assumed, including any marginal relief (if appropriate) and confirm that consideration has been given to changes to the standard rate of corporation tax included in the Finance Act 2011 and announcements in the 2012 Autumn Statement; • Bidders should specify the assumptions made in respect of the commencement and cessation of trade for tax purposes, including any tax relief assumed for pre-trading interest costs. • Bidders should specify the assumptions made in respect of deductibility or non-deductibility of revenue costs, including in respect of construction costs, transaction costs, such as bid costs, development costs, planning costs 	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.

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Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<p>and legal fees;</p> <ul style="list-style-type: none"> • Bidders are required to specify the assumptions made in respect of the tax treatment of capital expenditure, (including in respect of lifecycle costs and any intangible fixed assets) including amounts of expenditure allocated to the different capital allowance pools, amounts assumed to be non-qualifying for capital allowances, the rate of writing down allowance claimed and details of any capital allowances disclaimed; • Bidders are required to categorise taxable profits by type, such as trading profits, interest, and other non-trading profits or losses. The categories of taxable income should be appropriately ring-fenced (e.g. when carrying forward losses); • Bidders must specify any assumptions made in respect of the tax treatment of capitalised interest; • The application of transfer pricing legislation in the UK can have implications for PPP/PFI projects, particularly around the tax treatment of subordinated debt and corporate debt interest charges. Bidders should consider the implications of this aspect of corporation tax on their proposals and confirm that any such implications have been considered. • Bidders should consider the potential implications of the worldwide debt cap in respect of the deductibility of interest costs and confirm that any such implications have been taken into account in pricing the project. • Bidders should provide a statement setting out their assumptions in respect of the tax treatment of any other income or capital contributions received; • Bidders should provide a statement setting out any tax assumptions made concerning timing of 			

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Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<p>payments of corporation tax.</p> <ul style="list-style-type: none"> • Bidders should state the tax treatment of any surpluses • Bidders must make their own decisions as to whether or not to seek advanced tax clearance from HMRC for any aspect of the proposed treatment. If such clearance is sought, Bidders must attach the appropriate correspondence to their submission. If the Bidder is relying on an advanced clearance from HMRC, this will need to be provided before contract signature and Financial Close. • Bidders should identify fall back positions if the proposed treatment fails together with any other possible tax treatments that may be applicable to the contract. • Bidders are required to state any VAT assumptions made and the basis for these assumptions (including VAT implications in relation to land transactions where applicable). • Bidders should consider the implications of SDLT on their proposals. Any SDLT costs should be included within the Financial Model along with an accompanying statement explaining how it is calculated. 			
4	<ul style="list-style-type: none"> • Bidders should/must obtain and submit a formal letter from their tax advisers or suitably qualified professional confirming that in their opinion the proposed tax treatment (including corporation tax, VAT and SDLT) is valid and that any required accounting treatments underpinning the tax treatment would be within the appropriate accounting standards. This opinion should set out the basis for the treatments adopted, and identify any risks associated with it. 	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
5	<ul style="list-style-type: none"> The Bidder should separately identify the funders' margin and MLA costs (or equivalent) in the Financial Model and any swap credit spreads or liquidity margins (or equivalent) they would expect to incur The Bidder should confirm those elements of the overall interest rate that are fixed and those that are variable up to financial close The Bidder should identify the protocol they will utilise in setting the underlying funding rate at financial close ensuring transparency and best value for The Board All financing fees, including arrangement, commitment, agency and any other relevant fees should be separately identified and reflected in the Financial Model Assumptions on deposit and overdraft rates should be explicitly stated. 	Required as part of Submission for Dialogue Meeting 4 omitting those elements that are not relevant due to the use of standard terms.	Required omitting those elements that are not relevant due to the use of standard terms.	Required.
6	<p>Bidders should confirm that they will maintain underlying construction, operating, FM and Project Co costs for a period of three months from the target Financial Close date with no adjustment for inflation.</p> <p>Bidders should confirm that only capital, lifecycle and facilities management costs will increase post-validity period and that they will use all reasonable endeavours to mitigate the impact of any cost increases post validity period.</p> <p>Bidders should specify which cost index or indices they require costs to be inflated in the post validity period. Note should be taken of the indexation regime that will be applied to Scottish Government support in relation to the construction cost cap set out in section 3.8.1.</p>	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
7	Bidders should set out their approach to the treatment of surpluses and cash	Required as part of	Required in detailed	Required in detailed form.

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Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	buffers, confirming that approach set out in 3.8.7 above has been applied.	Submission for Dialogue Meeting 1.	form.	
8	The proforma financial information requirements are included in Annex 1 to this Appendix. The information is the minimum requirement. Where the Bidder needs to provide additional information in order to provide a higher level of understanding of the individual components of the submission such additional information should be provided The information in the financial proformas should not be aggregated.	Required as part of Submission for Dialogue Meeting 3.	Required.	Required.
9	The Bidder is required to provide a databook and user guide supporting the Financial Model for the Financial Submission, as set out in Section 3.9.3.	Draft version required as part of Submission for Dialogue Meeting 3.	Required.	Required.
10	Bidders should provide details on the range of sensitivity tests that funders have requested. The Final Tender Submission will require Bidders to provide the results of funders' sensitivity tests. The Board may also request certain sensitivities to be carried out and included in Financial Submissions.	Required as part of Submission for Dialogue Meeting 4.	Required. The Board will inform Bidders of any sensitivities required no later than three weeks before the submission date.	Required. The Board will inform Bidders of any sensitivities required no later than three weeks before the submission date.
Information required to support the funding package				
11	The Bidder should provide assessment of the current issues in the funding markets that could impact upon the availability or terms of the finance offered. The Bidder should also explain how any risks within its chosen funding strategy will be managed to ensure that there is no impact on the affordability, value for money or timescales for	Required as part of Submission for Dialogue Meeting 1.	Updated version required describing how these issues will be addressed between Preferred	Updated version required describing how these issues will be addressed between Preferred Bidder and Financial Close.

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Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<p>delivery of the Project.</p> <p>The Bidder's response should set out how value for money will be secured between funding options and/or funding providers, at each phase of the procurement.</p> <p>Bidders should confirm acceptance of the position that The Board reserves the right to instruct a funding competition at any point during the procurement.</p>		Bidder and Financial Close.	
12	Bidders should provide a statement confirming that they have not entered/will not enter into any exclusivity arrangements with funders.	Required as part of Submission for Dialogue Meeting 1.	Required.	Required.
13	<p>The Bidder must submit the following information for each class of debt finance:</p> <ul style="list-style-type: none"> • Identity of the funders • Type of facility offered • Amounts to be provided by each funder • Credit margins and similar charges • Explanation of the types of reserve account(s) and/or facility(ies) proposed and associated terms • Terms and conditions attaching to the debt including: <ul style="list-style-type: none"> • Draw down schedule • Repayment schedule and tenor and any average life covenants • Security required including parent company guarantees, bonding, letters of credit, liquidated damages and liability caps. • Interest rates and other fees • Financial ratios and covenants (base case, distribution and default) explicitly stating the basis of the calculation • Default clauses • Conditions precedent. • Extent to which the funds are committed • Confirmation that the margins and 	Not required.	Draft versions required, noting that the terms described should not be used in the Financial Model but provided for information only.	Required.

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Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	charges detailed above are a full and complete list and no additional margins or charges not otherwise disclosed will apply.			
14	The Bidder should specify any working capital requirements and provide evidence as to how this is to be financed.	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
15	The Bidder must submit the following information for each type of risk capital to be raised: <ul style="list-style-type: none"> • Identity of the investors • Amounts to be subscribed by each investor and the timing thereof • Minimum return requirement for each class of risk capital and the basis of any IRR calculations • Terms and conditions of the subscription including return requirements (shareholder agreement or detailed term sheet) • Coupon rights attaching to the subscription • Mezzanine interest rates • Terms and any other agreements between the Investors in their capacity as investors in the Project Co • Any other rights attaching to this subscription • An undertaking that no additional margins or charges will apply that have not already been disclosed and included in the Financial Model • The length of time each class of risk capital will remain in the project vehicle • The extent to which the funds are committed. • 	Outline proposals required as part of Submission for Dialogue Meeting 1.	Required.	Required.
16	To the extent that other forms of finance other than those listed above are to be used, the Bidder must provide appropriate details equivalent to those requested for subordinated debt and	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.

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Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	debt finance.			
17	<p>The Bidder is required to produce the strongest form of commitment possible. The level of investor and Funder commitment should be demonstrated through the provision of:</p> <ul style="list-style-type: none"> • board minutes or draft letters of support from the sponsor shareholders committing to subscribe subordinated debt on the terms identified above • letters of support from underwriting banks and financial institutions (if applicable) offering debt facilities on the terms identified above (to be accompanied by draft term sheets) • A clear statement on the level of approval process and timescale that will be required from the respective lending organisations should be made. • A letter from the Bidder's financial advisers stating that the proposed funding structure is realistic, achievable and deliverable and that the financing proposals are sufficient to enable the Project Co to meet its obligations under the NPD Project Agreement. 	Required as part of Submission for Dialogue Meeting 2.	Required in final draft form.	Required in final form.
18	<p>The Bidder must set out clearly its proposal in relation to any hedging arrangements required to support the project. The following details should be provided:</p> <ul style="list-style-type: none"> • the manner in which the Bidder will address the risk of future movements on interest rates, including a full description of its interest rate hedging to be applied • the time period over which hedges are expected to be in place • details of any financial instruments that will be used to provide protection against interest rate movements and the cost/effect of such protection should be reflected in the Financial 	Required as part of Submission for Dialogue Meeting 2.	Required.	Required.

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Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<p>Model</p> <ul style="list-style-type: none"> • confirmation that the Project Co will bear all interest rate risk in respect of its borrowings once financial close is achieved • confirmation that the Bidder will bear all foreign exchange risk • the manner (if any) in which the Bidder will address the risk of future movements in the Retail Price Index (RPI). The Board does not expect that Bidder's funding solution will require the use of RPI hedging instruments. The interim Financial Model submission should clearly demonstrate the proportion of costs that are fixed, the proportion subject to inflation and the basis upon which the Bidder has set the proportion of Annual Service Payment that will be subject to inflation • confirmation of the acceptance of the principle of benchmarking of hedging instruments (including GICs where appropriate) at financial close. 			
19	<p>The Bidder should indicate the extent of the funder due diligence that has been carried out to date and that will be carried out prior to the appointment of a preferred bidder and the overall scope and timetable of funder due diligence up to financial close. In addition to the provider of senior debt, the response should cover due diligence required by any third party provider of subordinated debt funds.</p>	<p>Required as part of Submission for Dialogue Meeting 2.</p>	<p>Required.</p>	<p>Required.</p>
20	<p>A programme setting out the timescale for agreeing all matters relating to funding to financial close must be provided. Evidence must be provided that the proposed providers of finance to Project Co have accepted this timetable in principle and that adequate resource will be available to ensure the timetable is met.</p>	<p>Required as part of Submission for Dialogue Meeting 2.</p>	<p>Required.</p>	<p>Required.</p>

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Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
Other information				
21	<p>The Bidder should provide a commentary on the calibration of the Payment Mechanism and confirm its acceptance in principle of the calibration of, and tolerances built into, the Payment Mechanism and performance regime. In commenting on these, the Bidder is expected to address:</p> <ul style="list-style-type: none"> • Practicality; • Value for Money; and • Ability to obtain funding 	Required as part of Submission for Dialogue Meeting 2.	Required.	Required.
22	Bidders must provide fully detailed calculations supporting the insurance premiums quoted, including sums insured, rates applied and deductibles, where applicable. This must be provided separately for construction and operational insurances.	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.

Annex 1 to Appendix B– Financial Proformas

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Appendix C - Legal Agenda Topics, Submission Requirements and Evaluation

Appendix C (i) – Legal Agenda Topics

1. Overview

It is the Board's intention that the core elements for discussion at the relevant Dialogue Meetings shall be as set out in the following legal agendas. However, the Board shall reserve the right to dovetail the legal agendas to address specific Bidder issues during the Dialogue Period.

2. Legal Agenda Topics

Meeting	Topics	Deliverable
Dialogue Meeting 1	Top 10 Key Issues in NPD Project Agreement	<p>1. A list of up to 10 key commercial / contractual issues in relation to the NPD Project Agreement together with:</p> <ul style="list-style-type: none"> an explanation of each of the Bidders' issues and why Bidders do not believe the NPD Project Agreement addresses the relevant issue; and where relevant, the Bidders' alternative proposal/s, explaining why the alternative proposal/s might be acceptable to the Board. <p>2. Any comments that Bidders may have in relation to the NPD Model requirements of the Board, including the NPD Articles of Association.</p>
Dialogue Meeting 2	Project Agreement mark-up and contractual structure	<p>1. Bidders are required to submit a detailed mark-up (in both clean and PDF comparison format) of the NPD Project Agreement (including all Schedules), together with a commentary in the form set out in Appendix C(ii) of Volume 1 of the ITPD. The detailed mark-up of the NPD Project Agreement and commentary should include:</p> <ul style="list-style-type: none"> an explanation of each of the Bidder's amendments and why the Bidder does not believe the NPD Project Agreement addresses the relevant issue; and where relevant, the Bidder's alternative proposal/s, explaining why the alternative proposal/s might be acceptable to the Board, Details of any proposed caps and termination triggers, <p>with such documentation being referred to as the "NPD Project Agreement Submission".</p> <p>2. In addition, the following documentation shall also require</p>

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		<p>to be provided by Bidders:</p> <ul style="list-style-type: none"> • Contractual matrix/diagram, showing clearly the relationships between the Bidder and its supply chain including funders and sub-contractors. The diagram should provide details of all collateral warranties, direct agreements and guarantees. Bidders should also be prepared to provide a presentation on its contractual structure; • Draft heads of terms for each of the Contractor, Services Provider and any relevant Key Sub-contractors. The Board will expect to see details such as caps in liability, liquidated damages and indemnities covered in these heads of terms; • Key terms of any proposed parent company guarantee; • Collateral Warranties to be provided to the Board together with key commercial terms; • Step-in and direct agreements together with key commercial terms; • Any proposed amendments to the Articles of Association, <p>with such documentation being referred to as the “Additional Documentation Submission”.</p> <p>3. Bidders should bear in mind the Board's expectations of minimal derogations to the NPD Project Agreement and be mindful of the Board's requirement to obtain SFT approval of any derogations pursuant to paragraph 3.5 (Derogation Procedure) of Volume 1 of the ITPD).</p>
Dialogue Meeting 3	Project Agreement mark-up and contractual structure	<ol style="list-style-type: none"> 1. Continue dialogue in relation to Bidders' NPD Project Agreement Submission. 2. Continue dialogue in relation to Bidders' Additional Documentation Submission. 3. Board to provide feedback to Bidders in relation to the Bidders' Project Agreement Submission and Additional Document Submission.
Dialogue Meeting 4	Project Agreement mark-up and contractual structure	<ol style="list-style-type: none"> 1. Continue dialogue in relation to Bidders' NPD Project Agreement Submission. 2. Continue dialogue in relation to Bidders' Additional Documentation Submission. 3. Board to provide feedback to Bidders in relation to the

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		Bidders' Project Agreement Submission and Additional Document Submission.
Dialogue Meeting 5	Project Agreement mark-up and contractual structure	<ol style="list-style-type: none"> 1. Continue dialogue in relation to Bidders' NPD Project Agreement Submission. 2. Continue dialogue in relation to Bidders' Additional Documentation Submission. 3. Board to provide feedback to Bidders in relation to the Bidders' Project Agreement Submission, Additional Document Submission.
Dialogue Meeting 6	Review of Draft Final Tenders	Please refer to paragraph 3 (Draft Final Tender Requirements) below.

Appendix C (ii) – Submission Requirements and Evaluation

1. Draft Final Tender Requirements for Legal Submission

Prior to Dialogue Meeting 6, Bidders are required to re-submit the documentation set out in paragraph 1.1 below to reflect the progress of issues agreed during the Dialogue Period. This documentation shall in turn form a Bidder's legal submission for the Draft Final Tender.

1.1 NPD Project Agreement and Additional Documentation

Bidders shall be required to provide:

1.1.1 A fully marked-up NPD Project Agreement in both clean and PDF comparison format together with a detailed commentary in the form set out in Appendix C(ii) of Volume 1 of the ITPD in relation to each amendment, setting out a Bidder's commercial position where relevant. The mark up should include details of any proposed caps (with associated justifications for the levels set), and details of all termination trigger levels and persistent breach levels (including associated justifications for any departures from those set out in the NPD Project Agreement), where they appear in square brackets in the NPD Project Agreement. Bidders will not be permitted to include in their mark up of the NPD Project Agreement; and

1.1.2

- (a) Contractual matrix/diagram, showing clearly the relationships between the Bidder and its supply chain including funders and sub-contractors. The diagram should provide details of all collateral warranties, direct agreements and any applicable guarantees which will be granted to the Board and the circumstances in which the protection offered by the collateral warranties and direct agreements will be available; and
- (b) Fully developed, signed heads of terms for each of the Contractor, Services Provider and any relevant Key-Subcontractors. The Board will expect to see details such as caps on liability, liquidated damages and indemnities covered in these heads of terms;
- (c) Final version of proposed parent company guarantees;
- (d) Final version of the Articles of Association.

1.2 Prohibited Bidder Amendments

1.2.1 Bidders will not be permitted to include in their mark up of the NPD Project Agreement referred to in paragraph 1.1.1 above or the additional documentation referred to in paragraph 1.1.2 above:

- (a) amendments, caveats and/or qualifications which have not previously been raised with the Board and/or its advisers during the Dialogue Period (other than drafting that is necessarily consequential on, or necessary to implement, amendments which have been so raised); or
- (b) amendments, caveats and/or qualifications which have been raised with the Board during Dialogue Period but rejected by the SFT,

such amendments being defined as "**Prohibited Bidder Amendments**".

- 1.2.2 The Board shall be entitled to reject in its absolute discretion any Prohibited Bidder Amendments included within the documentation to be submitted pursuant to paragraphs 1.1.1 and 1.1.2 above which forms part of a Bidder's legal submission for the Draft Final Tender.

1.3 Review of Draft Final Tenders

As per paragraph 4.6 (Draft Final Tender) of Volume 1 of the ITPD, the Board will review the Draft Final Tenders to ensure compliance with the tender requirements. A final round of Dialogue will then take place as indicated on the programme at paragraph 4.2.1 (Timetable of Dialogue Meetings) of Volume 1 of the ITPD. This Dialogue will provide feedback to Bidders on the content of their Draft Final Tender and clarify any outstanding points.

2. Final Tender

2.1 Overview

As per paragraph 4.8 (Final Tender) of Volume 1 of the ITPD, the Board shall provide Bidders with an Invitation to Submit Final Tenders. Unless the Bidder is notified otherwise in the Invitation to Submit Final Tender, the legal submission requirements for the Final Tender shall be as set out in paragraph 4.2 (NPD Project Agreement) and 4.3 (Additional Documentation) below.

2.2 NPD Project Agreement

- 2.2.1 Bidders should note that a NPD Project Agreement specific to each Bidder (**Final Tender (Bidder Specific) NPD Project Agreement**) shall be issued to each Bidder by the Board in the Invitation to Submit a Final Tender.

2.2.2 The Final Tender (Bidder Specific) NPD Project shall be based upon:

- (a) the respective NPD Project Agreement submitted by Bidders as part of the Draft Final Tender ; and
- (b) any agreed issues resolved in the final Dialogue Meeting,

and Bidders shall be required to submit their Final Tenders on the basis of the terms of the Final Tender (Bidder Specific) NPD Project Agreements, without further amendment.

- 2.2.3 Any amendment to the Final Tender (Bidder Specific) NPD Project Agreement may result in a Bidder's entire Final Tender being rejected by the Board without further evaluation.

2.3 Additional Documentation

- 2.3.1 Subject to paragraph 2.3.2, the following documentation shall also require to be submitted by Bidders as part of their Final Tender:

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- (a) Contractual matrix/diagram, showing clearly the relationships between the Bidder and its supply chain including funders and sub-contractors. The diagram should provide details of all collateral warranties, direct agreements and any applicable guarantees which will be granted to the Board and the circumstances in which the protection offered by the collateral warranties and direct agreements will be available;
- (b) Fully developed, signed heads of terms for each of the Contractor, Services Provider and any relevant Key Sub-contractors. The Board will expect to see details such as caps on liability, liquidated damages and indemnities covered in these heads of terms;
- (c) Final version of proposed parent company guarantees; and
- (d) Final version of the NPD Articles of Association.

2.3.2 The documentation referred to above in paragraph 2.3.1 above, shall be based upon:

- (a) the documentation referred to in paragraph 1.1.2 which was submitted by respective Bidders as part of their legal submission for the Draft Final Tender; and
- (b) any agreed issues resolved in the final Dialogue Meeting,

and Bidders shall be required to submit their Final Tenders on the basis of the terms of this paragraph, without further amendment.

2.3.3 Any amendment to the documentation referred to in paragraph 2.3.1 may result in a Bidder's entire Final Tender being rejected by the Board without further evaluation.

2.4 Evaluation of Final Tender

2.4.1 The legal submission which forms part of the Final Tender shall be evaluated as follows:

(a) NPD Project Agreement

Subject to paragraph 2.2.3, the NPD Project Agreement shall be evaluated in accordance with the following:

- (i) Pass/Fail: Bidders shall be awarded a pass if they accept the Final Tender (Bidder Specific) Project Agreement. Bidders shall be awarded a fail if they do not accept the Final Tender (Bidder Specific) Project Agreement;
- (ii) If a pass is received by Bidders in respect of the Final Tender (Bidder Specific) Project Agreement, the provisions of paragraph 5.7.1(d) (Quantifiable Bidder Amendments) of Volume 1 of the ITPD shall be applied. The Quantifiable Bidder Amendments that shall be applied to a Bidder's Provisional Economic Cost Score shall be those Quantifiable Bidder Amendments notified by the Board to Bidders during the Dialogue Period.

(b) Additional Documentation

Subject to paragraph 2.3.3, the additional documentation referred to in paragraph 2.3.1 above shall be evaluated in accordance with the following:

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- (i) Pass: Bidders shall be awarded a pass if they submit as part of their legal submission for their Final Tender the documentation referred to above in paragraph 2.3.1 above, which shall be based upon:
 - (A) the documentation referred to in paragraph 1.2.1 which was submitted by respective Bidders as part of their legal submission for the Draft Final Tender; and
 - (B) any agreed issues resolved in the final Dialogue Meeting,
- (ii) Fail: Bidders shall be awarded a fail if they submit as part of their legal submission for their Final Tender the documentation referred to above in paragraph 2.3.1 above which is not based upon:
 - (A) the documentation referred to in paragraph 1.2.1 which was submitted by respective Bidders as part of their legal submission for the Draft Final Tender; and
 - (B) any agreed issues resolved in the final Dialogue Meeting.

Appendix C (iii) – Proforma Commentary Table for NPD Project Agreement

The following pro forma commentary table should be used by Bidder's as the basis of their commentary table to accompany any mark-up of the NPD Project Agreement.

In accordance with paragraph 5.7 (Price Evaluation), the "Issue" column of the commentary table should include a description of each amendment to the NPD Project Agreement as either 1 or 2 as follows:

1. Minor/inconsequential amendment;
2. Quantifiable Bidder Amendment.

Issue	Clause	Description	Issue	Bidder Comment	Board Comment
1.	4	Project Documents	1	[•]	[•]

Appendix C (iv) – Interface Proposals**Summary of Interface Proposals to be provided by Bidders**

The following Interface Proposals are required to be provided by Bidders to the Board during the Dialogue Period. The requirements of the Interface Proposals are more fully set out in Appendix A of the Board's Construction Requirements, subject to certain conditions within Schedule Part 5 (Land Matters), and this summary should be read in conjunction with these provisions. Although the Interface Proposals are primarily relevant to the Construction Phase, some Interface Proposals shall apply to the Project Operations. Please note that Appendix A of the Board's Construction Requirements may be subject to change to reflect discussions during the Dialogue Period.

The requirement for the Interface Proposals arose from an agreement between the Board and Consort when the Site was removed from the Campus Site (i.e. in order for the Board to secure land for the construction of the Facilities) and therefore from Consort's responsibility. The Interface Proposals are intended to provide Consort with some comfort that the Project Operations are conducted by Project Co in a manner which is least detrimental to Consort's ability to operate the Retained Estate and/or Retained Site.

The Interface Proposals shall be agreed between the Board and Consort pursuant to procedures set out in the RIE Project Agreement. All Bidders are required to submit Interface Proposals prior to relevant Dialogue Meetings, as per the timetable set out below. However, the Board shall not engage with Consort to finalise and agree these Interface Proposals until Preferred Bidder stage. It is the Board's intention that the Interface Proposals shall be in an agreed form and ready for implementation by the Preferred Bidder at Financial Close.

The Board's approach to the Interface Proposals in the ITPD is to ensure a level playing field between Bidders. Please note that the Board cannot guarantee that Appendix A of the Board's Construction Requirements, upon which the Interface Proposals shall be based, will not be subject to further amendment or refinement at Preferred Bidder stage or post-financial close. However, at this stage, the Board anticipates that any such amendment or refinement should not be material.

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
1	Traffic Management Strategy	<p>The Traffic Management Strategy ('TMS') is required where Project Co wants to access the Site for the construction of the Project via the Orange Areas (which includes the orange hatched areas) shown on Plan 2.</p> <p>The TMS is a proposal which is to address traffic management at the Campus which must be prepared having regard to:</p> <ul style="list-style-type: none"> (a) the health and safety of all users of the Campus Site and/or Campus Facilities must be safeguarded at all times; (b) RIE Facilities is a working hospital to which access (including both pedestrian and vehicular) must be maintained at all times; (c) traffic at the Campus Site is to be prioritised in accordance with the following hierarchy: <ul style="list-style-type: none"> (i) blue light traffic access/egress; (ii) staff, patients and visitors to the Campus Site and/or Campus Facilities (public transport); 	<p>Drafts to be submitted for Dialogue Meeting 2.</p> <p>Also required to be submitted for Draft Final Tender and Final Tender.</p>	Preferred Bidder Stage	Pass / Fail	Construction Phase

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>(iii) staff, patients and visitors to Campus Site and/or Campus Facilities (car parking);</p> <p>(iv) Campus Site and/or Campus Facilities deliveries, FM supplies and waste collection; and</p> <p>(v) Project Co's construction traffic; and</p> <p>(d) insofar as reasonably practicable and appropriate in the circumstances (taking into consideration, for example, the number of construction vehicles involved, the number of journeys anticipated, the time of the day when access is required and the part(s) of the areas affected) construction traffic using the affected area shall require to be segregated from other traffic and/or pedestrians using the affected area (for example, through contra-flow or one way traffic arrangements and safe routes for pedestrians).</p> <p>Further details of the TMS are set out in paragraph 2 (Construction Access over Orange Area) of Section 1 of Part 1 of Appendix A of the Board's Construction Requirements.</p>				
2	Oversail Strategy	If as part of its activities (including construction of the Project) Project Co needs to oversail any other part of the	Draft to be submitted	Preferred Bidder	Pass / Fail	Primarily Construction

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>Retained Site and/or Retained Estate then Project Co requires to prepare Oversail Strategy/ies. The Oversail Strategy/ies must comply with specified criteria and include:</p> <p>(a) programme of proposed oversail activities;</p> <p>(b) risk assessments;</p> <p>(c) a strategy for erection, operation, dismantling of oversailing crane(s), the details of which are more fully set out in Section 4 (Oversailing) of Part 1 of Appendix A of the Board's Construction Requirements.</p>	<p>for Dialogue Meeting 2.</p> <p>Also required to be submitted for Draft Final Tender and Final Tender.</p>	<p>Stage</p>		<p>Phase but also Operational Term if any Project Operations required oversailing</p>
3	Access Strategy	<p>An Access Strategy is required where Project Co needs to occupy part or parts or do works in and/or hoard off Access Areas (which includes Orange Areas (including orange hatched areas, on Plan 2), Yellow Area (including yellow hatched area, on Plan 2) and Substation Access Area (which is shaded blue and hatched black on Plan 2)) for carrying out works to pedestrian and vehicular access, to reconfigure roads, footpaths and landscaped areas and install surface water and foul/sewer drainage connections.</p> <p>Pedestrian and vehicular access to the Campus Site and/or Campus Facilities must be maintained at all times (albeit that the access arrangements may require to be</p>	<p>Draft to be submitted for Dialogue Meeting 2.</p> <p>Also required to be submitted for Draft Final Tender and Final</p>	<p>Preferred Bidder Stage</p>	<p>Pass / Fail</p>	<p>Construction Phase and Operational Term (wherever there is to be future ongoing maintenance the areas described).</p>

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>subject to restrictions or diversions during any periods of occupation.) These restrictions need approval in the form of an Access Strategy. The Access Strategy is for managing pedestrian and vehicular access, in a manner similar to the TMS above but is not limited to traffic for construction. The Access Strategy is to be prepared which shall ensure:</p> <ul style="list-style-type: none"> (a) The health and safety of all users of the Campus Site and/or Campus Facilities must be safeguarded at all times; (b) Regard is had to RIE Facilities as a working hospital to which appropriate pedestrian and vehicular access must be maintained at all times; (c) Pedestrian and vehicular access must be maintained (albeit, at times it may be restricted) over the section of Little France Crescent lying within the part of the Orange Area shown shaded orange (but not hatched black) on Plan 2; and (d) Traffic will be prioritised in accordance with the following hierarchy: <ul style="list-style-type: none"> (i) blue light traffic access/egress; 	Tender.			

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>(ii) staff, patients and visitors to the Campus Site and/or Campus Facilities (public transport);</p> <p>(iii) staff, patients and visitors to the Campus Site and/or Campus Facilities (car parking);</p> <p>(iv) Campus Site and/or Campus Facilities deliveries, FM supplies and waste collection; and</p> <p>(v) Project Co's construction traffic.</p> <p>Further details of the Access Strategy are set out in paragraphs 2 to 4 (Access Strategy) and 8 of Section 5 of Part 1 of Appendix A of the Board's Construction Requirements</p> <p>Provisions about any Access Strategy to address an access which is required in the Operational Term not contemplated by the Access Strategy above is dealt with in Section 2 (Access Strategy and Amended Drainage Proposal) of Part 2 of Appendix A of the Board's Construction Requirements.</p>				
4	Supplemental Drainage	A Supplemental Drainage Proposal is required where Project Co wants to install new surface water drainage	Draft to be submitted	Preferred Bidder	Pass / Fail	Construction Phase

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
	Proposal	<p>connections from the Site to the existing surface water drain within the Orange Area. There is already an Initial Drainage Proposal, as set out in Appendix E of the Board's Construction Requirements, which primarily details the agreed connection points. This has to be complied with and supplemented by this Supplemental Drainage Proposal to include details of the design, construction, programme and Project Co's drainage proposals for the relevant drainage works.</p> <p>Prior to any drainage works taking place, Project Co (once appointed as Preferred Bidder) shall undertake a camera survey to document the condition of the existing surface water drainage system within the RIE Site. The camera survey will be carried out in accordance with Good Industry Practice and cover the full section of the RIE Site surface water drainage system that will serve the Site, from the point of the first connection from the Site to the drainage system to the point at which the drainage system discharges from the RIE Site to the Niddrie Burn. Four hard copies and an electronic version of the camera survey will be delivered by Project Co to the Board and no works may be carried out until the said camera survey has been carried out and requisite copies delivered by Project Co to the Board.</p> <p>Further details of the Drainage Proposals are set out in paragraphs 5 (Drainage Proposals) and 8 (Other General</p>	<p>for Dialogue Meeting 2.</p> <p>Also required to be submitted for Draft Final Tender and Final Tender.</p>	Stage		

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>Matters) of Section 5 of Part 1 of Appendix A of the Board's Construction Requirements.</p> <p>Amended Drainage Proposal</p> <p>If when Project Co is carrying out any of the drainage or services connections as more fully described above, it transpires that the position within the Orange Area is different (including route, depth, size or condition of the service media within the Orange Area) from what was anticipated so there is a need to change the scope of the drainage or service connections, then Project Co requires to prepare an Amended Drainage Proposal to include additional detail, information and drawings as are available.</p> <p>Further details of the Amended Drainage Proposals are set out in paragraph 2 (Drainage Proposals) of Section 2 of Part 2 of Appendix A of the Board's Construction Requirements.</p>				
5	Substation Proposal	<p>The Sub-station Proposal must address the construction and maintenance repair and renewal of the access road in the Substation Access Area in the event that a Substation is being built on the Substation Site.</p> <p>Substation Access Area</p>	Draft to be submitted for Dialogue Meeting 2.	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term.

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>If Project Co needs to do works to construct an access road in Substation Access Area shown shaded blue and hatched black on Plan 2, then prior to any access Project Co will have to prepare a Substation Proposal which must include details of design, construction, programme and Project Co's Proposals for the relevant Sub-station Access Works.</p> <p>The Substation Proposal must:</p> <ul style="list-style-type: none"> (a) be safe in respect of personnel or equipment on any part of the Campus and/or Campus Facilities; (b) be in accordance with Good Industry Practice and Law; (c) not materially adversely effect the flow or functioning of the Niddrie Burn; and (d) adequately protect the high voltage electricity cable running through the Substation Access Area. <p>Substation</p> <p>Project Co also needs to provide information about the design and construction of the Substation and Substation HV Cable.</p>	<p>Also required to be submitted for Draft Final Tender and Final Tender.</p>			

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>Method Statement</p> <p>Maintenance of Substation HV Cable by Project Co.</p> <p>Further details of the Substation Proposals and the Substation and Substation HV Cable are set out in paragraphs 6 and 7 (Substation Access and Cables) of Section 5 of Part 1 of Appendix A of the Board's Construction Requirements.</p>				
6	Service Proposal (Service Strip and Foul Service Strip)	<p>If Project Co wishes to do works (in each case as necessary in connection with the Works) to construct and lay:</p> <p>(a) service media through under over Service Strip (shown shaded yellow and hatched black on Plan 2) for the passage of water, sewage, drainage or oil, gas, electricity, telephone (and other telecommunications); and/or</p> <p>(b) foul drainage through under over Foul Service Strip (shown shaded yellow and hatched black on Plan 2A) for the passage of foul drainage,</p> <p>then Project Co requires to exhibit Scottish Water or other statutory authority/utility company approvals in relation to the works for the connection of service media from the Site to the mains sewer located on the RIE Site and provide a Project Co's Proposal which must detail the route and</p>	<p>Draft to be submitted for Dialogue Meeting 2.</p> <p>Also required to be submitted for Draft Final Tender and Final Tender.</p>	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>depth of service media and detailed Method Statements for the maintenance, repair and renewal of the (i) service media through, under and over the Service Strip; and (ii) foul drainage through the Foul Service Strip.</p> <p>Further details of the Service Proposal are set out in Section 6 (Service Strip and Foul Service Strip) of Part 1 of Appendix A of the Board's Construction Requirements.</p> <p>Amended Service Proposal</p> <p>If when Project Co is carrying out any of the drainage or services connections as more fully described above, it transpires that the position on Site is different (including route, depth, size or condition of the service media on Site) from what was anticipated so there is a need to change the scope of the drainage or service connections, then Project Co requires to prepare an Amended Service Proposal to include additional detail, information and drawings as are available.</p> <p>Further details of the Amended Service Proposal are set out in Section 3 (Service Strip and Foul Service Strip) of Part 2 of Appendix A of the Board's Construction Requirements.</p>				

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
7	Connection Proposal	<p>Project Co shall prepare a Connection Proposal in respect of the RIE Works. This should include a programme and the following specific connection information:</p> <p>(a) Link Building: (i) Design package for method of connection of the Facilities to the Link; and (ii) a Project Co's Proposal in respect of the connection to the Link Building;</p> <p>(b) Fire alarm systems: (i) The fire alarm system specification for the interface link between the fire alarm system within the Facilities and the RIE Facilities; (ii) design package information for method of installation for the interface link between the fire alarm system within the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the interface link between the fire alarm system within the Facilities and the RIE Facilities; and (iv) a Method Statement for the maintenance and repair of the interface link between the fire alarm system within the Facilities and the RIE Facilities;</p> <p>(c) Security systems: (i) The security system specification for the interface link between the security system within the Facilities and the RIE Facilities; (ii) design package information for the proposed method of installation of the interface link between the security systems between the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the interface link between the security</p>	<p>Draft to be submitted for Dialogue Meeting 2.</p> <p>Also required to be submitted for Draft Final Tender and Final Tender.</p>	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>systems within the Facilities and the RIE Facilities; and (iv) a Method Statement for the maintenance and repair of the interface link between the fire alarm systems within the Facilities and the RIE Facilities;</p> <p>(c) PTS: (i) The PTS specifications for the Facilities and the RIE Facilities; (ii) design package information for the proposed method of installation of the PTS within the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the installation of the PTS within the Facilities and RIE Facilities; (iv) a Method Statement for the maintenance and repair of the PTS within the Facilities and RIE Facilities; The Board will confirm the route during Dialogue.</p> <p>(d) ICT: (i) The ICT specifications for the Facilities and the RIE Facilities; (ii) design package information for the proposed method of installation of the ICT within the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the installation of the ICT within the Facilities and RIE Facilities; (iv) a Method Statement for the maintenance and repair of the ICT within the Facilities and RIE Facilities; The Board will confirm the route during Dialogue.</p> <p>Project Co should refer to Sub-section C of the Board's Construction Requirements as regards specifications and control requirements for such PTS, ICT, fire and security systems and information about the Link Building.</p>				

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		Further details of the Connection Proposal are set out in Section 7 (Link Building) of Part 1 of Appendix A of the Board's Construction Requirements.				

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Appendix D – Dialogue Period Query proforma

Re-provision of RHSC + DCN
DIALOGUE PERIOD QUERY PROFORMA

Ref No:
Dated Raised:

Topic: Technical Administration
 Financial Other
 Commercial

Is this query considered commercial in confidence?	Yes	No
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Query/Request:
Response:
Date of Response:

Please deliver response via:	Letter	Fax	E mail
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Raised on behalf of [] by: []

For RHSC DCN Use

RHSC DCN Ref No:

Date Received:

Passed to	NHSL Project Team		E&Y		Scottish Government other	
			MacRoberts			
			Mott Mac			

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Appendix E – Reference Design Elements

Elements of the Reference Design	Status
Schedules of Accommodation	For spaces relating to Operational Functionality that will be used by NHS Lothian, the area of these rooms shall be a minimum and this minimum area is a mandatory requirement. The Reference Design Schedule of Accommodation needs to be read in conjunction with the Schedule of Accommodation prepared by the Board as noted in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation). All other spaces are indicative.
Development Control Plan and Urban Design 1:1000/1:500	Mandatory - those elements defined under Operational Functionality i.e.: (i) the points of access to and within the Site and the Facilities; (ii) the relationship between one or more buildings that comprise the Facilities; (iii) the adjacencies between different departments within the Facilities; and (iv) the corridor widths shown are a minimum with these minimum widths being mandatory requirements. Indicative - everything else with exception of the above
Departmental Layouts 1:500	Mandatory - those elements defined under Operational Functionality i.e.: (i) the points of access to and within the Site and the Facilities; (ii) the relationship between one or more buildings that comprise the Facilities; and (iii) the adjacencies between different departments within the Facilities. This to include Specific Non-Clinical spaces. The corridor widths as shown are a minimum with these minimum widths being mandatory requirements. Indicative - all other elements (e.g. layouts and locations for Hard FM spaces, locations and sizes for services risers and spaces etc).
General Arrangements Plans 1:200	Mandatory - those elements defined under Operational Functionality i.e.: (i) the points of access to and within the Site and the Facilities; (ii) the relationship between one or more buildings that comprise the Facilities; and (iii) the adjacencies between different departments within the Facilities. (iv) the adjacencies between rooms within the

	<p>Hospital departments; this is to include Specific Non-Clinical spaces. The corridor widths as shown are a minimum and these minimum widths are mandatory requirements.</p> <p>Indicative - all other elements (e.g. layouts and locations for Hard FM spaces, locations and sizes for services risers and spaces, etc).</p>
General Arrangement Elevations and Sections.	Indicative
Generic Room Layouts 1:50	<p>Mandatory - those elements defined under Operational Functionality i.e.:</p> <p>The location and relationship of equipment, furniture, fittings and user terminals as shown on the 1:50 loaded room plans in respect of:</p> <ul style="list-style-type: none"> (i) all bed and trolley positions; (ii) internal room elevations; (iii) other project specific requirements, for example with regard to theatres and imaging departments; <p>Indicative - All other elements.</p>
Key Room Layouts 1:50	<p>Mandatory - those elements defined under 'Operational Functionality' i.e.:</p> <p>The location and relationship of equipment, furniture, fittings and user terminals as shown on the 1:50 loaded room plans in respect of:</p> <ul style="list-style-type: none"> (i) all bed and trolley positions; (ii) internal room elevations; and (iii) other project specific requirements, for example with regard to theatres and imaging departments; <p>Indicative - All other elements.</p>
Fire Strategy 1:200	Indicative
Interior Design and Artwork Concepts	Indicative
Wayfinding Strategy	Indicative

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Flexibility and expandability	Indicative
Supplies, Storage, Distribution and Waste Management (Soft FM)	Mandatory
Decontamination and Control of Infection (HAI-SCRIBE)	Indicative
BREEAM	Indicative
Geotechnical Site Investigation	N/A (Data Room status)
Decanting, Phasing,	Indicative
Traffic Impact Assessment and Traffic Management Plan	Indicative
Security Strategy	Indicative
ICT strategy	Mandatory
Helipad	Indicative

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Appendix F – Thermal and Energy Model Parameters

1. Thermal Modelling Data

1.1 General

Project Co shall undertake Dynamic Thermal Energy Modelling to assess the energy performance and thermal performance of Project Co's Proposals.

The thermal performance of the Facilities shall be dynamically thermally modelled to the Project specific parameters, identified within Section 3 (*Board's Construction Requirements*) of Schedule Part 6 (*Construction Matters*). Thermal modelling shall inform the sizing of all heating, ventilation and comfort cooling requirements for Project Co's Proposals, inclusive of all natural ventilation pathway and overheating analysis.

In conjunction with energy performance, CO² emissions shall also be required to be equal to, or better than, the agreed Carbon Emissions requirements in Section 3 (*Board's Construction Requirements*) of Schedule Part 6 (*Construction Matters*).

The following documentation shall be used in providing the targeted thermal energy modelling requirements for the building;

- Scottish Health Technical Memorandums
- EnCO2de
- Health Building Notes
- CIBSE Design Guides
- Building Regulations (Scotland) Technical Standards

1.2 Building Envelope

The building envelope, construction and materials and the operation will have a significant impact on the efficient operation of the building engineering services installations. The thermal and energy model requires therefore to take cognisance of the project specific factors as detailed in the Reference Design proposals and Section 3 (*Board's Construction Requirements*) of Schedule Part 6 (*Construction Matters*).

The modelling exercise must take cognisance of the RIE Facilities and the associated Link Building to recognise the interface between the new and the existing buildings.

The Gross Internal Floor Area should be calculated by measuring the overall internal area of the building making a reduction for partitions, walls, voids and courtyards. The floor areas of internal rooms, circulation spaces and internal walkways should be included.

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The heated volume should take into account the height between the floor surface and the room ceiling and should exclude ceiling voids, pipe ducts and plant rooms and include for a 6% reduction due to walls/partition generally in accordance with HTM 07-02: EnCO2de – Making energy work in healthcare.

The building envelope performance design criteria should be based upon an air tightness figure measured in $\text{m}^3/\text{hr}/\text{m}^2 @ 50\text{Pa}$ as appropriate to the type of facility and in accordance with Building Regulations (Scotland) Technical Standards.

Further methods of measuring and demonstrating the thermal efficiency of the building envelope such as thermal imaging can be utilised subject to agreement with the Board.

1.3 Ambient Weather Profile and Degree Day

The energy use of the building will be predicated by reference to the outside temperature and the Department of Health Estate and Facilities division publishes degree day data on a monthly basis.

The energy modelling shall be based on the above degree day data utilising the base temperature of 18.5° Celsius and Edinburgh degree day weather profile data.

1.4 Dynamic Thermal and Energy Modelling Simulation

A certified and industry approved Dynamic Simulation Model (DSM) software tool compliant with CIBSE Applications Manual AM11 shall be used to produce the thermal and energy model for the Facilities.

Bidders shall seek agreement from the Board of their proposed modelling tool which shall require to be the most updated version of either:-

- IES (Integrated Environmental Solutions) Programme
- TAS (Thermal Assessment Simulation) Programme

Future modelling tools may be available and Bidders shall obtain the agreement of the Board if they propose to use a certified alternative to those listed above.

1.5 Plant and Systems

The thermal and energy modelling shall incorporate all building services installations as required to maintain the Facilities within the operational parameters as defined in Section 3 (Board's Construction Requirements) of Schedule Part 6 (Construction Matters).

Any specific loads that Bidders deem to be excluded from the thermal and energy model, such as catering, etc., shall be quantified by Bidders and submitted to the Board for agreement and acceptance prior to any modelling works commencing.

1.6 Group 2 to 3 Equipment

As part of the thermal and energy modelling exercise Bidders shall provide an assessment of the energy consumption of the known Group 2A, Group 2B and Group 3 equipment.

Bidders are to provide a proposed methodology to the Board to demonstrate the projected energy consumption of the Group 2A, Group 2B and Group 3 equipment.

Although this information shall not form part of the agreed energy or carbon emissions targets, it shall be utilised to provide the Board with an informed estimate of anticipated future energy consumptions and utilities costs to allow future budget allocations to be assessed.

2 Design Period

2.1 Modelling of Design Proposals

To calculate energy consumption loads for mechanical services, the CIBSE Building Energy Codes, calculation using the Degree Day Method and Edinburgh weather data for Space Heating and ventilation systems shall be used.

The occupancy, Equipment usage and departmental hours shall be identified by the Board. Any variations from this data proposed by Project Co shall be agreed with the Board prior to any modelling works commencing. Where assumptions are made by Project Co, these shall be in line with Good Industry Practice. This includes the application of factors set out in CIBSE Guide B for the thermal weight of the building, levels of operation and occupancy (Table B18.12), and the correction factor for the length of working day (table B18.13) as appropriate.

The exact correction factors to be applied in the modelling shall be provided by the Bidders and agreed with the Board prior to any modelling works commencing.

The degree day figure used shall be 18.5° Celsius as the base.

Space heating/cooling should be assessed on the required temperatures that are indicated on the room data sheets that will be provided by the Board to Bidders.

Design calculations shall be based on an external winter condition appropriate to Edinburgh and shall be compliant with external winter conditions detailed in the CIBSE design guides.

Thermal conductivity values shall be at a minimum as stated in the Scottish Building Regulations (Technical Standards) and shall reflect the actual building fabric design proposals.

The clinical usage and departmental hours shall be as indicated by the Board and any variations from these shall be proposed by the Bidders shall be agreed with the Board prior to any modelling works commencing.

All ventilation plant should be assessed on a maximum power and pressure drop within the air distribution systems as stated in the Scottish Building Regulations (Technical Standards) and in-line with Good Industry Practice.

Domestic Hot Water (DHW), usage shall be based on a 24-hour usage period. Any variation to this shall be proposed by Bidders and agreed with the Board prior to any modelling works commencing.

The cold water storage provision should be based on a 24-hour day usage period. Any variation to this shall be proposed by Bidders and agreed with the Board prior to any modelling works commencing.

Lighting shall be modelled in accordance with the Board's Construction Requirements, Room Data Sheets and any specific guidance provided by the end-user through the Board.

All lighting designs shall comply with CIBSE lighting design guides and the general lighting strategy

proposed by Bidders and as detailed and agreed at Financial Close. Any variation to this shall be proposed by Bidders shall be agreed with the Board prior to any modelling works commencing.

The Dynamic Thermal Energy Model shall also be used by Bidders to show compliance of Project Co's Proposals with the Board's thermal and air quality requirements as identified in Section 3 (Board's Construction Requirements) of Schedule Part 6 (Construction Matters).

The dynamic simulation model shall use the CIBSE Design Summer Year (DSY) for Edinburgh in assessing the heating and, where required, cooling for each room within the Facilities. This information will inform the sizing of heating, ventilation and comfort cooling equipment within Project Co's Proposals.

The Dynamic Thermal Energy Model shall accurately model all proposed window/fenestration opening profiles, including taking in to account all constraints in the fenestration openings, including reveals, meshing and restrictors, when assessing overheating and air quality criteria for naturally ventilated rooms. Any automation and/or proposed opening parameters, for example temperature set points to open fenestration or any night time cooling strategies, shall be agreed in advance with the Authority.

The Dynamic Thermal Energy Model shall further allow for accurate thermal representation, and HVAC system sizing therein, for where doors are to be held open for operational or fire safety reasons.

2.2 Key Deliverable

The primary deliverable will be that Bidders shall provide detailed calculation and modelling documentation at design stage that demonstrates the proposed annual energy consumption of the Facilities by fuel type.

**Appendix G – Insurance Response Matrix
Part 1 Insurance Costs Matrices**

A. Premium calculation for Construction Phase - Schedule Part 15 Section 1

Class of Required Insurance	Cover Period	Sum Insured/ Rateable Factor	Premium Rate	Premium excluding IPT	Insurance Premium Tax (IPT)	Brokers remuneration (specify type and amount)
1. Contractors "All Risks" Insurance						
2. Contractors "All Risks" Terrorism Insurance ¹						
3. Delay in Start Up Insurance						
4. Delay in Start Up Terrorism Insurance ²						
5. Construction Third Party Liability Insurance						
6. Insurances required by law						
TOTALS						

¹ Bidder Note: whilst it is noted that the Terrorism Insurance will be renewable annually, the premium quoted in this table should represent the full cost for the duration of the Works.

² Bidder Note: whilst it is noted that the Terrorism Insurance will be renewable annually, the premium quoted in this table should represent the full cost for the duration of the Works.

B. Premium calculation for Policies to be taken out and maintained from the Actual Completion Date - Schedule Part 15 Section 2

Class of Required Insurance	Cover Period	Sum Insured/ Rateable Factor	Premium Rate	Premium excluding IPT	Insurance Premium Tax (IPT)	Brokers remuneration (specify type and amount)
1. Property Damage "All Risks" Insurance						
2. Property Damage "All Risks" Terrorism Insurance						
3. Business Interruption Insurance						
4. Business Interruption Terrorism Insurance						
5. Third Party Public & Products Liability Insurance						
6. Insurances required by law						
TOTALS						

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C. Waiver of subrogation for Consort and Consort Parties

Please identify separately for all policies required by Schedule Part 15 Sections 1 and 2 the cost of obtaining a waiver of subrogation against Consort and Consort Parties including their respective suppliers and / or subcontractors of any tier pertaining to the RIE Project Agreement in accordance with clause 53.6.1 of the draft NPD Project Agreement.

Class of Required Insurance	Cover Period	Premium excluding IPT	Insurance Premium Tax (IPT)	Brokers remuneration (specify type and amount)
1. Contractors "All Risks" Insurance				
2. Delay in Start Up Insurance				
3. Construction Third Party Liability Insurance				
4. Insurances required by law (Construction Phase)				
5. Property Damage Insurance				
6. Business Interruption Insurance				
7. Third Party Public & Products Liability Insurance				
8. Insurances required by law (from Actual Completion Date)				
TOTALS				

Commercial In Confidence - not disclosable under the Freedom of Information (Scotland) Act 2002

Part 2 Insurance Technical Matrix

A. Schedule Part 15 Section 1 of NPD Project Agreement

Class of Insurance	Insurer(s) Identity (N.B. Including any co-insurers or excess layer insurers)	Deductible each and every claim (N.B. Confirm any aggregate Deductible if applicable)	Agreement to the requirements Clause 53 (Insurance) (If not please identify areas of variation or alternative proposals)	Agreement to the requirements of Schedules Part 15 (Insurance Requirement) and Schedule Part 25 (Insurance Proceeds Account Agreement) (If not please identify areas of variation or alternative proposals)
1. Contractors "All Risks" Insurance				
2. Delay in Start Up Insurance				
3. Construction Third Party Liability Insurance				
4. Insurances required by law				

Commercial In Confidence - not disclosable under the Freedom of Information (Scotland) Act 2002

B. Schedule Part 15 Section 2 of NPD Project Agreement

Class of Insurance	Insurer(s) Identity (N.B. Including any co-insurers or excess layer insurers)	Deductible each and every claim (N.B. Confirm any aggregate Deductible if applicable)	Agreement to the requirements of Clause 53 (Insurance) (If not please identify areas of variation or alternative proposals)	Agreement to the requirements of Schedules Part 15 (Insurance Requirement) and Schedule Part 25 (Insurance Proceeds Account Agreement) (If not please identify areas of variation or alternative proposals)
1. Property Damage "All Risks" Insurance				
2. Business Interruption Insurance				
3. Third Party Public & Products Liability Insurance				
4. Insurances required by law				

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Commercial In Confidence - not disclosable under the Freedom of Information (Scotland) Act 2002

Appendix H – Certificate of Non-Collusion and Non-Canvassing

CERTIFICATE OF NON-COLLUSION AND NON-CANVASSING

We acknowledge that any Bidder who directly or indirectly canvasses any member, official or employee of Lothian Health Board (“the Board”) concerning the award of any contract in relation to the Project to re-provide services from the Royal Hospital for Sick Children, Child and adolescent Mental Health Services and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France will be disqualified from the bidding process and any Bid submitted by or on their behalf shall be disregarded.

Therefore, we hereby certify and undertake and bind and oblige ourselves to the Board and its successors that we have not canvassed or solicited nor will we in the future canvass or solicit any member, official or employee of the Board in connection with the award of the Project or any Bid or proposed Bid in connection therewith and we certify that, to the best of our knowledge and belief having made reasonable enquiry, our Relevant Persons (as hereinafter defined) have not so canvassed or solicited.

In this certificate and undertaking, "Relevant Person" shall mean, as applicable in relation to us, any party co-operating with us in tendering for the Project, fellow tender consortium member, joint venture, controlling shareholder, subsidiary or parent company or other company within any group of which we form part, or any other person directly or indirectly controlling or controlled by us.

The essence of tendering is that the Board shall receive *bona fide* competitive Bids from all persons tendering. In recognition of this principle:

- I. We certify to the Board and its successors that the Bid submitted by us, or on our behalf, is a *bona fide* Bid, intended to be competitive and we have not fixed or adjusted the amount of the Bid or the rates or prices quoted therein by, or under, or in accordance with any agreement or arrangement with any other person.
- II. We also certify to the Board and its successors that we and, to the best of our knowledge and belief having made reasonable enquiry, our Relevant Persons have not done and we hereby undertake and bind and oblige ourselves that we will not do at any time, any of the following acts:
 - A. enter into any agreement or arrangement with any other person that he shall refrain from bidding or add to the amount of any Bid to be submitted; or
 - B. offer or agree to pay or give any sum of money, inducement or valuable consideration directly or indirectly to any person for doing or having done or causing to be done, any act or omission in relation to the Bid or any other tender submitted to the Board in relation to the Project.

_____ in capacity of _____

Signature

duly authorised to act on behalf of

Date

in the presence of

_____ Witness _____

_____ Full name _____

_____ Address _____

Appendix I – Community Benefits

1 SOCIAL CONSIDERATIONS / COMMUNITY BENEFITS OVERVIEW

1.1 Background

The Board recognises the very significant training and employment opportunities delivery of this Project can create for the wider community and beyond throughout the Project Term. The Board also recognises that the Project has the potential to drive significant initiatives relating to regeneration, sustainability and social benefits, aligning with the Board's strategic objectives.

The Board is therefore incorporating a range of social considerations/Community Benefits (CB) Requirements into its procurement which will ultimately form contractual requirements under and in terms of Clause 73 (Community Benefits) of the NPD Project Agreement.

Project Co will work in partnership with the Board and where appropriate, the Edinburgh Partnership and the agencies listed in section 3.6 to deliver the Board's CB Requirements in respect of both the construction and operational phases of the Project.

1.2 Overview of the Board's CB Requirements

These are set out in Section 2 and comprise requirements for the following -:

- Targeted Recruitment and Training /Employment and Skills Plan(Section 2.1)
- Supply Chain Development (SMEs) (Section 2.2)
- Supply Chain Development (Social Enterprises) (Section 2.3)
- General CB Requirements (Section 2.4)

1.3 Bid Submission Requirements

These are detailed in Section 3.

In broad terms the Board's CB Requirements are expressed in general terms. Bidders are given freedom to provide proposals that best fit their delivery structure and procedures, split into construction phase proposals and operational phase proposals. Bidders are, however, required to propose specific financial consequences for failing to deliver these proposals, such payments to be reflected in Clause 73 of the NPD Project Agreement.

Bidders' responses will comprise completion of the various submission requirements, which are more fully set out in Section 3, but can be summarised as follows:

Section	Submission requirement	Approach to scoring
Section 3.1: Employability and Training – Construction phase	Completed ESP Completed CB Method Statement	Scored in accordance with section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPD, as also referred to in section B6 of Appendix (ii) (Submission Requirements) of Volume 1 of the ITPD. A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.
Section 3.2 – Employability	Completed ESP	Scored in accordance with

Section	Submission requirement	Approach to scoring
and Training – Operational phase	Completed CB Method Statement	<p>section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPD, as also referred to in section B6 of Appendix (ii) (Submission Requirements) of Volume 1 of the ITPD.</p> <p>A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.</p>
Section 3.3 – Supply Chain Development, SME and Social Enterprise – Construction phase	Completed CB Method Statement for Construction phase	<p>Scored in accordance with section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPD, as also referred to in section B6 of Appendix (ii) (Submission Requirements) of Volume 1 of the ITPD.</p> <p>A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.</p>
Section 3.3 – Supply Chain Development, SME and Social Enterprise – Operational phase	Completed CB Method Statement for Operational phase	<p>Scored in accordance with section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPD, as also referred to in section B6 of Appendix (ii) (Submission Requirements) of Volume 1 of the ITPD.</p> <p>A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.</p>
Section 3.4 – Other Community Benefits	Bidders shall submit a Method Statement setting out any other proposals or measures they are willing to undertake to provide additional Community Benefits	Requirement to submit a Method Statement but not scored.

.Responses referred to here as “CB Method Statements” are referred to in the NPD Project Agreement as Project Co's Community Benefits Method Statements.

1.4 Role of Edinburgh Council

The Board is a partner in the Edinburgh Partnership, a community planning partnership for the city which brings together the public, community, voluntary and business sectors to deliver a better quality of life in Edinburgh. For further information see:

http://www.edinburgh.gov.uk/info/20162/edinburgh_partnership/1446/about_the_edinburgh_partnership

Members of the Partnership will not be precluded from working with Project Co to deliver the CB programme provided that any potential conflicts of interest are managed to the Board's satisfaction.

2 THE BOARD'S COMMUNITY BENEFITS REQUIREMENTS

2.1 Targeted Recruitment & Training/Employment and Skills Plan

The Board is committed to assisting unemployed people, encouraging access to quality sustainable employment and providing training opportunities relating to deliver of the Project.

This may include on-site training and assessment, or offsite training, or a mix of these.

The Board, based on the approach outlined by Construction Skills, and using benchmarks suggested in guidance produced by them relevant to employability and training measures in major health projects, has identified the following required outputs and volumes.

Work Placement (16-19 years)	16
Work Placement (14-16 years)	4
Curriculum support activities	14
Graduates	3
Apprentice starts	11
Existing apprentices	10
Apprentice completions	3
Jobs advertised through local employment vehicles	7
N/SVQ starts for subcontractors	21
N/SVQ completions for subcontractors	18
Training Plans for subcontractors	5
Supervisor training for subcontractors	10
Leadership and management training for subcontractors	9
Advanced health and safety training for subcontractors	11

2.2 Supply Chain Development: SMEs

Context

The long term sustainable development of the SME base is vital to driving sustainable economic growth within Lothian, Scotland and beyond. The Board, in furtherance of its own objectives and those of the Edinburgh Partnership of which it forms part, recognises the need to support the development of the SME sector by developing a procurement approach which ensures their exposure to procurement opportunities related to the Project.

Requirement

Project Co shall ensure that the Project Co advertises, and ensures that its sub-contractors:

- advertise all relevant subcontracts to be agreed with Bidders with reference to Bidders' method statements; and

- allow SMEs equal opportunities to tender provided they have the appropriate capacity, experience and financial standing (and without leading to discrimination against others in the market).

An SME is defined as a company that is a small or medium-sized company and is not a member of a large group. An SME has a turnover of up to 50m Euro per annum and has no more than 250 employees.

Notes

Bidders may wish to contact the organisations listed in section 3.6 in the context of developing their proposals to meet the above.

2.3 Supply Chain Development: Social Enterprises

Context

The Board supports the Scottish Government's policy on Social Enterprise and believes that Social Enterprises have a distinct and valuable role to play in helping to create a strong, sustainable and socially inclusive economy.

A Social Enterprise is a business with primarily social objectives whose surpluses are principally reinvested for that social purpose in the business or in the community rather than being driven by the need to maximise profit for shareholders and owners. Social Enterprise is a business model which offers the prospect of a greater equity of economic power and a more sustainable society - by combining market efficiency with social and environmental justice.

The approach is founded on the principle of building relationships and partnerships by integrating a community development vision, social outcomes, business objectives and local and national government goals. Social Enterprises are involved in a wide range of industries, from recycling, community transport, landscaping, catering, employment and training to event management. In accordance with its broader objectives and its objectives through the Edinburgh Partnership, the Board wishes its procurement process ensures that Social Enterprises are made aware of supply chain opportunities offered by the Project.

Requirements: General

Project Co shall ensure that Project Co shall advertise, and ensure that its sub-contractors:

- advertise all relevant subcontracts to be agreed with Bidders with reference to Bidders method statements; and
- allow Social Enterprises equal opportunities to tender provided they have the appropriate capacity, experience and financial standing (and without leading to discrimination against others in the market)

Notes

Bidders may wish to contact the agencies listed in section 3.7 for information on Social Enterprises and/or in the context of developing their proposals to meet the above.

As part of the Scottish Government's strategy to create an enterprising third sector, social enterprises are preparing to increase activity with commercial contractors, utilising national and local training, capacity building and promotional measures. A register of social enterprises that are interested in contract delivery has been created at www.readyforbusiness.org to assist contractors to identify individual social enterprises and consortia, to assist planning with respect to community benefit delivery within a range of contract opportunities.

Scottish Government initiatives are supported by a Tender Preparation programme for Third Sector Organisations throughout Scotland that will be delivered through Scottish Government Contract by CEiS and the Supplier Development Programme in 2010/11. Through these programmes, significant support and resource is being allocated to support social enterprises to be ready to engage with companies delivering commercial contracts, and in particular within a community benefits framework to ensure that procurement activity contributes to meeting The Board's aims of having a robust social enterprise sector delivering social and environmental benefits in the city.

2.4 Other Community Benefits

Consistent with its broader objectives, including its objectives through the Edinburgh Partnership, the Board seeks to maximise Community Benefits delivered by the Project.

Accordingly, bidders will require to set out any additional Community Benefits that they would be willing to provide at no additional cost over the period of the contract. **Submissions on these additional benefits will not be scored** but the Board considers that such submissions could, for example, include additional Bidder proposals to:

- undertake educational initiatives with community, voluntary and charitable organisations relevant to the Project and not falling under 2.1 and 2.2 above; or
- support or contribute in some other way to the work of community, voluntary and charitable organisations associated with the Project.

Bidders will be at liberty to put forward other proposals.

Clause 73 of the NPD Project Agreement shall operate to contractually oblige Project Co to deliver additional Community Benefits that it puts forward.

2.5 General Community Benefits Requirements

2.5.1 Monitoring

Project Co will be required to provide monitoring information at least quarterly in a format to be agreed with the Board. The primary function of the monitoring information will be to enable the Board to measure and produce reports on Project Co's performance against the Community Benefits objectives.

In particular:

- Targeted Recruitment and Training;
- Supply Chain Development (SMEs and Social Enterprises); and
- Other Benefits put forward by Project Co.

To comply with the Data Protection Act, all such monitoring and training documents must include a statement authorising Project Co to disclose personal data from the monitoring forms to the Board for the purposes of contract monitoring. This statement is to be signed by the individuals listed.

2.5.2 Insurances

Project Co shall ensure that insurance cover includes people aged 16 and over and staff from employment and training organisations when on work experience on-site.

2.5.3 Disclaimer

The Board will work with its partners to enable access to appropriate construction and operational training, jobseekers, SMEs and Social Enterprises to be available to Project Co.

This action, however, does not comprise or imply any promise on the part of the Board or their agents to provide suitable services, trainees, labour or resources.

Any action taken by the Board to facilitate relationships between Project Co and individuals/firms/agencies does not imply and should not be deemed to imply that they or its agents consider the individual, firm or agency as suitable for engagement by Project Co and/or its supply chain. Within this context, the Board will work with local agencies to help facilitate the achievement of the Community Benefits Requirements.

3 BID SUBMISSION REQUIREMENTS

Bid submission requirements in respect of the Board's CB requirements are summarised at 1.3 above. The following sets out the detail required.

3.1 Employment and Skills Plan: Construction Phase

Bidders are required to complete an Employment and Skills Plan (ESP) covering the employment and skills areas from the table below (as extended by the Bidder to cover the full period of construction). For further information on each of these categories, Bidders are referred to Construction Skills in Scotland's document "*Client Based Approach to developing an Employment and Skills Strategy on construction projects in Scotland*" (and Appendix A in particular).

Benchmarks are provided in 2.1 and constitute minimum outputs for Bidders' ESPs. Bidders are to use their own judgement as to what outputs beyond those minimums they consider are ultimately achievable in relation to the Project.

The output figures for the ESP should indicate the minimum outputs for each month against the relevant employment and skills areas. The "Summary" columns are also to be completed. Guidance on the employment and skills areas is also included within Construction Skills in Scotland's document "*Client Based Approach to developing an Employment and Skills Strategy on construction projects in Scotland*" (and Appendix A in particular).

Bidders are required to provide an unequivocal statement alongside their ESP that, if appointed, they will be contractually bound to deliver against what they have set out in the ESP, in accordance with the terms and conditions set out in Clause 73 of the NPD Project Agreement.

TEMPLATE EMPLOYMENT AND SKILLS PLAN (ESP)

Employment and Skills areas		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Summ No
1.	Work Placement (16-19 years) – persons													16
2.	Work Placement (14-16 years) – persons													4
3.	Curriculum Support Activities – individual engagement													14
4.	Graduates – persons													3
5.	Apprentice Starts - persons													11
6.	Existing apprentices - persons													10
7.	Apprentice Completions - persons													3
8.	Jobs Advertised Through proximate Employment Vehicles - number													7
9.	N/SVQ Starts for Subcontractors - persons													21
10.	N/SVQ Completions for Subcontractors - persons													18
11.	Training Plans for Subcontractors - number													5
12.	Supervisor Training for Subcontractors - persons													10
13.	Leadership and Management Training for Subcontractors - persons													9
14.	Advanced Health and Safety Training for Subcontractors - persons													11

Employment and Skills Method Statement

Bidders are also required to provide a detailed CB Method Statement setting out how they intend to implement the employment and training requirements of the Board and to deliver the ESP. The CB Method Statement should be restricted to **1000** words and clearly set out the proposed approach for delivering skills development against the employment and skills areas, covering the following:

- who in the organisation will be responsible for managing the training scheme and overseeing the proposals?
- which education and training providers will be involved with the delivery of the ESP?
- what types of accredited and non-accredited training are expected to be offered and who are expected to be the main beneficiaries of this training?
- which trades or occupational areas is it envisaged will be offering apprenticeship opportunities?
- what types of apprenticeships are expected to be offered (i.e., traditional programme led, advanced etc)?
- how will the target outputs as set out in the ESP be delivered?
- how will health and safety issues be managed?
- what actions will be taken to ensure the support of trade contractors and sub-contractors working on the project?
- how will compliance be managed and monitored with respect to the organisation's trade contractors and sub-contractors?
- how will the target outputs as set out in the ESP be delivered?
- how will health and safety issues be managed?
- How will monitoring of delivery of Community Benefits and reporting to the Board under Clause 73 of the NPD Project Agreement be undertaken?
- What financial consequence the bidder proposes to include, for the purposes of clause 73 of the NPD Project Agreement, for failure to deliver against the ESP.

Bidders are referred to Construction Skills in Scotland's document "*Client Based Approach to developing an Employment and Skills Strategy on construction projects in Scotland*" (and Appendix A in particular) for further information and Appendix B of that document in particular.

3.2 Employment and skills plan: operational phase

Bidders should repeat the process outlined for the construction phase in respect of the operational phase (though the table should be completed not on a monthly basis but on an annual basis).

Note: The desired/expected outputs set out at Section 2.1 are for the Construction Phase only. The Board does not have desired/expected output figures for this element and it is a matter for bidders to consider, as against their specific approach to delivery.

3.3 Supply Chain Development: SMEs & Social Enterprise

Each Bidder must complete two separate CB Method Statements in accordance with the detail set out below, detailing what it proposes to do to meet the Board's SME and Social Enterprise supplier development objectives in respect of both the Construction Phase and Operational Phase (**800** word limit for each).

Bidders will be expected to have identified a source for any additional resources they will require to deliver the SME and Social Enterprise development, so that the requirements can be met with no additional costs to the Board. As part of the bid preparation, the Board expects Bidders to have contacted the agencies listed in Section 3.6 or other similar agencies of their choice.

Bidders are required to provide an unequivocal statement in the CB Method Statement that, if appointed, they will be contractually bound to deliver against what they have set out in their CB Method Statements, in accordance with the terms and conditions set out in Clause 73 of the NPD Project Agreement and the financial consequence the Bidder proposes to include, for the purposes of clause 73 of the NPD Project Agreement, for failure to deliver against what they have set out.

The Small to Medium sized Enterprises / Social Enterprises CB Method Statements must respond to the following questions (*NOTE: Separate responses are to be provided for the Construction Phase and the Operational Phase*):

1.	Describe the activities that you will undertake to identify SMEs and Social Enterprises and assess each sector separately in their capacity to deliver works, services or supplies, that are required for all contracts in relation to the Project.
2.	Please quantify, both in hours and value, the commitment of you and your sub-contractors, in relation to this project, to the engagement with SME / SEs in specific capacity building support and in the development of partnership working and outline your overall approach.
3.	How will you ensure that your sub-contractors make all opportunities available to SMEs and Social Enterprises?
4.	Describe the anticipated outcomes for SMEs and Social Enterprises from the activities you have outlined in response to Q2 and Q3 and how would you monitor and assess the social and economic impact of your engagement with SMEs and Social Enterprises?
5.	How you will monitor delivery of Community Benefits and report to the Board under Clause 73 of the NPD Project Agreement?

3.4 Other Community Benefits

Bidders must provide a CB Method Statement setting out any other Community Benefits they are willing to deliver (see Section 2.4) and their proposals to monitor delivery of Community Benefits and report to the Board under Clause 73 of the NPD Project Agreement (**note: this CB Method Statement will not be scored**).

Bidders are required to provide an unequivocal statement in the CB Method Statement that, if appointed, they will be contractually bound to deliver against what they have set out in their CB Method Statements, in accordance with the terms and conditions set out in Clause 73 of the NPD Project Agreement and the financial consequence the Bidder proposes to include, for the purposes of clause 73 of the NPD Project Agreement, for failure to deliver against what they have set out. (800 word limit)

3.5 FOR INFORMATION ONLY – SUPPORT AGENCIES

POSSIBLE RESOURCES

Note: Any action taken by the Board to facilitate relationships between Project Co and individuals/firms/agencies does not imply and should not be deemed to imply that they or its agents consider the individual, firm or agency as suitable for engagement by Project Co and/or its supply chain. Within this context, the Board will work with local agencies to help facilitate the achievement of the Community Benefits Requirements.

3.6.1 Recruitment and Training.

Agency	Remit	Contact	Position	Contact No.	Email	Web
Sector Skills CLIENTs :						
Construction Skills	Sector Skills for construction main trades. Advice on training and funding	Hugh McCafferty	Operations Manager	[REDACTED]	[REDACTED]	http://www.constructionskills.net/
EU Skills	Sector Skills for Utilities, Gas and heating plumbers. Advice on training & funding	Jim Brown	Skills Director Scotland	[REDACTED]	[REDACTED]	www.euskills.co.uk
Summit Skills	Sector Skills for Electrical, Plumbing & Building Services. Advice on training and funding	Ian Stirrat	Operations Manager	[REDACTED]	[REDACTED]	http://www.summitskills.org.uk
Edinburgh Partnership	Its role is to lead joint activity on issues facing the city and those living and working here	Saty Kaur		[REDACTED]	[REDACTED]	http://www.edinburghnp.org.uk

3.6.2 SMEs

Agency	Remit	Contact	Position	Contact No.	Email	Web
Federation of Small Businesses	FSB Scotland campaigns for a better social, political and economic environment to work, learn and do business in.	Stewart Farmer	Regional Organiser (West of Scotland)	[REDACTED]	[REDACTED]	http://www.fsb.org.uk
Scottish Enterprise	SE help ambitious businesses in Scotland to grow and become more successful. SE support key industry sectors and develop the business environment to enhance Scotland's economy	Jillian Moffat	Senior Manager	[REDACTED]	[REDACTED]	http://www.scottish-enterprise.com

Social Enterprises

Agency	Remit	Contact	Position	Contact No.	Email	Web
Edinburgh Chamber of Commerce	Dynamic member-led organisation, working to support the local business community and specifically our strong network of member businesses.			[REDACTED]		http://www.edinburghchamber.co.uk
Ready For Business	Business support Services for SEs	Roddy Stewart	Business Adviser	[REDACTED]	[REDACTED]	http://www.ceis.org.uk
Craigmillar & District Business Association	Association was created to provide a local networking and information forum for established businesses, local entrepreneurs and individuals within the Craigmillar area.			[REDACTED]	[REDACTED]	www.cdba.org.uk
Community Renewal	Work in local communities to and small	Nigel Green	Co-ordinator Edinburg	[REDACTED]	[REDACTED]	http://www.communityrenewal.org.u k/

	neighbourhoods to improve the wellbeing of families.		h			
WEACT (Stevenson College)	WEACT is our community-based employability organisation offering a range of services to clients across Edinburgh.			[REDACTED]	[REDACTED]	WEACT is our community-based employability organisation offering a range of services to clients across Edinburgh.

3.6.3 Other Sources

Agency	Contact No.	Address	Web
Job Centres:			
New Town Edinburgh East Lothian	██████████	<u>20 High Riggs, Edinburgh, Lothian.</u>	https://www.gov.uk/contact-jobcentre-plus
North House	██████████	<u>Eskmills Park Station Road, Musselburgh, Midlothian.</u>	
Schools:			
Castlebrae Community High School	██████████	<u>2A Greendykes Road Edinburgh, Midlothian, EH16 4DP</u>	http://castlebrae.org.uk/
Portobello High School	██████████	10 Duddingston Road Edinburgh EH15 1NF	http://portobellohighschool.org.uk
Holyrood High School	██████████	55 Duddingston Road West, Edinburgh, EH15 3ST	http://www.holyroodedin.edin.sch.uk/home.ikm
Liberton High School	██████████	328 Gilmerton Road, Edinburgh, EH17 7PT	www.liberton.edin.sch.uk/
Gracemount High School	██████████	<u>Lasswade Road, Edinburgh, EH16 6TZ.</u>	www.gracemounthighschool.co.uk/

Colleges:			
Jewel and Esk Valley College	██████████	<u>Milton Road Campus, 24 Milton Road, EH15 2PP.</u>	http://www.jec.ac.uk/
Queen Margaret University	██████████	<u>QMU Drive, Musselburgh, EH21 6UU.</u>	http://www.qmu.ac.uk/
Stevenson College	██████████	<u>Bankhead Avenue, Edinburgh, EH11 4DE.</u>	www.stevenson.ac.uk/

Appendix J - BIM Requirements for the Project

1. Project Set-up

- 1.1 Bidders are required to prepare a BIM Execution Plan for review by the Board. The BIM Execution Plan shall cover as a minimum the following topics:
- b) Project information/description;
 - c) Key BIM stakeholders;
 - d) Goals and project objectives;
 - e) BIM objectives and uses;
 - f) Model management;
 - g) BIM deliverables and format;
 - h) Quality control system;
 - i) Data management; and
 - j) Frequency and content of BIM audits.
- 1.2 The BIM execution plan is to be prepared in accordance with BS 1192.
- 1.3 Bidders must use recognised industry BIM software platforms, suited to the various tasks to be fulfilled by both the design team and the supply chain, and establish principles of interoperability.
- 1.4 Bidders will provide a BIM overlay to the design team process map.
- 1.5 Bidders will appoint an Information Manager to see that the common data environment is set up and maintained and that the mechanism and technology for information exchange are in place and adhered to throughout the Construction Phase and the Operational Term.
- 1.6 Bidders will establish a through-life information management strategy including graphical and non-graphical information. Agree format for transfer of information into asset management systems will be developed, and a data classification system (eg Uniclass 2) established.
- 1.7 A Soft Landings implementation plan will be developed that follows the principles of the Government Soft Landings plan Policy dated September 2012.

2. Pre-construction Phase

- 2.1 3D visualisations, walk-throughs and images for User, Local Authority and other Stakeholder presentations and discussions at key project milestones are to be prepared.
- 2.2 Room layouts are to be prepared using ADB to include fully loaded 3D views.

- 2.3 The model is to include performance targets for key indicators, associated with associated provision in the design to measure data in operation and allow model-based comparisons between design intent and actual performance.
- 2.4 Data outputs in COBie format are to be prepared at key stages aligned to the process map, at a Level of Detail matching the stage requirement.
- 2.5 Specifications are to be based on a system that allows direct links between spatial BIM Models and the accompanying specifications and object attributes.
- 2.6 Read-only access to the BIM model gratis and within 24 hours is to be made available at the Board's request.

3. Construction Phase

- 3.1 The Board is to have read-only access to 4D construction sequencing output from model.
- 3.2 The model is to be regularly updated (every 2 weeks) to reflect material/component detailed selections or variations from those selected at design/tender stage.
- 3.3 Read-only access to the BIM model gratis and within 24 hours is to be made available at the Board's request.

4. Operational Term

- 4.1 The model shall be maintained throughout the Operational Term to reflect all planned maintenance and lifecycle works and modification should be made to reflect all changes implemented under Schedule 16 Change Protocol.
- 4.2 Read-only access to BIM model, gratis, and within 24 hours is to be made available at the Board's request.
- 4.3 Asset Management software is to be discussed with the Board but data should be held in recognised interchange format (e.g. COBie) to allow interoperability between recognised facilities management (CAFM) packages, recognised asset management packages and the BIM model.

5. Handback

- 5.1 Project Co will hand over ownership of the model to the Board at the Expiry Date.
- 5.2 At the Expiry Date, the model is to be fully updated model to reflect all changes during the Operational Term including specification details, operation and maintenance requirements and residual design life of all components and assemblies.
- 5.3 The on-going maintenance and replacement information is to be in a format to be agreed with the Board.
- 5.4 Project Co shall provide training in the operation of software to the Board.



A bright new future: A project to re-provide services from the Royal Hospital for Sick Children, Child and Adolescent Mental Health Service and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France

“Re-provision of RHSC and DCN at Little France”

INVITATION TO PARTICIPATE IN DIALOGUES SUBMIT FINAL TENDER

**Volume 1
Revision A**

Contract Notice Ref: 386758-2012 (2012/S 235-386758)

Lothian Health Board

Waverley Gate

2-4 Waterloo Place

Edinburgh

EH1 3EG

www.nhslothian.scot.nhs.co.uk

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IMPORTANT NOTICE

The Invitation to ~~Participate in Dialogue and any subsequent Invitation to~~ Submit Final Tender (~~together~~ the “**Invitation**”) has been prepared for the purpose of providing certain information to Bidders invited to ~~participate~~ submit their final tenders in the competition for the design, build, finance and maintenance of a project to enable the re-provision of services from the Royal Hospital for Sick Children, Child and Adolescent Mental Health Service and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France (“**the Project**”).

In no circumstances shall the Board or their advisers, consultants, contractors, servants or agents incur any liability or responsibility arising out of or in respect of the issue of the Invitation.

Nothing in the Invitation shall be construed as legal, financial or tax advice.

Any summaries or descriptions of documents or contractual arrangements contained in any part of the Invitation cannot be and are not intended to be comprehensive, nor any substitute for the underlying documentation (whether existing or to be concluded in the future), and are in all respects qualified in their entirety by reference to them.

No legal relationship or other obligation shall arise between any Bidder and the Board unless and until the NPD Project Agreement has been formally executed in writing by the Board and the successful Bidder and any conditions precedent to its effectiveness have been fulfilled.

In this notice, references to the Invitation shall include all information contained herein and any other information (whether written, oral or in machine-readable form) or opinions made available by or on behalf of the Board, their advisers, consultants, contractors, servants or agents in connection with the Invitation or the Project including, without limitation, any additional information made available by the Board throughout the Dialogue Period.

Scots law shall be applicable to the Invitation and the Scottish Courts shall have exclusive jurisdiction.

Each Bidder's acceptance of delivery of the Invitation constitutes its agreement to, and acceptance of, the terms set forth in this Important Notice.

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1 INTRODUCTION

1.1 Purpose of Invitation to ~~Participate in Dialogue~~ Submit Final Tender

This Invitation to ~~Participate in Dialogue (ITPD)~~ Submit Final Tender (ISFT) is being issued in relation to the three successful candidates (each of whom shall be a Bidder) shortlisted by the Board following completion of the Pre-Qualification Questionnaire initiated by the Office ~~Official~~ Journal of European Union (OJEU) notice ref.386758-2012 (2012/S 235-386758) published on 5 December 2012. ~~The ITPD describes the Board's needs and requirements and sets out how Dialogue will be conducted~~ The three Bidders shortlisted by the Board following completion of the Pre-Qualification Questionnaire and subsequent completion of Competitive Dialogue are invited to submit Final Tenders.

The ISFT describes the Board's needs and requirements and sets out how Final Tender will be conducted.

1.2 Structure of the Invitation to ~~Participate in Dialogue~~ Submit Final Tender

The ~~ITPD~~ ISFT comprises four volumes of information as follows:

- 1.2.1 **Volume 1** contains background information on the Project, the conditions of participation, ~~the arrangements for the Dialogue, the Informal Submissions that Bidders must provide during the Dialogue Period, Draft Final Tender requirements, envisaged~~ Final Tender requirements and how the Board intends to evaluate the Final Tender, award the Project and communicate with Bidders. The requirements are broadly set out in Appendices A, B and C of Volume 1.
- 1.2.2 **Volume 2** contains the contractual requirements which are set out in the NPD Project Agreement and schedules, (which include the draft Payment Mechanism) and Articles of Association ~~and the Final Tender (Bidder Specific) NPD Project Agreement.~~
- 1.2.3 **Volume 3** contains the specific technical requirements of the Board for the Project including construction (clinical and non-clinical) requirements and Facilities standards, equipping requirements and facilities management requirements.
- 1.2.4 **Volume 4** comprises of details of the Data Room available to Bidders during the Tender Period.

1.3 Definitions within Invitation to ~~Participate in Dialogue~~ Submit Final Tender

1.3.1 In terms of the interpretation of the ~~ITPD~~ ISFT, unless the context otherwise requires:

- (a) The masculine includes the feminine and vice-versa;
- (b) The singular includes the plural and vice versa;
- (c) The words "include" and "including" shall be construed without limitation;
- (d) Any reference to a person includes a reference to an individual, company, authority, board, association or other legal entity;
- (e) Any reference to any directive, statute or statutory provision shall include any directive, statute, or statutory provision which amends or replaces or has amended, replaced

consolidated or re-enacted it and shall include any subordinate legislation made under any directive or statute;

- (f) Save as otherwise provided herein, any reference to a Volume shall be a reference to a Volume of the ~~ITPD~~SFT to; and
- (g) Save as otherwise provided herein, any reference in this Volume 1 to a section shall be a reference to a section of this Volume 1.

1.3.2 The terms used in these instructions to Bidders shall, where the same have been defined in the NPD Project Agreement, bear the same meaning as in the NPD Project Agreement unless otherwise defined hereunder:

Additional Documentation Submission has the meaning given to it in Appendix C(~~4~~ (ii)) of Volume 1 of the ~~ITPD~~SFT;

Ancillary Agreements means the Memorandum and the Articles of Association;

Annual Service Payment has the meaning given to it in the NPD Project Agreement;

Bidder means each of

- B3 ~~(herein referred to as Bidder A);~~
- Integrated Health Solutions (Lothian) ~~(herein referred to as Bidder B);~~ and
- Mosaic ~~(herein referred to as Bidder C)~~

and **Bidders** shall be construed accordingly;

Bioquarter Site has the meaning given to it in the NPD Project Agreement;

Board has the meaning given to it in the NPD Project Agreement;

Board's Construction Requirements has the meaning given to it in the NPD Project Agreement;

Board Services has the meaning given to it in the NPD Project Agreement;

~~Briefing Meeting has the meaning given to it in paragraph 4.4 (Briefing Meeting and Q and A Sessions) of Volume 1 of the ITPD;~~

CAMHS means the Child and Adolescent Mental Health Service currently provided from the Royal Edinburgh Hospital, Morningside Place, Edinburgh.

Campus Facilities has the meaning given to it in the NPD Project Agreement;

Campus Site has the meaning given to it in the NPD Project Agreement;

Certificate of Non-Collusion and Non-Canvassing means the certificate of that name set out in Appendix H of Volume 1 of the ~~ITPD~~SFT;

CEC means the City of Edinburgh Council;

City Development means the department of City Development within the City of Edinburgh Council;

Conject means the Conject information channel, ~~formerly known as BIW~~, provided by Conject Ltd, a web based construction collaboration portal utilised on the project by the Board.

Conject User Manual means the user manual for Conject set out in Volume 4 of the ~~ITPD~~ISFT;

Consort has the meaning given to it in the NPD Project Agreement;

Core Evaluation Team means the principal assessment body for procurement, for Pre-qualification Questionnaire, Dialogue and evaluation of the Final Tender;

Data room means the secure electronic data storage room that will be provided via Conject;

DCN means the Department of Clinical Neurosciences currently provided from the Western General Hospital on Crewe Road South, Edinburgh;

~~Dialogue means the competitive dialogue conducted in accordance with the Regulations;~~

~~Dialogue Meeting means a meeting between the Board and a Bidder during the Dialogue Period;~~

~~Dialogue Period means the period between the date of issue of the ITPD and the date of issue of the notification from the Board that Dialogue has been concluded;~~

Dialogue Period Bulletin means a communication during the ~~Dialogue~~Final Tender Period of that name described in paragraph 4.~~11~~5.2 (Communication Protocol) of Volume 1 of the ~~ITPD~~ISFT;

Dialogue Period Query means a communication during the ~~Dialogue~~Final Tender Period of that name described in paragraph 4.~~11~~5.2 (Communication Protocol) of Volume 1 of the ~~ITPD~~ISFT;

Dialogue Period Query Proformas means the document provided within Appendix D of Volume 1 of the ISFT;

Draft Final Tender means the submission made by a Bidder during the Dialogue Period in accordance with Appendices A, B and C of Volume 1 of the ITPD;

Draft Schedule of Accommodation has the meaning given to it in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation) of Volume 1 of the ISFT;

Enabling Works has the meaning given to it in paragraph 2.7.5 (Enabling Works) of Volume 1 of the ~~ITPD~~ISFT;

Economic Cost has the meaning defined in paragraph 5.7.1 (Economic Cost) of Volume 1 of the ~~ITPD~~ISFT;

Energy Centre means a dedicated autonomous energy centre to be provided as part of the Project;

Expiry Date has the meaning given to it in the NPD Project Agreement;

Environmental Matrix means the matrix contained in ~~ITPDISFT~~ Volume 3, Schedule Part 6, Section 3, Appendix C;

Equalisation Adjustment has the meaning described at paragraph 5.7.1 (c) (Economic Cost) of Volume 1 of the ~~ITPDISFT~~;

Equipment Schedule means the document named such in Volume 3 of the ~~ITPDISFT~~;

Equipment Responsibility Matrix means the document named such in Volume 3 of the ~~ITPDISFT~~;

Facilities has the meaning given to it in the NPD Project Agreement;

Family Hotel has the meaning given to it in Schedule Part 6, Section 3, Sub-section D (Specific Clinical Requirements);

FOISA has the meaning given to it in the NPD Project Agreement;

Full Business Case or FBC means full business case of the Board;

Financial Close has the meaning given to it in the NPD Project Agreement;

Financial Model means an electronic model used for the purposes of this procurement as produced by a Bidder in support of the Bidder's Financial Submission (or by the Board in the case of the Shadow Bid Financial Model), having the attributes defined at paragraph 3.9 of this document;

Financial Proformas means the contents of ~~Annex 1 to~~ Appendix B (ii) of Volume 1 of the ~~ITPDISFT~~;

Financial Submission means the elements of a Bidders proposals relating to financial issues as defined in Appendix B of Volume 1 of the ~~ITPDISFT~~ and as relating to the Final Tender, ~~Draft Final Tender and all other submissions required during the Dialogue Period;~~

Final Tender means a submission made by a Bidder in response to an Invitation to Submit Final Tender;

Final Tender (Bidder Specific) NPD Project Agreement means the Bidder specific NPD Project Agreement agreed with each Bidder during the Dialogue Period;

Final Tender Period means the period between the date of issue of the ~~notification that Dialogue has been concluded~~~~ISFT~~ and the date of the Final Tender;

Generic Rooms has the meaning given to it in paragraph 2.5.2 (Room Layouts) of Volume 1 of the ~~ITPDISFT~~;

GICs means guaranteed investment certificates

Group 1 Equipment has the meaning given to it in the NPD Project Agreement;

Group 2A Equipment has the meaning given to it in the NPD Project Agreement;

Group 2B Equipment has the meaning given to it in the NPD Project Agreement;

Group 3 Equipment has the meaning given to it in the NPD Project Agreement;

Gross Internal Floor Area means the area of a building measured to the internal face of the perimeter walls at each floor level. The rules of measurement of gross internal floor area are defined in the latest edition of the RICS Code of Measuring Practice;

Hard FM has the meaning given to it in paragraph 2.11 (Facilities Management: Services to be provided by Project Co) of Volume 1 of the ~~ITPD~~ISFT;

Helpdesk has the meaning given to it in the Service Level Specification contained in Volume 3 of the ~~ITPD~~ISFT;

Indicative Elements of the Reference Design has the meaning given to it in paragraph 2.6 (Indicative Elements of the Reference Design) of Volume 1 of the ~~ITPD~~ISFT;

~~**Informal Submission** has the meaning given in paragraph 4.2.3 (Timetable and Dialogue Meetings) of Volume 1 of the ITPD;~~

Information Provided means the information provided to the Bidders by the Board or its advisers during the ~~Dialogue~~Final Tender Period;

Interface Proposals has the meaning given to it in the NPD Project Agreement;

Invitation to Participate in Dialogue or ITPD means the document(s) issued on the 11th March 2013 to successful PQQ candidates

Invitation to Submit Final Tender or ISFT means this document as more particularly described in paragraph ~~4.24~~.1 of Volume 1 of the ~~ITPD~~ISFT as updated by the Board from time to time;

and
~~**Invitation to Submit Final Tender or ISFT** means~~ the document(s) which may be issued by the Board to any shortlisted Bidders inviting them to submit their Final Tender;

IRR means internal rate of return;

Key Rooms has the meaning given to it in paragraph 2.5.2 (Rooms Layouts) of Volume 1 of the ~~ITPD~~ISFT;

Key Stage Review the validation to be carried out by the Scottish Futures Trust on behalf of the Scottish Government at key stages of the procurement process;

Link Building has the meaning given to it in the NPD Project Agreement;

Mandatory Reference Design Requirements has the meaning given to it in paragraph 2.5 (Reference Design and Mandatory Reference Design Requirements) of Volume 1 of the ~~ITPD~~ISFT;

Medical School means the University of Edinburgh Medical School, Chancellor's Building, 49 Little France Crescent, Edinburgh, EH16 4SB;

MLA means mandatory liquid assets;

NPD means non-profit distributing;

NPD Articles of Association means the mandatory articles of association of Project Co, which are prescribed by the SFT;

NPD Model means the non-profit distributing model ascribed by the Scottish Government which represents a development of the traditional PFI model;

NPD Project Agreement means ~~either the contractbase NPD Project Agreement and/or the Final Tender (Bidder Specific) NPD Project Agreement (as the context requires), both as more fully described in paragraph 3.3, as set out in draft form at Volume 2 of the ITPD as updated from time to time~~ SFT and issued to ~~all Bidders who remain in Dialogue with the Board at the relevant time; each Bidder as part of the ISFT.;~~

NPV means net present value;

OBC means Outline Business Case of the Board relating to the Project;

Operational Functionality ~~has the meaning given to it in the NPD Project Agreement;~~ means

(a) the following matters as shown on the 1:500 scale development control plan and site plans;

(i) the point of access to and within the Site and the Facilities;

(ii) the relationship between one or more buildings that comprise the Facilities; and

(iii) the adjacencies between different hospital departments within the Facilities,

as indicated in the Reference Design;

(b) the following matters as shown on the 1:200 scale plans:

(i) the points of access to and within the Site and the Facilities;

(ii) the relationship between one or more buildings that comprise the Facilities;

(iii) the adjacencies between different hospital departments within the Facilities; and

(iv) the adjacencies between rooms within the hospital departments within the Facilities,

as indicated in the Reference Design;

(c) the quantity, description and areas (in square metres) and minimum critical dimensions of those rooms and spaces shown on the Draft Schedule of Accommodation, excluding Project Co spaces;

(d) the location and relationship of equipment, furniture, fittings and user terminals as shown on the 1:50 loaded room plans and internal elevations; and

(e) the location of and the inter-relationships between rooms within the departments within the Facilities, as indicated in the Reference Design;

but only insofar as each of the matters listed in (a) to (e) above relate to or affect Operational Use (with the exception of Non-Clinical Services);

~~(a)~~

Operational Use means the use of a room or space to the extent that it is used by the Board or its employees, tenants, agents and/or contractors (but not to avoid doubt Project Co staff) for carrying out the Board Services;

Payment Mechanism has the meaning given to it in ~~it~~ the NPD Project Agreement;

Non-Clinical Services has the meaning given to it in the NPD Project Agreement;

NPD Project Agreement Submission has the meaning given to it in Appendix C~~(iii)~~ of Volume 1 of the ~~ITPD|SFT~~;

Petrol Station Site has the meaning given to it in the NPD Project Agreement;

Plan 2 has the meaning given to it in the NPD Project Agreement;

Plan 4 has the meaning given to it in the NPD Project Agreement;

Planning Permission in Principle or PPIp means planning permission in principle granted to the Board by CEC in relation to the Site;

Preferred Bidder means the Bidder identified by the Board after evaluation of each of the Final Tenders with which the Board wishes to enter into the NPD Project Agreement;

Pre-Qualification Questionnaire means the document of that name issued on 5 December 2012;

Price Evaluation means the process set out in paragraph 5.7 (Price Evaluation) of Volume 1 of the ~~ITPD|SFT~~;

Price Evaluation Mark has the meaning given to it in paragraph 5.7.2 (Price Evaluation Mark) of Volume 1 of the ~~ITPD|SFT~~;

Project has the meaning given to it in the NPD Project Agreement;

Public Interest Director has the meaning given to it in paragraph 3.2.1(b) (Public Interest Director) of Volume 1 of the ~~ITPD|SFT~~;

Quality Evaluation Mark has the meaning given to it in paragraph 5.6.3 (Quality Evaluation Criteria) of Volume 1 of the ~~ITPD|SFT~~;

~~**Query Proformas** means the document provided within Appendix D of Volume 1 of the ITPD;~~

Reference Design means the preliminary designs prepared by the Board and their advisers and contained in the Data Room;

Reference Design Elements means the documents referred to within Appendix E of Volume 1 of the ~~ITPD~~ISFT;

Reference Design Schedule of Accommodation has the meaning given to it in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation) of Volume 1 of the ~~ITPD~~ISFT;

Regulations mean The Public Contracts (Scotland) Regulations 2012;

RIE Facilities has the meaning given to it in the NPD Project Agreement;

RIE Project Agreement has the meaning given to it in the NPD Project Agreement;

Royal Hospital for Sick Children and Department of Clinical Neurosciences means the premises and associated infrastructure proposed to be constructed as part of the Project and includes CAMHS;

RHSC means the Royal Hospital for Sick Children currently located at 9 Sciennes Road, Edinburgh EH9 1LF;

Schedule of Accommodation has the meaning given to it in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation) of Volume 1 of the ~~ITPD~~ISFT;

Schedule of Operational/Design Notes means document contained in Volume 4 of the ~~ITPD~~ISFT (Data Room);

Service Strip has the meaning given to it in the NPD Project Agreement;

SFT means the Scottish Futures Trust;

~~SFT's~~**SFT's Standard Form NPD Project Agreement** means the form of project agreement issued by SFT ~~on~~ in June 2012, and as amended by SFT from time to time;

Site Survey means the survey of the Site ~~to be~~ procured by the Board and set out in paragraph 2.16 (Surveys and Dialogue Period Ground Investigations); of Volume 1 of the ISFT;

Soft FM Interface Specification means the specification contained in Volume 3 of the ~~ITPD~~ISFT, Part 6, Section 3;

Solution means a solution developed by each Bidder in regard to the Project during the Dialogue Period;

Submission means ~~either or all of the Informal Submission, Draft Final Tender and/or Final Tender where the context requires~~ Submission

Surplus has the meaning given to it in the NPD Project Agreement;

Technical Cost Proformas means the proformas included in ~~Annex 1 to~~ Appendix A (v) of Volume 1 of the ~~ITPD~~ISFT;

Tender Period means ~~either the Dialogue Period or any~~ Final Tender Period;

User Guide means the SFT user guide in relation to standard project agreements (hub DBFM and NPD Model); version 2 dated June 2012 as amended from time to time;

VAT means value added tax;

VFM means value for money;

VIE means vacuum insulated evaporator.

1.4 Overview of Project

The Project shall be to design, build, finance and maintain a new facility to re-provide services from the Royal Hospital for Sick Children, Child and Adolescent Mental Health Service and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France.

In accordance with the Scottish Government's NPD initiative, the Board is ~~now~~ seeking to procure ~~through Dialogue~~ a partner who will form a NPD company (the "**Project Co**") for the delivery of the Project. ~~With the completion of the Dialogue Period, the Board is now issuing this ISFT.~~

The Project shall be based at the Campus Site. The Campus Site shall comprise the Retained Site (i.e. the site of the existing hospital and university buildings) and the Site (i.e. the site for the new Facilities) together with the Retained Estate (i.e. the existing hospital and university buildings) and the Facilities (i.e. the new hospital). The Retained Estate and Retained Site form part of an earlier PFI project entered into between the Board and Consort in 1998. Consort therefore operate (on behalf of the Board) the Retained Estate and the Retained Site.

The intention is that the Project shall construct standalone Facilities on the Site within the Campus Site at Little France as far as is practically possible. However, there shall be a physical link between the Facilities and the Retained Estate via a Link Building between the Facilities and the RIE Facilities at ground and first floor levels.

The Project will co-locate services currently provided at the RHSC located at Sciennes Road, Edinburgh, CAMHS at the Royal Edinburgh Hospital and DCN at the Western General Hospital, Edinburgh. Planning Permission in Principle has been received in respect of the Project.

This Project is regulated and governed by the Public Contracts (Scotland) Regulations 2012 and any contract awarded shall be to the Bidder who can offer the most economically advantageous tender in accordance with the Dialogue procedure.

1.5 Project Objectives and Drivers

1.5.1 The Board has developed a strategic clinical framework to underpin its approach to delivering Scotland's vision for sustainable, quality health care services and a healthier future for everyone.

The framework sets out the Board's principles for planning and delivering services and care in Lothian, and identifies how, through integrated working with partners and redesigning service around and with people, the Board will promote good health and deliver safer, more effective, person-centre healthcare.

The key principles are to:

- 1. focus on prevention and early intervention to help people keep well and anticipate care needs;
- 2. take a whole system approach to planning and managing integrated pathways of care, working with partner agencies in local authorities and voluntary sector;
- 3. reduce unnecessary variation in the way patients are cared for;
- 4. deliver services with the appropriate mix of staff skills, ensuring viable clinical staff rotas;
- 5. reduce spend on property and buildings as hospital stays reduce, to release money for direct patient services;
- 6. question active treatment which will not extend life or quality of life;
- 7. identify services that are not sustainable in the longer term and proactively plan a new way of delivering care;
- 8. make sure we stop procedures and treatments which add no clinical value; and
- 9. maximise the opportunities for use of new technologies to support health and healthcare.

The framework focuses on six strategic aims:

1. prioritise prevention, reduce inequalities and promote longer healthier lives for all;
2. put in place robust systems to deliver the best model of integrated care for our population – across primary, secondary and social care;
3. ensure that care is evidence based, incorporates best practice and innovation, and achieves sustainable care pathways for patients;
4. design healthcare systems to reliably and efficiently deliver the right care at the right time in the most appropriate setting;
5. involve patients and carers as equal partners, enabling individuals to manage their own health and wellbeing and that of their families; and
6. use resources – skilled people, technology, buildings and equipment - efficiently and effectively.

1.5.2 The Board is committed to increasing social capital and addressing inequalities, deriving benefit for the communities, such as through proactive application of community benefits clauses in its procurement processes.

1.5.3 Specific factors driving the need for change in children's and young people's services and clinical neurosciences are:

- (a) The age and limitations of the current premises;
- (b) The increase in age range of patients to be seen in the [facilityRHSC](#), up to age 16 years old, or 18 in some specialities.
- (c) The need to deliver sustainable specialist services whilst meeting the challenge of relatively small numbers of patients and small numbers of clinical experts;
- (d) The national policy for Paediatric Intensive Care Units in Scotland, which have been commissioned under NHS National Services since 2007, sited in two hospitals for children and young people;
- (e) The need to deliver neurosurgery on the same site as adult and children's emergency departments; and
- (f) The need to maintain strong links with the University of Edinburgh's Division of Clinical Neuroscience and their planned Institute of Neuroscience at Little France.

1.5.4 Clinical benefits of integrating the services into one building, supporting the Board's and national strategic ambitions include:

- (a) The ability to deliver paediatric and adult neurosurgery in the same theatre suite, maximising the utilisation of specialist equipment (e.g. intra-operative MRI) and expert staff, with direct internal access to age-appropriate critical care and wards;
- (b) Mental health services on the same site as acute hospital services for children and young people, supporting their physical as well as psychological care;
- (c) Joint-working and economies of scale in high-cost specialist clinical areas such as theatres and radiology; and
- (d) The opportunity to improve emergency access to services by incorporating a helipad on the roof of the Facilities.

1.6 Project Governance

1.6.1 The terminology used to describe project governance arrangements is as defined by the “Scottish Capital Investment Manual Programme and Project Organisation Guide”.

1.6.2 The Investment Decision-Maker is Lothian Health Board, which is ultimately accountable for the Project.

1.6.3 The Board’s Finance and Resources Committee (F&RC) has established a Project Steering Board, chaired by the Project Owner, who is NHS Lothian’s Director of Finance.

~~**1.6.4** The F&RC routinely receives minutes of the Project Steering Board. The Project Owner shall provide assurance to the F&RC on key aspects of project governance and internal control, and progress reports on the delivery of key project milestones.~~

~~**1.6.5** The Project Owner shall alert the F&RC in the event of any trend towards cost escalation or delay, or any radical changes to the objectives of the Project. The Project Owner shall make recommendations to the F&RC on action to take in these circumstances.~~

~~**1.6.6**~~**1.6.4** The Project Owner has the executive responsibility for decision-making relating to the project. All decisions must be consistent with Board strategies, policies and procedures and delegated budgets or in line with any agreed derogations.

~~**1.6.7**~~**1.6.5** The Project Director has responsibility for delivering the project within the governance parameters set out.

~~**1.6.8**~~**1.6.6** The Project Steering Board remit shall be:

- To assist the Project Owner and Project Director in the decision-making process for issues relating to the Project;
- To support the Project Owner and Project Director in preparing submissions to the F&RC, to satisfy that Committee’s assurance needs on governance and internal control and monitoring of key performance milestones;
- To serve as the Capital Management Group, with delegated authority to approve capital enabling works for the Project up to £250k, and will be the first place to review schemes higher than £250k; and
- To be the arbiter of matters arising from the implementation of the Project Design and the Strategic Delivery Programme.

~~**1.6.9**~~**1.6.7** Project Steering Board Membership:

- Project Owner (chair)
- Project Director

- Medical Director
- Non-executive member(s) of Lothian NHS Board
- ~~A representative from the service~~
- Director of Operations for children's services and neuroscience services
- Project Clinical Director
- Director of Capital Planning and Projects
- ~~Associate Director of Finance~~
- Project ~~Operational Lead~~Head of Commissioning and Service Redesign
- Head of Communications Manager
- ~~A representative from the Lothian Partnership Forum~~
- Employee Director
- A representative from the South-East & Tayside Regional Planning Group (SEAT)
- A representative from the Scottish Government
- A representative from the Scottish Futures Trust

~~1.6.10 The Project Owner, as chair of the Project Steering Board, shall decide whether a meeting should proceed in the event of absence of any members. The Project Owner may designate a member to chair a Project Steering Board meeting in their absence. However if the Project Steering Board is considering any business in its capacity as a Capital Management Group then the quorum is the Project Owner plus one member of Lothian Health Board, or if the Project Owner is not present, two members of Lothian Health Board.~~

~~1.6.11~~1.6.8 The Project Director is supported by a project team comprising clinical experts and experienced NHS managers from capital planning, service management, finance and communications. Staff representation is fully integrated into the project with a full-time Partnership member of the team.

~~1.6.12~~1.6.9 The Board's team are supplemented by specialist expertise from external financial, legal and technical advisers.

~~1.6.13 A Project Management Executive supports the Project Director in the day to day running of the Project and reporting on progress to the Project Steering Board.~~

1.7 Programme

The following table sets out the key target milestones for the Project.

Task	Date
Issue Invitation To Participate In Dialogue	12/03/13
Briefing Meetings	w/c 18/03/13
Board to propose draft Site Survey	22/03/13
Bidders to provide comments in relation to draft Site Survey	05/04/13
Dialogue Meeting 1	w/c 01/04/13
Dialogue Meeting 2	w/c 29/04/13

Dialogue Meeting 3	w/c 27/05/13
Dialogue Meeting 4	w/c 24/06/13
Dialogue Meeting 5	w/c 22/07/13
Draft Final Tender submission	26/08/13
Dialogue Meeting 6	w/c 23/09/13
Close dialogue	30/09/13
Invitation to Submit Final Tenders	11/10 <u>16/12/13</u>
Final Tender submission	11/11/13 <u>01/14</u>
Identify Preferred Bidder	13/01 <u>17/03/14</u>
Commercial and Financial Close	07/08 <u>02/10/14</u>
Construction commences	18/08 <u>03/10/14</u>
Completion date (target)	17/ 03 <u>02/17</u>
Hospital opening date	15/05/17

2 TECHNICAL OVERVIEW

2.1 Introduction

This section provides an overview of the technical requirements of the Project. In relation to all technical information provided by the Board, the Board reserves the right to amend all such information during the ~~course of the Dialogue Period~~Final Tender, including without limitation the Mandatory Reference Design Requirements, Board's Construction Requirements and Equipment provisions.

2.2 The Site

The planned location for the new Facilities is at Little France, in the south east of Edinburgh, home to the RIE Facilities and the University of Edinburgh Medical School and adjacent to the Edinburgh Bioquarter Site development.

The site is bounded on the north by the Medical School, on the east by the RIE Facilities, to the south by existing ~~commercial and~~ residential buildings on Old Dalkeith Road and to the west by the Queen's Medical Research Institute and the main entrance road serving the Campus Site at Little France.

Also to the west of the Campus Site is an area of rising ground which slopes up to Craigmillar Castle. The view from the south-east over the site to the castle, with Arthur's Seat in the distance, is considered by City of Edinburgh Council (CEC) to be an important view on the southern approach to the city. The Site of the new Facilities is wholly within the red line boundary set out in Plan 1.

2.2.1 The Royal Infirmary of Edinburgh

The RIE Facilities is a major acute teaching hospital and has more than 900 inpatient beds. As described above the RIE Facilities were procured under a PFI contract between the Board and Consort in 1998 and was opened in 2003.

It is home to Scotland's busiest maternity unit – some 6000 babies are born at the RIE Facilities' "Simpson Centre for Reproductive Health" each year – and to Scotland's busiest emergency department.

With a 24-hour emergency department, it provides a wide range of acute medical and surgical services for patients from across the Lothian region and specialist services for people throughout the south east of Scotland and beyond.

2.2.2 University of Edinburgh

The Chancellor's Building, adjoining the RIE Facilities, is part of the University of Edinburgh Medical School and houses teaching facilities, the medical library and research laboratories. It is currently home to the Multiple Sclerosis and Euan MacDonald Motor Neurone Disease research centres. The Chancellor's Building was constructed by Consort under the terms of the RIE Project Agreement.

The University opened its Queen's Medical Research Institute in 2005 which represented a major milestone in the history of biomedical research in Edinburgh. The Queen's Medical Research Institute houses over 600 researchers and aims to tackle a wide range of diseases at the most fundamental cellular level. Facilities include MRI and other modern imaging technologies and supporting infrastructure.

The University's Scottish Centre for Regenerative Medicine was opened in the Edinburgh Bioquarter Site in 2011. The Anne Rowling Building is the most recent addition to the University's facilities and lies between the Chancellor's Building and the site proposed for the new Facilities

2.3 Stand Alone Requirements

Subject to Clause 9 (Nature of Land Interests) including without limitation Schedule Part 5 (Land Matters) of the NPD Project Agreement, Appendix A of the Board's Construction Requirements and/or the Interface Proposals all buildings, facilities, services and associated works required to deliver the Project shall be contained within the Facilities and/or the Site and shall not be reliant upon any other buildings, facilities or services on the Retained Facilities and/or Retained Site (the "**Stand Alone Requirements**"). For the avoidance of doubt the following dedicated and autonomous elements shall be provided on the Site as part of the Project;

- (a) an Energy Centre;
- (b) the FM goods service yard; and
- (c) Hard FM spaces.

2.4 Design and construction elements

2.4.1 Overview

The specific requirements for the Facilities to be provided are set out in the Board's Construction Requirements. This comprises: -

- General Requirements;
- Specific Clinical Requirements; and
- Specific Non-~~clinical~~Clinical Requirements.

The Board's Construction Requirements are set out in Section 3 of Volume 3 of the ~~ITPD~~SFT and will ultimately form Section 3 of Schedule Part 6 (Board's Construction Requirements) of the NPD Project Agreement.

Using the work undertaken to date, the Board is seeking innovative proposals to meet its requirements.

The focus must be on providing age appropriate Facilities in a safe, caring and healing environment. This includes suitable Facilities for babies and young children, an adolescent inpatients zone, and accommodation for the adult population of DCN.

Areas for children, young people and adults should have their own identity within the integrated Facilities. At all times, the ethos, environment and needs of these different specialist areas has been considered in planning departmental relationships and patient pathways and this must be maintained.

Effective delivery of clinical services relies on close adjacencies between related specialties and disciplines. The design brief specifies that routes between departments should minimise travel time and distances for patients and staff in order to maximise clinical safety and efficiency.

The design will incorporate clearly identifiable, friendly and secure children's entrances to their outpatient and ward areas. There will be a separate main entrance to the DCN facilities. Recreation space and public facilities outside the wards will also be segregated as far as is practical.

The Board welcomes and will encourage Bidders to bring innovation, and expertise from within the UK and/or overseas to develop their own design proposals but it should be noted that certain elements of the design as they relate to aspects of Operational Functionality are mandatory, as described below and in Appendix E (Reference Design Elements) of Volume 1 of the ~~ITPD~~SFT.

2.4.2 Facilities to be provided

Facilities required for the Project include:

- (a) inpatient wards;
- (b) day case facilities;
- (c) outpatient clinics;
- (d) emergency department;
- (e) operating theatres;
- (f) radiology and physiology departments;
- (g) rehabilitation facilities;
- (h) laboratory facilities;
- ~~(h)(i)~~ support department;
- ~~(h)(i)~~ roof top helipad; and
- ~~(h)(k)~~ dedicated energy centre and goods delivery yard.

2.5 Reference Design and Mandatory Reference Design Requirements

The use of Reference Design in NPD projects is being promoted by the SFT and the Scottish Government.

A Reference Design for the Project has been developed and comprises mandatory elements and indicative elements. Procurement is proceeding on the basis of a Reference Design that the Board spent some time developing with significant clinical and stakeholder input prior to commencement of the Procurement. However, as set out in the ITPD, the Board reserves the right to amend the technical information provided. That Reference Design comprises mandatory elements and indicative elements.

The mandatory elements of the Reference Design (the “**Mandatory Reference Design Requirements**”) are those elements of the Reference Design relating to Operational Functionality. The definition used in the NPD Project Agreement is being applied to define the agreed Operational Functionality included in the Reference Design and is generally set out in the following constituents of the Reference Design:

- 1:500 Departmental Adjacency Layouts;
- 1:200 Departmental Layouts; and
- 1:50 Generic and Key Room Layouts.

Other areas of Operational Functionality are contained in other components within the Reference Design. Full details of the Mandatory Reference Design Requirements are set out in Appendix E (Reference Design Elements).

Bidders are required to develop design proposals which comply with the Mandatory Reference Design Requirements.

~~For the avoidance of doubt, the Board will not enter into any Dialogue on alternative solutions to the Mandatory Reference Design Requirements. Bidders’ proposals must be developed to comply with~~

~~these Mandatory Reference Design Requirements.~~ Bidders will be fully responsible for all elements of the design and construction of the Facilities including being responsible for verifying and satisfying themselves that the Mandatory Reference Design Requirements can be designed, built, and operated to meet the Board's Construction Requirements.

The Board will consider, and may accept, changes to the Mandatory Reference Design Requirements (i.e. those elements relating to Operational Functionality) where a Bidder considers that those Mandatory Reference Design Requirements are not capable of meeting the Board's requirements (as described in paragraph 5.2.2 of Volume 1 of the ITPD).

Bidders are reminded of the definition of Operational Functionality which is the process to be adopted by Bidders in this regard is as follows:

- in the event that a Bidder considers that the Board's requirements cannot be delivered as a result of a specific Mandatory Reference Design Requirement, then the Bidder should notify the Board as to the specific element of the Reference Design where this is the case. Bidders must explain why the Board's requirements cannot be delivered and provide supporting information. In addition, alternative design proposals to comply with the Board's requirements shall be submitted by the Bidders as part of their Informal Submission for the next Dialogue Meeting;

- the Board will review whether they agree that the Reference Design does not comply with the Board's requirements and if so whether the alternative design proposals are acceptable (or any comments they have on the alternative design proposals);

- the Board will confirm to the relevant Bidder whether they agree and, if so, any comments the Board have on the alternative design proposals. In the event that this is agreed then the mandatory status of this element of the Reference Design will be relaxed.

The Board confirms that the drafting in the ITPD around Operational Functionality is not intended to mandate elements of the Reference Design which demonstrably do not affect or impact Operational Use (excluding Non-Clinical Services). For example, this would mean that consequential adjacencies could be amended. Consequential adjacencies are those adjacencies which occur in the Reference Design but not for any intentional operational reason.

For the avoidance of doubt, Bidders are advised that the Board shall be entitled to reject any proposed change which it considers does affect Operational Use (excluding Non-Clinical Services).

Following completion of the Reference Design some further adjustments were developed by the Board. These are set out in the Schedule of Proposed Adjustments contained in Volume 4 of the ~~ITPDISFT~~. Bidders are expected to ~~address~~incorporate these adjustments ~~during the Dialogue Period and incorporate them within~~ their Final Tender. Bidders are required to provide a full breakdown of all costs (capex and opex) relating to item U1 "RHSC Specialist Paediatric Biochemistry Laboratory" included in the schedule.

2.5.1 Schedule of Accommodation and Reference Design Schedule of Accommodation

A schedule of accommodation has been developed by the Board to meet their requirements (the "**Draft Schedule of Accommodation**"). During the Dialogue Period a separate Draft Schedule of Accommodation was issued for the RHSC Specialist Paediatric Biochemistry Laboratories. While the Draft Schedule of Accommodation is not mandatory in itself, the areas set out within ~~it~~them are considered to be minimum areas. These minimum areas will only apply to elements which affect the Operational Functionality— and Non-Clinical Services areas. Areas such as service spaces (including risers) and Hard FM spaces will be for the Bidders to determine since responsibility and risk for these non operational spaces will ultimately rest with Project Co.

A further schedule of accommodation is included as part of the Reference Design; this has been developed based on the room areas achieved, as drawn, in the Reference Design (the “**Reference Design Schedule of Accommodation**”). Bidders are required to meet the minimum floor areas specified in the Draft Schedule of Accommodation however the Reference Design Schedule of Accommodation contains rooms where the area is less than the minimum requirements set out in the Draft Schedule of Accommodation. If Bidders cannot achieve the minimum floor areas for these rooms then it is acceptable, subject to agreement with the Board, for the rooms to be provided at the size achieved in the Reference Design. For the avoidance of doubt this will only apply to those individual rooms and not rooms of the same type or designation. ~~Bidders will be expected to develop a schedule of accommodation which will form part of their proposals (the “**Schedule of Accommodation**”).~~

Bidders will be expected to develop a schedule of accommodation which will form part of their proposals (the “**Schedule of Accommodation**”). The basis of measurement of floor areas within that schedule shall be as set out in SHPN 04-01, Adult Inpatient Facilities, Figure 12: Diagram indicating communication, circulation and net floor areas.

This is considered by the Board to be an integral part of compliance with Quality Evaluation Criteria C12 and Bidders are required to confirm that the net areas within their designs have been measured in accordance with that SHPN.

Notwithstanding the foregoing, it has been agreed that the net area of Bedrooms within the Family Hotel will include the short length of entrance hall which gives access to the En-suite facilities.

Circulation and communication space indicated in the Reference Design is also considered to be indicative but any corridor widths specified will be treated as minimum requirements. This is also outlined paragraph 5.10 (Corridor Widths and Heights) of the Board’s Construction Requirements. Therefore minimum corridor widths set out in the Reference Design are considered to be Mandatory Reference Design Requirements.

Any courtyards and terrace spaces are to be treated as communications spaces. These should be indicated on the Schedule of Accommodation submitted by Bidders but excluded from the measure of Gross Internal Floor Area.

2.5.2 Room Layouts

The 1:50 layout drawings included in the Reference Design cover the generic and key rooms only. Generic rooms are those rooms that are replicated more than four times across the Facilities (“**Generic Room**”). Key rooms are those that have critical operational requirements which the Board has identified for more detailed consideration and development at this early stage (“**Key Room**”). These include major spaces in the emergency department, operating theatre, radiology and outpatients departments. There are:

- 1839 rooms in total;
- 222 are covered under 88 Key Room types; and
- 756 are covered by 31 Generic Room types.

The Reference Design is developed in full at 1:500 and 1:200 scales. At 1:50 scale, where individual room layouts are detailed, the coverage is 53% of the total number of rooms (equating to 43% of the net floor area).

~~During Dialogue Bidders will be required to develop 1:50 layout drawings for the a selection of rooms identified in the table below which will form part of their proposals.~~

Table: 1:50 Layout Drawings to provided by the Bidders

Room Reference	Room Designation	Department
G A1 028/029	Resuscitation Bay	Emergency Department
G E1 001	The Pod/Multi-functional activity zone	Outpatient Area
G D2 013	Lung Function Laboratory	Cardiology and Respiratory
1 D6 053 4	Rehabilitation Rooms	Therapies
1 J1 003	Body Viewing	Bereavement Suite
2 R1 001 055	All	Clinical Management Suite
3 H3 001	Workshop/Tutorial 3	Clinical Education Suite
3 C1.1 042	Clean Utility	Medical In patients
4 H1 018	Molecular Biology Laboratory	Child Life and Health
4 H1 027	Physiological Laboratory	Child Life and Health
4 H1 016	Tissue Culture Store	Child Life and Health

The Preferred Bidder will be required to develop 1:50 layout drawings for all remaining rooms prior to Financial Close.

2.5.3 Room Data Sheets

Standard format Room Data Sheets have not been prepared by the Board for the Project. The specific room requirements (the "Room Information") are detailed in a combination of the following documents:

- The Board's Construction Requirements;
- The Environmental Matrix;
- The Schedule of Operational Design Notes;
- The Equipment Schedule;
- The Equipment Responsibility Matrix;
- The Draft Schedule of Accommodation; and
- The Operational Functionality elements of the Reference Design.

~~During Dialogue~~ Bidders will be required to develop Room Data Sheets, incorporating the Room Information, for those rooms for which 1:50 layout drawings ~~have been~~ prepared. ~~For the avoidance of doubt this shall include in dialogue, as well as~~ all Key Rooms and Generic Rooms ~~in addition to these rooms identified in the table at paragraph 2.5.2 above.~~ The Room Data Sheets will form part of the Bidders proposals.

The Preferred Bidder will be required to complete Room Data Sheets for all remaining rooms prior to Financial Close.

2.6 Indicative Elements of the Reference Design

During the preparation of the Mandatory Reference Design Requirements, other information has been generated both as a by-product of preparing the Reference Design itself and as a general Project requirement as follows:

- (i) FM goods handling and distribution;
- (ii) Structural engineering solutions;
- (iii) Building services engineering solutions;
- (iv) Servicing strategies and space allocations; and

- (v) Hard FM solutions and space allocations.

This constitutes the “**Indicative Elements of the Reference Design**”.

Such information is issued to the Bidders for “information only” so that they may understand the intent of the Reference Design. Bidders must however refer to the Board’s Construction Requirements for the detailed requirements for all such Indicative Elements of the Reference Design for which they will ultimately carry the risk. Bidders are advised that the Board’s Construction Requirements will always take precedence over the Reference Design for matters which do not define Operational Functionality. The full distinction between Mandatory Reference Design Requirements and Indicative Elements of the Reference Design are set out in Appendix E (Reference Design Elements).

2.7. Interface and Enabling Works

Introduction

The section is an overview of:

1. General background and information about the Works – see paragraph 2.7.1;
2. Works to be designed, constructed and replaced, repaired, renewed and maintained by Project Co as part of the Project. Sometimes these works are on the Site or on the RIE Site or Campus Site or even off the Campus Site – see paragraphs 2.7.2 and 2.7.3;
3. Works to be designed and constructed by Project Co as part of the Project but not intended to be replaced, repaired, renewed and maintained by Project Co – see paragraph 2.7.4;
4. Works which are being carried out by others and not intended to form part of the Project but are taking place at the Campus Site or off the Campus Site but which are nevertheless pertinent to the operations at the Campus Site as a whole – see paragraph 2.7.5;

2.7.1 General information relevant to the Works

The permanent and temporary Works and all construction operations for the Project should, save where expressly provided otherwise, generally be designed and constructed to enable them to be carried out and where appropriate replaced, repaired, renewed and maintained on and from within the Site.

The Site is part of the Campus Site and Project Co has to be aware of and plan and programme the Works having regard to the other activities and operations ongoing at the Campus Site.

At some points it may be necessary temporarily for Project Co to enter or have access across other parts of the Campus Site for construction activities and the Board has secured a number of rights for Project Co in respect of such other parts of the Campus Site.

As well as operations on the Site, Project Co will be entitled to use Car Park E for a site compound during the Construction Phase for the Works, subject to a number of restrictions on use as detailed in Section 3 (Site Compound/Car Park E) of Appendix A of the Board’s Construction Requirements and Clause 9 (Nature of Land Interests) including with limitation Schedule Part 5 (Land Matters) of the NPD Project Agreement. Further, in the event any activities on the Site involve oversailing any part of the Retained Site and/or the Retained Facilities then Project Co will require to develop an

Oversail Strategy as detailed in Section 4 (Oversail) of Appendix A of the Board's Construction Requirements.

Where any construction and/or replacement, repair, renewal or maintenance activities are permitted at the Campus Site but off the Site then these activities are restricted to and must be carried out in accordance with the rights secured for such activities which rights are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement and such rights are subject to a number of conditions being met which conditions are further detailed in Appendix A (Interface with Campus Site and/or Campus Facilities) of the Board's Construction Requirements. Further restrictions on conditions and other information governing design, construction and replacement, repair, renewal and maintenance activities are detailed in the Board's Construction Requirements and Services Requirements.

~~Please also Bidder should refer to the section C (iv) on Interface Proposals which require to be developed by Bidders during the Dialogue Period.~~

2.7.2 Links with RIE

(a) Link Building

As set out in paragraph 2.3 (Stand Alone Requirements) the new Facilities shall be delivered as a standalone new build. However, the Facilities will be physically linked to the RIE Facilities at ground and first floor levels. The part of the RIE Facilities to which the Facilities will be linked is called the Link Building.

The Link Building is being constructed as part of the key enabling works described in paragraph 2.7.5 (Enabling Works). Its construction is not intended to be part of the Project and it is intended to be completed prior to the Works commencing on Site. The Link Building shall ensure improved clinical functionality and service delivery, particularly between the emergency departments, operating theatres and critical care departments in the RIE Facilities and the Facilities. Project Co will be responsible for designing and constructing the Facilities to physically link to the RIE Facilities at the Link Building interface point as set out in Appendix B (Interface Output Specification) of the Board's Construction Requirements.

(b) RIE Works within the Campus Site but outside the Site boundary and maintained by Project Co

There shall also be building services links between the new Facilities and the RIE Facilities in respect of building services and other connections in terms of: -

- infrastructure associated with ICT;
- a pneumatic tube system (PTS);
- fire alarm system; and
- ~~fo~~ surface water drainage connections.

A new PTS will be designed and built which will run from the Facilities to the pharmacy and laboratories within the RIE Facilities. An ICT system will be designed and built which will run from the Facilities to link to the Board's ICT equipment/systems within the RIE Facilities. The Board will advise Project Co of the route for the PTS and ICT within the RIE Facilities. The Board will procure that Project Co will be given access to the RIE Facilities for the installation of the PTS and ICT and Project Co will be responsible for replacing, repairing, renewing and maintaining the PTS and ICT which have been installed as part of the Works. The Board will procure access for constructing,

replacing, repairing, renewing and maintaining, PTS and ICT within the RIE Facilities, such rights of access are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement but are subject to design, construction and other information being provided to and approved by the Board and Consort about the PTS and ICT systems as detailed in Section 7 (Link Building) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of such Appendix A. For more information about these systems please also see sections Appendix A of the Board's Construction Requirements.

The fire system for the Facilities will have to be designed and constructed and replaced, repaired, renewed and maintained such that they will be connected to, communicate and operate with the fire system at RIE Facilities. It is envisaged that such connections and a control box will be proximate to or within the Link Building. The rights to make and replace, repair, renew and maintain such connections are subject to design, construction and other information being provided to and approved by the Board and Consort about the fire system for the Facilities as detailed in Section 7 (Link Building) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of such Appendix A. For more information about these systems please also see paragraph 4 of the Board's Construction Requirements.

(c) Service Strip / Foul Drainage

There may also be connections into some existing infrastructure for foul drainage. If Project Co requires to connect the foul drainage systems for the Facilities into the existing foul and surface water drainage systems for RIE Facilities then foul drainage systems must be designed and constructed by Project Co such that they may be connected to foul drainage systems only at the agreed connection points in the Initial Drainage Proposal or within the Foul Service Strip shown shaded yellow and hatched black on Plan 2A serving the RIE Facilities. The Board will procure that Project Co will be given access to specified places and connections points on the RIE Site. Project Co will be responsible for replacing, repairing, renewing and maintaining the foul drainage systems serving the Facilities and the connections. The Board will procure access for Project Co constructing, replacing, repairing, renewing and maintaining the foul drainage systems serving the Facilities and connections as are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement, but are subject to design, construction and other information being provided to and approved by the Board and Consort about the foul drainage systems serving the Facilities as detailed in Section 6 (Service Strip and foul Service Strip) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of such Appendix A. For more information about these systems please also see paragraphs 4, 6 and 8 of the Board's Construction Requirements and the Initial Drainage Proposal

A list of Interface Proposals from Bidders is required ~~during Dialogue~~ for those elements of the new Facility which ~~may will~~ have to interface with the existing RIE Facilities and infrastructure serving RIE. These are detailed in Appendix A of the Board's Construction Requirements and summarised in Appendix C (iv) (Interface Proposals) of Volume 1 of the ~~HPDISFT~~.

As regards design and construction of any electrical, gas and water connections ~~there these~~ must all be independent services serving the Facilities and are not intended to connect into any such services serving RIE Facilities or the rest of the Campus Site and/or Campus Facilities. However wherever any such services have to be installed on the RIE Site, the locations for such services are restricted to certain areas, including the Service Strip which is shown shaded yellow and hatched black on Plan 2. Project Co will be responsible for design and construction and replacing, repairing, renewing and maintaining such services serving the Facilities. The Board will procure for Project Co access for such rights of access for constructing replacing, repairing, renewing and maintaining such services as are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement but are subject to design, construction and other information being provided to and approved by the Board and Consort about the services as detailed in Section 6

(Service Strip and Foul Service Strip) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of such Appendix ~~and for~~. For more information about these systems please also ~~see~~ paragraphs 4, 6 and 8 of the Board's Construction Requirements.

2.7.3 Other Works outside Campus Site

The Board has identified other works (the Off Site Works on the Bioquarter Site) which will be required to be carried out, by Project Co, outwith the Campus Site. This may include the provision of a dedicated Scottish Power Substation for the Project which may be located adjacent to Car Park F at the Campus Site in the area outlined in blue on Plan 4 although Project Co is invited to suggest alternative locations for any suitable power source outwith the Campus Site. If required, access to the Substation, if constructed adjacent to Car Park F detailed above, for construction and ongoing maintenance may be via the area shaded blue and hatched black on Plan 4. The cable route to the Facilities will be agreed with the Board and ~~may~~**must** enter the Site via the Service Strip (shown shaded yellow and hatched in black on Plan 2) and the cable route may not cross the RIE Site at any other point.

2.7.4 Retained Estate Handback Infrastructure

The Board has identified the following RIE Works which will be required to be carried out on the Campus Site but outwith the Site boundary. These works shall result in the Retained Estate Handback Infrastructure and shall be Works carried out by Project Co but upon completion will not be maintained by Project Co but by or on behalf of the Board by or on behalf of Consort. These Works include the design and construction of:

- (a) ~~(a)~~ Hospital Square Infrastructure;
- (b) ~~(b)~~ Cycle Path Infrastructure;
- (c) **Petrol Station Site**; and
- (d) ~~(e)~~ Drainage Infrastructure.

The Retained Estate Handback Infrastructure is more fully described in paragraph 4 of the Board's Construction Requirements.

For a summary of the proposed Petrol Station Works, the Petrol Station provisional sum and relevant background reports, Bidders should refer to Appendix L (Petrol Station Site) of the Volume 1 of the ISFT. This should be read in conjunction with the relevant updates to Volume 2 and Volume 3 of the ISFT.

2.7.5 Enabling Works

(a) RIE Enabling Works

The Board has identified the following enabling works (the "RIE Enabling Works") which will be required to be carried out on the Campus Site to meet planning requirements for the Project. These key enabling works will be carried out by or on behalf of the Board by or on behalf of Consort. These works are not intended to form part of the Project and it is intended they are completed or substantially completed prior to any part of the Works commencing on Site. The key enabling works, and their programmed completion dates, are described here for information purposes only.

- (i) Flood Protection Works: which means the enhancement of existing flood protection measures at the Campus Site, to be completed October 2014;

- (ii) Road Infrastructure Works: which means changes to the road and transport infrastructure at the Campus Site, including but not limited to the creation of a public transport terminus to the east of RIE Facilities, new bus stances and revision of existing car parking; to be completed March 2015;
- (iii) VIE Relocation Works: which means relocation of the existing VIE plant serving RIE Facilities to another location on the RIE Site. Separate VIE plant is required for the Facilities to be completed December 2013;
- (iv) Link Building Works: which means the building which is to be part of RIE Facilities to which the new Facilities will be connected at ground and first floor levels described in paragraph 2.7.1(a) above. to be completed December 2014;
- (v) Service Diversion Works: which means the diversion of certain services such as electricity, water, gas, that serve RIE Facilities and are currently located on under or over the Site to positions outwith the Site to new positions within the RIE Site. However Project Co should note that not all redundant services are being removed and grubbing up of any diverted and redundant services will be the responsibility of Project Co as part of the Works. For the avoidance of doubt there shall be no diversion of the County sewer, the crèche's sewer and connection, the crèche's storm water sewer which it is believed run under the Site, to be completed October 2014;
- (vi) Sewer Diversion Works: which means the diversion of trunk sewers currently located in the Site to positions outwith the perimeter but still within the Site to new positions within the RIE Site. to be completed March 2014;
- (vii) Clinical Facilities: Reconfiguration/alteration of a number of clinical facilities within RIE Facilities; and
- (viii) Way Finding: which means the installation of new comprehensive way-finding measures across the Campus at Little France (new signage and directional indicators as necessary).

(b) Flood Works

Off-Site Flood Protection Works – It is proposed to construct flood defence walls (approximately 1000mm high) to both sides of the Niddrie Burn in the Nether Craigour area upstream of the Old Dalkeith Road bridge to provide improved flood protection to the Campus Site. These works will be procured under a separate contract and do not form part of the Project.

2.8 BREEAM

Bidder's designs must achieve, as minimum, a "Very Good" BREEAM rating in line with the requirements for healthcare facilities as set out in the BREEAM Scheme Document for New Construction (SD5073) 2011. The designs must also achieve as a minimum of 6 credits ("an "Excellent" rating) level of performance for credit ENE 01 Reduction of Emissions in accordance with the requirements in the BREEAM Scheme Document for New Construction (SD5073) ~~Section 6.0 ENE+).~~

2.9 Sustainable Design and Quality

Bidders are required to promote sustainable development by demonstrating an integrated approach to the social, environmental and economic well-being of the area served, now and for future

generations. The Facilities will reflect the objectives of any local agenda strategy supported by the CEC and also satisfy the requirements of all health and social care guidance notes, as set out in Board's Construction Requirements associated with sustainability and environmental performance.

2.10 Community Benefits

The Board recognises the importance of sustaining the community and delivering against social considerations. As well as providing significant training and employment opportunities for the full Project Term, the Project also has the potential to drive significant initiatives relating to regeneration, sustainability and social benefits, aligning with the Board's strategic objectives.

Community Benefits clauses set out within Clause 73 (Community Benefits) of the NPD Project Agreement support this agenda. Provisions relevant to training and appropriate measures regarding supply chain contracts and engagement with small and medium sized enterprises and supported businesses are recognised as examples of the elements that may be taken into account.

Project Co will work in partnership with the Board and where appropriate, the Edinburgh Partnership and the agencies listed in paragraph 3.6 of Appendix I ([Community Benefits](#)) to deliver the Board's requirements in respect of both the Construction Phase and Operational Term of the Project.

Please refer to Appendix I and ~~section criteria~~ B6 of Appendix A_(ii) ~~of Volume 1 of the ITPD~~ which set out the Board's approach to social considerations/Community Benefits and how Bidder proposals in these areas will be taken into account.

2.11 Facilities Management - Services to be provided by Project Co

The interface of facilities management (FM) services provided across the Campus Site will be addressed through the Little France Campus Working Group.

Project Co will be required to provide the Services which shall be a proactive facilities management and lifecycle replacement service. The key elements of the Services shall include, but not be limited to:

- Contract management;
- Performance management and monitoring via a helpdesk facility;
- Programmed ~~-,maintenance~~ and unprogrammed maintenance work of the mechanical, electrical and building fabric components of the Facilities;
- Procurement and management of Utilities;
- Lifecycle replacement of the mechanical, electrical and building fabric components of the Facilities, including all floor coverings;
- Hard landscaping maintenance;
- External façade cleaning / window cleaning; and
- Periodic cleaning of vents, extractors and luminaires.

For the avoidance of doubt, Bidders should note that the following items are excluded from the Services and will be delivered by the Board (or third party providers):

- Portable Appliance Testing; and
- Redecoration of walls and ceilings.

The detailed requirements for above are set out in Volume 3 of the [ITPD|SFT](#) and will ultimately become Schedule Part 12 (Service Requirements) of the NPD Project Agreement.

2.12 Services to be provided by the Board

Delivery of all Clinical Services in the Facilities will be the responsibility of the Board.

It is anticipated that soft FM services will be provided by a combination of the Board and third party providers contracted with the Board. There will be a number of operational interfaces not only with the Board's team but also the FM staff working within the RIE Facilities and so Project Co shall be required to adopt a collaborative approach to interfaces so that hard and soft facilities services are provided by Project Co, the Board and the RIE FM team effectively and in adherence with Board policies. Key to the success of that relationship will be the quality of the team and clarity of the agreement between the parties.

To assist Bidders in developing their proposals and understanding the interfaces with the Board and third party providers, information on the Board's proposed delivery strategies has been provided within Schedule Part 6 (Board's Construction Requirements), section 3, Sub-section E (Specific Non-Clinical Requirements) of the NPD Project Agreement covering items such as but not limited to:

- Linen Services;
- Waste Management/ Disposal;
- Materials Management;
- Porter Services;
- Catering Services;
- Routine, Periodic and Specialist cleaning;
- Domestic Services; and
- Delivery ~~basement~~Area.

In addition the Board will be responsible for the maintenance and lifecycle replacement of Equipment that the Board is responsible for as set out in paragraph 2.15 (Equipment) and the Board Services.

2.13 ICT

The Project includes the design, construction and maintenance of comprehensive and robust infrastructure (e.g. containment, cabling and node rooms) for the Facilities in accordance with the requirements of the Board's Construction Requirements.

The Board will install hardware (e.g. servers, PCs, printers, scanners), make the final connections (at the application and in computer rooms) and commission the operational system. Future management of the telephone system and IT helpdesk will not form part of Project Co's scope of the Services. Instead, the telephone system and switchboard will be managed by the Board. The IT helpdesk service will also be provided by the Board.

A responsibility matrix relating to the ICT installations is contained in the Board's Construction Requirements.

2.14 Retail opportunities

The provision of catering and retail services within the Facilities does not form part of the Project. Catering and retail services shall be provided by the Board and associated parties (such as voluntary and/ or charitable organisations). These will be part of the Board Services.

2.15 Equipment

2.15.1 Equipment documentation

The following documents are contained within Volume 3 of the ~~ITPDISFT~~, which outline the Board's requirements in relation to Equipment and associated responsibilities:

(a) Equipment Schedule which shows all Equipment (Group 1, Group 2A, Group 2B and Group 3) which will be installed or anticipated to be installed in the Facilities presented on a room by room basis; ~~and~~

(b) Supplemental Equipment Schedule for U1 – RHSC Specialist Paediatric Biochemistry Laboratories: and

~~(b)(c)~~ Equipment Responsibility Matrix which shows for each different item of Equipment, the split of responsibilities between Project Co and the Board.

2.15.2 Groups of Equipment

Equipment included for the Project will include new equipment replacement, transfer and fit out of existing equipment, upgrade of existing equipment and new equipment included in developments.

(a) Group 1 Equipment

This is Equipment fixed to the building fabric (including fixed furniture e.g. cabinets, boards, blinds, brackets, shelves, TV brackets and illuminators) and/or attached to, or forming part of the building services (e.g. sanitary ware, sockets, outlets IT and medical, theatre lights, luminaries and pendants etc).

Project Co will generally be responsible for all Group 1 Equipment including specification, procurement, installation, maintenance and Lifecycle Replacement. However, the Board shall specify the details (both quantities and specification) for certain key items of Group 1 Equipment which are more clinical in nature (e.g. pendants in theatres and critical care).

The quantities specified for Group 1 Equipment in the Equipment Schedule are considered to be indicative by the Board. However, such quantities of Group 1 Equipment represent the minimum quantities acceptable to the Board. The exception to this are those items of Group 1 Equipment which the Board wish to specify – these are identified on the Equipment Schedule and will be considered to be mandatory.

(b) Group 2A Equipment

Project Co will only be responsible for the installation of Group 2A Equipment (and the installation of the replacement equipment at lifecycle intervals). The Board will be responsible for all other aspects of Group 2A Equipment (such as specification, procurement, maintenance and Lifecycle Replacement). Project Co will be responsible for designing Facilities which allow the Board to carry out their obligations in relation to Group 2A Equipment (including operation).

(c) Group 2B and Group 3 Equipment

The Board will be wholly responsible for all Group 2B and Group 3 Equipment including specification, procurement, installation, maintenance and Lifecycle Replacement. Project Co will not be responsible for any aspect of Group 2B or Group 3 Equipment however Project Co will be responsible for designing Facilities which allow the Board to carry out their obligations in relation to Group 2B and Group 3 Equipment (including operation).

Equipment included for the Project will include new Equipment replacement, transfer and fit out of existing equipment, upgrade of existing Equipment and new Equipment included in developments.

2.16 Surveys and Dialogue Period Ground Investigations

The ground investigation surveys which have been carried out to date are summarised in Volume 4 Data Room Contents. Warranties are not provided for these surveys.

~~The Board intends to procure a Site Survey, the results of which shall be made available through the issue of the Factual Report via CLAR-00133 to all Bidders. Bidders shall be invited to review and comment on a draft scope for the bidders. The Site Survey Bidders shall be required to submit their comments within the timescale set out in paragraph 1.7 (Programme) of Volume 1 of the ITPD. When incorporated the scope is agreed, the Board shall instruct the Site Survey, incorporating any agreed Bidder comments in accordance with paragraph 1.7 (Programme) of Volume 1 of the ITPD.~~

The Board shall not warrant this Site Survey. However, the Board shall procure that the party engaged to carry out the Site Survey provides a reliance letter to the Preferred Bidder in respect of the Site Survey.

2.17 Planning

An application for Planning Permission in Principle (PPiP) for the "erection of a Children's Hospital, including Department for Clinical Neurosciences (DCN) and ancillary facilities, helipad, associated enabling development including energy centre, Vacuum Insulated Evaporator (VIE), car parking, revised access and public transport arrangements, public realm works and landscaping, (car parking, access and public transport arrangements in detail)" at Edinburgh Royal Infirmary, 51 Little France Crescent, Edinburgh, EH16 4SA was submitted to the CEC on the 29th July 2011.

The application (Reference 11/02454/PPP) was approved by CEC on 5th April 2012, subject to a number of conditions, and the conclusion of a Section 75 legal agreement.

The application was supported by a suite of information including a Design and Access Statement, which included the principles of design, sustainability, scale and massing. The application was also accompanied by an Environmental Statement in accordance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011.

A subsequent stand alone permission (Reference 12/00479/FUL) was granted by CEC on 4 June 2012, for development of revised public access and revised public transport arrangements, associated car park remodelling, public realm works and landscaping. This followed the conclusion of a separate Section 75 legal agreement.

Various background papers relating to the application for PPiP and the application for Planning Permission, including Section 75 legal agreements are available within the Data Room.

~~In order to efficiently manage the pre-application consultation process for the approval of the detailed scheme, the Board and their representatives will agree a schedule of meetings with CEC Planning and Building Standards at which Bidders will be required to present their proposals and discuss planning and related issues. Any such meetings will be coordinated by the Board and their representatives and will be attended by the Board's representatives as appropriate. The details for these meetings will be agreed with each of the Bidders early in the dialogue process. No direct contact should be made with the CEC Planning and Building Standards, unless first agreed with the Board.~~

~~Other stakeholders, including Historic Scotland, Scottish Natural Heritage and Architecture and Design Scotland, will also be invited to be involved in this pre-planning process, to assist the Board in reviewing and assessing the Submissions.~~

The Preferred Bidder, once appointed, will be responsible for obtaining approval of the detailed scheme, in compliance with the conditions of the PPIP. This will require approval of matters specified in conditions. This will be required prior to Financial Close. The Board expects Bidders to have satisfied themselves before submitting their Solutions that their proposals will secure detailed planning consent.

2.17.1 Archaeology – Watching Brief

~~Bidders are advised that following negotiations with City of Edinburgh Council, a Written Scheme of Investigation for the archaeological watching brief has now been drafted (Condition 10 of the granted Planning in Principal 11/02454/PPP dated 5th April refers)~~

~~The Board has obtained prior agreement to the Written Scheme of Investigation from the City of Edinburgh Council Archaeology Service and formal written confirmation is awaited from the Principal Planner.~~

~~AOC Archaeology Group will be employed by the Board to undertake this service.~~

2.18 Artwork

The integration of art into the architecture and landscape to enhance the hospital environment is an essential requirement of the design. The Board welcomes innovative proposals for interactive art and wayfinding throughout the Facilities. Project Co will appoint artists to work with the Board on developing an arts strategy for the Project. Project Co shall carefully consider the arts strategy for the Board, including artworks and artefacts from the existing buildings that have been identified for transfer, and outputs from the 2010-2014 charitably funded Artists in Residence Programme within the RHSC and CAMHS.

~~The Board will be responsible for approving the whole art content in the Project and Project Co shall engage the Board fully in this process before any art work is commissioned.~~

2.19 Family Hotel

The Family Hotel is to provide “home away from home” accommodation for the families of children receiving ~~in-patient~~inpatient care in hospital. This accommodation is free of charge to families at the point of delivery, and aims to provide a supportive environment, and enable the whole family to be able to spend time together and close to their sick child.

It will provide overnight accommodation for families as well as facilities for parents whose children are resident on the wards, as outlined in the Specific Clinical Requirements section K2 (Family Hotel) ~~of Sub Section D (Specific Clinical Requirements)~~.

2.20 Achieving Excellence Design Evaluation Toolkit (AEDET)

~~An initial Project Co will be required to provide design information for an AEDET assessment has been carried out on the Reference Design which can be found in the Data Room. During Dialogue it is the intention within one month of the Board to carry out further AEDET assessments using the information provided by the Bidders appointment as Preferred Bidder.~~ The AEDET assessment will

be ~~undertaken~~facilitated by the Board with the assistance of Project Co. and carried out by key project stakeholders. The ~~AEDET reviews will not be evaluated but the~~ outcome of the process will ~~be passed back to the Bidders during the Dialogue prior to Dialogue Meeting five, purely as an informative tool to assist Bidders~~Project Co to develop their proposals. Bidders are, however, reminded that their proposals shall ultimately be evaluated by the Board in accordance with paragraph 5 (Tender Evaluation and Contract Award Criteria) of Volume 1 of the ITPD, the design deliverables and requirements laid out in the Invitation to Submit Final Tender.

A final AEDET review will be carried out on the design following the completion of construction and handover of the building to the Board.

3 COMMERCIAL OVERVIEW

3.1 Introduction

This section provides an overview of the commercial aspects of the Project.

3.2 NPD Structure

The Project will be delivered using the Scottish Government's NPD Model. The NPD Model was developed and introduced as an alternative to, and has since superseded, the traditional private finance initiative or "PFI" model in Scotland. It has been used in the education (schools) and health sectors. ~~The NPD Model has been fine tuned since it was first introduced and this section summarises the basic principles that will underpin the NPD Model as it will apply to the Project.~~

The NPD Model is defined by three core principles:

- Enhanced stakeholder involvement in the management of projects;
- No dividend bearing equity; and
- Capped private sector returns.

Projects funded using NPD Model principles will pay a fixed return to the holders of the junior or risk-bearing debt of the Project Co. All other distributions to equity (i.e. the holders of the shares and junior debt of the Project Co) will be prohibited. Surpluses arising after satisfying all precedent lines in the cash cascade, subject to any agreed buffer, will be payable to the Board as a rebate against ~~unitary charge service payments.~~ Annual Service Payments. In this way, returns to investors are capped at the level bid during the procurement process.

Although contractors and funders are expected to earn a normal market rate of return as in any other form of privately-finance PPP deal, the NPD Model seeks to eliminate uncapped equity returns associated with the traditional PFI model and limit these returns to a reasonable rate set in competition.

3.2.1 Key features of the NPD Model:

These key features include:

- (a) **Corporate structure:** The Board will contract with a special purpose vehicle (referred to in the NPD Project Agreement as "**Project Co**") which will be majority owned and controlled by the private sector investors. The Board will own a "golden share" in the Project Co which gives it certain controls over the corporate, governance and management structures within the Project Co. Project Co's articles of association must incorporate the mandatory NPD articles, produced by the SFT, that enshrine the fundamental principles of the NPD Model;
- (b) **Public Interest Director:** One of the Project Co's directors will be nominated by the SFT and will bring an independent voice to Project Co's board and shall ensure a greater degree of transparency and accountability to stakeholders (the "**Public Interest Director**");
- (c) **Refinancing:** Under the NPD Model the Public Interest Director has the right to instigate a refinancing on the same basis as the Board may instigate a refinancing under SoPC4 guidance;

- (d) **Capped Returns:** This shall ensure that a “normal” level of investment return is made by the private sector and that these returns are transparent;
- (e) **Surpluses:** Surpluses generated by Project Co shall be reinvested in the public sector; and
- (f) **Transparency:** The public interest shall be represented in the governance of the NPD structure, which increases transparency and accountability and facilitates a more proactive and stable partnership between public and private sector parties.

SFT ~~has~~ provided a suite of contractual documents, comprising a NPD Project Agreement and articles ~~that will~~ be adopted for use in this Project, appropriately amended for project and NHS-specific issues. ~~These are included at Volume 2 documents formed the basis of the ITPD commercial dialogue from March to December 2013.~~

Further information on the NPD Model is available from the SFT website: www.scottishfuturetrust.org.uk.

3.2.2 Benefits of NPD Model

The NPD Model retains the benefits of traditional PFI structures, such as:

- (a) optimum risk allocation;
- (b) whole-life costing;
- (c) maximised design efficiencies;
- (d) robust programming of lifecycle maintenance and facilities management;
- (e) performance-based payments to the private sector;
- (f) single point delivery system, reducing interface risk for the public sector client; and
- (g) improved service provision.

Also produces additional benefits, as set out in paragraph 3.2.1 above.

3.3 Overview of NPD Project Agreement

In terms of Volume 2 of the ISFT, this sets out the following documentation:

3.3.1 The Board's base NPD Project Agreement which reflects the SFT's Standard Form NPD Project Agreement, with amended to reflect additional project specific amendments which have been agreed by SFT. In terms of these project specific amendments, please refer to paragraph 3.6 (Project Specific Changes) below.~~The~~

3.3.2 A Final Tender (Bidder Specific) NPD Project Agreement which reflects all Bidder specific amendments agreed between the Board, SFT and each Bidder during the Dialogue Period. The Final Tender (Bidder Specific) NPD Project Agreement and its schedules shall regulate the relationship between the Board and Project Co.

~~The Board expects Bidders to accept the positions within the NPD Project Agreement which reflect the SFT's Standard Form Project Agreement. However, the Board acknowledges that the project specific amendments to the NPD Project Agreement may be amendments worthy of discussion between the Board and Bidders. Bidders are requested to raise all comments (including all Sub-contractor comments and/or anticipated Senior Funder comments) in relation to the NPD Project~~

~~Agreement prior to Dialogue Meeting 3 and, if accepted by the Board and SFT (pursuant to the derogations process), such comments may form part of the relevant Submissions. The SFT's Standard Form NPD Project Agreement is derived from other standard documentation in use in PFI projects; in particular SoPC4 and the Scottish Standard Health PPP Contract, therefore its principles will be familiar to those actively involved in the PPP market.~~

3.4 General Approach in relation to NPD Project Agreement

The Preferred Bidder will be expected to enter into the Final Tender (Bidder Specific) NPD Project Agreement with the Board in the form ~~of the draft NPD Project Agreement set out in Volume 2 of the ITPD with the exception of any agreed derogations sanctioned by the Board and SFT~~SFT.

~~In terms of the Dialogue, all matters relating to the NPD Project Agreement should be raised by Bidders, their Sub-contractors and/or their potential Funders during the Dialogue Period. Depending on the approach to funding adopted for Final Tender, as set out in paragraph 3.8.6 (Due Diligence) an appropriate level of due diligence on behalf of Funders should be carried out during the Dialogue Period. Only matters in relation to fine tuning and clarification of the~~Only matters in relation to fine tuning and clarification of the Final Tender (Bidder Specific) NPD Project Agreement shall be addressed once the Dialogue Period has closed. Other than fine tuning and clarification issues, any issues ~~which are~~ not raised during the Dialogue Period will not be considered by the Board ~~after if they involve changes to the Dialogue Period has closed.~~ basic features of the Final Tender Submission or the Project that are likely to distort competition or have a discriminatory effect.

The Board will also require the Direct Agreements to be substantially in the form set out in the ~~draft~~Final Tender (Bidder Specific) NPD Project Agreement

To the extent that Bidders, their potential Funders, diligence teams and/or Sub-contractors ~~have had~~ concerns about the terms of the ~~draft~~Final Tender (Bidder Specific) NPD Project Agreement or any of the other key project documents including the Ancillary Agreements, these ~~must be should have been~~ raised with the Board ~~prior to during the start of Dialogue Meeting 3 Period.~~

3.5 Derogation Procedure

~~The Board has agreed with SFT the required project/sector specific changes to the SFT's Standard Form NPD Project Agreement prior to issue of the ITPD. Thereafter, any further changes proposed to the NPD Project Agreement by Bidders during the Dialogue Period will, if acceptable to the Board, require SFT's approval through a derogation procedure to be managed by the Board. The Board and SFT's expectation is that any such derogations will be minimal. The Board will engage with the SFT on project/sector specific changes throughout the Dialogue Period, and will aim to provide feedback to Bidders on proposed amendments as soon as possible. A final decision on all Bidders amendments to the NPD Project Agreement shall be reached between the Board and SFT, and communicated to the relevant Bidders, prior to close of the Dialogue Period. The Board has raised all Bidder specific derogations with SFT during the Dialogue Period and has provided feedback to Bidders during the Dialogue Period as to whether such derogations have been either accepted or rejected by SFT.~~

3.6 Project Specific Changes to NPD Project Agreement

3.6.1 A number of project/sector specific amendments ~~have been were~~ agreed with SFT and ~~are were~~ set out in the Board's base NPD Project Agreement for the ITPD.

The key project specific amendments ~~include:~~ included for the ITPD were:

- a) **Lifecycle** Additional lifecycle drafting has been added at Clause 23A (Lifecycle Replacement) of the NPD Project Agreement to provide the Board with greater visibility in terms of lifecycle replacement.
- b) **TUPE** The Board does not envisage that the Transfer of Undertaking (Protection of Employment) Regulations 2006 (TUPE) will apply to the Project or to any current Board staff. SFT's alternative drafting set out in Form 2 of Appendix 2 of the User Guide has therefore been added at Clause 25 (No Employee Transfer) of the NPD Project Agreement. In addition, Clause 26 (Pensions) of the NPD Project Agreement has been deleted.
- c) **Board's right to stop Project Operations** In terms of Clause 13A, a new clause has been added permitting the Board to instruct Project Co to stop performing the Project Operations in the event of a (i) Stop Incident; (ii) potential impact upon Clinical Services, and/or (iii) the occurrence of a Major Incident. In terms of (ii) and (iii) a Compensation Event shall be available to Project Co if the Board instructs stopping the Project Operations on one of these grounds. In terms of (i), the consequences of this Board instruction shall be treated in a similar way to Clause 13 in relation to opening up of the Works.
- d) **Indemnities** Additional limbs of the indemnity have been added in relation to breach of the Interface Proposals and/or breach of Appendix A of the Board's Construction Requirements and a breach of certain Reserved Rights. These are project specific requirements of the Board and primarily relate to Site issues which may have a wider impact upon the operation of the Campus Site.
- e) **Insurance** The Board has undertaken a review of the insurable and uninsurable risks that may emanate from the Project. The insurance provisions and minimum requirements have been set out in Clause 53 (Insurance) and Schedule Part 15 (Insurance Requirements) of the NPD Project. In addition, waiver of subrogation option has been added at Clause 53.6 (Subrogation and Vitiation) of the NPD Project Agreement. Bidders shall be required to price this option as part of its Draft Final Tender and Final Tender as indicated in Financial Proformas 1a and 4.
- f) **Community Benefits** SFT's drafting set out in Form 5 (Community Benefits) of the User Guide has been added at Clause 73 (Community Benefits) of the NPD Project Agreement (see 2.10, Appendix I and section B6 of Appendix A(ii) for further detail on how the Board is taking social considerations/Community Benefits into account in this procurement.

- g) **Interface**
- (i) *Interface*: Appendix A of the Board's Construction Requirements sets out the specific interface issues between the Facilities and the Retained Estate. Appendix A of the Board's Construction Requirements also requires Bidders to prepare certain Interface Proposals to address these specific interface issues.
- (ii) *Interface Proposals*: The Interface Proposals shall include Bidder's proposals relating to construction access, operational access, oversail strategy, access areas strategy, drainage and substation proposals, service strip and foul service strip proposals and connection to the Link Building proposals. These Interface Proposals shall form part of Bidders Submissions and shall also form part of both the Draft Final Tender and Final Tender. The requirements for the Interface Proposals are more fully described in Appendix A of the Board's Construction Requirements, but shall be subject to conditions set out in Schedule Part 5 (Land Matters) of the NPD Project Agreement. However, for ease of reference, a list of Interface Proposals has been set out in Appendix C (iv) (Interface Proposals) of Volume 1 of the [HTPDISFT](#).
- (iii) *Little France Campus Working Group*: The Board has established a Little France Campus Working Group in which Project Co will be required participate in. The purpose of this group is to support all parties on the Campus Site in order that they can work in partnership to deliver their responsibilities under Health and Safety legislation and the Construction (Design and Management) Regulations 2007 to ensure the safety of patients, staff and visitors and the operation of services on the Campus Site.
- h) **Payment Mechanism**
- The NPD Project Agreement schedule has been amended to reflect the acute healthcare nature of the accommodation and incorporates the use of sessions as opposed to days as an element of the deduction formula for unavailability, in addition to the application of a gearing mechanism to the derivation of Service Unit values.

3.7 Articles of Association

Project Co will be a private company limited by shares with the Articles of Association contained in Volume 2 of the [HTPDISFT](#) which sets out the mandatory NPD provisions including membership of Project Co, the rights of the members, voting rights and controls on how revenue is to be used.

As part of the Final Tender, Bidders are requested to populate paragraph 4.1.5 of the Articles of Association in order that the Board is made aware of the amount of any cash buffer within the Financial Model.

3.8 Financial Aspects of the Project

In this Section, the [HTPDISFT](#) sets out the following:

(a) key financial aspects of the Project that the Board considers to be of fundamental importance;
and

~~(b)(a)~~ financial assumptions to be made by ~~bidders~~; Bidders.

~~(c) submission requirements at each stage; and~~

~~(d) the process by which financial evaluation of Final Tenders will take place.~~

3.8.1 Affordability

The Board has developed a shadow bid Financial Model that produces an Annual Service Payment as derived from technical cost inputs that reflect the ~~Reference Design project scope~~ and a set of assumptions that reflects current economic factors and funding market conditions. This model has been used to ensure that the Project is affordable to the Board.

The Board will be responsible for meeting the proportion of the Annual Service Payment related to Hard Facilities Management (Hard FM) services and 50% of the lifecycle maintenance expenditure. The Scottish Government will meet the remaining proportion of the Annual Service Payment via revenue support.

~~Bidders should note that Scottish Government revenue support for a proportion of the Annual Service Payment is capped in relation to the construction cost of the Project. The construction cost cap will include all construction related costs, including design fees. It has been set at an uninflated amount of £137,757,000 (based on a 3Q 2011 base date) plus an inflation allowance calculated by reference to the BCIS All in Tender Price Index from the base date of 3Q 2011 to the index forecast at the assumed construction mid-point of 4Q 2015. The indices at 18 February 2013 are 3Q2011 (final) 220 and 4Q 2015 (forecast) 237 giving a current inflation allowance of £10,645,000 and a total current construction cap of £148,402,000. All figures are net of VAT.~~

~~The construction cap supported by the Scottish Government will be adjusted during the Dialogue Period to reflect changes in BCIS All in Tender Price Index for the forecast of the index at 4Q 2015 and bidders are expected to monitor movements in the index for the purposes of formulating their proposals. The Board will advise bidders in the ISFT of the level of Scottish Government's cap as at that date based on the most recently published BCIS Index forecast and it will be fixed at that date. In the shadow bid Financial Model, the Board has assumed Hard FM and Life Cycle Costs of £29 per m² and £27 per m² respectively, at current prices.~~

The Board will be responsible for meeting other costs such as soft facilities management services, utility costs and rates.

Scottish Government support for a proportion of the Annual Service Payment continues to be capped in relation to the construction cost of the project, including all construction related costs, including design fees. It has been set at an uninflated amount of £137,757,000 (based on a Q3 2011 base date) plus an inflation allowance calculated by reference to the BCIS All-in Tender Price Index from the base date of Q3 2011 to the index forecast at the assumed construction mid-point of Q4 2015. The indices at 27 November 2013 are Q3 2011 220 and Q4 2015 255 giving a current inflation of allowance of £21,283,457 and a total construction cap of £159,040,567.

~~This figure is the final cap level, which from this point forward is fixed and will not be adjusted further. All figures are net of VAT.~~

~~The table below summarises the key drivers of the Board's affordability position. The Board's expectation is that Bidders will seek to deliver financial proposals that remain within these constraints. The Board reserves the right to set aside any Bid that exceeds the construction cap, except where the Board has specifically agreed that a higher construction cost is acceptable proposals from Bidders which are unaffordable.~~

<u>Element</u>	<u>Notes</u>	<u>Amount</u>
<u>Capital cost</u>	<u>Scottish Government cap</u>	<u>£159,040,567</u>
<u>Annual real life cycle maintenance</u>	<u>None</u>	<u>£27 / sq m</u>
<u>Annual real hard FM</u>	<u>None</u>	<u>£29 / sq m</u>
<u>Capitalised bid development costs (excluding design fees)</u>	<u>As a percentage of construction costs</u>	<u>3%</u>

~~3.8.2 Value for Money~~Funding Approach

~~It is essential that the Board can demonstrate that the Project remains value for money throughout the procurement process. Provision of revenue support by the Scottish Government will be dependent upon the Board being able to demonstrate to the SFT and Scottish Government that Bidder proposals are based on costs that are competitive and represent value for money.~~

~~The Board is also required to submit a Full Business Case to the Scottish Government prior to Financial Close. This needs to clearly demonstrate that the Project will deliver value for money and will be affordable to the Board over the duration of the contract. The Full Business Case requires to be approved by the Scottish Government to allow the Project to proceed.~~

~~a~~

~~3.8.3~~Funding Approach

~~Due to the current volatility of the funding market, the Board has devised an approach to the funding elements of Bidders' solutions that provides for the flexibility required to allow Bidders to respond to developments in the market as Dialogue progresses. This approach is set out below.~~

~~Submissions Prior to Final Tender~~

~~Competition to be~~

~~It is the Board's intention to devise and issue a standard term sheet containing funding terms relevant in the current funding market that Bidders should use in developing the financial elements of the Draft Final Tender and any relevant financial submissions required during the Dialogue Period. This standard term sheet will be issued no later than three weeks before any relevant submission date.~~

~~Final Tender Stage~~

~~At the Final Tender stage the Board reserves the right to request either:~~

- ~~a) A Fully Funded Solution that covers the full duration of the NPD Project Agreement. In this option, it would be the Bidder's responsibility to identify and propose a form of funding for the Project that is both deliverable and offers the best possible Value for Money to the Board. Should Bidders consider that this is not achievable this must be discussed during Dialogue. In preparing Final Tenders on this basis, Bidders should clearly demonstrate to the Board that a competitive process has been undertaken in order to identify the preferred funder and/or chosen funding route, and that funder due diligence has been completed. The pricing developed will be evaluated to determine whether a funding competition will be required at once a Preferred Bidder stage; or~~
- ~~b) A solution based on a Standard Term Sheet to be issued by the Board should this prove to be preferable based on prevailing market conditions at that time. Should this option be pursued Bidders would be required in any case to have engaged diligence teams on behalf of potential funders, whose reports would be included within the Final Tender submissions. Once a Preferred Bidder is has been appointed a funding competition, EIB have now confirmed that they would, subject to satisfactory due diligence, be carried out to identify the preferred funding solution.~~

~~The Board will inform Bidders of the preferred option at the earliest possible opportunity during Dialogue.~~

~~Bidders should note that as a condition of Scottish Government support for the project the Board reserves the right/willing to instruct a funding competition at any point during the procurement.~~

~~Bidders are also reminded that the Scottish Government reserves the right to consider alternative funding, financing and / or contractual arrangements to support the delivery of the project. The Board will provide updates to Bidders during dialogue should any such alternatives emerge.~~

~~**3.8.4 Funder Commitment and funding for the Project up to a value of £98.81 million. Further, EIB have indicated that they are willing to enter into discussions with Bidders, to sign confidentiality agreements and provide Exclusivity**~~

~~Bidders are required to demonstrate the strongest possible evidence of funder support for the proposals contained in the Final Tender. The Final Tender should include the provision of term sheets and letters of support as necessary and as specified should these be required. A letter confirming EIB's willingness to fund the Project is included in Appendix B. A clear statement on the level of internal approval that the project has received from the respective lending organisations should be made. In addition the details of any further approvals that would be required prior to Financial Close should be fully disclosed.~~

~~The Board requires has a strong preference that EIB funding is used to support the Preferred Bidder's proposals given the value for money that it will offer. However, the use of EIB funding is not mandatory - Bidders may continue to explore funding solutions that do not appoint funders incorporate EIB funding should these have the potential to offer better value for money.~~

~~A set of funding terms that Bidders should use in developing their Draft Final Tenders and Final Tenders is appended to this document at Appendix B (iv). The terms provided are based on an exclusive a combination of commercial bank and EIB funding provided on a 50/50 basis during the Dialogue Period. During the Dialogue Period, Bidders will,~~

~~Where a Bidder proposes to utilise an Equity Bridge Loan, the same terms should be assumed as for the senior debt, that is, the relevant assumptions as to the pricing of the Loan should be extracted from Appendix B (iv)~~

3.8.3 Security package

~~Bidders are required to confirm that no exclusivity arrangements have been signed incorporate a fully priced security package into their bids. This package should be compatible with their potential funders. Failure to adhere to this the funding structure and terms provided by the Board, at this stage assumed to be a commercial bank and EIB funded approach. Details of the pricing or this package should be inserted into the table included at Appendix B (v)~~

~~Bidders will be required to take the full risk of the pricing of the security package relating to commercial bank and EIB debt. If Bidders have not adequately priced the security package, they must bear the cost of any enhancement required.~~

~~In discussion with SFT, the Board has identified the likely security package requirement may result in the down selection of that Bidder. Advice as to exclusivity associated with a capital market funding solution. Bidders should populate the table at Appendix B (v) in the Final Tender period will be provided during the Dialogue Period relation to the pricing of such a package. The prices provided would be used in the case of a capital market solution being adopted following the post Preferred Bidder Funding Competition.~~

3.8.5 European Investment Bank Involvement

~~Bidders should note that initial discussions have taken place with the European Investment Bank (EIB) regarding their potential involvement in the Project. The potential involvement of EIB will be discussed with Bidders during the Dialogue Period.~~

~~For the avoidance of doubt, the Board would expect to receive the benefit of any cost reduction arising from lower security package sizing requirements and would bear the risk of the cost implications of a capital market solution requiring higher security package sizing requirements than those included in the table. Bidders will be expected to bear the risk of any variation in the actual pricing of the security package.~~

3.8.64 Due Diligence

~~By Final Tender, Bidders are required to demonstrate that they have carried out a detailed full due diligence exercise over their submission has been carried out on behalf of Funders or which would be accepted by potential Funders. At that stage the Board will require assurances that the Funders have been involved in the Bidders must submit copies of completed due diligence process and fully support thereports as part of Final Tender submission.~~

~~Bidders are encouraged to progress their due diligence at the earliest opportunity.~~

3.8.75 Surpluses

In developing the Project the Board has assumed no prescribed levels of Surpluses are required to be paid during the concession period. Bidders should assume that any and all Surpluses that are

generated will be paid to the Board as a rebate against the Annual Service Payment. Bidders should follow the accounting and tax advice, in relation to surpluses, as detailed below.

Any Surpluses produced by a Bidder's ~~Financial Model~~financial model will be included in the evaluation of price by applying 7% nominal discount rate in calculating the NPV of such Surpluses. Bidders should note that this discount rate is higher than that which will be used to evaluate the Annual Service Payment (6.~~090875~~%). This approach reflects the Board's strong preference for a lower and certain Annual Service Payment as opposed to an equivalent and less certain Surplus.

Any Surpluses forecast in Bidders' Financial Models should reflect the level of cash buffer that has been bid (see below) and the full impact of the ~~funding terms~~ being used for Final Tenders of the Senior Funding Agreements, as these will affect the likelihood and timing of Surplus Payments actually being made to the Board. ~~Evaluation strategies should allow for risk adjustment of forecast Surpluses where appropriate.~~

3.8.8 Cash Buffer

Bidders may retain a cash buffer (over and above Senior Funders' reserves and covenants) in their Financial Models in order to deal with unexpected events that arise during the Project. Surpluses are required to be paid out only to the extent that these exceed the cash buffer. The cash buffer should be set at a level that is no higher than two months' worth of the indexing element of the monthly Annual Service Payment. The cash buffer itself should index. Bidders are free to propose a lower level of cash buffer, as this will allow an earlier release of surpluses which will be evaluated more favourably through the NPV calculation described above.

Bidders' Financial Submissions should clearly identify Surpluses available for distribution to the Board. Such Surpluses should be defined as:

(a) any Surpluses bid and included in the Financial Model over the operational period, including the period post repayment of debt;

~~(b)~~(a) positive cash balances forecast in the Financial Model at the Expiry Date; and

~~(e)~~(a) any Debt Service Reserve Account (DSRA) or Maintenance Reserve Account (MRA) balance released on repayment of debt (if not used to retire debt).

Payments of Surpluses to the Board should be assumed to take place on the last day of the relevant accounting period applicable.

3.8.7 SFT Policy on Accounting and Tax Treatment of Surpluses

In terms of the treatment of surpluses, Bidders should adopt the new Non Profit Distributing rebate of Annual Service Payment model advocated by the Scottish Futures Trust, whereby additional costs are accrued throughout each year of the project in order to reduce trading profits each year, reflecting the fact that profits are not distributed. This is a significantly more tax efficient method than the previous approach commonly used of returning surpluses to the public sector under the gift aid relief method.

The tax and accounting treatment of surpluses is an evolving technical area for accounting and tax experts, whose accounting advice (and hence tax treatment), as provided to Bidders for NPD projects, is advancing rapidly. There is a range of treatments that accounting experts consider could be used to model the rebate structure. Whilst maintaining the principle of moving to a rebate model and seeking tax efficient proposals, Bidders should determine their own specific accounting, and hence taxation, approach in their final submissions with reference to the Board's submission

requirement F12. It is not possible or desirable for the Board to mandate an accounting and tax approach at this time.

Bidders are required to include all costs associated with delivering the proposed treatment, including but not limited to advisory costs incurred in seeking clearances if considered necessary by the Bidder. Bidders are also expected to have undertaken diligence on behalf of funders and submit a tender, taking into account the accounting and tax treatment of surpluses, that is acceptable to the funding market.

It is not considered likely that HMRC will provide a clearance for tax treatment adopted as this will be dependent on the accounting treatment and standards adopted by the SPV in discussion with its auditors. However, Bidders must make their own decisions as to whether or not to seek advance tax clearance from the HMRC for any proposed treatments in respect of surpluses.

If the Bidder is to apply to HMRC for a non-statutory clearance regarding any other tax treatment applied, the Board will require such clearance to be obtained before Financial Close.

3.8.

~~3.8.9-8~~ Interest Rate Risk

The Scottish Government will take the risk of changes in the reference interest rate (e.g., either the underlying London Interbank Borrowing Rate (LIBOR) rate or UK Government Gilt rate) up to Financial Close ~~subject to approval and conditions of the FBC.~~

~~3.8.109~~ Foreign Exchange Risk

The Board will not accept any foreign exchange risk. Such risks should be absorbed entirely by Bidders.

~~3.8.11-10~~ Third party income

The Board does not anticipate that any third party income will be available within the Project and none should be assumed within Financial Submissions.

~~3.8.1211~~ Capital and charitable contributions

~~The Board does not intend to~~For the purposes of the Final Tender, Bidders should assume that the Board will not inject any capital contributions into the ~~project at this time.~~ However, The Board

~~wishes to reserve the right to make such an injection should this prove practical and desirable at a later point in the Dialogue Period.~~

~~It is likely, however, that charities associated with the Board will wish to make a charitable contribution to the Project. This may take a number of forms:~~

- ~~(a) A contribution in the form a lump sum payment to cover the cost of construction of specific areas within the building that the charity wishes to support, such as the Family Hotel. For the avoidance of doubt, such areas are already included within the Service Level Specification and Reference Design and, nor will form part of the new Facilities and Services whether or not a charitable contribution is made.~~
- ~~(b) A donation that will allow the specification of certain areas in the new Facilities to there be enhanced over and above the level of Board's requirements currently contained within Volume 3 of the ITPD. Should such a donation be forthcoming, the Board would seek to amend the Board's requirements as required.~~
- ~~(c) A donation that funds the purchase of specific assets such as equipment or artwork.~~

~~At present, the size and nature of such any charitable contributions is not known. Where the value and timings of such contributions has an impact upon the level of borrowing that Bidders will require at Financial Close, the Board is to provide a firm commitment of the injection of these contributions to all Bidders prior to close of Dialogue so that Final Tenders and Financial Models can be prepared on the correct basis. This position may be reviewed at Preferred Bidder stage.~~

3.8.12 Validity of Submission

~~Bidders are required to price their Submissions anticipating a Financial Close of 2 October 2014. Bidders are required to maintain underlying construction, operating, FM and Project Co's costs for a period of three months from the target Financial Close date with no adjustment for inflation, meaning that should Financial Close be reached prior to 2 January 2015, the bid price will not be adjusted for the effects of inflation.~~

~~Bidders are also obliged to use all reasonable endeavours to mitigate the impact of any cost increases post validity period.~~

~~Bidders must confirm that the following cost indexes will apply in the post validity period:~~

- ~~(a) Construction costs – BCIS All in TPI~~
- ~~(b) Facilities management, lifecycle and SPV costs – RPI~~

3.8.13 Indexation

The Annual Service Payment will be indexed on an annual basis. The Payment Mechanism contains the formula for applying the inflation adjustment. ~~Bidders should note that the affordability assessment assumes that approximately 20% of Annual Service Payment payments are subject to indexation in line with the cost inputs used in the shadow bid Financial Model.~~

The ~~Board Authority~~ does not expect that a Bidder's funding solution will require the use of RPI hedging instruments. Any relevant financial ~~submissions~~ submission should clearly demonstrate the proportion of costs that are fixed and the proportion subject to inflation. Bidders should set a rate of

Annual Service Payment indexation that creates a natural hedge position given their cost structure. Bidders are required to develop their proposals on the basis of the use this natural hedge and to provide inflation sensitivities that demonstrate this as set out in the Financial Proformas ~~contained in Annex 1 to Appendix B.~~

3.8.14 Validity of Submission

~~Bidders are required to price their Submissions anticipating a Financial Close of 7 August 2014. Bidders are required to maintain underlying construction, operating, FM and Project Co's costs for a period of three months from the target Financial Close date with no adjustment for inflation, meaning that should Financial Close be reached prior to 7 May 2015, the bid price will not be adjusted for the effects of inflation. Bidders are also obliged to use all reasonable endeavours to mitigate the impact of any cost increases post validity period.~~

Bidders must specify which cost index or indices they require costs to be inflated in the post validity period.

3.8.15 Pass Through Costs

The Board will retain price risk associated with the defined pass through costs, those being insurance, rates and utility costs, as set out in the NPD Project Agreement. However, Bidders should note that the Board will review such costs in each Bidder's solution and allow for these in the Equalisation Adjustment ~~(see below)~~ as part of the Price ~~Evaluation~~evaluation process. ~~Financial Pro-forma 1a should be used to set out the pass-through costs proposed by the Bidder.~~

3.8.16 Accounting and Tax Treatments

~~Bidders are required to satisfy themselves generally as to their own tax position under existing tax legislation, including any issues surrounding IFRS, the application of any capital allowances and revenue relief against corporation tax and the treatment of Surplus payments. All assumptions in respect of tax and accounting should be set out clearly in the Financial Model. Bidders will be required to demonstrate within their Submissions that the most beneficial treatments have been adopted and that the Board has received the full benefit thereof by way of reduced Annual Service Payment. It is anticipated that a composite trade tax treatment will produce the lowest Annual Service Payment and, based upon this assumption, the NPD Project Agreement will be drafted accordingly. If Bidders can demonstrate a more beneficial tax and accounting treatment they should advise what changes would be required to the NPD Project Agreement to accommodate the alternative approach.~~

3.9 Financial Model

3.9.1 Key assumptions

Bidders are requested to note the following assumptions within their Financial Models, in addition to those noted ~~in Section 3.8~~ above:

~~(a)~~ For the purposes of their Submission, Bidders ~~will be~~ provided with a LIBOR swap rate assumption ~~no later than three weeks before as part of the submission date of any relevant Submissions. Should a Bidder elect to provide a capital market solution, Term Sheets included in Appendix B.~~

~~(a)~~ ~~Indexation of the Board will provide an appropriate reference rate Annual Service Payment should be based on the same timescale.~~

(b) RPI and not RPIx. RPI should be assumed as 2.5%.

(c) The Financial Model should be prepared in accordance with UK GAAP or IFRS.

(d) The date of Financial Close should be assumed to be ~~7 August~~ 2 October 2014.

(e) The Financial Model should cover an operational period of twenty-five (25) years plus the construction period, with each year end assumed to be 31 March.

(f) The discount rate to be used in calculating all NPV figures should be 3.5% real and 6.0875% nominal, with the exception of the discounting of surpluses, which should be discounted at 7% nominal.

(g) All costs in the Financial Model should assume a price base date as at Financial Close with a first indexation point of the 1 April subsequent to Financial Close.

(h) The Bidders NPV calculation should discount cash flows back to the base date as at Financial Close.

(i) The NPV should be based on values at the mid-point of each financial period.

(j) Bidders should assume corporation tax rates which have been included in the Finance Act 2012 and announcements in the 2012 Autumn Statement;

~~(k)~~ Annual Service Payment payments should assume 100% performance.

~~(j)~~ ~~Cash flows should be assumed to occur at the midpoint of each semi-annual period.~~

~~(k)~~ (l) Surpluses are as defined in Section 3.8. 65 of this document and should be treated as indicated.

~~(m)~~ (m) Public Interest Director fees are to be included in the financial submission of £15,000 per annum, subject to indexation, and clearly shown in a separate row in the Financial Model and proformas.

~~(n)~~ (n) Construction insurance costs are to be included within the Financial Model.

~~(o)~~ (o) Pass-through costs (operational insurance costs, utilities costs and rates) are to be excluded from the Financial Model but should be shown separately within the Bidder's Financial Submission in ~~Financial~~ Proforma ~~1a~~ FP1a. In the case of energy costs, Bidders should use the input unit price assumptions provided in the Proforma to generate the pass through cost, based on the projected energy usage inherent in the Bidder's proposals. For Non-Domestic Rates, Bidders should populate the Proforma FP1a using the calculator at Proforma FP1b. All such pass-through costs will be evaluated as part of the Equalisation Adjustment.

For a summary of the potential Equalisation Adjustment relating to Appendices to Schedule Part 16 – Change Protocol, Bidders should refer to Appendix A (vi) (Change Protocol) of the Volume 1 of the ISFT.

~~(e)(p)~~ All assets will revert to the Board on expiry for nil consideration.

~~(p)(a)~~ ~~No third party income~~ Debtor Days relating to revenue in the model should be included in the Financial Model assumed to be zero.

~~(q)(a)~~ No capital contributions should be assumed unless otherwise informed.

3.9.2 Financial model ~~format~~ Format

Bidders must submit financial projections for each year of the NPD Project Agreement in the form of a computer Financial Model, which will become the Financial Model as defined in the Draft NPD Project Agreement.

The Financial Model must adhere to the following requirements:

~~(a)~~ The Financial Model must be prepared using Microsoft Excel (2003 or later);

~~(a)~~

(b) The Financial Model should be free of error, including circular references or hard-coded values in non-input areas;

~~(e)(a)~~ The Financial Model should be transparent, with the logic of all calculations capable of being followed through the model, with no hidden macros or password protected areas;

~~(d)(a)~~ Financial projections should be presented on a monthly basis during the construction period and on a semi annual basis during operations (for each period ending 30 September and 31 March);

~~(e)~~ All values should be expressed in £ sterling and to £'000's;

~~(a)~~

~~(f)(b)~~ The Financial Model should identify input capital expenditure and operating costs which should be referenced to costs in the Technical Cost Proformas as required under ~~Annex 1 to~~ Appendix A ~~(v)~~ and Financial Proformas as required under ~~Annex 1 to~~ Appendix B; ~~(ii)~~

~~(g)(a)~~ The Financial Model should incorporate all of the Financial Proformas provided at ~~Annex 1 to~~ Appendix B; ~~(ii)~~, linked to worksheets in the Bidder's Financial Model so that the Proforma contents update automatically and can be reconciled to worksheets in which model calculations are performed;

~~(h)(a)~~ The Financial Model should be capable of running sensitivities in all the key areas of risk that funders are likely to focus on. As a minimum this should include the following:

- (i) Delay to Financial Close;
- ~~(ii)(i)~~ Capital cost increases;
- ~~(iii)(i)~~ Construction programme delays;
- ~~(iv)(i)~~ Operational cost increases;
- ~~(v)(i)~~ Lifecycle cost increases;
- ~~(vi)(i)~~ Insurance cost increases;
- ~~(vii)(i)~~ Interest rate changes;
- ~~(viii)(i)~~ Inflation rate changes;
- ~~(ix)(i)~~ Corporation tax and VAT rate changes; ~~and~~
- ~~(x)(i)~~ Deductions relating to the Payment Mechanism.

It is assumed that the Financial Model will be independently verified by the Bidder/Senior Funder as part of the process leading to Financial Close. Bidders are required to accept the risk that the model audit may prove the Annual Service Payment to be incorrect, and that they may not pass any additional costs on to the Board.

The Board will require sight of the Financial Model auditor's opinion letter that Bidder will obtain prior to Financial Close. For the avoidance of doubt the Board does not require a duty of care from the model auditors.

~~Bidders must submit three (3) CD copies of the Financial Model. The disks must be free of viruses.~~
The Financial Model must include a print option macro.

~~During the Dialogue and evaluation phase, the Board may request Bidders to run key sensitivities and provide the results to the Board for analysis. Bidders' Financial Models must have the necessary functionality in order to undertake these sensitivities.~~

3.9.3 Model Databook

The Bidder is required to provide a databook and user guide supporting the Financial Model for any relevant Submission. The databook should include the following details as a minimum:

- Summary of the content of the Financial Model, on a sheet by sheet basis;
- A table of location of inputs to the Financial Model with the cell/sheet reference and source;
- Copies of source documents (e.g. construction cashflow);
- An explanation of the methodology used to generate the financial projections;
- A definition of how the financial ratios are calculated, ~~(which must be consistent with the Funders' term sheets), and that the underlying values are confirmed as acceptable to funders in their support letter;~~
- Details of the mechanisms contained in the Financial Model and an explanation of how key tasks in the Financial Model are carried out;
- A statement of the accounting policies applied to the Financial Model and their compliance with the relevant accounting standards; ~~and~~
- A detailed statement of the assumptions used in relation to tax.

3.10 Insurance

3.10.1 The Board has undertaken a review of the insurable and uninsurable risks that may emanate from the Project. Insurance provisions and minimum requirements have been set out in the NPD Project Agreement (at Clause 53 (Insurance), Schedule Part 15 (Insurance Requirements)) and Schedule Part 25 (Insurance Proceeds Account Agreement) in accordance with NHS Board requirements relative to NPD Projects in Scotland.

3.10.2 Insurances required under the Project will be reviewed and may be revised by the Board in line with Board strategy towards treatment of insurable risks in the Project, Project technical solutions and commercial considerations. Any such revision will form part of the Equalisation Adjustment made in relation to insurance pass-through costs.

3.10.3 A waiver of subrogation option has been added at Clause 53.6 (Subrogation and Vitiation) of the NPD Project Agreement. Bidders are asked to identify separately the costs associated

with this waiver in Part C (Waiver of subrogation for Consort and Consort Parties) of Appendix G (Insurance Response Matrix) of Volume 1 of the ~~ITPDISFT~~.

~~3.10.4 It is envisaged that the insurance provisions will be fully agreed and the insurance costs breakdown fixed prior to the close of Dialogue.~~

Insurance Response Requirements

~~3.10.5~~3.10.4 For the purposes of demonstrating compliance with the Board's requirements, and to assist in evaluation, Bidders are required to provide completed versions of the insurance matrices set out in Part 1 (Insurance Cost Matrix) and Part 2 (Insurance Technical Matrix) of Appendix G (Insurance Response Matrix) of Volume 1 of the ~~ITPDISFT~~, clearly identifying where:

- (i) there will be full compliance with the Board's insurance requirements; and
- (ii) the Bidder proposes alternative solutions to satisfy the Board's requirements and the rationale for these.

~~3.10.6~~3.10.5 Bidders should ensure transparency in both the Financial Model and ~~ITPDISFT~~ Submission. Bidders are required to provide detailed Required Insurances premium calculations and full details of associated Project insurance related costs in accordance with the format set out in Part 1 (Insurance Cost Matrix) of Appendix G (Insurance Response Matrix) of Volume 1 of the ~~ITPDISFT~~. Bidders are required to complete the Part 2 (Insurance Technical Matrix) of Appendix G (Insurance Response Matrix) of Volume 1 of the ~~ITPDISFT~~ in a manner which is consistent with their mark-up of the NPD Project Agreement. Costs presented in the Matrices should reconcile to the insurance pass-through cost values entered into Financial Proforma PF1a.

4 COMPETITIVE DIALOGUE PROCESS FINAL TENDER SUBMISSION

4.1 Introduction Final Tender

~~4.1.1 The Board has elected to use Dialogue to award the Project in accordance with Regulation 18 of the Regulations. Therefore, Dialogue commences upon the issue of the ITPD.~~

~~4.1.2 It is envisaged that the Dialogue process will comprise a series of meetings leading to submission of the Final Tender, as more fully described in this section. The Board intends to continue the Dialogue until it is satisfied that Solutions from one or more Bidders are capable of meeting the Board's requirements.~~

~~4.1.3 During Dialogue, the Board will:~~

- ~~a) discuss aspects of the NPD Project Agreement, the other key project documents including the Ancillary Agreements and the proposed risk allocation with the Bidders;~~
- ~~b) ensure equality of treatment among the Bidders and in particular, will not provide information in a discriminatory manner which may give any Bidder an advantage over another; and~~
- ~~c) not reveal to the other Bidders, Solutions proposed or any confidential information communicated by a Bidder without that Bidder's agreement.~~

~~4.1.4 Bidders are required to provide the following Submissions during the Dialogue Period:~~

- ~~a) Informal Submissions; and~~
- ~~b) Draft Final Tender.~~

~~At the close of Dialogue, Bidders will be invited to submit their Final Tender.~~

~~4.1.5 Each Bidder is required to develop only one Solution and provide Submissions in accordance 4.1.1 A Final Tender must not contain proposals which:~~

- ~~a. Materially differ from proposals presented / submitted to the Board in respect of matters which the Bidder was required to present / submit to the Board during the Dialogue Period;~~
- ~~b. Include key information that has not been presented and specified by Bidders during the Dialogue Period; or~~
- ~~c. The Board has previously confirmed as not capable of meeting its requirements; and~~
- ~~d. Include changes to the Final Tender (Bidder Specific) NPD Project Agreement.~~

~~4.1.2 The Preferred Bidder shall only be permitted to fine tune and clarify aspects of its Final Tender in line with the requirements of this paragraph 4 (Competitive Dialogue procurement law. **Process**).~~

4.2 Timetable of Dialogue Meetings

4.2 Board Evaluation Team

4.2.1 ~~A series of monthly meetings have been scheduled to take place with each Bidder on the dates indicated in the table below. The Board may vary the timetable or terminate or alter the Dialogue process in any way at its sole discretion.~~

Activity	Week	Bidder A	Bidder B	Bidder C
Dialogue Opens				
Issue ITPD	0	12/03/13		
Briefing Meeting \ Q and A Sessions	1	Tue 19/03/13	Wed 20/03/13	Thu 21/03/13
Informal Submission 1	2	Mon 25/03/13	Tue 26/03/13	Wed 27/03/13
Dialogue Meeting 1	3	Tue 02/04/13	Wed 03/04/13	Thu 04/04/13
Informal Submission 2	6	Mon 22/04/13	Tue 23/04/13	Wed 24/04/13
Dialogue Meeting 2	7	Tue 30/04/13	Wed 01/05/13	Thu 02/05/13
Informal Submission 3	10	Mon 20/05/13	Tue 21/05/13	Wed 22/05/13
Dialogue Meeting 3	11	Tue 28/05/13	Wed 29/05/13	Thu 30/05/13
Informal Submission 4	14	Mon 17/06/13	Tue 18/06/13	Wed 19/06/13
Dialogue Meeting 4	15	Tue 25/06/13	Wed 26/06/13	Thu 27/06/13
Informal Submission	18	Mon 15/07/13	Tue 16/07/13	Wed 17/07/13
Dialogue Meeting 5	19	Tue 23/07/13	Wed 24/07/13	Thu 25/07/13
Draft Final Tender Submission	24	26/08/13		
Dialogue Meeting 6	28	Tue 24/09/13	Wed 25/09/13	Thu 26/09/13
Dialogue Closes				
Invitation to Submit for Final Tenders	30	11/10/13		
Submission of Final Tenders	35	11/11/13		

4.2.2 ~~Each monthly Dialogue Meeting (Dialogue Meetings 1-6) shall involve the Board spending time with each Bidder. The format of such monthly meetings shall be:~~

~~(a) Initial meeting between the Board's full Core Evaluation Team and Bidder's team;~~

~~(b) The initial meeting shall (if required) break out into a series of sub-meetings concentrating on legal, technical and financial aspects of Bidder's proposals;~~

~~(c) The sub-meetings shall re-convene for a final wrap-up meeting with the Board's full Core Evaluation Team and Bidder's team.~~

~~4.2.3 In advance of each Dialogue Meeting, Bidders are invited to submit specific material related to the agenda topics to be discussed ("**Informal Submissions**") as more fully set out in paragraph 4.5.3. These Informal Submissions by Bidders prior to the Dialogue Meetings shall enable the Board and its advisers to:~~

~~(a) review the work undertaken by Bidders since the previous Dialogue Meeting;~~

~~(b) provide any meaningful and relevant comments to the Bidders; and~~

~~(c) avoid any time disconnect between the Board's comments and the development of Bidders' Solutions.~~

~~4.2.4 The Informal Submissions referred to in paragraph 4.2.3 above shall be required to be uploaded onto Conject in advance of each Bidder's Dialogue Meeting as outlined in the table at paragraph 4.2.1.~~

~~4.3 Dialogue and the Core Evaluation Team~~

~~4.3.1 Formal Dialogue Meetings will generally be chaired by one consists of the following members of the Board's team, who represent the following, representing various Board interests in evaluation:~~

- ~~• Brian Currie (Project Director)~~
- ~~• Iain Graham (Commercial and Legal)~~
- ~~• Janice MacKenzie (Clinical and Service Users)~~
- ~~• Carol Potter (Finance)~~
- ~~• Jackie Sansbury (Operations and Commissioning)~~

~~4.3.2 Upon commencement of Dialogue, Bidders will have the opportunity to comment on the title and purpose The evaluation of each meeting and to suggest changes they believe could criteria will be made in order to make the Dialogue more economic, efficient and effective.~~

~~4.3.3 Each Bidder will be required to attend the scheduled meetings set out at paragraph 4.2.1. However, Bidders can propose alternative dates no later than twenty (20) Business Days before a meeting is scheduled to take place and must explain to the Board (in broad terms) the reasons why this proposed change is necessary.~~

~~4.3.4 The Board will consider alternative dates proposed by Bidders provided this does not compromise its obligation to conduct an open, fair and transparent dialogue and subject to availability of the Board personnel and advisers.~~

~~4.3.5 The Board will confirm if they can accommodate an alternative date no later than fifteen (15) Business Days before a meeting is arranged to take place.~~

~~4.3.6 Where the Board is unable to accommodate an alternative date proposed by a Bidder, the Bidder is required to attend the original scheduled meeting as set out in paragraph 4.2.1.~~

~~4.3.7 The Board may, subject to the availability of its relevant resources and at its sole discretion and in accordance with the Regulations, meet Bidders in addition to the scheduled meetings before the submission of the Draft Final Tender. If the Board considers that additional meetings are required, these will be arranged by the Board and notified to the Bidders accordingly.~~

~~4.3.8 The Board will provide Bidders with a draft agenda for a scheduled or additional Dialogue Meeting no later than ten (10) Business Days before the date a Dialogue Meeting is arranged to take place. A draft agenda will include the following:~~

~~(a) Title;~~

~~a member of~~

~~(b) **Date** and time;~~

~~(c) Chairperson and Scribe;~~

~~(d) Attendees;~~

~~(e) Purpose;~~

~~(f) Parts of the ITPD to be discussed, and~~

~~(g) Parts of a Bidder's Solution to be discussed and any supporting information that would make a discussion more meaningful.~~

~~4.3.9 Bidders are required to provide the supporting information requested by the Board and advise the Board of any changes or additions to be made to the draft agenda, together with any requests for clarification to facilitate discussions no later than six (6) Business Days before the date of a Dialogue Meeting.~~

~~4.3.10 The final agenda agreed by the Board and a Bidder will be circulated by the Board to all attendees no later than five (5) Business Days before a Dialogue Meeting.~~

~~4.3.11 The number of attendees at a meeting should be kept to a minimum and reflect the purpose and subject matter to be discussed.~~

~~4.3.12 The Board will endeavour to communicate a record of the actions that were agreed by the Board and a Bidder during a meeting no later than four (4) Business Days after a Dialogue Meeting takes place.~~

~~4.3.13 This information exchange will not constitute any decision by the Board and will be limited to a record of:~~

~~(a) the parts of a Solution presented and specified by a Bidder at the Dialogue Meeting; and~~

~~(b) any actions arising out of the Dialogue Meeting.~~

~~4.3.14 Nothing in this information exchange is, or should be, relied upon as a promise or representation as to the Board's ultimate decision in relation to the Dialogue for the Project.~~

~~4.3.15 Notwithstanding that the Board may not have objected to nor rejected a Bidder's Solution during the Dialogue Period, such Solutions shall not be considered by the Bidder to have been approved by the Board.~~

~~4.4 — Briefing Meeting/ Q and A Session~~

~~4.4.1 A separate initial briefing meeting (the "Briefing Meeting") will be held with each of the three Bidders.~~

~~4.2.2 4.4.2 This will be an opportunity for each Bidder to meet the Project Owner, the Core Evaluation Team and will include members of the Board's NHS Lothian project team, including its advisers. The Board will make a presentation to provide Bidders with an overview of the Project and in particular the detail and importance of the Reference Design and the demarcation between Mandatory Reference Design Requirements and and advisers. Indicative Elements of the Reference Design. It is envisaged that the agenda~~

~~4.3 Submission requirements for the Briefing Meeting will include:~~

- ~~(b) Introduction and purpose/agenda (Project Director);~~
- ~~(c) Strategic context (Project Owner/Director of Capital Planning);~~
- ~~(d) Clinical context/Reference Design (Clinical Lead/Project Director);~~
- ~~(e) Operational context (Operations Lead/Director of Capital Planning);~~
- ~~(f) Commercial issues (Board Legal and Financial Advisers);~~
- ~~(g) Programme and process (Project Director/Commissioning Lead);~~
- ~~(h) Q and A (Bidders).~~

~~4.4.3 The number of attendees from each of the Bidder's teams to the Briefing Meeting will be limited to a maximum of fifteen (15) each. Confirmation of the Bidder's attendees will be requested by the Board in advance.~~

~~4.4.4 In advance of the Briefing Meeting, Bidders will be invited to submit questions to the Board using Conject.~~

~~4.5 — Dialogue and associated submission~~

~~4.5.1 It is envisaged that there will be five (5) Dialogue Meetings prior to submission of the Draft Final Tender. Initially the Dialogue will focus on the strategic direction of the Project and development of Bidders' proposals, including technical, financial and legal proposals. The Dialogue will then aid Bidders in developing Solutions capable of meeting the Board's requirements and refining them prior to submission of the Draft Final Tender. Informal Submissions, which shall not be evaluated, will be required in advance of the Dialogue Meetings to support the Bidders proposals. Feedback will be given to Bidders at each stage of the Dialogue and will inform the basis for the remaining Dialogue. The objective of Dialogue is to ensure Bidders are clear on the Board's requirements and allow each Bidder to develop a Solution that is capable of meeting the requirements set out in the ITPD. Dialogue will also be the opportunity for Bidders to explore innovative proposals and aspects of their approach that will add value with the Board.~~

~~4.5.2 The schedule of formal Dialogue Meetings and corresponding dates for Dialogue Meetings are set out in paragraph 4.2.1 above.~~

~~4.5.3 The proposed agenda topics and submission requirements for each Dialogue Meeting are set out in the following appendices to Volume 1 of the ITPD:~~

- ~~(a) Appendix A (i) (Technical Agenda Topics and Informal Submission Requirements) and (ii) (Submission Requirements);~~
- ~~(b) Appendix B (i) (Financial Agenda Topics and Submission Requirements); and~~
- ~~(c) Appendix C (i) (Legal Agenda Topics) and (ii) Submission Requirements and Evaluation).~~

~~It should be noted that this is a proposed guide to the agenda topics and submission requirements during Dialogue. Bidders may suggest changes, but this will require the agreement of the Board.~~

~~4.5.4 With each technical submission, Bidders are also required to provide a completed Annex 2 to Appendix A (ii) "Schedule of Design Deliverables for Technical Meetings during Dialogue Period" confirming the supporting drawings and information that Bidders are providing to support the Submission Requirements of the ITPD. Bidders should note that all drawings must be submitted at least once before submission of the Draft Final Tender~~

~~4.5.5 Throughout Dialogue the Board intends to provide Bidders with any updates to the NPD Project Agreement, its schedules and other project documents including the relevant Ancillary Agreements as set out in Volume 2 of the ITPD.~~

~~4.6 — Draft Final Tender~~

~~4.6.1 Bidders are required to submit a Draft Final Tender on or before noon on the date set out in the programme at paragraph 4.2 (Timetable of Dialogue Meetings) or such other dates as notified by the Board to the Bidders.~~

~~4.6.2 The Board will review the Draft Final Tenders to ensure compliance with the tender requirements set out within the ITPD. A final Dialogue Meeting will then take place as indicated on the programme at paragraph 4.2.1 (Timetable of Dialogue Meetings). This Dialogue will provide feedback to Bidders on the content of their Draft Final Tender and clarify any outstanding points.~~

~~4.7 — Conditions for closing Competitive Dialogue~~

~~It is expected by the close of Dialogue, the terms of the NPD Project Agreement will have been agreed in all material respects. Once Dialogue has been closed, the Board shall invite each Bidder to submit a Final Tender.~~

~~4.8 — Final Tender~~

~~4.8.1 Once Dialogue has closed, the Board will issue an Invitation to Submit Final Tender to each Bidder. The requirements for this Invitation to Submit Final Tender are broadly set out in Appendices A, B and C of Volume 1 of the ITPD. However the Board reserves the right to amend or modify the requirements for the Invitation to Submit Final Tender.~~

~~4.8.2 The Invitation to Submit Final Tender shall set out the following:~~

- ~~(a) date for receipt of the Final Tender by the Board;~~
- ~~(b) conditions of the Final Tender;~~
- ~~(c) the submission requirements of the Final Tender; and~~
- ~~(d) the methodology which the Board will use to evaluate the Final Tender.~~

~~4.8.3 The Preferred Bidder shall only be permitted to fine tune and clarify aspects of its Final Tender in line with the requirements of procurement law.~~

~~4.9 Submission requirements for the Draft Final Tender and Final Tender~~

~~4.9.3.1 Each Bidder shall ensure that its Submissions are provided using UK English, with all values expressed in UK Sterling/GB Pounds, using formats as specified in Submission Requirements.~~

~~4.9.23.2 The Final Tender shall be submitted no later than noon on the date for the relevant submission set out in the programme at paragraph 1.7 or such other date as notified by the Board to the Bidders.~~

~~4.3.3 Submissions or requests received after specified dates and times shall not be accepted for consideration and shall be returned unopened to the sender unless there are extenuating circumstances beyond the control of the Bidder in which case on being satisfied that such extenuating circumstances existed, the Board may at their discretion accept such submission.~~

~~4.3.4 Bidders shall ensure that one (1) electronic copy of the Draft Final Tender and/or Final Tender are delivered electronically via Conject in accordance with the filing structure set up in Conject user manual.~~

~~4.3.5 The filing structure on Conject will require a separate document for each criteria and each requirement outlined in ISFT Volume 1 Appendices.~~

- ~~a) Quality evaluation submissions: No commercial / financial information should be submitted via these folders~~
 - ~~• Technical submission part A – executive summary (excluding the overview of the Final Tender from a financial perspective)~~
 - ~~• Technical submission part B – strategic and management: separate folders for each of 15 criteria with supporting appendices~~
 - ~~• Technical submission part C – design and construction: separate folders for each of 30 criteria with supporting appendices – excluding C29~~
 - ~~• Technical submission part D – facilities management: separate folders for each of 14 criteria and any supporting appendices – excluding D13~~
 - ~~• Technical submission appendix 1.1 – design deliverables~~
 - ~~• Technical submission appendix 1.2 – specifications~~
 - ~~• Appendix C (iv) Interface Proposals~~

~~b) All commercial / financial information should be contained in the following folders:~~

- ~~• Executive Summary (including the overview of the Final Tender from a financial perspective, including a summary of capital costs, Annual Service Payment and funding structures)~~
- ~~• Technical submissions – costs criteria files for C29 & D13 and appendices~~
- ~~• Financial Submission~~
- ~~• Legal submission~~

~~4.3.6 The electronically submitted final tender will take precedence over the hard copy.~~

~~4.3.7 Final Tender submissions shall not be accepted by email or facsimile unless otherwise instructed by the Board.~~

~~4.3.8 Volume 4 of the ITPD and Bidders shall ensure that two (2) hard copies are also of the Final Tender, with a further two (2) hard copies of the response to Appendix A (ii) – Technical Submission Requirements are delivered by receipted mail or by hand to:~~

RHSC and DCN Project ~~Director~~
~~Project~~ Offices
 NHS Lothian
 56 Canaan Lane
 Edinburgh
 EH10 4SG

~~4.9.3.8~~ The packages shall be clearly marked for the attention of the Project Director, Re-provision of RHSC and DCN at Little France.

~~4.3.9.4~~ No package should bear any mark indicating the Bidder's identity. If more than one package is delivered, they all shall carry some random unifying code number and an indication of the number of packages in total (e.g. 1 of 2, 2 of 2).

~~4.9.53.10~~ Each Bidder shall obtain a signed receipt acknowledging delivery of the Submission.

~~4.9.6 The Draft Final Tender and/or Final Tender shall be submitted no later than noon on the date for the relevant submission set out in the programme at paragraph 4.2 (Timetable of Dialogue Meetings) of Volume 1 of the ITPD or such other date as notified by the Board to the Bidders.~~

~~4.9.7 Submissions or requests received after specified dates and times shall not be accepted for consideration and shall be returned unopened to the sender unless there are extenuating circumstances beyond the control of the Bidder in which case on being satisfied that such extenuating circumstances existed, the Board may at their discretion accept such submission.~~

~~4.3.9 4.9.8 Draft Final Tender and Final Tender submissions shall not be accepted by email or facsimile unless otherwise instructed by the Board.~~

~~4.9.93.11~~ Each Bidders' ~~Draft Final Tender and/or~~ Final Tender shall be presented in three volumes – volume 1: Technical response; volume 2: Financial response; and volume 3: Legal response. The content required in each section is defined in the following appendices to Volume 1 of the ~~ITPD~~ SFT:

~~(a)~~ Appendix A (i) (Not Used);

~~(a)(b)~~ Appendix A (ii) (Technical Submission Requirements);

~~(c)~~ Appendix A (iii) (Design Deliverables);

~~(d)~~ Appendix A (iv) (Specifications);

~~(e)~~ Appendix A (v) (Technical Cost Proformas);

~~(f)~~ Appendix A (vi) (Change Protocol);

~~(b)(g)~~ Appendix B (i) (Financial ~~Agenda Topics and~~ Submission Requirements);

~~(e)(h)~~ Appendix C (ii) (Legal Submission Requirements and Evaluation); and

~~(e)(i)~~ Appendix G (Insurance Response Matrix).

~~4.3.12~~ ~~4.9.10~~ Each hard copy volume of a Bidders' ~~Draft Final Tender and/or~~ Final Tender shall be filed in a separate folder with its contents clearly marked on the outside with Bidder's name, volume number, folder number and copy number for example Volume 2, folder 1 of 3, copy 1.

~~4.3.13~~ ~~4.9.11~~ Hard copy submissions should be bound in a way that responses to each Quality Evaluation Criterion (as set out in the ISFT) can be extracted separately.

~~4.3.14~~ Each folder shall contain an index list for that folder which shall be bound immediately inside the cover, including the page numbers of each folder.

~~4.9.123.16~~ Each page of each volume shall be numbered clearly and sequentially.

~~4.9.133.17~~ Submissions shall not include any loose pages.

~~4.9.143.18~~ Drawings shall be numbered and a drawing list shall be included as part of the index list under the appropriate heading.

~~4.9.153.19~~ Drawings shall not be larger than ~~A1~~A0 size and shall be clearly referenced, folded and inserted into pockets within the appropriate volume.

~~4.9.163.20~~ Each Bidder shall nominate and mark one copy of the ~~Draft Final Tender and/or~~ Final Tender as the master copy. The master copy of the Submission shall be used as the primary source of reference during the evaluation process.

~~4.9.173.21~~ Bidders shall provide ~~Draft Final Tender and~~ Final Tender Submissions that contain all the elements required and necessary for the performance of the NPD Project Agreement on the basis of the Solution presented and specified by Bidders during the Dialogue Period and accepted by the Board and SFT under the derogations process.

~~4.9.18~~ ~~Draft Final Tenders and/or~~ ~~4.3.22~~ Final Tenders must be completed under the headings, using the tables and information supplied by the Board, and shall follow the order and numbering contained in Appendices A, B and C of this Volume 1 of the ~~ITPDISFT~~.

~~4.9.19~~ ~~Draft Final Tenders and/or~~ ~~3.23~~ Final Tenders that include key information that has not been presented and specified by Bidders during the Dialogue Period and/or the Board has previously confirmed is not capable of meeting the mandatory requirements will not be accepted by the Board.

~~4.9.203.24~~ Bidders should provide such information as is necessary to enable the Board to evaluate whether a ~~Draft Final Tender and/or~~ Final Tender is capable of meeting the Board's requirements.

~~4.9.213.25~~ The Board are entitled to modify Appendices A, B and C, of Volume 1 of the ~~ITPDISFT~~, the Board's requirements set out in Volume 1 of the ~~ITPDISFT~~ generally, and/or require Bidders to omit specific aspects of a Solution at their absolute discretion where not agreed by the Board during the Dialogue Period pursuant to the parameters set out in the NPD Project Agreement, the Board's Construction Requirements and/or SFT under the derogations process subject to ensuring equality of treatment amongst all Bidders.

~~4.9.223.26~~ General information such as marketing and promotional information will not be accepted by the Board and all information provided by Bidders must be specific to the information that is requested.

~~4.9.233.27~~ Bidders are required to provide a ~~Draft Final Tender and/or~~ Final Tender that are acceptable to all legal entities (including, where relevant, ~~any Senior Funders and relevant subcontractors~~) that are involved in the development of a Solution and the preparation of ~~Draft Final Tender and/or~~ Final Tenders.

~~4.9.243.28~~ Bidders shall note that the Board shall reserve its position on the acceptability or otherwise of the ~~Draft Final Tender and/or~~ Final Tender.

~~4.104.4~~ **Conject (BIW)**

~~4.104.1~~ The Project will continue to use Conject during the ~~ITPD~~Final Tender process. Conject, ~~formerly known as BIW~~, is a web-based construction collaboration portal. Procedures utilising Conject shall include:

- (a) Data room access;
- (b) Dialogue queries and Dialogue Period bulletin responses;
- ~~(c) Bid clarification queries and responses;~~
- ~~(d) Submitting Informal Submissions; and~~
- ~~(e)~~(c) Submitting completed ~~Draft Final Tenders and~~ Final Tenders.

~~4.114.5~~ **Communication Protocol**

~~4.115.1~~ All information and communication flows between the Board and Bidders ~~outwith Dialogue Meetings~~during the Final Tender Period will be via Conject. The process for information and communication flows between the Board and Bidders including queries, bulletins, ~~submissions~~, and request for clarifications is set out in paragraph ~~4.11.26~~.

~~4.115.2~~ Information and communication flows between the Board and Bidders will be categorised as follows:

- (a) Dialogue Period Query (Confidential/Not Confidential – see paragraph ~~4.126.1~~) prepared by a Bidder and communicated to the Board relating to an ISFT process query only;
- (b) Dialogue Period Bulletin ~~(Confidential/Not Confidential – see paragraph 4.12)~~ prepared by the Board and communicated to a Bidder ~~(either in response to a Dialogue Period Query or otherwise)~~an ISFT process query only;
- ~~(c) Dialogue Period Submission prepared by a Bidder and communicated to the Board; and~~
- ~~(d)~~(c) Request for clarification prepared by the Board and communicated to a Bidder in response to a ~~Dialogue Period~~Final Tender Submission.

~~4.115.3~~ Please refer to Appendix D of Volume 1 of the ~~ITPD~~ISFT for template form to be used by Bidders when sending a Dialogue Period Query. ~~Please also refer to Appendix D of~~

~~Volume 1 of the ITPD for template forms to be used by the Board when providing a Dialogue Period Bulletin.~~

~~4.115.4~~ The Board is entitled to decline to respond to any other form of information and communication flow sent by a Bidder.

~~4.115.5~~ Bidders may communicate a Dialogue Period Query to the Board no later than ~~ten (10) Business Days before the date of any Submission.~~

~~four (4.11) Business Days after the issue of ISFT.~~

~~4.5.6~~ The Board will endeavour to provide a Dialogue Period Bulletin in response to a Dialogue Period Query by no later than ~~five (5) four (4) Business Days before the date of any Submissions~~submission of Final Tenders.

~~4.115.7~~ Receipt of information and communications flows between the Board and Bidders will be recorded in accordance with Conject User Manual.

~~4.115.8~~ Additionally, the Board reserve the right to issue additional information at any time during the ~~Dialogue~~Final Tender Period. The Board may exercise the option to postpone the return of the ~~Draft Final Tender or~~ Final Tender in the event that additional information is issued which has a bearing on the ~~Draft Final Tender or~~ Final Tender.

~~4.124.6~~ **Commercially sensitive and confidential information**

~~4.126.1~~ If a Bidder considers a communication or any part of its submission to be commercially sensitive and wishes it to be treated by the Board as confidential they should make it clear in the relevant section of the Dialogue Period Query template form and explain in concise terms what harm may result from its disclosure.

~~4.126.2~~ If the Board does not agree that a communication is commercially sensitive, the Bidder will be invited to withdraw this communication. In the event that this invitation is declined, the Board will distribute a response to all Bidders.

~~4.126.3~~ If the Board agrees that a communication is commercially sensitive it will be treated in the strictest confidence by the Board subject to an entitlement to share such communication with the relevant members of the Board's Project team including advisers and key stakeholders for the purposes of preparing a confidential response.

~~4.12.4 Any Dialogue Period Bulletin prepared by the Board in response to a Dialogue Period Query which is not commercially sensitive will be distributed to all Bidders.~~

~~4.12.5 During the Dialogue Period, the Board may:~~

~~(a) seek to establish the feasibility of a Bidder's Solution relevant to an aspect of the Project including obtaining the view of a third party, for example in relation to the interface with existing RIE Facilities; and/or;~~

~~(b) where not viewed as commercially sensitive by a Bidder, look to adapt its requirements to reflect, whether in whole or in part information provided and/or elements of a particular Bidder's Solution.~~

~~Both of the above may involve the passing of information to a third party.~~

~~4.12.6 In relation to paragraph 4.12.5 a) above, the Board shall adopt a process whereby it shall use its reasonable endeavours to procure that:~~

- ~~(a) any third party recipient of information will require to sign a confidentiality undertaking prior to receipt of any information;~~
- ~~(b) the Bidder will be provided with a consent request, prepared separately from other Dialogue documentation, in which it may detail information it is prepared to disclose to a third party, including any potentially competing third party, relevant to its proposals, and seeking consent for such disclosure; and~~
- ~~(c) Following receipt of such a consent request, a Bidder may at all times refuse or agree to disclose information to a third party.~~

~~4.12.7 In relation to paragraph 4.12.6(b) above, the Board will use its reasonable endeavours to seek the express consent of a Bidder as to whether a specific aspect of that Bidder's Solution can be adopted by the Board as a requirement for all Bidders to meet. A Bidder may withhold consent to the Board adopting such a requirement on the grounds that the Bidder has developed such requirement as part of its Solution and considers this requirement to be commercially sensitive and not capable of being disclosed to the other Bidders.~~

~~4.134.7~~ **Building Information Modelling (BIM)**

Building Information Modelling (BIM) is being increasingly used within the industry. The use of BIM is being encouraged by central government and the Board expect that Bidders will use BIM for the development and implementation of their proposals.

Bidders shall prepare a BIM execution plan for review by, and agreement with, the Board. The BIM execution plan must be prepared in accordance with BS1192 and shall be submitted as part of ~~the Bidder's Informal Submission during the Dialogue Period and form part of~~ their Final Tender. Appendix J contains further details of the Board's BIM requirements for the Project.

5 TENDER EVALUATION AND CONTRACT AWARD CRITERIA

5.1 Introduction

5.1.1 This section outlines the approach to the evaluation methodology for the Final Tenders. ~~The Informal Submissions and Draft Final Tender shall not be evaluated by the Board. These Informal Submissions and Draft Final Tenders shall be used as tools during the Dialogue Period for Bidders to set out their Solutions to the Board and for subsequent feedback on whether aspects of the Informal Submissions and Draft Final Tenders meet the Board's requirements set out in the ITPD. Bidders should note that there shall be no down selection of Bidders during the Dialogue Period.~~

5.1.2 Contract award will be on the basis of the offer, contained in the Final Tender, which is the most economically advantageous as set out in paragraphs 5.6 (Quality Evaluation Criteria), 5.7 (Price Evaluation) and 5.8 (Combining Price and Quality Evaluation), also in accordance with Part 5 of the Regulations.

5.2 Overview of Evaluation Process

5.2.1 The Final Tender evaluation will comprise the following steps:

(a) Completeness and compliance check – as more fully set out in paragraph 5.3 (Compliance and Completeness);

(b) Compliance with the Stand Alone Requirements – as more fully set out in paragraph 5.4 (Compliance with Stand Alone Requirements);

~~(c) Evaluation of Funding Proposals as more fully set out in paragraph 5.5 (Deliverability of Funding);~~

~~(c)~~ Evaluation of all of the Quality Evaluation Criteria on a pass/fail basis - as more fully set out in paragraph 5.6.2 (Quality Evaluation Criteria)

~~(e)~~(d) Evaluation of those Quality Evaluation Criteria that are evaluated on a scored basis - as more fully set out in paragraphs 5.6.3 (Quality Evaluation Criteria) which will result in a mark out of 40 being awarded to each Bidder;

~~(f)~~(e) Price Evaluation (including commercial aspects) – as more fully set out in paragraph 5.7 (Price Evaluation), which will result in a mark out of 60 being awarded to each Bidder; and

~~(g)~~(f) Combination of Price Evaluation Mark and Quality Evaluation Mark, resulting in a mark out of 100 being awarded to each Bidder, as more fully set out in paragraph 5.8 (Combining Price and Quality Evaluation).

Should a Final Tender fail any of the steps set out in paragraphs 5.2.1 (a), (b), ~~(e)~~ or ~~(e)~~ above then ~~no further evaluation will be carried out and~~ the Final Tender will be deemed to be non-compliant and no further evaluation will be carried out.

5.2.2 Bidders should note that Board's requirements as referred to in Table B and Table C of paragraph 5.6 (Quality Evaluation Criteria) means all requirements of the Board as set out in Volume 2 and Volume 3 of (and any requirements referred to within) this ~~ITPD, and as may~~

~~be supplemented, varied and/or refined (and disclosed by the Board to Bidders during Dialogue).SFT.~~

5.3 Compliance and Completeness

- 5.3.1 The Board will check each Final Tender for compliance and completeness to establish if it has been prepared and submitted in accordance with and meets the requirements set out in the ~~Invitation to Submit Final Tender.SFT.~~
- 5.3.2 The Board is entitled to disqualify a Bidder if a Final Tender is not prepared and submitted in accordance with the requirements set out in the ~~Invitation to Submit Final Tender.SFT.~~ The Board's decision on this matter will be final.
- 5.3.3 The Board is entitled, but not obliged, to seek clarification from Bidders at any time in respect of incomplete and ambiguous information contained in a Final Tender.
- 5.3.4 In the event the Board receives incomplete or ambiguous information in a Final Tender or response to a request for clarification the Board is entitled to disqualify a Bidder and the Board's decision on this matter will be final.
- 5.3.5 The Board may request a Bidder to clarify a Final Tender received, but such clarification, specification and/or fine tuning shall not involve material changes to a Final Tender when such clarifications, specifications or fine tuning are likely to distort competition or have a discriminatory effect.

5.4 Compliance with Stand Alone Requirements

- 5.4.1 The Board will check each Final Tender for compliance with the Stand Alone Requirements as identified in paragraph 2.3 (Stand Alone Requirements). Non-compliance with the Stand Alone Requirements will result in the Final Tender being deemed to be non-compliant.

~~5.5 Deliverability of Funding~~

~~Bidders should assume for the purposes of Final Tender that the deliverability of the funding proposals will be evaluated on the following broad basis:~~

- ~~(a) acceptability of proposed guarantees to be put in place to support the Project Co/consortium structure;~~
- ~~(b) extent of Funders due diligence completed and demonstration of a robust process for conclusion of the Funders due diligence; and~~
- ~~(c) extent of demonstrated support of Funders (including assessment of the quality of letters of support and any conditions of financing) and summarily for providers of any junior debt.~~

~~However the Board will provide additional guidance to Bidders as to the specific requirements of Final Tenders in relation to funding during the Dialogue Period and will confirm how such requirements will be evaluated at this stage. The evaluation of funding proposals shall be assessed on a pass/fail basis. A pass will be awarded where the Board is satisfied that proposals demonstrate acceptability against each of the above criteria, as such~~

~~criteria may be changed by the Board and notified to the Bidders during the Dialogue Period. It is the Board's intention that, during Dialogue and Draft Final Tender stages, Bidders will be made aware of elements of the proposed solution they are developing which are unlikely to achieve a pass.~~

5.6 Quality Evaluation Criteria

- 5.6.1 The Quality Evaluation Criteria (QEC), the basis for evaluation and, where relevant, their weightings are included in Table A below. Bidder's should note that Appendix A (ii) ~~of the ITPD~~ (Technical Submission Requirements) of the Volume 1 of the ISFT sets out for Bidder's (under the column "Submission Requirement") a description of technical aspects which the Board require, or where indicated anticipate Bidders should provide in their Submissions. Please note, however, that the individual submission requirements (for example, the bulleted points) are not and should not be treated by Bidders as sub-evaluation criteria. ~~Bidder's~~ Bidders are reminded that the QEC are as set out in Table A (duplicated in the first, second and third columns of Appendix A (ii) (Technical Submission Requirements) of the Volume 1 of the ISFT for ease of reference) and responses to each QEC will be evaluated only in accordance with this paragraph 5 and no other basis.
- 5.6.2 The Board are keen to ensure that the Bidder appointed Preferred Bidder is able to deliver the highest quality in respect of all of its requirements.- Therefore in the first instance, all QEC will be evaluated on a pass/fail basis.- Primarily the QEC will be evaluated in accordance with the pass/fail criteria set out in Table B of this paragraph 5.6.-~~2~~ However, in some instances the Board's requirements for a QEC are not set out in Volume-~~2~~ and Volume 3 of the ~~ITPD~~ ISFT and as such Table B shall not apply.- In those cases the QEC shall be evaluated by the Board based on the pass/fail criteria set out in the column headed "Pass / Fail Guidance" (where relevant) in Appendix A(ii) of the ~~ITPD~~ ISFT. ~~It is the Board's intention that, during Dialogue and Draft Final Tender stages,~~ Bidders will be made aware, pursuant to submission of elements of Draft Final Tenders, of the proposed solution they are developing specific areas in which are unlikely to achieve their draft proposals submitted at that stage did not constitute a pass in accordance with the relevant criteria, as set out in Table B or Appendix A (ii).
- 5.6.3 Following the pass/fail evaluation the Board will then carry out a detailed assessment of the remaining Final Tenders to evaluate some of the QEC based on a scored evaluation. The scored assessment shall only apply to those QEC flagged as "scored" in Table A of this paragraph 5.6. Each of these scored QEC shall be given a score of between 5 and 10 in accordance with the scoring system set out in Table C of this paragraph 5.6. The score for each QEC will then be multiplied by the QEC Weighting and divided by 10 to give a weighted score. The weighted score for each QEC will be added to give a total score for Quality out of 40 (the **Quality Evaluation Mark**).

Table A – Evaluation Basis and Weightings for Quality Evaluation Criteria

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
A – Executive Summary			Not Scored	
B – Strategic and Management Approach (5%)				

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
	B1	Clarity, robustness and quality of understanding of policy framework and approach to addressing these.	Scored	0.16
	B2	Clarity, -robustness and quality of approach to contribution to delivering the Board's 'vision' and associated performance management regime.	Scored	0.32
	B3	Clarity, robustness and quality of understanding of Project outcomes and approach to contribution of delivering these.	Scored	0.5756
	B4	Clarity, -robustness and quality, of approach to partnership and collaborative working with the Board and its partners.	Scored	0.81
	B5	Clarity, -robustness and quality of approach to staff development including recruitment, training, induction and HR issues.	Scored	0.32
	B6	Clarity, -robustness and quality of approach to delivering community benefits.	Scored	0.32
	B7	Clarity, -robustness and quality of approach to integration of design with facilities management considerations.	Scored	0.32
	B8	Clarity, -robustness and quality of approach to consortia management arrangements including approach to sub contractors.	Scored	0.57
	B9	Quality of proposed personnel	Scored	0.32
	B10	Clarity, -robustness and quality of approach to continuity throughout the Project.	Scored	0.32
	B11	Acceptable organisational diagrams for each stage of Project.	Pass/Fail	
	B12	Clarity, -robustness and quality of approach to health and safety.	Scored	0.81
	B13	Acceptable approach to environmental, quality and health and safety management	Pass/Fail	

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
	B14	systems. Clarity, - robustness and quality of approach to management of design development including integration with the Board and its partners.	Scored	0.16
	B15	Acceptable programme from appointment as Preferred Bidder to Financial Close.	Pass/Fail	
C – Approach to Design & Construction (23%)				
	C1	Clarity, - robustness and quality of approach to meeting the stakeholders requirements in their design	Scored	2.64
	C2	Clarity, -robustness and quality of approach to design quality	Scored	1.85
	C3	Clarity, robustness and quality of architectural -and landscape design	Scored	2.64
	C4	Clarity, robustness and quality of approach to delivering innovation.	Scored	2.64
	C5	Clarity, robustness, and quality of approach to adaptability and flexibility	Scored	2.64
	C6	Clarity, robustness and quality of way finding and signage proposals.	Scored	1.06
	C7	Clarity, robustness and quality of interior design proposals.	Scored	2.64
	C8	Clarity, robustness and quality of M&E engineering design proposals.	Scored	1.06
	C9	Clarity, robustness and quality of natural and artificial lighting proposals	Scored	1.06
	C10	Clarity, robustness and quality of energy management proposals.	Scored	1.85
	C11	Clarity, robustness and quality of equipment proposals.	Scored	1.06
	C11A	Compliance with Minimum Level of Group 1 Equipment.	Pass/Fail	

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
	C12	Compliance With Mandatory Reference Design Requirements	Pass/ Fail	
	C13	Acceptable approach to achieving planning permission.	Pass/ Fail	
	C14	Acceptable vertical and horizontal movement strategy.	Pass/ Fail	
	C15	Acceptable ICT strategy.	Pass/ Fail	
	C16	Acceptable fire planning strategy.	Pass/ Fail	
	C17	Acceptable structural design proposals.	Pass/ Fail	
	C18	Acceptable services, utilities and infrastructure proposals.	Pass/ Fail	
	C19	Acceptable approach to achieving required BREEAM rating.	Pass/ Fail	
	C20	Acceptable post Preferred Bidder stage design development proposals and design programme.	Pass/ Fail	
	C21	Compliance with Board's Construction Requirements	Pass/ Fail	
	C22	Acceptable design life proposals.	Pass/ Fail	
	C23	Acceptable construction programme and approach to monitoring.	Pass/ Fail	
	C24	Clarity, robustness and quality of construction methodology	Scored	1.85
	C25	Acceptable approach to commissioning and handover.	Pass/ Fail	
	C26	Acceptable approach to quality and environmental management systems.	Pass/ Fail	
	C27	Acceptable approach to health and safety management.	Pass/ Fail	
	C28	Acceptable approach to compliance with CDM regulations.	Pass/ Fail	
	C29	Robustness of technical costs.	Pass/ Fail	
	C30	Acceptable list of summary assumptions, clarifications and derogations.	Not Scored	
	C31	Acceptable Interface Proposals.	Pass / Fail	
D – Approach to Facilities Management (12%)				

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
	D1	Clarity, robustness and quality of approach to management and administration of the Services and Contract.	Scored	2.50
	D2	Acceptable approach to integration with Board policies and operation.	Pass/ Fail	
	D3	Acceptable approach to ensuring quality management.	Pass/ Fail	
	D4	Acceptable approach to ensuring environmental management.	Pass/ Fail	
	D5	Acceptable approach to ensuring health and safety management.	Pass/ Fail	
	D6	Acceptable approach to interfacing with the Board for undertaking works outside of access times.	Pass/ Fail	
	D7	Clarity, robustness and quality of approach to partnership and resources including liaison, resources and supply chain management.	Scored	2.50
	D8	Acceptable approach to business continuity planning.	Pass/ Fail	
	D9	Acceptable fire safety policies and procedures.	Pass/ Fail	
	D10	Clarity, robustness and quality of approach to performance and information management including; Helpdesk, programme maintenance lifecycle, performance monitoring, monitoring and records, regular reports and information requests, building services and statutory testing.	Scored	4.50
	D11	Acceptable approach to un-programmed maintenance.	Pass/ Fail	
	D12	Clarity, robustness and quality of approach to service elements including; utilities management and grounds maintenance services.	Scored	2.50
	D13	Robustness of technical costs.	Pass/ Fail	
	D14	Acceptable list of summary assumptions, clarifications and derogations.	Not Scored	
	D15	Acceptable approach to	Pass/ Fail	

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
		mobilisation of Facilities Management services.		

Table B – Pass / Fail Criteria for Quality Evaluation Criteria

Pass / Fail Criteria	
Pass	<p>The Bidders approach:</p> <ul style="list-style-type: none"> demonstrates a satisfactory understanding of the Board's requirements; and delivers a satisfactory level of compliance with the Board's requirements.
Fail	<p>The Bidders approach:</p> <ul style="list-style-type: none"> fails to demonstrate a satisfactory understanding of the Board's requirements; or fails to deliver a satisfactory level of compliance with the Board's requirements.

Table C – Scoring System for Quality Evaluation Criteria

Scoring Range	Categorisation	Description
5 – 10		
5	Satisfactory	<p>The Bidder's approach:</p> <ul style="list-style-type: none"> demonstrates a satisfactory understanding of all aspects of the Board's requirements; and/or proposes a solution which performs satisfactorily in complying with the Board's requirements.
6-7	Good	<p>The Bidder's approach:</p> <ul style="list-style-type: none"> demonstrates a satisfactory understanding of all aspects of the Board's requirements and a detailed and good understanding of some aspects of the Board's requirements; and/or proposes a solution which performs well against the Board's requirements.

Scoring Range	Categorisation	Description
5 – 10		
8-9	Very Good	The Bidder's approach: <ul style="list-style-type: none"> demonstrates a detailed and very good understanding of all aspects of the Board's requirements; and/or proposes a solution which, performs very well against the Board's requirements.
10	Excellent	The Bidder's approach: <ul style="list-style-type: none"> demonstrates an exceptional understanding of all aspects of the Board's requirements; and/or proposes a solution which performs very well in complying with the Board's requirements and excels in complying with some of the Board's requirements.

5.7 Price Evaluation

5.7.1 Economic Cost

The Economic Cost of the Submission will be determined by calculating the Net Present Value (NPV) of each Financial Submission over the period of the NPD Project Agreement using the following components:

- (a) NPV of Annual Service Payment - The proposed total Annual Service Payment stream in the Bidder's Financial Model, taken from Financial Pro-forma 1 and verified against the Financial Model, prepared using the assumptions and specifications set out in paragraphs 3.8 and 3.9. The NPV will be calculated using the Treasury real discount rate of 3.5% (6.0875% nominal);
- (b) NPV of Surpluses - The forecast level of surpluses in the Bidder's Financial Model, as presented in Financial Proforma 2 and verified against the Financial Model will be deducted from the NPV of the total Annual Service Payment. Due to the more uncertain nature of the surplus payments the NPV will be calculated using a real discount rate of 4.39% (7.0% nominal);
- (c) Equalisation Adjustment - Any additional material related costs and revenues to be borne by the Board as a result of any Financial Submission, including the pass-through costs of energy and utilities, rates and insurance costs as set out in Financial Pro-forma 1. The impact of such costs will be estimated by the Board and expressed as an NPV of the adjustments made, discounted at a real rate of 3.5%. Where an Equalisation Adjustment (other than the pass-through costs) has been made, the nature of and rationale for the adjustment will be disclosed to the Bidder; and
- (d) Quantifiable Bidder Amendments - The Economic Cost will include an amount that reflects the deemed value (whether positive or negative) of any (i) amendments, caveats or qualifications to the NPD Project Agreement or specification that affect the risk profile of the Project or (ii) elements of the Financial Submission, that have or, in the reasonable opinion of the Board may have, a significant and quantifiable financial impact on the

Board (a 'Quantifiable Bidder Amendment'). For this purpose, the deemed value of the Quantifiable Bidder Amendment will be the estimated financial impact to the Board of the risk occurring multiplied by the estimated probability of that risk being realised. Such values will be converted to an NPV using the 3.5% real discount rate.

Where any such Quantifiable Bidder Amendments and/or Equalisation Adjustments are identified, these ~~will be~~ discussed and the deemed value shared with each Bidder during Dialogue.

5.7.2 Price Evaluation Mark

The Economic Cost derived from the components described in paragraph 5.7.1 will be scored as shown in the table below, with the Bidder with the lowest Economic Cost scoring the maximum 60 (the Price Evaluation Mark).

Deviation from lowest Economic Cost	Price Evaluation Mark
<=0.25%	60
>0.25%, <=0.50%	59.75
>0.50%, <=0.75%	59.625
>0.75%, <= 1.00%	59.5
>1.00%, <= 1.50%	59.25
>1.50%, <=2%	59
>2%, <=3%	58.5
>3%, <=4%	58
>4%, <=5%	57.5
>5%, <=6%	56.5
>6%, <=7%	55.5
>7%, <=8%	54.5
>8%, <=9%	53.5
>9%, <=10%	52.5
>10%, <=11%	50.5
>11%, <=12%	48.5
>12%, <=13%	46.5
>13%, <=14%	44.5
> 14%, <= 15%	42.5

Deviation from lowest Economic Cost	Price Evaluation Mark
> 15%, <= 16%	40.5
> 16%, <= 17%	37.5
> 17%, <= 18%	34.5
> 18%, <= 19%	31.5
> 19%, <= 20%	28.5
> 20%, <= 21%	24.5
> 21%, <= 22%	20.5
> 22%, <= 23%	16.5
> 23%, <= 24%	12.5
> 24%, <= 25%	8.5
> 25%	0

5.7.3 Evaluation of Funding Approach

The Board will evaluate Bidders' submissions in relation to funding on a scored basis. The areas of the submission that will be evaluated for this purpose are, primarily, the responses to questions F1-F7. However, responses to questions F8-F17 will also be taken into account where these would have a bearing on the deliverability of funding. Such scoring would be applied as an adjustment to the Price Evaluation Mark only and would not form part of the Qualitative appraisal.

The scoring scheme to be applied is set out in the table below:

<u>Adequacy of response</u>	<u>Overall deduction from Price Evaluation Mark</u>
<u>All required information is provided, with no omission or qualification, and provides strong evidence that the eventual funding package adopted will be deliverable</u>	<u>No deduction</u>
<u>Required information is largely provided, with answers present for all questions, with only minor and insignificant omission or qualification, and provides reasonable evidence that the eventual funding package adopted will be deliverable</u>	<u>Deduction of 1 Mark</u>
<u>Information provided contains significant omissions and qualifications, with only some evidence provided that the eventual funding package adopted will be deliverable</u>	<u>Deduction of 2 Marks</u>
<u>Information provided is insufficient and contains multiple significant omissions and qualifications, with several questions not answered</u>	<u>Deduction of 3 Marks</u>

<u>adequately, with little evidence that that the eventual funding package adopted will be deliverable</u>	
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By way of example, the lowest priced Final Tender would be awarded the maximum Price Evaluation Mark of 60 but should that Bidder's responses in relation to funding be inadequate the Bidder may sustain a deduction that could reduce this Mark to 57.

Bidders were made aware, pursuant to submission of Draft Final Tenders, of how their Draft Final Tender submissions would be scored under the above mechanism". The purpose of adding this wording is to reduce risk of arguments that bidders were unaware of how this process would operate.

5.8 Combining Price and Quality Evaluation

For each Bidder, the Price Evaluation Mark (out of 60) will be added to the mark for the Quality Evaluation Mark (out of 40) to give a total mark out of 100. The Final Tender with the highest combined mark will be deemed by the Board to be the most economically advantageous tender.

6 GENERAL PROCUREMENT RULES

6.1 Introduction

This section outlines the general procurement rules applying to the Project competition ~~in addition to those set out in section 4 (Competition Dialogue Process)~~ relevant to submission requirements and elsewhere within the ~~ITPDISFT~~.

6.2 Information provided to Bidders – Confidentiality and Crown Copyright

By receiving the ~~ITPDISFT~~, each Bidder agrees to keep confidential the ~~ITPD to Participate in DialogueISFT~~ and all of the Information Provided.

Bidders shall not reproduce the ~~ITPDISFT~~ in any form (including photocopying or storing by electronic means) or any other Information Provided for any purpose other than that specifically necessary to ~~make submit~~ a ~~SubmissionFinal Tender~~ without the specific written permission of the Board.

The ~~ITPDISFT~~ and Information Provided may be made available to a Bidder's members, employees and professional advisers directly involved in the appraisal of such information (who must be made aware of the obligation of confidentiality) but shall not, either in whole or in part, be copied, reproduced, distributed or otherwise made available to any other party in any circumstances without the prior written consent of the Board, nor may it be used for any other purposes than that for which it is intended.

The ~~ITPDISFT~~ (including any copies and or any supplemental or referenced documents) and any Information Provided is and shall always remain the property of the Board who is entitled to demand their return and/or destruction at any time.

6.3 Information provided to Bidders - Warnings / Disclaimers

While the Information Provided has been prepared in good faith, it does not purport to be comprehensive nor to have been verified by the Board or any of their advisers. Neither the Board nor any of their agents or advisers accept any liability or responsibility for the accuracy, adequacy or completeness of any opinions, commentary, information and documentation contained in the ~~ITPDISFT~~ or of any other opinions, commentary, information and documentation made available during the Tender Period or in respect of any Final Tender. No representation or warranty, express or implied, is or will be given by the Board or any of their agents or advisers with respect to such opinions, commentary, information and documentation. Any liability therefore is hereby expressly disclaimed.

It is not warranted that the Information Provided shall identify or provide Bidders with Solutions for the attainment of the Board's requirements. It is the responsibility of each Bidder to develop their proposals to ensure that they satisfy the Board's requirements.

Bidders must obtain for themselves at their own responsibility and expense all information necessary for the preparation of their ~~Submissions during the Tender Period and in respect of any~~ Final Tender.

Bidders must complete and provide all information in accordance with the conditions and requirements of the ~~ITPDISFT~~.

6.4 Restrictions on the Use of the Invitation to ~~Participate in Dialogue~~ Submit Final Tender

The ~~ITPDISFT~~ and subsequent Information provided should not be considered as an investment recommendation made by the Board or any of its advisers or agents to any of the Bidders. Each person to whom the ~~ITPDISFT~~ is issued should make its own independent assessment of the Project competition and all matters relevant to that competition and to the Project after making such investigation and taking such professional advice as it deems necessary.

Nothing in the ~~ITPDISFT~~ is, or should be, relied upon as a promise or representation as to the Board's ultimate decision in relation to the Project competition and/or the award of a public contract.

6.5 The Board's Right to Terminate

Bidders' attention is drawn to the fact that, by issuing the ~~ITPDISFT~~, the Board is in no way committed to accepting any Final Tender or identifying a Preferred Bidder.

The Board reserves the right, in its absolute discretion, to terminate, cancel or abandon the Project competition at any time before the execution of the NPD Project Agreement without giving prior notice to Bidders. In the event that the Project competition is so terminated, the Board will have no liability whatsoever to a Bidder, their subcontractor(s), their funders, the advisers to the Bidder or adviser(s) to any subcontractor(s) or funders for any costs incurred in connection with the Project competition.

6.6 Board's right to vary the process

The Board reserves the right, at its discretion, and subject to compliance with procurement law requirements:

- 6.6.1 to change the basis of, terms of or the procedure for, the process, including the timing, form and substance of the procedure of the Project competition. Under no circumstances shall the Board incur any liability in respect thereof;
- 6.6.2 to issue supplementary documentation at any time during the Project competition in order to clarify any matter and/or amend any aspect of the Information Provided;
- 6.6.3 amend the Board's requirements, Mandatory Reference Design Requirements, NPD Project Agreement and/or any other aspect of the Board's procurement documentation.

Any changes shall be communicated to Bidders as quickly as possible.

6.7 Conduct and Conflicts of interest

The Board wishes to avoid or resolve any conflicts of interest or other matters which may compromise its legal obligations relevant to conducting an open, transparent, fair and non-discriminatory competitive procurement. A Bidder must, accordingly, ensure that its participation in the Project competition that may lead to the award of a contract does not in any way compromise the Board's performance of its obligations.

A Bidder must consider these matters carefully on an ongoing basis and ensure that its actions are not capable of compromising the Board's ability to meet its obligations.

If in doubt, a Bidder must declare a potential conflict of interest and inform the Board of the measures the Bidder intends to implement to avoid it occurring.

The Board and Bidders will seek to agree the measures that are necessary to avoid any conflicts of interest or potential conflicts of interest arising.

In the event that an agreement cannot be reached and the Board considers its obligations in relation to the procurement are compromised, the Board reserves the right to disqualify a Bidder from the Project competition. The Board's decision on this matter will be final.

Each Bidder shall ensure that all relevant entities involved in its participation in the Project competition, including, without limitation, consortia members, subcontractors and all relevant technical, financial and legal advisers, are aware of the provisions of this paragraph 6 and do not breach any of the provisions set-out herein

6.8 Canvassing and contacts

Except as provided in the ~~ITPDISFT~~, Bidders shall not approach staff of the Board or staff of the Board's advisers or contractors with a view to obtaining information or clarification in respect of any part of their Submission or solution or attempting to support or enhance their prospect of being identified as the Preferred Bidder. Any such approach or attempted approach by a Bidder may lead to the Bidder's disqualification.

Bidders are required to complete a Certificate of Non-Collusion and Non-Canvassing as part of their Final Tender.

6.9 Disqualification/Rejection of Bidders

In accepting delivery of the ~~ITPDISFT~~, each Bidder agrees to abide by the provisions and conditions that it contains, or which are set out in any subsequent Information Provided in relation to the Project competition, in all and any dealings or communications, during the ~~course of the Dialogue and in respect of any~~ Final Tender or otherwise in relation to the Project.

The acceptance of the ~~ITPDISFT~~ by a Bidder will imply acceptance of its provisions by Bidders without qualification. Any attempt to qualify provisions, either expressly or impliedly, may result in the Bidder being disqualified.

The Board reserves the right to reject or disqualify a Bidder where:

- 6.9.1 a Bidder's Submission is submitted late, completed incorrectly, incomplete or fails to include a Solution capable of meeting the Board's requirements; and/or
- 6.9.2 the Bidder or any person or entity involved with the Bidder's participation in the Project competition is guilty of serious misrepresentation in relation to any aspect of the Project competition; and/or
- 6.9.3 there is a change in identity, control, financial standing or other factor impacting on the selection and/or evaluation process affecting the Bidder including, where the Bidder is a consortium, changes relevant to Consortium membership and members, and such changes shall be addressed in accordance with paragraph 6.13; and/or
- 6.9.4 the Bidder or any person or entity involved with the Bidder's participation in the Project competition contravenes any of the terms of the ~~ITPDISFT~~ or terms set out in any subsequent Information Provided, including within the Invitation to Submit Final Tenders; and/or

- 6.9.5 the Board becomes aware that information provided by the Bidder or any person or entity involved with the Bidder's participation in the Project competition is intentionally or unintentionally false, misleading or incorrect; and/or
- 6.9.6 the Bidder or any entity involved with the Bidder's participation in the Project competition prejudices the Project competition by failing to take steps to address a conflict of interest or other matters which impact negatively on the Board's ability to meet its procurement law obligations.

6.10 Costs

All work undertaken and costs incurred by Bidders in relation to any stage of ~~the Dialogue relating to~~ the Tender Period and any Final Tender, or otherwise in relation to the Project, shall be at each Bidder's own risk and expense.

6.11 Freedom of Information

FOISA and the Environmental Information (Scotland) Regulations provide significant and important rights to access information and the Board supports FOISA's and the Environmental Information (Scotland) Regulations' underpinning principles by encouraging behaviour which is open, transparent and increases public participation. Accordingly, all information submitted to the Board may be disclosed by the Board in response to a request under FOISA and the Environmental Information (Scotland) Regulations or in response to Legislation requiring the disclosure of information by the Board. The decisions of the Board in the interpretation thereof shall be final and conclusive in any dispute, difference or question arising in respect of disclosure. The Board may also decide to include certain information in the publication scheme which it maintains under FOISA and the Environmental Information (Scotland) Regulations.

Further, the Board may also disclose all information submitted to them to the Scottish or United Kingdom Parliament or any other department, office or agency of Her Majesty's Government in Scotland or the United Kingdom, and their servants or agents.

If a Bidder considers that any of the information to be provided is commercially sensitive, it shall be obliged to identify it and explain to the Board (in broad terms) what harm may result from its disclosure. Bidders should be aware that, even where it has indicated that information is commercially sensitive, the Board may be required to disclose it and as such reserves the right to do so. Bidders should be further aware that the basis of the preferred bid will be included within the Full Business Case that the Board requires to complete. The Full Business Case will be made a public document.

Bidders should also note that the receipt of any material marked 'confidential' or equivalent by the Board should not be taken to mean that the Board accept any duty of confidence by virtue of that marking.

The Board may publish, on the Scottish Government and the Board's websites, the names and contact details of Bidders who have been issued with the ~~ITPDISFT~~.

6.12 Collusion

Any collusion between Bidders, their subcontractors or advisers will lead to the exclusion of the Bidders involved at the discretion of the Board.

Bidders shall be required to sign the Certificate of Non-Collusion and Non-Canvassing and to submit it no later than five (5) Business Days from the date of issue of the ~~ITPD~~SFT.

6.13 Changes in Bidder Circumstances

Each Bidder is required immediately to bring to the Board's notice any change in the identity of any organisation, consortium member or entity identified and evaluated in its pre-qualification submission since the submission of the Pre-Qualification Questionnaire and such change may only be made with the prior written agreement of the Board. Any additional information provided by a Bidder pursuant to the requirements of this section will be evaluated in accordance with the selection criteria in respect of such information in the Pre-Qualification Questionnaire. The Board has selected the Bidders on the basis of information provided by them concerning their eligibility, the economic and financial standing, technical and professional ability. The Board reserve the right to withdraw the selection of a Bidder at any time if the Board concludes that a Bidder is ineligible, no longer satisfies the minimum standards of economic and financial standing or technical and professional ability or is otherwise required by its procurement law obligations to reject the Bidder.

6.14 Non Compliance

Any Submission provided without the Bidder complying with the requirements of the ~~ITPD or any Invitation to Submit Final Tender~~SFT may be rejected by the Board.

6.15 Publicity and Media Statements

Bidders shall obtain the Board's specific written permission (on form, content and purpose) before any statements or other disclosures regarding their involvement in the procurement of the Project are made public (media, seminars, websites, conferences, promotional material etc).

6.16 Variant Bids

In accordance with the OJEU Notice, Bidders should be aware that no variant bids will be permitted.

Appendix A (i) – Not used**Appendix A (ii) – Technical Agenda Topics and Informal Submission Requirements**

~~Bidders should note that the table below is a proposed guide to the agenda topics during Dialogue. It may however be subject to change to reflect the outcome of Dialogue and bidder specific issues. Bidders may suggest changes, but this will require the agreement of the Board.~~

~~With each Technical submission, Bidders are also required to provide a completed Annex 2 of Appendix A (ii) – “Schedule of Design Deliverables for Technical Meetings during Dialogue Period” confirming the supporting drawings and information that Bidders are providing in support of the Bid Submission Requirements. Bidders should note that all design deliverables must be submitted at least once before the Draft Final Tender submission.~~

~~Technical~~

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
Meeting-1	<p><u>Strategic</u> Understanding, Vision, Understanding outcomes, Collaborative working</p> <p><u>Design</u> General approach to design covering stakeholders requirements, strategic approach to design, architectural and landscape strategy, innovation and adaptability/flexibility, Planning permission, Approach to BIM and development of drawings</p> <p><u>Equipment</u> Approach to equipment.</p> <p><u>Facilities Management</u> Approach to FM and integration with Board policies</p> <p><u>Costs</u> Approach to development of Capex and Opex</p>	<p>B1, B2, B3, B4.</p> <p>C1, C2, C3, C4, C5, C12, C13</p> <p>C11</p> <p>D1, D2.</p> <p>C20, D13</p>
Meeting-2	<p><u>Strategic</u> HR issues, Community Benefits, Integration of Design & FM Meeting-1 update.</p> <p><u>Design</u> Approach to M&E, daylighting and artificial lighting and energy management. Update from Meeting-1.</p> <p>Initial draft proposals for layout and architecture and development of BIM.</p>	<p>B5, B6, B7</p> <p>C8, C9, C10</p>

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	<p><u>Construction</u> Approach to construction methodology and programme</p> <p><u>Interface Proposals</u></p> <p><u>Facilities Management</u> Approach to FM, QA, Environmental Management, Health & Safety and out of hours working. Update from Meeting 1</p> <p><u>Costs</u> Report on development of Capex and Opex with draft costs.</p>	<p>C23, C24</p> <p>C31</p> <p>D3, D4, D5, D6</p> <p>C29, D13</p>
Meeting-3	<p><u>Strategic</u> Consortia management, proposed personnel, organisation, maintaining continuity. Update from Meeting 2</p> <p><u>Design</u> Approach to vertical and horizontal movement, ICT, fire, structural engineering and site services and utilities. Update from Meeting 2</p> <p>Developed proposals for layout and engineering – further development of BIM.</p> <p><u>Construction</u> Update on approach to construction methodology and programme.</p> <p><u>Interface Proposals</u> Update from meeting 1.</p>	<p>B8, B9, B10, B11</p> <p>C14, C15, C16, C17, C18</p> <p>C23, C24</p> <p>C31</p>

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	<p><u>Equipment</u> Draft proposals for equipment strategy including group 1 equipment.</p> <p><u>Facilities Management</u> General FM management proposals and approach to FM partnering, business continuity, fire strategy.</p> <p>Update from Meeting 2.</p> <p><u>Costs</u> Report on development of Capex and Opex with further developed costs.</p> <p><u>Insurance</u> Report on insurance in accordance with Appendix G (Insurance Response Matrix)</p>	<p>C11</p> <p>D7, D8, D9, D10</p> <p>C20, D13.</p>
Meeting 4	<p><u>Strategic</u> Consortia approach to health and safety, H&S, QA and environmental management systems; design management programme for period from Preferred Bidder to Financial Close.</p> <p>Update from Meeting 3.</p> <p><u>Design</u> Wayfinding, interior design, comparison with reference design, planning permission, BREEAM.</p> <p>Update from Meeting 3.</p> <p>Further development of BIM with draft versions of submission drawing requirements.</p>	<p>B12, B13, B14, B15</p> <p>C6, C7, C12, C13, C19</p>

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	<p><u>Construction</u> Final approach to construction methodology and programme, commissioning and handover, QA, construction health and safety and CDM.</p> <p><u>Equipment</u> Review of final equipment proposals.</p> <p><u>Facilities Management</u> Approach to services elements, unprogrammed maintenance. Assumptions made and mobilisation proposals.</p> <p><u>Costs</u> Report on development of Capex and Opex with further developed costs.</p> <p><u>Insurance</u> Update from Meeting 3.</p>	<p>C23, C24, C25, C26, C27, C28</p> <p>C11</p> <p>D11, D12, D14, D15.</p> <p>C29, D13.</p>
Meeting 5	<p><u>Strategic</u> Update on Meeting 4 and final review.</p> <p><u>Design</u> Review of final response to general approach to design covering stakeholders' requirements, strategic approach to design, architectural and landscape strategy, innovation and adaptability/flexibility.</p> <p>Final review of BIM and draft versions of all drawing submission</p>	<p>C1, C2, C3, C4, C5</p>

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	<p>requirements:</p> <p><u>Construction</u> Compliance with BCRs, design life proposals, assumptions, clarifications and derogations. Final update on programme, commissioning and handover, QA, construction health and safety and CDM.</p> <p><u>Equipment</u> Feedback on final equipment proposals</p> <p><u>Facilities Management</u> Review and update on FM proposals.</p> <p><u>Costs</u> Report on finalisation of Capex and Opex with final draft costs.</p> <p><u>Insurance</u> Update from Meeting 4.</p>	<p>C20, C22, C30</p> <p>C23, C24, C25, C26, C27, C28</p> <p>C11</p> <p>C29, D13.</p>
Meeting 6	Feedback on Draft Final Tender submission.	

Appendix A (ii) – Submission Requirements

The technical Submissions submitted by the Bidders shall be structured following the same numbering reference system as set out in the “Quality Evaluation Criteria and Reference” and the “Submission Requirement Reference” in the table below.

In relation to the technical Submission Requirements for C (Approach to Design and Construction), subject to the requirements of paragraph 4 of Volume 1 of the ITPD and to encourage and facilitate innovative technical solutions, Bidders are permitted to submit its responses in a format (e.g. written responses, drawings or other representations) which they consider most appropriate to best demonstrate an understanding of the Board's requirements and/or a solution which complies with the Board's requirements. However, as a minimum, the Board would require all design deliverables set out in AP1.1 and AP1.2 to be submitted as part of the Submission Requirements for C (Approach to Design and Construction) and each response (C1 to C31) should refer to which Design Deliverables within AP1.1 and AP1.2 support the response.

The technical submission requirements submitted by the Bidders in response to section C (Approach to Design and Construction) below will ultimately form part of Project Co's Proposals in accordance with the NPD Project Agreement.

The technical submission requirements submitted by the Bidders in response to section D (Approach to Facilities Management) below will ultimately form part of the Method Statements in accordance with the NPD Project Agreement.

The technical submission requirements submitted by the Bidders in response to section B (Strategic and Management Approach) below will form part of Project Co's Proposals and/or the Method Statements in accordance with the NPD Project Agreement.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
A. Executive Summary A1	Not Scored	n/a	A1.1	Bidders must submit an Executive Summary of their Final Tender. The Executive Summary shall include: <ul style="list-style-type: none"> An overview of the Bidders' approach to the Project; The Bidders' understanding of the Project, key Board requirements and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>the main factors, as determined by the Bidder that will influence the deliverability of the Project. In addition a concise statement describing the Bidders' approach to address the factors identified;</p> <ul style="list-style-type: none"> • An indication of what the Bidders bring to the Project by way of skills or innovative solutions to meet their own criteria for success; • An overview of the Bidders' accepted list of key assumptions or clarifications • An overview of the Bidders' proposed design solution and integration with the Site; and • An overview of the Final Tender from a financial perspective, including a summary of capital costs, the Unitary Payment and funding structures. 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B. Strategic and Management Approach					
B1. Clarity, robustness and quality of understanding of policy framework and approach to addressing these.	Scored	0.16	B1.1	Bidders must submit proposals setting out their understanding of the relevant local and national health policies and describe how these strategic issues have been included within the Bidders' Final Tender submission, in particular with respect to the delivery of solutions specific to this Project.	To Pass, Bidders will be required to demonstrate a clear understanding of national health policies specific to the Project.
B2. Clarity, robustness and quality of approach to contribution to delivering the Board's 'vision' and associated performance management regime	Scored	0.32	B2.1	Bidders must submit proposals setting out how their proposals will enhance and contribute to the Board's vision. Bidders should explain their role in delivering the Board's vision, and include proposed performance management mechanisms for demonstrating Project Co's contribution to the achievement of this vision.	To Pass, Bidders will be required to demonstrate that they will contribute to the Board's vision.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B3. Clarity, robustness and quality of understanding of Project outcomes and approach to contribution of delivering these	Scored	0.57	B3.1	Bidders must submit proposal setting out their understanding of the Project outcomes (as outlined in the Boards benefits realisation plan) and how their proposals will contribute to the delivery of outcomes/benefits with specific details of how the Bidder has already addressed these in their Final Tender submission, or how they will be addressed after Final Tender submission. Bidders must also outline what they offer by way of skills and/or innovative solutions to deliver these outcomes/benefits.	To Pass, Bidders will be required to demonstrate that they understand the Project outcomes and will contribute to these.
B4. Clarity, robustness and quality, of approach to partnership and collaborative working with the Board and its partners	Scored	0.81	B4.1	Bidders must submit a method statement outlining their approach to collaborative working and developing and maintaining a successful long term partnership with the Board and its partners, (i) in the period from Preferred Bidder appointment to Financial Close; (ii) throughout the construction period; and (iii) operational period of the contract confirming in their proposals: <ul style="list-style-type: none"> • What they believe to be the factors critical to achieving a successful relationship (both short term and long term); 	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to collaborative working.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> • Their understanding of the key interface issues and how they intend to manage these and integrate with the existing relationships; • How they will develop and maintain a full understanding of the Boards' objectives including matters identified during Dialogue; • How their objectives can reflect and adapt to the Board's goals as they evolve over time; and • The manner in which they will conduct themselves that accords with the culture of the Board, local communities and other key stakeholders to the Project. 	
B5. Clarity, robustness and quality of approach to staff development including recruitment, training, induction and HR issues	Scored	0.32	B5.1	<p>Recruitment The Bidders must submit proposals setting out details of the following:</p> <ul style="list-style-type: none"> • Approach to recruitment and vetting of staff, including as appropriate relevant security clearances (e.g. Disclosure Scotland, Protection of Vulnerable Groups Scheme etc); • Procedures for working in areas with children or vulnerable persons; and 	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to staff development.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			B5.2	<ul style="list-style-type: none"> Details of its employment policy and evidence that employees and prospective employees are treated fairly irrespective of race, gender, religion, disability or background. <p>Human Resources Issues The Bidders must submit proposals setting out:</p> <ul style="list-style-type: none"> Details of their Occupational Health approach for staff having come into contact with high risk person or areas. 	
			B5.3	<p>Training and Induction The Bidders must submit proposals setting out:</p> <ul style="list-style-type: none"> Details of any achievement in relation to the Investors In People initiative (or equivalent); Details of the Bidder's employee development and appraisal system; Details of its own and its supply chain's training policy and procedures, including an indication of the training to be offered to the on-site staff specific to this Contract and a statement of the percentage of their annual turnover which is spent on staff training; 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> Details of induction programme and ongoing training for staff, specifically working with HV systems and Legionella control; and Details of induction programme for sub-contractors. 	
B6. Clarity, robustness and quality of approach to delivering community benefits	Scored	0.32	B6.1	Bidders must submit their proposals to deliver community benefits as part of the Project in accordance with Clause 73 (Community Benefits) of the NPD Project Agreement and Appendix I of Volume 1 of the ITPD. These should include specific proposals covering economic, environmental and social benefits related to the Project during both the construction and operational stages of the Project.	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to community benefits (including complying with the minimum targeted recruitment numbers set out in Appendix I Section 2.1).
B7. Clarity, robustness and quality of approach to integration of design with facilities management considerations	Scored	0.32	B7.1	Bidders must submit proposals demonstrating how a consistent and a coordinated approach will be developed and assured between the building design and FM solutions. Bidders shall take account of the hard FM site interface issues and integration with the soft FM which will be provided by the Board. Bidders responses shall include specific	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to integration of design with facilities management.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>proposals on:</p> <ul style="list-style-type: none"> • How their design development process will consider and incorporate the FM aspects at each stage of the process from pre financial close through to construction; and • The method by which design coordination issues will be managed and FM interface issues raised with the Board and its partners. 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B8. Clarity, robustness and quality of approach to consortia management arrangements including approach to sub contractors	Scored	0.57	B8.1	<p>Bidders must submit proposals setting out details of how its consortium will be managed, setting out the key roles and their responsibilities including technical roles within their consortium they have identified as key to the Project during contract finalisation, construction and operational stages and Project Co's role in leading the project management. This shall include team leaders for all principal disciplines, both before and after financial close, and may include but not be limited to the following:</p> <ul style="list-style-type: none"> • Project and programme management; • Risk management; • Design; • Works; • Services; and • Quality, safety and environmental management including HAISCRIBE and BREEAM. 	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to consortia management proposals.
			B8.2	<p>Where any element of the Works and/or Services are to be provided by subcontractors other than the Contractor or Service Provider(s) Bidders must submit details of:</p> <ul style="list-style-type: none"> • The selection process undertaken for such sub contractors that are confirmed at the time of submitting Final Tender, and/or the selection process (including timescales) that will be undertaken for 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>those subcontractors yet to be confirmed; and</p> <ul style="list-style-type: none"> The manner in which performance of the sub contractors will be secured and integrated within the overall performance requirements of the Board's output specifications. 	
B9. Quality of proposed personnel	Scored	0.32	B9.1	<p>Bidders must submit a summary curriculum vitae (maximum of two pages per person) of the personnel proposed for the roles identified in B8 above which shall include (as a minimum) details of key experience, education and professional status.</p>	To Pass, Bidders will be required to demonstrate that their key personnel have satisfactory levels of experience.
B10. Clarity, robustness and quality of approach to continuity throughout the Project	Scored	0.32	B10.1	<p>Bidders must submit proposals setting out their continuity plan for all stages of the project. The key matters to be addressed will include:</p> <ul style="list-style-type: none"> how any changes in personnel between their pre and post financial close teams will be managed and communicated; describe how as part of the design development process they view Project Co's role in ensuring design continuity and knowledge transfer. This will include how they will achieve design team continuity throughout the whole design development, construction and operational phases considering the consortium team and design organisations, and the key personnel 	To Pass, Bidders will be required to demonstrate that there will be continuity throughout the Project.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>working within each of those organisations. The continuity plan shall address proposals for the role of design staff on-site during the development and the Works phase; and</p> <ul style="list-style-type: none"> the submission should particularly address the issue of consistency of personnel throughout the project and the need for procedures to deal with knowledge transfer to ensure smooth transition when required. 	
B11. Acceptable organisational diagrams for each stage of Project	Pass/Fail	n/a	B11.1	<p>Bidders must submit organisation diagrams for the consortium including the lines of communication with the Board and other key stakeholders for each of the phases of the project including:</p> <ul style="list-style-type: none"> contract finalisation (appointment of Preferred Bidder to Financial Close); construction and commissioning period; and operational term. 	To Pass, Bidders will be required to demonstrate a clear organisational structure for each stage of the Project.
B12. Clarity, robustness and quality of approach to health and safety	Scored	0.81	B12.1	<p>Bidders must submit a detailed health and safety strategy which the Bidder proposes to adopt to comply with in fulfilling their health and safety obligations throughout the project, covering the following phases:</p> <ul style="list-style-type: none"> contract finalisation (appointment of 	To Pass, Bidders will be required to demonstrate they will adopt a robust approach to health and safety.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>Preferred Bidder to Financial Close);</p> <ul style="list-style-type: none"> • construction and commissioning period; and • operational term. <p>In particular, the proposals should address Project Co's leadership role and key project roles throughout and particularly in the delivery and management of the Project on a 24/7 operational site, addressing key issues such as:</p> <ul style="list-style-type: none"> • The Boards requirements; • Operational continuity requirements of the RIE Facilities; • Obligations to connect to and maintain critical service connections; • Traffic management – construction and operational access/ egress; • Compliance with HaiScribe requirements; • Construction activity; • Linking to a live operational major health facility; • Proximity to live operational general hospital facility (24/7) and medical school; • Security issues; • Access and maintenance requirements of the project; • Pollution control; • Noise, dust, water egress, and vibration issues and the like; and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> Details of business continuity plans. 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B13. Acceptable approach to environmental, quality and health and safety management systems	Pass/Fail	n/a	B13.1 B13.2	<p>Bidders must submit proposals setting out how Project Co intends to set up, manage, maintain, work towards and gain accreditation of its environmental, health and safety and quality management systems including specific proposals on:</p> <ul style="list-style-type: none"> • The systems to be developed and implemented; • How these systems will be put in place; • The process for the development of the systems; • Interim measures while the systems are being developed; and • Timescales for accreditation. <p>As a minimum Bidders must submit proposals setting out the following aspects of their environmental, health and safety and quality management systems:</p> <ul style="list-style-type: none"> • Proposed document management systems; • Verification procedures for design work; • Detailed change control procedures for each stage of the Project; • Procedures and a programme for carrying out Project reviews; and • Description of the procedures to co-ordinate and manage the design process including the interface between design teams and continuity of design team members (as set out in B10). In addition, 	To Pass, Bidders will be required to demonstrate that they will adopt an acceptable approach to management systems.

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			B13.3	<p>a statement of how and when design changes will be reviewed and commented on by Project Co/ Service Provider.</p> <p>Bidders must submit proposals demonstrating that they operate an accredited Health and Safety management system complying with the OHAS 18001 standard.</p>	
B14. Clarity, robustness and quality of approach to management of design development including integration with the Board and its partners	Scored	0.16	B14.1	<p>Bidders must submit proposals setting out :</p> <ul style="list-style-type: none"> • Their approach to managing the Project's design development, with particular emphasis on development post Final Tender, including proposals for interface with specific sub-groups harmonising with the current Board Project structure. The submission should include a description of the procedures to co-ordinate and manage the design process and to interface with key stakeholders, including document management, verification of design, change control during design development and design reviews; and • The management and review structures and procedures that will be put in place by the Bidder to manage potential conflicts, delays, changes in the Board's goals and other issues at each key design stage of the Project. 	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to management of design development including a commitment to working with the Board.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B15. Acceptable programme from appointment as Preferred Bidder to Financial Close	Pass/Fail	n/a	B15.1	<p>Bidders must submit a week by week programme covering the contract finalisation period from appointment of Preferred Bidder until Financial Close with a detailed breakdown of the key tasks to be completed by the end of each week with the critical path and key milestones shown. Bidders shall supplement the programme with commentary on, as a minimum, the following matters:</p> <ul style="list-style-type: none"> • Mechanisms that will be adopted to ensure that the critical path for the technical, legal and commercial activities will remain on programme, and therefore that the overall Project programme is maintained; • Confirmation of key inputs, timescales and required by dates for the Board to review/approve Bidder submissions during contract finalisation; • Confirmation that their overall programme to Financial Close, is achievable; and • Key risks to the Project proceeding on programme shall also be identified, with a brief commentary on how the Bidder proposes to mitigate each risk. 	To Pass, Bidders will be required to submit a logical and deliverable programme.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C. Approach to Design & Construction					
C1. Clarity, robustness and quality of approach to meeting the stakeholders requirements in their design	Scored	2.64	C1.1	<p>The Bidders must submit proposals setting out their approach to meeting the stakeholders requirements in their design.</p> <p>For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Evidence that they are sensitive to the co-location of the RHSC and DCN and that they will take advantage of this arrangement to maximise their design; ii. Evidence that they are aware of the wide range of stakeholders associated with these departments and that they understand and will cater for all their requirements in their design; iii. Evidence that their bid will deliver a nurturing, engaged and safe community that supports the well being of all patients, carers, families, visitors and staff; iv. Evidence that their design will provide a healing environment that will assist the Board in its core obligation to 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>deliver clinical care to users of both the RHSC and DCN;</p> <ul style="list-style-type: none"> v. Evidence that their design will include particular consideration of the proposed external spaces, therapy gardens and landscaping, communal patient areas for example quiet and television rooms, public areas; vi. Evidence that their design will adequately address security requirements; vii. Evidence that their design will fully incorporate infection control requirements and HAI Scribe; and viii. In particular for the RHSC and CAMHS, we would expect the Bidders to demonstrate how the design will be developed to achieve: <ul style="list-style-type: none"> i. Facilities that are a beautiful place with children and young people at the centre of a nurturing, engaged and safe community; ii. Facilities that are reassuring, relaxing, convenient and safe with the needs of children and young people and those with disabilities expressly addressed; and iii. Facilities that provide an 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>appropriate balance of internal and external play areas.</p> <p>In relation to the DCN, we would anticipate Bidders shall demonstrate how similar qualities to the above (ix (i – iii)) but also in addition, how the design will be developed to achieve a nurturing, quiet and relaxing environment for its patients.</p>	
C2. Clarity, robustness and quality of approach to design quality	Scored	1.85	C2.1	<p>Bidders must submit proposals setting out their approach to achieving design quality. This must be provided as set out in C2.1 – C2.3 below:</p> <p>Bidders must submit proposals setting out how the design will be developed to integrate the architectural, mechanical, electrical and civil and structural engineering aspects of the design to present a cohesive innovative design which meets all the Board's construction and stakeholders' requirements (including infection control and HAI Scribe requirements). The submission shall utilise all Mandatory Reference Design Requirements to deliver a solution across all disciplines.</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C2.2	Bidders must submit proposals setting out their design analysis of both the site and the Board's requirements as depicted in the Board's Construction Requirements. The review of the site shall identify, as a minimum, opportunities, constraints and access and planning issues.	
			C2.3	Bidders must submit proposals setting out a clear statement summarising what they understand to be the key strategic issues relating to the project and demonstrate how the design proposals have dealt with these specific project issues, and any impact their proposals will have on such matters.	
C3. Clarity, robustness and quality of architectural and landscape design	Scored	2.64	C3.1	<p>Bidders must submit proposals setting out their approach to architecture and landscape design. This should be provided as set out in C3.1 – C3.3 below:</p> <p>Bidders must submit proposals setting out their approach to architecture design. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. How the design will deliver world class architectural design practice in delivering Facilities that support the Board's clinical needs and a design 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>which provides a high level of creativity;</p> <p>ii. How the design will provide an ordered composition of building elements in a stimulating form that successfully combines good standards of space, height, form, scale and use of materials and colours / images with associated functional requirements and the surroundings;</p> <p>iii. How the design will address the interests of stakeholders, including (but not limited to) clinicians, patients (and their representatives, families and carers), health commissioners, Local Government, and the local community;</p> <p>iv. How the design will deliver architectural quality and demonstrates how this will be provided;</p> <p>v. How the design will deliver the lines of sight and views from windows which are suitable for children and young people;</p> <p>vi. How the design will provide age and ability appropriate art and way finding design which is integrated into the design solution;</p> <p>vii. How the design will fully consider all aspects of safety in all areas and a description of how risks have been removed through design innovations;</p>	

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			C3.2	<p>viii. How the design will fully address control of infection and HAI Scribe; and</p> <p>ix. How the design will minimise cleaning and maintenance of all elements of the Facilities by choice of materials, layout and orientation and shows how such activities can be carried out safety and without disruption to clinical activities.</p> <p>Bidders must submit proposals demonstrating how they will deliver high quality architectural buildings, and high quality finishes and component parts. As well as the architectural drawings and supporting information, Bidders shall provide specific details in detailed specification format to include the following:</p> <ul style="list-style-type: none"> i. Internal and external doors and door furniture, also showing proposed pattern of vision panels; ii. Washing and toilet facilities; iii. Reception desks and touchdown bases; iv. Communal patient areas, which include spaces such as playrooms, television rooms and quiet rooms v. External therapy gardens and external covered play and seating areas vi. Floor and wall coverings; vii. Natural and artificial lighting 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C3.3	<p>particularly in key public areas, artwork and key clinical areas such as theatres;</p> <p>viii. Samples of worktops and wall cupboards shall be provided for approval by the Board; and</p> <p>ix. Juxtaposition of main external finishes / cladding.</p> <p>Bidders must submit proposals setting out their approach to external hard and soft landscaping (including courtyards and therapy gardens) which shows how the design will be developed for therapeutic use and how it provides patient and staff access and how it enhances the environment of the Facilities. The proposals should demonstrate how the principle elements of external landscaping will be designed. to:</p> <ul style="list-style-type: none"> i. Complement the RHSC and DCN buildings and the neighbouring RIE; ii. Minimise the risk of vandalism and crime; iii. Facilitate security of pedestrians and avoided 'no-go' areas in their design. Ensure site safety and link with the Green Travel Plan; iv. Minimise maintenance and operation costs; v. Ensure easy maintenance and cleaning whilst minimising health and safety issues; 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				vi. Provide appropriate fire safety routes for all users; vii. Incorporate SUDS and other sustainable features; viii. Incorporate art work; and ix. Incorporate lighting, heating, seating, canopy and wind protection arrangements which are appropriate for young children and less disabled people. For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) those items listed in (i) – (ix) above.	
C4. Clarity, robustness and quality of approach to delivering innovation	Scored	2.64	C4.1	Bidders must submit proposals setting out their approach to delivering innovation. This should be provided as set out in C4.1 – C4.4 below: Bidders must submit proposals setting out where it will be, or has been possible to provide innovative solutions to meet the Board's requirements. Innovation in design can range from whole concepts of hospital planning, distribution of functions etc to the building solution (e.g. use of prefabricated units) to detail design of components, materials, spaces, use of technology and art etc. Bidders must show how their design reflects current and developing innovations	

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			C4.2	<p>in healthcare delivery and construction generally and translate these into an innovative building solution.</p> <p>Bidders must submit proposals setting out how their design, using innovation, will optimise the sustainability of the Facilities. Bidders must provide details of their strategy to show how it will optimise energy, water and utility consumption, minimise waste production, implements a strategy to meet the Board's BREEAM requirements including carbon reduction and other positive activities described in the Board's Construction Requirements to provide a sustainable development.</p>	
			C4.3	<p>Bidders must submit proposals setting out how an innovative approach to the provision of ICT in the Facilities in line with the Board's Construction Requirements and FM Output Specifications has been delivered.</p>	
			C4.4	<p>Where areas of innovation are identified Bidders must submit supporting evidence, where possible, with examples from other schemes where this has proved successful. Bidders must provide information to show the benefit, cost and risk for each innovation so the Board can assess them separately.</p>	

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C5. Clarity, robustness, and quality of approach to adaptability and flexibility.	Scored	2.64	<p>C5.1</p> <p>C5.2</p>	<p>Bidders must submit proposals setting out their approach to adaptability and flexibility. This should be provided as set out in C5.1 and C5.2 below:</p> <p>Bidders must submit proposals setting out an adaptability strategy which shall describe what features have been incorporated to facilitate future adaptation of use and/or expansion, technological changes, changes in national policy, national and local planning, clinical advancement and seasonal or future strategic variations in use. It is expected that particular reference shall be made to potential changes in the delivery of surgical and radio diagnostic services given the rapid evolution of developments in these disciplines. All design disciplines i.e. architectural, mechanical and electrical, structural and environmental, must be considered.</p> <p>Bidders must submit proposals setting out their approach to adaptability and flexibility. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <p>i. How the interior spaces may be re-arranged in future if a change of use were to occur;</p>	

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				<ul style="list-style-type: none"> ii. How the building's services and external infrastructure have been designed to allow this adaptability; iii. How the building structure and envelope, services, partitioning, ceiling, and flooring systems and construction technique has been designed to allow this adaptability; iv. How the main electrical installations can accommodate changes over and above the 25% capacity increase (requested in Section 3 Board's Construction Requirements) with minimal structure disruption; and v. How the environmental services strategy will co-ordinate with the adaptability and flexibility strategy. 	
C6. Clarity, robustness and quality of way finding and signage proposals	Scored	1.06	C6.1	<p>Bidders must submit proposals demonstrating their way finding strategy. For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) how it has been developed to:</p> <ul style="list-style-type: none"> i. Suit the needs of the particular patient mix for the Facilities i.e. children, young people and adults using different services, as well as staff and visitors; ii. Include internal and external signage 	

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				<p>and signage outside the site boundary relevant to the Facilities. External signage shall include proposals for the wider RIE site, pedestrians, vehicles and street signage;</p> <p>iii. Integrate with the art strategy and lighting strategy for the Facilities;</p> <p>iv. Take cognisance of patient journey times and take steps to minimise such journey times;</p> <p>v. Minimise the transmission of micro-organisms and separates clean and contaminated traffic and material streams;</p> <p>vi. Include hand hygiene signage;</p> <p>vii. Include no smoking signage;</p> <p>viii. Make reference to sample or exemplar site information provided by The Board; and</p> <p>ix. Make use of signage in the floor.</p>	

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C7. Clarity, robustness and quality of interior design proposals	Scored	2.64	C7.1	<p>Bidders shall submit their interior design proposals. This must be provided as set out in C7.1 and C7.2 below:</p> <p>For both the RHSC and DCN sectors of the Facilities Bidders must submit proposals setting out how their design has been developed to include:</p> <ul style="list-style-type: none"> i. Interior design proposals and illustrations for each distinct area of the Facilities, paying particular attention to the interior design solutions for public, patient and key staff areas; ii. Communal patient areas that are light, spacious and provide a welcoming atmosphere and which are domestic in design and ambience with the main entrance being immediately apparent; iii. Public areas which are restful, open and well lit with natural light and have views out to landscaped spaces that add quality and orientation; iv. An open and friendly environment, that shall ensure privacy and dignity for patients, family members and visitors when required; v. The incorporation of art in the proposals. Bidders shall provide the name(s) of the artists whom will undertake the work; 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C7.2	<p>vi. Integration with their lighting strategy and equipment strategy;</p> <p>vii. Integration with maintenance, cleaning, operation and sustainability;</p> <p>viii. Integration with way finding and signage proposals and how the way finding and signage within the RHSC and DCN links with the way finding within the existing RIE;</p> <p>ix. How the interior materials within the Facilities match the furniture, furnishings and equipment being procured by the Board; and</p> <p>x. Facilities which have a safe and secure environment which is not created via visible security features e.g. security cameras. Safety in design shall also take consideration of anti-ligature, child safety, and Child and Adolescent Mental Health Service whilst maintaining access and ambience.</p> <p>For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) those items listed in (i) – (x) above.</p> <p>Bidders must submit proposals setting out how their interior design for the RHSC has been developed to provide:</p> <p>i. Age and ability appropriate signage throughout the Facilities;</p>	

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			C7.3	<p>ii. A nurturing, relaxed and safe environment in the patient, communal and public areas; and</p> <p>iii. Furniture, windows and lines of sight which are appropriate for young children and children in pushchairs and wheelchairs.</p> <p>Bidders must submit proposals setting out how their interior design submission for the DCN provides a nurturing, quiet and relaxed environment in the patient, communal and public areas.</p>	
C8. Clarity, robustness and quality of M&E engineering design proposals	Scored	1.06	C8.1	<p>Bidders must submit proposals setting out their approach to M&E engineering services design. This must be provided as set out in C8.1 – C8.3 below:</p> <p>Bidders must submit proposals setting out the engineering services design for each element of the scheme in sufficient detail to demonstrate compliance with the Board's Construction Requirements. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. An engineering design, control and operational philosophy statement; ii. Details of principal M&E system selections; 	

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			C8.2	<p>iii. The definition of plant areas and zones both internal and external to the Facilities; and</p> <p>iv. Schematics and written proposals for major plant provision.</p> <p>Bidders must submit proposals setting out how their design will be developed to include the following:</p> <ul style="list-style-type: none"> i. Building services which support the Board's business, safety and security and life critical services under supply failure scenarios. Specific details shall be provided relating to standby facilities and mains service redundancy; ii. An autonomous energy centre and associated plant; iii. How temperature, ventilation and comfort for occupants will be maintained in accordance with the minimum criteria and how, if possible, these criteria will be improved; iv. How the quality of the environment and prevention of sick building syndrome shall be ensured; v. How mechanical and electrical design is integrated with architectural, structural and civil aspects as outlined above in C2 and C4; vi. How sustainability has been incorporated into their design, 	

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			C8.3	<p>including details of the maintenance and operation philosophy for all mechanical and electrical equipment;</p> <p>vii. Proposals for external services, including details of the main routes (including proposed connections to existing services), intakes and off-site reliance of these services and how this interfaces with adjacent sites (this is also discussed in C18 below);</p> <p>viii. Details of the main source of heating energy; and</p> <p>ix. Details of mechanical and electrical innovations including costs as described in C4.</p> <p>The following information should be also be provided to help demonstrate the design proposals noted above, including:</p> <p>x. An environmental conditions / room provisions matrix for both mechanical and electrical services for each room in the Facilities; and</p> <p>xi. Major plant life cycle statements and design life, including an explanation of the Bidder's lifecycle philosophy to support the lifecycle costing analysis completed in the technical costs proforma;</p> <p>Whilst Bidders are required to undertake their own design, the Board has provided a</p>	

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				draft Environmental Matrix as part of the ITPD documentation. Bidders must confirm acceptance of the Board's Environmental Matrix, highlighting any proposed changes on an exception basis.	
C9. Clarity, robustness and quality of natural and artificial lighting proposals	Scored	1.06	C9.1	<p>Bidders must submit proposals setting out their approach to natural and artificial lighting within the Facilities. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. The balance of natural and artificial light; ii. How the environment created by the lighting design will support the well being of patients, carers, visitors and staff; iii. How it will be functional for clinical use; iv. How it will produce an aesthetically pleasing environment; v. How it will be co-ordinated with the building structure and how it will integrate with other areas e.g. mechanical and electrical design, interior design and architecture; vi. How it will include sustainability and energy efficiency; vii. How the interior lighting philosophy will include room usage and warning 	

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				<p>viii. signs, night lighting, security emergency signage and emergency lighting, lighting control and wiring philosophy, standby lighting; and How the external lighting philosophy will minimise light pollution for the neighbours including the RIE, assist to minimise vandalism, assist to improve security, and take account of local residents' needs.</p>	
C10. Clarity, robustness and quality of energy management proposals	Scored	1.85	C10.1	<p>Bidders must submit proposals setting out their approach to energy management. This should be provided as set out in C10.1 and C10.2 below.</p> <p>Bidders must submit an energy model, complete with supporting information, demonstrating how their design solution will achieve an optimum level of energy and utility conservation (linked with the requirement for a sustainable development in C4) and show that their design fulfils the following:</p> <ol style="list-style-type: none"> i. The building energy performance will achieve a minimum of 6 credits for ENE.01 in the BREEAM assessment. ii. The water consumption for the Facilities will not exceed 170,000 litres/bed/annum (Part 6 Section 3: The Board's Construction 	

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			C10.2	<p>Requirements);</p> <p>iii. 20% of energy is provided by renewable energy sources (Part 6 Section 3: The Board's Construction Requirements); and</p> <p>iv. The inclusion of passive design strategies for ventilation and thermal control. The environmental control system is to be co-ordinated and integrated with the design of the structure and the occupied areas in order to maximise the control and flexibility of the installations.</p> <p>In addition Bidders must submit an analysis of their design solution which demonstrates energy consumption proposals along with cost estimates of specific measures or innovations to be introduced.</p> <p>For information purposes only in addition to the model referred to above a dynamic thermal energy model is to be submitted which should comply with the parameters set out in Appendix F of the ITPD Volume 1.</p>	

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C11. Clarity, robustness and quality of equipment proposals	Scored	1.06	C11.1	<p>Bidders must submit proposals setting out their approach to equipment. This must be provided as set out in C11.1 and C11.2 below.</p> <p>Bidders must submit the following: :</p> <ul style="list-style-type: none"> i. A commentary showing how the Group 1 Equipment scheduled by the Board varies from their own assessment of Group 1 Equipment needs. This shall be done by providing a mark-up of the Group 1 Equipment included in Equipment Schedule contained in Volume 3 of the ITPD. It should be noted that the quantity of Group 1 Equipment specified by the Board is considered to be a minimum; ii. A commentary on any aspect of the proposed equipment responsibilities regime suggested in paragraph 2.15 (Equipment) of the ITPD Volume 1. that is not considered to represent best value to the Board, and suggestions as to alternative profiles of responsibility, if any, that may enhance this; iii. A commentary setting out their proposals to select equipment suppliers and how the required level of quality is to be achieved in the equipment for which they will be 	

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			C11.2	<p>responsible for supplying and any improvement in the level of quality being proposed. Samples of worktops and wall cupboards shall be provided for approval by the Board to support this; and</p> <p>iv. Their approach to working alongside the Board to allow the Groups 2A, 2B and 3 Equipment to be installed and how this process will be managed.</p> <p>Bidders must submit a fully priced Schedule of Group 1 Equipment, the total sum for which should be clearly identifiable in the Technical Cost Proforma requested at C29 below.</p>	
C11A Compliance with minimum level of Group 1 Equipment	Pass / Fail	n/a	C11A.1	Bidders must provide confirmation that they will comply with the minimum level of Group 1 Equipment as set out in the Equipment Schedule and Equipment Responsibility Matrix.	
C12. Compliance With Mandatory Reference Design Requirements	Pass / Fail	n/a	C12.1	Bidders must submit proposals demonstrating how their design complies with the Mandatory Reference Design Requirements.	

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C13.Acceptable approach to achieving planning permission	Pass / Fail	n/a	<p>C13.1</p> <p>C13.2</p>	<p>Bidders must submit proposals setting out their approach to achieving planning permission. This must be provided as set out in C13.1 and C13.2 below.</p> <p>Bidders must submit proposals demonstrating compliance including a methodology for achieving planning approval accordance with paragraph 2.17 of Volume 1 of the ITPD. This should include the following:</p> <ul style="list-style-type: none"> i. Community requirements; ii. Policy of the local planning authority; iii. Development Framework requirements; and iv. "Good neighbourliness". <p>Bidders are required to (in conjunction with the Board) participate in planning consultation meetings with the City of Edinburgh Council regarding planning requirements. From these consultations Bidders must submit evidence to demonstrate that the granting of approvals for the scheme will be achieved in the Preferred Bidder stage and confirm any perceived obstacles / project risks (both known and unknown) in this regard shall be clearly drawn to the Board's attention.</p>	To Pass, Bidders will be required to demonstrate that the granting of approvals for the scheme will be achieved

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C14. Acceptable vertical and horizontal movement strategy	Pass / Fail	n/a	C14.1 C14.2 C14.3	<p>Bidders must submit proposals setting out their vertical and horizontal movement strategy. This must be provided as set out in C14.2 – C14.3 below.</p> <p>Bidders must submit proposals setting out a coherent strategy which shows how their design has been developed for managing different categories of traffic and materials within the Campus Site. This shall include the movement of people and vehicles and the distribution of supplies and waste and the separation of clean and contaminated traffic and materials during transportation, storage and at drop off points.</p> <p>Bidders must submit proposals setting out how their design has been developed to minimise travel time and distances for patients, staff, and material transmission of micro-organisms either through airborne or other means to support and segregate a natural flow of pedestrian and vehicular traffic.</p> <p>Bidders must submit proposals setting out how their design has been developed to include a strategy for the following:</p> <ul style="list-style-type: none"> i. Wheelchair users, less able users and transportation of small children and babies that will use the Facilities; 	

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				<ul style="list-style-type: none"> ii. Incorporation of fire fighting lift(s) to maintain evacuation use for the less able, small children and babies in an emergency situation; and iii. The route required by people and materials from the helipad, the RIE and the Facilities. 	
C15. Acceptable ICT strategy and Bidders proposals, compliant with Board's requirements	Pass / Fail	n/a	<p>C15.1</p> <p>C15.2</p> <p>C15.3</p>	<p>Bidders must submit proposals setting out their approach to a compliant ICT strategy. This must be provided as set out in C15.1 – C15.4 below.</p> <p>Bidders must submit proposals setting out their ICT strategy and demonstrating an understanding of the Board's requirements for information management and technology (M&T).</p> <p>Bidders must submit proposals setting out a detailed methodology demonstrating how it will ensure compliance with the Board's Construction Requirements, define clear interfaces of responsibility as necessary, and how they will take overall responsibility for the coherence and compatibility of systems such that they will operate to suit the Board's needs.</p> <p>Bidders must submit proposals setting out the number, location size and specification</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C15.4	of IT / communications rooms. Bidders must submit proposals setting out how the Board's routing, fire suppression, ventilation and connectivity to the RIE requirements has been specifically addressed.	
C16. Acceptable fire planning strategy	Pass / Fail	n/a	C16.1	Bidders must submit proposals setting out their fire planning strategy. This must be provided as set out in C16.1 and C16.2 below. Bidders must submit proposals setting out their strategic fire strategy, demonstrating how the design will be developed to consider fire compartmentation and horizontal and vertical evacuation strategies.	
			C16.2	Bidders must submit proposals setting out how their fire planning strategy has been developed. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following: i. The implications on staff and users in the event of a fire; ii. A clear understanding of the policies and principles underlying fire safety in NHS premises, compliance with NHS	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>polices and principles and full agreement and coordination with Lothian and Borders Fire and Rescue Service, The CEC Council's Building Control Department and the Board's Fire Officer;</p> <p>iii. Compliance with: The Building (Scotland) Regulations 2004 and The Building (Scotland) Amendment Regulations 2011, SHTM 81 and SHTM 82;</p> <p>iv. How a Fire Engineering solution has been developed (if it has been proposed), to what extent it has been agreed with the regulatory authorities and how the Board will not be exposed to any additional risks (programme, quality or cost) should the solution need to be amended or abandoned during the course of the development and finalisation of proposals;</p> <p>v. Integration of their fire strategy with the fire strategy for the RIE Facilities to ensure they are compatible and operate in conjunction and how the fire strategy issues at the Link with the RIE Facilities are to be addressed;</p> <p>vi. Details of external and internal access and circulation routes, including a safety and security statement for each element of the scheme with particular reference to the different patient types</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>using the Facilities; and</p> <p>vii. Details of how the particular issues in the surrounding areas of high fire risk such as the helicopter landing pad are to be addressed.</p>	
C17. Acceptable structural design proposals	Pass / Fail	n/a	<p>C17.1</p> <p>C17.2</p>	<p>Bidders must submit proposals setting out their approach to structural design. This must be provided as set out in C17.1 - C17.3 below.</p> <p>Bidders must submit proposals setting out a statement of the structural design philosophy which shall demonstrate how their design has been developed including a methodology for ensuring a safe, aesthetically pleasing and durable structure.</p> <p>Bidders must submit proposals relating to the following elements:</p> <ul style="list-style-type: none"> i. Substructure; ii. Structural frame solution, including grid arrangements; iii. Ground, suspended floor slab and roof construction; iv. External wall and internal partition construction; v. Fire protection strategy and proposed methods to be adopted ; and vi. Methods for dealing with floor penetrations both during new build 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C17.3	<p>works and to accommodate future potential needs.</p> <p>Bidders must submit the following:</p> <ul style="list-style-type: none"> i. A schedule and/or drawings demonstrating the dead and imposed loading design criteria (both uniformly distributed and concentrated loads) adopted for all areas of the Facilities; ii. Specification of construction and materials to be utilised in the hard external works e.g. roads, pavements etc.; iii. Details of their proposals for co-ordinating structure with space requirements and distribution of services taking into account maintenance and replacement during the operational life of the buildings; iv. Details of opportunities for the future expansion of Clinical Services and Non-Clinical Services. The Bidders shall ensure that the physical arrangement of the Facilities allows for growth and change of clinical services in the future, as far as is practical for example partition moves and additional service runs both vertically and horizontally. The cost implications of structural solutions to future proof the Facility by creating 'soft spots' (refer also to C5 above) shall also be 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				included; and v. A detailed description of the design of the drainage system, taking into account matters such as the design itself, allowable discharge into the public sewers, the need or otherwise for surface water attenuation and the incorporation of drainage to existing buildings within the site drainage proposals.	
C18. Acceptable services, utilities and infrastructure proposals	Pass / Fail	n/a	C18.1	Bidders must submit proposals setting out their mains service infrastructure strategy for the site, and defines principal service routes external to the buildings. This shall also demonstrate adequacies of capacities including details of these provided by Utility providers.	
C19. Acceptable approach to achieving required BREEAM rating	Pass / Fail	n/a	C19.1	Bidders must submit proposals setting out their approach to achieving the required BREEAM rating. This must be provided as set out in C19.1 and C19.2 below. Bidders must submit a draft BREEAM assessment of their proposals with supporting commentary. Bidders shall demonstrate how they will achieve, as a minimum, a “Very Good” rating in line with the requirements for healthcare facilities as	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C19.2	<p>set out in the BREEAM Scheme Document for New Construction (SD5073) 2011.</p> <p>Where assumptions with respect to certain elements within these assessments have to be made (i.e. such details that would ordinarily be developed during the Preferred Bidder or post Financial Close period) the basis for these assumptions, including substantiation, must be set out in the Bidders proposals.</p>	
C20. Acceptable post Preferred Bidder stage design development proposals and design programme	Pass / Fail	n/a	C20.1	<p>Bidders must submit proposals setting out their approach to design development and design programme. This must be provided as set out in C20.1 and C20.2 below.</p> <p>Bidders must submit proposals setting out their approach to be adopted to manage the design process (taking account of the design review procedures to be implemented). For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ol style="list-style-type: none"> i. Further development of 1:500, 1:200 and 1:50 design drawings and other design details and how these will be developed in conjunction with the Board's project team, user groups, specialist advisers and other project 	To Pass, Bidders will be required to demonstrate clear proposals setting out a robust process, supported with a logical and deliverable programme, for the development process both up to, and beyond, Financial Close.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C20.2	<p>stakeholders, to achieve sign off to the proposals;</p> <p>ii. Further development of the specifications and engineering related drawings and how these will be developed in conjunction with the Board's project team to achieve sign off of the proposals;</p> <p>iii. The anticipated level of involvement that the Board will have in the design development process, and the number of main design iterations anticipated;</p> <p>iv. Outline proposals for change control, confirmation of technical queries and other design related management tools; and</p> <p>v. Further development of interior design proposals to the satisfaction of the Board incorporating patient groups.</p> <p>Bidders must submit a design programme to Financial Close and thereafter to design completion. This shall:</p> <p>i. Show the proposed programme for the development of the design drawings and specifications (supplemented by samples and models as appropriate) and other technical schedules to the NPD Project Agreement;</p> <p>ii. Clearly indicate the expected number of design drawings and</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> iii. specifications; Clearly define periods allowed for the Board's consideration of proposals; and iv. Demonstrate how and when sign off of the Board's Construction Requirements will be achieved in this period by the Preferred Bidder, and how this sign off relates to development and sign off of Project Co Proposals. 	
C21. Compliance with Board's Construction Requirements	Pass / Fail	n/a	C21.1	Bidders must confirm their compliance with the Board's Construction Requirements. If as their design has been developed there are specific areas of the Board's Construction Requirements that Bidders would seek to change, these shall be scheduled and provided in support of the statement. The Board shall not be required to accept any proposed amendments.	
C22. Acceptable design life proposals	Pass / Fail	n/a	C22.1	Bidders must submit a schedule of design life proposals against the elements listed in section 5.1 (Schedule of Life Expectancies) of the Board's Construction Requirements.	
C23. Acceptable	Pass / Fail	n/a		Bidders must submit proposals setting out	To Pass, Bidders will be

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C24. Clarity, robustness and quality of construction methodology	Scored	1.85		<p>Bidders must submit their construction methodology proposals. This must be provided as set out in C24.1 - C24.10 below.</p> <p>C24.1 Bidders must submit proposals setting out in sufficient detail how they will deliver the development including their construction strategy, proposals and method statements. Bidders shall address in detail how the Works phase of the project will be managed including a methodology covering day to day management.</p> <p>C24.2 Bidders must submit proposals setting out in sufficient detail how they shall mitigate the egress of water, dust, debris or any microbiological contamination out of the Site and into adjacent buildings i.e. how they will ensure they are a considerate contractor.</p> <p>C24.3 Bidders must submit proposals setting out in sufficient detail how they will follow the provisions of Sections 60 and 61 of the Control of Pollution Act 1974, with reference to the control of noise due to any demolition or construction works in particular for works adjacent to an occupied property i.e. RIE and other occupiers of the wider estate.</p> <p>C24.4 Bidders must submit proposals setting out in</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C24.5	<p>sufficient detail how they will not only adhere to legal obligations but how they will ensure that “at all times the requirements and reasonable wishes and safety of the immediate neighbours to the Campus Site (including the Royal Infirmary of Edinburgh, Little France site) are respected” with particular consideration to key locations such as A&E and operating theatres.</p> <p>Bidders must submit proposals to set out in sufficient detail how they will ensure that they will integrate with and not inhibit the RIE pedestrian, vehicular, cycle, service vehicular and emergency vehicular movements, access routes and parking during construction and during operation of the Facilities. The submission must set out how they will ensure site safety at all times.</p>	
			C24.6	<p>Bidders must submit proposals, in sufficient detail, setting out how continuity of utility supplies and operational continuity of the immediate neighbours is to be maintained at all times. The Bidders submission shall also provide outage protocols in case these safeguards fail to protect the neighbours</p>	
			C24.7	<p>Bidders must submit proposals, in sufficient detail, setting out a detailed methodology demonstrating their proposals for the safe and compliant disposal of surplus excavated</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C24.8	material, all building spoil, demolition waste and rubbish. Bidders must submit proposals of their site office set up. This shall describe in particular how they are to be serviced and how safe access and egress will be provided.	
			C24.9	Bidders must submit proposals setting out in sufficient detail their approach to storage of materials. This shall describe in particular how materials will be delivered to, stored, and then transferred to the Site for incorporation in the Works.	
			C24.10	Bidders must submit proposals setting out in sufficient detail their construction phasing and access methodology which shall demonstrate how the proposals have been developed to address the Site constraints and interfaces with the wider site. Bidders must include their proposals for creation of a temporary construction access over the Yellow Area (as shown on Plan 2). Bidders must submit details of location of access and methodology for its construction. This will form part of the management procedures for the Works as regards satisfying town planning matters as detailed in the ITPD. Further details are set out in paragraph 1 (Construction Access over	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				Yellow Area) of Section 1 of Part 1 of Appendix A of the Board's Construction Requirements.	
C25. Acceptable approach to commissioning and handover	Pass / Fail	n/a	C25.1	<p>Bidders must submit proposals setting out a commissioning programme, supported by a methodology demonstrating how this will be developed and agreed in conjunction with the Board. For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) how they will provide the following:</p> <ul style="list-style-type: none"> i. Management of interfaces with the Board and the Board's contractors and other parties e.g. Consort for the Link Building and obtaining such other parties consents/approvals as required; ii. How they will carry out commissioning activities both before and after the Actual Completion Date; iii. Access for the Board during the Works including access for equipment installation (Groups 2A, 2B and 3) and the Board's Contractors; iv. A "zero defects" culture in order to deliver the scheme with few or no snagging items at the Actual Completion Date. Bidders shall outline a contingency plan for 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>investigating and rectifying any defects which could still occur despite all best endeavours of the Project Co. In addition proposals should be submitted outlining how snagging items will be closed out after the Actual Completion Date;</p> <p>v. Facilities handover including how they shall interface and assist the Board with their decanting, familiarisation and training for the Facilities and proposals on how they shall work closely with the Board in developing an occupation plan;</p> <p>vi. Facilities which are “Clinically Handover Clean” to the satisfaction of the Board’s Head of Service Infection Control.” Bidders shall demonstrate within their response:</p> <ul style="list-style-type: none"> • How they propose to interface with the Board’s Head of Service Infection Control to agree the process and standards required to achieve the appropriate level of clinical cleanliness for each location within the Facilities; ▪ How this will be managed in terms of the sign-off of the Facility <u>Facilities</u> and handover process; <u>and</u> 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>How this will conform with HA/ Scribe; and</p> <ul style="list-style-type: none"> ▪ Details of any specialist contractors that may be used as part of this process. 	
C26. Acceptable approach to quality and environmental management systems	Pass / Fail	n/a	C26.1	<p>Bidders must submit proposals setting out their approach to construction quality and environmental management systems. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following:</p> <ol style="list-style-type: none"> i. Confirmation that they will complete the Works in accordance with the requirements of BS EN ISO 9001 and 14001 or any equivalent standard; ii. Details of proposed quality assurance and environmental management systems (i.e. a system synopsis); iii. Details of their approach to developing the quality and environmental management systems, including key dates; iv. Where individual quality and environmental management systems of the designers, contractor, service provider and Project Co are to be used, a statement regarding how these separate systems will be integrated to form a coherent overall quality management system. For the 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>avoidance of doubt, the Board requires Project Co (in addition to their sub-contractors) to adopt and implement a compliant system;</p> <p>v. Details of their approach for monitoring quality during construction (this may be by reference to a similar system implemented on a similar scheme); i.e. compliance with current revisions of BS 8000: Series "Workmanship on Building Sites, BS 5606:1990 "Guide to Accuracy in Building". and other activities based on Good Industry Practice current at the time, as a minimum;</p> <p>vi. Details of their approach for auditing the quality and environmental management systems. This shall include details of the independent, internal and external audits of Project Co and its sub-contractors; and</p> <p>vii. A description of how the proposed systems will integrate with their strategies for risk mitigation.</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C27. Acceptable approach to health and safety management	Pass / Fail	n/a	C27.1	<p>Bidders must submit proposals setting out their health and safety management system. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Confirmation that they will adopt and implement an accredited health and safety management system complying with the requirements of OHAS ISO 18001. For the avoidance of doubt the Board requires that Project-Co adopt and implement a compliant system; ii. Details of all proposed designers, sub-contractors, and suppliers confirming that they operate and accredited health and safety management system complying with OHAS 18001 standards covering all aspects of the project as applicable. Copies of current certificates from an accredited third-party assessment body showing that systems are compliant should be provided; iii. Details of the approach for auditing designers, contractors, sub-contractors and suppliers of their health and safety management systems. This should include details 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>of internal, external and independent audits of Project-Co;</p> <ul style="list-style-type: none"> iv. Proposals for managing occupational health that will be implemented; v. Key dates for development of the system; vi. Safety in design and how Bidders have removed risks through design innovations; vii. Potential constraints on their Works activities when considering the health and safety of their immediate neighbours and other members of the public that may be affected by the Works. This shall include construction traffic management plan within the Campus at Little France and restrictions on the movement of water, dust, vibration, noise and micro-organisms; viii. How any risks to health and safety will be managed and mitigated throughout the Works; ix. How they plan to deal with the potential occurrence of below ground services crossing the Site, in addition to the removal of other below ground obstructions that may still be present from previous demolition works; x. Methodology for the use of 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>overhead cranes;</p> <p>xi. The removal of waste material;</p> <p>xii. Compliance with HAI Scribe;</p> <p>xiii. Storage, transportation and handling of gas cylinders (for construction use); and</p> <p>xiv. How their proposals facilitate the control and management of an outbreak and spread of infectious diseases in accordance with HTM 2025 and SHFN 30.</p>	
C28. Acceptable approach to compliance with CDM regulations	Pass / Fail	n/a	C28.1	<p>Bidders must submit proposals setting out their approach to achieving compliance with the CDM regulations. This must be provided as set out in C28.1 and C28.2 below.</p> <p>Bidders must submit proposals setting out how they will comply with the requirements of the Construction (Design and Management) Regulations 2007. Particular reference shall be made to Project Co's role as Client, in addition to proposals to cover discharging the duties of CDM Coordinator, Designer and Principal Contractor under the Regulations. Bidders shall also include the methodology to demonstrate how they will deal with potential commercial and other conflicts between their constituent parts with respect to compliance with the Regulations and shall provide the following:</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> i. A competency submission for the individual who will be leading the role of CDM co-ordinator, in accordance with CDM ACOP L144 “Managing Health and Safety in Construction”; ii. A Health and Safety document to identify how the requirements of Appendix 4 of the ACOP L144 “Managing Health and Safety in Construction” will be applied on the project; iii. The format of the Pre- Construction Information relating to the project to address the requirements of Appendix 2 of the CDM ACOP L144 “Managing Health and Safety in Construction”; iv. The contents and structure of the Construction Phase Plan relating to the project to address the requirements of Appendix 3 of the CDM ACOP L144 “Managing Health and Safety in Construction”; v. Details of the induction process to address the requirements of section 184 and 185 of the CDM ACOP L144 “Managing Health and Safety in Construction”; vi. The format to be used for the Health and Safety File to address the requirements of section 263 of the 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C28.2	<p>CDM ACOP L144 “Managing Health and Safety in Construction”; and</p> <p>vii. Details of the process for managing health and safety in Design including hazard elimination and risk reduction, principles of prevention, provision of information and management of the Design process as required by the CDM ACOP L144 “Managing Health and Safety in Construction”.</p> <p>Bidders must submit proposals setting out how they have complied with the CDM duties during the Dialogue Period and provide a design risk assessment which is to be updated as the design is progressed.</p>	
C29. Robustness of technical costs	Pass / Fail	n/a	C29.1	Bidders must submit fully completed technical cost proformas contained in the ITPD. All information requested must be provided. Bidders’ completed proformas shall be provided in the same MS Excel format to allow direct comparison between bids.	To Pass, Bidders will be required to demonstrate that their technical costs are robust for the scope of works to be delivered.
C30. Acceptable list of summary assumptions, clarifications and derogations	Not Scored	n/a	C30.1	Bidders must submit a consolidated schedule of all assumptions, clarifications and qualifications made in respect of their ITPD Bids. Whilst it is encouraged that such references are also made in the	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				appropriate locations throughout Bidders' submissions, it is a mandatory requirement of the ITPD Submission that all such matters are also summarised in a single location.	
C31. Acceptable Interface Proposals	Pass / Fail	n/a	C31.1	Bidders must submit proposals setting out their approach to meeting the interface issues as described in Appendix A of the Board's Construction Requirements (subject to the conditions set out in Clause 9 (Nature of Land Interests) including without limitation Schedule Part 5 (Land Matters) of the NPD Project Agreement).	

Appendix AP1.1—Design Deliverables

Appendix AP1.1	<p>Design Deliverables</p> <p>Bidders shall provide the following design submission requirements (as given in the Volume 1 of the ITPD):</p> <p>1. Project Overview</p> <p>1.1—Bid Drawings Schedule</p> <p>2. Approach to Design & Construction—Architectural & Landscaping Design</p> <p>2.1—Architectural Drawings Schedule</p> <p>2.2—Outline Architectural Specification supporting the design concept and setting out the proposed materials, finishes and components to be used. Outline Specification shall be included for all components as detailed in the BCIS Elemental Analysis</p> <p>2.3—Development Control Plan</p> <p>2.4—1:1000 Site Plans</p> <p>2.5—1:500 Location/Site Plan</p> <p>2.6—1:200 Site Layouts</p> <p>2.7—Landscaping Proposal Specifications</p> <p>2.8—Landscaping Proposal Drawings</p> <p>2.9—1:200 Architectural general arrangement floor plans, sections and elevations</p> <p>2.10—1:500 Architectural departmental adjacencies</p> <p>2.11—1:100 Architectural elevations including building elevation/facade showing appropriately rendered: fenestration, exterior materials, louvers and cast shadows</p> <p>2.12—1:100 Architectural sections denoting floor to ceiling heights, suspended ceilings, raised access floors and floor levels</p> <p>2.13—1:100 Departmental and 1:50 room layouts</p> <p>2.14—1:200 Architectural drawings detailing (i) movement strategy, (ii) user flow diagrams at all principal circulation locations, (iii) movement interfaces and (iv) analysis of key nodal points.</p> <p>2.15—1:50 Architectural sections through Roof and Plant Room</p>
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- ~~2.16—1:100 Architectural proposals relative to the clinical requirements and infection control.~~
- ~~2.17—1:200 Architectural drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.~~
- ~~2.18—DDA Proposals including drawings, analysis and proposals.~~
- ~~2.19—AEDET assessment drawings~~
- ~~2.20—1:50 Architectural design response detailing interfaces with existing RIE~~
- ~~2.21—1:100 Architectural drawings and visualisations for the Pod proposals~~
- ~~2.22—1:50 Architectural elevations and visualisations showing the Entrances~~

3. Approach to Design & Construction—Interior Design Proposals

- ~~3.1—Quality, appropriateness and proposals for RHSC interior design supported by architectural drawings of how the layout and the design proposed addresses:

 - ~~3.1.1—Signage~~
 - ~~3.1.2—Patient, communal and public areas~~
 - ~~3.1.3—Appropriateness of facilities for users~~~~
- ~~3.2—Loaded 1:50 room layout drawings for the RHSC indicating interior design proposals and demonstrating the coordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.~~
- ~~3.3—Quality, appropriateness and proposals for DCN interior design supported by architectural drawings of how the layout and the design proposed addresses:

 - ~~3.3.1—Signage~~
 - ~~3.3.2—Patient, communal and public areas~~
 - ~~3.3.3—Appropriateness of facilities for users~~~~
- ~~3.4—Loaded 1:50 room layout drawings for the DCN indicating interior design proposals and demonstrating the coordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.~~
- ~~3.5—Internal Perspectives at eye level that demonstrate form and setting of the key internal architectural areas,~~

~~distinguishing or innovative features which demonstrate the design quality of the proposals~~

~~3.6— Drawings and visualisations to demonstrate the integration of Artwork into the interior design concept.~~

~~3.7— Sample boards to demonstrate the proposed interior finishes, colour and textures. Boards to include RHSC and DCN wards, the Pod, Atrium and GAMHS.~~

~~4. Approach to Design & Construction— Civil & Structural Proposals~~

~~4.1— Structural Drawings Schedule~~

~~4.2— Civil Engineering Drawings Schedule~~

~~4.3— Outline Structural Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components as in accordance with the NBS Specification~~

~~4.4— 1:500 Site plan layout indicating all manholes, gully positions for all site drainage~~

~~4.5— 1:500 Site plan layout indicating all positions for surface water drainage~~

~~4.6— 1:500 Site plan layout indicating all positions for foul water drainage~~

~~4.7— 1:500 Site plan layout indicating all positions for water mains~~

~~4.8— 1:500 Site plan layout indicating all positions for roads, footpaths and finished levels~~

~~4.9— 1:100 structural general arrangement foundation plans~~

~~4.10— 1:100 structural general arrangement plans including floor and roof plans indicating all column and beam locations and sizes and all structural elements~~

~~4.11— 1:100 structural sections through the building showing structural elements and service zones~~

~~4.12— Confirmation of Geotechnical surveys, reports, studies undertaken in addition to the Geotechnical survey in the data room~~

~~4.13— Confirmation of other site surveys, reports, studies undertaken in addition to the information already located in the data room~~

~~4.14— Confirmation of any vibration monitoring / prevention proposals.~~

~~4.15— 1:100 drawings for Helipad~~

~~4.16— Outline Structural Specification supporting the Helipad design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification~~

~~5. Mechanical & Electrical Services~~~~5.1 Building services (mechanical) drawings schedule~~~~5.2 Building services (electrical) drawings schedule~~~~5.3 Outline Building services (mechanical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification~~~~5.4 Outline Building services (electrical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification~~~~5.5 1:500 site plan layout indicating all mechanical services, utilities supplies, natural gas mains, water supply and fire mains~~~~5.6 1:500 site plan layout indicating all electrical utilities supplies, electrical mains, data and communications ducts~~~~5.7 1:200 internal services concept schematic and zoning plans for both heating and ventilation; indicating of heating and ventilation in each room~~~~5.8 1:100 mechanical general arrangement floor plans showing extent of services, distribution routes, mechanical plant acoustic treatment, plant areas, etc~~~~5.9 Mechanical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed:~~~~5.9.1 Plant strategy~~~~5.9.2 Distribution strategy~~~~5.9.3 Incoming gas and water services (including metering and sub-metering)~~~~5.9.4 Environmental design considerations~~~~5.9.5 Heat sources~~~~5.9.6 Natural Ventilation strategy~~~~5.9.7 Mechanical Ventilation strategy~~~~5.9.8 Mechanical cooling~~~~5.9.9 Mechanical air conditioning~~

- ~~5.9.10 Specialist ventilation strategy~~
- ~~5.9.11 Domestic hot and cold water system~~
- ~~5.9.12 Space Heating System~~
- ~~5.9.13 Space Cooling System~~
- ~~5.9.14 Building Energy and Management System~~
- ~~5.9.15 Dry Risers~~
- ~~5.9.16 Soil and Waste System (above and underground)~~
- ~~5.9.17 Rainwater pipework and distribution~~
- ~~5.9.18 Specialist drainage~~
- ~~5.9.19 Sanitary ware and appliances~~
- ~~5.9.20 Dry Risers~~
- ~~5.9.21 Natural Gas Installations including Laboratory Gases~~
- ~~5.9.22 Medical Gas Installations~~
- ~~5.9.23 Pneumatic Tube System~~
- ~~5.9.24 Mechanical Commissioning Strategy~~
- ~~5.10 1:100 electrical general arrangement floor plans showing extent of services, distribution routes, plant areas, etc~~
- ~~5.11 Electrical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed:~~
 - ~~5.11.1 Incoming electrical services~~
 - ~~5.11.2 Metering and Sub-metering~~
 - ~~5.11.3 Mains distribution including standby generation facilities~~
 - ~~5.11.4 Earthing, Bonding and Lightning protection~~
 - ~~5.11.5 Containment systems~~
 - ~~5.11.6 Small power installation~~
 - ~~5.11.7 Lighting and Emergency Lighting~~

- ~~5.11.8 Specialist lighting~~
- ~~5.11.9 Lighting control systems~~
- ~~5.11.10 Uninterruptible Power Supplies~~
- ~~5.11.11 Telecommunications and I.T.~~
- ~~5.11.12 Nurse Call System~~
- ~~5.11.13 Fire Detection and Suppression System~~
- ~~5.11.14 Staff Attack / Induction Loop~~
- ~~5.11.15 Security system~~
- ~~5.11.16 Access Control system~~
- ~~5.11.17 CCTV system~~
- ~~5.11.18 Public address system~~
- ~~5.11.19 Digital TV and Radio Installation~~
- ~~5.11.20 Patient / Equipment Tagging~~
- ~~5.11.21 Induction Loop~~
- ~~5.11.22 Bedhead Services~~
- ~~5.11.23 Electrical Commissioning Strategy~~

~~5.12 1:50 mechanical and electrical services sections to illustrate use of ceilings, natural daylight, ventilation strategies, cooling and heating strategies, lighting strategy, acoustic strategy, specialist installations strategy, services concept~~

6. Lift Provisions

- ~~6.1 Lift and Escalator Drawings Schedule~~
- ~~6.2 Outline Building Services (lift and escalator provision) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification. Traffic flow analysis to be included.~~

7. Environmental Services and Energy Management Strategy

~~7.1 Natural Ventilation drawings and proposals~~**~~8. Fire Strategy~~**~~8.1 1:100 Fire Strategy drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.~~~~8.2 Outline Fire Strategy Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification~~**~~9. Security Strategy~~**~~9.1 1:100 Security drawings in support of security strategy and how the security proposals support the design concept~~~~9.2 Outline Security Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification~~**~~10. Acoustic Strategy~~**~~10.1 Outline Acoustic Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification~~**~~11. Adaptability, Flexibility and Expandability Strategy~~**~~11.1 Architectural adaptability drawings in support of the overall adaptability strategy.~~~~11.2 Strategy and drawings showing how the design of the new RHSC and DCN demonstrates innovation, flexibility, consideration of whole life design and is capable of absorbing reasonable change in the future without excessive public, patient or clinical disruption.~~

AP1.2**Specifications**

~~Bidders shall provide specific details on their proposed suite of specifications for the Works. These details shall include, but not be limited to the following:~~

- ~~i. The industry recognised specifications proposed, with specific commentary on the extent of application of those to each main discipline (civil / structural, M&E, architectural etc);~~
- ~~ii. Inclusion of either Project specific specifications for each main discipline, or example specifications used on other projects that are representative of the level of detail and clearly demonstrate the proposed level of quality that will apply to this scheme: and~~
- ~~iii. A statement confirming that all such specifications (including fully completed framework specifications) will be fully drafted by the Preferred Bidder prior to Financial Close.~~

~~For the avoidance of doubt, the Board is expecting Bidders to adopt both general, and where required, specific specifications to cover all components, materials, workmanship etc. For example the NBS framework could be utilised for mainstream building elements, however may need to be supplemented by specific standards and specifications relevant to particular Bidder proposals (e.g. piling, steelwork erection, infrastructure works).~~

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
D. Approach to Facilities Management					
D1. Clarity, robustness and quality of approach to management and administration of the Services and Contract	Scored	2.50	D1.1	<p>Bidders must submit proposals setting out their proposed approach to managing and administering both the Services and the NPD Project Agreement itself. The Bidder is also required to provide a detailed proposal for the management, liaison and interfacing with the Board and the other Board service providers, these being Authority Parties.</p> <p>The importance to the Board of a holistic approach to the delivery of Services under the NPD Project Agreement cannot be overstated. The success of this will be dependent upon the quality of the general management of the Project.</p> <p>Bidders must submit the following:</p> <ol style="list-style-type: none"> i. Full Method Statements for the management and administration of the Project Agreement and Services contained therein; ii. Location of the members of Project Co's administration team (i.e. on or off site); iii. Details of Bidder's proposed managerial structure, indicating the roles and responsibilities of each manager, supervisor and team member; iv. Details of how material changes to the management structure of Project Co will be 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>communicated to the Board;</p> <p>v. Details of how changes to working practices and / or Service delivery timings will be communicated to the Board; and</p> <p>vi. Details of how it is proposed to electronically manage Services management and administration to improve delivery.</p>	
D2. Acceptable approach to integration with Board policies and operation	Pass / Fail	n/a	D2.1	<p>Bidders must submit proposals setting out how they will comply, integrate and align their methodologies with the Board's policies, operation and procedures for the delivery of Services to the Facilities. This must include the following:</p> <p>i. Details of how it will ensure that the Services are delivered in accordance with the requirements of the Health planning Standards/NHS Requirements as detailed within paragraph 2.3 of Volume 3 of the ITPD.</p>	
D3. Acceptable approach to ensuring quality management	Pass / Fail	n/a	D3.1	<p>Bidders must submit proposals setting out their Method Statements for quality management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <p>i. Description of any quality management systems or policies the Bidder has for the Services or would put in place for the Services;</p> <p>ii. Interface with the Board's Quality</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>Assurance representatives</p> <p>iii. Process to ensure that Project Co's advisers are continually aware of any relevant legislative changes and procedures for communicating these changes to the Board as appropriate;</p> <p>iv. Proposals for carrying out audits, including the provision of their proposed audit programme for the Services; and</p> <p>v. Details of the Bidder's proposals for the escalation of activities following a major incident including interface with the Board.</p>	
D4. Acceptable approach to ensuring environmental management	Pass / Fail	n/a	D4.1	<p>Bidders must submit proposals setting out their Method Statements for environmental management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <p>i. Interface with the client's environment representatives;</p> <p>ii. Process to ensure that Project Co's advisers are continually aware of any relevant legislative changes and procedures for communicating these changes to the Board as appropriate;</p> <p>iii. Details of their approach to ISO 14001 and shall describe any relevant experience of implementing such systems for other local authority or NHS clients of the Bidder;</p> <p>iv. Bidder's environmental policy statement, and shall state explicitly whether they have, or</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>are working towards developing an environmental strategy;</p> <ul style="list-style-type: none"> v. Bidder's environmental management system, for their own organisation and/or for this project; vi. Structure of the environmental management system; vii. Details of the Bidder's approach and commitment to use of ethical and sustainable materials; viii. Proposals for carrying out audits, including the provision of an indicative audit programme for the Services; and ix. Details of the Bidder's proposals for the escalation of activities following a major incident, including interface with the Board. 	
D5. Acceptable approach to ensuring health and safety management	Pass / Fail	n/a	D5.1	<p>Bidders must submit proposals setting out their Method Statements for health and safety management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Procedure for disseminating hazard and safety warnings; ii. Methodology for the development and maintenance of the health and safety system relevant to the Services; iii. Interface with the Board's health and safety representatives; iv. Process for maintaining effective overall control of all site activities and the 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>coordination of and liaison with all staff such that there are suitable integrated arrangements to allow compliance with the Health and Safety at Work Act 1974;</p> <p>v. Process to ensure that Project Co's advisers are continually aware of any relevant legislative changes and procedures for communicating these changes to the Board as appropriate;</p> <p>vi. Process to ensure constant access to health and safety professionals for both its own staff and the Board's nominated representatives;</p> <p>vii. Develop bespoke risk assessments recognising the services being delivered at the RIE and University on the wider Campus.</p> <p>viii. A copy of the Bidder's Health and Safety policy and a description of their approach to ISO 9001 and ISO 18001 or similar systems;</p> <p>ix. Proposals for carrying out audits, including the provision of an indicative audit programme for the Services; and</p> <p>x. Details of their proposals for the escalation of activities following a major incident including interface with the Board.</p>	
D6. Acceptable approach to interfacing with the Board for undertaking	Pass / Fail	n/a	D6.1	<p>Bidders must submit proposals setting out their approach to interfacing with the Board for undertaking works outside of access times. This must include the following:</p> <p>i. How they will ensure that any Works and</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
works outside of access times				<p>Services proposed to be undertaken outside agreed Access Times are agreed with the Board's Representative prior to commencement; and</p> <p>ii. How Works and Services will be managed and carried out in accordance with Permit to Work System.</p>	
D7. Clarity, robustness and quality of approach to partnership and resources including liaison, resources and supply chain management	Scored	2.50		<p>Bidders must submit proposals setting out their approach to partnership and resources including liaison, resources and supply chain management. This must be provided as set out in D7.1 – D7.3 below.</p> <p>D7.1 Bidders must submit proposals setting out their approach to communications with the Board or its representatives. This shall include their proposed appropriate interfaces, frequency, nature and structure of meetings and reporting.</p> <p>D7.2 Bidders must submit proposals setting out:</p> <p>i. Details of storage, maintenance and disposal of plant, equipment, materials, consumables, packaging and chemicals used in the delivery of the Services;</p> <p>ii. Details of suitably qualified staff and availability to meet the requirements of this NPD Project Agreement.</p> <p>D7.3 Bidders must submit proposals setting out:</p> <p>i. Details of how the supply chain will be managed;</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul style="list-style-type: none"> ii. Proposed approach to delivery of Services through the supply chain; iii. Method of creating a successful integrated Services team. 	
D8. Acceptable approach to business continuity planning	Pass / Fail	n/a	D8.1	<p>Bidders must submit proposals setting out their approach to business continuity planning. This must include the following:</p> <ul style="list-style-type: none"> i. Details of its approach to business continuity planning including: <ul style="list-style-type: none"> a. Its approach to the creation and maintenance of its own business continuity plan and disaster recovery plans for the required Services; b. The proposed approach to supporting the Board's "Business Continuity; and c. Details of who within the management team will have overall responsibility for business continuity. ii. Details of its proposed training procedures for staff who will participate in emergency procedures; iii. Details of its proposals for testing Business Continuity Plans at the property; iv. Details of its proposals for the escalation of activities following a major incident (and\ or at the request of the Board); v. Details of its own, internal Business Continuity (e.g. those plans related to its own survival as a business following a major incident); and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				vi. Details of the existing arrangements for testing its own, internal Business Continuity Plans.	
D9. Acceptable fire safety policies and procedures	Pass / Fail	n/a	D9.1	Bidders must submit proposals setting out their approach to fire safety policies and procedure. This must include the following: <ul style="list-style-type: none"> i. Details of its fire safety policy ii. Details of fire safety and security systems and procedures to be implemented on site including their approach to the Helipad. iii. Approach to ensuring an integrated fire safety strategy for the overall site, including appropriate interfaces with the Board and other Third Party organisations i.e. Authority Parties. 	
D10. Clarity, robustness and quality of approach to performance and information management including; helpdesk, programme maintenance lifecycle, performance monitoring,	Scored	4.50	D10.1	Bidders must submit proposals setting out their approach to performance and information management, This must be provided as set out in D10.1 – D10.8 below. Bidders must submit proposals setting out details of their proposed computer-aided facilities management (CAFM) system and how they will provide an asset management and reporting capability. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following: <ul style="list-style-type: none"> i. Call receipt and management and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
monitoring and records, regular reports and information requests, building services and statutory testing			D10.2	<p>escalation;</p> <ul style="list-style-type: none"> ii. Management information; iii. Reporting; iv. Incident management; v. Alarm management; vi. Maintenance scheduling; vii. Asset data maintenance; viii. Helpdesk interface protocol with the Board and/or third party's; ix. Proposed staffing and location of the helpdesk; x. Interface between the helpdesk and other aspects of the CAFM system; xi. Reporting procedures and frequency of reporting; and xii. Enabling the Board to gain access to the data held within the BMS in a format/ method agreeable to the Board. <p>Bidders must submit proposals setting out their approach to programme maintenance lifecycle. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. The information and delivery strategy which will be utilised in establishing a Programmed Maintenance planner; ii. Confirmation that the Bidder recognises that certain works will need to be undertaken out of normal working hours/ during the 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>weekends to minimise the impact on the Board's operations, and without additional cost to the Board;</p> <p>iii. Method of establishing and updating their 5-year Maintenance Lifecycle plan;</p> <p>iv. Details on the provision of all specialist sub-contractors for programmed maintenance and lifecycle;</p> <p>v. Details of how it will ensure that the delivery of all Services will underpin the required hygienic/infection control standards for the facility, specifically compliance with HAI Scribe standards;</p> <p>vi. Details on staffing and management of the Service;</p> <p>vii. Details on how planned, reactive and statutory works are to be monitored for both quality and safe methods of work. This should include works that are undertaken by directly employed staff and any sub-contractors;</p> <p>viii. Details of proposals to assess staff roles and responsibilities, skill requirements, competency, training arrangements and review procedures;</p> <p>ix. Details on its approach to planned, reactive and statutory maintenance including prioritising business critical equipment and systems at all premises together with details on how any planned maintenance that is not achieved by the planned date is addressed;</p> <p>x. Sample of proposed Service Report to be used for this Contract;</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			D10.3	<p>xi. Details on interface with Board's cleaning service when carrying out Programmed Maintenance;</p> <p>xii. Schedule for cleaning of all internal and external panes of glazed areas of the Facilities envelope; and</p> <p>Schedule of planned external façade cleaning service.</p> <p>Bidders must submit proposals setting out details of their proposed delivery strategy and key activities. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following service areas:</p> <ul style="list-style-type: none"> i. Mechanical maintenance ii. Electrical maintenance iii. Plumbing iv. Lift maintenance v. Fire safety system/ equipment vi. Internal / external fabric of the Facilities vii. Periodic electrical testing and inspections viii. Lift inspections ix. Pressure vessel x. Pressure systems (written schemes) xi. Water systems risk assessments xii. Fire risk assessments xiii. Water sampling / testing 	
			D10.4	<p>Bidders must submit proposals setting out their approach to performance monitoring. This must include the following:</p> <ul style="list-style-type: none"> i. Description of how the performance of the 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			D10.5	<p>Service will be self-monitored;</p> <p>ii. Approach to customer feedback and complaints handling;</p> <p>iii. Sample customer feedback form.</p> <p>Bidders must submit proposals setting out their approach to monitoring and records. This must include the following:</p> <p>i. Details on how the Bidder will ensure all certificates, appropriate documentation and records in relation to the Project are stored in accordance with appropriate legislation and the Board's policies; and</p> <p>ii. Details on how the Bidder will ensure all records in relation to the Project are maintained accurately and kept up-to-date.</p>	
			D10.6	<p>Bidders must submit proposals setting out their approach to regular reporting and information request. This must include the following:</p> <p>i. Procedures for ensuring that the reports are appropriately tailored to the Boards requirements, including the completion period for such reports;</p> <p>ii. Details on how it will ensure that reports are accurate and produced in line with agreed timescales;</p> <p>iii. Details of the types of reports that they are currently producing for other clients.</p>	
			D10.7	<p>Bidders must submit proposals setting out their approach to building services. This must include</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			D10.8	<p>the following:</p> <ul style="list-style-type: none"> i. Approach to commissioning new Plant and Equipment; ii. Details on how hardware and software licenses will be kept up to date; iii. Details on how to ensure all Equipment/ Assets used in the delivery of the Services are maintained properly and safe to use. <p>Bidders must submit proposals setting out their approach to statutory testing.</p>	
D11. Acceptable approach to un-programmed maintenance	Pass / Fail	n/a	D11.1	<p>Bidders must submit proposals setting out their approach to Un-programmed Maintenance Works. This must include the following:</p> <ul style="list-style-type: none"> i. Meeting the relevant Rectification Period; and ii. Meeting the standards required. 	
D12. Clarity, robustness and quality of approach to service elements including; utilities management and grounds maintenance services	Scored	2.50	D12.1	<p>Bidders must submit proposals setting out their approach to service elements including utilities management and grounds maintenance. This must be provided as set out in D12.1 and D12.2 below.</p> <p>Bidders must submit a detailed methodology describing their approach to utilities management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <ul style="list-style-type: none"> i. Proposals to ensure an adequate continuous 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			D12.2	<p>supply of energy is available;</p> <p>ii. Proposals for interface with the Board to ensure no interruptions in the supply of Utilities to the Facilities;</p> <p>iii. Proposals for procurement of Utilities for the Board which demonstrate value for money;</p> <p>iv. Maintenance approach to ensure all external Utility infrastructures within the Site is fully functional;</p> <p>v. Method of monitoring Utilities/carbon consumption and how usage will be analysed and used;</p> <p>vi. Sample Utility consumption report;</p> <p>vii. Proposals for improving energy/ carbon efficiency; and</p> <p>viii. Details on Utility energy profile audit.</p> <p>Bidder must submit proposals setting out their approach to grounds maintenance. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:</p> <p>i. Methodology for Grounds Maintenance Service and indicative programme for Planned Maintenance; <u>and</u></p> <p>ii. Approach to gritting and de-icing during adverse weather;</p> <p>iii. Approach to ensuring the Holipad is reasonably clear of ice and snow;</p> <p>iv. <u>ii.</u> Interface with third parties in ensuring a holistic approach to the safe use of the Campus access and egress routes.</p>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
D13. Robustness of technical costs	Pass / Fail	n/a	D13.1	Bidders must submit fully completed technical cost proformas for the Services contained in the ITPD. All information requested must be provided. Bidders' completed proformas shall be provided in the same MS Excel format to allow direct comparison between bids.	To Pass, Bidders will be required to demonstrate that their technical costs are robust for the scope of works to be delivered.
D14. Acceptable list of summary assumptions, clarifications and derogations	Not Scored	n/a	D14.1	Bidders must submit a consolidated schedule of all assumptions, clarifications and qualifications made in respect of their ITPD Bids. Whilst it is encouraged that such references are also made in the appropriate locations throughout Bidders' submissions, it is a mandatory requirement of the ITPD Submission that all such matters are also summarised in a single location.	
D15. Acceptable approach to mobilisation of Facilities Management services	Pass / Fail	n/a	D15.1	Bidders must submit proposals setting out their approach to mobilisation of facilities management services. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following: <ul style="list-style-type: none"> i. A draft mobilisation plan using MS Project showing the activities to be performed, interdependencies between activities, the allocation of resources and where Board input is required; ii. Details of their proposed structuring and 	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<p>resourcing for mobilisation. This should include the names and CVs of the proposed mobilisation management team, indicating relevant experience;</p> <p>iii. Details of proposed communications with the Board during mobilisation. This shall propose appropriate interfaces and the frequency, nature and structure of meetings and reporting;</p> <p>iv. Approach to recruitment of staff, including as appropriate relevant security clearances;</p> <p>v. Detailed proposals for the establishment of the Helpdesk service that clearly demonstrates an understanding of the operational and technical interfaces with Board Services;</p> <p>vi. Proposals for installation and population of the CAFM system describing (as applicable) how installation shall be effected and how data will be migrated and tested; and</p> <p>vii. Method of vetting staff and acquiring the necessary and appropriate security clearances.</p>	

Annex 1 to

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Appendix A —~~Technical Cost Proforma~~

~~Design and Construction and FM Technical Cost Proforma.~~

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~~Annex 2 to Appendix A(iii) – Design Deliverables Proforma~~**~~Re-provision of RHSC and DCN at Little France~~****~~Schedule of Design Deliverables for Technical Meetings during the Dialogue Period~~****~~Instructions to Bidders:~~**

- ~~1. The design deliverables listed below are those scheduled in Section C (Appendix AP1.1 & AP1.2) of the Submission Requirements detailed in Appendix A (ii) of Volume 1 of the ITPD.~~
- ~~2. Bidders shall complete the table below to indicate what drawings they will submit at each Dialogue Meeting in support of the Submission Requirements. This is in addition to each disciplines drawing schedule.~~
- ~~3. All drawings must be submitted during the Dialogue Period prior to submission of the Draft Final Tender.~~
- ~~4. The Final Tender shall include the design deliverables developed to RIBA Plan of Work Stage D.~~

<p>Section Appendix A (iii)</p>	<p>Design Deliverables</p> <p><u>Bidders shall provide the following design submission requirements (as given in the Volume 1 of the ITPD):</u></p> <p>1. Project Overview</p> <p><u>1.1 - Bid Drawings Schedule</u></p> <p>2. Approach to Design & Construction - Architectural & Landscaping Design</p> <p><u>2.1 - Architectural Drawings Schedule</u></p> <p><u>2.2 - Outline Architectural Specification supporting the design concept and setting out the proposed materials, finishes and components to be used. An Outline Specification shall be included for all components as detailed in the appropriate sub sections of the NBS Specification template.</u></p> <p><u>2.3 - Development Control Plan</u></p> <p><u>2.4 - 1:1000 Site Plan</u></p> <p><u>2.5 - 1:500 Location/Site Plan</u></p> <p><u>2.6 - 1:200 Site Layouts</u></p> <p><u>2.7 - Landscaping Proposal Specifications</u></p> <p><u>2.8 - Landscaping Proposal Drawings</u></p> <p><u>2.9 - 1:200 Architectural general arrangement floor plans, sections and elevations</u></p> <p><u>2.10 - 1:500 Architectural departmental adjacencies</u></p> <p><u>2.11 - 1:200 Architectural elevations showing appropriately rendered:-fenestration, exterior materials, louvers and cast shadows</u></p> <p><u>2.12 - 1:100 Architectural sections denoting floor to ceiling heights, suspended ceilings, raised access floors and floor levels</u></p> <p><u>2.13 - 1:200 Departmental layouts to include a table setting out the Draft Schedule of Accommodation and Reference Design Schedule of Accommodation requirements and the Bidder's proposed schedule of accommodation and 1:50 room layouts. Schedule of Accommodation should include the following:</u></p> <p><u>Column A – areas for each room as stated in the Draft Schedule of Accommodation</u></p> <p><u>Column B – areas for each room as stated in the Reference Design Schedule of Accommodation</u></p> <p><u>Column C – as drawn Areas for each room proposed by the Bidder</u></p> <p><u>Column D – variance in areas between Column A and Column C (Column C minus Column A)</u></p> <p><u>Column E – where the areas in Column C are less than Column A, Bidders shall provide the variance in areas between Column C and B (Column C minus Column B)</u></p>	<p>Meeting-1</p>	<p>Meeting-2</p>	<p>Meeting-3</p>	<p>Meeting-4</p>	<p>Meeting-5</p>	<p>Deleted Cells</p> <p>Deleted Cells</p> <p>Deleted Cells</p> <p>Deleted Cells</p> <p>Deleted Cells</p> <p>Deleted Cells</p> <p>Deleted Cells</p> <p>Deleted Cells</p>
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	<p><u>Column F – a comments Column to explain why the Board’s Draft Schedule of Accommodation (Column A) cannot be achieved, noting the absolute minimum area the Board will accept is the area in the Reference Design Schedule of Accommodation (Column B)</u></p> <p><u>2.14 – 1:200 Architectural drawings detailing (i) movement strategy, (ii) user flow diagrams at all principal circulation locations, (iii) movement interfaces and (iv) analysis of key nodal points</u></p> <p><u>2.15 - 1:50 Architectural sections through Roof and Plant Room</u></p> <p><u>2.16 - 1:200 Architectural proposals relative to the clinical requirements and infection control.</u></p> <p><u>2.17 - 1:200 Architectural drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.</u></p> <p><u>2.18 - DDA Proposals including drawings, analysis and proposals.</u></p> <p><u>2.19 –Drawings of the developed proposals suitable for use at post Preferred Bidder AEDET Review.</u></p> <p><u>2.20 - 1:50 Architectural design response detailing interfaces with existing RIE</u></p> <p><u>2.21 - 1:100 Architectural drawings and visualisations for the Pod proposals</u></p> <p><u>2.22 – 1:20 coloured part architectural elevations and visualisations showing the Entrances</u></p> <p><u>3. Approach to Design & Construction - Interior Design Proposals</u></p> <p><u>3.1 - Quality, appropriateness and proposals for RHSC interior design supported by architectural drawings of how the layout and the design proposed addresses:</u></p> <p><u>3.1.1 - Signage</u></p> <p><u>3.1.2 - Patient, communal and public areas</u></p> <p><u>3.1.3 - Appropriateness of facilities for users</u></p> <p><u>3.2 - Loaded 1:50 room layout drawings for the RHSC indicating interior design proposals and demonstrating the coordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.</u></p> <p><u>3.3 - Quality, appropriateness and proposals for DCN interior design supported by architectural drawings of how the layout and the design proposed addresses:</u></p> <p><u>3.3.1 - Signage</u></p> <p><u>3.3.2 - Patient, communal and public areas</u></p> <p><u>3.3.3 - Appropriateness of facilities for users</u></p> <p><u>3.4 - Loaded 1:50 room layout drawings for the DCN indicating interior design proposals and demonstrating the coordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.</u></p>											
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	<p><u>3.5 - Internal Perspectives at eye level that demonstrate form and setting of the key internal architectural areas, distinguishing or innovative features which demonstrate the design quality of the proposals</u></p> <p><u>3.6 – Drawings and visualisations to demonstrate the integration of Artwork into the interior design concept.</u></p> <p><u>3.7 – Sample boards to demonstrate the proposed interior finishes, colour and textures. Boards to include RHSC and DCN wards, the Pod, Atrium and CAMHS.</u></p> <p><u>4. Approach to Design & Construction - Civil & Structural Proposals</u></p> <p><u>4.1 - Structural Drawings Schedule</u></p> <p><u>4.2 - Civil Engineering Drawings Schedule</u></p> <p><u>4.3 - Outline Structural Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components as detailed in the appropriate sub section of the NBS Specification template.</u></p> <p><u>4.4 - 1:500 Site plan layout indicating all manholes, gully positions for all site drainage</u></p> <p><u>4.5 - 1:500 Site plan layout indicating all positions for surface water drainage</u></p> <p><u>4.6 - 1:500 Site plan layout indicating all positions for foul water drainage</u></p> <p><u>4.7 - 1:500 Site plan layout indicating all positions for water mains</u></p> <p><u>4.8 - 1:500 Site plan layout indicating all positions for roads, footpaths and finished levels</u></p> <p><u>4.9 - 1:200 structural general arrangement foundation plans</u></p> <p><u>4.10 - 1:200 structural general arrangement plans including floor and roof plans indicating all column and beam locations and sizes and all structural elements</u></p> <p><u>4.11 - 1:100 structural sections through the building showing structural elements and service zones</u></p> <p><u>4.12 - Confirmation of Geotechnical surveys, reports, studies undertaken in addition to the Geotechnical survey in the data room</u></p> <p><u>4.13 - Confirmation of other site surveys, reports, studies undertaken in addition to the information already located in the data room</u></p> <p><u>4.14 - Confirmation of any vibration monitoring / prevention proposals.</u></p> <p><u>4.15 - 1:100 drawings for Helipad</u></p> <p><u>4.16 - Outline Structural Specification supporting the Helipad design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification</u></p> <p><u>5. Mechanical & Electrical Services</u></p> <p><u>5.1 - Building services (mechanical) drawings schedule</u></p>											
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	<p><u>5.2 - Building services (electrical) drawings schedule</u></p> <p><u>5.3 - Outline Building services (mechanical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components as detailed in the appropriate sub section of the NBS Specification template.</u></p> <p><u>5.4 - Outline Building services (electrical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components as detailed in the appropriate sub section of the NBS Specification template.</u></p> <p><u>5.5 - 1:500 site plan layout indicating all mechanical services , utilities supplies, natural gas mains, water supply and fire mains</u></p> <p><u>5.6 - 1:500 site plan layout indicating all electrical utilities supplies, electrical mains, data and communications ducts</u></p> <p><u>5.7 - 1:200 internal services concept schematic and zoning plans for both heating and ventilation; indicating of heating and ventilation in each room</u></p> <p><u>5.8 - 1:200 mechanical general arrangement floor plans showing extent of services, distribution routes, mechanical plant acoustic treatment, plant areas, etc</u></p> <p><u>5.9 - Mechanical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed :</u></p> <p><u>5.9.1 - Plant strategy</u></p> <p><u>5.9.2 - Distribution strategy</u></p> <p><u>5.9.3 - Incoming gas and water services (including metering and sub-metering)</u></p> <p><u>5.9.4 - Environmental design considerations</u></p> <p><u>5.9.5 - Heat sources</u></p> <p><u>5.9.6 - Natural Ventilation strategy</u></p> <p><u>5.9.7 - Mechanical Ventilation strategy</u></p> <p><u>5.9.8 - Mechanical cooling</u></p> <p><u>5.9.9 - Mechanical air conditioning</u></p> <p><u>5.9.10 - Specialist ventilation strategy</u></p> <p><u>5.9.11 - Domestic hot and cold water system</u></p> <p><u>5.9.12 - Space Heating System</u></p> <p><u>5.9.13 - Space Cooling System</u></p> <p><u>5.9.14 - Building Energy and Management System</u></p> <p><u>5.9.15 - Dry Risers</u></p> <p><u>5.9.16 - Soil and Waste System (above and underground)</u></p> <p><u>5.9.17 - Rainwater pipework and distribution</u></p> <p><u>5.9.18 - Specialist drainage</u></p>											
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	<p><u>5.9.19 - Sanitary ware and appliances</u></p> <p><u>5.9.20 - Dry Risers</u></p> <p><u>5.9.21 - Natural Gas Installations including Laboratory Gases</u></p> <p><u>5.9.22 - Medical Gas Installations</u></p> <p><u>5.9.23 – Pneumatic Tube System</u></p> <p><u>5.9.24 - Mechanical Commissioning Strategy</u></p> <p><u>5.10 - 1:200 electrical general arrangement floor plans showing extent of services, distribution routes, plant areas, etc</u></p> <p><u>5.11 - Electrical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed:</u></p> <p><u>5.11.1 - Incoming electrical services</u></p> <p><u>5.11.2 – Metering and Sub-metering</u></p> <p><u>5.11.3 - Mains distribution including standby generation facilities</u></p> <p><u>5.11.4 - Earthing, Bonding and Lightning protection</u></p> <p><u>5.11.5 - Containment systems</u></p> <p><u>5.11.6 - Small power installation</u></p> <p><u>5.11.7 – Lighting and Emergency Lighting</u></p> <p><u>5.11.8 - Specialist lighting</u></p> <p><u>5.11.9 - Lighting control systems</u></p> <p><u>5.11.10 - Uninterruptible Power Supplies</u></p> <p><u>5.11.11 - Telecommunications and I.T.</u></p> <p><u>5.11.12 - Nurse Call System</u></p> <p><u>5.11.13 - Fire Detection and Suppression System</u></p> <p><u>5.11.14 - Staff Attack / Induction Loop</u></p> <p><u>5.11.15 - Security system</u></p> <p><u>5.11.16 - Access Control system</u></p> <p><u>5.11.17 - CCTV system</u></p> <p><u>5.11.18 - Public address system</u></p> <p><u>5.11.19 - Digital TV and Radio Installation</u></p> <p><u>5.11.20 – Patient / Equipment Tagging</u></p> <p><u>5.11.21 – Induction Loop</u></p> <p><u>5.11.22 – Bedhead Services</u></p> <p><u>5.11.23 - Electrical Commissioning Strategy</u></p> <p><u>5.12 - 1:50 mechanical and electrical services sections to illustrate use of ceilings, natural daylight, ventilation strategies, cooling and heating strategies, lighting strategy, acoustic strategy, specialist installations strategy, services</u></p>											
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	<p><u>concept</u></p> <p>6. Lift Provisions</p> <p><u>6.1 - Lift and Escalator Drawings Schedule</u></p> <p><u>6.2 - Outline Building Services (lift and escalator provision) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components as detailed in the appropriate sub section of the NBS Specification template. Traffic flow analysis to be included.</u></p> <p>7. Environmental Services and Energy Management Strategy</p> <p><u>7.1 - Natural Ventilation drawings and proposals</u></p> <p>8. Fire Strategy</p> <p><u>8.1 - 1:200 Fire Strategy drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.</u></p> <p><u>8.2 - Outline Fire Strategy Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components as detailed in the appropriate sub section of the NBS Specification template.</u></p> <p>9. Security Strategy</p> <p><u>9.1- 1:200 Security drawings in support of security strategy and how the security proposals support the design concept</u></p> <p><u>9.2 - Outline Security Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components as detailed in the appropriate sub section of the NBS Specification template.</u></p> <p>10. Acoustic Strategy</p> <p><u>10.1 - Outline Acoustic Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components as detailed in the appropriate sub section of the NBS Specification template.</u></p> <p>11. Adaptability, Flexibility and Expandability Strategy</p> <p><u>11.1 - Architectural adaptability drawings in support of the overall adaptability strategy.</u></p> <p><u>11.2 - Strategy and drawings showing how the design of the new RHSC and DCN demonstrates innovation, flexibility, consideration of whole life design and is capable of absorbing reasonable change in the future without excessive</u></p>								
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		<u>public, patient or clinical disruption.</u>												
-	-	-												
AP1.1	-	-												
-	-	-												
-	1	Project Overview												
-	1.1	Bid Drawings Schedule											✓	✓
-	-	-												
-	2	Approach to Design & Construction Architectural and Landscaping Design												
-	2.1	Architectural Drawings Schedule											✓	✓
-	2.2	Outline Architectural Specification supporting the design concept and setting out the proposed materials, finishes and components to be used. Outline Specification shall be included for all components as detailed in the NBS Specification											✓	✓
-	2.3	Development Control Plan											✓	✓
-	2.4	1:1000 Site Plans											✓	✓
-	2.5	1:500 Location/Site Plan											✓	✓
-	2.6	1:200 Site Layouts											✓	✓
-	2.7	Landscaping Proposal Specifications											✓	✓
-	2.8	Landscaping Proposal Drawings											✓	✓
-	2.9	1:200 architectural general arrangement floor plans, sections and elevations											✓	✓
-	2.10	1:500 architectural departmental adjacencies											✓	✓
-	2.11	1:100 architectural elevations including building elevation/facade showing appropriately rendered fenestration, exterior materials, louvres and cast shadows											✓	✓
-	2.12	1:100 architectural sections denoting floor to ceiling heights, suspended ceilings, raised access floors, floor levels											✓	✓
-	2.13	1:100 departmental layouts and 1:50 room layouts											✓	✓
-	2.14	1:200 Architectural drawings detailing (i) movement strategy, (ii) user flow diagrams at all principal circulation locations, (iii) movement interfaces and (iv) analysis of key nodal points.											✓	✓
-	2.15	1:50 architectural sections through Roof and Plant Room											✓	✓
-	2.16	1:100 architectural proposals relative to the clinical requirements and infection control.											✓	✓

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-	2.17	1:200 architectural drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.							✓	✓
-	2.18	DDA Proposals including drawings, analysis and proposals.							✓	✓
-	2.19	AEDET assessment drawings							✓	✓
-	2.20	1:50 Architectural design response detailing interfaces with existing RIE							✓	✓
-	2.21	1:100 Architectural drawings and visualisations for the Pod proposals							✓	✓
-	2.22	1:50 Architectural elevations and visualisations showing the Entrances							✓	✓
-	-	-							-	-
-	3	Approach to Design & Construction – Interior Design Proposals							-	-
-	3.1	Quality, appropriateness and proposals for RHSC interior design supported by architectural drawings of how the layout and the design proposed addresses:							-	-
-	3.1.1	–Signage							✓	✓
-	3.1.2	–Patient, communal and public areas							✓	✓
-	3.1.3	–Appropriateness of facilities for users							✓	✓
-	-	Loaded 1:50 room layout drawings indicating interior design proposals and demonstrating the co-ordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.							✓	✓
-	3.2	Quality, appropriateness and proposals for DCN interior design supported by architectural drawings of how the layout and the design proposed addresses:	-	-	-	-	-	-	-	-
-	3.2.1	–Signage	-	-	-	-	-	-	✓	✓
-	3.2.2	–Patient, communal and public areas	-	-	-	-	-	-	✓	✓
-	3.2.3	–Appropriateness of facilities for users	-	-	-	-	-	-	✓	✓
-	3.3	Loaded 1:50 room layout drawings indicating interior design proposals and demonstrating the co-ordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.	-	-	-	-	-	-	✓	✓
-	3.4	Internal Perspectives at eye level that demonstrate form and setting of the key internal architectural areas, distinguishing or innovative features which demonstrate the design quality of the proposals.	-	-	-	-	-	-	✓	✓
-	-	Drawings and visualisations to demonstrate the integration of Artwork into the interior design concept	-	-	-	-	-	-	✓	✓
-	-	Sample boards to demonstrate the proposed interior finishes, colours and textures. Boards to include RHSC and DCN Wards, the Pod, Atrium and CAMHS.	-	-	-	-	-	-	✓	✓
-	-	-	-	-	-	-	-	-	-	-
-	4	Approach to Design & Construction – Civil & Structural Proposals	-	-	-	-	-	-	-	-
-	4.1	Structural Drawings Schedule							✓	✓
-	4.2	Civil Engineering Drawings Schedule							✓	✓

-	4.3	Outline Structural Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS specification							✓	✓
-	4.4	1:500 Site plan layout indicating all manholes, gully positions for all site drainage							✓	✓
-	4.5	1:500 Site plan layout indicating all positions for surface water drainage							✓	✓
-	4.6	1:500 Site plan layout indicating all positions for foul water drainage							✓	✓
-	4.7	1:500 Site plan layout indicating all positions for water mains							✓	✓
-	4.8	1:500 Site plan layout indicating all positions for roads, footpaths and finished levels							✓	✓
-	4.9	1:100 structural general arrangement foundation plans							✓	✓
-	4.1	1:100 structural general arrangement plans including floor and roof plans indicating all column and beam locations and sizes and all structural elements							✓	✓
-	4.11	1:100 structural sections through the building showing structural elements and service zones	-						✓	✓
-	4.12	Confirmation of Geotechnical surveys, reports, studies undertaken [in addition to the Geotechnical survey in the data room]	-						✓	✓
-	4.13	Confirmation of other site surveys, reports, studies undertaken [in addition to the information already located in the data room]	-						✓	✓
-	4.14	Confirmation of any vibration monitoring / prevention proposals.	-						✓	✓
-	4.15	1:100 drawings for the Helipad	-						✓	✓
-	4.16	Outline Structural Specification supporting the Helipad design concept including proposed materials and components to be used. Outline specification shall be included for all components in accordance with the NBS specification.	-						✓	✓
-	-	-	-	-	-	-	-	-	-	-
-	5	Mechanical & Electrical Services	-	-	-	-	-	-	-	-
-	5.1	Building services (mechanical) drawings schedule							✓	✓
-	5.2	Building services (electrical) drawings schedule							✓	✓
-	5.3	Outline Building services (mechanical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification							✓	✓
-	5.4	Outline Building services (electrical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification							✓	✓
-	5.5	1:500 site plan layout indicating all mechanical services, utilities supplies, natural gas mains, water supply and fire mains							✓	✓
-	5.6	1:500 site plan layout indicating all electrical utilities supplies, electrical mains, data and comms ducts							✓	✓

-	5.7	1:200 internal services concept schematic and zoning plans for both heating and ventilation; indicating of heating and ventilation in each room							✓	✓
-	5.8	1:100 mechanical general arrangement floor plans showing extent of services, distribution routes, mechanical plant acoustic treatment, plant areas, etc.							✓	✓
-	5.9	Mechanical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed:							✓	✓
-	5.9.1	Plant strategy							✓	✓
-	5.9.2	Distribution strategy							✓	✓
-	5.9.3	Incoming gas and water services (including metering and sub metering)							✓	✓
-	5.9.4	Environmental design considerations							✓	✓
-	5.9.5	Heat sources							✓	✓
-	5.9.6	Natural Ventilation strategy							✓	✓
-	5.9.7	Mechanical Ventilation strategy							✓	✓
-	5.9.8	Mechanical cooling							✓	✓
-	5.9.9	Mechanical air conditioning							✓	✓
-	5.9.10	Specialist ventilation strategy							✓	✓
-	5.9.11	Domestic hot and cold water system							✓	✓
-	5.9.12	Space Heating System							✓	✓
-	5.9.13	Space Cooling System							✓	✓
-	5.9.14	Building Energy and Management System							✓	✓
-	5.9.15	Dry Risers							✓	✓
-	5.9.16	Soil and Waste System (above and underground)							✓	✓
-	5.9.17	Rainwater pipework and distribution							✓	✓
-	5.9.18	Specialist drainage							✓	✓
-	5.9.19	Sanitary ware and appliances							✓	✓
-	5.9.20	Dry Risers							✓	✓
-	5.9.21	Natural Gas Installations including laboratory gases							✓	✓
-	5.9.22	Medical Gas Installations							✓	✓
-	5.9.23	Pneumatic Tube System								
-	5.9.24	Mechanical Commissioning Strategy							✓	✓
-	5.10	1:100 electrical general arrangement floor plans showing extent of services, distribution routes, plant areas, etc							✓	✓

-	5.11	Electrical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed:							✓	✓
-	5.11.1	Incoming electrical services							✓	✓
-	5.11.2	Metering and Sub-metering							✓	✓
-	5.11.3	Mains distribution including standby generation facilities							✓	✓
-	5.11.4	Earthing, Bonding and Lightning protection							✓	✓
-	5.11.5	Containment systems							✓	✓
-	5.11.6	Small power installation							✓	✓
-	5.11.7	Lighting and Emergency Lighting							✓	✓
-	5.11.8	Specialist lighting							✓	✓
-	5.11.9	Lighting control systems							✓	✓
-	5.11.10	Uninterruptible Power Supplies							✓	✓
-	5.11.11	Telecommunications and I.T.							✓	✓
-	5.11.12	Nurse Call System							✓	✓
-	5.11.13	Fire Detection and Suppression System							✓	✓
-	5.11.14	Staff Attack / Induction Loop							✓	✓
-	5.11.15	Security system							✓	✓
-	5.11.16	Access Control system							✓	✓
-	5.11.17	CCTV system							✓	✓
-	5.11.18	Public address system							✓	✓
-	5.11.19	Digital TV and Radio Installation							✓	✓
-	5.11.20	Patient / Equipment Tagging							✓	✓
-	5.11.21	Induction Loop							✓	✓
-	5.11.22	Bedhead Services							✓	✓
-	5.11.23	Electrical Commissioning Strategy							✓	✓
-	5.12	1:50 mechanical and electrical services sections to illustrate use of ceilings, natural daylight, ventilation strategies, cooling and heating strategies, lighting strategy, acoustic strategy, specialist installations strategy, services concept							✓	✓
-	-	-	-	-	-	-	-	-	-	-
-	6	Lift Provisions	-	-	-	-	-	-	-	-
-	6.1	Lift and Escalator Drawings Schedule							✓	✓

-	6.2	Outline Building services (lift and escalator provision) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification. Traffic flow analysis to be included.							✓	✓
-	-	-							-	-
-	7	Environmental Services and Energy Management Strategy							-	-
-	7.1	Natural Ventilation drawings and proposals							✓	✓
-	-	-							-	-
-	8	Fire Strategy							-	-
-	8.1	1:100 Fire Strategy drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code							✓	✓
-	8.2	Outline Fire Strategy Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification							✓	✓
-	-	-							-	-
-	9	Security Strategy							-	-
-	9.1	1:100 Security drawings in support of security strategy and how the security proposals support the design concept							✓	✓
-	9.2	Outline Security Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification							✓	✓
-	-	-							-	-
-	10	Acoustic Strategy							-	-
-	10.1	Outline Acoustic Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification							✓	✓
-	-	-							-	-
-	11	Adaptability, Flexibility and Expandability Strategy							-	-
-	11.1	Architectural adaptability drawings in support of the overall adaptability strategy							✓	✓
-	11.2	Strategy and drawings showing how the design of the new RHSC and DCN demonstrates innovation, flexibility, consideration of whole life design and is capable of absorbing reasonable change in the future without excessive public, patient or clinical disruption							✓	✓
-	-	-							-	-
AP1.2	-	Specifications as described.							✓	✓
-	-	-							-	-
-	-	-							-	-

~~Appendix B (i) – Financial Agenda Topics and Submission Requirements~~

~~1. – Dialogue Meeting 1: Agenda Topics and Submission Requirements~~

Appendix A (iv) – Specifications

Meeting	Topics	Deliverable
Preparation for Financial Meeting Appendix A (iv)	<ul style="list-style-type: none"> Funding strategy Approach to surpluses/buffers <ul style="list-style-type: none"> • Risk capital 	<p>A Submission covering the following topics:</p> <ul style="list-style-type: none"> intended funding strategy, addressing 11 and 12 in Financial Submission requirements below. intended approach to surpluses/buffers, addressing 7 below; <p>approach to risk capital addressing 15 below. <u>Specifications</u></p> <p><u>Bidders shall provide specific details on their proposed suite of specifications for the Works. These details shall include, but not be limited to the following:</u></p> <ol style="list-style-type: none"> <u>i. The industry recognised specifications proposed, with specific commentary on the extent of application of those to each main discipline (civil / structural, M&E, architectural etc);</u> <u>ii. Inclusion of either Project specific specifications for each main discipline, or example specifications used on other projects that are representative of the level of detail and clearly demonstrate the proposed level of quality that will apply to this scheme: and</u> <u>iii. A statement confirming that all such specifications (including fully completed framework specifications) will be fully drafted by the Preferred Bidder prior to Financial Close.</u>

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		<p><u>For the avoidance of doubt, the Board is expecting Bidders to adopt both general, and where required, specific specifications to cover all components, materials, workmanship etc. For example the NBS framework could be utilised for mainstream building elements, however may need to be supplemented by specific standards and specifications relevant to particular Bidder proposals (e.g. piling, steelwork erection, infrastructure works).</u></p>
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<p>Financial Meeting 1</p>	<ul style="list-style-type: none"> ● Funding strategy ● Approach to surpluses/buffers ● Risk capital 	<p>Presentation of Submission described above:</p>
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2. Dialogue Meeting 2: Agenda Topics and Submission Requirements

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Appendix A (v) – Technical Cost Proformas

[See separate Excel file]

Appendix A (vi) – Change Protocol

Annex 1 to Appendix A (vi) – Description of Potential Equalisation Adjustment for Change Protocol

Bidders to note the following points in relation to the Appendices to Schedule Part 16 Change Protocol:

1. Notional fixed quantities have been applied to the attached Appendices of Schedule Part 16 - Change Protocol.
2. The notional fixed quantities will be applied automatically to the bidder's rates to obtain the annual cost of the bidders Appendices of Schedule Part 16 - Change Protocol submissions.
3. As described at paragraph 5.7.1 (c) (Economic Cost) of Volume 1 of the ITPD, the Board will apply the annual cost over the 25 year concession period.
4. A probability factor will be applied to the annual cost of each Bidder's proposals, with the probability being a maximum of 20% in any year, to reflect the likelihood that the full value of change will not apply to each and every year but will vary across the contract period. With respect to the proposed probability factor, the Board confirms that the same factors will be applied to all three Bidder.
5. The resulting risk adjusted annual values will be discounted by 3.5% (real) to derive a NPV that will form the Equalisation Adjustment to be applied.
6. The notional quantities will be removed prior to Financial Close and will not form part of the catalogue for the operational period and as such should not be assumed to be the level of works required during the contract period.
7. When completing Appendix 1 Part 1 bidders should ensure that the Timescales section of the Appendix are completed with reference to the drafting in Schedule part 16.
8. The population of these catalogues is for evaluation purposes only through a potential Equalisation Adjustment, which shall be calculated pursuant to the above description. At the preferred bidder stage the catalogue will be developed further to reflect the full range of specifications within the preferred bidders design, any additional rates will be benchmarked against the bidders original rates proposed at Final Tender.
9. It is recognised that each Bidder will be applying different product solutions and it is for the Bidder to decide the appropriate product(s) from their catalogue to be inserted into the change workbook which is only to be utilised for evaluation purposes. This should be based on bidders' experience of the most likely product(s) to be required under change control noting;

Appendix 2, Part 1 – column for Bidder Priced Product Description, to allow bidders to specify the product they have used for pricing each line item within the table.

Appendix 2, Part 2 – Revised the responsible party for a number of items to correctly reflect the costing requirements for lifecycle works.

Annex 2 to Appendix A (vi) – Schedule Part 16 Change Protocol Proformas

[See separate Excel file]

Appendix B (i) – Financial Submission Requirements

Bidders should provide their responses to the questions below in a separate document labelled ‘Financial Submission’. Where possible, the responses should be contained in a single document, with the use of separate annex documents avoided if it is possible to include the relevant information in the main text without causing difficulties in formatting or document size.

Me eti ng Re f	<u>Topics Required Response</u>	P e r f o r m a n c e
F1	<p>Potential Funders</p> <p>Bidders should provide details of funders that the Bidder would intend to involve in a Preferred Bidder Funding Competition. This shortlist should include as wide a range of potential funding solutions as is practical and should include capital markets solutions.</p> <p>Bidders should submit summary details of the funding terms being proposed by these funders within Final Tenders for information purposes only. Letters of support should be submitted from funders to be included in the funding competition.</p>	
F2	<p>Funding Competition Methodology</p> <p>The Bidder’s response should set out how value for money will be secured between funding options and/or funding providers, during the Preferred Bidder Funding Competition.</p> <p>This should take the form of a proposed Funding Competition methodology, to be based on the protocol set out in Appendix B6 below, that will be applied in order to secure the required funding after Preferred Bidder appointment, including timescales that will apply.</p>	
F3	<p>Programme to Financial Close</p> <p>The Bidder should describe any additional funding-specific actions or issues between Tender submission and Financial Close over and above those described in the answer to question B15.</p> <p>Except where already provided in the response to question B15, evidence must be provided that potential providers of finance to Project Co have accepted the proposed timetable in principle and that adequate resource will be available to ensure the timetable is met.</p> <p>Where possible, and again except where already covered in the response to question B15, Bidders should provide a clear statement on the level of approval process and timescale that will be required from the respective lending organisations.</p>	
F4	<p>Exclusivity</p> <p>Bidders should provide a statement confirming that they have not entered/will not enter into any exclusivity arrangements with funders before Preferred Bidder appointment.</p>	
F5	<p>Risk Capital Information</p>	

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Meeting Ref	<p>Topics <u>Required Response</u></p>
	<p>The Bidder must submit the following information for each type of risk capital to be raised:</p> <ul style="list-style-type: none"> • <u>Identity of the investors</u> • <u>Amounts to be subscribed by each investor and the timing thereof</u> • <u>Terms and conditions of the subscription including return requirements and/or coupon rights (shareholder agreement or detailed term sheet)</u> • <u>Mezzanine interest rates if applicable</u> • <u>Terms and any other agreements between the Investors in their capacity as investors in the Project Co</u> • <u>Any other rights attaching to this subscription</u> • <u>An undertaking that no additional margins or charges will apply that have not already been disclosed and included in the Financial Model</u> • <u>The length of time each class of risk capital will remain in the project vehicle</u> • <u>The extent to which the funds are committed. The Bidder is required to produce the strongest form of commitment possible. The level of commitment should be demonstrated through the provision of Board minutes or letters of support from the sponsors committing to subscribe subordinated debt on the terms identified above.</u>
<p>P r e p a r e d f o r f u n d e r s</p>	<p>A Submission covering the following topics:</p> <ul style="list-style-type: none"> • <u>approach to hedging (18 below);</u> • <u>Bidder initial views of payment mechanism, addressing 21 below;</u> • <u>Level of funder commitment obtained to date, progress on due diligence and approach between now and close to those issues, addressing 17, 19 and 20 below;</u> <p>Update on progress on areas discussed in Meeting 1, where relevant. <u>Due Diligence</u></p> <p>The Bidder should indicate the extent of the funder due diligence that has been carried out to date and the overall scope and timetable of funder due diligence up to Financial Close. In addition to the provider of senior debt, the response should cover due diligence required by any third party provider of subordinated debt funds.</p> <p>Bidders should provide completed versions of the diligence certification appended to this document at Appendix B3 below for legal and technical diligence advisors, to the effect that they have carried out work as if acting on behalf of funders and have raised all of the issues that they would normally expect funders to have raised in assessing the Bidders' proposals.</p> <p>Bidders should submit any diligence reports available in support of the certification.</p> <p>A model audit is not required at this stage. However, Bidders should indicate whether a model auditor has been appointed and if so, what scope of services has been agreed.</p> <ul style="list-style-type: none"> • <u>Bidders should indicate their acceptance of the risk that the model audit may prove the Annual Service Payment to be incorrect, and that they may not pass any additional costs on to the Board.</u>

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<u>Me eti ng Re f</u>	<u>Topics</u> <u>Required Response</u>	<u>Re f er en ce</u>
<u>i a t e e t t e r e n c e</u>		

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Meeting Reference	Topics Required Response	Delet
F7	<p><u>Security Package</u></p> <p><u>Bidders should provide full details of the security required to support their proposals, including parent company guarantees, bonding, letters of credit, liquidated damages and liability caps, and set out full details of the pricing assumed for such a security package. This should be done by completing the table included in Appendix B5.</u></p> <p><u>Bidders should confirm that they will bear the risk of pricing of the security package relating to senior debt as contained with the Bidder's submitted Financial Model.</u></p> <p><u>Bidders should describe the process undertaken to establish the security package and pricing proposed and set out how they have satisfied themselves that they are able to bear the risk of any change in pricing.</u></p> <p><u>Security Package for Capital Market Solution</u></p> <p><u>Bidders should provide detailed pricing information for the security package required for a capital market solution, based on discussions with potential providers of funding from this source and clearly demonstrating the level of internal approval already obtained or required to secure such pricing. Bidders should complete the table included at Appendix B5. Evidence to support the pricing presented, such as letters from brokers or bondsmen, should be provided in support of this information.</u></p> <p><u>Bidders should describe how pricing of the package might change if the sizing of the security package alters, for example, if a 15% performance bond is required.</u></p> <p><u>Bidders should clearly set out in their proposals the trigger point for any change in junior debt structure or timing that may come as a result of the use of a capital funded solution. For example, Bidders should indicate the tolerance within which any change in the timing, structure or amount of junior debt would allow that Bidder to keep to its final tender IRR.</u></p> <p><u>Bidders should identify any security package requirements that would be unacceptable.</u></p>	
F8	<p><u>Financial Model</u></p> <p><u>The Bidder should provide a narrative statement describing the key outputs of the Financial Model, including Annual Service Payment (both real and nominal in the first full year of operations); NPV of ASP and surpluses, summary of pass-through costs, sources and uses of funds and key assumptions.</u></p> <p><u>The Bidder is required to submit the Financial Model from which the key output information is derived which complies with the authority term sheet in Appendix B4 and the key assumption and format requirements set out in section 3.9 of IFT Volume 1.</u></p>	
F9	<p><u>Databook</u></p> <p><u>The Bidder is required to provide a databook and user guide supporting the Financial Model for the Financial</u></p>	

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Me eti ng Re f	Topics Required Response	Re f er en ce
	Submission, as set out in section 3.9 of IFT Volume 1.	
F1 0	<p>Proformas</p> <p>The proforma financial information requirements are included in Appendix B2 below.</p> <p>The information is the minimum requirement. Where the Bidder needs to provide additional information in order to provide a higher level of understanding of the individual components of the submission such additional information should be provided.</p>	
F1 1	<p>Tax and Accounting Risk</p> <p>The Bidder should provide confirmation that they will underwrite and accept all risk relating to the tax and accounting adopted within the Financial Model.</p>	
F1 2	<p>Advisor Opinion</p> <p>Bidders should submit a formal letter from their tax advisers or suitably qualified professional from within the Bidder's own organisation confirming that in their opinion the proposed tax treatment (including corporation tax, treatment of surpluses, VAT and SDLT) is valid and that any required accounting treatments underpinning the tax treatment would be within the appropriate accounting standards. This opinion should set out the basis for the treatments adopted, and identify any risks associated with it.</p>	
F1 3	<p>Detailed Tax Assumptions</p> <p>Bidders should identify assumptions in relation to taxation including the following:</p> <ul style="list-style-type: none"> • Bidders must specify the corporation tax rates assumed, including any marginal relief (if appropriate) and confirm that consideration has been given to changes to the standard rate of corporation tax included in the Finance Act 2011 and announcements in the 2012 Autumn Statement. • Bidders should specify the assumptions made in respect of the commencement and cessation of trade for tax purposes, including any tax relief assumed for pre-trading interest costs. • Bidders should specify the assumptions made in respect of deductibility or non-deductibility of revenue costs, including in respect of construction costs, transaction costs, such as bid costs, development costs, planning costs and legal fees. • Bidders are required to specify the assumptions made in respect of the tax treatment of capital expenditure, (including in respect of lifecycle costs and any intangible fixed assets) including amounts of expenditure allocated to the different capital allowance pools, amounts assumed to be non-qualifying for capital allowances, the rate of writing down allowance claimed and details of any capital allowances disclaimed. • Bidders are required to categorise taxable profits by type, such as trading profits, interest, and other non-trading profits or losses. The categories of taxable income should be appropriately ring-fenced (e.g. when carrying forward losses). • Bidders must specify any assumptions made in respect of the tax treatment of capitalised interest. • The application of transfer pricing legislation in the UK can have implications for PPP/PFI projects, 	

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Meeting Re f	<u>Topics Required Response</u>	Re f
	<p><u>particularly around the tax treatment of subordinated debt and corporate debt interest charges. Bidders should consider the implications of this aspect of corporation tax on their proposals and confirm that any such implications have been considered.</u></p> <ul style="list-style-type: none"> • <u>Bidders should consider the potential implications of the worldwide debt cap in respect of the deductibility of interest costs and confirm that any such implications have been taken into account in pricing the project.</u> • <u>Bidders should provide a statement setting out their assumptions in respect of the tax treatment of any other income or capital contributions received.</u> • <u>Bidders should provide a statement setting out any tax assumptions made concerning timing of payments of corporation tax.</u> • <u>Bidders must make their own decisions as to whether or not to seek advanced tax clearance from HMRC for any aspect of the proposed treatment. If such clearance is sought, Bidders must attach the appropriate correspondence to their submission. If the Bidder is relying on an advanced clearance from HMRC, this will need to be provided before contract signature and Financial Close.</u> • <u>Bidders are required to state any VAT assumptions made and the basis for these assumptions (including VAT implications in relation to land transactions where applicable).</u> • <u>Bidders should consider the implications of SDLT on their proposals if relevant. Any SDLT costs should be included within the Financial Model along with an accompanying statement explaining how it is calculated.</u> 	
F1 4	<p><u>Bid Validity</u></p> <p><u>Bidders should confirm that they will maintain underlying construction, operating, FM and Project Co costs for a period of three months from the target Financial Close date with no adjustment for inflation.</u></p> <p><u>Bidders should confirm that only capital, lifecycle and facilities management costs will increase post-validity period and that they will use all reasonable endeavours to mitigate the impact of any cost increases post validity period.</u></p> <p><u>Bidders should provide specific cell references in the Financial Model that define which costs will increase post validity period.</u></p> <p><u>Bidders should specify which cost index or indices they require costs to be inflated in the post validity period. Note should be taken of the indexation regime that will be applied to Scottish Government support in relation to the construction cost cap.</u></p>	
F1 5	<p><u>Surplus Treatment</u></p> <p><u>Bidders should describe in detail the tax and accounting treatment applied to any surpluses in the Financial Model.</u></p> <p><u>Bidders should also set out the approach taken to the creation of any cash buffer, with reference to paragraph 3.8.6 of this IFT document.</u></p>	

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Meeting Ref	Topics Required Response	
E16	<p><u>Hedging</u></p> <p>Financial Meeting 2The Bidder must set out clearly its proposal in relation to financial risk, Financial Close and any hedging arrangements required to support the project. The following details should be provided:</p> <ul style="list-style-type: none"> • <u>The manner in which the Bidder will address the risk of future movements on interest rates, including a full description of its interest rate hedging to be applied.</u> • <u>The time period over which hedges are expected to be in place.</u> • <u>Details of any financial instruments that will be used to provide protection against interest rate movements and the cost/effect of such protection should be reflected in the Financial Model.</u> • <u>Confirmation that the Project Co will bear all interest rate risk in respect of its borrowings once Financial Close is achieved.</u> • <u>Confirmation that the Bidder (and subsequently Project Co) will bear all foreign exchange risk.</u> • <u>The manner in which the Bidder will address the risk of future movements in the Retail Price Index (RPI). The Board does not expect that any Bidder's funding solution will require the use of RPI hedging instruments. The Financial Model submission should clearly demonstrate the proportion of costs that are fixed, the proportion subject to inflation and the basis upon which the Bidder has set the proportion of Annual Service Payment that will be subject to inflation.</u> • <u>Confirmation of the acceptance of the principle of benchmarking of hedging instruments (including GICs where appropriate) at Financial Close.</u> • <u>The Bidder should identify the broad approach they will utilise in setting the underlying funding rate at Financial Close ensuring transparency and best value for The Board.</u> 	

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Me eti ng Re f	<u>Topics</u> <u>Required Response</u>	P e t i v e r a t i o n
E1 Z	<p><u>Payment Mechanism</u></p> <p><u>The Bidder should confirm, in relation to the payment mechanism schedule and thresholds for warning notices and termination in clauses 24 and 41, that:</u></p> <ul style="list-style-type: none"> <u>the sponsors support the bid position</u> <u>the bid position is acceptable to FM sub-contractors</u> <u>appointed funder technical advisors have reviewed the bid position and have included all relevant comments in their due diligence report</u> <u>the Bidder will work with the Board in agreeing the bid position with funders appointed as a result of the funding competition</u> 	

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Appendix B (ii) – Financial Proformas

[See separate Excel file]

Appendix B (iii) – Due Diligence Certification

Part 1 - Funder's Technical Adviser: Draft Certificate

As per Question F6 of the Financial Submission Requirements, The Board requires that this certificate is signed by the technical adviser who has carried out the funder's technical due diligence exercise for the purposes of the Final Tender.

We were appointed by [Insert name of Bidder] to carry out funder due diligence on the Final Tender Submission ("Funder's Technical Due Diligence").

We were appointed to undertake the following scope of work and confirm that this has been completed.

a) _____ [Insert Scope of work here]

We confirm that this is the level of technical due diligence we would expect to carry out on behalf of a funder for a project of this type at this stage.

We confirm that we have undertaken due diligence on the calibration of the Payment Mechanism and that any matters which we have raised as a result of the due diligence we have carried out have been raised and discussed with the Board during the Dialogue Period and have been included within [Insert name of Bidder]'s Final Tender submission.

Approved Signatory of technical adviser: _____

Name of company: _____

Date

3. ~~Dialogue Meeting 3: Agenda Topics and Submission Requirements~~

: _____

Part 2 - Funder's Legal Adviser: Draft Certificate

As per Question F6 of the Financial Submission Requirements, The Board requires that this certificate is signed by the legal adviser who has carried out the funder's technical due diligence exercise for the purposes of the Final Tender.

We were appointed by [Insert name of Final Bidder] to carry out funder due diligence on the Final Tender Submission ("Funder's legal Due Diligence").

We were appointed to undertake the following scope of work and confirm that this has been completed.

a) _____ [Insert Scope of work here]

We confirm that this is the level of legal due diligence we would expect to carry out on behalf of a funder for a project of this type at this stage.

We confirm that any matters which we have raised as a result of the funder due diligence we have carried out have been raised and discussed with the Board during dialogue and are included within [Insert name of Final Bidder]'s Final Tender submission.

Approved Signatory of legal adviser: _____

Name of company: _____

Date: _____

Appendix B (iv) – Term Sheets

<u>Meeting</u>	<u>Topics</u> <u>Commercial Bank(s)</u>	<u>Deliverable</u> <u>EIB</u>
<u>Senior Term Loan</u>	50% of the Senior Funding Requirement.	50% of the Senior Funding Requirement up to a maximum of £98.81 million.
<u>Gearing</u>	To be no more than 90% at Financial Close.	
<u>Debt tail</u>	2 years	
<u>Preparation Financial Meeting</u> <u>Repayment</u>	<ul style="list-style-type: none"> ▲ Financial Model ▲ Tax and accounting ▲ Bid validity ● <u>Databook</u> ▲ Sensitivities ▲ Working capital ● 	<p>A Submission covering the following topics:</p> <ul style="list-style-type: none"> ▲ The Financial Model, its structure and operation; ▲ Key model inputs and assumptions; ▲ Key model outputs, including presentation of initial Annual Service Payment to proposals and response to 1, 8 and 9 below; <p>Update as required on other areas. The Senior Term Loan shall be repaid in accordance with the agreed repayment schedule reflected in the Base Case Financial Model and the Facility Agreement, which will be a 6-monthly sculpted schedule.</p>
<u>Facility Margins</u>	<p>LIBOR assumed to be 4.00%</p> <p>Construction: LIBOR plus 2.80% p.a.</p> <p>Operations Yrs 1 - 8: LIBOR plus 2.50%</p> <p>Operations Yrs 9 - 15: LIBOR plus 2.80%</p> <p>Operations Yrs 16 - 20: LIBOR plus 3.00%</p> <p>Operations Yrs 21+: LIBOR plus 3.20%</p> <p>Equity Bridge (if in use): 1.75%</p>	5.50% p.a. throughout.
<u>Hedging Credit Spread</u>	Interest rate swap: 0.28%	n/a
<u>MLAs</u>	2 bps	n/a
<u>Arrangement Fee</u>	2.30 %	1.00%
<u>Financial Meeting</u> <u>Commitment Fee</u>	Outstanding issues 40% of the applicable margin	Presentation of Submission described above. Discussion of outstanding issues. 45bps
<u>Agency Fee</u>	£35,000 p.a. indexed	n/a
<u>Cover Ratios</u>	<p>Base Case Minimum ADSCR: 1.20</p> <p>Base Case Average ADSCR: 1.20</p> <p>Minimum LLCR: 1.20</p>	

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	<p style="text-align: center;"><u>Lock Up ADSCR: 1.10</u> <u>Lock Up LLCR: 1.15</u></p> <p style="text-align: center;"><u>Default Minimum ADSCR: 1.05</u> <u>Default Minimum LLCR: 1.10</u></p>
<u>Reserve Accounts</u>	<p><u>A Debt Service Reserve Account to cover 6 months debt service.</u></p> <p><u>A Maintenance Reserve Account to provide a 3 year look-forward reserve mechanism on a 100%/66%/33% basis.</u></p>

4. ~~Dialogue Meeting 4: Agenda Topics and Submission Requirements~~**Project Ratios – Definitions**

For the purpose of this Term Sheet, cover ratios shall be defined as follows:

Annual Debt Service Cover Ratio (ADSCR) - (Backward and Forward looking)

The ADSCR is calculated looking back 12 months from the testing date and looking forward 12 months from the testing date and is calculated as the Available Cash Flow divided by the Debt Repayments.

Available Cash Flow comprises:

<u>Meeting Include</u>	<u>TopicsDeduct</u>	<u>Deliverable</u>
<u>Unitary Payment</u>		<u>Service provider operating costs</u>
<u>Current account balance</u>		<u>SPV operating expenditure</u>
<u>Preparation for Financial Meeting 4</u>	<p>All other areas of Financial Submission</p> <p><u>Receipt of third party revenue</u></p>	<p>A Submission covering all remaining areas of Financial Submission not covered in previous meetings, addressing 2, 3, 4, 5, 6, 9, 10, 14, 16 and 22 below.</p> <p><u>Life-cycle costs</u></p>
<u>Financial Meeting 4</u>	<p>All other areas of Financial Submission</p> <p><u>Cash receipts from sale of tax losses</u></p>	<u>Presentation of Submission described above. Taxes</u>
<u>Positive changes in working capital</u>		<u>Negative changes in working capital</u>
<u>Releases from Reserve Account(s)</u>		<u>Payments to Reserve Account(s)</u>
<u>Interest received on cash deposits</u>		

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5. ~~Dialogue Meeting 5: Agenda Topics and Submission Requirements~~

Debt Repayment comprises:

Senior debt principal repayments plus senior debt interest payments for the 12 months prior to the testing date for a backward looking ADSCR and 12months from the testing date for a forward looking ADSCR.

Loan Life Cover Ratio

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Net present value of forecast available cash from the testing date until the final repayment date of the senior debt discounted to the testing date at the weight average cost of the senior debt plus all cash balances **divided by** total senior debt outstanding at the calculation date.



Европéиска инвестициона банка
 Erropíská investiční banka
 Den Europæiske Investeringsbank
 Euroopaiste Investitionsbank
 Euroopa investeerimispank
 Ευρωπαϊκή Τράπεζα Επενδύσεων
 European Investment Bank
 Banco Europeo de Inversiones
 Banque européenne d'investissement
 Banca europea per gli investimenti
 Eiropas Investīciju banka
 Europos investicijų bankas
 Európai Beruházási Bank
 Bank Europew tał-Inwestiment
 Europese investeringsbank
 Europejski Bank Inwestycyjny
 Banco Europeu de Investimento
 Banca Europeană de Investiții
 Európska investičná banka
 Evropska investicijska banka
 Euroopan investointipankki
 Europeiska investeringsbanken

NHS Lothian
 Waverley Gate
 2-4 Waterloo Place
 Edinburgh
 EH1 3EG
 UK

For the attention of: Susan Goldsmith, Director of Finance

By courier

Luxembourg, 04 December 2013

OPS A/WE-2/2013-0200/FR/vdb

Ref.:

Royal Hospital for Sick Children (RHSC), Child and Adolescent Mental Health Service (CAMHS) and the Department of Clinical Neurosciences (DCN).

Dear Madam,

The European Investment Bank ("EIB") is pleased to respond to the request of the NHS Lothian (the "Authority") to write in support of the financing proposal for the Royal Hospital for Sick Children (RHSC), Child and Adolescent Mental Health Service (CAMHS) and the Department of Clinical Neurosciences (DCN), (the "Project").

The EIB's Board of Directors have approved in principle a loan to the Project for an amount of up to GBP 98.81 million. This letter does not represent a binding commitment by EIB to provide financing to the Authority, or the Project, and any financing and participation by EIB will be subject to satisfactory due diligence, terms and documentation, including but not limited to the various conditions referred to below.

The commitment to fund the Project would be made at financial close and before providing such commitment EIB would need to be satisfied that various conditions have been fulfilled including, inter alia:

- (i) we have completed satisfactory due diligence in relation to the Project and that the structure and terms of all project and finance documentation are satisfactory to us;
- (ii) we have agreed the commercial arrangements and documentation with the preferred bidder, the sponsors/contractors and the other debt providers;
- (iii) the proposed loan achieves an acceptable internal loan grading and risk profile;
- (iv) that we have received the necessary internal credit and other approvals; and



(v) the relevant conditions precedent have been fulfilled to EIB's satisfaction.

This letter shall not create any legal relations.

More information on these projects can be found on www.eib.org

EIB looks forward to working with the Authority on the implementation of this Project.

This letter shall be governed by and construed in accordance with English law.

Yours faithfully,

EUROPEAN INVESTMENT BANK

[Redacted signature block]

P. Jacobs

F. Rizzi

Appendix B (v) – Security Package Pricing

<u>Meeting</u>	<u>Topic</u> <u>Bank/EIB</u> <u>Solution</u>	<u>Deliverable</u> <u>Wrapped</u> <u>Bond</u>	<u>Unwrapped Bond</u>
<u>Liability Cap</u>	<u>Details to be provided</u>	<u>50%</u>	<u>50%</u>
<u>Preparation for Financial Meeting</u> <u>Letter of Credit</u>	<u>Amount required</u> <u>Institution providing the Letter of Credit and associated rating</u> <u>Annual cost (nominal) in % terms</u> <u>Resulting total cost as used in financial model</u>	<u>Update on previous Submissions</u> <u>Identification of areas requiring Dialogue prior to Draft Final Tender</u> <u>10 % Letter of Credit from institution with minimum rating from S&P of A-</u> <u>Annual cost (nominal) in % terms</u> <u>Resulting total cost</u>	<u>A written update of any changes to previous Submissions.</u> <u>A schedule of areas requiring further Dialogue before Draft Final Tenders are invited</u> <u>20 % Letter of Credit from institution with minimum rating from S&P of A-</u> <u>Annual cost (nominal) in % terms</u> <u>Resulting total cost</u>
<u>Performance Bond</u>	<u>Amount of Performance Bond required</u> <u>Institution providing the Performance Bond and associated rating</u> <u>Annual cost (nominal)</u> <u>Total cost</u>	<u>10 % Liquid performance bond:</u> <u>Annual cost (nominal)</u> <u>Total cost</u>	<u>10 % Liquid performance bond:</u> <u>Annual cost (nominal)</u> <u>Total cost</u>
<u>Parent Company Guarantees</u>	<u>Details to be provided</u>		
<u>Financial Meeting</u> <u>Equity bridge loan</u>	<u>Update on previous Submissions</u> <u>Identification of areas requiring Dialogue prior to Draft Final Tender</u> <u>If in use, details of security package requirements to be provided</u>	<u>Presentation of Submission described above.</u>	
<u>Other</u>	<u>Please detail any other Bidder-specific lender security package requirements (during construction or operations)</u>	<u>Please detail any other Bidder-specific lender security package requirements (during construction or operations)</u>	<u>Please detail any other Bidder-specific lender security package requirements (during construction or operations)</u>
<u>Rating Agency</u>	<u>n/a</u>	<u>Upfront and annual monitoring costs to be</u>	<u>Upfront and annual monitoring costs to be</u>

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<u>costs</u>		<u>provided (for information only)</u>	<u>provided (for information only)</u>
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Appendix B (vi) – Funding Competition Protocol

Objectives of the Funding Competition

The primary objective of the Funding Competition is to identify competitive proposals for senior debt funding for the Project which:

- are firm, unqualified and deliverable;
- enable the required amount of senior debt to be raised;
- reduce the NPV of the Annual Service Payment as proposed in the Preferred Bidder's Final Tender Financial Model ('FT Model');
- are deliverable by the target Financial Close date 1 October 2014;
- do not require any renegotiation of any Project documents or any alteration of the risk allocation as agreed between the Board and Preferred Bidder.

6. ~~Process~~ Dialogue Meeting 6: Agenda Topics and Submission Requirements

<u>Meeting</u>	<u>Topics</u>	<u>Deliverable</u>
<u>Preparation for Financial Meeting 6</u>	<ul style="list-style-type: none"> • <u>Update on previous Submissions</u> • <u>Identification of areas requiring Dialogue prior to Final Tender</u> 	<p><u>A written update of any changes to previous Submissions.</u></p> <p><u>A schedule of areas requiring further Dialogue before Final Tender is invited. The Board will provide a schedule to Bidders setting out its view of these areas which Bidders should annotate, expand and amend as required.</u></p>
<u>Financial Meeting 6</u>	<ul style="list-style-type: none"> • <u>Update on previous Submissions</u> • <u>Identification of areas requiring Dialogue prior to Draft Final Tender</u> 	<u>Presentation of Submission described above.</u>

~~In order to ensure comparability in Submissions received, Bidders are requested to provide the financial information outlined below and to cross-reference this to their Submission documentation. If Bidders believe that certain information is not applicable this should be clearly indicated within their responses.~~

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
Financial Model Response				
1	The Bidder is required to submit a Financial Model which complies with the format requirements set out in section 3.9.2.	Required as part of Submission for Dialogue Meeting 3.	Required. Bidders should populate a Financial Model using standard terms as provided by the Board.	Required. Bidders should populate a Financial Model using actual terms provided by chosen funding providers.
2	The Bidder should provide confirmation that they are prepared to underwrite the tax and accounting adopted within the Financial Model	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
3	Bidders should identify assumptions in relation to taxation including the following: <ul style="list-style-type: none"> • Bidders must specify the corporation tax rates assumed, including any marginal relief (if appropriate) and confirm that consideration has been given to changes to the standard rate of corporation tax included in the Finance Act 2011 and announcements in the 2012 Autumn Statement; • Bidders should specify the assumptions made in respect of the commencement and cessation of trade for tax purposes, including any tax relief assumed for pre-trading interest costs. • Bidders should specify the assumptions made in respect of deductibility or non deductibility of revenue costs, including in respect of construction costs, transaction costs, such as bid costs, development costs, planning costs and legal fees; • Bidders are required to specify the 	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<p>assumptions made in respect of the tax treatment of capital expenditure, (including in respect of lifecycle costs and any intangible fixed assets) including amounts of expenditure allocated to the different capital allowance pools, amounts assumed to be non-qualifying for capital allowances, the rate of writing down allowance claimed and details of any capital allowances disclaimed;</p> <ul style="list-style-type: none"> • Bidders are required to categorise taxable profits by type, such as trading profits, interest, and other non-trading profits or losses. The categories of taxable income should be appropriately ring-fenced (e.g. when carrying forward losses); • Bidders must specify any assumptions made in respect of the tax treatment of capitalised interest; • The application of transfer pricing legislation in the UK can have implications for PPP/PFI projects, particularly around the tax treatment of subordinated debt and corporate debt interest charges. Bidders should consider the implications of this aspect of corporation tax on their proposals and confirm that any such implications have been considered. • Bidders should consider the potential implications of the worldwide debt cap in respect of the deductibility of interest costs and confirm that any such implications have been taken into account in pricing the project. • Bidders should provide a statement setting out their assumptions in respect of the tax treatment of any other income or capital contributions received; • Bidders should provide a statement setting out any tax assumptions made concerning timing of payments of corporation tax. • Bidders should state the tax treatment of any surpluses • Bidders must make their own 			

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<p>decisions as to whether or not to seek advanced tax clearance from HMRC for any aspect of the proposed treatment. If such clearance is sought, Bidders must attach the appropriate correspondence to their submission. If the Bidder is relying on an advanced clearance from HMRC, this will need to be provided before contract signature and Financial Close.</p> <ul style="list-style-type: none"> ■ Bidders should identify fall back positions if the proposed treatment fails together with any other possible tax treatments that may be applicable to the contract. ■ Bidders are required to state any VAT assumptions made and the basis for those assumptions (including VAT implications in relation to land transactions where applicable). ■ Bidders should consider the implications of SDLT on their proposals. Any SDLT costs should be included within the Financial Model along with an accompanying statement explaining how it is calculated. 			
4	<ul style="list-style-type: none"> ■ Bidders should/must obtain and submit a formal letter from their tax advisors or suitably qualified professional confirming that in their opinion the proposed tax treatment (including corporation tax, VAT and SDLT) is valid and that any required accounting treatments underpinning the tax treatment would be within the appropriate accounting standards. This opinion should set out the basis for the treatments adopted, and identify any risks associated with it. 	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
5	<ul style="list-style-type: none"> ■ The Bidder should separately identify the funders' margin and MLA costs (or equivalent) in the Financial Model and any swap credit spreads or liquidity margins (or equivalent) they would expect to incur 	Required as part of Submission for Dialogue Meeting 4 omitting these	Required omitting these elements that are not relevant due	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<ul style="list-style-type: none"> ▲ The Bidder should confirm these elements of the overall interest rate that are fixed and those that are variable up to financial close ▲ The Bidder should identify the protocol they will utilise in setting the underlying funding rate at financial close ensuring transparency and best value for The Board ▲ All financing fees, including arrangement, commitment, agency and any other relevant fees should be separately identified and reflected in the Financial Model ▲ Assumptions on deposit and overdraft rates should be explicitly stated. 	elements that are not relevant due to the use of standard terms.	to the use of standard terms.	
6	<p>Bidders should confirm that they will maintain underlying construction, operating, FM and Project Co costs for a period of three months from the target Financial Close date with no adjustment for inflation.</p> <p>Bidders should confirm that only capital, lifecycle and facilities management costs will increase post validity period and that they will use all reasonable endeavours to mitigate the impact of any cost increases post validity period.</p> <p>Bidders should specify which cost index or indices they require costs to be inflated in the post validity period. Note should be taken of the indexation regime that will be applied to Scottish Government support in relation to the construction cost cap set out in section 3.8.1.</p>	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
7	Bidders should set out their approach to the treatment of surpluses and cash buffers, confirming that approach set out in 3.8.7 above has been applied.	Required as part of Submission for Dialogue Meeting 1.	Required in detailed form.	Required in detailed form.
8	The proforma financial information requirements are included in Annex 1 to this Appendix. The information is the minimum	Required as part of Submission for Dialogue	Required.	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	requirement. Where the Bidder needs to provide additional information in order to provide a higher level of understanding of the individual components of the submission such additional information should be provided The information in the financial proformas should not be aggregated.	Meeting 3.		
9	The Bidder is required to provide a databook and user guide supporting the Financial Model for the Financial Submission, as set out in Section 3.9.3.	Draft version required as part of Submission for Dialogue Meeting 3.	Required.	Required.
10	Bidders should provide details on the range of sensitivity tests that funders have requested. The Final Tender Submission will require Bidders to provide the results of funders' sensitivity tests. The Board may also request certain sensitivities to be carried out and included in Financial Submissions.	Required as part of Submission for Dialogue Meeting 4.	Required. The Board will inform Bidders of any sensitivities required no later than three weeks before the submission date.	Required. The Board will inform Bidders of any sensitivities required no later than three weeks before the submission date.
Information required to support the funding package				
11	The Bidder should provide assessment of the current issues in the funding markets that could impact upon the availability or terms of the finance offered. The Bidder should also explain how any risks within its chosen funding strategy will be managed to ensure that there is no impact on the affordability, value for money or timescales for delivery of the Project. The Bidder's response should set out how value for money will be secured between funding options and/or funding providers, at each phase of the procurement. Bidders should confirm acceptance of the position that The Board reserves the right to instruct a funding competition at any point during the	Required as part of Submission for Dialogue Meeting 1.	Updated version required describing how these issues will be addressed between Preferred Bidder and Financial Close.	Updated version required describing how these issues will be addressed between Preferred Bidder and Financial Close.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	procurement.			
12	Bidders should provide a statement confirming that they have not entered/will not enter into any exclusivity arrangements with funders.	Required as part of Submission for Dialogue Meeting 1.	Required.	Required.
13	<p>The Bidder must submit the following information for each class of debt finance:</p> <ul style="list-style-type: none"> ▲ Identity of the funders ▲ Type of facility offered ▲ Amounts to be provided by each funder ▲ Credit margins and similar charges ▲ Explanation of the types of reserve account(s) and/or facility(ies) proposed and associated terms ▲ Terms and conditions attaching to the debt including: <ul style="list-style-type: none"> ▲ Draw down schedule ▲ Repayment schedule and tenor and any average life covenants ▲ Security required including parent company guarantees, bonding, letters of credit, liquidated damages and liability caps. ▲ Interest rates and other fees ▲ Financial ratios and covenants (base case, distribution and default) explicitly stating the basis of the calculation ▲ Default clauses ▲ Conditions precedent. ▲ Extent to which the funds are committed ▲ Confirmation that the margins and charges detailed above are a full and complete list and no additional margins or charges not otherwise disclosed will apply. 	Not required.	Draft versions required, noting that the terms described should not be used in the Financial Model but provided for information only.	Required.
14	The Bidder should specify any working capital requirements and provide evidence as to how this is to be financed.	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
15	The Bidder must submit the following	Outline	Required.	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<p>information for each type of risk capital to be raised:</p> <ul style="list-style-type: none"> • Identity of the investors • Amounts to be subscribed by each investor and the timing thereof • Minimum return requirement for each class of risk capital and the basis of any IRR calculations • Terms and conditions of the subscription including return requirements (shareholder agreement or detailed term sheet) • Coupon rights attaching to the subscription • Mezzanine interest rates • Terms and any other agreements between the Investors in their capacity as investors in the Project Co • Any other rights attaching to this subscription • An undertaking that no additional margins or charges will apply that have not already been disclosed and included in the Financial Model • The length of time each class of risk capital will remain in the project vehicle • The extent to which the funds are committed. • 	proposals required as part of Submission for Dialogue Meeting 1.		
16	To the extent that other forms of finance other than those listed above are to be used, the Bidder must provide appropriate details equivalent to those requested for subordinated debt and debt finance.	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
17	The Bidder is required to produce the strongest form of commitment possible. The level of investor and Funder commitment should be demonstrated through the provision of: <ul style="list-style-type: none"> • board minutes or draft letters of support from the sponsor shareholders committing to subscribe subordinated debt on the terms identified above • letters of support from underwriting banks and financial institutions (if 	Required as part of Submission for Dialogue Meeting 2.	Required in final draft form.	Required in final form.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<p>applicable) offering debt facilities on the terms identified above (to be accompanied by draft term sheets)</p> <ul style="list-style-type: none"> • A clear statement on the level of approval process and timescale that will be required from the respective lending organisations should be made. • A letter from the Bidder's financial advisers stating that the proposed funding structure is realistic, achievable and deliverable and that the financing proposals are sufficient to enable the Project Co to meet its obligations under the NPD Project Agreement. 			
18	<p>The Bidder must set out clearly its proposal in relation to any hedging arrangements required to support the project. The following details should be provided:</p> <ul style="list-style-type: none"> • the manner in which the Bidder will address the risk of future movements on interest rates, including a full description of its interest rate hedging to be applied • the time period over which hedges are expected to be in place • details of any financial instruments that will be used to provide protection against interest rate movements and the cost/effect of such protection should be reflected in the Financial Model • confirmation that the Project Co will bear all interest rate risk in respect of its borrowings once financial close is achieved • confirmation that the Bidder will bear all foreign exchange risk • the manner (if any) in which the Bidder will address the risk of future movements in the Retail Price Index (RPI). The Board does not expect that Bidder's funding solution will require the use of RPI hedging instruments. The interim Financial Model submission should clearly demonstrate the proportion of costs 	Required as part of Submission for Dialogue Meeting 2.	Required.	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<p>that are fixed, the proportion subject to inflation and the basis upon which the Bidder has set the proportion of Annual Service Payment that will be subject to inflation</p> <ul style="list-style-type: none"> • confirmation of the acceptance of the principle of benchmarking of hedging instruments (including GICs where appropriate) at financial close. 			
19	<p>The Bidder should indicate the extent of the funder due diligence that has been carried out to date and that will be carried out prior to the appointment of a preferred bidder and the overall scope and timetable of funder due diligence up to financial close. In addition to the provider of senior debt, the response should cover due diligence required by any third party provider of subordinated debt funds.</p>	Required as part of Submission for Dialogue Meeting 2.	Required.	Required.
20	<p>A programme setting out the timescale for agreeing all matters relating to funding to financial close must be provided. Evidence must be provided that the proposed providers of finance to Project Co have accepted this timetable in principle and that adequate resource will be available to ensure the timetable is met.</p>	Required as part of Submission for Dialogue Meeting 2.	Required.	Required.
Other information				
21	<p>The Bidder should provide a commentary on the calibration of the Payment Mechanism and confirm its acceptance in principle of the calibration of, and tolerances built into, the Payment Mechanism and performance regime. In commenting on these, the Bidder is expected to address:</p> <ul style="list-style-type: none"> • Practicality; • Value for Money; and • Ability to obtain funding 	Required as part of Submission for Dialogue Meeting 2.	Required.	Required.
22	<p>Bidders must provide fully detailed calculations supporting the insurance premiums quoted, including sums insured, rates applied and deductibles,</p>	Required as part of Submission for Dialogue	Required.	Required.

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Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	where applicable. This must be provided separately for construction and operational insurances.	Meeting 4.		

Annex 1 to Appendix B – Financial Proformas

Delivery of senior debt funding is the responsibility of the Preferred Bidder. This includes:

- management of the Funding Competition process and of the funder Due Diligence process;
- production of all materials required and covering all costs incurred in the process;
- meeting the timescales that will be set out in the Preferred Bidder letter.

The Funding Competition will be run by the Preferred Bidder, subject to advance approval from the Board, SFT and their financial advisors in respect of key issues including:

- timing of the competition;
- developing the shortlist of prospective funders to be approached;
- the documentation issued to prospective funders;
- evaluation criteria;
- final selection of bank versus any other (e.g. public bond) structure.

Any difference in cost to the account of the Preferred Bidder arising from the final selection of funding route is the Preferred Bidder's risk, subject to the risk allocation arrangements set out in the IFT. Such costs will not be amended following selection of Preferred Bidder and final selection of preferred funder(s).

Offers solicited from prospective senior debt funders must at a minimum:

- be deliverable - final submissions from funders must have credit committee approval providing an unambiguous commitment to fund;
- be sufficient to cover the full required senior debt sum;
- set out their proposals for all key terms such as credit margins, fees, cover ratios, and interest rate hedging;
- accept the principles of public sector benchmarking of derivatives pricing at Financial Close, or competing any GICs at Financial Close in the case of a bond solution;
- accept the Project Agreement, associated Schedules and all other Project Documents in full, preserving the risk allocation set out in the Final Tender. Any funder seeking to amend these Documents may be excluded from the Competition;
- confirm whether the Preferred Bidder's security package proposals (including proposed security provider(s)) are acceptable;
- confirm their rating requirements for the Account Bank;
- confirm whether their offer is a "bank" or "bond" solution; that they accept the standard form compensation on termination provisions for "bank" or "bond" (as applicable); that they accept calculation of breakage costs on termination on the basis of readily identifiable and objective benchmarks;
- demonstrate commitment to the proposed financial close date;
- confirm whether the Preferred Bidder's security package proposals (including proposed security provider(s)) are acceptable;
- confirm their rating requirements for the Account Bank;
- confirm whether their offer is a "bank" or "bond" solution; that they accept the standard form compensation on termination provisions for "bank" or "bond" (as applicable); that they accept calculation of breakage costs on termination on the basis of readily identifiable and objective benchmarks;
- reflect the detailed funder's due diligence undertaken and accept novation of the funder's advisors appointed by the Preferred Bidder; and

- demonstrate commitment to the proposed financial close date.

The Board will not accept significant changes to the Project Agreement, associated Schedules or other Project Documents as a result of the funding competition. To the extent that any such change has a negative impact on the Project it will be an equity risk rather than a risk for the Board. The Board therefore expects the Preferred Bidder to develop the Information Memorandum to a sufficient level of detail to make the above terms for participation clear.

If financing is expected to come from a club of funders, the following should be asked of prospective funders in order to assess the deliverability of any club solution:

- whether, if part of a club, they would accept one funder in the club taking on the role of Agent/Security Trustee (and whether they would be willing to / require to assume that role); and
- whether, if part of a club, they would accept the appointment of one funder to represent the club on technical issues and one funder to represent the club on legal issues (and whether they would be willing to / require to assume that role).

The Preferred Bidder will discuss Funding Competition responses received with the Board to allow financial modelling of responses to be carried out on an agreed basis. The Preferred Bidder will model all Funding Competition responses agreed with the Board as set out in the Funding Competition Methodology. The Preferred Bidder will prepare a summary report demonstrating the impact of each funding proposal on the Annual Service Payment and the associated NPV versus those in the FT Model as well as a tabular summary of pricing and key terms and conditions for each proposal.

Financial Model

The FT Model based on the Board's Final Tender term sheet provided in this document will be provided to prospective funders by the Preferred Bidder. Funders will be requested to improve on these terms, subject to there being no change in the Board's risk profile. If prospective funders feel that a revised Model reflecting an alternative structure is necessary for them to perform their assessment of the Project then they should outline their rationale to enable the Preferred Bidder and Board to consider the request and agree a new version.

The junior debt coupon included in the FT Model will not increase regardless of any change in rates or terms resulting from the Funding Competition.

The Board will take the risk up to Financial Close on movements to underlying LIBOR/ reference gilt/GIC rates or bond margin.

Benefits arising from the Funding Competition and any improvements up to and including Financial Close will be passed in full to the Board, including improvements in bank terms such as fees, costs, margins, gearing, cover ratios and increase in loan tenor. Benefits from any incorporation of EIB finance are wholly for the account of the Board.

Involvement of the Board and SFT

To enable agreement and decision-making throughout the process, the Preferred Bidder will chair a funding competition "working group" which will include a representative from each of the Board, its financial advisers and SFT.

Consent of SFT will be required throughout, including:

- agreement of the shortlist of funders;
- agreement of the contents of the Information Memorandum;
- final selection of the funding route and final selection of the preferred funder(s).

All correspondence with funders in competition will be recorded in writing and available to all

procuring parties (i.e. the Board, the preferred bidder, SFT and advisors).

The Board, its advisors and SFT retain the right to attend all significant meetings held with potential funders. A minimum of 48 hours' notice of such meetings must therefore be given to the Board including a detailed agenda for such meetings.

Regular summaries of significant communications pertaining to the competition and the position of any negotiations are to be provided in advance of each meeting.

The competition will be run on a transparent, open book basis. The Preferred Bidder will allow the Board, its advisors and SFT full access to the responses received from funders and all analysis (including financial modelling produced by the Preferred Bidder or its advisers) to assess and compare those responses. The Preferred Bidder agrees to run any additional scenarios or sensitivities reasonably requested by the Board, its advisors or SFT. The list of sensitivities will, as far as possible, be agreed in advance of the competition.

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Appendix C (i) – Not Used

Appendix C ~~(ii)~~ – Legal ~~Agenda Topics~~, Submission Requirements and Evaluation**Appendix C (i) – Legal Agenda Topics****1. Overview**

~~It is the Board's intention that the core elements for discussion at the relevant Dialogue Meetings shall be as set out in the following legal agendas. However, the Board shall reserve the right to do/omit the legal agendas to address specific Bidder issues during the Dialogue Period.~~

2. Legal Agenda Topics

Meeting	Topics	Deliverable
Dialogue Meeting 1	Top 10 Key Issues in NPD Project Agreement	<p>1. A list of up to 10 key commercial / contractual issues in relation to the NPD Project Agreement together with:</p> <ul style="list-style-type: none"> • an explanation of each of the Bidders' issues and why Bidders do not believe the NPD Project Agreement addresses the relevant issue; and • where relevant, the Bidders' alternative proposal/s, explaining why the alternative proposal/s might be acceptable to the Board. <p>2. Any comments that Bidders may have in relation to the NPD Model requirements of the Board, including the NPD Articles of Association.</p>
Dialogue Meeting 2	Project Agreement mark up and contractual structure	<p>1. Bidders are required to submit a detailed mark up (in both clean and PDF comparison format) of the NPD Project Agreement (including all Schedules), together with a commentary in the form set out in Appendix C(ii) of Volume 1 of the ITPD. The detailed mark up of the NPD Project Agreement and commentary should include:</p> <ul style="list-style-type: none"> • an explanation of each of the Bidder's amendments and why the Bidder does not believe the NPD Project Agreement addresses the relevant issue; and • where relevant, the Bidder's alternative proposal/s, explaining why the alternative proposal/s might be acceptable to the Board, • Details of any proposed caps and termination triggers, <p>with such documentation being referred to as the "NPD Project Agreement Submission".</p> <p>2. In addition, the following documentation shall also require to be provided by Bidders:</p>

		<ul style="list-style-type: none"> • Contractual matrix/diagram, showing clearly the relationships between the Bidder and its supply chain including funders and sub-contractors. The diagram should provide details of all collateral warranties, direct agreements and guarantees. Bidders should also be prepared to provide a presentation on its contractual structure; • Draft heads of terms for each of the Contractor, Services Provider and any relevant Key Sub-contractors. The Board will expect to see details such as caps in liability, liquidated damages and indemnities covered in these heads of terms; • Key terms of any proposed parent company guarantee; • Collateral Warranties to be provided to the Board together with key commercial terms; • Step in and direct agreements together with key commercial terms; • Any proposed amendments to the Articles of Association; <p>with such documentation being referred to as the "Additional Documentation Submission".</p> <p>3. Bidders should bear in mind the Board's expectations of minimal derogations to the NPD Project Agreement and be mindful of the Board's requirement to obtain SFT approval of any derogations pursuant to paragraph 3.5 (Derogation Procedure) of Volume 1 of the ITPD).</p>
Dialogue Meeting 3	Project Agreement mark up and contractual structure	<ol style="list-style-type: none"> 1. Continue dialogue in relation to Bidders' NPD Project Agreement Submission. 2. Continue dialogue in relation to Bidders' Additional Documentation Submission. 3. Board to provide feedback to Bidders in relation to the Bidders' Project Agreement Submission and Additional Document Submission.
Dialogue Meeting 4	Project Agreement mark up and contractual structure	<ol style="list-style-type: none"> 1. Continue dialogue in relation to Bidders' NPD Project Agreement Submission. 2. Continue dialogue in relation to Bidders' Additional Documentation Submission. 3. Board to provide feedback to Bidders in relation to the Bidders' Project Agreement Submission and Additional Document Submission.
Dialogue	Project Agreement	<ol style="list-style-type: none"> 1. Continue dialogue in relation to Bidders' NPD Project

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Meeting 5	mark up and contractual structure	<p>Agreement Submission.</p> <p>2. Continue dialogue in relation to Bidders' Additional Documentation Submission.</p> <p>3. Board to provide feedback to Bidders in relation to the Bidders' Project Agreement Submission, Additional Document Submission.</p>
Dialogue Meeting 6	Review of Draft Final Tenders	Please refer to paragraph 3 (Draft Final Tender Requirements) below.

~~Appendix C (ii) — Submission Requirements and Evaluation~~**~~1. — Draft Final Tender Requirements for Legal Submission~~**

~~Prior to Dialogue Meeting 6, Bidders are required to re-submit the documentation set out in paragraph 1.1 below to reflect the progress of issues agreed during the Dialogue Period. This documentation shall in turn form a Bidder's legal submission for the Draft Final Tender.~~

~~1.1 — NPD Project Agreement and Additional Documentation~~

~~Bidders shall be required to provide:~~

~~1.1.1 A fully marked up NPD Project Agreement in both clean and PDF comparison format together with a detailed commentary in the form set out in Appendix C(ii) of Volume 1 of the ITPD in relation to each amendment, setting out a Bidder's commercial position where relevant. The mark up should include details of any proposed caps (with associated justifications for the levels set), and details of all termination trigger levels and persistent breach levels (including associated justifications for any departures from those set out in the NPD Project Agreement), where they appear in square brackets in the NPD Project Agreement. Bidders will not be permitted to include in their mark up of the NPD Project Agreement; and~~

~~1.1.2~~

~~(a) Contractual matrix/diagram, showing clearly the relationships between the Bidder and its supply chain including funders and sub-contractors. The diagram should provide details of all collateral warranties, direct agreements and any applicable guarantees which will be granted to the Board and the circumstances in which the protection offered by the collateral warranties and direct agreements will be available; and~~

~~(b) Fully developed, signed heads of terms for each of the Contractor, Services Provider and any relevant Key Subcontractors. The Board will expect to see details such as caps on liability, liquidated damages and indemnities covered in these heads of terms;~~

~~(c) Final version of proposed parent company guarantees;~~

~~(d) Final version of the Articles of Association.~~

~~1.2 — Prohibited Bidder Amendments~~

~~1.2.1 Bidders will not be permitted to include in their mark up of the NPD Project Agreement referred to in paragraph 1.1.1 above or the additional documentation referred to in paragraph 1.1.2 above:~~

~~(a)~~

~~1. — Prohibited Bidder Amendments~~

~~1.1 Bidders will not be permitted to include in their Final Tender (Bidder Specific) NPD Project Agreement or any part of their Final Tender Submission:~~

~~1.1.1 amendments, caveats and/or qualifications which have not previously been raised with the Board and/or its advisers during the Dialogue Period (other than drafting that is~~

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necessarily consequential on, or necessary to implement, amendments which have been so raised); or

~~(b)1.1.2~~ amendments, caveats and/or qualifications which have been raised with the Board during Dialogue Period but rejected by the SFT,

such amendments being defined as "**Prohibited Bidder Amendments**".

~~1.2.2~~ The Board shall be entitled to reject in its absolute discretion any Prohibited Bidder Amendments included within the ~~documentation to be submitted pursuant to paragraphs 1.1.1 and 1.1.2 above~~ Final Tender (Bidder Specific) NPD Project Agreement or Final Tender Submission which forms part of a Bidder's ~~legal~~ submission for the ~~Draft~~ Final Tender.

~~1.3~~ — **Review of Draft Final Tenders**

~~As per paragraph 4.6 (Draft Final Tender) of Volume 1 of the ITPD, the Board will review the Draft Final Tenders to ensure compliance with the tender requirements. A final round of Dialogue will then take place as indicated on the programme at paragraph 4.2.1 (Timetable of Dialogue Meetings) of Volume 1 of the ITPD. This Dialogue will provide feedback to Bidders on the content of their Draft Final Tender and clarify any outstanding points.~~

2. Final Tender

2.1 Overview

~~As per paragraph 4.8 (Final Tender) of Volume 1 of the ITPD, the Board shall provide Bidders with an Invitation to Submit Final Tenders. Unless the Bidder is notified otherwise in the Invitation to Submit Final Tender, the legal submission requirements for the Final Tender shall be as set out in paragraph 4.2 (NPD Project Agreement) and 4.3 (Additional Documentation) below.~~

2.2 NPD Project Agreement Submission

2.2.1 Bidders should note that a NPD Project Agreement specific to each Bidder (**Final Tender (Bidder Specific) NPD Project Agreement**) shall be issued to each Bidder by the Board in the Invitation to Submit a Final Tender.

2.2.2 The Final Tender (Bidder Specific) NPD Project shall be based upon:

- (a) the respective NPD Project Agreement submitted by Bidders as part of the Draft Final Tender ; and
- (b) any agreed issues resolved in the final Dialogue Meeting,

and Bidders shall be required to submit their Final Tenders on the basis of the terms of the Final Tender (Bidder Specific) NPD Project Agreements, without further amendment— ~~(subject to paragraph 2.4.1(a)(ii))~~ (the "**NPD Project Agreement Submission**"). A letter from each Bidder's consortium confirming that their Final Tender (Bidder Specific) NPD Project Agreement is acceptable to them shall suffice for the purposes of the NPD Project Agreement Submission. Please also note the additional Board requirement to complete the certificate set out in Appendix K (Acceptance of Contractual Terms) by the consortium members (including sub-contractors).

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2.2.3 ~~Any Subject to paragraph 2.4.1(a)(ii) any~~ amendment to the Final Tender (Bidder Specific) NPD Project Agreement may result in a Bidder's entire Final Tender being rejected by the Board without further evaluation.

2.3 Additional Documentation Submission

2.3.1 Subject to paragraph 2.3.2, the following documentation (the "Additional Documentation Submission") shall also require to be submitted by Bidders as part of their Final Tender:

- (a) Contractual matrix/diagram, showing clearly the relationships between the Bidder and its supply chain including shareholders, junior debt providers, funders and sub-contractors. The diagram should provide details of all collateral warranties, direct agreements ~~and~~ any applicable guarantees and who the design consultants shall be which will be granted to the Board and the circumstances in which the protection offered by the collateral warranties and direct agreements will be available;
- (b) Fully developed, signed heads of terms for each of the Contractor, Services Provider and any relevant Key Sub-contractors. The Board will expect to see details such as caps on liability, liquidated damages and indemnities covered in these heads of terms;
- (c) Final version of proposed parent company guarantees; and
- (d) Final version of the NPD Articles of Association.

2.3.2 The documentation referred to above in paragraph 2.3.1 above, shall be based upon:

- (a) ~~thesuch similar~~ documentation ~~referred to in paragraph 1.1.2 which as~~ was submitted by respective Bidders as part of their legal submission for the Draft Final Tender; and
- (b) any agreed issues resolved in the final Dialogue Meeting,

and Bidders shall be required to submit their Final Tenders on the basis of the terms of this paragraph, without further amendment.

~~2.3.3 Any amendment to the documentation referred to in paragraph 2.3.1 may result in a Bidder's entire Final Tender being rejected by the Board without further evaluation.~~

2.4 Evaluation of Final Tender

2.4.1 The legal submission which forms part of the Final Tender shall be evaluated as follows:

- (a) NPD Project Agreement

Subject to paragraph 2.2.3, the NPD Project Agreement shall be evaluated in accordance with the following:

- (i) Pass/Fail: Subject to paragraph 2.4.1 (a)(ii) below, Bidders shall be awarded a pass if they accept the Final Tender (Bidder Specific) Project Agreement. Bidders shall be awarded a fail if they do not accept the Final Tender (Bidder Specific) Project Agreement;

- (ii) If a pass is received by Bidders in respect of the Final Tender (Bidder Specific) Project Agreement, the provisions of paragraph 5.7.1(d) (Quantifiable Bidder Amendments) of Volume 1 of the ITPD shall be applied. The Quantifiable Bidder Amendments that shall be applied to a Bidder's Provisional Economic Cost Score shall be those Quantifiable Bidder Amendments notified by the Board to Bidders during the Dialogue Period. Bidders can choose not to include amendments which result in Quantifiable Bidders Amendments within the Final Tender (Bidder Specific) NPD Project Agreement, as part of their Final Tender. The Quantifiable Bidder Amendments to be applied to the Provisional Economic Cost Score shall then be reduced accordingly by the Board.

(b) Additional Documentation Submission

Subject to paragraph 2.3.3, the ~~additional documentation~~ Additional Documentation Submission referred to in paragraph 2.3.1 above shall be evaluated in accordance with the following:

- (i) Pass: Bidders shall be awarded a pass if they submit as part of their legal submission for their Final Tender the documentation referred to above in paragraph 2.3.1 above, which shall be based upon:
- (A) ~~the such similar~~ documentation ~~referred to in paragraph 1.2.1 which~~ was submitted by _____ respective Bidders as part of their legal submission for the Draft Final Tender; _____ and
- (B) any agreed issues resolved in the final Dialogue Meeting,
- (ii) Fail: Bidders shall be awarded a fail if they submit as part of their legal submission for their Final Tender the documentation referred to above in paragraph 2.3.1 above which is not based upon:
- (A) ~~the such similar~~ documentation ~~referred to in paragraph 1.2.1 which~~ was submitted by _____ respective Bidders as part of their legal submission for the Draft Final Tender; _____ and
- (B) any agreed issues resolved in the final Dialogue Meeting.

Appendix C (iii) – ~~Proforma Commentary Table for NPD Project Agreement~~ Not Used

~~The following pro forma commentary table should be used by Bidder's as the basis of their commentary table to accompany any mark up of the NPD Project Agreement.~~

~~In accordance with paragraph 5.7 (Price Evaluation), the "Issue" column of the commentary table should include a description of each amendment to the NPD Project Agreement as either 1 or 2 as follows:~~

~~1. Minor/inconsequential amendment;~~

~~-~~

~~2. Quantifiable Bidder Amendment.~~

~~-~~

Issue	Clause	Description	Issue	Bidder Comment	Board Comment
+	4	Project Documents	+	{•}	{•}

Appendix C (iv) – Interface Proposals**Summary of Interface Proposals to be provided by Bidders**

The following Interface Proposals are required to be provided by Bidders to the Board ~~during the Dialogue Period~~ for Final Tender as part of C31. The requirements of the Interface Proposals are more fully set out in Appendix A of the Board's Construction Requirements, subject to certain conditions within Schedule Part 5 (Land Matters), and this summary should be read in conjunction with these provisions. Although the Interface Proposals are primarily relevant to the Construction Phase, some Interface Proposals shall apply to the Project Operations. Please note that Appendix A of the Board's Construction Requirements may be subject to change to reflect discussions during the Dialogue Period.

The requirement for the Interface Proposals arose from an agreement between the Board and Consort when the Site was removed from the Campus Site (i.e. in order for the Board to secure land for the construction of the Facilities) and therefore from Consort's responsibility. The Interface Proposals are intended to provide Consort with some comfort that the Project Operations are conducted by Project Co in a manner which is least detrimental to Consort's ability to operate the Retained Estate and/or Retained Site.

The Interface Proposals shall be agreed between the Board and Consort pursuant to procedures set out in the RIE Project Agreement. All Bidders are required to submit Interface Proposals prior to relevant Dialogue Meetings, as per the timetable set out below. However, the Board shall not engage with Consort to finalise and agree these Interface Proposals until Preferred Bidder stage. It is the Board's intention that the Interface Proposals shall be in an agreed form and ready for implementation by the Preferred Bidder at Financial Close.

The Board's approach to the Interface Proposals in the ITPD is to ensure a level playing field between Bidders. Please note that the Board cannot guarantee that Appendix A of the Board's Construction Requirements, upon which the Interface Proposals shall be based, will not be subject to further amendment or refinement at Preferred Bidder stage or post-financial close. However, at this stage, the Board anticipates that any such amendment or refinement should not be material.

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
1	Traffic Management Strategy	<p>The Traffic Management Strategy ('TMS') is required where Project Co wants to access the Site for the construction of the Project via the Orange Areas (which includes the orange hatched areas) shown on Plan 2.</p> <p>The TMS is a proposal which is to address traffic management at the Campus which must be prepared having regard to:</p> <p>(a) the health and safety of all users of the Campus Site and/or Campus Facilities must be safeguarded at all times;</p> <p>(b) RIE Facilities is a working hospital to which access (including both pedestrian and vehicular) must be maintained at all times;</p> <p>(c) traffic at the Campus Site is to be prioritised in accordance with the following hierarchy:</p> <p>(i) blue light traffic access/egress;</p> <p>(ii) staff, patients and visitors to the Campus Site and/or Campus Facilities (public transport);</p> <p>(iii) staff, patients and visitors to Campus Site and/or Campus Facilities (car parking);</p> <p>(iv) Campus Site and/or Campus Facilities deliveries, FM supplies and waste collection; and</p>	<p>Drafts Required to be submitted for Dialogue Meeting-2.</p> <p>Also required to be submitted for Draft Final Tender and Final Tender.</p>	Preferred Bidder Stage	Pass / Fail	Construction Phase

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>(v) Project Co's construction traffic; and</p> <p>(d) insofar as reasonably practicable and appropriate in the circumstances (taking into consideration, for example, the number of construction vehicles involved, the number of journeys anticipated, the time of the day when access is required and the part(s) of the areas affected) construction traffic using the affected area shall require to be segregated from other traffic and/or pedestrians using the affected area (for example, through contra-flow or one way traffic arrangements and safe routes for pedestrians).</p> <p>Further details of the TMS are set out in paragraph 2 (Construction Access over Orange Area) of Section 1 of Part 1 of Appendix A of the Board's Construction Requirements.</p>				
2	Oversail Strategy	<p>If as part of its activities (including construction of the Project) Project Co needs to oversail any other part of the Retained Site and/or Retained Estate then Project Co requires to prepare Oversail Strategy/ies. The Oversail Strategy/ies must comply with specified criteria and include:</p> <p>(a) programme of proposed oversail activities;</p> <p>(b) risk assessments;</p> <p>(c) a strategy for erection, operation, dismantling of</p>	<p>Draft <u>Required</u> to be submitted for Dialogue Meeting 2.</p> <p><u>Also required to be submitted</u></p>	Preferred Bidder Stage	Pass / Fail	Primarily Construction Phase but also Operational Term if any Project Operations required oversailing

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		oversailing crane(s), the details of which are more fully set out in Section 4 (Oversailing) of Part 1 of Appendix A of the Board's Construction Requirements.	for Draft Final Tender and Final Tender.			
3	Access Strategy	<p>An Access Strategy is required where Project Co needs to occupy part or parts or do works in and/or hoard off Access Areas (which includes Orange Areas (including orange hatched areas, on Plan 2), Yellow Area (including yellow hatched area, on Plan 2) and Substation Access Area (which is shaded blue and hatched black on Plan 2)) for carrying out works to pedestrian and vehicular access, to reconfigure roads, footpaths and landscaped areas and install surface water and foul/sewer drainage connections.</p> <p>Pedestrian and vehicular access to the Campus Site and/or Campus Facilities must be maintained at all times (albeit that the access arrangements may require to be subject to restrictions or diversions during any periods of occupation.) These restrictions need approval in the form of an Access Strategy. The Access Strategy is for managing pedestrian and vehicular access, in a manner similar to the TMS above but is not limited to traffic for construction. The Access Strategy is be prepared which shall ensure:</p> <p>(a) The health and safety of all users of the Campus Site and/or Campus Facilities must be safeguarded at all times;</p>	<p>Draft</p> <p><u>Required</u> to be submitted for Dialogue Meeting 2.</p> <p>Also required to be submitted for Draft Final Tender and Final Tender.</p>	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term (wherever there is to be future ongoing maintenance the areas described).

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>(b) Regard is had to RIE Facilities as a working hospital to which appropriate pedestrian and vehicular access must be maintained at all times;</p> <p>(c) Pedestrian and vehicular access must be maintained (albeit, at times it may be restricted) over the section of Little France Crescent lying within the part of the Orange Area shown shaded orange (but not hatched black) on Plan 2; and</p> <p>(d) Traffic will be prioritised in accordance with the following hierarchy:</p> <p>(i) blue light traffic access/egress;</p> <p>(ii) staff, patients and visitors to the Campus Site and/or Campus Facilities (public transport);</p> <p>(iii) staff, patients and visitors to the Campus Site and/or Campus Facilities (car parking);</p> <p>(iv) Campus Site and/or Campus Facilities deliveries, FM supplies and waste collection; and</p> <p>(v) Project Co's construction traffic.</p>				

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>Further details of the Access Strategy are set out in paragraphs 2 to 4 (Access Strategy) and 8 of Section 5 of Part 1 of Appendix A of the Board's Construction Requirements</p> <p>Provisions about any Access Strategy to address an access which is required in the Operational Term not contemplated by the Access Strategy above is dealt with in Section 2 (Access Strategy and Amended Drainage Proposal) of Part 2 of Appendix A of the Board's Construction Requirements.</p>				
4	Supplemental Drainage Proposal	<p>A Supplemental Drainage Proposal is required where Project Co wants to install new surface water drainage connections from the Site to the existing surface water drain within the Orange Area. There is already an Initial Drainage Proposal, as set out in Appendix E of the Board's Construction Requirements, which primarily details the agreed connection points. This has to be complied with and supplemented by this Supplemental Drainage Proposal to include details of the design, construction, programme and Project Co's drainage proposals for the relevant drainage works.</p> <p>Prior to any drainage works taking place, Project Co (once appointed as Preferred Bidder) shall undertake a camera survey to document the condition of the existing surface water drainage system within the RIE Site. The camera survey will be carried out in accordance with Good Industry Practice and cover the full section of the RIE Site surface water drainage system that will serve the Site,</p>	<p>Draft <u>Required</u> to be submitted for Dialogue Meeting 2.</p> <p>Also required to be submitted for Draft Final Tender and Final Tender.</p>	Preferred Bidder Stage	Pass / Fail	Construction Phase

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>from the point of the first connection from the Site to the drainage system to the point at which the drainage system discharges from the RIE Site to the Niddrie Burn. Four hard copies and an electronic version of the camera survey will be delivered by Project Co to the Board and no works may be carried out until the said camera survey has been carried out and requisite copies delivered by Project Co to the Board.</p> <p>Further details of the Drainage Proposals are set out in paragraphs 5 (Drainage Proposals) and 8 (Other General Matters) of Section 5 of Part 1 of Appendix A of the Board's Construction Requirements.</p> <p>Amended Drainage Proposal</p> <p>If when Project Co is carrying out any of the drainage or services connections as more fully described above, it transpires that the position within the Orange Area is different (including route, depth, size or condition of the service media within the Orange Area) from what was anticipated so there is a need to change the scope of the drainage or service connections, then Project Co requires to prepare an Amended Drainage Proposal to include additional detail, information and drawings as are available.</p> <p>Further details of the Amended Drainage Proposals are set out in paragraph 2 (Drainage Proposals) of Section 2 of Part 2 of Appendix A of the Board's Construction Requirements.</p>				

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
5	Substation Proposal	<p>The Sub-station Proposal must address the construction and maintenance repair and renewal of the access road in the Substation Access Area in the event that a Substation is being built on the Substation Site.</p> <p>Substation Access Area If Project Co needs to do works to construct an access road in Substation Access Area shown shaded blue and hatched black on Plan 2, then prior to any access Project Co will have to prepare a Substation Proposal which must include details of design, construction, programme and Project Co's Proposals for the relevant Sub-station Access Works.</p> <p>The Substation Proposal must:</p> <p>(a) be safe in respect of personnel or equipment on any part of the Campus and/or Campus Facilities;</p> <p>(b) be in accordance with Good Industry Practice and Law;</p> <p>(c) not materially adversely effect the flow or functioning of the Niddrie Burn; and</p> <p>(d) adequately protect the high voltage electricity cable running through the Substation Access Area.</p> <p>Substation</p>	<p>Draft Required to be submitted for Dialogue Meeting-2.</p> <p>Also required to be submitted for Draft Final Tender and Final Tender.</p>	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term.

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>Project Co also needs to provide information about the design and construction of the Substation and Substation HV Cable.</p> <p>Method Statement</p> <p>Maintenance of Substation HV Cable by Project Co.</p> <p>Further details of the Substation Proposals and the Substation and Substation HV Cable are set out in paragraphs 6 and 7 (Substation Access and Cables) of Section 5 of Part 1 of Appendix A of the Board's Construction Requirements.</p>				
6	Service Proposal (Service Strip and Foul Service Strip)	<p>If Project Co wishes to do works (in each case as necessary in connection with the Works) to construct and lay:</p> <p>(a) service media through under over Service Strip (shown shaded yellow and hatched black on Plan 2) for the passage of water, sewage, drainage or oil, gas, electricity, telephone (and other telecommunications); and/or</p> <p>(b) foul drainage through under over Foul Service Strip (shown shaded yellow and hatched black on Plan 2A) for the passage of foul drainage,</p> <p>then Project Co requires to exhibit Scottish Water or other statutory authority/utility company approvals in relation to the works for the connection of service media from the Site</p>	<p>Draft Required to be submitted for Dialogue Meeting-2.</p> <p>Also required to be submitted for Draft Final Tender and Final</p>	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>to the mains sewer located on the RIE Site and provide a Project Co's Proposal which must detail the route and depth of service media and detailed Method Statements for the maintenance, repair and renewal of the (i) service media through, under and over the Service Strip; and (ii) foul drainage through the Foul Service Strip.</p> <p>Further details of the Service Proposal are set out in Section 6 (Service Strip and Foul Service Strip) of Part 1 of Appendix A of the Board's Construction Requirements.</p> <p>Amended Service Proposal</p> <p>If when Project Co is carrying out any of the drainage or services connections as more fully described above, it transpires that the position on Site is different (including route, depth, size or condition of the service media on Site) from what was anticipated so there is a need to change the scope of the drainage or service connections, then Project Co requires to prepare an Amended Service Proposal to include additional detail, information and drawings as are available.</p> <p>Further details of the Amended Service Proposal are set out in Section 3 (Service Strip and Foul Service Strip) of Part 2 of Appendix A of the Board's Construction Requirements.</p>	Tender.			

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
7	Connection Proposal	<p>Project Co shall prepare a Connection Proposal in respect of the RIE Works. This should include a programme and the following specific connection information:</p> <p>(a) Link Building: (i) Design package for method of connection of the Facilities to the Link; and (ii) a Project Co's Proposal in respect of the connection to the Link Building;</p> <p>(b) Fire alarm systems: (i) The fire alarm system specification for the interface link between the fire alarm system within the Facilities and the RIE Facilities; (ii) design package information for method of installation for the interface link between the fire alarm system within the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the interface link between the fire alarm system within the Facilities and the RIE Facilities; and (iv) a Method Statement for the maintenance and repair of the interface link between the fire alarm system within the Facilities and the RIE Facilities;</p> <p>(c) Security systems: (i) The security system specification for the interface link between the security system within the Facilities and the RIE Facilities; (ii) design package information for the proposed method of installation of the interface link between the security systems between the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the interface link between the security systems within the Facilities and the RIE Facilities; and (iv) a Method Statement for the maintenance and repair of the interface link between the fire alarm systems</p>	<p>Draft <u>Required</u> to be submitted for <u>Dialogue Meeting</u> 2 <u>Final Tender</u>.</p> <p>Also <u>required</u></p>	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<p>within the Facilities and the RIE Facilities;</p> <p>(c) Not Used.</p> <p>(c) PTS: (i) The PTS specifications for the Facilities and the RIE Facilities; (ii) design package information for the proposed method of installation of the PTS within the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the installation of the PTS within the Facilities and RIE Facilities; (iv) a Method Statement for the maintenance and repair of the PTS within the Facilities and RIE Facilities; The Board will confirm the route during Dialogue.</p> <p>(d) ICT: (i) The ICT specifications for the Facilities and the RIE Facilities; (ii) design package information for the proposed method of installation of the ICT within the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the installation of the ICT within the Facilities and RIE Facilities; (iv) a Method Statement for the maintenance and repair of the ICT within the Facilities and RIE Facilities; The Board will confirm the route during Dialogue.</p> <p>Project Co should refer to Sub-section C of the Board's Construction Requirements as regards specifications and control requirements for such PTS, ICT, fire and security systems and information about the Link Building, <u>systems and information about the Link Building.</u></p> <p>Further details of the Connection Proposal are set out in Section 7 (Link Building) of Part 1 of Appendix A of the</p>				

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Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
8	<u>Construction Access Proposal</u>	<p>Board's Construction Requirements.</p> <p><u>Project Co's construction access is governed by the following provisions of Appendix A of the Board's Construction Requirements:</u></p> <p><u>(a) Paragraph 1 in relation to Construction Access over the Yellow Area; and</u></p> <p><u>(b) Paragraph 2 in relation to construction access over the Orange Area.</u></p>	<p><u>Required to be submitted for Draft Final Tender and Final Tender. <u>tender</u></u></p>	<p><u>Preferred Bidder Stage</u></p>	<p><u>Pass/Fail</u></p>	<p><u>Construction Phase</u></p>



Re-provision of RHSC and DCN at Little France

Invitation to Participate in

Appendix D – Dialogue Period Query ~~proforma~~ **Proforma**

Re-provision of RHSC + DCN
DIALOGUE PERIOD QUERY PROFORMA

Ref No:
Dated Raised:

Topic: Technical Administration
 Financial Other
 Commercial

Is this query considered commercial in confidence?	Yes	No
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Query/Request:

Response:

Date of Response:

Please deliver response via:	Letter	Fax	E mail
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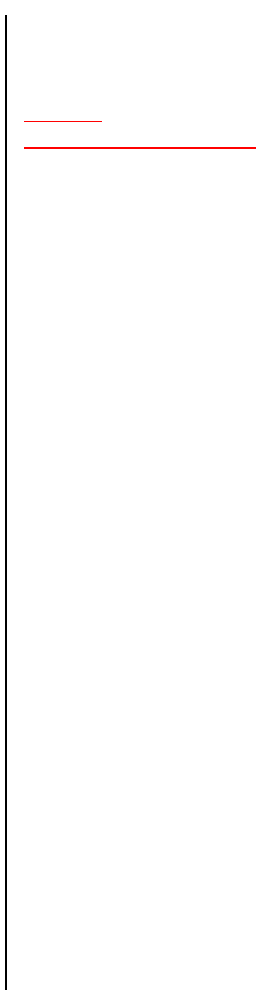
Raised on behalf of [] by: []

For RHSC DCN Use

RHSC DCN Ref No:

Date Received:

Passed to	NHSL Project Team		E&Y		Scottish Government other	
			MacRoberts			
			Mott Mac			



Appendix E – Reference Design Elements

Elements of the Reference Design	Status
Schedules of Accommodation	For spaces relating to Operational Functionality that will be used by NHS Lothian, <u>and Non-Clinical Services spaces</u> , the area of these rooms shall be a minimum and this minimum area is a mandatory requirement. The Reference Design Schedule of Accommodation needs to be read in conjunction with the <u>Draft</u> Schedule of Accommodation prepared by the Board as noted in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation). All other spaces are indicative.
Development Control Plan and Urban Design 1:1000/1:500	Mandatory - those elements defined under Operational Functionality i.e.: (i) the points of access to and within the Site and the Facilities; (ii) the relationship between one or more buildings that comprise the Facilities; (iii) the adjacencies between different departments within the Facilities; and (iv) the corridor widths <u>as</u> shown are a minimum with these minimum widths being mandatory requirements. Indicative - everything else with exception of the above <u>including Non-Clinical Services spaces</u> .
Departmental Layouts 1:500	Mandatory - those elements defined under Operational Functionality i.e.: (i) the points of access to and within the Site and the Facilities; (ii) the relationship between one or more buildings that comprise the Facilities; and (iii) the adjacencies between different departments within the Facilities ; This to include Specific Non-Clinical spaces. The; and <u>(iv) the</u> corridor widths as shown are a minimum with these minimum widths being mandatory requirements. Indicative - all other elements (e.g. <u>Non-Clinical Services spaces</u> , layouts and locations for Hard FM spaces, locations and sizes for services risers and spaces etc).
General Arrangements Plans 1:200	Mandatory - those elements defined under Operational Functionality i.e.: (i) the points of access to and within the Site and the Facilities; (ii) the relationship between one or more buildings that comprise the Facilities; and (iii) the adjacencies between different departments within the Facilities. (iv) the adjacencies between rooms within the Hospital departments; this is to include Specific Non-Clinical spaces.; The (iv) the adjacencies between rooms within the Hospital departments; and (v) the corridor widths as shown are a

	<p>minimum and these minimum widths are mandatory requirements.</p> <p>Indicative - all other elements (e.g. <u>Non-Clinical Services spaces</u>, layouts and locations for Hard FM spaces, locations and sizes for services risers and spaces, etc).</p>
General Arrangement Elevations and Sections.	Indicative
Generic Room Layouts 1:50	<p>Mandatory - those elements defined under Operational Functionality i.e.: The location and relationship of equipment, furniture, fittings and user terminals as shown on the 1:50 loaded room plans <u>in respect of:</u></p> <p>(i) all bed and trolley positions; (ii) internal room elevations; (iii) other project specific requirements, for example with regard to theatres and imaging departments;.</p> <p>Indicative - All other elements.</p>
Key Room Layouts 1:50	<p>Mandatory - those elements defined under 'Operational Functionality' i.e.: The location and relationship of equipment, furniture, fittings and user terminals as shown on the 1:50 loaded room plans <u>in respect of:</u></p> <p>(i) all bed and trolley positions; (ii) internal room elevations; and (iii) other project specific requirements, for example with regard to theatres and imaging departments;.</p> <p>Indicative - All other elements.</p>
Fire Strategy 1:200	Indicative
Interior Design and Artwork Concepts	Indicative
Wayfinding Strategy	Indicative
Flexibility and expandability	Indicative

Supplies, Storage, Distribution and Waste Management (Soft FM)	Mandatory
Decontamination and Control of Infection (HAI-SCRIBE)	Indicative
BREEAM	Indicative
Geotechnical Site Investigation	N/A (Data Room status)
Decanting, Phasing,	Indicative
Traffic Impact Assessment and Traffic Management Plan	Indicative
Security Strategy	Indicative
ICT strategy	<u>Indicative</u> Mandatory
Helipad	Indicative

Appendix F – Thermal and Energy Model Parameters

~~1. Thermal Modelling Data~~

~~1 THERMAL MODELLING DATA~~

~~1.1 1.1 General~~

~~In addition to energy modelling required of Bidders to satisfy Building Regulations and the BREEAM requirements of the Project, energy modelling shall further be undertaken to inform the Authority of the actual proposed annual energy consumption of the Facilities, by fuel type, and the annual operating costs therein.~~

~~Bidders / Project Co shall undertake Dynamic Thermal Energy Modelling comprehensive “all-inclusive” thermal and energy modelling to assess the energy performance and thermal of the Bidders’ proposals/Project Co Proposals, and provide an assessment of the actual energy consumption for the building.~~

~~The thermal and energy performance of Project Co’s Proposals.~~

~~The thermal performance of the Facilities shall be dynamically thermally modelled to the Project specific parameters, identified within Section 3 (Board’s Construction Requirements) of Schedule Part 6 (Construction Matters). Thermal and energy modelling shall inform the sizing of all heating, ventilation and comfort cooling requirements for Project Co’s Proposals, inclusive of all natural ventilation pathway and overheating analysis.~~

~~In conjunction with energy performance, CO² emissions shall also be required to be equal to, or better than, the agreed Carbon Emissions requirements in Section 3 (Board’s Construction Requirements) of Schedule Part 6 (Construction Matters).~~

~~Bidders/Project Co shall provide proposed energy consumption figures from their “all-inclusive” thermal and energy modelling, with all supporting documentation including model inputs, assumptions, calculations and reporting, at the following design stages:~~

- ~~• Final Tender;~~
- ~~• Financial Close; and~~
- ~~• Commissioning End Date.~~

The following documentation shall be used in providing the ~~targeted~~ thermal and energy modelling ~~requirements~~ for the building;

- Scottish Health Technical Memorandums
- EnCO2de
- Health Building Notes
- ~~• CIBSE Design Guides~~

- [CIBSE Design Guides \(including AM11: *Building Energy and Environmental Modelling* and TM54: *Evaluating operational energy performance of buildings at the design stage*\)](#)
- Building Regulations (Scotland) Technical Standards

1.2 Building Envelope

The building envelope, construction and materials and the operation will have a significant impact on the efficient operation of the building engineering services installations. The thermal and energy model requires therefore to take cognisance of the project specific factors as detailed in the Reference Design proposals and Section 3 (*Board's Construction Requirements*) of Schedule Part 6 (*Construction Matters*).

The modelling exercise must take cognisance of the RIE Facilities and the associated Link Building to recognise the interface between the new and the existing buildings.

The Gross Internal Floor Area should be calculated by measuring the overall internal area of the building making a reduction for partitions, walls, voids and courtyards. The floor areas of internal rooms, circulation spaces and internal walkways should be included.

The heated volume should take into account the height between the floor surface and the room ceiling and should exclude ceiling voids, pipe ducts and plant rooms and include for a 6% reduction due to walls/partition generally in accordance with HTM 07-02: EnCO2de – Making energy work in healthcare.

The building envelope performance design criteria should be based upon an air tightness figure measured in $\text{m}^3/\text{hr}/\text{m}^2 @ 50\text{Pa}$ as appropriate to the type of facility and in accordance with Building Regulations (Scotland) Technical Standards.

Further methods of measuring and demonstrating the thermal efficiency of the building envelope such as thermal imaging can be utilised subject to agreement with the Board.

1.3 Ambient Weather Profile and Degree Day

The energy use of the building ~~will~~may be predicated by reference to the outside temperature and the Department of Health Estate and Facilities division publishes degree day data on a monthly basis.

The energy modelling shall be based on the above degree day data utilising the base temperature of 18.5° Celsius and Edinburgh degree day weather profile data.

[Outputs from degree day energy models may be combined with additional numerical energy models to provide an "all inclusive" energy model for the building.](#)

1.4 Dynamic Thermal and Energy Modelling Simulation

[AAs an alternative to the Degree Day methodology, a](#) certified and industry approved Dynamic Simulation Model (DSM) software tool compliant with CIBSE Applications Manual AM11 ~~shall~~may be used to produce the thermal and energy model for the Facilities.

Bidders shall seek agreement from the Board of their proposed modelling tool which shall require to be the most updated version of either:-

- IES (Integrated Environmental Solutions) Programme

- TAS (Thermal Assessment Simulation) Programme

Future modelling tools may be available and Bidders shall obtain the agreement of the Board if they propose to use a certified alternative to those listed above.

Outputs from dynamic simulation models may be combined with additional numerical energy models to provide an "all inclusive" energy model for the building.

1.5 Plant and Systems

The thermal and energy modelling shall incorporate all building services installations as required to maintain the Facilities within the operational parameters as defined in Section 3 (Board's Construction Requirements) of Schedule Part 6 (Construction Matters).

Any specific loads that Bidders deem to be excluded from the thermal and energy model, such as catering, etc., shall be quantified by Bidders and submitted to the Board for agreement and acceptance prior to any modelling works commencing.

1.6 Group 2 to 3 Equipment

As part of the thermal and energy modelling exercise Bidders shall provide an assessment of the energy consumption of the known Group 2A, Group 2B and Group 3 equipment.

Bidders are to provide a proposed methodology to the Board to demonstrate the projected energy consumption of the Group 2A, Group 2B and Group 3 equipment.

Although this information shall not form part of the agreed energy or carbon emissions targets, it shall be utilised to provide the Board with an informed estimate of anticipated future energy consumptions and utilities costs to allow future budget allocations to be assessed.

~~2—Design Period~~

2 DESIGN PERIOD

2.1 Modelling of Design Proposals

To calculate energy consumption loads for mechanical services, the CIBSE Building Energy Codes, calculation using the Degree Day Method and Edinburgh weather data for Space Heating and ventilation systems shall be used.

The occupancy, Equipment usage and departmental hours shall be identified by the Board. Any variations from this data proposed by Project Co shall be agreed with the Board prior to any modelling works commencing. Where assumptions are made by Project Co, these shall be in line with Good Industry Practice—and shall be quantified in the submission. This includes the application of factors set out in CIBSE Guide B for the thermal weight of the building, levels of operation and occupancy (Table B18.12), and the correction factor for the length of working day (table B18.13) as appropriate.

The exact correction factors to be applied in the modelling shall be provided by the Bidders and agreed with the Board prior to any modelling works commencing.

The degree day figure used shall be 18.5° Celsius as the base.

Space heating/cooling should be assessed on the required temperatures that are indicated on the room data sheets that will be provided by the Board to Bidders.

Design calculations shall be based on an external winter condition appropriate to Edinburgh and shall be compliant with external winter conditions detailed in the CIBSE design guides.

Thermal conductivity values shall be at a minimum as stated in the Scottish Building Regulations (Technical Standards) and shall reflect the actual building fabric design proposals.

The clinical usage and departmental hours shall be as indicated by the Board and any variations from these shall be proposed by the Bidders shall be agreed with the Board prior to any modelling works commencing.

All ventilation plant should be assessed on a maximum power and pressure drop within the air distribution systems as stated in the Scottish Building Regulations (Technical Standards) and in-line with Good Industry Practice.

Domestic Hot Water (DHW), usage shall be based on a 24-hour usage period. Any variation to this shall be proposed by Bidders and agreed with the Board prior to any modelling works commencing.

The cold water storage provision should be based on a 24-hour day usage period. Any variation to this shall be proposed by Bidders and agreed with the Board prior to any modelling works commencing.

Lighting shall be modelled in accordance with the Board's Construction Requirements, Room Data Sheets and any specific guidance provided by the end-user through the Board.

All lighting designs shall comply with CIBSE lighting design guides and the general lighting strategy proposed by Bidders and as detailed and agreed at Financial Close. Any variation to this shall be proposed by Bidders shall be agreed with the Board prior to any modelling works commencing.

The ~~Dynamic Thermal Energy Model~~thermal and energy model shall also be used by Bidders to show compliance of Project Co's Proposals with the Board's thermal and air quality requirements as identified in Section 3 (Board's Construction Requirements) of Schedule Part 6 (Construction Matters).

~~The dynamic~~Dynamic simulation ~~model~~models shall use the CIBSE ~~Design Summer Test Reference~~Year (DSY)TRY) data for Edinburgh in assessing the heating and, where required, cooling for each room within the Facilities. This information will inform the sizing of heating, ventilation and comfort cooling equipment within Project Co's Proposals. CIBSE Design Summer Year (DSY) data shall be utilised to assess natural ventilation strategies.

~~The Dynamic-Thermal Energy Model~~and energy models shall accurately model all proposed window/fenestration opening profiles, including taking in to account all constraints in the fenestration openings, including reveals, meshing and restrictors, when assessing overheating and air quality criteria for naturally ventilated rooms. Any automation and/or proposed opening parameters, for example temperature set points to open fenestration or any night time cooling strategies, shall be agreed in advance with the Authority.

The ~~Dynamic Thermal Energy Model~~thermal and energy models shall further allow for accurate thermal representation, and HVAC system sizing therein, for where doors are to be held open for operational or fire safety reasons.

2.2 2.2 Key Deliverable

The primary deliverable will be that Bidders / Project Co shall provide detailed calculation and modelling documentation ~~at design stage, following the protocol as identified above~~ that demonstrates the proposed “all-inclusive” actual annual energy consumption of the proposed Facilities by fuel type.

Bidders/Project Co shall further show that thermal modelling has been undertaken, following the protocol as identified above, to inform the heating, ventilation and cooling (HVAC) plant, overheating analysis and equipment sizing for the Facilities.

Appendix G – Insurance Response Matrix

Part 1 Insurance Costs Matrices

A. Premium calculation for Construction Phase - Schedule Part 15 Section 1

Class of Required Insurance	Cover Period	Sum Insured/ Rateable Factor	Premium Rate	Premium excluding IPT	Insurance Premium Tax (IPT)	Brokers remuneration (specify type and amount)
1. Contractors "All Risks" Insurance						
2. Contractors "All Risks" Terrorism Insurance ¹						
3. Delay in Start Up Insurance						
4. Delay in Start Up Terrorism Insurance ²						
5. Construction Third Party Liability Insurance						
6. Insurances required by law						
TOTALS						

¹ Bidder Note: whilst it is noted that the Terrorism Insurance will be renewable annually, the premium quoted in this table should represent the full cost for the duration of the Works.

² Bidder Note: whilst it is noted that the Terrorism Insurance will be renewable annually, the premium quoted in this table should represent the full cost for the duration of the Works.

B. Premium calculation for Policies to be taken out and maintained from the Actual Completion Date - Schedule Part 15 Section 2

Class of Required Insurance	Cover Period	Sum Insured/ Rateable Factor	Premium Rate	Premium excluding IPT	Insurance Premium Tax (IPT)	Brokers remuneration (specify type and amount)
1. Property Damage "All Risks" Insurance						
2. Property Damage "All Risks" Terrorism Insurance						
3. Business Interruption Insurance						
4. Business Interruption Terrorism Insurance						
5. Third Party Public & Products Liability Insurance						
6. Insurances required by law						
TOTALS						

C. Waiver of subrogation for Consort and Consort Parties

Please identify separately for all policies required by Schedule Part 15 Sections 1 and 2 the cost of obtaining a waiver of subrogation against Consort and Consort Parties including their respective suppliers and / or subcontractors of any tier pertaining to the RIE Project Agreement in accordance with clause 53.6.1 of the draft NPD Project Agreement.

Class of Required Insurance	Cover Period	Premium excluding IPT	Insurance Premium Tax (IPT)	Brokers remuneration (specify type and amount)
1. Contractors "All Risks" Insurance				
2. Delay in Start Up Insurance				
3. Construction Third Party Liability Insurance				
4. Insurances required by law (Construction Phase)				
5. Property Damage Insurance				
6. Business Interruption Insurance				
7. Third Party Public & Products Liability Insurance				
8. Insurances required by law (from Actual Completion Date)				
TOTALS				

Part 2 Insurance Technical Matrix

A. Schedule Part 15 Section 1 of NPD Project Agreement

Class of Insurance	Insurer(s) Identity (N.B. Including any co-insurers or excess layer insurers)	Deductible each and every claim (N.B. Confirm any aggregate Deductible if applicable)	Agreement to the requirements Clause 53 (Insurance) (If not please identify areas of variation or alternative proposals)	Agreement to the requirements of Schedules Part 15 (Insurance Requirement) and Schedule Part 25 (Insurance Proceeds Account Agreement) (If not please identify areas of variation or alternative proposals)
1. Contractors "All Risks" Insurance				
2. Delay in Start Up Insurance				
3. Construction Third Party Liability Insurance				
4. Insurances required by law				

B. Schedule Part 15 Section 2 of NPD Project Agreement

Class of Insurance	Insurer(s) Identity (N.B. Including any co-insurers or excess layer insurers)	Deductible each and every claim (N.B. Confirm any aggregate Deductible if applicable)	Agreement to the requirements of Clause 53 (Insurance) (If not please identify areas of variation or alternative proposals)	Agreement to the requirements of Schedules Part 15 (Insurance Requirement) and Schedule Part 25 (Insurance Proceeds Account Agreement) (If not please identify areas of variation or alternative proposals)
1. Property Damage "All Risks" Insurance				
2. Business Interruption Insurance				
3. Third Party Public & Products Liability Insurance				
4. Insurances required by law				

Re-provision of RHSC and DCN at Little France Invitation to Participate in Dialogue Volume 1

Appendix H – Certificate of Non-Collusion and Non-Canvassing

CERTIFICATE OF NON-COLLUSION AND NON-CANVASSING

We acknowledge that any Bidder who directly or indirectly canvasses any member, official or employee of Lothian Health Board (“the Board”) concerning the award of any contract in relation to the Project to re-provide services from the Royal Hospital for Sick Children, Child and adolescent Mental Health Services and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France will be disqualified from the bidding process and any Bid Submission submitted by or on their behalf shall be disregarded.

Therefore, we hereby certify and undertake and bind and oblige ourselves to the Board and its successors that we have not canvassed or solicited nor will we in the future canvass or solicit any member, official or employee of the Board in connection with the award of the Project or any Bid Submission or proposed Bid Submission in connection therewith and we certify that, to the best of our knowledge and belief having made reasonable enquiry, our Relevant Persons (as hereinafter defined) have not so canvassed or solicited.

In this certificate and undertaking, "Relevant Person" shall mean, as applicable in relation to us, any party co-operating with us in tendering for the Project, fellow tender consortium member, joint venture, controlling shareholder, subsidiary or parent company or other company within any group of which we form part, or any other person directly or indirectly controlling or controlled by us.

The essence of tendering is that the Board shall receive *bona fide* competitive BidsSubmission from all persons tendering. In recognition of this principle:

- I. We certify to the Board and its successors that the BidSubmission submitted by us, or on our behalf, is a *bona fide* BidSubmission, intended to be competitive and we have not fixed or adjusted the amount of the BidSubmission or the rates or prices quoted therein by, or under, or in accordance with any agreement or arrangement with any other person.
- II. We also certify to the Board and its successors that we and, to the best of our knowledge and belief having made reasonable enquiry, our Relevant Persons have not done and we hereby undertake and bind and oblige ourselves that we will not do at any time, any of the following acts:
 - A. enter into any agreement or arrangement with any other person that he shall refrain from bidding or add to the amount of any BidSubmission to be submitted; or
 - B. offer or agree to pay or give any sum of money, inducement or valuable consideration directly or indirectly to any person for doing or having done or causing to be done, any act or omission in relation to the BidSubmission or any other tender submitted to the Board in relation to the Project.

_____ in capacity of _____
Signature

duly authorised to act on behalf of _____

Re-provision of RHSC and DCN at Little France Invitation to Participate in Dialogue Volume 1

Date

in the presence of _____
_____ Witness

_____ Full name

_____ Address

Appendix I – Community Benefits~~1 SOCIAL CONSIDERATIONS / COMMUNITY BENEFITS OVERVIEW~~~~1 Social Considerations / Community benefits overview~~**1.1 Background**

The Board recognises the very significant training and employment opportunities delivery of this Project can create for the wider community and beyond throughout the Project Term. The Board also recognises that the Project has the potential to drive significant initiatives relating to regeneration, sustainability and social benefits, aligning with the Board's strategic objectives.

The Board is therefore incorporating a range of social considerations/Community Benefits (CB) Requirements into its procurement which will ultimately form contractual requirements under and in terms of Clause 73 (Community Benefits) of the NPD Project Agreement.

Project Co will work in partnership with the Board and where appropriate, the Edinburgh Partnership and the agencies listed in section 3.6 to deliver the Board's CB Requirements in respect of both the construction and operational phases of the Project.

1.2 Overview of the Board's CB Requirements

These are set out in Section 2 and comprise requirements for the following -:

- Targeted Recruitment and Training /Employment and Skills Plan(Section 2.1)
- Supply Chain Development (SMEs) (Section 2.2)
- Supply Chain Development (Social Enterprises) (Section 2.3)
- General CB Requirements (Section 2.4)

1.3 Bid Submission Requirements

These are detailed in Section 3.

In broad terms the Board's CB Requirements are expressed in general terms. Bidders are given freedom to provide proposals that best fit their delivery structure and procedures, split into construction phase proposals and operational phase proposals. Bidders are, however, required to propose specific financial consequences for failing to deliver these proposals, such payments to be reflected in Clause 73 of the NPD Project Agreement.

Bidders' responses will comprise completion of the various submission requirements, which are more fully set out in Section 3, but can be summarised as follows:

Section	Submission requirement	Approach to scoring
Section 3.1: Employability and Training – Construction phase	Completed ESP Completed CB Method Statement	Scored in accordance with section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPDISFT , as also referred to in section B6 of Appendix (ii) (Technical Submission Requirements) of

Re-provision of RHSC and DCN at Little France Invitation to Participate in Dialogue Volume 1

Section	Submission requirement	Approach to scoring
		Volume 1 of the ITPDISFT . A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.
Section 3.2 – Employability and Training – Operational phase	Completed ESP Completed CB Method Statement	-Scored in accordance with section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPDISFT , as also referred to in section B6 of Appendix (ii) (Technical Submission Requirements) of Volume 1 of the ITPDISFT . A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.
Section 3.3 – Supply Chain Development, SME and Social Enterprise – Construction phase	Completed CB Method Statement for Construction phase	-Scored in accordance with section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPDISFT , as also referred to in section B6 of Appendix (ii) (Technical Submission Requirements) of Volume 1 of the ITPDISFT . A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.
Section 3.3 – Supply Chain Development, SME and Social Enterprise – Operational phase	Completed CB Method Statement for Operational phase	-Scored in accordance with section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPDISFT , as also referred to in section B6 of Appendix (ii) (Technical Submission Requirements) of Volume 1 of the ITPDISFT . A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.
Section 3.4 – Other Community Benefits	Bidders shall submit a Method Statement setting out any other proposals or measures they are willing to undertake to provide additional Community Benefits	Requirement to submit a Method Statement but not scored.

-Responses referred to here as “CB Method Statements” are referred to in the NPD Project Agreement (~~Bidder Specific~~) as Project Co’s Community Benefits Method Statements.

1.4 Role of Edinburgh Council

The Board is a partner in the Edinburgh Partnership, a community planning partnership for the city which brings together the public, community, voluntary and business sectors to deliver a better quality of life in Edinburgh. For further information see:

http://www.edinburgh.gov.uk/info/20162/edinburgh_partnership/1446/about_the_edinburgh_partnership

Members of the Partnership will not be precluded from working with Project Co to deliver the CB programme provided that any potential conflicts of interest are managed to the Board's satisfaction.

~~2~~ THE BOARD'S COMMUNITY BENEFITS REQUIREMENTS

~~2~~ The Board's Community Benefits Requirements

2.1 Targeted Recruitment & Training/Employment and Skills Plan

The Board is committed to assisting unemployed people, encouraging access to quality sustainable employment and providing training opportunities relating to deliver of the Project.

This may include on-site training and assessment, or offsite training, or a mix of these.

The Board, based on the approach outlined by Construction Skills, and using benchmarks suggested in guidance produced by them relevant to employability and training measures in major health projects, has identified the following required outputs and volumes.

Work Placement (16-19 years)	16
Work Placement (14-16 years)	4
Curriculum support activities	14
Graduates	3
Apprentice starts	11
Existing apprentices	10
Apprentice completions	3
Jobs advertised through local employment vehicles	7
N/SVQ starts for subcontractors	21
N/SVQ completions for subcontractors	18
Training Plans for subcontractors	5
Supervisor training for subcontractors	10
Leadership and management training for subcontractors	9
Advanced health and safety training for subcontractors	11

2.2 Supply Chain Development: SMEs

2.2.1 Context

The long term sustainable development of the SME base is vital to driving sustainable economic growth within Lothian, Scotland and beyond. The Board, in furtherance of its own objectives and those of the Edinburgh Partnership of which it forms part, recognises the need to support the development of the SME sector by developing a procurement approach which ensures their exposure to procurement opportunities related to the Project.

2.2.2 Requirement

Project Co shall ensure that the Project Co advertises, and ensures that its sub-contractors:

- advertise all relevant subcontracts to be agreed with Bidders with reference to Bidders' method statements; and
- allow SMEs equal opportunities to tender provided they have the appropriate capacity, experience and financial standing (and without leading to discrimination against others in the market).

An SME is defined as a company that is a small or medium-sized company and is not a member of a large group. An SME has a turnover of up to 50m Euro per annum and has no more than 250 employees.

2.2.3 Notes

Bidders may wish to contact the organisations listed in section 3.6 in the context of developing their proposals to meet the above.

1.1 2.3 — Supply Chain Development: Social Enterprises

2.3.1 Context

The Board supports the Scottish Government's policy on Social Enterprise and believes that Social Enterprises have a distinct and valuable role to play in helping to create a strong, sustainable and socially inclusive economy.

A Social Enterprise is a business with primarily social objectives whose surpluses are principally reinvested for that social purpose in the business or in the community rather than being driven by the need to maximise profit for shareholders and owners. Social Enterprise is a business model which offers the prospect of a greater equity of economic power and a more sustainable society - by combining market efficiency with social and environmental justice.

The approach is founded on the principle of building relationships and partnerships by integrating a community development vision, social outcomes, business objectives and local and national government goals. Social Enterprises are involved in a wide range of industries, from recycling, community transport, landscaping, catering, employment and training to event management. In accordance with its broader objectives and its objectives through the Edinburgh Partnership, the Board wishes its procurement process ensures that Social Enterprises are made aware of supply chain opportunities offered by the Project.

2.3.2 Requirements: General

Project Co shall ensure that Project Co shall advertise, and ensure that its sub-contractors:

- advertise all relevant subcontracts to be agreed with Bidders with reference to Bidders' method statements; and
- allow Social Enterprises equal opportunities to tender provided they have the appropriate capacity, experience and financial standing (and without leading to discrimination against others in the market)

2.3.3 Notes

Bidders may wish to contact the agencies listed in section 3.7 for information on Social Enterprises and/or in the context of developing their proposals to meet the above.

As part of the Scottish Government's strategy to create an enterprising third sector, social enterprises are preparing to increase activity with commercial contractors, utilising national and local training, capacity building and promotional measures. A register of social enterprises that are interested in contract delivery has been created at www.readyforbusiness.org to assist contractors to identify individual social enterprises and consortia, to assist planning with respect to community benefit delivery within a range of contract opportunities.

Scottish Government initiatives are supported by a Tender Preparation programme for Third Sector Organisations throughout Scotland that will be delivered through Scottish Government Contract by CEiS and the Supplier Development Programme in 2010/11. Through these programmes, significant support and resource is being allocated to support social enterprises to be ready to engage with companies delivering commercial contracts, and in particular within a community benefits framework to ensure that procurement activity contributes to meeting ~~The~~ the Board's aims of having a robust social enterprise sector delivering social and environmental benefits in the city.

2.4 Other Community Benefits

Consistent with its broader objectives, including its objectives through the Edinburgh Partnership, the Board seeks to maximise Community Benefits delivered by the Project.

Accordingly, bidders will require to set out any additional Community Benefits that they would be willing to provide at no additional cost over the period of the contract. **Submissions on these additional benefits will not be scored** but the Board considers that such submissions could, for example, include additional Bidder proposals to:

- undertake educational initiatives with community, voluntary and charitable organisations relevant to the Project and not falling under 2.1 and 2.2 above; or
- support or contribute in some other way to the work of community, voluntary and charitable organisations associated with the Project.

Bidders will be at liberty to put forward other proposals.

Clause 73 of the NPD Project Agreement shall operate to contractually oblige Project Co to deliver additional Community Benefits that it puts forward.

2.5 General Community Benefits Requirements

2.5.1 Monitoring

Project Co will be required to provide monitoring information at least quarterly in a format to be agreed with the Board. The primary function of the monitoring information will be to enable the Board to measure and produce reports on Project Co's performance against the Community Benefits objectives.

In particular:

- Targeted Recruitment and Training:
- Supply Chain Development (SMEs and Social Enterprises); and
- Other Benefits put forward by Project Co.

To comply with the Data Protection Act, all such monitoring and training documents must include a statement authorising Project Co to disclose personal data from the monitoring forms to the Board for the purposes of contract monitoring. This statement is to be signed by the individuals listed.

2.5.2 Insurances

Project Co shall ensure that insurance cover includes people aged 16 and over and staff from employment and training organisations when on work experience on-site.

2.5.3 Disclaimer

The Board will work with its partners to enable access to appropriate construction and operational training, jobseekers, SMEs and Social Enterprises to be available to Project Co.

This action, however, does not comprise or imply any promise on the part of the Board or their agents to provide suitable services, trainees, labour or resources.

Any action taken by the Board to facilitate relationships between Project Co and individuals/firms/agencies does not imply and should not be deemed to imply that they or its agents consider the individual, firm or agency as suitable for engagement by Project Co and/or its supply chain. Within this context, the Board will work with local agencies to help facilitate the achievement of the Community Benefits Requirements.

3 BID SUBMISSION REQUIREMENTS

Bid submission requirements in respect of the Board's CB requirements are summarised at 1.3 above. The following sets out the detail required.

3.1 Employment and Skills Plan: Construction Phase

Bidders are required to complete an Employment and Skills Plan (ESP) covering the employment and skills areas from the table below (as extended by the Bidder to cover the full period of construction). For further information on each of these categories, Bidders are referred to Construction Skills in Scotland's document "*Client Based Approach to developing an Employment and Skills Strategy on construction projects in Scotland*" (and Appendix A in particular).

Benchmarks are provided in 2.1 and constitute minimum outputs for Bidders' ESPs. Bidders are to use their own judgement as to what outputs beyond those minimums they consider are ultimately achievable in relation to the Project.

The output figures for the ESP should indicate the minimum outputs for each month against the relevant employment and skills areas. The "Summary" columns are also to be completed. Guidance on the employment and skills areas is also included within Construction Skills in

Scotland's document "*Client Based Approach to developing an Employment and Skills Strategy on construction projects in Scotland*" (and Appendix A in particular).

Bidders are required to provide an unequivocal statement alongside their ESP that, if appointed, they will be contractually bound to deliver against what they have set out in the ESP, in accordance with the terms and conditions set out in Clause 73 of the NPD Project Agreement.

TEMPLATE EMPLOYMENT AND SKILLS PLAN (ESP)

Employment and Skills areas		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Sum No
1.	Work Placement (16-19 years) – persons													16
2.	Work Placement (14-16 years) – persons													4
3.	Curriculum Support Activities – individual engagement													14
4.	Graduates – persons													3
5.	Apprentice Starts - persons													11
6.	Existing apprentices - persons													10
7.	Apprentice Completions - persons													3
8.	Jobs Advertised Through proximate Employment Vehicles - number													7
9.	N/SVQ Starts for Subcontractors - persons													21
10.	N/SVQ Completions for Subcontractors - persons													18
11.	Training Plans for Subcontractors - number													5
12.	Supervisor Training for Subcontractors - persons													10
13.	Leadership and Management Training for Subcontractors - persons													9
14.	Advanced Health and Safety Training for Subcontractors - persons													11

Employment and Skills Method Statement

Bidders are also required to provide a detailed CB Method Statement setting out how they intend to implement the employment and training requirements of the Board and to deliver the ESP. The CB Method Statement should ~~be restricted to 1000 words and~~ clearly set out the proposed approach for delivering skills development against the employment and skills areas, covering the following:

- who in the organisation will be responsible for managing the training scheme and overseeing the proposals?
- which education and training providers will be involved with the delivery of the ESP?
- what types of accredited and non-accredited training are expected to be offered and who are expected to be the main beneficiaries of this training?
- which trades or occupational areas is it envisaged will be offering apprenticeship opportunities?
- what types of apprenticeships are expected to be offered (i.e., traditional programme led, advanced etc)?
- how will the target outputs as set out in the ESP be delivered?
- how will health and safety issues be managed?
- what actions will be taken to ensure the support of trade contractors and sub-contractors working on the project?
- how will compliance be managed and monitored with respect to the organisation's trade contractors and sub-contractors?
- how will the target outputs as set out in the ESP be delivered?
- how will health and safety issues be managed?
- How will monitoring of delivery of Community Benefits and reporting to the Board under Clause 73 of the NPD Project Agreement be undertaken?
- What financial consequence the bidder proposes to include, for the purposes of clause 73 of the NPD Project Agreement, for failure to deliver against the ESP.

Bidders are referred to Construction Skills in Scotland's document "*Client Based Approach to developing an Employment and Skills Strategy on construction projects in Scotland*" (and Appendix A in particular) for further information and Appendix B of that document in particular.

3.2 Employment and skills plan: operational phase

Bidders should repeat the process outlined for the construction phase in respect of the operational phase (though the table should be completed not on a monthly basis but on an annual basis).

Note: The desired/expected outputs set out at Section 2.1 are for the Construction Phase only. The Board does not have desired/expected output figures for this element and it is a matter for bidders to consider, as against their specific approach to delivery.

3.3 Supply Chain Development: SMEs & Social Enterprise

Each Bidder must complete two separate CB Method Statements in accordance with the detail set out below, detailing what it proposes to do to meet the Board's SME and Social Enterprise supplier development objectives in respect of both the Construction Phase and Operational Phase ~~(800 word limit for each)~~.

Bidders will be expected to have identified a source for any additional resources they will require to deliver the SME and Social Enterprise development, so that the requirements can be met with no additional costs to the Board. As part of the bid preparation, the Board expects Bidders to have contacted the agencies listed in Section 3.6 or other similar agencies of their choice.

Bidders are required to provide an unequivocal statement in the CB Method Statement that, if appointed, they will be contractually bound to deliver against what they have set out in their CB Method Statements, in accordance with the terms and conditions set out in Clause 73 of the NPD Project Agreement and the financial consequence the Bidder proposes to include, for the purposes of clause 73 of the NPD Project Agreement, for failure to deliver against what they have set out.

The Small to Medium sized Enterprises / Social Enterprises CB Method Statements must respond to the following questions (*NOTE: Separate responses are to be provided for the Construction Phase and the Operational Phase*):

1.	Describe the activities that you will undertake to identify SMEs and Social Enterprises and assess each sector separately in their capacity to deliver works, services or supplies, that are required for all contracts in relation to the Project.
2.	Please quantify, both in hours and value, the commitment of you and your sub-contractors, in relation to this project, to the engagement with SME / SEs in specific capacity building support and in the development of partnership working and outline your overall approach.
3.	How will you ensure that your sub-contractors make all opportunities available to SMEs and Social Enterprises?
4.	Describe the anticipated outcomes for SMEs and Social Enterprises from the activities you have outlined in response to Q2 and Q3 and how would you monitor and assess the social and economic impact of your engagement with SMEs and Social Enterprises?
5.	How you will monitor delivery of Community Benefits and report to the Board under Clau

3.4 Other Community Benefits

Bidders must provide a CB Method Statement setting out any other Community Benefits they are willing to deliver (see Section 2.4) and their proposals to monitor delivery of Community Benefits and report to the Board under Clause 73 of the NPD Project Agreement (**note: this CB Method Statement will not be scored**).

Bidders are required to provide an unequivocal statement in the CB Method Statement that, if appointed, they will be contractually bound to deliver against what they have set out in their CB Method Statements, in accordance with the terms and conditions set out in Clause 73 of the NPD Project Agreement and the financial consequence the Bidder proposes to include, for the purposes

of clause 73 of the NPD Project Agreement, for failure to deliver against what they have set out.
(800 word limit)

3.5 FOR INFORMATION ONLY – SUPPORT AGENCIES

POSSIBLE RESOURCES

Note: Any action taken by the Board to facilitate relationships between Project Co and individuals/firms/agencies does not imply and should not be deemed to imply that they or its agents consider the individual, firm or agency as suitable for engagement by Project Co and/or its supply chain. Within this context, the Board will work with local agencies to help facilitate the achievement of the Community Benefits Requirements.

3.6.1 Recruitment and Training-

Agency	Remit	Contact	Position	Contact No.	Email	Web
Sector Skills CLIENTS :						
Construction Skills	Sector Skills for construction main trades. Advice on training and funding	Hugh McCafferty	Operations Manager			http://www.constructionskills.net/
EU Skills	Sector Skills for Utilities, Gas and heating plumbers. Advice on training & funding	Jim Brown	Skills Director Scotland			www.euskills.co.uk
Summit Skills	Sector Skills for Electrical, Plumbing & Building Services. Advice on training and funding	Ian Stirrat	Operations Manager			http://www.summitskills.org.uk
Edinburgh Partnership	Its role is to lead joint activity on issues facing the city and those living and working here	Saty Kaur				http://www.edinburghnp.org.uk

3.6.2 SMEs

Agency	Remit	Contact	Position	Contact No.	Email	Web
Federation of Small Businesses	FSB Scotland campaigns for a better social, political and economic environment to work, learn and do business in.	Stewart Farmer	Regional Organiser (West of Scotland)	[REDACTED]	[REDACTED]	http://www.fsb.org.uk
Scottish Enterprise	SE help ambitious businesses in Scotland to grow and become more successful. SE support key industry sectors and develop the business environment to enhance Scotland's economy	Jillian Moffat	Senior Manager	[REDACTED]	[REDACTED]	http://www.scottish-enterprise.com

3.6.3 Social Enterprises

Agency	Remit	Contact	Position	Contact No.	Email	Web
Edinburgh Chamber of Commerce	Dynamic member-led organisation, working to support the local business community and specifically our strong network of member businesses.					http://www.edinburghchamber.co.uk
Ready For Business	Business support Services for SEs	Roddy Stewart	Business Adviser			http://www.ceis.org.uk
Craigmillar & District Business Association	Association was created to provide a local networking and information forum for established businesses, local entrepreneurs and individuals within the Craigmillar area.					www.cdaba.org.uk
Community Renewal	Work in local communities to	Nigel Green	Co-ordinator			http://www.communityrenewal.org.uk/

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	and small neighbourhoods to improve the wellbeing of families.		Edinburgh			
WEACT (Stevenson College)	WEACT is our community-based employability organisation offering a range of services to clients across Edinburgh.			██████████ ██████████ ██████████	████████████████████	WEACT is our community-based employability organisation offering a range of services to clients across Edinburgh.

3.6.34 Other Sources

Agency	Contact No.	Address	Web
Job Centres:			
New Town Edinburgh East Lothian		<u>20 High Riggs, Edinburgh, Lothian.</u>	https://www.gov.uk/contact-jobcentre-plus
North House		<u>Eskmills Park Station Road, Musselburgh, Midlothian.</u>	
Schools:			
Castlebrae Community High School		<u>2A Greendykes Road Edinburgh, Midlothian, EH16 4DP</u>	http://castlebrae.org.uk/
Portobello High School		10 Duddingston Road Edinburgh EH15 1NF	http://portobellohighschool.org.uk
Holyrood High School		55 Duddingston Road West, Edinburgh, EH15 3ST	http://www.holyroodedin.ic.org/home.ikm
Liberton High School		328 Gilmerton Road, Edinburgh, EH17 7PT	www.liberton.edin.sch.uk/
Gracemount High		<u>Lasswade Road, Edinburgh, EH16 6TZ.</u>	www.gracemounthighschool.co.uk/

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School			
Colleges:			
Jewel and Esk Valley College	██████████	<u>Milton Road Campus, 24 Milton Road, EH15 2PP.</u>	http://www.jec.ac.uk/
Queen Margaret University	██████████	<u>QMU Drive, Musselburgh, EH21 6UU.</u>	http://www.qmu.ac.uk/
Stevenson College	██████████	<u>Bankhead Avenue, Edinburgh, EH11 4DE.</u>	www.stevenson.ac.uk/

Appendix J - BIM Requirements for the Project**1- 1 Project Set-up**

1.1 Bidders are required to prepare a BIM Execution Plan for review by the Board. The BIM Execution Plan shall cover as a minimum the following topics:

b)a) Project information/description;

e)b) Key BIM stakeholders;

d)c) Goals and project objectives;

e)d) BIM objectives and uses;

f)e) Model management;

g)f) BIM deliverables and format;

h)g) Quality control system;

i)h) Data management; and

j)i) Frequency and content of BIM audits.

1.2 The BIM execution plan is to be prepared in accordance with BS 1192.

1.3 Bidders must use recognised industry BIM software platforms, suited to the various tasks to be fulfilled by both the design team and the supply chain, and establish principles of interoperability.

1.4 Bidders will provide a BIM overlay to the design team process map.

1.5 Bidders will appoint an Information Manager to see that the common data environment is set up and maintained and that the mechanism and technology for information exchange are in place and adhered to throughout the Construction Phase and the Operational Term.

1.6 Bidders will establish a through-life information management strategy including graphical and non-graphical information. Agree format for transfer of information into asset management systems will be developed, and a data classification system (eg Uniclass 2) established.

1.7 A Soft Landings implementation plan will be developed that follows the principles of the Government Soft Landings plan Policy dated September 2012.

2. Pre-construction Phase

2.1 3D visualisations, walk-throughs and images for User, Local Authority and other Stakeholder presentations and discussions at key project milestones are to be prepared.

- 2.2 Room layouts are to be prepared using ADB to include fully loaded 3D views.
- 2.3 The model is to include performance targets for key indicators, associated with associated provision in the design to measure data in operation and allow model-based comparisons between design intent and actual performance.
- 2.4 Data outputs in COBie format are to be prepared at key stages aligned to the process map, at a Level of Detail matching the stage requirement.
- 2.5 Specifications are to be based on a system that allows direct links between spatial BIM Models and the accompanying specifications and object attributes.
- 2.6 Read-only access to the BIM model gratis and within 24 hours is to be made available at the Board's request.

3. Construction Phase

- 3.1 The Board is to have read-only access to 4D construction sequencing output from model.
- 3.2 The model is to be regularly updated (every 2 weeks) to reflect material/component detailed selections or variations from those selected at design/tender stage.
- 3.3 Read-only access to the BIM model gratis and within 24 hours is to be made available at the Board's request.

4. Operational Term

- 4.1 The model shall be maintained throughout the Operational Term to reflect all planned maintenance and lifecycle works and modification should be made to reflect all changes implemented under Schedule 16 Change Protocol.
- 4.2 Read-only access to BIM model, gratis, and within 24 hours is to be made available at the Board's request.
- 4.3 Asset Management software is to be discussed with the Board but data should be held in recognised interchange format (e.g. COBie) to allow interoperability between recognised facilities management (CAFM) packages, recognised asset management packages and the BIM model.

5. Handback

- 5.1 Project Co will hand over ownership of the model to the Board at the Expiry Date.
- 5.2 At the Expiry Date, the model is to be fully updated model to reflect all changes during the Operational Term including specification details, operation and maintenance requirements and residual design life of all components and assemblies.

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- 5.3 The on-going maintenance and replacement information is to be in a format to be agreed with the Board.
- 5.4 Project Co shall provide training in the operation of software to the Board.

Appendix K – Certificate of Acceptance of Contractual Terms

CERTIFICATE OF ACCEPTANCE ON CONTRACTUAL TERMS

As per paragraph

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2.2.2 of Appendix C of Volume 1 of the ISFT, the Board requires that this certificate is signed by the Bid Director/Project Co lead, the D&C lead and the FM lead to acknowledge acceptance of the terms of the Final Tender (Bidder Specific) NPD Project Agreement, the Payment Mechanism and the Service Level Specification.

1. We, being [Project Co], [D&C] and [FM] can confirm that the terms of the following documentation (where relevant) are acceptable to us:

1.1 Final Tender (Bidder Specific) NPD Project Agreement as set out in Volume 2 of the ISFT;

1.2 Payment Mechanism as set out in Volume 2 of the ISFT;

1.3 Service Level Specification as set out in Volume 3 of the ISFT; and

1.4 Board's Construction Requirements as set out in Volume 3 of the ISFT.

2. We confirm that any matters which we have raised as a result of the due diligence we have carried out during the Dialogue Period have been raised and discussed with the Board during the Dialogue Period and that such matters have been included within [Insert name of Bidder]'s Final Tender submission.

_____ in capacity of _____

Signature of [Project Co]

duly authorised to act on behalf of

Date

in the presence of

_____ Witness

_____ Full name

_____ Address

_____ in capacity of _____

Signature [D&C]

duly authorised to act on behalf of

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Date

in the presence of

Witness

Full name

Address

in capacity of

Signature [FM]

duly authorised to act on behalf of

Date

in the presence of

Witness

Full name

Address

Appendix L – Petrol Station Site

The Board can confirm the Petrol Station Site was purchased by the Board on Wednesday 27 November 2013. The Petrol Station Site is as outlined in pink on the attached Plan 2.

Bidders shall include the landscaping of the Petrol Station Site in their Final Tender landscaping proposals. The Board can confirm that Bidders may use the Petrol Station Site during the Works for Construction Traffic only. The Petrol Station landscaping proposals and construction methodology will not be scored in the Final Tender Evaluation, however the bidders proposals should meet the Boards requirements.

Ground Investigations will be undertaken by the Board at the Petrol Station Site as early as practically possible with the anticipated issue of the Factual Report in March 2014. The scope and appointment of the Ground Investigation will be clarified in consultation with all Bidders prior to commencement of the Ground Investigation.

The Ground Investigations will be designed and managed by the Board's environmental consultant who will produce a Phase 1 and Phase 2 contaminated land risk assessment based on a proposed public open space land use. The reports will represent the baseline site conditions and be submitted to the bidders for review. The Ground Investigation Contractor will provide a letter of reliance for the Petrol Station Site Ground Investigation works only. A letter of reliance will not be provided for the reports produced by the Board's environmental consultant.

The preferred bidder will be required to obtain necessary planning permission from The City of Edinburgh Council for the proposed temporary and permanent land uses at the Petrol Station Site e.g. potential construction traffic route during construction and final reinstatement as an area of public open space within the Board's retained estate. The preferred bidder shall submit appropriate documentation to obtain such permissions including, but not limited to, risk assessments, a detailed remedial options appraisal and remediation statement which shall be produced in line with Part IIA of the Environmental Protection Act (1990) and follow best practice guidelines detailed in CLR11 (2004), BS10175:2011+A1:2013 and PAN 33.

Remediation proposals shall be agreed with the Board and their Environmental Consultant prior to submission to The City of Edinburgh Council and if necessary, SEPA.

Any remediation undertaken by Project Co during construction phase shall be independently verified by the Environmental Consultant and certified in accordance with the City of Edinburgh Council Planning Requirements and Regulations.

Additional Completion Criteria will be added to Appendix B (Completion Criteria) of Schedule Part 10 (Outline Commissioning Programme) to reflect the Petrol Station Works, the Petrol Station Completion Criteria are included in this clarification.

It is expected the work will be completed within the overall construction timetable, and therefore the Petrol Station Works will form part of the main Completion Criteria, however a fall back option of a phase 2 completion can be considered in the preferred bidder to financial close period, only if the Ground Investigation indicates more onerous ground conditions.

Provisional Sum

A provisional sum of £500,000 (excluding VAT) for undertaking the scope defined in this clarification shall be included to cover.

1. Risk Assessment and Reporting:

- Production of contaminated land interpretive reports and risk assessments (Phase 1 and Phase 2).
- Production of a remediation options appraisal report and remediation strategy (Phase 3).

2. Discharge of Planning Conditions imposed by The City of Edinburgh City Council relating to:

- The Demolition of any existing buildings.
- The proposed temporary land use, e.g. site access road.
- The final public open space land use as part of the wider planning application.

3. Remediation works:

- Potential removal of hydrocarbon free product and impacted soils/groundwater (if encountered).
- Supervision of the above.
- Provision of an inert environmental capping layer and geo-membrane.
- Independent validation and inspection.
- Or other viable remediation method that meets the planning requirements

The Board confirms the Provisional Sum includes the provision of an inert environmental capping layer and geo-membrane, however landscaping is not included.

The above scope, although based on the Parson Brinkerhoff Remediation Reports attached to this clarification, is indicative only and will be refined during the risk assessment process. It is dependent on the nature of the ground conditions encountered during the Petrol Station Site Ground Investigation works.

The Provisional Sum for the Petrol Station Works will be reviewed by the Board and the preferred bidder during the preferred bidder to Financial Close stage. This review will take place on an open book basis and following the issue of the Petrol Station Site Ground Investigation and subsequent preferred bidder discussions with the City of Edinburgh Council on the extent of any remediation that may (or may not) be required. The provisional sum will be adjusted in accordance with the attached Open Book Accounting Strategy and will be jointly agreed between the preferred bidder and the Board whilst also demonstrating value for money for the Board.

Volume 4 - Data Room – for information only

Copies of Parson Brinkerhoff Remediation reports

Copies of historical ground investigations reports provided to the Board during purchase of the Petrol Station Site will be available for bidder information only.

Mott MacDonald Risk Assessment and Remediation Options Appraisal Reports

A review and assessment of the information contained within the Parsons Brinkerhoff Report and other reports provided to the Board by Esso Petroleum Company Limited during purchase of the Petrol Station Site has been undertaken by Mott MacDonald in view of the proposed public open space land use. These reports are for information only.



RE-PROVISION OF THE RHSC AND DCN AT LITTLE FRANCE

A project to re-provide the services from the Royal Hospital for Sick Children, Child and Adolescent Mental Health Service and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France

FULL BUSINESS CASE

Version 2

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GLOSSARY

ASP	Annual service payment
BREEAM	Building Research Establishment Environmental Assessment Methodology
CAMHS	Child and Adolescent Mental Health Services
CEL	Chief Executive's Letter, from the Chief Executive of NHS Scotland
CIG	Capital Investment Group
DCN	Department of Clinical Neurosciences
ECCM	East coast costing model
EIB	European Investment Bank
FBC	Full Business Case
FM	Facilities management
HEAT	NHS Scotland targets, under headings of Health, Efficiency, Access, Treatment
HDU	High dependency unit, also known as level 2 critical care
ICT	Information and communications technology
ICU	Intensive care unit, also known as level 3 critical care
IHSL	Integrated Health Solutions Lothian, the preferred bidder appointed as Project Co
ISFT	Invitation to submit final tenders
KSR	Key Stage Review
LDP	Local delivery plan
NPD	Non-profit distributing, the public private partnership model used for this project
NPV	Net present value
OBC	Outline Business Case
OJEU	Official Journal of the European Union
PFI	Private finance initiative, the model for the Royal Infirmary of Edinburgh contract
PICU	Paediatric intensive care unit
Project Co	The name given to the consortium appointed to deliver the NPD project.
PTS	Pneumatic tube system
REH	Royal Edinburgh Hospital
RHSC	Royal Hospital for Sick Children
RIE	Royal Infirmary of Edinburgh, on the Little France campus
SA6	Supplemental Agreement 6 to the RIE Project Agreement
SEAT	South-east and Tayside regional planning for NHS Scotland
SFT	Scottish Futures Trust
SGHSCD	Scottish Government Health and Social Care Directorate
SRO	Senior responsible officer
WGH	Western General Hospital

1 EXECUTIVE SUMMARY

This Full Business Case (FBC) has been developed following Scottish Capital Investment Manual guidance. It is based on NHS Lothian's Outline Business Case (OBC) for the Royal Hospital for Sick Children (RHSC) and Department of Clinical Neurosciences (DCN) approved by the Scottish Government in September 2012.

1.1 Strategic Context

- 1.1.1 NHS Lothian has introduced a new Strategic Clinical Framework, in line with the NHSScotland Quality Framework and 2020 Vision, since the OBC was written, however the strategic need for a new RHSC and DCN has not changed. The clinical drivers and policies underpinning the OBC remain relevant, and the need to maintain Waiting Times Standards makes the case even stronger.
- 1.1.2 While RHSC and DCN successfully provide safe and effective specialist clinical care, the ongoing delivery and development of these services is limited by the challenges posed by geography and by outdated accommodation, with considerable backlog maintenance issues, that cannot be adapted to provide the best service possible.
- 1.1.3 The investment objectives, or benefits, of the project have not changed. Moving the RHSC, CAMHS and DCN into purpose-built 21st century facilities will improve NHS Lothian's efficiency in using its resources for safe and effective patient care.

1.2 Economic Case

- 1.2.1 The preferred location for the project has not changed since OBC; co-locating this range of services at Little France will maximise synergies between acute healthcare specialties.
- 1.2.2 Evaluation in the OBC confirmed that, of the procurement options available to NHS Lothian, a non-profit distributing (NPD) project which brought together children's and neurosciences services in one facility was the most economically advantageous outcome.

1.3 Commercial Case

- 1.3.1 The FBC is submitted following completion of competitive dialogue with three bidders, the evaluation of final tenders and the appointment of Integrated Health Solutions Lothian (IHSL) as preferred bidder in March 2014.
- 1.3.2 The FBC outlines the scope of the NPD contract, including risk transferred to the private sector, based on the Scottish Futures Trust (SFT) standard form Project Agreement. Hard facilities management (FM), or estates, is a part of the contract. In line with NHSScotland policy, all other FM services will be delivered by NHS Lothian.
- 1.3.3 Complex interdependencies with the existing PFI contract for the Royal Infirmary of Edinburgh (RIE) at Little France are recognised in the NPD Project Agreement. The Little France Campus Working Group, chaired by NHS Lothian, has been established to manage relations and operations between all parties on site.

- 1.3.4 Commercial arrangements with the existing PFI provider are required for NHS Lothian to:
- Secure vacant possession of the site from Consort, with sufficient enabling works completed for IHSL to start construction in October 2014; and
 - Procure works to develop RIE clinical services to support the model and patient pathways for RHSC and DCN. These works require to be contracted through Consort.
- 1.3.5 The value and scope of charitable donations for the RHSC and DCN is to be determined, and these arrangements will be formalised in accordance with best practice.

1.4 Financial Case

- 1.4.1 The total capital value of the project is £227m, a marginal decrease from the OBC projection.
- 1.4.2 A decrease in the NPD capital costs, reflecting the competitive final tender cost, was offset by increased non NPD capital costs, mostly in clinical enabling and offsite flood works.
- 1.4.3 The SFT cap has now been adjusted downwards to reflect the final tender NPD costs and any increase in the annual service payment due to further design development will be the responsibility of NHS Lothian. SGHSCD have confirmed they will fully fund the revised non NPD capital costs.
- 1.4.4 The OBC FM costs were estimated on a rate per square metre, and for FBC have now been developed based on the final tender design. The revised costs, after offset by existing budgets, are estimated to be £1m per annum higher than allowed for at OBC.
- 1.4.5 Additional clinical staffing for the building was explicitly excluded from the OBC, which stated that this required to be addressed through normal financial planning. Since then, detailed work has been carried out by NHSL and partner Boards to identify the staffing required to deliver the agreed service model.
- 1.4.6 The revenue cost associated with legislation or policy requirements gives rise to a resource gap of £3.6m. Of this, £1.9m relates to the provision of additional capacity for NHS Lothian and will be covered from existing NHS Lothian capacity budgets. The remaining balance will be shared with other systems, including SEAT partners.
- 1.4.7 It is fully recognised that further work is required, in collaboration with partner Boards, to continue to refine and agree the remaining operational costs to deliver the agreed service model. In particular, costs of £3.9m associated with additional capacity (16 beds to open in 2017 and 3 theatres) and developments totalling £0.9m where there is a choice about phasing, have not been agreed at this point and will require further scrutiny.
- 1.4.8 The net revenue impact at FBC is £10.8m, £2.5m higher than that projected at OBC.
- 1.4.9 NHS Lothian confirms that the financial consequences will ultimately be managed as part of their financial planning process.

1.5 Management case

- 1.5.1 The FBC expands on the project management arrangements described at OBC. This includes responsibilities in the period up to financial close, the construction and commissioning phase, and the 25-year operational term of the contract.

1.6 Approval by other Boards

- 1.6.1 NHS Borders, Dumfries and Galloway, Fife, Forth Valley and Tayside all confirmed their support in principle for the new RHSC and DCN service model and the NPD project at OBC.
- 1.6.2 Through the South-east and Tayside (SEAT) group, NHSL have shared, scrutinised and agreed to the running costs of the proposed model with the partner Boards.

1.7 Programme

- 1.7.1 The approval process and dates for the FBC are based on the programme to reach Financial Close on 2 October 2014, as agreed with Integrated Health Solutions Lothian:

Activity	Timescale
Endorsement of FBC by Project Steering Board	20/06/2014
Approval by NHS Borders, Dumfries & Galloway, Fife and Forth Valley	27/06/2014
Approval of FBC by Finance and Resources Committee	09/07/2014
Approval of FBC by NHS Lothian Board	06/08/2014
Submission of FBC to SGHSCD CIG	29/07/2014
FBC presentation to SGHSCD CIG	05/08/2014
SGHSCD meeting to consider FBC	26/08/2014
Financial close	02/10/2014
Start on site	03/10/2014
Completion / handover	17/02/2017
Project Co FM service commencement	17/02/2017
Hospital Opens	15/05/2017

- 1.7.2 Approval of the FBC by SGHSCD's Capital Investment Group will allow NHS Lothian to proceed to financial close with the preferred bidder subject to completion of the pre-financial close Key Stage Review (KSR).
- 1.7.3 Following financial close an FBC Addendum will be prepared to inform NHS Lothian Board and SGHSCD of the final details of the contract.

1.8 Confirmation of status

- 1.8.1 This FBC was approved by NHS Lothian Board on 6 August 2014 for submission to the SGHSCD Capital Investment Group.
- 1.8.2 The support from the Scottish Government is outlined in the 2012 funding letter and the March 2014 pre-preferred bidder KSR carried out by SFT.

1.8.3 Contributions from partner NHS Boards have been confirmed, with letters of support attached at Appendix 1.

1.9 Statement of Affordability

1.9.1 NHS Lothian confirms that the financial consequences will be ultimately managed as part of their financial and capital plan process; with support from the Scottish Government NHS Boards and charity partners.

2 THE STRATEGIC CASE

This section describes:

- the national and local context for the project;
- the service model and scope of the project;
- the objectives and benefits of the project; and
- highlights the constraints and dependences.

2.1 Strategic Context

2.1.1 National Strategy

The Scottish Government's vision is for sustainable, quality health care services and works to deliver a healthier future for everyone. The strategic context for this project remains consistent from OBC and the planning for RHSC and DCN has been taken forward in line with all national policy, local strategy and NHS guidance including but not limited to:

- NHS Scotland's Quality Strategy¹ to deliver person-centred, safe, effective, efficient, equitable and timely healthcare, and the implementation plan, 2020 Vision.
- The directive on inpatient accommodation, where all patients will be accommodated in single rooms unless there are clinical reasons for multi-bedded rooms to be available.²
- The recommendation that care for children and young people up to age 16, and age 18 for mental health and some complex and chronic conditions, should be provided in age-appropriate facilities.³
- Better Health Better Care, with its emphasis on improving quality, addressing excessive variation in practice, and ensuring the highest standards of patient safety.
- The policy to have two Paediatric Intensive Care Units in Scotland, commissioned under NHS National Services;
- Delivering for Health, which describes shifting the balance to community based care with improved partnership working.
- The Kerr Report developed the modernisation and re-design of health services that meet the needs of the local population with local access to services. This includes the provision of integrated health services and improved access to diagnostic and treatment facilities, and specific to this project, the recommendation to deliver adult and paediatric neurosurgery on the same site.⁴
- Modernising Medical Careers, the Consultants' Contract and the European Working Time Regulation all affect workforce planning.
- The requirement that all NHS Boards contribute to the greenhouse gas emissions reduction targets set in the Climate Change (Scotland) Act 2009.

The service model that will deliver on these strategies and policies is outlined in section 2.8.

¹ Scottish Government (2010): *NHSScotland Quality Strategy – putting people at the heart of our NHS*

² CEL 27 (2010) on *Provision of Single Room Accommodation and Bed Spacing*

³ Scottish Government (May 2009): *Hospital Services for Young People*

⁴ Kerr (2005): *Building a Health Service 'Fit for the Future'*. Earlier reviews of paediatric surgical services have also made the same recommendations in Kennedy (2001) *The Report of the Public Inquiry into children's heart surgery at the Bristol Royal Infirmary 1984-1995*, and The Society of British Neurological Surgeons (2000) *Safe Neurosurgery*.

2.2 Organisational overview

2.2.1 NHS Lothian

NHS Lothian provides a comprehensive range of primary, community-based and acute hospital services for the populations of Edinburgh, Midlothian, East Lothian and West Lothian.

NHS Lothian provides services for the second largest residential population in Scotland - circa 800,000 people – and tertiary and national services by contract with other NHS Boards and NHSScotland. NHS Lothian employs approximately 24,000 staff.

2.2.2 Services related to this project

The Royal Hospital for Sick Children provides a comprehensive range of dedicated children's services, including its own accident and emergency department. The RHSC offers acute medical and surgical care, specialist surgical and medical care, haematology and oncology, day care and critical care to Lothian and the South-East and Tayside (SEAT) region. The outpatient department cares for more than 34,000 patients a year.

Child and Adolescent Mental Health Services inpatient and day case facilities are provided for the SEAT region at the Young People's Unit at the Royal Edinburgh Hospital and two satellite units in South Edinburgh.

The Department of Clinical Neurosciences at the Western General Hospital provides acute neurology services for Lothian patients and the tertiary service for the South-East of Scotland and Dumfries and Galloway, and neurosurgery for the same regional population.

2.2.3 NHS Lothian Strategy

NHS Lothian's Strategic Clinical Framework⁵ commits to ensuring safe, effective and person-centred care through six strategic aims:

1. Prioritise prevention, reduce inequalities and promote longer healthier lives for all
2. Put in place robust systems to deliver the best model of integrated care for our population – across primary, secondary and social care
3. Ensure that care is evidence-based, incorporates best practice and fosters innovation, and achieves seamless and sustainable care pathways for patients
4. Design our healthcare systems to reliably and efficiently deliver the right care at the right time in the most appropriate setting
5. Involve patients and carers as equal partners, enabling individuals to manage their own health and wellbeing and that of their families
6. Use the resources we have – skilled people, technology, buildings and equipment – efficiently and effectively.

NHS Lothian's Strategic Plan for 2014-2020⁶ includes specific proposals to develop services for children, young people and adult neurosciences patients, and cites the delivery of the RHSC and DCN at Little France as a vehicle for these commitments:

- a) To implement the NHS Lothian strategy for children and young people 2013–2020, "Improving the Health and Wellbeing of Lothian's Children and Young People";

⁵ NHS Lothian (2013): *Our Health, Our Future: NHS Lothian's Strategic Clinical Framework for 2013-2020*

⁶ NHS Lothian (2014): *Our Health, Our Care, Our Future: NHS Lothian's Draft Strategic Plan for 2014-2020*

- b) To develop a strategy (including e-strategy) and fully integrated pathways of care for patients with neurological conditions, head injury, sensory impairment, epilepsy, Huntington's and other rare conditions requiring physical and complex care

NHS Boards must meet the NHSScotland National Waiting Times standards.⁷ The NHS Lothian Local Access Policy describes how the organisation will meet its treatment time targets and guarantees.

NHS Lothian's Local Delivery Plan describes the organisations objectives, including HEAT targets, setting out how the Board will contribute to Scotland's vision for sustainable, quality health care services.

2.3 Investment Objectives

2.3.1 Benefits criteria, or investment objectives, were developed specifically for this project by stakeholders in RHSC and DCN services. These have been re-validated at each option appraisal and business case stage of the project.

2.3.2 The key investment objectives for this project, and how they relate to the Scottish Capital Investment Manual (SCIM)⁸ are listed below:

- To provide an environment that supports **clinical effectiveness**, meeting of national standards and targets and facilitates the implementation of best evidence based practice leading to improved treatment outcomes for patients. (SCIM: clinical effectiveness, meeting standards, evidence based)
- To provide an environment where clinical service arrangements can be delivered to a standard and timeframe that represents best possible outcome for patients, in conjunction with **best value for money**. (SCIM: efficient use of resources and revenue)
- To provide a physical environment the quality of which **promotes the health and well being** of the building's users. (SCIM: a physical environment to promote health and well being)
- To provide a service environment that will easily allow **engagement and involvement with research** and service development opportunities with our partner higher education institutes. To make research, treatments and interventions, and their potential benefits, available to patients. Attracting highly capable staff with progressive research interests will improve patient care and service delivery. (SCIM: research, education and service development.)
- To provide a scheme option that results in the **minimum possible disruption to patients** and allows the continued delivery of clinical services over the duration of the construction, leading to a solution that provides a more efficient and effective clinical service delivery environment. (SCIM: delivered with minimum disruption; delivered to standard and timeframe with value for money)

⁷ CEL 33 (2012): *NHSScotland National Waiting Times Guidance*

⁸ Scottish Government (2009): *Scottish Capital Investment Manual*

- To provide services that will be **safely accessible** to patients, visitors and staff by public and private transport. (SCIM: safely accessible services.)
- To optimise the efficient use of energy, water, waste management and in so doing **reduce lifetime recurring revenue costs** whilst also **reducing the carbon footprint** by minimising pollution generation. (SCIM: efficient use of resources and revenue)
- To **future-proof the capacity** of NHS services. (SCIM: efficient use of resources and revenue)

2.4 Existing arrangements



Figure 1: Map of Edinburgh showing locations of existing hospitals relevant to this project

- 2.4.1 Services for children and young people are currently provided at the RHSC at Sciennes Place. These acute and tertiary services comprise 131 inpatient and day case beds, five operating theatres, outpatient departments, diagnostic, therapies and laboratory services and all administrative functions to support the children's hospital. Clinical specialities include medicine, surgery, neurosciences and oncology for Lothian and the South-east of Scotland, and one of the two paediatric intensive care units in the country.
- 2.4.2 CAMHS inpatient and day case facilities are provided at the Young People's Unit at the Royal Edinburgh Hospital (REH) and two satellite units in South Edinburgh. These

comprise 12 inpatient beds and a range of supporting day case and outpatient accommodation.

- 2.4.3 Adult neurology and neurosurgery services are provided in the DCN at the Western General Hospital in 64 inpatient beds, 2 operating theatres, neuroradiology including interventional radiology, day case investigations, outpatients, therapies and supporting office accommodation.
- 2.4.4 As outlined in the OBC, the strategic need to deliver national policy and NHS Lothian's business drivers point to the project relocating RHSC, CAMHS and DCN to Little France. This site currently comprises the Royal Infirmary of Edinburgh, University of Edinburgh teaching and research buildings, and the BioQuarter research and development park.

2.5 Future Business Needs: The Case for Change

The case for change outlined in the OBC remains valid and is based on the key drivers outlined below.

2.5.1 RHSC – Clinical Drivers

Services in the existing RHSC have been developed to their maximum capacity; they currently take new patients up to their thirteenth birthday and provide ongoing care to existing patients up to age sixteen, which falls short of national policy to provide care for all young people up to age 16 in appropriate facilities⁹.

Paediatric neurosurgery is performed in RHSC by surgeons who also work in DCN on a different site four miles away. Resources are allocated to run planned admissions and operations on both sites, however the emergency service is provided by one on-call surgeon across both services. This is possible due to the small number of admissions, but these patients are acutely unwell and the need for medical staff to travel between sites in an emergency is inefficient and, at worst, a compromise to patient safety.

Acutely unwell babies requiring surgery are transferred three miles by road from neonatal critical care alongside maternity services in the RIE to the paediatric theatres at RHSC. The ambulance transfers, physical distance and time delays all pose risk to patient safety.

2.5.2 RHSC – Property Drivers

The 2011-15 NHS Lothian Property and Infrastructure Strategy recognised that the RHSC requires significant improvement and that it would be uneconomic and highly disruptive to adapt the existing site. It also found that overcrowding was a problem at RHSC, and referred to the report by the Scottish Child Health Support Group in 2003, that 'continued investment' (in the RHSC) would be unproductive in the long term and it is clearly no longer fit for purpose'.

The Property Asset Management Strategy (2011-15) gave RHSC the highest possible risk score in terms of the amount of backlog maintenance required, at a total cost of £11.4million. This was considered to be giving rise to poor condition and performance and

⁹ Scottish Government (May 2009): *Hospital Services for Young People*

the updated strategy for 2014-21 judges the functional suitability of the RHSC to be not satisfactory / unacceptable.

The age and fabric of the building and the layout of patient facilities, including limited single rooms, makes it difficult to achieve the required infection control standards, to provide adequate isolation or barrier nursing facilities and to maintain standards of cleanliness.

The geographical spread of clinical facilities and poor clinical adjacencies result in inefficient patient and staff flows. Patients often require access to a number of services that are located in separate buildings on the hospital site. Therapies and a range of other services are located in buildings adjacent to the hospital; as there is no covered approach to these buildings patients and families have to go outside to access them in all weather conditions.

2.5.3 CAMHS – Clinical Drivers

NHS Lothian's Joint Mental Health and Wellbeing Strategy¹⁰ includes the aims that more people with mental health problems will have good physical health and that fewer people will experience stigma and discrimination.

In 2006 the ombudsman recommended that NHS Lothian '*should ensure that inpatient mental health services for patients with eating disorders have access to acute in-patient medical services with the specialist knowledge and expertise needed to treat patients with eating disorders.*'¹¹ Co-locating CAMHS with the hospital for children and young people will provide acute medical as well as mental health services for this vulnerable patient group.

By including mental health in the services provided at the hospital for children and young people, and working to integrate them into the hospital 'family', NHS Lothian will be able to further reduce any stigmatisation of this patient group.

Service redesign work in mental health includes a focus on adolescents and their transition from children's to adult services, which will be on different sites following this move.

2.5.4 DCN – Clinical Drivers

Redesign within the service has resulted in waiting times for inpatients and outpatients reducing to below 12 weeks each, however, there is limited scope within the current facilities to maintain the standard of 18 weeks total wait. There is currently no CEPOD theatre capacity and emergencies in normal working hours impact on planned admissions, thereby causing further waiting times pressures.

Neurology referrals increased by 53% over the period 2006-2009 and neurosurgery by 84% in the same period, with consequent pressure on radiology, theatre and inpatient facilities. Projections from the General Register Office for Scotland show an increase in the population across the DCN catchment area and the incidence of neuroscience conditions, which will put even greater pressure on the resource for secondary and tertiary services provided in DCN.

¹⁰ NHS Lothian (2011): *A Sense of Belonging – Joint Mental Health and Wellbeing Strategy 2011-2016*

¹¹ Scottish Public Services Ombudsman (June 2006): *Case number 200400447*

A major challenge to effective patient care in the existing model is the distance of the intensive care beds in the WGH from the rest of DCN. A patient journey to and from this area, to access critical care, theatres or radiology in an emergency, can take in excess of twenty minutes and goes through public areas of the hospital. Specialist staff urgently needed in one unit may be engaged in the other, and the distance between the departments does not support efficient management of the workforce.

At present, spinal surgery referrals are made to either neurosurgery in DCN or orthopaedics at the RIE with separate patient pathways for similar conditions and procedures.

This project does not include the provision of longer-term rehabilitation and ongoing care, the service model being underpinned by the assumption this will continue to be provided off-site from the DCN.

2.5.5 DCN – Property Drivers

A key issue for DCN re-provision, identified in the Property and Infrastructure Strategy (2011-15), is that the outdated existing facilities do not meet patient expectations of 'fit for purpose'. Scottish Government directives on single rooms¹² further support the case for new accommodation. At present approximately 20% of DCN beds are in single rooms, none with en-suite facilities, and all are in spaces less than current recommendations of 19m² per patient bed.

In the 2011-15 strategy the DCN narrowly achieved a satisfactory rating for health and safety and the physical condition and energy efficiency of the build was judged unsatisfactory. In NHS Lothian's updated 2014-21 Property and Asset Management Strategy, the functional suitability of DCN is classed as not satisfactory / unacceptable. The projected cost of upgrading the existing accommodation to an acceptable standard was over £14million at 2007 costs.

2.6 **The Royal Infirmary of Edinburgh**

2.6.1 Commercial context

The RIE facility was procured as a PFI contract between the former Royal Infirmary of Edinburgh NHS Trust and Consort Healthcare (ERI) Ltd. The RIE facility was financed, designed and build by Consort Healthcare, and a range of soft and hard facility management services are also provided through the PFI RIE Project Agreement.

The site is leased to Consort Healthcare Ltd for a term of 130 years, thus any site development requires Consort Healthcare approval and changes to the project agreement. The supplemental agreement (SA6) confirming the framework for the land swap and the site enabling works required to deliver the RHSC and DCN project was signed in January 2012.

This project requires enabling work within the RIE to support the clinical model proposed for RHSC and DCN. These separate packages of work to re-model critical care,

¹² Scottish Government; CEL 48 (2008) and CEL 27 (2010) on *Provision of Single Room Accommodation and Bed Spacing*

pharmacy, laboratories and medical photography, and install new pneumatic tube, fire alarm and IT links to the new build, require to be delivered under the terms of NHS Lothian's RIE Project Agreement with Consort.

2.6.2 Clinical enabling – RIE clinical divers

2.6.2.1 A consequence of moving DCN to Little France is the re-modelling of adult critical care in the RIE, giving rise to the need to relocate the current renal and transplant high dependency unit (HDU).

2.6.2.2 General and neurosciences critical care

To ensure the sustainability of critical care on three acute sites across Lothian, and the concentration of expert staff and infrastructure for this patient group, this project will integrate acutely unwell neurosciences patients into the critical care cohort at the RIE. This area comprises HDU beds and intensive therapy unit (ICU) beds, also known as level 2 and level 3 critical care.

At present critical care in the RIE is running at 83% occupancy, above the recommended 75% for an efficient and sustainable service. The unit is restricted in the flexibility it can provide for patients whose conditions fluctuate, and often these patients require to be moved when they are at their most sick, or to accommodate others who have deteriorated.

Bed modelling indicates a need for 42 critical care beds to support the current RIE services *and* neurosciences. This does not include the renal and transplant high dependency beds, to be displaced, which are addressed separately. The current critical care wards require to be re-modelled into a single unit of flexible level 2/3 beds, adding one additional bed space.

2.6.2.3 Renal and transplant HDU

The current renal and transplant HDU beds are over-occupied, with pressure coming from increased incidence of disease and of transplantation activity. In relocating this service for the DCN move, NHS Lothian is able to build a fit-for-purpose and future-proofed HDU with an increase in beds to match regional modelling requirements. The service will be relocated alongside the downstream ward, bringing efficiencies in patient and staff pathways, and an increase in isolation and single room accommodation.

There are currently 11 beds in the unit; demand modelling demonstrates 16 will be required by 2020. 16 bed spaces will be built, with 14 planned to open in 2017.

2.6.2.4 Office accommodation

The space for the new renal and transplant HDU is currently occupied by laboratories, university and IT offices and NHS Lothian need to relocate these 70 clinical support staff to enable the series of moves described above.

2.6.2.5 Spinal surgery services

Accommodation for spinal surgery in DCN will allow a single, equitable patient pathway and provides much-needed capacity for orthopaedics in the RIE theatres and wards.

2.6.2.6 Helipad and major trauma

The location of the existing helipad on land adjacent to the RIE necessitates the transfer of patients from helicopter to ambulance for transportation to the building itself, with risk to the patient in the delay and double-handling required. The helipad itself no longer meets the standards set out by the Civil Aviation Authority for such facilities, and therefore its hours and conditions of use are limited.

The new facility will include a helipad for the transfer of patients to and from the Little France site by air. 24/7 direct access by air ambulance would contribute to the Scottish Government's stated intention that Edinburgh would have a Major Trauma Centre.

2.6.3 Clinical enabling – accommodation drivers

2.6.3.1 In developing the service model for the RHSC and DCN, clinical support services were considered across the whole Little France site. It was agreed at OBC that the following did not require to be replicated in the new building, and would be enabled from the RIE:

2.6.3.2 Pharmacy

The RIE pharmacy will serve all clinical services in the RIE, RHSC and DCN from 2017. To accommodate the additional activity the department requires increased aseptic accommodation and the installation of robotics for the storage and dispensing of medicines. This necessitates the installation of a pneumatic tube system (PTS) link from the RHSC and DCN build.

2.6.3.3 Laboratory services

The RIE laboratories will support the majority of tests required by the RHSC and DCN from 2017. The addition of specialist paediatric biochemistry laboratory space to the RHSC scope is covered in section 2.7.3.

2.6.3.4 Pneumatic Tube System (PTS)

The use of the RIE pharmacy and laboratories necessitates the extension of the RHSC and DCN PTS network to two stations in the RIE for the delivery of prescriptions and specimens to these departments. This will be a separate network to the PTS in the RIE that the PFI provider there is responsible for.

2.6.3.5 Medical photography

This department, currently used for adults only, requires minor redesign to accommodate the children and young people who will also be seen here from 2017.

2.7 **Agreed Scope**

2.7.1 This project addresses the re-provision of all acute hospital departments from the RHSC, the CAMHS inpatients and day case services and the DCN to Little France. This includes clinical support provided by laboratories and pharmacy, and facilities management and administrative and management functions.

The RHSC and DCN will be a stand alone facility, managed separately from the existing RIE building and its PFI contract arrangements. Facilities management (FM), access and delivery arrangements, and the procurement and provision of energy and medical gases will be independent of the RIE.

This FBC encompasses the NPD contract for the RHSC and DCN building and the range of related enabling works to be carried out by Consort, the RIE PFI provider.

2.7.2 RHSC and DCN Accommodation

The NPD project encompasses following accommodation requirements:

- inpatient beds: 211
- day case beds: 22
- theatres: 10 suites
- MRI scanners: space for 5 scanners, including one intra-operative in theatres
- CT scanners: 2
- angiography suite: 1
- outpatient departments: 42 clinic rooms
- rehabilitation space for physiotherapy, occupational therapy, speech and language therapy and dietetics
- paediatric emergency department
- helipad
- classrooms for the hospital outreach teaching service
- sanctuary / spiritual care space
- family hotel and family support facilities
- health records library
- office accommodation for administration and clinical support
- staff changing and rest facilities
- kitchen and catering outlets including a restaurant
- retail outlet
- facilities management: domestics, materials management, laundry, waste, portering
- energy centre
- service and delivery yard
- secure accessible garden space
- emergency, disabled and parent and child car parking at entrances
- paediatric biochemistry laboratory

The following accommodation schedule changes have been agreed since OBC:

- Further review of the service model and projected activity in both paediatrics and neurosurgery resulted in a change of scope and the proposed minor procedures room is now a full theatre suite to provide more capacity and flexibility. There are ten operating theatres in the schedule now.
- Where DCN was previously planned to have 100% single rooms, the Chief Medical Officer has since agreed to derogation for eight beds to be provided in two shared 4-bed areas for reasons of clinical safety and observation.¹³

¹³ Mike Baxter (16 July 2013): *by email: Justification for derogation from single bed guidance approved*

- The paediatric biochemistry laboratory has been incorporated into space previously earmarked as shelled accommodation. This service cannot fit into the current RIE labs alongside other RHSC and DCN activity. The NHS Lothian strategy for laboratories may find another solution before May 2017, timescales for this parallel project have not been confirmed, in which case the accommodation would revert to shelled space for future change.
- The accommodation schedule gross internal floor area for the reference design was 49,991m². Following the changes above and design development in dialogue, the accommodation schedule for these services is 51,156 m².

2.7.3 Facilities management and lifecycle

All soft FM services will be provided by NHS Lothian.

All hard FM and lifecycle will sit with Project Co with the exception of:

- Snow and ice clearing; this is currently done by the RIE PFI provider and for clarity of accountability NHS Lothian intends to extend their contract to include this.
- Pest control; this will be added to NHS Lothian's current outsourcing of this service, which is the approach for the whole of Lothian excluding RIE.

2.7.4 Site boundary

In addition to the site identified in the OBC, the adjacent land that was formerly a petrol filling station has been procured by NHS Lothian for the project. This area shall be included in the landscaping, and is available to Project Co to use for construction access, although not for building upon.

2.7.5 Enabling for the NPD project

Site enabling works to be carried out by the PFI provider of the RIE, to ready the site for vacant possession by Project Co include:

- Sewer and services re-routing
- Relocation of VIE gas plant
- Alterations to roads infrastructure
- RIE Emergency Department link to the new build
- Flood defence works on the Little France site
- Flood defence works not on the Little France site

2.7.6 Site interface

Works on the interface with RIE and the wider Little France site to be carried out by Project Co include:

- Hospital square works: roadworks and landscaping of the area between RIE, RHSC and DCN and the Chancellor's Building
- Specified road works;
- Surface water drainage connections;
- Emergency department and theatres link to the RIE;
- ICT and fire alarm systems interface with the RIE;
- Pneumatic tube delivery system to two specified locations within the RIE.

2.7.7 Clinical enabling in RIE

Clinical enabling works to be carried out by the PFI provider to ready the RIE to support the RHSC and DCN comprise:

- critical care redesign
- creation of a new renal and transplant HDU
- relocation of 70 clinical support staff
- pharmacy works to increase aseptic capacity and install robotics
- medical photography redesign

2.7.8 Exclusions

This project does not include NHS Lothian's Community Child Health service, currently also on Sciennes site, which will be relocated in the same timeframe.

This project does not include NHS Lothian's broader strategic redesign of laboratory services.

2.8 **Agreed Service Requirements**

2.8.1 Model of Care

The model of care that was signed off at OBC has been reviewed and confirmed as valid. The principle that underpin the service model and accommodation requirements are summarised here.

- a) Wherever possible, the provision of outpatient and day case services is shifted to community premises and facilities closer to the patient, including other NHS Board areas.
- b) Patient pathways designed to provide rapid assessment and access to diagnostics to speed decision-making and the commencement of treatment.
- c) Whenever possible, patients' emergency care needs will be met on an ambulatory basis rather than through admission to hospital.
- d) Day case treatment will be the norm for as much planned hospital care as possible.
- e) The norm for surgical admissions will be on the day of surgery.
- f) Admission and discharge will be safe and timely, with no boarding, unnecessary delays or avoidable re-admission.
- g) Care pathways and the physical building will be designed to reduce wasteful activities for patients and staff such as avoidable transfers and travel.
- h) Inpatient accommodation will be configured to allow for flexible management of beds to respond to seasonal or other variations in demand.

- i) Patients requiring a high dependency of care will be nursed within purpose-built and staffed critical care units.
- j) Theatres and radiology facilities will be configured to co-locate equipment and expert staff, and will be shared by adult and paediatric services insofar as this does not impact negatively on the patient experience.

Further planning assumptions for **children and young people's services** include:

- k) Incorporating the increased age range from 13-16, for all paediatric services except mental health which extends to 18-years of age.
- l) Paediatric acute receiving unit will manage acute medical admissions for up to 72 hours.
- m) 59% of inpatient beds, including all adolescent, mental health and oncology beds, will be in single rooms with en-suite.¹⁴
- n) Transitional high dependency area for children with complex needs in a homely environment, for example, preparing patients and family for discharge with home care packages.
- o) Adolescent inpatients will have designated single rooms and access to shared facilities specifically for their age group within the RHSC wards.
- p) National bed modelling for CAMHS beds¹⁵
- q) 26-room family hotel for carers and relatives, or patients the night before admission

Further planning assumptions for **clinical neurosciences** include:

- r) Acute Care area for the receiving and assessment of referrals from other hospitals and care of the least stable patients
- s) Time-critical thrombolysis for stroke treatment will take place in DCN
- t) Critical care level two (high dependency) and level three (intensive care) patients will be looked after in the RIE.
- u) All adult spinal surgery pathways will be through the DCN
- v) All inpatient beds in DCN wards and 66% of those in acute care will be in single rooms with en-suite facilities.

2.8.2 Activity modelling

The OBC presented the bed model required to deliver the projected activity for the service model described above. Healthcare planning consultants Civil Eyes and Tribal validated

¹⁴ Approved by the Chief Medical Officer (2008)

¹⁵ SEAT (October 2008) recommendations in response to the Child Health Support Group's 2004 report: *Inpatient Working Group – Psychiatric Inpatient Services for Children and Young People in Scotland: A Way Forward*

these service model assumptions and bed requirements, using benchmarking data from peer hospitals, and Tribal also confirmed the requirements for theatre and radiology facilities.

The bed and activity models are refreshed annually using updated population and activity projections. The most recent, based on 2012/13 information, validates the bed model numbers as detailed in the OBC, achieving upper quartile performance against a peer group. This is summarised in figure 2.

2.8.3 Future-proofing

The building is designed to provide the need for flexibility to support business continuity and variations in activity, for example

- day case beds are located alongside inpatient wards to allow admissions overnight when demand requires it;
- single rooms with en-suite facilities will prevent or contain the spread of infection; and
- isolation rooms will prevent the spread of infection and protect the patients most vulnerable to infection.

Service and bed type		Build	Open 2017	Average bed occupancy
Children and young people	Inpatients, including CAMHS	120	117	74%
	Day cases	22	22	-
	Critical care	24	22	76%
	Total for RHSC	166	161	75%
Clinical neurosciences				
Clinical neurosciences	Inpatients	67	62	82%
	Day cases	2	2	-
	<i>Subtotal: DCN in the NPD</i>	<i>69</i>	<i>64</i>	<i>82%</i>
	+ Critical care in RIE	11	11	75%
	Total for DCN	80	75	81%

Figure 2: Bed model

The inclusion of expansion capacity in the building specification extends the useful life of the building without major change. The project incorporates capacity to enable future expansion or changes to the service model in a number of ways:

- additional beds beyond those currently required in 2017 will be shelled in RHSC, DCN, and renal & transplant HDU;
- a shelled MRI space for future radiology developments; and
- critical care beds are being built with infrastructure to provide intensive care or high dependency as the patient condition changes, rather than move acutely unwell patients to a different bed space.

2.9 Workforce Planning

2.9.1 Workforce planning principles

The overall vision for the workforce is to ensure the right staff are available in the right place with the right skills and competences to deliver high quality care and services.

The redesign and configuration of services emerging from this development is anticipated to provide the leverage of ensuring long term sustainability of services provided via reviewing roles, responsibilities and skill mix.

There will be the potential for clinical services to further develop new multi-specialty team approaches and roles in advance of commissioning the facility.

The workforce needs to be aligned with both service and financial plans to ensure affordability and sustainability over the long term. To this end, workforce planning has been developed and agreed with partnership colleagues and a working group engaging the five principal NHS Boards that use and pay for services in RHSC and DCN.

The proposed workforce plan takes into account the bed model and the physical specification for the new development (such as single bedrooms, the impact of increased bathrooms and toilets, and the impact of layout on walking distances.)

2.9.2 Workforce planning methodology

Workforce planning has involved multi-disciplinary and management staff from each service working with the project team, human resources colleagues and partnership representatives.

Using the revised Scottish Government Workforce Planning Guidance 6 step methodology (CEL 32, 2011) as a framework methodology an NHS Lothian multi disciplinary Workforce Planning Group was formed to develop an overarching workforce plan. The group considered all non clinical and clinical services in RHSC and DCN, and the impact of the project on critical care in the WGH and RIE. It had at its foundation the planned model of care and the new way services will be provided, as described in the OBC and signed off by NHS Lothian and its partner Boards in 2012.

Accredited and approved workforce tools, where available, were used and triangulated or adapted by those services which currently do not have approved tools available.

Each service was expected to interface their contribution to this workforce plan with that of their own service work plans to ensure synergy, impact analysis and corporate planning for the impact of such a large scale development on a new site, and other services impacted by the relocation of RHSC and DCN.

To develop the models the Workforce Planning Group undertook a series of workshops and analysis meetings culminating in the development of integrated workforce plans cognisant of the dependencies and interdependencies of services. Comparing these against current staffing profiles resulted in the final workforce plans.

Through SEAT, representation from NHS Borders, Dumfries and Galloway, Fife, Forth Valley and Tayside joined the NHS Lothian project team and service leads to review, challenge and agree the proposed workforce plans.

At these meetings with other Boards the models of care and the specification and design of the hospital were described in detail to ensure a clear understanding of the anticipated benefits the development.

This group has committed to continued working on workforce development and commissioning planning up to the opening of the building.

2.9.3 Workforce plan implementation

A major change programme is required to plan and support the transition of services from their current sites. The impact of this on staff for role development, skill mix changes and shift pattern changes and location of base will be assessed and managed through the NHSScotland Staff Governance Standard and the Organisational Change Policy in partnership with staff side colleagues.

The model of care will be implemented ahead of the move to new premises where practical, which will give the opportunity to regularly refresh the workforce plan as the model is delivered, refined or improved. It is a known risk that the model cannot be fully implemented until the new development opens.

As part of the overall project a commissioning plan is being developed, the transition plan for workforce moving to the new development will be incorporated into this.

2.10 Benefits

2.10.1 Benefits criteria were developed specifically for this project by stakeholders in RHSC and DCN services. These have been reviewed again for the FBC, and the expected benefits are summarised below.

2.10.2 Quality and clinical effectiveness

- Improved clinical outcomes through **reduced waiting times and fewer cancellations**, with hospital capacity built to match anticipated demand.
- Improved clinical outcomes through **redesigned patient pathways, reduced transfer times and reduced length of stay** supported by the co-location of related and inter-dependant services.
- Improved patient safety through **less patient boarding** when hospital capacity, with flexibility, is built to match anticipated variations in demand.
- A **reduction in healthcare associated infection** through modern design, particularly single rooms with en-suite accommodation.

2.10.3 Quality of the environment

- Improved inpatient experience **protecting patient privacy and dignity**, with provision for **control of the personal environment**, including **reduced disturbance**, in single rooms.
- Improved patient experience with **age-appropriate facilities** with hospital capacity built to match anticipated demand.
- Improved staff and patient experience with **standardisation of design** increasing staff efficiency and **releasing time to focus on patient care**.
- Improved patient, family and staff experience with **on-site amenities** including **access to the outside environment**.
- Improved staff experience reflected in **staff recruitment and retention** and a **reduction in sickness-related staff absence**.

2.10.4 Accessible services

- Good user access by **pedestrian routes and all means of transport**.
- Good access to services for users with mobility challenges with **managed proximity parking** for drivers with disabilities, or with disabled and/or small children as passengers.
- Fast **access to emergency services by road and air**.
- A good user experience of following **clear signage and wayfinding** to the departments they need.

2.10.5 Sustainable healthcare services

- Securing the **continued delivery of highly specialist services**, such as paediatric neurosurgery through co-location of RHSC and DCN.
- Sustainable **workforce plans that recruit, develop and retain expert staff**.

2.10.6 Sustainable facilities and communities

- An efficient building that **minimises its impact on the environment and resources** in terms of energy consumption and running costs, and its transport strategy.
- Promoting **local employment and capabilities**, particularly in the construction phase, through training and placement opportunities, engagement with small and medium sized enterprises and social enterprises.

2.10.7 Research and development

- Promoting **collaborative working with higher education, research and development**, in particular the University of Edinburgh through co-location with the Medical School, Research Institute and other developments across the Edinburgh BioQuarter.

2.11 **Strategic Risks**

The strategic risks to NHS Lothian in delivering this project are:

2.11.1 Service risks

Failure to deliver this project would see NHS Lothian continuing to provide RHSC and DCN in facilities without sufficient capacity for the demand placed upon them. Limits on the available theatre and bed capacity means that meeting waiting times is unsustainable in the long-term. The inclusion of patients aged 13-16 in RHSC emergency department activity would risk their ability to meet the 4-hour unscheduled care target.

Uninterrupted delivery of safe, effective healthcare at the RIE whilst undertaking a project of this scale is a challenge. NHS Lothian is already over one year into the programme of building work at Little France to enable this project, and is closely managing the impact on the RIE. Active risk management, involving working with all parties on the campus, has been set up in advance of the construction of the main NPD project and the clinical enabling works in order to protect operational clinical services.

Risks to the delivery of RHSC, DCN and CAMHS services in their transition to the Little France will be managed through commissioning planning in close partnership with the operational management teams.

2.11.2 Commercial risks

The introduction of an NPD provider into Little France, where there is already an existing PFI, poses commercial risk in relation to both contracts. There is potential for the delivery of the NPD project to impact on availability of the RIE facility in the context of the PFI contract provisions. NHS Lothian has ensured that the new facility is a free-standing development, and that appropriate interface agreements are established in the respective contracts covering both construction and operational phases, with arrangements managed by the Board.

2.11.3 Political and financial risks

The timing of the procurement for the NPD, with the funding competition and financial close programmed either side of the Scottish independence referendum, is unique to this project. There is a risk that the cost of financing could be higher than anticipated, or contractual protection sought by funders before the outcome of the referendum is known. To mitigate this risk, NHS Lothian, SFT and the preferred bidder have engaged and continue to engage with funders during the funding competition. It is also noted that private financiers have funded a number of NPD transactions in Scotland in recent months.

2.11.4 Organisational capacity

NHS Lothian has an ambitious programme of capital and service developments. The Project Team directly responsible for this project has been established and is costed in this FBC. As and when service input is required this is flagged to the departments concerned and support facilitated.

2.12 **Constraints**

The project constraints from the OBC have been reviewed and updated as follows:

- Delivery within the agreed timescales: the revised Programme, updated following approval of the OBC, is in section 6.2.
- Delivery within the agreed financial envelope: the final tender of the preferred bidder (Project Co) came in under the construction cost cap and progress with other costs is presented in chapter 5.
- Compliance with statutory planning requirements: planning in principle was granted in April 2012, and the submission for Reserved Matters and Local Application went to the City of Edinburgh Council in April 2014. The Planning Authority consultation period has now closed and full planning permission is anticipated by the end of August 2014.
- Architecture and Design Scotland requirements: these were addressed through involving A&DS in the development of the design prior to submission.

- Achievement of a 'good' BREEAM 2011 rating: the final tender design of the appointed preferred bidder achieves as a minimum a 'very good' rating when subjected to a BREEAM 2011 New Construction (SD5073) and BREEAM ENE1 target of 6 credits (excellent) in accordance with the BREEAM Scheme Document for New Construction (SD5073) Section 6.ENE1 assessment.
- Management of any disruption to the RIE services and the Chancellors Building during the construction phase will be through the Little France Campus Working Group, including all parties on campus.

2.13 Dependencies

The project dependencies from the OBC have been reviewed and updated as follows:

- The availability and condition of the site; the SA6 agreement with Consort confirms the programme of works will be completed to deliver 'vacant possession' by financial close, with all works due to be completed by June 2015.
- Capacity of RIE clinical and support services to support the new building on site; the programme of clinical enabling works described in the FBC will address this ahead of completion of RHSC and DCN.
- Implementation of an integrated transport strategy for the site; the local authority recently granted planning consent for an updated masterplan for the Edinburgh BioQuarter, which includes the NHS facilities at Little France, and engagement is continuing with stakeholder and government agencies.

3 THE ECONOMIC CASE

This section of the FBC reviews the results from the detailed appraisals previously undertaken at OBC in order to determine if there are any significant changes in the key variables impacting the outcome.

The key variables reviewed at FBC include:

- Capital cost of new build work for RHSC and DCN;
- Capital cost of associated NPD fees and equipment costs;
- Capital cost of associated enabling and clinical enabling work;
- Overall running costs and net revenue impact; and
- Benefits associated with the preferred option.

3.1 OBC Preferred Option

Earlier option appraisals, in 2007 for RHSC and 2009 for DCN, had concluded that the preferred location for both services was the same site as the Royal Infirmary of Edinburgh.

A capital-funded OBC for the RHSC, including CAMHS, to be built at Little France was approved in 2008; however, economic circumstances in 2010 dictated that the project would have to be delivered through a revenue-funded model.

Having confirmed that the benefits criteria used in 2007 and 2009 still reflected the investment objectives for the services, and that the preferred way forward was still to move to Little France, NHS Lothian presented a further assessment of options to the SGHSDC Capital Investment Group in the 2011 Business Case Update. The report from this option appraisal is included at appendix 2.

Option	Net present cost (£000)	Non-financial benefits score	NPV per benefits score (£000)	Ranking
1. NPD RHSC & DCN in a joint build on car park B	291,415	404	721.3	1
2. NPD RHSC on car park B and PFI RIE extension for DCN	295,092	314	939.8	2

Figure 3: Option appraisal results presented in 2011 Business Case Update

Approval of this update and the preferred option it presented, an NPD joint build for RHSC and DCN, led to NHS Lothian developing the OBC submitted and approved in 2012. The 2012 OBC economic analysis further validated this preferred option.

3.2 Capital cost of the new build

The total projected capital costs at OBC stage were assessed at £230m, with the NPD element estimated at £155m. The capital value of the new build works for the NPD contract has been set by the final tender from the Preferred Bidder at £147m. The Preferred bidder submission is within the terms of the Construction Cost Cap ("the cap"). This covers the construction costs eligible for revenue funding support including the cost of

the building, IT infrastructure, Group 1 (supply and installation) and Group 2A (installation only) equipment and private sector design fees post financial close.

SFT, in setting the cap, took account of progress of the reference design, the invitation to participate in dialogue and the outcome from key stage reviews.

The reduction in the capital value of the NPD new build works for RHSC and DCN between OBC and FBC stages was achieved through the competitive dialogue and tendering process with three bidders.

3.3 Capital cost of associated NPD fees and equipment

The projected capital costs at OBC stage were assessed at £4.5m for specialist Adviser Fees (mainly technical, legal and financial to support the NPD contract).

The updated costs at FBC stage amount to £4.8m for specialist Adviser Fees, which reflects the complexities of the interface of this project with the existing PFI contract both in advance of procurement and during competitive dialogue with bidders. Also, given the nature of this project as the first acute healthcare NPD to commence procurement, many of the deliverables produced by the advisory team have been used for the benefit of the wider NPD programme.

The projected capital costs at OBC stage for equipping the new build development were £36.4m (balance of equipment to transfer from current use or be procured under the Board's normal replacement programme).

Work is ongoing to identify the extent to which equipment will transfer to the new facility and to quantify the cost associated with procuring the balance. The equipment procurement and management will feature as part of the commissioning strategy and implementation phase with the overall programme budget monitoring supporting the mitigation of risk.

3.4 Capital costs of enabling and clinical enabling work

The projected capital costs at OBC stage were assessed at £33.4m. The capital cost of the more detailed plans at FBC stage amounts to £36.2m.

This work is scheduled to be undertaken over the financial years 2014/15 to 2016/17 from traditional public capital funding.

3.5 Annual running costs and net revenue impact

3.5.1 At OBC stage, annual running costs were estimated to increase by £2.0m. This has been reassessed as part of the FBC process and the differential increased to £3.0m.

3.5.2 The OBC explicitly excluded additional clinical staffing for the project, stating that this required to be addressed through normal financial planning. Workforce planning, as described in section 2.9, has now been agreed with partnership and other NHS Boards, with an agreed increase in annual running cost for clinical services at £3.6m per annum.

3.5.3 The split of revenue costs between NHS Lothian and partner NHS boards is detailed in the Financial Case, section 5.4.

3.6 Benefits associated with the preferred option

3.6.1 The key benefits identified in the OBC were developed in consultation with stakeholders. These remain valid and are linked to the benefits realisation plan in appendix 3.

3.6.2 Clinical benefits of integrating these services into one building, supporting the Board and national strategic ambitions, include:

- Efficiency and effectiveness through the ability to deliver paediatric and adult neurosurgery in the same theatre suite, maximising the utilisation of specialist equipment and expert staff, with direct internal access to age-appropriate critical care and wards;
- Joint-working and economies of scale in high-cost specialist clinical areas such as theatres and radiology;
- Proximity of paediatric and adult neurology services for the large adolescent patient group transferring to age-appropriate care;
- The opportunity to improve emergency access to services by incorporating a helipad on the roof of the new build; and
- This option was the least disruptive to adult clinical services and patient pathways at the RIE through the build and commissioning.

3.6.3 Non-clinical benefits of integrating the two services into one building include:

- Economies of scale in sharing support accommodation and facilities such as health records, IT and staff changing;
- Some economy of scale in the provision of public space, whilst preserving the ethos of a hospital for children and young people, segregated from adult services where necessary; and
- Preserving the RIE Facilities expansion zone to accommodate the Board's business needs for future flexibility and growth.

3.6.4 As required by SFT Value for Money Guidance the Board completed a qualitative assessment of value for money at OBC which confirmed that the project was viable, desirable and achievable. Review of the OBC assessment, included at appendix 4, has confirmed that it continues to be valid at FBC.

3.7 Conclusion

3.7.1 Following a robust option appraisal process involving a wide range of stakeholders at OBC stage, the Board determined that its preferred option was Option 1, an NPD joint build for RHSC and DCN.

3.7.2 This decision has been further reinforced by the detailed plans at FBC stage which have identified no significant change in the planned NPD costs or benefits.

- 3.7.3 The preferred option provides the optimal value for money solution to the Board and public sector of the options available, whilst also addressing key clinical requirements covering both local and national priorities.
- 3.7.4 Subsequent sections of the FBC provide details on the financial case, the procurement route, risk management and the project plan.

4 THE COMMERCIAL CASE

This section describes:

- The key commercial details of the NPD contract between NHS Lothian and the Preferred Bidder for the design, build, finance and maintenance of the RHSC and DCN.
- The procurement process for the associated enabling and clinical enabling works on the site and in existing services.

4.1 NPD Deal and Contractual Arrangement

4.1.1 Background

The Scottish Government Draft Budget published in November 2010 advised that the project would be supported through the programme of revenue financed investment through the Non Profit Distributing (NPD) model.

NHS Lothian received confirmation from the Director General for Health and Social Care and Chief Executive of NHS Scotland on 18 September 2012 of the approval of the OBC and to proceed to procurement.

The NPD model was developed and introduced as an alternative to, and has since superseded in Scotland, the traditional private finance initiative (PFI) and Public Private Project (PPP) models and is defined by the broad core principles of:

- Enhanced stakeholder involvement in the management of projects;
- No dividend bearing equity; and
- Capped private sector returns.

The NPD model, in line with traditional PFI and PPP structures, provides for:

- Optimum risk allocation;
- Whole-life costing;
- Maximised design efficiencies;
- Robust programming of lifecycle maintenance and facilities management;
- Performance-based payments to the private sector;
- Single point delivery system, reducing interface risk for the public sector client; and
- Improved service provision.

The standard contract for NPD is designed by SFT to promote maximum value for money through commercially reasonable risk transfer; to simplify as far as possible consistent with a robust commercial structure and fundability and to minimise transaction costs with a standard that should be reasonably acceptable by contractors, investors and funders as well as procuring authorities. It also introduces the following benefits:

- Capped returns ensure that a “normal” level of investment return is made by the private sector and that these returns are transparent;
- Excess profits or surpluses generated by the Project Company are returned to the public sector at the discretion of the Public Interest Director; and

- The public interest is represented in the governance of the NPD structure, which increases transparency and accountability and facilitates a more pro-active and stable partnership between public and private sector parties.

This section outlines the commercial transaction that the Preferred Bidder and NHS Lothian will sign up to and serves to communicate the following:

- Agreed scope of services;
- Agreed risk allocation;
- Agreed payment mechanism;
- Key contractual clauses;
- Personnel implications (TUPE);
- Agreed procurement strategy; and
- Agreed implementation timescales.

4.1.2 Agreed scope of NPD services

The RHSC and DCN shall be a standalone facility in terms of services, management and contract, separate from the existing RIE building and its PFI contract arrangements.

The project will be delivered by a Project Co (a non-recourse special purpose vehicle funded from a combination of senior and subordinated debt underpinned by a 25 year service concession contract, set up specifically to deliver the project).

Project Co will be responsible for providing all aspects of design, construction, ongoing facilities management (hard maintenance services and lifecycle replacement of equipment components) and finance throughout the course of the project term other than a small number of exceptions as set out below.

Project Co shall also carry out the following enabling and interface works to fit with the RIE and wider Little France site:

- Hospital square works;
- Specified road works;
- Surface water drainage connections;
- Emergency department and theatres link to the RIE;
- ICT and fire alarm systems interface with the RIE;
- Pneumatic tube delivery system to two specified locations within the RIE.

NHS Lothian is managing the programme of enabling works, carried out by Consort Healthcare, to deliver vacant possession of the site for Project Co. The commercial arrangements for these works are outlined in section 4.3 below.

In line with national policy, soft facilities management will be provided by NHS Lothian and are therefore excluded from the NPD services. Hard FM comes under the contractor in the Non-Profit Distributing model.

To facilitate joint working arrangements between NHS Lothian and Project Co in relation to the provision of hard FM services, a 'Responsibility Matrix' has been agreed between the parties. This matrix articulates responsibility at a practical operational level and shall support the Project Agreement.

An equipment responsibility matrix has been prepared, detailing all equipment by description, group reference, location and responsibility between NHS Lothian and Project Co in terms of supply, installation, maintenance and replacement over the course of the operational term. The matrix shall set out the following details:

- Group 1 items of equipment, which are generally large items of permanently installed plant or equipment, will be supplied, installed, maintained and replaced by Project Co throughout the project term. These are revenue funded, paid for through the NPD annual service payment.
- Group 2A items of equipment will be supplied by NHS Lothian, installed by Project Co, and maintained and replaced by NHS Lothian.
- Groups 2B and 3 items of equipment are supplied, installed, maintained and replaced by NHS Lothian. Groups 2 and 3 equipment are capital costs met by NHS Lothian.

A full description of the services to be included in the RHSC and DCN NPD project, as detailed in the Invitation to Submit Final Tender (ISFT), is available on request.

4.1.3 Agreed NPD risk allocation

This section provides details of how the NPD associated risks have been apportioned between NHS Lothian and Project Co in line with the SFT standard form NPD Project Agreement.

The general principle is to ensure that the responsibility for risks should rest with “the party best able to manage them”, subject to value for money.

A key feature of the NPD model is the transfer of inherent construction and operational risk to the private sector that traditionally would be carried by the public sector. Figure 4 outlines ownership of known key risks as per the model for NPD contracts

	Risk Description	Allocation		
		NHS Lothian	Project Co	Shared
1.	Design risk		√	
2.	Construction and development risk		√	
3.	Transitional and implementation risk		√	
4.	Availability and performance risk		√	
5.	Operating risk			√
6.	Variability of revenue risks		√	
7.	Termination risks			√
8.	Technology and obsolescence risks		√	
9.	Residual value risks		√	
10.	Financing risks		√	
11.	Legislative risks			√
12.	Sustainability risks			√

Figure 4: Allocation of key risks in the NPD contract

Project specific risks include the location of the Project, given that the RHSC and DCN shall be constructed within the campus site of an existing PFI project between NHS Lothian and Consort. NHS Lothian shall therefore require to manage its own relationships with Project Co, Consort and the University of Edinburgh, and also relationships between these parties. This risk is mitigated with Project Co preparing interface proposals, which require to be approved, that set out how it intends to construct and thereafter maintain the RHSC and DCN.

1) **Design risk** sits with Project Co, subject to the Project Agreement (Clause 12.5) and agreed derogations identified within the Board's Construction Requirements.

2) Subject to NHS Lothian securing vacant possession of the site and ensuring that any relevant enabling works have been completed by Consort, the **construction and development risk** for the facilities sits with Project Co, subject to the Project Agreement. For example, a small number of delay and compensation events could entitle Project Co to compensation if the events materialised, such as no access to the site and incomplete enabling works which impact upon the site.

3) **Transition and implementation risk** prior to the actual completion date sits with Project Co in accordance with NHS Lothian's Construction Requirements and agreed commissioning timetable. After the actual completion date, the transition and implementation risk shall sit with the Board in line with the agreed commissioning timetable.

4) **Availability and performance risk** sits entirely with Project Co subject to the provisions of the Project Agreement.

5) **Operating risk** is a shared risk, subject to NHS Lothian and Project Co's responsibility under the Project Agreement. For example, Project Co shall be responsible for "hard" services and NHS Lothian shall be responsible for "soft" services.

6) **Variability of revenue risk** is a Project Co risk subject to adjustments of the Annual Service Payment under the Project Agreement. However, NHS Lothian shall be responsible for all pass through utility costs such as energy usage and direct costs such as insurance and local authority business rates, all of which are subject to different factors such as indexation.

7) **Termination risk** is a shared risk under the Project Agreement with both parties being subject to events of default that can trigger termination. In addition NHS Lothian has an additional right of voluntary termination of the Project, subject to the Project Agreement.

8) **Technology and obsolescence risk** predominantly sits with Project Co. However NHS Lothian could be exposed through specification and derogation within the Board's Construction Requirements, obsolescence through service change during the period of functional operation and relevant or discriminatory changes in law under the Project Agreement.

9) **Residual value risks** sit with Project Co until the end of the Project Term and shall sit with the Board thereafter. In relation to the handback of the facilities by Project Co at the end of the Project Term, Project Co must ensure that the facilities meet certain key standards or shall be required to pay to rectify the facilities in order that it meets certain key standards.

10) **Financing risks** predominantly sit with Project Co subject to the Project Agreement: however relevant changes in law, compensation events that compensate Project Co and changes under the Project Agreement all may give rise to obligation to NHS Lothian to provide additional funding. Board voluntary termination may also bring an element of reverse risk transfer due to aspects of the funding arrangement with the funder.

11) **Legislative risks** are shared subject to the Project Agreement. Whilst Project Co is responsible to comply with all laws and consents, the occurrence of relevant changes in law as defined in the Project Agreement can give rise to compensation to Project Co.

12) **Sustainability risks** are proportionately shared subject to the Project Agreement. Project Co is obliged to comply with the Board's Construction Requirements in terms of sustainable design and construction, which includes achieving a Building Research Establishment Environmental Assessment Methodology (BREEAM) overall score of 'very good', and an 'excellent' level of performance for the credit pertaining to Reduction in CO₂ Emissions, which sets the Energy Performance Target for the Facilities. Project Co is further obligated to perform tests on completion to demonstrate that its design and construction meets NHS Lothian's energy performance target, and is also required to ensure that these standards are continually upheld by ensuring energy efficient operation of Plant in line with an agreed energy strategy and through maintenance and lifecycle of hard FM components. However, NHS Lothian ultimately carries the operational volume and price risk relating to the actual operating energy and utilities consumption of the facilities.

4.1.4 Agreed payment mechanism

Annual Service Payments (unitary charge) to Project Co will only commence when the development is made operational and will be managed and regulated by means of the payment mechanism that will protect NHS Lothian (by deductions from payment) if there are failures in availability or performance.

The payment mechanism follows standard form drafting, with deductions from the annual service payment for availability and performance failures, such that should the entire facility be unavailable, no payment would be due. The payment mechanism was amended to reflect the acute healthcare nature of the accommodation and includes the application of a gearing mechanism to the deviation of service unit values.

4.1.5 Key contractual clauses

The draft NPD Project Agreement reflects SFT's Standard Form Project Agreement, with additional project specific amendments including amendments relating to interface with the RIE Facilities, lifecycle, TUPE, insurance, community benefits and the payment mechanism. All amendments to the NPD Project Agreement have been agreed by SFT.

During the dialogue period, the Preferred Bidder had the opportunity to discuss and propose further changes to the NPD Project Agreement. As a result of this process, bidder specific amendments to the NPD Project Agreement were agreed to by NHS Lothian and subsequently approved by SFT. Following close of the dialogue period, only fine tuning and clarification issues are able to be considered by NHS Lothian and any issues not raised by the Preferred Bidder during the dialogue period are not able to be considered by NHS Lothian if they involved changes to the basic features of the preferred bidder's final tender submission or the Project which are likely to distort competition or have a discriminatory effect.

4.1.6 Personnel implications

No staff will transfer to Project Co and therefore the alternative standard contract provisions in relation to employee transfer (TUPE) will not come into effect.

Existing staff in RHSC, CAMHS and DCN will move to the new site under NHS Lothian organisational change arrangements.

4.1.7 Agreed procurement strategy

The procurement strategy for the RHSC and DCN project has followed the NPD procurement route.

NHS Lothian made the following key appointments for the provision of adviser support for the Revenue Funded Accommodation Non-Profit Distributing (NPD) project. The following team has advised on the Project during the procurement stages and shall continue to advise NHS Lothian to completion of construction works and commissioning:

- Technical – Mott Macdonald Limited
- Legal – MacRoberts LLP
- Financial – Ernst & Young LLP
- Insurance – Willis

To maximise the value of the development work already undertaken under Frameworks Scotland and to achieve the programme timetable, NHS Lothian maintained its Design Adviser, Technical Adviser and Cost Adviser appointments. These appointments ensured the delivery of the Reference Design and associated costs for the OBC.

4.1.8 NPD implementation timescales

Following CIG approval of the OBC on 18 September 2012, the updated programme for delivery of the project is as follows:

Activity	Timescale
Receipt of funding letter	04/12/2012
Appointment of Preferred Bidder	05/03/2014
FBC formal consideration by NHS Lothian Board	06/08/2014
Funding competition completion	15/08/2014
Targeted town planning committee	27/08/2014
FBC formal consideration by CIG SGHSCD	26/09/2014
Pre-Financial Close KSR approval	30/09/2014
Financial close	02/10/2014
Start on site	03/10/2014
FBC Addendum to NHS F&R Committee	12/11/2014
FBC Addendum to CIG SGHSCD	25/11/2015
Completion / handover	17/02/2017
Project Co FM service commencement	17/02/2017
Hospital Opens	15/05/2017
Post project evaluation	15/05/2018
Project Co FM Service Completion	16/02/2042

Figure 5: Key programme milestones from sign-off of the OBC

4.1.9 Procurement process

In December 2012 NHS Lothian published a contract notice on the Official Journal of the European Union (Ref: 2012/S 235-386758). Pre-qualification questionnaire (PQQ) submissions were received from the following applicants:

- B3 (Balfour Beatty and BAM)
- Integrated Health Solutions Lothian (Macquarie Capital Ltd, Brookfield Multiplex and ETDE)
- Mosaic (Laing O'Rourke, Laing Investments and Serco)

Following a detailed review NHS Lothian confirmed all three applicants qualified to proceed to competitive dialogue and the Invitation to Participate in Dialogue was issued in March 2013.

During the dialogue period the FM provider for Integrated Health Solutions Lothian changed to Bouygues, and the FM provider for B3 changed to Cofely. The PQQ test was updated to reflect these changes and these consortia continued to pass.

The detailed programme of procurement activities to financial close are summarised here:

Activity	Timescale
OJEU notice, PQQ and Information Memorandum issued	05/12/12
Bidders Day	13/12/12
Pre-Qualification Questionnaire submission	21/01/13
Invitation To Participate In Dialogue issued to pre-qualified candidates	18/09/12
3 x Dialogue Meeting 1	w/c 01/04/13
3 x Dialogue Meeting 2	w/c 29/04/13
3 x Dialogue Meeting 3	w/c 27/05/13
3 x Dialogue Meeting 4	w/c 24/06/13
3 x Dialogue Meeting 4A	w/c 17/06/14
3 x Dialogue Meeting 4B	w/c 15/07/14
3 x Dialogue Meeting 4C	w/c 12/08/14
3 x Dialogue Meeting 5	w/c 16/09/13
3 x Dialogue Meeting 5A	w/c 23/09/14
Draft Final Tender submission from 3 bidders	21/10/13
3 x Dialogue Meeting 6	w/c 18/11/13
Close of Dialogue	13/12/14
Invitation to Submit Final Tender issued	16/12/14
Final Tender submission from 3 bidders	13/01/14
Appointment of Preferred Bidder	05/03/14
Funding Competition completion	15/08/2014
Financial Close	02/10/14

Figure 6: Procurement programme

The dialogue process adhered to fair and equitable treatment of bidders to develop proposals in line with the Board's requirements.

The evaluation process adhered to fair and equitable treatment of submissions to identify the most economically advantageous tender.

Following six months of dialogue the bidders' Draft Final Tenders were submitted, reviewed and the subject of the final dialogue meeting.

In December 2013 the European Investment Bank (EIB) confirmed that they would, subject to satisfactory due diligence, provide funding for the project up to a value of £98.81 million.

At the close of dialogue, the Invitation to Submit Final Tenders invited each bidder to submit a Final Tender on 13 January 2014.

4.1.10 Final tender evaluation and appointment of preferred bidder

The three Final Tender legal submissions were evaluated by MacRoberts LLP, who provided a Legal Report to NHS Lothian recommending that the three Bidders 'pass' for the purposes of the Final Tender legal submissions. A copy of MacRoberts' letter to NHS Lothian on conclusion of the Final Tender evaluation is attached at appendix 5.

The technical submissions were evaluated by NHS Lothian expert users and Mott Macdonald technical advisers. Technical proposals were evaluated against quality-based criteria without sight of the financial submissions or knowledge of the outcome of price evaluation.

A copy of Mott Macdonald's letter on conclusion of the technical evaluation is attached at appendix 6.

Financial evaluation was completed by Ernst and Young LLP and their summary report on completion of their Final Tender evaluation is attached at appendix 7.

For each bidder, the mark for the quality evaluation (out of 60) was added to mark for the price evaluation (out of 40) and the bidder with the highest combined mark was deemed to be the most economically advantageous tender.

The evaluation process identified **Integrated Health Solutions Lothian** as the most economically advantageous tender and they were appointed preferred bidder in March 2014. The section of their submission describing the three parties in the Integrated Health Solutions Lothian consortium is included at appendix 8.

4.1.11 Programme to financial close

NHS Lothian and Project Co are now working together towards the conclusion of the NPD procurement with financial close, programmed for 2 October 2014.

During the competitive dialogue period bidders appointed due diligence legal and technical advisers to support the tendered position in respect of the Project Agreement and to engage with potential funders post preferred bidder appointment. A shortlist of preferred funders has been established with the selection managed by Macquarie, sponsor for the Preferred Bidder and monitored by SFT. The competition is due to be completed by 15 August.

4.2 **Site Enabling Works**

4.2.1 A programme of enabling works is currently underway to de-risk the NPD delivery and ensure the existing facilities at Little France are prepared for new the facilities without ongoing reliance on the infrastructure of the existing PFI.

4.2.2 The agreed scope of works includes:

- Sewer and services re-routing;
- Relocation of VIE gas plant;

- Roads infrastructure;
- RIE emergency department link building to between the RIE Facilities and the Facilities;
- Flood defence works at the Campus Site; and
- Flood defence works not on the Campus Site.

4.2.3 Due to the nature of the existing PFI contract and responsibility for the existing services, these works have been procured using public capital funds through Consort Healthcare and are being delivered by Balfour Beattie Construction. These contracts are let with traditional contract responsibilities but NHS Lothian carries the majority of the risk through indemnity provided to Consort to keep the original PFI Project Agreement 'whole'.

4.2.4 The programme of works is underway and will be completed to the extent that 'vacant possession' of the NPD site is delivered by Financial Close, with all works due to be completed by June 2015.

4.3 Clinical Enabling Works

4.3.1 Further enabling works within the RIE are required to meet the operational and service requirements associated with the co-location of the RHSC and DCN services at Little France. As these works are within the existing footprint of the RIE, they are being procured through Consort Healthcare as capital funded projects.

4.3.2 The scope of the clinical enabling works includes:

- critical care redesign
- creation of a new renal and transplant HDU
- relocation of 70 clinical support staff
- pharmacy works to increase aseptic capacity and install robotics
- medical photography redesign

4.3.3 These contracts will be let with traditional contract responsibilities but NHS Lothian carries the majority of the risk through indemnity provided to Consort to keep the original PFI Project Agreement 'whole'.

4.3.4 As design and tendering for these works are ongoing, separate business cases will be brought forward to NHS Lothian in parallel with this Business Case. The programme of works will be completed by the time of operation of RHSC / DCN.

4.3.5 In addition, the displaced services from RIE are being reprovided in other NHS Lothian facilities, elsewhere in RIE or adjoining Edinburgh BioQuarter.

4.4 Charities

4.4.1 NHS Lothian recognises that there is considerable opportunity to enhance the RHSC and DCN facility through charitable support, and has been working with a number of organisations who are keen to support the project. The proposed contributions cover a range of aspects of the project, for example:

- Family hotel facilities – including equipment and management costs
- Artworks and other enhancements of the base build accommodation
- Hospital radio studio

- Management of the retail outlet as a fundraising venture
- 4.4.2 It is intended that, following best practice, all charities wishing to donate capital, services or equipment enter into formal agreement within NHS Lothian. This is not intended to deter donation, but to ensure clarity of scope, purpose and costs, to protect obligations and to promote positive long-term relations between all parties. A similar approach will also apply for other third parties, such as university or local authority interests.
- 4.4.3 All donations will be outside the financial model for the NPD to avoid the need for Project Co to raise debt and NHS Lothian to pay Annual Service Payments against the debt.
- 4.4.4 Charitable donations and contracts are anticipated between a charity and NHS Lothian only, however, depending on the intended purpose of the donation, back to back arrangements may be needed with
- a) Project Co – as NHS Lothian must ensure it fits with the Project Agreement
 - b) Scottish Government – as NHS Lothian must ensure that if the funds cover the basic build that these are credited against central contributions
- 4.4.5 NHS Lothian have engaged Central Legal Office to advise on implementing development, facilities or equipment agreements with charities across the wider NHS. MacRoberts LLP, legal advisers to the Board for this project, will ensure that the third party agreements related to RHSC and DCN are in line with the NPD Project Agreement.

5 THE FINANCIAL CASE

The purpose of the financial case is to clearly set out the financial impact of the investment proposals. This section sets out all capital and revenue costs associated with the preferred option, assesses the affordability, and considers the impact on NHS Lothian's financial statements.

In order to make this assessment, an affordability model has been developed which incorporates estimates for:

- Capital costs, both covered by and out with, the non profit distributing (NPD) model ;
- Annual service payment derived from the NPD financial model;
- Revenue costs (pay and non pay) associated with existing services, i.e. baseline costs; and
- Changes to revenue costs associated with service redesign as a direct result of the project.

5.1 Capital Costs

5.1.1 There are two components to the capital element of the scheme: those covered by the NPD model; and those beyond the scope of NPD. Taking these together, the total capital value of the project is £227m as illustrated in figure 7:

	OBC £k	FBC £k	Difference £k
NPD capital costs	154,900	146,688	8,212
<i>Non NPD capital costs</i>			
Enabling & town planning	22,659	22,174	485
Clinical enabling	10,740	14,121	(3,381)
Offsite flood		4,298	(4,298)
Equipment	36,399	36,399	0
Reference design fees	2,273	2,541	(268)
Petrol station site		550	(550)
Sub total non NPD	72,071	80,083	(8,012)
Total	226,971	226,771	200

Figure 7: Total capital value

The NPD and non NPD elements are discussed in more detail below.

5.1.2 NPD capital costs

The capital cost in the OBC was £154.9m; this is updated to £146.7m at FBC using the final tendered cost from Project Co, the preferred bidder, following competitive dialogue in procurement. This is subject to design development which is ongoing as the project specifications are finalised in conjunction with IHSL. Although this cannot yet be quantified, the project management is minimising any financial impact and there is no expectation that the final position will deviate significantly from the tender price. This

represents the cap set by SFT and therefore any consequent increase in the ASP will be the responsibility of NHS Lothian.

5.1.3 Non NPD capital costs

There are a number of key components to the capital costs which are out with the scope of NPD. The annual impact is illustrated in figure 8 below:

	Pre 2014/15 £k	2014/15 £k	2015/16 £k	2016/17 £k	2017/18 £k	Total £k
Enabling & town planning	10,985	11,064	125			22,174
Clinical enabling		3,415	4,544	6,162		14,121
Offsite flood	381	173	3,744	0		4,298
Equipment	0	1,200	2,161	16,519	16,519	36,399
Reference design fees	2,541					2,541
Petrol station site	433	117				550
Total	14,339	15,970	10,574	22,681	16,519	80,083

Figure 8: Non NPD capital costs

The following assumptions underpin these costs:

- *Enabling and town planning* – based on tendered prices for the 6 supporting projects (on site flood prevention, roads infrastructure, VIE replacement, alterations to RIE building, service and sewer diversions).
- *Clinical enabling* – detailed design has now concluded and a pre tender estimate will be available in early July. In the meantime costs are assumed to be in line with estimates in the OBC.
- *Offsite flood works* - based on a cost plan which reflects the current design, these estimates have been scrutinised by external technical advisors. A pre-tender check will be carried out in September 2014.
- *Equipment* – assumes 20% of existing equipment transfers to the new facility. Beyond this costs are based on an inflation allowance of 8.48% on 2013 prices.

5.2 Sources of Capital Funding

5.2.1 In the OBC funding letter the SGHSCD confirmed the elements of the non NPD capital they would directly fund. Support for the enabling works was capped as follows:

- £17.9m for external enabling works;
- £2.7m for offsite protection works;
- £7.8m for clinical enabling works; and
- £36.4m for equipment.

These figures specifically excluded optimism bias (estimated at £8.1m at the time of the OBC) which is managed centrally by SGHSCD and costs relating to the reference design which were separately funded. Thus funding identified at that point totaled £75.2m. The difference between this and the estimated OBC costs (£0.4m) relates to increases in enabling works identified post OBC and captured in the funding letter.

- 5.2.2 At £80.1m, the anticipated total cost exceeds the provision in the funding letter (adjusted for optimism bias) by £4.9m. This variance includes flood prevention works which were a condition of planning not known until after the approval of the OBC. This variance has been discussed with representatives from SGHSCD who have agreed to increase the capital support to match the current estimate of £80.1m.
- 5.2.3 Charities supporting the project include the Edinburgh and Lothian Health Foundation, the Sick Kids Friends Foundation, Ronald McDonald House Charities, Teenage Cancer Trust and Trefoil. No contributions can be assumed until formal commitments have been secured, however it is anticipated that some funding will be provided. Details on these contributions and the extent to which these provide one off capital, or ongoing revenue support will be further developed post FBC.
- 5.2.4 The University of Edinburgh is a key stakeholder in the project, with 700m² of accommodation (the Department of Child Life and Health) in the schedule. In 2009, for the original RHSC OBC, the cost of university accommodation came to £3m, and the university committed £1m funding with the balance to be funded by the NHS.
- 5.2.5 The project will release land and buildings at the existing RHSC (and associated) sites. Given the ongoing delivery of other clinical services on the WGH site, there is no assumption that there will be any land release associated with the DCN. This FBC does not include any capital receipt from the sale of the existing RHSC and associated properties as a funding source for the project.
- 5.2.6 It is therefore assumed that all non NPD capital costs associated with the project, as detailed in figure 8 above, will be funded by an SGHD project specific capital allocation.

5.3 Revenue Costs

5.3.1 To assess the revenue implications of the project, the baseline costs of the current service were established and compared to estimated future costs. To support this, an affordability model was set up with 3 key components:

- Annual service payment (which includes hard FM and lifecycle costs);
- Facilities costs (related to the running the building); and
- Cost of clinical services (workforce in the main).

5.3.2 Annual service payment

Under the rules for revenue funded projects a payment is made to the private sector for the services it provides. This is referred to as an annual service payment (ASP) and has 5 separate components as detailed in figure 9.

Component of ASP	Description
1. Repayment of capital and associated financing costs	Repayment of the original capital cost, interest associated with borrowing and any surpluses
2. Special purpose vehicle (SPV) fees	Administering, insuring, debt monitoring fee and running costs of the SPV
3. Facilities management (hard FM)	Cost of maintaining the building

4. Lifecycle	Replacement cost of major equipment during the life of the project, for example replacing boilers and lifts
5. Surpluses	Represented by excess cash in the model returned to the public sector. Surpluses exist due to the banking cash requirements and the variable nature of the operating cost, for example lifecycle.
6. Other	Including tax and interest on cash

Figure 9: Components of annual service payment

As part of the competitive dialogue process, the preferred bidder supplied a financial model which projected the ASP over the life of the building. For the 25 year period this is estimated at £508m and is analysed by component in figure 10.

	£k
Repayment of capital and associated financing costs	350,967
Special purpose vehicle (SPV) fees	9,652
Facilities management (hard FM)	57,405
Lifecycle	52,345
Surpluses	56,473
Other	(19,142)
Total	507,699

Figure 10: Value of annual service payment by component

5.3.3 Scottish Government NPD Revenue Support

The Scottish Government Health and Social Care Directorate provides revenue support for each aspect of an NPD project, defined as follows:

- 100% of the cost of construction and the resulting cost of finance
- 50% of life cycle costs
- 100% of private sector development costs and running costs of the project company

All other costs are to be funded by NHS Lothian and partners.

Figure 11 provides a summary of the charge over a period of years alongside the revenue support from SGHSCD to determine the remaining revenue impact for NHS Lothian and partners.

	Full year impact in 2017/18 £k	Final year impact in 2041/42 £k	Average over 25 years £k
Annual service payment	18,857	22,061	20,308
SGHSCD Total	16,651	17,605	17,120
SGHSCD % share	88.30%	79.80%	84.30%
NHS Total	2,206	4,456	3,188
NHS % share	11.70%	20.20%	15.70%

Figure 11: Annual service payment (base date September 2014)

This shows a disproportionate increase in the element of the ASP payable by NHS Lothian and partners from £2.2m in the first full year of operation to £4.5m in 2041/42, reflecting the differential impact of inflation on the components of the unitary charge. Hard FM (100% funded by NHS Lothian and partners) and lifecycle costs (50% funded by NHS Lothian and partners) are subject to annual indexation, whilst minimal indexation is applied to the financing costs (100% funded by SGHSCD). NHS Lothian and SGHSCD are working towards a joint understanding of the accounting and funding implications, recognising the significant contribution from SGHSCD towards the ASP. The NHS Lothian share of the ASP over the period of operation is shown in figure 12.

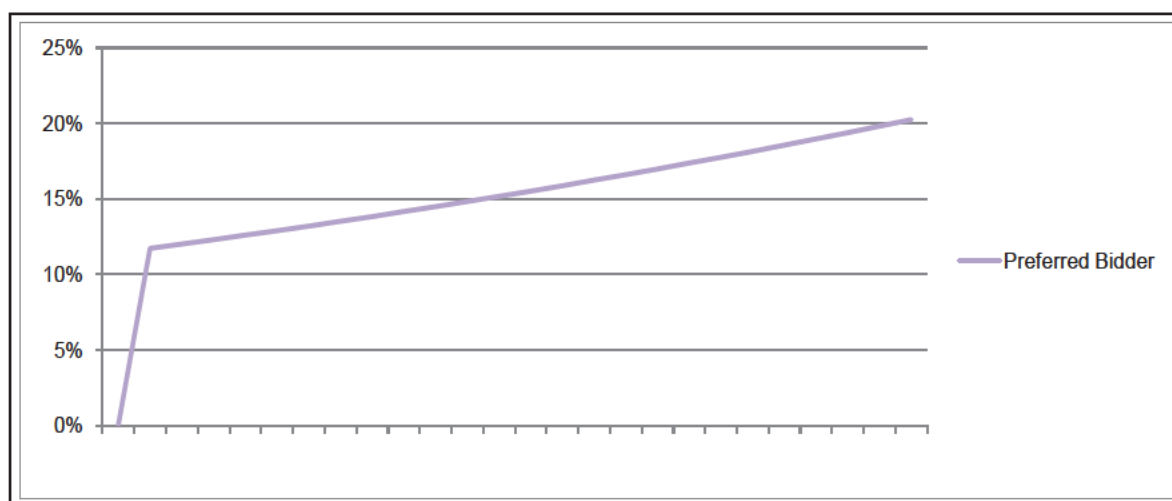


Figure 12: NHS Lothian share of ASP

As required by Scottish Futures Trust Value for Money Guidance, NHS Lothian has completed a qualitative assessment of value for money. This confirmed that the project is considered viable, desirable and achievable.

5.3.4 Facilities Management Services

Elements of ongoing running costs will be covered by the annual service payment, whilst other services such as cleaning and utilities will be provided by NHS Lothian. In the OBC, existing soft FM services within NHS Lothian and other available benchmarks were used to provide indicative costs for the facilities management services to be provided directly by NHS Lothian.

This approach was refined in July 2012 when the facilities management workforce work stream commenced planning the future services workforce needs. This involved:

- establishing the workforce baseline and budget for each facilities management area (domestic, estates, materials management, logistics and catering services);
- identifying the future workforce needs;
- critically examining the rationale for any proposed change;
- estimating overheads associated with the service; and
- exploring opportunities for re-design of service delivery and roles.

Estimated costs, offset by baseline budgets are shown in figure 13.

	OBC £k	FBC £k	Diff £k
Soft FM			
<i>Domestics Services</i>	1,593	2,363	770
<i>Catering Services</i>	493	410	(83)
<i>Logistics</i>	567	1,072	505
<i>Rooftop helipad</i>	0	284	284
<i>Estates</i>	86	224	138
<i>Materials management</i>	51	43	(8)
Sub total soft FM	2,790	4,396	1,606
Energy	1,052	1,300	248
Rates	1,067	1,000	(67)
Other	51	221	170
Sub total costs	4,961	6,917	1,956
Off-setting budgets	(2,934)	(3,936)	(1,002)
Net position	2,027	2,981	954

Figure 13: Facilities management costs

5.3.5 Cost of clinical services

The OBC noted that activity was projected to increase in the run up to the opening of the new facility, with a consequent impact on staffing levels. It further proposed that the inevitable increase in costs would be recognised as a financial planning issue and be considered and managed during the annual planning cycle, between OBC agreement and the new facility being opened.

Since then, detailed work has been carried out to identify the staffing required to deliver to the service model. NHS Lothian has worked together with partner boards to approve the workforce planning principles, review and agree costing methodologies and scrutinise and test the impact on costs.

As part of this work, costs have been categorised as follows:

- *Legislation and policy* – driven by legislation or national policy. The impact on workforce of the significantly increased number of single rooms as prescribed in CEL 27 (2010), Provision of Single Room Accommodation and Bed Spacing being one example. To support the FBC, SEAT partners have agreed in principle to increases in costs of £1.8m in this classification.
- *Additional NHS Lothian capacity* - representing the impact elsewhere in the NHS Lothian system of additional capacity created in the new RHSC/DCN facility. Examples include spinal beds transferring from orthopaedics to DCN. Costs in this category are estimated at £1.9m and will be funded via existing NHS Lothian capacity plans and will not be shared with SEAT and other partners.
- *Additional capacity* – additional 26 beds (16 to open in 2017) and three theatres required to deliver the service model. Further work is required to explore the extent to which the associated activity is already being delivered albeit in different ways,

including through the independent sector or extended working days. The estimated cost associated with this capacity is £3.9m.

- *Capacity which could be phased in* – developments totalling £0.9m where there is a choice about phasing. One example would be the helipad where the start date could be delayed or hours of operation limited, although this decision would have to factor in the impact of the trauma centre. As above, work will continue with our partners to explore the options and associated implications.

SEAT partners have agreed in principle to the requirement for increased clinical service costs where these are driven by legislation or policy requirements. The cross-board group established to review the costs will continue to refine and agree the remaining operational costs to deliver the agreed service model, factoring in the annual review of capacity models and population projections, and related financial planning implications.

5.3.6 Non recurring costs

A high level assessment of transitional/non recurring costs has been undertaken and will be continually developed and refined in the years leading up to the handover of the facility.

5.4 Net revenue impact

5.4.1 Taking all of these items together, the net revenue impact of £10.9m is shown in figure 14.

	OBC £k	FBC £k	Difference £k
Recurring costs			
Annual service payment	22,381	18,857	(3,524)
Facilities costs	4,961	6,917	1,956
Equipment depreciation and running costs	4,308	4,606	298
Clinical services		3,646	3,646
Total recurring costs	31,649	34,027	2,377
Offsetting funding			
SGHSCD contribution to ASP	(20,029)	(16,651)	3,378
Existing NHS Lothian budgets (facilities & depreciation)	(3,295)	(4,685)	(1,390)
Existing NHS Lothian budgets (capacity)		(1,896)	(1,896)
Affordability gap	8,325	10,795	2,469

Figure 14: Net revenue impact

5.4.2 This compares to an affordability gap of £8.3m at the time of the outline business case and, whilst there have been offsetting movements across a number of headings, the difference relates largely to the further work undertaken to quantify the additional capacity available and the consequent impact on costs of the agreed clinical service model as outlined above.

5.4.3 This will be managed across all NHS partners and will be equitably distributed across each of the Boards using the East Coast Costing Model (ECCM). Figure 15 details the proposed percentages and share of costs.

5.4.4 All NHS partners recognise the financial risks which underpin the revenue position at this stage. NHS Lothian is in dialogue with neighbouring boards to progress any further financial impact of the agreed clinical service model.

	%	£k
Lothian	71.6%	7,729
Fife	11.4%	1,231
Forth Valley	4.9%	529
Borders	4.0%	432
Tayside	2.3%	248
Dumfries & Galloway	2.6%	281
Other	3.2%	345
Total	100.0%	10,795

Figure 15: Share of revenue costs based on ECCM

5.5 Impact on Balance Sheet

5.5.1 The accounting treatment likely to apply to assets created by the project into three categories:

- Assets within the scope of the NPD contract
- Assets delivered by Consort Healthcare
- Assets funded and subsequently owned and/or managed by NHS Lothian

5.5.2 NPD Assets

5.5.2.1 *NHS Lothian's Accounts*

In considering the appropriate accounting treatment for the NPD Project assets, it is first necessary to consider whether the arrangement is regarded as a service concession falling within the scope of HMT Guidance on IFRIC 12.

The project will be delivered using the standard contract for NPD projects issued by SFT. As such, the following features of the contract are indicative that the NPD arrangement is within the scope of IFRIC 12 as it meets all the following requirements under the HMT Guidance:

- NHS Lothian will control or regulate what services the NPD operator must provide with the infrastructure, to whom it must provide them and at what price;
- NHS Lothian controls significant residual interest in the infrastructure asset at the end of the term of the agreement; and
- the infrastructure has been constructed by the NPD operator on land that will be under the control of NHS Lothian.

Accordingly, per the guidance set out in IFRS, NHS Lothian will need to record the infrastructure assets constructed under the project on its balance sheet. Any resultant impairment will be treated as an ODEL impairment and fully funded by SGHSCD.

5.5.2.2 *Governmental accounts*

From 1st April 2009 the accounting and budgetary treatments in relation to PFI and similar transactions diverged. As noted above, accounts for bodies such as NHS boards follow IFRIC 12 and ESA 95 (or ESA2010 as from September 2014). Departmental budgets such as those of the Scottish Government must follow national accounting standards, as set out in the Manual on Government Deficit and Debt (MGDD).

The key issue under MGDD is the classification of the assets involved in the arrangement, either as government assets or as the (NPD) operator's assets. The assets can be considered as non government assets only if there is strong evidence that the operator is bearing most of the risk attached to the specific partnership. In this context the risk assessment focuses on the following three main categories of risk:

- Construction risk: (covering events like late delivery, meeting defined specifications and additional costs);
- Availability risk: (covering volume and quality of output); and
- Demand risk: (covering variability of demand).

The assets should be classified as off balance sheet for government if both of the following conditions are met:

- the operator bears the construction risks, and
- the operator bears at least one of either availability or demand risk.

If these conditions are met, the contract is treated as similar to the treatment of an operating lease in ESA 95/2010, it would be classified as the purchase of services by government. If the conditions are not met then the assets are to be classified as on balance sheet for government.

Based on the proposed NPD contractual arrangements the operator and not NHS Lothian will be exposed to construction and availability risk. Conversely, NHS Lothian will bear the demand risk.

On this basis the analysis under the MGDD would suggest that for national accounts purposes the assets would be off balance sheet.

5.5.3 Consort Healthcare Assets

At present, the assumption made in this business case is that assets to be delivered by Consort Healthcare will be paid for directly by NHS Lothian. Consort Healthcare will carry out the works and recover the cost from NHS Lothian without amendment of the annual service payment. Payments in this category will be accounted for as capital grants in line with the Capital Accounting Manual. As such they will be off balance sheet for both NHS Lothian and the Scottish Government.

5.5.4 Assets funded by Scottish Government/NHS Lothian

Largely equipment, any such assets in this category would be on balance sheet at both NHS Lothian and Scottish Government level.

5.6 Impact on Income and Expenditure Account

The SGHD budgetary framework with UK Treasury is operated under ESA. This is broadly equivalent to the former method of resource accounting framework under UK Generally Accepted Accounting Principles (UK GAAP). Since 2008 however, Health Boards' accounts and financial targets have been set under International Financial Reporting Standards (IFRS).

Recognising the impact of IFRS accounting treatment, the likely impact of the NPD on both the Board's and Scottish Government's budget is summarised in the figure 16 below.

NPD Cost	Board Budget	Scottish Government Budget	Funding
Capital cost of revenue financed asset	Non-core CRL	Capital ODEL	Fully funded by SG
Annual Service Payments	Core RRL	Resource DEL	SG will fund all components except for 50% Lifecycle and 100% Hard FM
Depreciation of revenue financed assets	Non-core RRL	Resource ODEL	Fully funded by SG
Impairments of revenue-finances assets	Non-core RRL	Resource ODEL	Fully funded by SG

Figure 16: NPD accounting

It is assumed that any write down of the existing RHSC property will be treated as a funded impairment via the AME (Annually Managed Expenditure) process.

5.7 Statement of Affordability

NHS Lothian confirms that the financial consequences will ultimately be managed as part of their financial and capital plan process; with support from the Scottish Government, NHS Boards and other partners.

6 THE MANAGEMENT CASE

This section aims to outline the management arrangements for the NPD under three project phases:

- a) completion of procurement, up to financial close;
- b) construction and commissioning; and
- c) the operational phase for the completed development.

6.1 Governance framework

6.1.1 Figure 16 sets out the governance structure and reporting framework in phases (a) and (b), showing how the Project Steering Board and Project Co fit into this structure.

6.1.2 The Director of Finance for NHS Lothian is the Senior Responsible Officer, chairing the Project Steering Board and reporting to NHS Lothian Finance and Resources Committee, a sub-committee of the NHS Lothian Board.

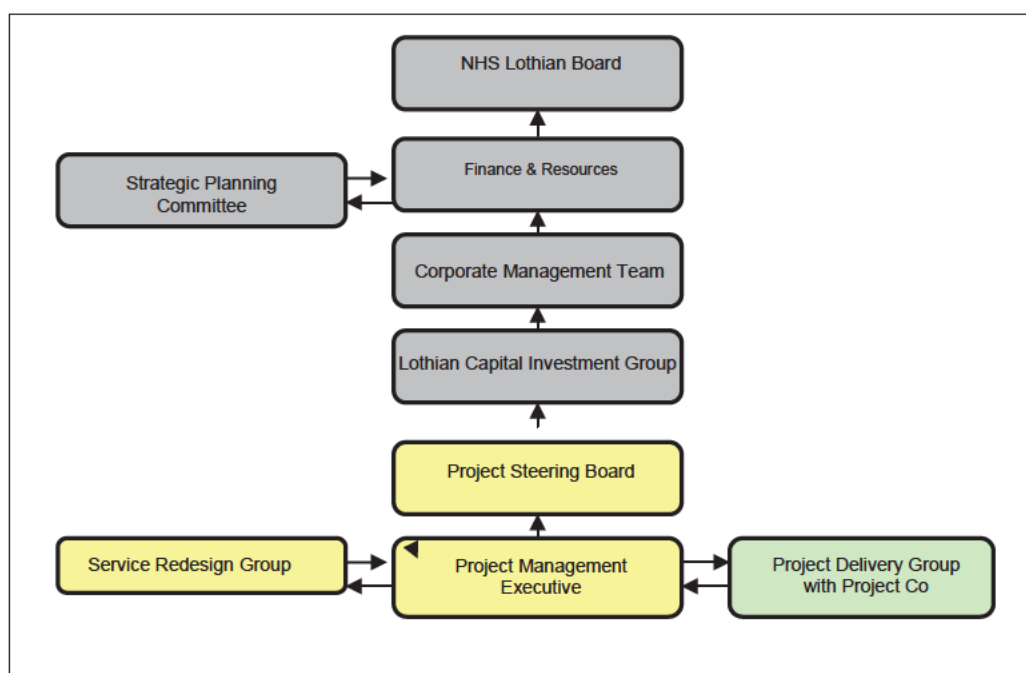


Figure 17: NHS Lothian governance structure with project governance groups in place until the hospital opens

6.1.3 NHS Lothian is committed to working closely with Partnership colleagues, who are represented on the Project Steering Board and the Service Redesign Group.

6.1.4 The project is a substantive agenda item on the SEAT Directors of Finance and Directors of Planning meetings. A representative of this group sits on the Project Steering Board.

6.1.5 As principle stakeholders in the project NHS Borders, Dumfries and Galloway, Fife and Forth Valley, through SEAT, have participated in the development and sign-off of the service model and associated revenue costs.

6.1.6 Figure 18, taken from Project Co's final tender, sets out the governance structure and management structure in the hospital operational period. 'On site' staff are responsible for

day to day management and reporting of the contract; 'off-site' denotes the parties engaged in governance and supporting contract management.

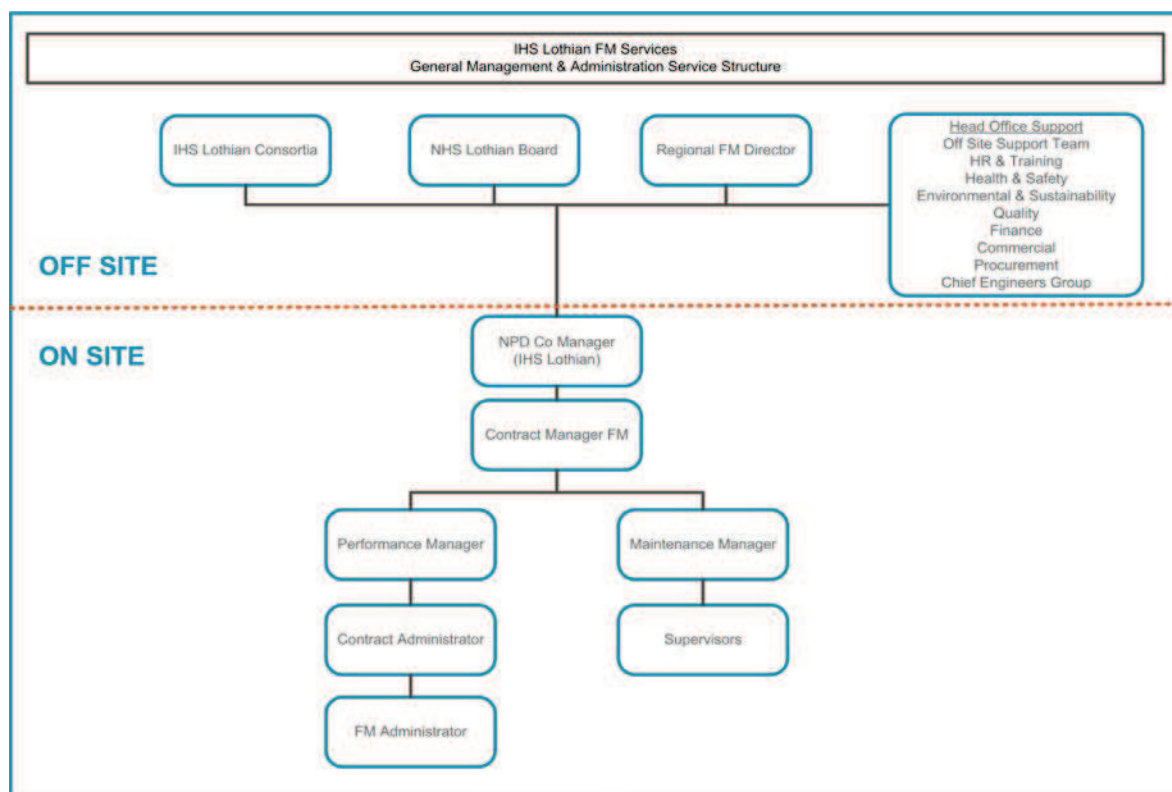


Figure 18: Project Co proposed contract management and governance structure from hospital opening

6.1.7 The responsibilities of the groups in figure 17 are outlined below:

Team or Group	Phase(s)	Responsibilities
NHS Lothian Board	a, b, c	<ul style="list-style-type: none"> Investment decision maker Oversee the project and, once operational, the performance of the facility. Approve the final contract award Resolve matters outside the Board's delegated authority
Finance and Resources Committee	a, b, c	<ul style="list-style-type: none"> Approve the preferred bidder appointment Approve the business case Agree and prioritise the Capital Plan
Strategic Planning Committee	a, b, c	<ul style="list-style-type: none"> Advise the Board on the appropriateness of clinical and service strategies to achieve the high level vision and aims of the NHS Lothian Strategic Clinical Framework
Lothian Capital Investment Group	a, b, c	<ul style="list-style-type: none"> Oversee the NHS Lothian property and assets management investment programme
Project Steering Board:	a, b	<ul style="list-style-type: none"> Establish project organisation Authorise the allocation of programme funds

Team or Group	Phase(s)	Responsibilities
<i>NHS Lothian and public sector partners</i>		<ul style="list-style-type: none"> Monitor project performance against strategic objectives Resolve strategic issues which need the agreement of senior stakeholders to ensure progress of programme Maintain commitment to the programme Manage the governance structure Produce the FBC document Prepare for transition to operational phase
Project Management Executive: <i>NHS Lothian project leads and advisers</i>	a, b	<ul style="list-style-type: none"> Monitor project delivery and make recommendations for approval to the Project Board. Co-ordinate submission of papers to all governance groups as required
Service Redesign Group: <i>NHS services only</i>	a, b	<ul style="list-style-type: none"> Deliver the service modernisation programme with the clinical management teams Maximise the integration of development opportunities across directorates and with external partners
Project Delivery Group: <i>NHS Lothian Project Management Executive plus Project Co leads</i>	a, b	<ul style="list-style-type: none"> Manage interface between NHS Lothian and Project Co Agree and monitor the programme, escalating issues for resolution where necessary. Manage and report on risk Agree responsibilities for the production of information and documentation. Develop the content of the Project Agreement and all associated documentation Receive and agree actions on reports from the User and Project Groups, Adviser Team and other bodies.

Figure 19: Project group responsibilities

In addition to the governance groups described above, the Little France Campus Working Group has been established as a project management interface for all partners on the site to co-operate in establishing arrangement for a safe working environment.

6.1.8 Roles and responsibilities – NHS Lothian

The key roles of those involved in governance for NHS Lothian are, and named individuals at the time of the FBC, are outlined in figure 20.

Role	Group / individual	Summary of Role
Senior Responsible Owner (SRO)	Susan Goldsmith, Director of Finance	Overall responsibility for the project, being directly accountable to the NHS Lothian Board. Provides strategic direction and leadership, and ensures that the business case reflects the views of all stakeholders.
Project Director	Brian Currie	Lead responsibility for delivering the facilities and services agreed in the business case. Provides strategic direction, leadership and ensures that the business case reflects the views of all stakeholders.

Role	Group / individual	Summary of Role
Board Observer	Brian Currie	NHS Lothian representative who will attend and participate (but not vote) at Project Co board meetings after financial close.
Project Clinical Directors	Janice MacKenzie (RHSC) and [Vacancy] (DCN)	Represents clinical services in the project. Works with preferred bidder to financial close to complete design in line with the Board's Construction Requirements within the financial limits. Leads the implementation of the agreed service model in respective clinical services in order to deliver the associated benefits.
Head of Commissioning and Service Redesign	Jackie Sansbury	Ensures that the clinical enabling projects required in the RIE are delivered. Leads the overall service change and workforce planning implementation for the project. Leads planning for and co-ordinate the transition of services into the new facility in conjunction with Project Co.
Commercial lead	Iain Graham	Manages the legal, commercial and financial workstreams for NHS Lothian. Liases with SFT regarding the funding competition. Interface with the RIE PFI contract. Supports the project director in relation to wider Board capital plan requirements.
Head of Property and Asset Management Finance	Moira Pringle	Responsibility for all finance aspects relating to NHS Lothian's capital plan / programme, and lead financial input into the project.
Contracts Manager	Stuart Davidson	Ensures that NHS Lothian expenditure is effective and efficient and that a productive relationship is established and maintained with Project Co. This role is endorsed by SFT and described in SCIM Guidance. ¹⁶

Figure 20: Key NHS Lothian personnel responsible for delivering the project

6.1.9 Roles and responsibilities – external advisers

The NHS Lothian project team is supported by a team of external advisers, as set out in figure 21 below.

Role	Responsibilities
Project Manager – Mott Macdonald	The project manager will be co-ordinate the inputs of the appointed advisers and their interface with NHS Lothian and Project Co.
	Following financial close: <ul style="list-style-type: none"> • Coordinate due diligence on bidder solutions
Legal Advisers – MacRoberts LLP	The role of the legal adviser is to give appropriate advice in their areas of expertise, including up to financial close: <ul style="list-style-type: none"> • Evaluating and advising on all legal and contractual solutions;

¹⁶ Scottish Futures Trust (June 2011): *Review of Operational PFI/PPP/NPD Projects*

Role	Responsibilities
	<ul style="list-style-type: none"> • Developing the contract documentation for the project, using SFT specific standard documentation where appropriate; and • Undertaking legal due diligence on Project Co's solutions. <p>Following Financial Close:</p> <ul style="list-style-type: none"> • Supporting the Commercial Lead in clarification and fine tuning of legal aspects. • Assisting NHS Lothian on implementation of the contract
Financial Advisers - Ernst & Young LLP	<p>The role of the financial adviser is to give appropriate advice in their areas of expertise, including up to financial close:</p> <ul style="list-style-type: none"> • Supporting the development of financial aspects of the FBC; • Developing the payment mechanism in conjunction with the technical advisers; • Reviewing funding and taxation aspects of the solutions; and • Preparing the accounting opinion for the Director of Finance. <p>Following financial close:</p> <ul style="list-style-type: none"> • Supporting the Commercial Lead in clarification and fine tuning of financial aspects. • Assisting NHS Lothian on implementation of the contract, for instance in the operation of the payment mechanism and reviewing calculation of the annual service payment.
Technical Advisers - Mott MacDonald Limited	<p>The role of the technical adviser is to give appropriate advice in their areas of expertise, including up to financial close:</p> <ul style="list-style-type: none"> • Supporting the development of technical aspects of the FBC; • Review of Project Co's proposals to ensure they meet NHS Lothian's objectives; • Developing the payment mechanism in conjunction with the financial advisers; • Undertaking technical due diligence and scrutinising costs of Project Co's proposals • Reviewing Project Co's planning submission; • Supporting the Project Director in clarification and fine –tuning of technical issues. <p>Following financial close:</p> <ul style="list-style-type: none"> • Assist with general queries and assist with technical due diligence. • Support the Project Director in the construction and commissioning phase
Insurance Advisers - Willis	<p>The role of the insurance adviser is to give appropriate advice in their areas of expertise in all phases of the project.</p>

Figure 21: External advisers to NHS Lothian

The project team shall continue to review the advisory appointments to ensure appropriate and continued adviser support is made available throughout the construction period and into early operation stage as necessary.

6.1.10 Roles and responsibilities – Scottish Futures Trust

NHS Lothian is being supported by SFT who retain responsibility for managing the NPD programme nationally.

SFT will nominate a Public Interest Director for the Project Company to perform the duties in accordance with the articles of association for that company.

6.2 Project plan

6.2.1 The strategic programme to the RHSC and DCN opening in 2017 is attached at appendix 9. Key milestones are summarised in figure 22.

Activity	Timescale
Appointment of Preferred Bidder	05/03/2014
Preferred Bidder/Authority Project Initiation Workshop	28/04/2014
Town Planning Application	09/05/2014
FBC formal consideration by NHS Lothian Board	06/08/2014
Funding competition completion	15/08/2014
Targeted town planning committee	27/08/2014
FBC formal consideration by CIG SGHSCD	26/09/2014
Pre-Financial Close KSR approval	30/09/2014
Financial close	02/10/2014
Start on site	03/10/2014
FBC Addendum to NHS F&R Committee	12/11/2014
FBC Addendum to CIG SGHSCD	25/11/2015
Completion / handover	17/02/2017
Project Co FM service commencement	17/02/2017
Hospital Opens	15/05/2017
Post project evaluation	15/05/2018
Project Co FM Service Completion	16/02/2042

Figure 22: Programme milestones from Preferred Bidder appointment

6.2.2 The dates detailed in figure 23 highlight the key milestones for FBC governance.

Activity	Timescale
Endorsement of FBC by Project Steering Board	20/06/2014
Approval of FBC costs by NHS Borders, Dumfries & Galloway, Fife and Forth Valley	20/06/2014
Approval of FBC by Finance and Resources Committee	09/07/2014
Approval of FBC by NHS Lothian Board	06/08/2014
Submission of FBC to SGHSCD CIG	29/07/2014
FBC presentation to SGHSCD CIG	05/08/2014
Approval of FBC by SGHSCD CIG	01/10/2014
Financial close	02/10/2014
Start on site	03/10/2014
Submission of FBC Addendum to SGHSCD CIG	22/10/2014
FBC Addendum to NHS F&R Committee	12/11/2014
Approval of FBC Addendum by SGHSCD CIG	25/11/2014

Figure 23: FBC governance programme

6.3 Preferred bidder appointment to financial close – key activities

- 6.3.1 Development of the final tender design to achieve planning consent and to complete detailed design is managed by IHSL's Design Manager with support from the NHS Lothian project team, including technical advisers, and extensive user engagement in the following:
- 1:200 departmental level sign-off
 - 1:50 room design, including equipment and room data sheets sign-off
 - Technical design sign-off, e.g. interior design, fire strategy, ICT strategy
- 6.3.2 Town planning matters are managed by IHSL and their planning advisers, with input from NHS Lothian supported by planning and technical advisers. The consultation period for the town planning submission for Reserved Matters and Local Application closed in June 2014 and full planning permission is anticipated before the end of August 2014.
- 6.3.3 NHS Lothian have engaged Health Facilities Scotland (HFS) to advise on equipment requirements for the project and to support the procurement, installation and commissioning. HFS are participating in design development, and once the equipment schedule is agreed at completion of design, will progress the equipment procurement and commissioning process.
- 6.3.4 Development of the Project Agreement and supporting contract schedules will be led by IHSL with input from NHS Lothian and legal, technical, financial and insurance advisers.
- 6.3.5 IHSL will confirm funding arrangements with the EIB, and conclude the funding competition to secure the remaining finance.
- 6.3.6 IHSL and NHS Lothian are working together to identify aspects of the project that will attract charity contributions, and to maximise the additional value that this can bring for all users of the facilities.

6.4 Commissioning and equipment – key activities

- 6.4.1 Commissioning arrangements are outlined in the Project Agreement with IHSL, to ensure all aspects of construction conform to the relevant standards and comply with contractual requirements. This will require appropriate certification, the handover of building operational manuals and a 'builders' clean to remove construction debris. In this phase, control of the site will transfer from the construction contractor to NHS Lothian and the FM service provider.
- 6.4.2 The operational commissioning programme, detailing the transfer of hospital services from their current sites to the new facility, will dovetail with the commissioning of the building.
- 6.4.3 NHS Lothian has developed a programme of service redesign, including workforce planning and change management, in preparation for the new model of care.
- 6.4.4 The NHS Lothian commissioning team structure has been agreed, with the following roles reporting to the Head of Commissioning and Service Redesign:
- A commissioning manager each for RHSC, DCN and RIE has been appointed, with departmental commissioning facilitators within the services to be identified
 - NHS Lothian equipment lead – identified

- HFS equipment team - identified
- Theatres and critical care commissioning lead – recruitment underway
- Radiology commissioning lead - identified
- ICT commissioning lead – to be identified
- Building commissioning lead – to be identified
- Facilities management commissioning lead – to be identified

6.4.5 The contractual arrangements for the different groups of equipment is outlined in section 4.1.2. Management of the equipment schedule on completion of the design by IHSL will be handed to NHS Lothian, to be supported by HFS. This will include the specification of equipment in line with user requirements, procurement and programming for installation and commissioning with IHSL. Equipment will require testing, calibrating and tagging as appropriate, and staff will require to be trained. This will also include the identification of equipment items to transfer from existing sites.

6.5 Communication and reporting arrangements

6.5.1 The stakeholders in the project can be summarised as follows:

- NHS Lothian, comprising Lothian Partnership Forum, clinical management teams, facilities management services, corporate services.
- Project-specific groups and workstreams
- Statutory authorities and public bodies such as the Health & Safety Executive, City of Edinburgh planning department, Architecture and Design Scotland (a statutory consultee through the planning process)
- Funders comprising NHS Lothian, other NHS Boards, charities, the University of Edinburgh, the Scottish Government, European Investment Bank and Project Co.
- Patient Focus and Public Involvement (PFPI) groups
- Other Stakeholders comprising National Education Services Scotland (NES), core NHS Lothian sections & others.

Key stakeholders of the project are represented within the appropriate workstreams and, where required, at Project Steering Board level.

6.5.2 A communications plan is in place to ensure communication and consultation with the wider network of stakeholders to the project, including staff, patients and their families, partner organisations and the public.

6.5.3 The project has a community benefits plan with deliverables developed during competitive dialogue stage and forming part of the tender by the Preferred Bidder and will be implemented from mid-August 2014 through the Preferred Bidder's experienced Community Benefits Co-ordinator. The Community Benefits framework follows the SFT standard form and includes key deliverables for training, placements and employment in excess of the Construction Skills Framework upon which it was based. Engagement with small and medium sized enterprises (SMEs) and social enterprises form part of the construction and operations phase deliverables by Project Co.

The deliverables proposed by the Preferred Bidder will be monitored through the contracted Performance Management regime and reinforced by commercial deductions in the event of failing to meet the objectives.

- 6.5.4 All governance functions are supported by a range of reports, including the Project Progress (dashboard), Risk Register Report, Financial Report and a range of supplementary reports.
- 6.5.5 In the construction and commissioning phase Project Co are responsible for providing information on their progress against programme.
- 6.5.6 In the operational phase Project Co reporting will form part of the performance management and payment mechanism arrangements as a part of the Project Agreement, managed through NHS Lothian's Contract Manager.
- 6.5.7 All reports are commissioned on behalf of the Project Steering Board by the Project Management Executive and submitted for approval. Regular progress reports are submitted to the Lothian Capital Investment Group and the Finance and Resources Committee as part of internal governance requirements.

6.6 Risk management

- 6.6.1 All risks will be assessed using the same process, summarised below:

- Identifying the risk;
- Assessing the risk;
- Documenting the risk;
- Managing and reporting the risk; and
- Closing the risk.

- 6.6.2 Once the likelihood and impact of a risk has been rated, each risk will then have a single score which shall be calculated by multiplying the likelihood and impact ratings. This single score determines whether a risk is rated red, amber or green. The table set out below outlines the scores for likelihood and impact, and how these relate to the rating of a risk:

			Likelihood				
			Rare	Unlikely	Possible	Likely	Almost Certain
		Score	1	2	3	4	5
Impact	Catastrophic	5	5	10	15	20	25
	Major	4	4	8	12	16	20
	Moderate	3	3	6	9	12	15
	Minor	2	2	4	6	8	10
	Negligible	1	1	2	3	4	5
Risk rating	Combined score	Action/Treatment					
HIGH	15 – 25	Poses a serious threat. Requires immediate action to reduce/mitigate the risk.					
MEDIUM	9 – 12	Poses a threat and should be pro-actively managed to reduce/mitigate the risk.					
LOW	1 – 8	Poses a low threat and should continue to be monitored.					

Figure 24: Risk assessment matrix

- 6.6.3 At the time of writing the FBC the risk register contained 59 live risks. The risks described in figure 25 are red and amber rated.

Risk ref.	Risk description	Risk management	Mitigated risk score
Procurement risk			
8	Programme delay in reaching financial close	User and adviser input to deliver a) town planning b) technical schedules c) contractual documentation d) funding competition	20
59	Availability of funding	The programme has the funding competition before the independence referendum and financial close afterwards. There is potential for funders to seek a higher cost of finance or contractual protection due to their perceived risk of the financial covenant or credit rating of a newly independent Scotland.	10.5
Enabling risk			
29	Insufficient space in RIE to support RHSC/DCN clinical models	The last remaining displaced staff who require to move for the critical care and renal and transplant model require replacement office accommodation.	13.5
10	Vacant possession of site	Agreements are in place with Consort to secure land and deliver enabling and the programme for delivery is being closely managed.	12
39	Infection control	Enabling works construction in the RIE will be closely managed with infection prevention and control to minimise this risk to hospital services.	12
30	Impact on RIE clinical services productivity	Enabling works in the RIE will be closely monitored with clinical management teams to minimise the impact on service delivery and waiting times.	10
31	Infrastructure damage to RIE in construction	Enabling works construction in the RIE will be closely managed with contractors to prevent damage to utilities and consequent impact on hospital services.	10
28	Delays in completion of RIE clinical enabling	Programme identifies critical path and monitoring of contractor progress.	
14	RIE construction interface failures	Control plans are being developed with Project Co and Consort, to be finalised by financial close.	15
15	RIE interface failures: access routes	Project Co to join working group of all site partners to jointly manage this risk.	15
16	Site traffic	Project Co to join working group of all site partners to jointly manage this risk.	12
NPD construction risk			
9	Specification changes post Financial Close	Governance is in place for approval of change. Annual review of service model and assumptions.	10.5
11	Programme	Site surveys undertaken; Project Co to complete their own	9

	delay due to unexpected site conditions	before Financial Close.	
NPD commissioning risk			
21	Equipment transfer and service downtime	Equipment schedule and commissioning programme to be fully developed with Project Co.	9
25	Service change	Governance is in place for approval of change. Annual review of service model and assumptions.	9
63	Project team resources	Team established to deliver current phase of project; further appointments for commissioning to be made.	12
Operational risk			
45	Service change	Degree of flexibility is designed into the accommodation. Governance is in place for approval of change. Annual review of service model and assumptions.	9
46	Campus management	Project Co to join working group of all site partners to jointly manage this risk.	9
External / governance risk			
49	Campus management	Project Co to join working group of all site partners to jointly manage this risk.	9
55	Charities input	It is proposed to formalise charity contributions and terms.	9

Figure 25: High and medium risks extracted from the project risk register, as of June 2014

6.7 Key Stage Review

- 6.7.1 As part of the governance process for NPD projects, there is a requirement to participate in SFT Key Stage Reviews (KSRs) at specific stages up to Financial Close. Completed KSR reviews are detailed below.

Key Stage Review	Completed
Pre-OJEU	04/12/2012
Pre-ITPD	07/03/2013
Pre- Close of Dialogue	13/12/2013
Pre-Preferred Bidder	28/02/2014

Figure 26: Key Stage Reviews to date at submission of the FBC

The KSR Report for the appointment of the Preferred Bidder is available in appendix 10.

- 6.7.2 Following submission of the FBC to the SGSCHD Capital Investment Group (CIG) a final KSR (Pre- Financial Close) will be required in advance of Financial Close.

6.8 Change Management

6.8.1 Procurement phase pre-financial close

Changes to Project Co's final tender, by Project Co or by NHS Lothian, are being managed through the Project Delivery Group and, if there are costs that will impact on this FBC, escalated to the Project Steering Board for agreement.

6.8.2 Construction and commissioning phase

The change protocol in the Project Agreement governs the management of changes post Financial Close.

6.8.3 Operational phase

The service provided by Project Co is enshrined in the Project Agreement. Day to day matters, performance delivery issues and the management and control of change will be through the NHS Lothian Contract Manager role.

With NHS Lothian having both a PFI and an NPD project on the Little France site, there is benefit in this role co-ordinating with both parties on the management of their contracts.

6.8.4 Organisational level

This project represents a significant change for NHS Lothian. The change to the physical infrastructure is simply an enabler to a more fundamental change in the way that healthcare will be delivered for the population served by NHS Lothian.

The impact of the change to workforce, facilities and the model of care will be considerable, and the service redesign group for the project, linking to the NHS Lothian Strategic Planning Committee, will manage this change agenda.

6.9 **Post Project Evaluation**

6.10 The purpose of undertaking a project evaluation is to assess how well the scheme has met its objectives and whether they have been achieved to time, cost and quality.

6.11 The evaluation will be led by the project team supplemented by representatives of key stakeholders. The Project Steering Board, or its successor, will receive evaluation reports on each element.

6.12 Evaluation of the procurement process has been carried out at key stages by SFT, with reviews to be completed before proceeding to the next phase.

6.13 Benefits realisation, using the benefits management plan at appendix 3, will be evaluated at the following stages

- a) Spring 2015 – recording the baseline in current services
- b) Spring 2017 – re-recording the baseline prior to the move
- c) Summer 2018 – evaluation of the benefits 12 months after opening

6.14 In the 12-months post-project evaluation, the following issues will be considered:

- To what extent relevant project objectives have been achieved?
- To what extent the project went as planned?
- Where the plan was not followed, why this has happened?
- How plans for the future projects should be adjusted, if appropriate.

APPENDIX 1

Support from partner Boards:

- a) **NHS Borders**
- b) **NHS Dumfries and Galloway**
- c) **NHS Fife**
- d) **NHS Forth Valley**
- e) **NHS Tayside**


NHS Borders

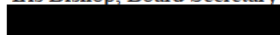
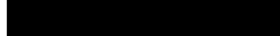
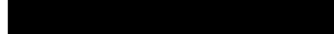
Chair & Chief Executive's Office

Chair & Chief Executive's Office
NHS Borders
Headquarters
Borders General Hospital
Melrose
Roxburghshire TD6 9BD



Ms Susan Goldsmith
Director of Finance
NHS Lothian
Waverley Gate
2-4 Waterloo Place
Edinburgh EH1 3EG


www.nhsborders.org.uk
Date 3rd June 2014
Your Ref
Our Ref CC/IB

Enquiries to Iris Bishop, Board Secretary
Extension 
Direct Line 
Email 

Dear Susan

Re-provision of RHS and DCN

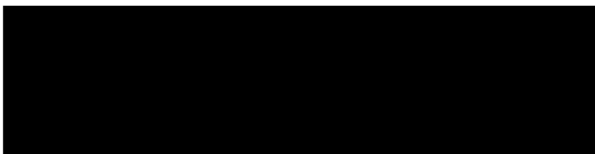
Thank you for coming to NHS Borders on Monday 2nd June. We found the meeting and your presentation informative. Please also pass on our thanks to Sorrel.

We have reviewed the RHSC and DCN FBC costs to other Boards document dated 22nd May 2014 and we:

- are content to approve the methodology proposed for the split of Full Business Case costs, based on activity across the NHS Boards
- agree to support our share of the NPD annual service payment
- commit, in principle, to our share of the related operational costs and will in conjunction with colleagues in NHS Lothian continue to review and scrutinise these
- are committed to continue to work with NHS Lothian to agree the implementation of service capacity and changes, and related workforce requirements, to ensure value for money and cost effective provision. This will include working together to agree the most appropriate and timely care pathways.

This is subject to approval at our Board Meeting on the 26th June 2014.

Yours sincerely



Calum Campbell
Chief Executive



**Dumfries and Galloway
NHS Board**

Chief Executive's Office

Mid North
Crichton Hall
Bankend Road
Dumfries
DG1 4TG

Ref: JA/KL/RHS&DCN
Date: 20th June 2014



Ms Susan Goldsmith
Director of Finance
NHS Lothian
Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG

Dear Susan

Re-provision of RHS and DCN


Thank you for coming to NHS Dumfries and Galloway on Monday 16th June. We found the meeting and your presentation informative. Please also pass on our thanks to Sorrel.

We have reviewed the RHSC and DCN FBC costs to other Boards document dated 22nd May 2014 and we:

- are content to approve the methodology proposed for the split of Full Business Case costs, based on activity across the NHS Dumfries and Galloway;
- agree to support our share of the NPD annual service payment;
- commit, in principle, to our share of the related operational costs and will in conjunction with colleagues in NHS Lothian continue to review and scrutinise these;
- are committed to continue to work with NHS Lothian to agree the implementation of service capacity and changes, and related workforce requirements, to ensure value for money and cost effective provision. This will include working together to agree the most appropriate and timely care pathways.

NHS Dumfries and Galloway Board approved the RHSC and DCN FBC at our meeting on Monday 16th June 2014.

Yours sincerely,


JEFF ACE
Chief Executive

Chairman: Philip N Jones
Chief Executive: Jeff Ace

Fife NHS Board

Hayfield House
 Hayfield Road
 Kirkcaldy
 Fife KY2 5AH

www.nhsfife.org



Ms Susan Goldsmith
 Director of Finance
 NHS Lothian
 Waverley Gate
 2-4 Waterloo Place
 EDINBURGH
 EH1 3EG

Date 3 July 2014
 Your Ref
 Our Ref CB/SAL/L45265
 Enquiries to Mrs C Bowring
 Direct Line
 Email:

Dear Susan

Re-provision of RHS and DCN

Thank you for coming to NHS Fife on Tuesday 27th May 2014. We found the meeting and your presentation informative. Please also pass on our thanks to Jackie and Sorrel.

We have reviewed the RHSC and DCN FBC costs to other Boards document dated 22nd May 2014 and we:

- are content to approve the methodology proposed for the split of Full Business Case costs, based on agreed activity across the NHS Boards
- agree to support our appropriate share of the NPD annual service payment as laid out in the Outline Business Case
- commit, in principle, to our appropriate share of the related operational costs and will in conjunction with colleagues in NHS Lothian continue to review and scrutinise these
- are committed to continue to work with NHS Lothian to reach agreement on the implementation of service capacity and changes, and related workforce requirements, to ensure value for money and cost effective provision. This will include working together to agree the most appropriate and timely care pathways.

This was approved at our Board Meeting on the 24th June 2014.

Yours sincerely

John Wilson
 Chief Executive



Chair Allan Burns
 Chief Executive John Wilson
 Fife NHS Board is the common name of Fife Health Board

NHS Forth Valley

Carseview House
Castle Business Park
Stirling
FK9 4SWSusan Goldsmith
Director of Finance
NHS Lothian
Waverley Gate
2-4 Waterloo Place
EDINBURGH
EH1 3EGDate 23rd June 2014Your Ref:
Our Ref:
Enquiries to Jane Grant
Extension
Direct Line
Email

Dear Susan

FULL BUSINESS CASE FOR ROYAL HOSPITAL FOR SICK CHILDREN AND DEPARTMENT OF CLINICAL NEUROSCIENCES

NHS Forth Valley considered the summary financial information provided by NHS Lothian at a closed session of the Board on Tuesday 17th June 2014.

The Full Business Case was approved and additional funding supported in principle, subject to continued work with SEAT Boards to minimise the additional costs. Whilst supportive of the development, there is concern about the magnitude of additional costs. There was support to the commitment across the region to pursue potential efficiencies to further reduce costs. This review should include efficiency improvements and clear understanding of costs being incurred through the current costing model.

Our nominated representatives will continue to work with Lothian and other SEAT Board staff to address these issues.

Yours sincerely



Jane Grant
Chief Executive

Chairman: Alex Linkston CBE
Chief Executive: Jane Grant

*Forth Valley NHS Board is the common name for Forth Valley Health Board
Registered Office: Carseview House, Castle Business Park, Stirling, FK9 4SW*

www.nhsforthvalley.com  [Facebook.com/nhsforthvalley](https://www.facebook.com/nhsforthvalley)  [@nhsforthvalley](https://twitter.com/nhsforthvalley)

Extract Minute**NHS Tayside****TAYSIDE NHS BOARD****FINANCE AND RESOURCES COMMITTEE – RESERVED BUSINESS**

Minute of Meeting of Tayside NHS Board Finance and Resources Committee held at 09.30 a.m. on **Thursday 17 April 2014** in the Board Room, King's Cross Conference Suite, Dundee

Present

Dr A Cowie, Non-Executive Member, NHS Tayside
 Mr D Cross, Chair, Dundee Community Health Partnership & Non-Executive Member, NHS Tayside
 Dr D Dorward, Non-Executive Member and Clinical Director, Dundee CHP, NHS Tayside
 Mrs J Golden, Employee Director, NHS Tayside
 Mr M Landsburgh, Non-Executive Member, NHS Tayside
 Mrs A Rogers, Chair, Angus Community Health Partnership & Non-Executive Member, NHS Tayside

Attending- Executive Directors

Mr I S McDonald, Director of Finance, NHS Tayside
 Ms L McLay, Chief Executive, NHS Tayside
 Dr A Russell, Medical Director, NHS Tayside

Regular and Other Attendees

Mr L Bedford, Associate Director of Finance – Planning and Operational, NHS Tayside
 Mr D Carson, Assistant Director of Finance, Governance and Corporate Finance, NHS Tayside
 Mr D Colley, Finance Governance Accountant, NHS Tayside (for items 1 – 16)
 Ms K Dapre, Energy and Climate Manager, Health Facilities Scotland (for items 1 – 12)
 Mr G Doherty, Director of Human Resources, NHS Tayside
 Ms M Dunning, Board Secretary, NHS Tayside (for items 11 - 14)
 Mr S Hay, Non-Executive Member, NHS Tayside
 Miss D Howey, Head of Committee Administration, NHS Tayside (for items 11 - 14)
 Mr S Lyall, Head of Finance – Operational Unit, NHS Tayside
 Miss D Robertson, Representative Area Clinical Forum, NHS Tayside

In Attendance

Mrs R Forbes, PA/Office Manager, Directorate of Finance, NHS Tayside

Apologies

Mr M Anderson, Head of Property, NHS Tayside
 Mr J Boland, Representative Area Partnership Forum
 Councillor D Doogan, Non-Executive Member, NHS Tayside
 Mrs L Dunion, Chair, Perth and Kinross CHP and Non-Executive Member, NHS Tayside
 Ms C Hastings, Representative Area Clinical Forum, NHS Tayside
 Dr M McGuire, Nurse Director, NHS Tayside
 Mr S Watson, OBE, DL, (*ex officio*) Chair, NHS Tayside

Dr Dorward in the Chair**20. RE-PROVISION OF ROYAL HOSPITAL FOR SICK CHILDREN AND DEPARTMENT OF CLINICAL NEUROSCIENCES, EDINBURGH**

ACTION

Mr Lyall spoke to report FRC 28/2014.

Mr Lyall informed the Committee that Plans to build a replacement for the current Royal Hospital for Sick Children (RHSC), incorporating CAMHS, and Department of Clinical Neurosciences (DCN), Edinburgh, has been in the making for several years. This project would see a combined building constructed next to the Edinburgh Royal Infirmary, bringing paediatric care, specialist neonatal care, neurosciences and adult and children's emergency departments together on one site to create a centre of excellence.

NHS Lothian was now moving towards preparation of the Full Business Case for approval by the Board and the Scottish Government Capital Investment Group. It was announced as part of the Scottish Government's budget for 2011/12 that the re-provision of RHSC and DCN would be funded using the Non Profit Distributing Model. An Outline Business Case was subsequently developed and approved by Scottish Government in September 2012.

20. RE-PROVISION OF ROYAL HOSPITAL FOR SICK CHILDREN AND DEPARTMENT OF CLINICAL NEUROSCIENCES, EDINBURGH cont'd.

Following this, Integrated Health Solutions Lothian were chosen as the preferred bidder in March 2014 to design, build and maintain the new RHSC and DCN and construction work was expected to start in autumn 2014 with the hospital opening in the summer of 2017.

Members noted that the RHSC and DCN were regional facilities and Regional partners, including NHS Tayside, were engaged in the project through the South East and Tayside (SEAT) Regional Planning Group. The re-provision of services would incur additional recurring revenue consequences associated with the move to a new facility but that the additional recurring revenue costs associated with the new building were mostly funded by SGHSCD as it was an NPD scheme. There were other additional recurring revenue costs, mainly due to additional staffing requirements and soft FM costs that are in excess of existing budgets and Boards are asked to contribute an appropriate share of the additional cost.

Mr Lyall highlighted the costs contained within Table 1 of the report. NHS Tayside's share of recurring revenue costs was estimated at £0.4 million (2.3%) which was based on historic activity patterns. It should be noted that figures remain provisional at this stage as NHS Lothian was currently engaging with regional partners in a detailed examination of costs. Progress on any material variation would be reported back to members through future Corporate Finance reports to the Committee.

Members noted that NHS Lothian required all Boards to sign up to their share of costs by June 2014 to allow the Full Business Case to proceed through NHS Lothian and SGHCD governance processes. NHS Tayside would make provision for the additional costs in the next iteration of the Strategic Financial Plan 2015/16 to 2019/20 with provision in 2017/18. The Committee noted that there were no capital implications

Mr Lyall drew member's attention to the slides accompanying the report.

The Chairman thanked Mr Lyall for the report and the Committee noted the status of the project and approved NHS Tayside's share of the additional recurring revenue consequences associated with this project from 2017/18 provisionally estimated at £0.4 million.

The meeting concluded business at 11.15 a.m.

Subject to any amendments recorded in the Minute of the subsequent meeting of the Committee, the foregoing Minute is a correct record of the reserved proceedings of the meeting of NHS Tayside Finance and Resources Committee held on 17 April 2014 and was approved by the Committee at its meeting held on 15 May 2014.

.....
CHAIRPERSON

.....
DATE

APPENDIX 2

Benefits appraisal of the project options (2011)

RHSC & DCN OPTIONS at 2011 – NON-FINANCIAL BENEFITS APPRAISAL

Stakeholders met on 16 December 2010 to review and score the two shortlisted options for the location of the Department of Clinical Neurosciences at Little France.

Options

As this exercise was to score the *non-financial* benefits of the location of DCN, the different procurement routes for Option 1 were not considered, and only two options were scored:

- 1: Joint build in an independent build with the new RHSC
- 2: Extension at the south end of the ward arc, plus some existing RIE space

Scoring Participants

Stakeholder Group	Representative
Senior Management Team	Fiona Mitchell, Director of Operations – Women’s, Children’s and Neurosciences Colin Briggs, Head of Service for DCN and Service Manager for RHSC
DCN Clinical Management Team (CMT)	Colin Mumford, Clinical Director
Children’s Services CMT	Dr Edward Doyle, Clinical Director Janice McKenzie, Chief Nurse
Critical Care CMT	Dr Brian Cook, Clinical Director
Anaesthetics & Theatres CMT	David Hood, Service Manager
General Medicine CMT	Jackie Drummond, Assistant Service Manager
Radiology CMT	Michael Conroy, Radiology Manager
NHS Lothian Staff Partnership	Susan Lloyd, Partnership Redesign
Project Team	Brian Currie, Project Director
NHSL Capital Planning	Iain Graham, Director of Capital Planning and Projects

Benefit Criteria

The group agreed that the following benefit criteria and weighting should be used to score the project options.

Quality of care: clinical effectiveness and meeting national guidance.	Weighting
<p>To provide integrated neuroscience services providing good patient and staff pathways within DCN:</p> <p>Essential: immediate adjacency of DCN Acute Care, neuroradiology and neurosurgical theatres (horizontal or vertical); neuroscience ITU and HDU beds within approximately 5 minutes transfer by trolley from DCN Acute Care, neuroradiology and neurosurgical theatres.</p> <p>Desirable: co-location of outpatient clinics, therapies, neurophysiology and radiology.</p>	35
<p>To provide good patient and staff pathways between DCN and related adult specialities:</p> <p>Essential: immediate adjacency of General ITU (Ward 118) and neurosciences ITU and HDU;</p> <p>Desirable: close proximity between A&E and DCN Acute Care (horizontal or vertical); adjacency with trauma; adjacency with orthopaedic back services in order to support a single spinal surgery service; adjacency with RIE radiology to allow economies in build and revenue costs; proximity to acute stroke unit.</p>	
<p>To provide good patient and staff pathways between DCN and related paediatric specialities:</p> <p>Essential: RHSC access to DCN theatres; PICU beds within approximately 5 minutes transfer by trolley from neuroradiology and neurosurgical theatres.</p> <p>Desirable: co-located with RHSC radiology and neurophysiology to allow economies in build and revenue costs.</p>	
Deliverability – the ability to implement options	
Delivering the operational solution by 2015.	25
Minimising disruption to clinical services during construction and commissioning of services.	
Minimising disruption for the wider site during construction and commissioning of services.	
Quality of the physical environment	
A functional, safe and efficient working environment for the assessment, treatment and care of patients.	15
Sustainability	
The delivery of emergency specialist services 24/7.	15
Maximising potential efficiencies to deliver a sustainable workforce.	
An energy efficient infrastructure and working environment.	
A facility that allows for flexibility and further expansion to meet changing service needs.	
Accessibility (Helicopter access only)	
Ease of access to the Little France hospitals for emergency patients transferred by helicopter.	10

The stakeholder group agreed that the site options to be scored would deliver no significant difference in the remaining criteria used in the initial appraisal, so Research and education was therefore not weighted.

Scores

BENEFIT CRITERIA		Unweighted scores		AGREED WEIGHT	Weighted scores		Notes on discussion
		OPTION 1	OPTION 2		OPTION 1	OPTION 2	
		Joint build with new RHSC	New build extension and some existing RIE		Joint build with new RHSC	New build extension and some existing RIE	
1	Quality of care	47.3	39.3	35	138.1	114.7	Option 1 provided the best pathways for essential links between RHSC and the DCN theatres. Option 1 is more flexible in the internal adjacencies for DCN than the site at the end of the ward arc. Both options have excellent proximity from DCN to ITU.
2	Deliverability	48.0	32.7	25	100.0	68.1	Considerable disruption anticipated for RIE to build DCN on the end of the ward arc. Concerns about live construction either side of A&E for option 2. Overall timescale for completion of two separate projects thought likely to be longer.
3	Sustainability	49.7	34.3	15	62.1	42.9	Greater energy efficiency demanded of option 1. Less impact on sustainability of RIE services during construction of option 1. Option 2 would utilise last remaining RIE expansion zone.
4	Quality of the physical environment	53.0	39.0	15	66.3	48.8	New builds would be 100% single rooms. Proportion of DCN would be in existing RIE wards and therefore not single rooms in option 2. Higher quality of build expected in purpose-designed and -built accommodation complying with latest regulations.
5	Accessibility - Helipad only	45.0	48.0	10	37.5	40.0	Noted that this was for a small but critical group of patients.
6	Research and education	0.0	0.0	0	0.0	0.0	
	TOTAL	243.0	193.3		403.9	314.4	

APPENDIX 3

Benefits realisation plan

RHSC and DCN at Little France - **Benefits Realisation Plan**

The anticipated benefits map to the investment objectives for the RHSC and DCN at Little France project.

The project team lead for each benefit will co-ordinate baseline measurement by the end of 2014/15.

Contents

Benefit:	Page no:
1. Quality and clinical effectiveness	2
2. Quality of environment	6
3. Accessibility	9
4. Sustainability of environment	12
5. Sustainability of services and workforce	14
6. Deliverability	16
7. Research and development	18

1. Quality and clinical effectiveness

Overview

- Improvement in health and reduction in health inequalities by delivering and sustaining high quality care and treatment.
- A hospital that facilitates good clinical pathways and interfaces between specialities, diagnostic and support services.
- The building will allow NHS Lothian to meet quality and treatment targets set out in national and clinical guidance.

Responsibility for delivering the benefit

- Project Director
- General Manger for Children's Services
- General Manger for Clinical Neurosciences

Responsibility for monitoring the benefit

- Service Planning Project Manager
- Associate Medical Director for Children's Services
- Associate Medical Director for Clinical Neurosciences

Specific	<p>Benefits</p> <p>Improved access to care and treatment for all at the right time and in the right location. A hospital that facilitates and maximises interfaces between related specialities through co-location on site of:</p> <ul style="list-style-type: none"> • adult and paediatric emergency departments • paediatric and neonatal surgery • adult and paediatric neurosurgery • physical and mental health services for children and young people • acute neuroscience care and the emergency department • adult spinal surgery in DCN and orthopaedics <p>A hospital that facilitates good clinical pathways and patient journeys between specialities, diagnostics and support services, e.g.</p> <ul style="list-style-type: none"> • reduced patient transfer time from the emergency department to diagnostics, theatres and critical care as required • reduced patient transfer time for the retrieval of critically ill patients from other hospitals, by road or air • provision of critical care in specialist HDU and ICU units rather than general wards • provision of specialist transitional care for children and young people in a dedicated unit • reduction in time between the admission of emergency patients to initiation of specialist care • reduction in patients boarded into another speciality ward <p>A reduction in healthcare associated infection.</p> <p>Improved patient safety.</p> <p>Reduced waiting times with improved performance against Treatment Time Guarantees.</p> <p>Upper quartile performance against peer national services.</p> <p>Disadvantages</p> <p>Distance created for neuro-oncology service between DCN at Little France and oncology at WGH requires to be addressed to ensure no negative impact on service quality.</p>
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RHSC and DCN at Little France - **Benefits Realisation Plan**

Measurable	<p>Evidence required</p> <ul style="list-style-type: none"> ▪ New service co-located with major acute adult hospital – completion of RHSC and DCN at Little France project ▪ Evidence of improved pathways & processes, physical adjacencies and best practice ▪ Evidence of distance and timescales for patient journeys ▪ Evidence of meeting Treatment Time guarantees ▪ Reduction in the cancellation of operations and over-run of theatre sessions ▪ Reduction in / maintain minimal infection rates ▪ Reduction in clinical incidents ▪ Benchmarking against peer services, currently done through Civil Eyes Valuing Medical Resources programme. <p>Examples of how benefits will be monitored</p> <ul style="list-style-type: none"> ▪ Monitor LOS prior to introducing new models of care and after transfer to new building - health intelligence data ▪ Measure pre and post move transfer of patient journey times between key departments e.g. DCN theatres to adult ICU, emergency departments to theatre, SMMP to RHSC theatre. ▪ Waiting times performance before and after the move ▪ Monitor comparative levels of HAI – Infection Control Reports and Audits ▪ Scottish Patient Safety Programme measures, e.g. for HAI, surgical incidents and critical care outcomes. ▪ Interrogate Datix incident / near miss reports for the services ▪ The Productive Operating Theatre measures ▪ Releasing Time to Care measures ▪ Parent and family satisfaction audits before and after the move. ▪ Monitor volume of and issues raised in complaints before and after the move
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RHSC and DCN at Little France - **Benefits Realisation Plan**

Achievable	<p>Actions necessary to realise benefits</p> <ul style="list-style-type: none"> ▪ Engagement of staff in developing, signing-off and delivery of the project. ▪ Develop and sign-off a design that delivers the necessary adjacencies and relationships. ▪ Redesign of patient pathways, and associated operational policies, workforce plans and service development plans. ▪ Development of a robust communications plan with staff and public to give understanding of the benefits of the project implementation. ▪ Commissioning Plan
Relevant	<p>Associated Investment Objective</p> <p>To provide an environment that supports Clinical Effectiveness, meeting of national standards and targets and facilitates the implementation of best evidence based practice leading to improved treatment outcomes for patients.</p>
Time-bound	<p>Timeframe for monitoring this benefit</p> <p>Baseline monitoring: 2014/15 Re-visit the baseline pre-move: 2016/17 Post-project evaluation: 2018/19</p>

2. Quality of environment / acceptability

Overview

- A quality physical environment which promotes the health and wellbeing of the building's users.
- There will be an increase in stakeholders satisfaction in the new 'fit for purpose' environment
- The building will comply with Hospital Building Note (HBN) guidance, the Disability Discrimination Act (DDA) and Design Quality for NHS Scotland 2010.

Responsibility for delivering the benefit

- Project Director
- General Manger for Children's Services
- General Manger for Clinical Neurosciences

Responsibility for monitoring the benefit

- Project Clinical Director
- Associate Medical Director for Children's Services
- Associate Medical Director for Clinical Neurosciences

RHSC and DCN at Little France - **Benefits Realisation Plan**

Specific	<p>Benefits</p> <ul style="list-style-type: none"> • Patient privacy and dignity in care will be improved with single rooms and fit for purpose design. • Patients will have increased control over their own environment – noise , temperature, light, socialisation – and will experience fewer interruptions to their sleep • Increased patient and public satisfaction in the facilities. • Building users will have access to external amenity space • Age appropriate care • A reduction in healthcare associated infection. • Improved patient safety. • Reduced staff absence – unplanned absence will achieve the target of below 3.5% • Improvement in the recruitment and retention of staff with a reduction in staff turnover <p>Disadvantages</p> <p>None identified</p>
Measurable	<p>Examples of how benefits will be monitored</p> <ul style="list-style-type: none"> ▪ Patient Quality Indicators audit measures ▪ Patient satisfaction / parent and family satisfaction audits before and after the move. ▪ Monitor environmental / facilities complaints before and after the move ▪ Monitor environmental / facilities issues in staff feedback before and after the move ▪ Monitor comparative levels of HAI – Infection Control reports and Audits ▪ Monitor staff absence and turnover – personnel systems

RHSC and DCN at Little France - **Benefits Realisation Plan**

Achievable	<p>Actions necessary to realise benefits</p> <ul style="list-style-type: none"> ▪ The design and finished environment will be scrutinised through the AEDET process. ▪ The building will be DDA compliant. ▪ The building will conform to the Design Quality for NHSScotland Standards 2010. ▪ Engagement of staff and patient representatives in developing, signing-off and delivering the project. ▪ Develop and sign off a design that delivers the necessary adjacencies and relationships. ▪ Develop and sign off a design that delivers patient safety and operational functionality within each department. ▪ Develop and sign off a design that delivers the internal design required to enable patient control of their environment, and promote user satisfaction and well-being.
Relevant	<p>Associated Investment Objective</p> <p>To provide a physical environment, the quality of which, promotes the health and well being of the buildings users.</p>
Time-bound	<p>Timeframe for monitoring this benefit</p> <p>Baseline monitoring: 2014/15 Re-visit the baseline pre-move: 2016/17 Post-project evaluation: 2018/19</p>

3. Accessibility

Overview

- Services that will be safely accessible to patients, visitors and staff, by public and private transport.
- The project includes a rooftop helipad to serve all clinical services in RIE, RHSC and DCN
- The project includes provision of car-parking, cycle-parking and public transport drop-off, and the reprovision of car park B at the RIE, which is being taken over for the new RHSC and DCN.

Responsibility for delivering the benefit

- Project Director
- General Manager for Children's Services
- General Manager for Clinical Neurosciences

Responsibility for monitoring the benefit

- Capital Planning Project Manager
- Chief Nurse for Children's Services
- Chief Nurse for Clinical Neurosciences

RHSC and DCN at Little France - **Benefits Realisation Plan**

Specific	<p>Benefits</p> <ul style="list-style-type: none"> ▪ The site location enables easy access on foot or by car, cycle or public transport. ▪ The main entrance to the building is pedestrianised ▪ The site supports rapid and ease of emergency access by land and air ▪ The joining of adult and paediatric emergency departments, allowing families to be treated on the one site ▪ Separation of emergency and routine traffic <ul style="list-style-type: none"> Patients arriving by emergency ambulance will enter by the A & E entrance Patients arriving for day case or outpatient appointments will enter via the main entrance into hospital ▪ Adequate car parking provision is provided to support the specific needs of patients, frontline staff, essential car users and visitors to the site ▪ A drop off facility for carers adjacent to the main entrance and A&E ▪ Car parking spaces adjacent to the main entrance and A&E for disabled patients / drivers ▪ Car parking for RHSC & DCN patients and visitors will be in the closest public car park on the Little France site ▪ Access to park and ride facilities close to new hospital ▪ Provision is made for cyclists to secure their bikes to bike racks ▪ The signage access and way-finding will be compliant with DDA <p>Disadvantages</p> <ul style="list-style-type: none"> ▪ Limited parking capacity; some staff eligible for a pass at their current place of work will no longer have one – perceived disadvantage.
Measurable	<p>Examples of how benefits will be monitored</p> <ul style="list-style-type: none"> ▪ Monitor transport / access complaints before and after the move ▪ Monitor transport / access issues in staff feedback before and after the move ▪ Usage of flexible parking permits and other parking management information ▪ Access audit ▪ Monitor transfers to acute hospital services by air before and after the move.

RHSC and DCN at Little France - **Benefits Realisation Plan**

Achievable	<p>Actions necessary to realise benefits</p> <ul style="list-style-type: none"> ▪ Good public information including signage and route management to direct public and staff by the planned safe route into the building ▪ Include access management in the commissioning programme ▪ Provide dedicated set down and pick up points clearly identifiable within the site layout plans ▪ Provide car parking arrangements that meet the requirements recommended by the Scottish Government ▪ Provide safe access route into the RHSC and DCN Building and Little France site ▪ Provide good real time travel information at the exits to the hospital ▪ Provide bike racks to allow cyclists to secure their bikes ▪ Shuttle bus and park and ride facilities close to hospital building
Relevant	<p>Associated Investment Objective</p> <p>To provide services that will be safely accessible to patients, visitors and staff, by public and private transport.</p>
Time-bound	<p>Timeframe for monitoring this benefit</p> <p>Baseline monitoring: 2014/15 Re-visit the baseline pre-move: 2016/17 Post-project evaluation: 2018/19</p>

4. Sustainability - environmental

Overview

- Efficient use of resources and revenue to deliver services. Scottish Government policy is for all new NHS buildings achieve the standard of BREEAM Healthcare 'Excellent'.

Responsibility for delivering the benefit

- Project Director
- Director of Operations – Facilities

Responsibility for monitoring the benefit

- Capital Planning Project Manager
- Energy and Environment Manager

Benefits

- 20% of energy from low carbon technology
- BREEAM 'very good' rating, with 'excellent' for energy credits
 - Reduced utilities consumption and lifecycle costs
 - Reduced carbon emissions
 - Reduced waste

Disadvantages

- Costs of achieving BREEAM standard to be determined

Specific

RHSC and DCN at Little France - **Benefits Realisation Plan**

Measurable	<p>Examples of how benefits will be monitored</p> <p>ENVIRONMENTAL SUSTAINABILITY from BREEAM 2011 guidance:</p> <ul style="list-style-type: none"> ▪ Management ▪ Health & Wellbeing ▪ Energy ▪ Transport ▪ Water ▪ Materials ▪ Waste ▪ Land Use & Ecology ▪ Pollution
Achievable	<p>Actions necessary to realise benefits</p> <ul style="list-style-type: none"> • The building design will to be compliant with Edinburgh Standards for Sustainable Buildings • A strategy for waste reduction during construction will be implemented • Once operational, recycling will be promoted through the provision of appropriate and accessible storage areas for waste • What material will be used on the building? • Off site recycling of waste • For transport see Accessibility benefit, above
Relevant	<p>Associated Investment Objective</p> <ul style="list-style-type: none"> • Efficient use of resources and revenue to deliver services.
Time-bound	<p>Timeframe for monitoring this benefit</p> <p>Baseline monitoring: 2014/15 Re-visit the baseline pre-move: 2016/17 Post-project evaluation: 2018/19</p>

5. Sustainability – service / workforce	
<p>Overview</p> <ul style="list-style-type: none"> • Delivery of sustainable clinical services, particularly adult and paediatric critical care, and neurosurgery. <p>Responsibility for delivering the benefit</p> <ul style="list-style-type: none"> • Project Director • General Manager for Children’s Services • General Manager for Clinical Neurosciences <p>Responsibility for monitoring the benefit</p> <ul style="list-style-type: none"> • Head of Redesign and Commissioning • Service Manager for Children’s Services • Service Manager for Clinical Neurosciences 	
Specific	<p>Benefits</p> <ul style="list-style-type: none"> ▪ Secure paediatric neurosurgery and intensive care unit in RHSC ▪ Sustainable delivery of adult ICU on three acute sites in Lothian ▪ Sustainable service and workforce plans for all teams and specialties <p>Disadvantages</p> <ul style="list-style-type: none"> • None identified
Measurable	<p>Examples of how benefits will be monitored</p> <ul style="list-style-type: none"> ▪ Sustainable medical staff rotas; use of agency / locum cover ▪ Sustainable nursing staff rotas; use of agency / locum cover ▪ Performance against Treatment Time Guarantees ▪ % theatre cancellations by NHSL ▪ % outpatient cancellations by NHSL

RHSC and DCN at Little France - **Benefits Realisation Plan**

Achievable	<p>Actions necessary to realise benefits</p> <ul style="list-style-type: none"> ▪ Demand projection and capacity planning • Workforce planning, including implementation of / recruitment to new roles • Treatment Time performance recording
Relevant	<p>Associated Investment Objective</p> <ul style="list-style-type: none"> • Efficient use of resources and revenue to deliver services.
Time-bound	<p>Timeframe for monitoring this benefit</p> <p>Baseline monitoring: 2014/15 Re-visit the baseline pre-move: 2016/17 Post-project evaluation: 2018/19</p>

6. Deliverability / Disruption	
<p>Overview</p> <ul style="list-style-type: none"> Continuity of RHSC, DCN and RIE services with minimal impact on quality or targets throughout the delivery of the project <p>Responsibility for delivering the benefit</p> <ul style="list-style-type: none"> Project Director General Manager for Children’s Services General Manager for Clinical Neurosciences <p>Responsibility for monitoring the benefit</p> <ul style="list-style-type: none"> Head of Redesign and Commissioning Service Manager for Children’s Services Service Manager for Clinical Neurosciences 	
Specific	<p>Benefits</p> <ul style="list-style-type: none"> Services in RHSC and DCN will be uninterrupted through construction phase as the new build is off-site. Services in the RIE will experience minimal disruption as traffic management and construction project management will work to reduce impact and risk. <p>Disadvantages</p> <ul style="list-style-type: none"> Double-running requires resource – staff, equipment and support services Staff engagement requires resource – clinical and non-clinical groups, design, equipment, workforce planning, commissioning
Measurable	<p>Examples of how benefits will be monitored</p> <ul style="list-style-type: none"> Services will maintain waiting times and quality targets before, during and after the commissioning phase , e.g. HEAT targets ‘Loss of facility’ registered for the RIE PFI provider

RHSC and DCN at Little France - **Benefits Realisation Plan**

Achievable	<p>Actions necessary to realise benefits</p> <ul style="list-style-type: none"> • Construction programme planning to minimise disruption • Commissioning programme planning to maximise service delivery, including double-running where necessary • Engagement of RIE site PFI providers in traffic management planning for construction and commissioning period
Relevant	<p>Associated Investment Objective</p> <ul style="list-style-type: none"> • To provide a scheme option that results in the minimum possible disruption to patients and allows the continued delivery of clinical services over the duration of the project (activity levels maintained).
Time-bound	<p>Timeframe for monitoring this benefit</p> <p>Baseline monitoring: 2014/15 Re-visit the baseline pre-move: 2016/17 Post-project evaluation: 2018/19</p>

7. Research & Development

Overview

- To provide an environment that facilitates engagement and involvement with the University of Edinburgh and other research and development bodies and opportunities.

Responsibility for delivering the benefit

- Project Director
- Associate Medical Director for Children's Services
- Associate Medical Director for Clinical Neurosciences

Responsibility for monitoring the benefit

- Clinical Project Director
- Director of the Edinburgh Clinical Research Facility
- Director of the Centre for Clinical Brain Sciences, University of Edinburgh

Benefits

- Co-location with the Chancellor's Building, Queen's Medical Research Institute and Edinburgh BioQuarter
- Access to quality training and teaching facilities for staff in RHSC and DCN specialties
- Access to quality training, teaching and personal study facilities for undergraduate and postgraduate study in paediatric and neuroscience disciplines
- High quality research facilities
- Formal partnership arrangements with education and research institutes
- Enhanced research and education portfolio in paediatric and neuroscience disciplines

Disadvantages

- None identified

Specific

RHSC and DCN at Little France - **Benefits Realisation Plan**

Measurable	<p>Examples of how benefits will be monitored</p> <ul style="list-style-type: none"> ▪ Research Assessment Exercise rating for hospital-based clinical subjects, psychiatry and neuroscience. ▪ Research portfolio in paediatric and neuroscience disciplines
Achievable	<p>Actions necessary to realise benefits</p> <ul style="list-style-type: none"> • Formal partnership arrangements with education • Enhanced research portfolio • Multidisciplinary involvement in the research and education programme
Relevant	<p>Associated Investment Objective</p> <ul style="list-style-type: none"> • To provide a service environment that will easily allow engagement and involvement with research and service development opportunities with our partner higher education institutes. To provide a service that will advance treatments and interventions and attract highly capable staff with progressive research interests and who can be more readily retained.
Time-bound	<p>Timeframe for monitoring this benefit</p> <p>Baseline monitoring: 2014/15 Re-visit the baseline pre-move: 2016/17 Post-project evaluation: 2018/19</p>

APPENDIX 4

Value for money assessment from the Outline Business Case (2011)

SGHD Value for Money Assessment Guidance: Capital Programmes and Projects
Appendix C – Checklist and Pro-forma of Required Actions Stage 2

Requirement	Details Assessed	NHS Lothian response
Qualitative Assessment of NPD	<ol style="list-style-type: none"> 1. Review, confirm and complete applicable pro-forma below relating to: <ul style="list-style-type: none"> • Viability of project • Desirability of project • Achievability of project (in particular market capacity and likely bid competition / market interest to be reviewed) 2. Consider wider VfM factors and generic VfM factors 3. Review proposed Project Timetable 4. Confirm proposed risk allocation (as per standard form NPD/hub DBFM contract, where applicable) 5. Confirm benefit assessment and deliverability 6. Support evaluation and decision with evidence from previous projects. <p>Report findings should include the results of the assessment of the viability, desirability and achievability of revenue financed procurement. (This should include the pro-forma assessment tables and the results of the workshops which assessed these.)</p>	The remaining sections of this table address each of these points.
Review of Affordability – to determine if the project can continue	<p>Confirm project is affordable / supportable to the procuring authority based upon forecast scope and delivery timescales. The affordability implications (including the affordability envelope under a range of sensitivities) should be signed off required.</p> <p>The affordability assumptions and implications should be detailed within the report.</p>	Refer to section 5.6.
Review of Balance Sheets Status	<p>The accounting implications of the project should be assessed and recorded within the Report.</p>	Refer to section 5.4.

VIABILITY

Issue	Questions	NHS Lothian Response
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VIABILITY		
Issue	Questions	NHS Lothian Response
Project level objectives and outputs	Is the Procuring Authority satisfied that a long term, operable contract could be constructed for the project?	Yes. The requirement is for discrete facilities capable of being managed under a specific contract, with clearly definable outputs. The clinical requirement supports long-term strategy within the NHS in Scotland.
	Confirm that the proposed contract describes / will describe service requirements in clear, objective, output-based terms over a long term period in accordance with the standard NPD contract and guidance.	The project will use the standard form NPD contract as drafted by SFT, with no derogation envisaged other than in project-specific areas.
	Confirm that the contract will support assessments of whether the service has been delivered to an agreed standard in accordance with the standard NPD contract and guidance.	As above.
	Confirm that the proposed project outcomes will meet the project objectives and address the need.	The development of the project has ensured that the outcomes to be sought under the procurement are aligned with clinical and strategic objectives and will meet long term clinical needs.
	Will there be significant levels of investment in the new capital assets and related services?	Yes. Refer to section 5.1. The project is a major capital investment for the NHS, with a value of circa £150 million.

VIABILITY		
Issue	Questions	NHS Lothian Response
	<p>Confirm that any interfaces with other projects or programmes are clear and manageable?</p>	<p>The key areas of interface will be with the ongoing operations of the Royal Infirmary of Edinburgh, managed via a contract between NHS Lothian and Consort. This interface is critical to the success of the project and has been addressed in detail in risk management processes. Ensuring an effective interface is a key aspect of the project management and governance structure.</p>
	<p>Confirm that the services to be provided as part of the project do not require the essential involvement of Procuring Authority personnel? To what extent does any involvement negate the risk transfer that is needed for VfM?</p>	<p>The services to be provided by the contractor are limited to Hard FM. NHS Lothian will have no direct role in the delivery of these services, although the monitoring and management of contractual arrangements will be a key task for NHS Lothian staff.</p>
	<p>Will the private sector have control / ownership of the intellectual property rights associated with the performance / design / development of the assets for the new service? Confirm that the standard form NPD contract provisions relating to intellectual property rights will be adopted.</p>	<p>Arrangements for these issues will be governed by the contract, which will utilise the standard form drafting provided by SFT.</p>

VIABILITY		
Issue	Questions	NHS Lothian Response
Operational flexibility	Is the Procuring Authority satisfied that operational flexibility is likely to be maintained over the lifetime of the contract at an acceptable cost?	Yes. The contract will contain drafting to deal with the management of change. The specification for the facilities will be derived from detailed design work already undertaken that ensures that long-term clinical needs will be met. As FM services are limited to Hard FM only, the NHS will have control over the delivery of the vast majority of operational services provided within the new facility.
	Is there a practical balance between the degree of operational flexibility that is desired and long term contracting based on up-front capital investment in projects?	See above.
	What is the likelihood of large contract variations being required during the life of a typical contract?	The facility is designed to deliver long-term need as it is currently understood. Any requirement for change will derive from factors and influences that are not yet known. However, major variation is not expected or considered likely.
Equity, efficiency and accountability	Does the scope of the project services allow the contractor to have control of all the relevant functional processes? Do the services have clear boundaries?	These factors will be fully addressed within the contract, which follows SFT standard form.
	Are there regulatory or legal restrictions that require project services to be provided directly?	There are no such restrictions envisaged.

VIABILITY		
Issue	Questions	NHS Lothian Response
	<p>Will the private sector be able to exploit economies of scale through the provision, operation or maintenance of other similar services to other customers?</p> <p>Does the private sector have greater experience / expertise than the Procuring Authority in delivery of the project services? Are the services in the project non-core to the Procuring Authority?</p> <p>Is the Project likely to deliver improved value for money to the Procuring Authority as a whole?</p>	<p>The project is located centrally within Scotland's central belt and has good access to communication links. While it is not yet known which private sector parties may decide to take part in the procurement, we can reasonably assume that they will be experienced operators of similar contracts, facilities or services in Scotland or elsewhere in the UK, and so could exploit economies of scale on this basis.</p> <p>The services to be provided by the contractor are limited to hard FM services, which cannot be considered core to the NHS. All core NHS services are to be retained by NHS Lothian.</p> <p>Yes. The procurement process will be highly competitive and will drive a value for money outcome. During operations the governance of the NPD vehicle will ensure that the contractor operates efficiently and maximises returns for stakeholders.</p>
OVERALL VIABILITY	Is the relevant Accountable Officer satisfied that operable contracts with built in flexibility can be constructed across the project, and that strategic and regulatory issues can be overcome?	Yes, this is confirmed.

DESIRABILITY		
Issues	Question	Response
Risk management	<p>Does the project involve the purchase of significant capital assets, where the risks of cost and time over-runs are likely to be significant?</p>	<p>The assets to be procured are significant and there are several risks inherent in a project of this nature. However, each of these risks has been identified, as set out in section 6.7, and quantified where possible. Risk mitigation processes have been put in place for each risk. In addition, the affordability analysis takes account of a number of sensitivities that test the implications of delays and cost overruns.</p>
	<p>Is the private sector likely to be able to manage the generic risks associated with the project more effectively than the Procuring Authority?</p> <p>Bearing in mind the relevant risks that need to be managed for the project, what is the ability of the private sector to price and manage these risks?</p> <p>Can envisaged standardised payment mechanisms and contract terms incentivise good risk management within the project, as per the standard form NPD contract?</p>	<p>The risk processes applied have sought to identify all risks and allocate them to the party best placed to manage that risk. In particular, the standard NPD contract embodies a risk allocation that is well understood and accepted by the private sector. The project will, therefore, only seek to allocate risks to the private sector that it can manage effectively and price so that value for money is not damaged. NHS Lothian will retain other risks.</p> <p>The use of the NPD standard contract will ensure that good risk management arrangements are put in place.</p>

DESIRABILITY		
Issues	Question	Response
Innovation	<p>Does a preliminary assessment indicate that there is likely to be scope for innovation on a project basis?</p> <p>Does some degree of flexibility remain in the nature of the technical solutions / services and / or the scope of the project?</p> <p>Can solutions be adequately free from the constraints imposed by the Procuring Authority, legal requirements and / or technical standards?</p> <p>To what extent will the individual project's scope, specification and operation be pre-set or open to negotiation with the private sector?</p> <p>Could the private sector improve the level of utilisation of the assets underpinning the project (e.g. through selling, licensing, commercially developing for third party usage etc)?</p>	<p>The approach to be taken in the project is to create a reference design for the facilities that embodies desired clinical adjacencies and functionality that will form a key element of the output specification for the project. Bidders will be able to focus, therefore, on delivering the most effective and innovative solution that delivers these outputs, built on a solid foundation of work already completed by NHS Lothian.</p> <p>The scope of the project and the outputs sought will be set. However, the competitive dialogue process will allow scope for discussion about how the bidders might best deliver this scope in output terms.</p> <p>There is no specific barrier to bidders coming forward with proposals along these lines during the competitive dialogue subject to the core requirement being delivered and to the constraints of avoidance of direct competition with commercial activities delivered by Consort at the Royal Infirmary.</p>

DESIRABILITY		
Issues	Question	Response
Service provision	In relation to the project, are there good strategic / service delivery reasons not to retain soft service provision in-house? What are the relative advantages and disadvantages of this approach?	The decision to include only hard FM services in the project was taken at programme level and has been agreed with Scottish Government. There are no specific reasons why Soft FM should be included in the contract alongside Hard FM.
Incentive and monitoring	Confirm that the standard form NPD / hub DBFM contract provisions relating to monitoring and incentivising service delivery will be adopted.	This is confirmed
Lifecycle costs / residual value?	Is it possible to integrate the design, build and operation of the project?	Yes – bidders will be asked to provide an integrated solution that encompasses design and build, with life cycle and hard FM provisions designed to be complementary to the chosen design.
	Is a lengthy contract envisaged? Will long-term contractual relationships be suitable (or advantageous) for the service? Are there constraints on the status of the assets at contract end?	Yes – a contract length as per the NPD standard will be adopted, along with the standard approach of assets reverting to NHS Lothian at nil cost at the end of the concession.
	Are there significant ongoing operating costs and maintenance requirements across the project? Are these likely to be sensitive to the type of construction?	Yes. The contractor will be fully responsible for all hard FM and life cycle aspects of the facility throughout the contract and will be required to cost such services in tandem with design and construction so that the elements are fully integrated.

DESIRABILITY		
Issues	Question	Response
OVERALL DESIRABILITY	Overall, is the relevant Accountable Officer satisfied that the project and its procurement approach would bring sufficient benefits?	Yes. The chosen approach will ensure that the need is met via a competitive process that will be designed to encourage bidders to add value.

ACHIEVABILITY		
Issue	Question	Response
Transaction costs and client capacity	Does the Procuring Authority have an appropriate governance and management structure in place for progressing the procurement of the project?	Yes. The project is supported by a well-resourced team of internal and external staff as described in section 6.3.
	Is there sufficient Procuring Authority capability and capacity to manage the procurement process and appraise the ongoing performance against agreed outputs?	Yes, see above.
	Can an appropriately skilled procurement team be assembled in good time?	Yes, this team is already in place as shown in section 6.3.
	<p>Will the project be feasible within the required timescale?</p> <p>Is there sufficient time for resolution of key Procuring Authority issues?</p> <p>Does the size of the project justify the transaction costs?</p>	<p>Yes. Considerable work has been put into designing a challenging yet deliverable timetable for the project that has been agreed with SFT and SG.</p> <p>Yes. Transaction costs have been factored into the financial modelling undertaken on which affordability of the project has been established. These amount to some x% of the overall project cost and are derived from benchmarking against other similar projects.</p>

ACHIEVABILITY		
Competition / Market Interest	Is there evidence that the private sector is capable of delivering the required outcomes for the Project?	Yes. The scope of the project is broadly similar to other DBFO-type projects delivered successfully in the NHS in the UK. Considerable informal market interest has already been demonstrated.
		As above.
	Have any similar projects been tendered to market?	The concept of NPD is now well established in the market, with three completed schools projects and a completed NPD project in the NHS, NHS Tayside's Mental Health Developments Project.
	Is there likely to be sufficient market appetite for the project in the timetable currently anticipated?	The timing of the project is such that there are few other similar projects in progress at this time and that interest from the market, which is very keen to see a clear pipeline of deals emerging, will be considerable.
	Has this been tested robustly? Is there any evidence of market failure for similar projects?	Yes. See above. This has been tested via various market sounding exercises.
	Has the Procuring Authority's commitment to a revenue financed solution for this type of project been demonstrated?	NHS Lothian has demonstrated its commitment to a privately financed approach and has procured several facilities, included the Royal Infirmary of Edinburgh, in this way in the past.

ACHIEVABILITY		
	Do the nature of the investment and / or the strategic importance of the work and / or the prospect for further business suggest that it will be seen by the market as a potentially profitable project?	Yes. This is a large and important project that creates a major opportunity for the market to be involved in a significant long-term partnership that will generate a variety of sub-contracts. NHS Lothian recognise that it is desirable for the private sector to be able to generate a reasonable profit from such a project, bearing in mind that the contract will be let competitively and value for money tested rigorously.
OVERALL ACHIEVABILITY	Overall is the relevant Accountable Officer satisfied that the project is achievable, that the project team is sufficiently resourced and the project is attractive to the market?	Yes. NHS Lothian has invested heavily in this project in order to ensure its success.

APPENDIX 5

Legal adviser letter on completion of final tender evaluation

Commercial – in confidence

CONFIDENTIAL

APPENDIX 6

Technical adviser letter on completion of final tender evaluation

Commercial – in confidence

CONFIDENTIAL

APPENDIX 7

Financial adviser letter on completion of final tender evaluation

Commercial – in confidence

CONFIDENTIAL

APPENDIX 8

Preferred bidder consortium

The IHS Lothian team has unique experience, delivering value for PPP projects in the healthcare market

This IHS Lothian team comprises:

MACQUARIE CAPITAL (MACQUARIE)

A global leader in procuring, developing and managing essential social infrastructure assets, with a significant commitment to the Scottish market. An example includes the successful close of Forth Valley PFI Hospital. Macquarie has extensive global experience as junior debt investor and financial adviser on a wide range of PPP infrastructure projects, with a special focus on healthcare and social infrastructure.

Having been the lead sponsor for the Peterborough PFI Hospital, Royal Adelaide PPP Hospital and a number of other international healthcare PPP projects, Macquarie has a unique knowledge and unrivalled experience in delivering successful healthcare PPPs post the global financial crisis.

It is testament to Macquarie's expertise that it has closed over 60 PPP projects exceeding £10 billion in the last 10 years in the UK and Europe alone.

BROOKFIELD MULTIPLEX (BM)

An international leading construction contractor with a long track record in delivering world-class, quality healthcare projects. Currently building the New South Glasgow General Hospital, BM has a significant local presence and a positive understanding and relationship with the local supply chain. In partnership with Macquarie, BM delivered Peterborough Hospital PFI three months ahead of programme.

Their management team focus and thrive on delivering complex healthcare projects. As an example on the New South Glasgow General Hospital, a new £20 million office block will now be built funded by savings made on the project by BM.

BM has engaged with world class designers to provide a bespoke, state-of-the-art, tailor-made facility to optimise the patient and user experience, for both the children's and neurological centres.

BOUYGUES ENERGIES & SERVICES (BES)

A world leader in delivering sustainable energy efficient solutions, BES brings the real value benefit of combined FM services delivery and lifecycle management. With substantial expertise in the UK including Mid Essex Hospital Services, North Middlesex University Hospital and West Middlesex University Hospital, BES services are tailored to delivering high quality healthcare.

Within the BES team, qualified healthcare professionals, now permanently engaged in FM delivery, bring operational knowledge into the application of the support services adding value beyond a usual FM operator. The IHS Lothian team and BES specifically will work in partnership with the Board to develop the right type of facility and FM approach to service Lothian's needs and the Board's requirements. BES also has an established office in Edinburgh.



APPENDIX 9

Strategic programme

APPENDIX 10

Key Stage Review report at pre-preferred bidder appointment



SCOTTISH
FUTURES
TRUST

Validation of Revenue Funded Projects:

NPD Programme Pre-Preferred Bidder Appointment Key Stage Review

28 February 2014

**NPD Programme
Pre-CoD Key Stage Review**

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Scottish Government (SG)

Project Sponsor
 For Scotland

Procuring Authority
 Eg. Local Health Board

Project Team

Notes to the Reviewer

1.1. Background

It is a condition of Scottish Government (SG) funding support that all projects in the revenue funded programme are, in addition to any existing project approvals processes, externally validated by SFT. SFT undertakes validation by carrying out Key Stage Reviews (KSRs) of projects at key stages of a procurement. The KSR process is designed to support the successful delivery of revenue funded projects whether delivered through the non-profit distributing (NPD) model or the hub initiative as Design Build Finance and Maintain (DBFM) projects by providing an assessment of the readiness of a project before it moves on to the next stage in the procurement process.

1.2. Timing

This review is required to be completed following evaluation of Final Tenders and in advance of the appointment of a Preferred Bidder.

The review should be carried out by the member of the Scottish Futures Trust team who normally provides support to the relevant project (the Reviewer). The Reviewer must agree the precise timing of the review and submission of SFT's report with the Project Sponsor and/or SG to integrate with the other project approvals processes.

In the run up to each review point, the Reviewer will inform and keep up-to-date the SFT validation team of the estimated timetable for carrying out the KSR. The validation team will arrange for a member of the SFT's senior management team (SMT) to scrutinise the list completed by the Reviewer before it can be submitted to the Project Sponsor and/or SG. The Reviewer should thereafter liaise directly with the allocated SMT member and must return a countersigned copy of the list to the Validation Team upon SMT sign-off. The Reviewer should discuss arrangements with the allocated SMT member and provide a verbal briefing if requested in advance of review so that if required necessary background information can be made available.

1.3. Process

The Reviewer must familiarise him/herself of the requirements of the checklist and consider which elements s/he can answer on the basis of existing knowledge of the project and identify what additional information is required in relation to the project in order to complete the remaining sections. The Reviewer should, at the earliest opportunity, explain to the Procuring Authority / Project Team what additional information s/he will require, in what form and by when in order to complete the review within the agreed timescales.

The review is not intended to be a "stop-start" process and the Reviewer should refer to the list throughout each delivery stage so that all sections of the checklist can be completed without delay to the project. The process involves the Reviewer completing this pro-forma list on the basis of information obtained in his/her day-to-day dealings with the project, considering whether in his or her view the project is ready to proceed to the next stage of procurement and making recommendations as to what actions may be required to achieve appropriate state of readiness. No formal submission, as such, will be required from the Procuring Authority, but the project team will be required to provide the Reviewer with information to allow him/her to complete the list and compile his/her report.

Once completed by the Reviewer, the list and draft report should be submitted to the allocated SMT member for scrutiny before being issued to the relevant Project Sponsor and/or SG and copied to the Procuring Authority. The relevant Project Sponsor and/or SG will thereafter, as part of its overall sign-off process, determine whether and on what basis the project should proceed to the next stage

taking into consideration any recommendations made in the KSR report. The Reviewer should liaise directly with the Project Sponsor and Procuring Authority as may be required to address any queries arising from the KSR report or recommendations.

1.4. Further information

Please contact the Validation Team for further information on the KSR process. Queries relating to the revenue funded programme requirements should be directed to the SFT Finance Team.

Pre-CoD Key Stage Review List

SFT Reviewer (Primary Reviewer)	Donna Stevenson
SFT Secondary Reviewer (SMT Member)	Tony Rose

Section 1: Project Outline

Project title	Royal Hospital for Sick Children and Department of Clinical Neuroscience (RHSC/DCN) Project
Brief project description	The provision of the Royal Hospital for Sick Children, Edinburgh and the Department of Clinical Neuroscience, currently within the Western General, Edinburgh in a joint new building adjacent to the existing Royal Infirmary of (RI) at Little France in Edinburgh. The new build will extend to approximately 50,000 square metres with separate energy centre and facilities management yard and basement.
Outline of scope of services in project (please identify the services and who (NPD SPV or Procuring Authority) will provide those services)	The NPD SPV is to provide lifecycle replacement, hard FM service with associated helpdesk facilities including grounds maintenance, utilities procurement and management and window cleaning. NHS Lothian (the Board) is to provide the soft fm services.
Key programme dates: <ul style="list-style-type: none"> • Preferred Bidder appointment • Financial Close 	The following dates for key elements of the programme: <ul style="list-style-type: none"> • OJEU: was issued on 5 December 2012 • ITPD: 11 March 2013 • ITFT: to be issued 13 December 2013 • PB appointment: to be made on 10 March 2014 • FC: scheduled for 1 October 2014

Project Contact Details

Project Sponsor /SG Responsible Officer	Scottish Government's Health and Social Care Directorates ("SGHSCD")
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(name & contact details)	Mike Baxter, Deputy Director, St Andrew's House, Waterloo Place, Edinburgh Telephone: [REDACTED] Email: [REDACTED]
Project Authority Responsible Officer (name & contact details)	Susan Goldsmith, Project Sponsor Email: [REDACTED]
Project Director/Manager (name & contact details)	Brian Currie, Project Director NHS Lothian, 56 Canaan Lane Edinburgh Telephone: [REDACTED] Email: [REDACTED]
Principal legal, technical and financial advisers (firm/company & name of main contact)	Technical : Richard Cantlay, Mott Macdonald Financial : Michael Pryor, Ernst & Young Legal: Andrew Orr, MacRoberts

Section 2: Project Requirements

The key objective of this section is to confirm that the proposed technical solution has been developed and agreed with the proposed preferred bidder in sufficient detail, minimising the risk of changes in the period up to financial close. Arrangements must be in place for anticipating, identifying and managing any changes to the project scope thereafter.

	Question	Yes/No	Comments
1.	Please outline any changes that been made to the scope of the project since the last KSR and demonstrate that such changes have the required level of approval within the Procuring Authority and from the relevant Project Sponsor and/or SG.		<p>There have been no changes in scope since the Pre-COD KSR except that there is a proposal to be considered by the Project Steering Board on 28 February to consider changing the catering strategy from full service kitchen to offsite production and regeneration facilities within the hospital. The Board has advised that the space requirements would remain the same for the kitchen and that there is sufficient room on the wards for the proposed new arrangements. The Board's view is that there is not likely to be a material change in costs for the NPD project, nor should it give rise to any procurement issue. If approved, the Board intends to proceed with a variation post PB.</p> <p>Recommendation: (1) that the Board advises SFT of the outcome of the consideration of this proposal and of the progress for the change in scope, including the steps to be taken by the board to ensure value for money in relation to the change in costs; and</p> <p>(2) that the Board develops the detail of the implementation of its strategy, including interface management, so that catering arrangements will be in place in advance of the operational date, noting that an interim strategy will also require to be developed should the Board's long terms catering strategy not be fully implemented at the proposed facility opening date.</p>
2.	Is the Procuring Authority satisfied that the proposed	Yes	The position remains as at the Pre COD KSR except for the catering

	preferred bidder's solution will satisfy its operational and functional requirements (including in relation to the matters below) and deliver the project objectives, benefits and outcomes:		proposal noted above.
	- the scope of FM services within the project;		As Pre COD KSR
	- the impact of the project on staff (including potential impact of TUPE legislation);		None anticipated
	- the interface between FM services to be included within the project and those for which the Procuring Authority will retain responsibility;		As Pre COD KSR
	- the interface between design and the delivery of FM services (e.g. cleaning) and risks (e.g. energy consumption, security) retained by the Procuring Authority;		As Pre COD KSR
	- the interface (during both construction and operations) between the works and services within the project and the Procuring Authority's other facilities and services (e.g. impact on use of adjoining facilities during the construction phase);		As Pre COD KSR
	- sustainability;		As Pre COD KSR
	- community benefits;		The proposals from the bidders meet the Board's requirements and there are remedy provisions which the Board considers to be appropriate.

	- the inclusion of equipment within the project;		As Pre COD KSR subject to any subsequent changes to the catering arrangements
	the delivery of the Procuring Authority's IT requirements within the new facilities;		As Pre COD KSR
	- decant from existing facilities and migration to new facilities;		As Pre COD KSR
	any conditions or recommendations on scope/specification/design identified in the outline business case approval or previous KSRs;		See Question 31 regarding the recommendations which were made in the Pre COD KSR.
3.	Is the Procuring Authority, and are its advisers, satisfied that any further development of technical information required from the preferred bidder appointment to financial close is achievable within the current project timetable?	Yes	<p>The Board has confirmed that all bidders have provided detailed programmes to cover the activities for the period until FC and that the development of the technical information is at least as advanced as the Board anticipated at this stage.</p> <p>The Board and its advisers are satisfied that any further development of technical information from PB appointment to FC is achievable within the current project timetable.</p> <p>Recommendation :</p> <p>a. The Authority is asked to share the developed version of the draft PB letter to allow SFT the opportunity to comment and to take due account of those comments.</p> <p>b. It is understood that the Board's communication strategy is such that the Preferred Bidder will be announced publicly prior to receiving the signed PB letter from the proposed PB. The Board is asked to confirm to SFT that it has considered whether there are any significant issues which would merit obtaining signature to the PB letter prior to a public announcement and that the Board's final</p>

			communications strategy for the PB announcement has been informed by this process.
4.	Please demonstrate that a control mechanism and an approvals process are in place for identifying and managing changes to scope, costs and timescales during the procurement process.		As Pre GOD KSR

Section Three: Affordability

The key objective of this section is to consider and test the overall affordability position of the project for both the Procuring Authority and the Scottish Government, in terms of both revenue and capital funding requirements.

2. Please complete the following project affordability table (with information for the relevant KSR stage)¹:

[Note : the following commentary was included at the Pre COD KSR stage:

The issues arise in relation to the bidders' financial submissions and the table below:

- 2.1. **Construction cap:** the construction cap remains at £137.757m plus inflation to mid point construction of 4Q 2015 (from 3Q 2011) or earlier midpoint if applicable during procurement: the earlier date is not applicable. The inflated construction cap has been fixed at 28 November 2013 on which date the relevant BICS indices were 3Q2011: 220; 4Q2015: 254. This gives an inflation percentage of 15.45% (£21,283,457) and revised, and now fixed, construction cap of £159,040,567.
- 2.2. **SPV average annual operating costs:** The funding letter was based on estimated SPV costs of £387k. Only one Bidder's costs exceed this amount.
- 2.3. **SPV project development costs** The funding letter envisaged an indicative level of 3%, and all of the bids are outside of this estimate. The Board challenge these costs during dialogue and made clear its expectation that they could be reduced. A more detailed analysis of the breakdown and content of these costs will be required at ISFT stage to ensure comparability with the funding letter indicative sum.
- 2.4. **Lifecycle maintenance fund :** lifecycle costs are to be compared to the £27m2 indicated in the funding letter. All Bidders are below this number.
- 2.5. **Hard Fm costs :** these costs are to be compared to the £29m2 assumed in the OBC . The Board challenged the costs of the bidder whose cost exceeds this amount and there may be potential for this to be reduced at the final tender stage.
- 2.6. **Unitary charge:** both the total and SG's share of the first full year's unitary charge (which is to be adjusted per the note below) for all three bidders is below SFT's current affordability assumptions.

Note: as stated in Question 28 (referring to Question 1 of the Pre ITPD KSR) the costs of the specialist paediatric biochemical laboratory are excluded from SG's funding and the costs of the petrol filling station works are capped.]

¹ It is expected that these costs will be based on internally generated estimates pre-OJEU and pre-ITPD and that cost expectations will be updated to reflect bids as they are submitted during the procurement process.

In relation to the Provisional Preferred bidder's (PPB) figures:

- (a) Construction costs: the construction costs are over £12m below the construction cap of £159,040,567, which was the inflated figure at ISFT of the base construction cap of £137.7m.
- (b) SPV average annual operating costs: the funding letter was based on estimated SPV costs of £387k. The PPB's costs are £235k.
- (c) SPV project development costs : the funding letter envisaged an indicative level of 3% and the PPB's figure is 3.66%.
- (d) Lifecycle maintenance fund : lifecycle costs are to be compared to the £27/m² indicated in the funding letter. The PPB's figure is £22.89/m² which inflates at RPI plus 0.5%.
- (e) Hard Fm costs : these costs are to be compared to the £29/m² assumed in the OBC. The PPB's figure is £27.93/m², which inflates at RPI plus 1%.
- (f) Unitary charge: The Board advise that the first year's full annual unitary charge is £18.956m and has calculated NHS Lothian's share of the unitary charge as £2,150m, so that SG's share would on that basis be £16.806m. The Board has advised that no adjustment has yet been made as regards the bio lab nor taking account of the cap on the petrol filling station works but the Board will work with SFT/SG to make the required adjustment according to an agreed process in the post-PB period. The amounts advised by the Board for both the unitary charge and SG's share are within SFT's affordability limits. The Board's advisers have also confirmed that in relation to demonstrating that the indexation of the unitary charge follows the natural hedge, the inflation sensitivities were provided, with the required scenarios being provided by the bidders as a financial proforma, with satisfactory results that show that an appropriate proportion is indexed. The base case position for the preferred bidder is indexation of 20% of the unitary charge.

	Pre-OJEU	Pre-ITPD	Pre-IFT	Pre-PB ²	Pre-FC
Construction cost (nominal cumulative)	£137.7m plus inflation to mid point of construction of 1Q 2016 (from 3Q 2011) or earlier midpoint if applicable during procurement See footnote 3	£137.7m plus inflation to mid point of construction of 4Q 2015 (from 3Q 2011) or earlier midpoint if applicable during procurement See footnote 4	£137.7m plus inflation to mid point of construction of 4Q 2015 (from 3Q 2011) or earlier midpoint if applicable during procurement	£146.688m [Note: construction cap, including inflation was £159.041m]	
Design fees	See footnote 5	As Pre OJEU	Included in	Figure not	

² Provisional Preferred Bidder's numbers have been included

³ Note: The inflation allowance to be applied to the uninflated amount will be calculated on the basis of the pricing base date of Q3 2011 and a construction midpoint (the revised midpoint) being 1Q 2016 or, if earlier, the construction midpoint which is being proposed through the procurement process. The inflation allowance on the basis of the BCIS index published in October 2012 was £11,271,620 so that the Construction Cost Cap at that date on that basis is £149,027,938. The movements in the forecast index will be monitored periodically including through the KSR process as it proceeds. In addition there is significant capital requirement both for enabling works and equipment and support is to be provided as set out in the Funding Letter.

⁴ Note: The inflation allowance to be applied to the uninflated amount will be calculated on the basis of the pricing base date of Q3 2011 and a construction midpoint (the revised midpoint) being 4Q 2015 or, if earlier, the construction midpoint which is being proposed through the procurement process. The inflation allowance on the basis of the BCIS index published in 18 Feb 2013 was £10,645,000 so that the Construction Cost Cap at that date on that basis is £148,402,000 on the basis of a mid point construction of 4Q 2015.

The movements in the forecast index will be monitored periodically including through the KSR process as it proceeds. In addition there is significant capital requirement both for enabling works and equipment and support is to be provided as set out in the Funding Letter.

⁵ TC5B states that there is included an allowance based upon 8.5% of the estimated construction value and this is included in the construction cap figure. The assumption is that the design costs prior to financial closure are carried elsewhere.

(nominal cumulative)		assumption	construction cap	provided separately	
Bid development costs (nominal cumulative)	See footnote 7	As Pre OJEU assumption	See commentary above	£5.365m	
SPV costs (in construction) (nominal cumulative)	See footnote 8	As Pre OJEU assumption	As Pre OJEU assumption	Figure not provided separately	
Hard FM costs (real per annum)	£29/m See footnote 29	As Pre OJEU assumption	See commentary above	£27.93/m ²	
Lifecycle costs (real cumulative)	£27/m ² ¹⁰	As Pre OJEU assumption	See commentary above	£22.89/m ²	

⁶ Including success fees

⁷ The Board's advisers financial model assumes 5% of capex whereas SFT considers that 3% of capex is more appropriate, taking account of the level of design development pre procurement.

⁸ The Board's advisers financial model does not have an entry for SPV costs during construction : development fees are 5%.

⁹ The Board's advisers model also includes a risk allowance which significantly increases the overall sum for hard fm. The Atkins Report forming an annex to SFT's Project Review says that the figure of £29/m² sits within the expected range of benchmarks.

¹⁰ The Atkins Report says that "Based on a range of benchmark information the Life Cycle Cost per square metre per annum of £27/m², at 3Q 2011 prices, sits within the acceptable range of benchmarks"

SPV costs (in operations) (real per annum)	£387,000 See footnote 11	As Pre DJEU assumption	See commentary above	£235k	
Operational Term (years)	25 years	As Pre DJEU assumption	As Pre DJEU assumption	25 years	
Percentage of unitary charge indexation	22% ¹²	As Pre DJEU assumption	As Pre DJEU assumption	20%	
Swap rate ¹³	4% ¹⁴	As Pre DJEU assumption	Term sheet assumes LIBOR assumed to be 4.00% and all in rate for EIB as 5.50% p.a.	Term sheet assumes LIBOR assumed to be 4.00% and all in rate for EIB as 5.50% p.a.	
Unitary charge	See footnote 11	As Pre DJEU assumption	See commentary	£18.956m	

¹¹ SFT's assumption is £350kpa

¹² Per EY's shadow bid model : SFT's estimate of indexed amount would be lower given lower estimates of lifecycle, hard fin and SPV costs.

¹³ Including any buffer

¹⁴ for swap rate plus buffer per EY's shadow bid model : 3.41% (SFT model), but margin 2.25% (EY model), 3% (SFT model) and MLA + swap spread 0.38% (EY model), 0.5% (SFT model) – hence all in senior rate 6.63% (EY model), 6.91% (SFT model). (Also sub debt rate – 13% EY, 11% SFT – hence pro forma WACC 7.27% EY, 7.32% SFT.)

(nominal year 1 of operations)	15	assumption	above	(ye 31 March 2018)	
SG funding support (nominal year 1 of operations)	See footnote 16	As Pre OJEU assumption	See commentary above	£16.806m, but see note (f) above	

	Question	Yes/No	Comments
5.	Please explain any changes that have been made to the cost and funding assumptions (both revenue and capital) since the last KSR and demonstrate that such changes have the required level of approval within the Procuring Authority and from the relevant Project Sponsor and/or		As Pre COD KSR, see comment above re catering strategy Recommendation: The Authority's attention is drawn to the fact that the Construction Cost Cap of £159,041m is no longer relevant for affordability purposes and is replaced by the Preferred Bidders construction proposal. SG anticipates no increase in the revenue.

¹⁵ As is made clear in the Funding Conditions (and see email correspondence between SFT and the Board culminating on 7 March 2012), there is discrepancy between the figures calculated by the Board and those by SFT: the relevant figures are: Unitary charge (nominal 1st full yr of ops - 12 months to 31/3/2018) - £22,381k (EY model), £20,970k (SFT model) – both excluding insurance costs. No unitary charge figures are to be provided to bidders.

¹⁶ See footnote 14: the relevant figures SG Funding Support (nominal first full year of ops - 12 months to 31/3/2018) - £19,115k SFT. We cannot find the equivalent figure in the EY financial model but the OBC v3.0 at page 49 says £20,029k

	SG		funded capital amount, subject to any changes agreed between SG and the Board in relation to any changes in costs due to any change in the catering strategy, which are anticipated by the Board to reduce the costs. The revenue funded amount will be calculated on the basis of the funding letter and SFT's guidance at or near financial close and will take account of the actual financing terms and interest rates which are fixed at financial close.
6.	Please demonstrate that the project remains affordable to the Procuring Authority in terms of enabling capital costs, unitary charge contributions and ongoing operational costs (e.g. utilities, soft FM services).		<p>The Board has confirmed that the project remains affordable on the basis of the tenders which have been submitted.</p> <p>The Board has confirmed that the Costs of the external enabling works are being maintained within the current budget.</p>
7.	Please confirm what sensitivities have been applied in assessing the affordability of the project and demonstrate that an appropriate allowance is in place to absorb reasonable cost movements.		The Board advises that the sensitivity of the financial position, including ASP, clinical cost, cost of enabling works etc will be addressed in detail in the FBC. No specific sensitivities have been carried out on figures within the ASP other than those relating to indexation, as key figures are all comfortably within the thresholds for affordability agreed at OBC stage.
8.	What are the key risks / outstanding issues that may have an impact on the affordability of the project and what		The senior debt funding for the project will be sought during the PB period. The Board will require the PB to run a funding competition. This will be conducted in accordance with the principles set out in the

	strategy is in place to manage these?		<p>ISFT, which the Board has confirmed have been accepted by the Preferred bidder. The Board, its advisors and SFT will have transparency of process and a right for approval of the final funding selected.</p> <p>Recommendation : It is recommended that the Board and its advisors continue to liaise with SFT up to and beyond the PB appointment in order to agree funding strategy and plan that is acceptable to all parties.</p>
9.	Please provide details (including amount, proportion of total funding requirement and proposed timing) of any capital contributions that the Procuring Authority intends to make any capital contributions to the SPV during the project and confirm that the size and timing of these has been agreed with the proposed preferred bidder. Please demonstrate that the amount of the capital contribution includes allowance for associated financing fees etc. Please demonstrate that the documentation of this arrangement has been agreed and complies with relevant guidance.		The Board anticipates that there will be no capital contributions
10.	Has the proposed preferred bidder assumed composite trader tax treatment and has the full benefit of this been passed on to the Procuring Authority?	Yes	The Board's financial advisers have also confirmed that the treatment of the taxation of surpluses on the tenders is appropriate consistent with previous discussions with SFT.
11.	Please provide details of how delays to financial close and indexation of input costs are to be treated.		The price will hold for 3 months after the target FC date. After this period BCIS All-in-TPI will apply to capital costs and RPI to lifecycle, SPV and FM costs. The proposed PB has accepted this position.

12.	Please demonstrate how any recommendations / actions / requirements in relation to the affordability of the project, detailed in the outline business case approval and previous KSRs, have been addressed.		See Question 31 regarding the recommendations which were made in the Pre COD KSR.

Section 4: Value for Money

The objective of this section is to ensure that the key drivers of value for money are addressed in the Procuring Authority's approach to development and delivery of the project. Please refer to relevant Value for Money guidance¹⁷.

	Question	Yes/No	Comments
13.	Please demonstrate how the Procuring Authority intends to drive value for money through "Effective Delivery". <i>(Response required only to the extent that the position has changed since last KSR)</i>		As Pre-COD KSR
14.	Please describe how any changes to scope and procurement options since the last KSR have been assessed and the impact that these have on the delivery of value for money.		On changes to scope see above re the catering strategy; there have been no changes in the procurement options.
15.	Please describe the steps that the Procuring Authority and advisers have taken to assess and benchmark the sufficiency / efficiency/competitiveness of bidders proposals in relation to the following: - capital cost inputs - SPV average annual operating costs - SPV project development costs		The following comments from Question 33 of the Pre-COD KSR are relevant: "1) The capital costs were evaluated having regard to the Reference Design cost plan which was benchmarked and current benchmarking. The deliverability of capital costs were assessed by the Board's technical advisers. 2) Bidders have been providing key metrics to the Board in relation to key financial aspects of their bids. These have been benchmarked against other projects and market expectations and challenged where inconsistent. The Board's view is that all bidders are currently largely

¹⁷ Value for Money Assessment Guidance: Capital Programmes and Projects (updated October 2011) and SFT's Supplementary Guidance for projects in £2.5bn Revenue Funded Investment Programme (October 2011)

	<ul style="list-style-type: none">- lifecycle maintenance fund and profile- tax efficiency- financing terms- subordinated debt return		<p>in line with expectation with regard to SPV costs, sub-debt return and development costs.”</p> <p>See also the commentary at the affordability section above relating to performance against benchmarks.</p>
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Section 5: Commercial

The key objective of this section is to test that a robust commercial position has been established with the preferred bidder and that a strategy is in place to deal with any outstanding issues in the period up to financial close.

	Question	Yes/No	Comments
16.	Please confirm that a list of derogations from the standard NPD contract documentation (including service specification, payment mechanism, NPD articles of association and accompanying guidance) has been agreed with the preferred bidder and approved by SFT.	Yes	As discussed with SFT at the Pre-COD KSR there are some drafting points to be resolved at PB stage.
17.	Are there any outstanding contractual points?	No	
18.	Please explain how the proposed preferred bidder has demonstrated that it has the support of sub-contractors for the technical proposals and commercial positions in their final tender. Have heads of terms been agreed between the proposed preferred bidder and its sub-contractors?		<p>The Board has confirmed that the proposed preferred bidder has submitted agreed signed heads of term from with their construction contractors, service provider and key Subcontractors.</p> <p>The Board has confirmed that on its advisers advice the levels of caps and indemnities are in accordance with market norms.</p>
19.	Has the preferred bidder secured committed senior debt finance for the project? If not, what strategy is in place for securing senior debt financing proposals and has this been agreed with SFT?		<p>An institutional term sheet approach was taken at SFT. The Preferred bidder has therefore not secured committed senior debt and there is to be a post PB funding competition on the basis of the principles proposed by SFT.</p> <p>All Bidders have accepted the SFT principles for a funding competition and have submitted detailed timetables for completion, incorporating</p>

			<p>a funding competition.</p> <p>Refer to recommendation 4 at Q8.</p>
20.	Has the proposed preferred bidder, sub-contractors and funders confirmed their willingness to sign up to a commitment letter that establishes the terms of their appointment?		<p>The funder position remains as described above insofar as bidders have performed their own diligence on a shadow basis to support funder commitment and have support letters to reflect this but that committed funds will not be secured until post PB.</p> <p>With regards to sub-contractors, please see Q18 above.</p>
21.	What, if any, key commercial issues remain outstanding with the proposed preferred bidder and how are the implications for the project programme and affordability position to be managed?		<p>The Board has advised that there are no key commercial issues outstanding, subject to the securing of senior debt following the funding competition, which has been factored into the programme, and any variation for the catering position.</p>
22.	Specifically, has agreement been reached with the preferred bidder in relation to the following matters: <ul style="list-style-type: none"> - vandalism risk - warning notice and termination triggers - payment mechanism (including levels of deductions, unavailability thresholds etc) - TUPE and pensions - level of cash buffer applied before surplus payments 		<p>Yes in each case, as set out in the Pre-COD/KSR subject to final Funder Direct Agreement terms being subject to discussion and agreement with the selected funder.</p> <p>The cash buffer of the preferred bidder is modelled at £100k which the Board advises is well within the stipulated limits set out in the ISFT and in SFT guidance.</p>

	tenders direct agreement		
23.	Is the Procuring Authority satisfied that the incentives delivered by the service specification and payment mechanism reflect its priorities and desired outputs? Please describe what scenario testing has been applied in calibrating the payment mechanism.	Yes	No change since pre COD KSR
24.	Please confirm the status of the Procuring Authority's title investigations, and whether a list of disclosed title conditions, and the impact of these conditions, has been agreed with the proposed preferred bidder.		As Pre COD KSR
25.	Please demonstrate that a programme has been agreed with the proposed preferred bidder for the various due diligence processes required to reach financial close and that these are realistic and synchronised with the overall procurement timetable.		<p>A programme capturing the processes required from PB to FC formed part of the Final Tender submission. The Board has provided a consolidated programme which sets out the main activities. programme is however currently light on detail for due diligence processes. This will need to be further developed with the Preferred Bidder, and in consideration of the strategy to secure senior debt funding, to ensure this activity is synchronised with the overall procurement timetable.</p> <p>Recommendation : It is recommended that provision of a detailed programme and work plan for the project, to include the capture of diligence and agreed funding procurement route is prioritised for agreement at the first meeting with the PB.</p>
26.	Please confirm the period for which the preferred bidder's final tender is open for acceptance.		The prices are held for 3 months after anticipated FC then Indexation applies. The Board has advised that there is no specific end date in the tenders.
27.	It is a condition of SG revenue funding support that the project meets the requirements for classification as a	Yes	There has been no change from the pre COD KSR. No further changes to standard form have been proposed. Accordingly the risk allocation

	non-government asset for national accounts purposes under relevant Eurostat (ESA95) guidance. Please confirm that the contract terms agreed with the proposed preferred bidder transfer availability and construction risk to the private sector.		follows standard form and transfers construction and availability risk.
28.	Please describe any changes that have been made to the risk register and risk management plan since the last KSR, and the impact that any such changes have on the project.		<p>No changes have been made to the Risk Management plan and the risk register has been updated. The three key changes are:</p> <p>Risk 10 – Vacant Possession of Site now AMBER (previously RED) – as discussed this is due to confirmation from Consort on availability of access and status of link building.</p> <p>Risk 29 – Insufficient Space in RIE (Clinical Enabling) now AMBER (previously RED) – displaced staff no longer dependent on labs strategy progress.</p> <p>Risk 6 – Procurement Progress Challenge increased to AMBER (previously GREEN) – reasons given in KSR section 29.</p>
29.	Please describe the risks that the Procuring Authority considers to be most significant to the preferred bidder stage and the strategy for managing these risks.		The key risks in the Updated risk register are as listed in Annex B.
30.	Please describe any changes since the last KSR to the mechanism in place for reviewing and updating the risk		No changes have been made.

	register and risk management plan		
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Section 6: Readiness

The key objective of this section is to determine whether the necessary steps have been taken to enable the project to move forward and to ensure that appropriate project management arrangements, processes, protocols and documentation are in place to support progress to financial close.

	Question	Yes/No	Comments
31.	Please demonstrate how the recommendations / actions / requirements detailed in the last KSR report, have been addressed (to the extent that these are not dealt with under separate sections of this KSR questionnaire).		The recommendations from the Pre COD KSR are noted with an update and ongoing recommendations in Annex A.
32.	Do any further internal/external processes need to take place before appointment of the preferred bidder?	Yes	The appointment will be considered by the Project Steering Group on 28 February and then by the Board's Finance and Performance Committee on 5 March.
33.	Please explain any changes that have been made to the governance and project management arrangements, resourcing and budgets since the last KSR.		No changes have been made.
34.	Please confirm any changes that have been made to the Procuring Authority's procurement strategy (including timetable) since the last KSR and demonstrate that this remains/is realistic and deliverable.		There have been no changes in the strategy since the Pre COD KSR; there will be a post PB funding competition in line with the process agreed with and involving SFT.
35.	Please demonstrate that a robust and comprehensive project plan is in place and that the project team has a clear understanding of all tasks / work streams (including evaluation, clarifications, and approvals) to manage the project through to financial close.		The Board had provided a composite programme for the NPD project as well as the equivalent programme for the external enabling and clinical enabling works. The Board advises that the underlying programme which were submitted by bidders were elaborate and demonstrated that

			<p>considerable thought had already gone into the process.</p> <p>As noted at Question 25 above, a more detailed programme and work plan is to be developed, including the detail of the funding competition and finalisation of the funding documentation. Reference is made to the recommendation at Question 25.</p>
36.	<p>Please demonstrate how the project team intends to manage the interface between the preferred bidder and stakeholders (e.g. end users) going forward.</p>		<p>There are meetings which have already been diaried to enable the detailed consultation on the 1:50 drawing with clinicians during the PB stage.</p> <p>User involvement following the appointment of the preferred bidder will be crucial and the NHSL Project Team are committed to delivering this. The NHSL Project Team will manage the stakeholder interface with the Preferred Bidder to ensure this is done in a timely manner and that consultation and engagement is meaningful and effective. This will be taken forward in a number of ways:</p> <ul style="list-style-type: none"> • Following the announcement of PB there will be 11 Open Sessions for staff and key stakeholders (charities, volunteers and patient PFPI groups) across hospital sites to launch the PB's design and update on the next stage of the project • Service leads have been identified for each department to take forward the detailed design development with the PB Design Team and NHSL Project Team and one of their key responsibilities is to ensure views of staff and patients and relatives are taken account of in the planning of departments. In addition to this a number of charitable organisations will be involved e.g. Sick Kids Friends Foundation, Edinburgh & Lothian's Health Foundation, Ronald MacDonald, and Teenage Cancer Trust

			<ul style="list-style-type: none"> The RHSC Family Council, Young People's Advisory Board and DCN Patient Reference Group will continue to be consulted with in relation to the ongoing development of the design of the hospital and also service redesign Project Stakeholder Board will continue to meet quarterly <p>Recommendation</p> <p>The Board is asked to monitor engagement with the stakeholders during the PB period recognising the programme and tendered design and price agreed in the final tender process and the risks associated with these elements changing.</p>
37.	Please demonstrate that the project timetable allows sufficient time for all outstanding staffing issues (if any) to be resolved including (if applicable) achieving LGPS admitted body status/ GAD scheme certification.		It is not anticipated that there will be any TUPE transfers.
38.	Please provide an update on the land/site strategy (e.g. acquisition, title issues, ground conditions, surveys, enabling works) and planning matters and describe what strategy is in place to manage the impact of any outstanding matters on the project timetable and/or affordability position.		<p>Title issues remain as per the Pre COD KSR.</p> <p>On planning:</p> <ul style="list-style-type: none"> (a) For the on site works for the hospital the preferred bidder will develop detailed proposals to be submitted to the August planning committee; and (b) For the offsite works the application is to be submitted to target the committee in September and this consent is required as part of the S75 requirements. <p>Reference is made to the ongoing recommendation from the Pre COD</p>

		<p>KSR.</p> <p>Site investigations for the petrol filling station site have now been instructed.</p> <p>The external enabling works are ongoing and the Board is now confident that:</p> <ul style="list-style-type: none"> (a) although the road works will be not yet be completed by programmed date of financial close, these works will not interfere with the preferred bidders' ability to obtain possession of the site; (b) the link building will be completed to shell and while Consort will still require access, the preferred bidder has confirmed that it will not need access to the affected are until spring 2015. <p>The Board has advised that the development of the clinical enabling works is going well with discussions with Consort ongoing ad Supplementary agreements being drafted.</p>
59	Please describe what steps the Procuring Authority has taken to verify that the financial and economic standing of the preferred bidder remains unchanged from the pre-qualification stage.	The Board has confirmed that the PQQ tests were rerun at the final tender stage and all were satisfactory.

<p>Is the project ready to proceed to the next stage? (*Delete as applicable)</p>	<p>Yes: Yes, subject to recommendations below* No, due to reasons outlined below*</p>
<p>Reasons / Recommended actions:</p>	<p>To be completed by:</p>
<p>Question 1 :</p> <p>Recommendation :</p> <ul style="list-style-type: none"> (1) that the Board advises SFT of the outcome of the consideration of this proposal and of the progress for the change in scope, including the steps to be taken by the board to ensure value for money in relation to the change in costs; and (2) that the Board develops the detail of the implementation of its strategy, including interface management, so that catering arrangements will be in place in advance of the operational date, noting that an interim strategy will also require to be developed should the Board's long terms catering strategy not be fully implemented at the proposed facility opening date. 	
<p>Question 3 :</p> <p>Recommendation :</p> <p>a.The Authority is asked to share the developed version of the draft PB letter to allow SFT the opportunity to comment and to take due account of</p>	

<p>those comments.</p> <p>b. It is understood that the Board's communication strategy is such that the Preferred Bidder will be announced publicly prior to receiving the signed PB letter from the proposed PB. The Board is asked to confirm to SFT that it has considered whether there are any significant issues which would merit obtaining signature to the PB letter prior to a public announcement and that the Board's final communications strategy for the PB announcement has been informed by this process.</p>	
<p>Question 5:</p> <p>Recommendation : The Authority's attention is drawn to the fact that the Construction Cost Cap of £159,041m is no longer relevant for affordability purposes and is replaced by the Preferred Bidders construction proposal. SG anticipates no increase in the revenue funded capital amount, subject to any changes agreed between SG and the Board in relation to any changes in costs due to any change the catering strategy, which are anticipated by the Board to reduce the costs. The revenue funded amount will be calculated on the basis of the funding letter and SFT's guidance at or near financial close and will take account of the actual financing terms and interest rates which are fixed at financial close.</p>	
<p>Question 8:</p> <p>Recommendation : It is recommended that the Board and its advisors continue to liaise with SFT up to and beyond the PB appointment in order to agree funding strategy and plan that is acceptable to all parties.</p>	
<p>Question 25:</p> <p>Recommendation : It is recommended that provision of a detailed programme and work plan for the project, to include the capture of diligence and agreed funding procurement route is prioritised for</p>	

<p>being extended for that reason.</p> <p>6. Recommendation : that (1) the Board progresses these planning procedures to obtain planning consent for the offsite works prior to financial close and (2) works with the preferred bidder to ensure that resolution of reserved matters and planning permission of main facility and the works the petrol filling station site are achieved within the timescales required by the overall programme for financial close.</p> <p>7. Recommendation : that the Board place a focus on the issues which require to be resolved to ensure that the clinical enabling works are developed and completed within the timescale required to enable the new facility to operate properly on completion and to bring forward regular reports on proposals and progress to the Project Steering Board.</p>	
Signature of Primary Reviewer	Signature of Secondary Reviewer
[Redacted]	[Redacted]
Date: [Redacted] 4 March 2014	Date [Redacted] 4th March 2014
Procuring Authority Declaration	<p>I confirm that:</p> <p>a) I am not aware of any information that would materially change the assessment and review of the project; and</p> <p>b) the project's details as logged in the Scottish Government's Infrastructure Projects Database (SGIPD) are up-to-date and complete and reflect the current state of the project (including the information on the project's time table and as [Redacted])</p>
Name and Position:	Date and Signature: 5 March 2014 [Redacted] Director of Finance

agreement at the first meeting with the PB.	
<p>Question 36</p> <p>Recommendation: The Board is asked to monitor engagement with the stakeholders during the PB period recognising the programme and tendered design and price agreed in the final tender process and the risks associated with these elements changing.</p>	
<p>Ongoing recommendations from the Pre COD KSR : see Annex A</p> <ol style="list-style-type: none"> 1. Recommendation: That the Board keeps SFT advised as to progress in relation to the development of the proposals for the scope and costs in relation to the works on the petrol filling station site during the period until financial close. 2. Recommendation: that the Board operates and monitors the open book mechanism in relation to the cost of the petrol filling station works to maximise value for money. 3. Recommendation : that the Board continue discussions as to potential charitable donations and consider how any such donations will be factored in the project, consistent with the funding letter and the timescale for achieving financial close. 4. Recommendation: That these and any other key risks are closely monitored with mitigations put in place in a timely manner following discussions by the Project Steering Board 5. Recommendation: that the Board continues to monitor closely the Consort works and takes appropriate mitigation measures to ensure that vacant possession can be provided to the NPD contractor at financial close without the timescale for that close 	

Annex A : Responses to recommendations from Pre COD KSR

Recommendation	Update and, where applicable, ongoing recommendations
<p>Question 1:</p> <p>Recommendation : That the Board keeps SFT advised as to</p> <ul style="list-style-type: none"> (i) progress in relation to the development of the proposals for the scope and costs in relation to the works on the petrol filling station site during the period until financial close; (ii) the Project Steering Board's decision following consideration of a further paper on the Board's catering 	<p>Update:</p> <ul style="list-style-type: none"> (i) Process ongoing: Site investigation now underway; (ii) Paper to be considered by the Project Steering Board on 28 February ; see comments above. <p>Recommendation: That the Board keeps SFT advised as to progress in relation to the development of the proposals for the scope and costs in relation to the works on the petrol filling station site during the period until financial close.</p> <p>On the catering strategy, reference is made to the recommendation at Question 1 above.</p>
<p>Question 1:</p> <p>Recommendation: that the Board operates and monitors the open book mechanism in relation to the cost of the petrol filling station works to maximise value for money.</p>	<p>Ongoing recommendation</p>
<p>Question 2:</p> <p>Recommendation : That, prior to close of dialogue, the Board receives and copies to SFT, letters, in the form of the drafts which the Board have earlier provided to SFT, from each of its financial, legal and technical advisers</p>	<p>Completed</p>

<p>confirming that each consider that it is appropriate for the Board to close dialogue.</p>	
<p>Question 24:</p> <p>Recommendation : that the Board continue discussions as to potential charitable donations and consider how any such donations will be factored in the project, consistent with the funding letter and the timescale for achieving financial close.</p>	<p>Ongoing recommendation</p>
<p>Question 28 (1 from Pre ITPD KSR):</p> <p>Recommendation : that the Board monitors and reports to SFT the cost of this change in scope (including inflation, financing, lifecycle and other consequent costs) separately so that the level of revenue support (excluding this change) can be calculated.</p>	<p>To be dealt with post PB stage</p>
<p>Question 28 (19 from Pre ITPD KSR):</p> <p>Recommendation: That these and any other key risks are closely monitored with mitigations put in place in a timely manner following discussions by the Project Steering</p>	<p>Ongoing recommendation</p>

Board	
<p>Question 28 (19 from Pre ITPD KSR):</p> <p>Recommendation: that the Board continues to monitor closely the Consort works and takes appropriate mitigation measures to ensure that vacant possession can be provided to the NPD contractor at financial close without the timescale for that close being extended for that reason.</p>	Ongoing recommendation
<p>Question 28 (19 from Pre ITPD KSR):</p> <p>Recommendation : that (1) the Board progresses these planning procedures to obtain planning consent for the offsite works prior to financial close and (2) works with the preferred bidder to ensure that resolution of reserved matters and planning permission of main facility and the works the petrol filling station site are achieved within the timescales required by the overall programme for financial close.</p>	Ongoing recommendation
Question 34:	

<p>Recommendation : that prior to closing dialogue,</p> <p>(1) the Board is satisfied that all of the NPD documentation, with bidder specific derogations, as agreed with SFT, covers all commercial issues and is complete and reflects the agreement reached with each of the bidders during the dialogue process; and</p> <p>(2) the relevant bidder (in respect of which this point remains outstanding) confirms that it accepts that all of petrol filling works, including landscaping, will be completed at or prior to the same time as the works on the main hospital.</p>	<p>Completed</p>
<p>Question 49:</p> <p>Recommendation : that the Board place a focus on the issues which require to be resolved to ensure that the clinical enabling works are developed and completed within the timescale required to enable the new facility to operate properly on completion and to bring forward regular reports on proposals and progress to the Project Steering Board.</p>	<p>Ongoing recommendation</p>
<p>Question 56:</p> <p>Recommendation : That, prior to close of dialogue, the Board the ISFT updates the ISFT to reflect the petrol filling</p>	<p>Completed</p>

station works clarification, including the process for carrying out surveys and fixing the provisional sum prior to financial close.	
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Annex B: Key Risks

Number	Risk:	Impact	Mitigation :	Adequacy of Controls	Status
8	Programme delay in reaching Financial Close	Programme delayed due to protracted or inconclusive closure of dialogue and/or negotiations to reach financial agreement	Use of Standard Form PA, determination to create a 'level playing field' and fully developed suite of ITPD documents all in place prior to commencing competitive dialogue. Programme	Not satisfactory at present. The Project Team continue to be sceptical regarding delivery of FC in less than six months from appointment of Preferred Bidder. Third party involvement	Red

			<p>updated July 2013 to address</p> <p>design compliance before close of</p> <p>dialogue. However, this remains</p> <p>the highest risk to project</p> <p>procurement.</p>	<p>in the town planning process or</p> <p>the funding competition are of</p> <p>particular concern. The Project</p> <p>Team note that Glasgow</p> <p>College took 3 months more</p> <p>than anticipated 4 month</p> <p>programme to close, however</p> <p>that construction commenced</p> <p>before FC at the contractor's</p> <p>risk. Review monthly.</p>	
6	Procurement process	Programme is delayed by	Comprehensive procurement	Given anticipated very close	Amber

	challenge	challenge from an unsuccessful bidder or third party. High cost in programme and fees.	documentation to inform the market and ensure level playing field. Feedback through competitive dialogue on bidders' proposals. Transparent evaluation process with robust audit trail. Evaluation completed and standstill letters and feedback to unsuccessful bidders being	final scores following evaluation process the likelihood of a challenge has increased. Satisfactory at present.	
14	RIE interface failures	Planned interface construction (e.g. ED link, PTS) does not deliver operational	NHSL working with Consort to minimise risk until Project Co appointed. Discussions	-	Amber

		functionality.	in competitive dialogue to keep bidders informed of works; control plans to be finalised with preferred bidder by financial close.		
15	RIE interface failures	Construction of areas outside the red line to be handed to Consort are not completed to specification and access to Facility through RIE links is not possible e.g. Hospital Square, ED, theatres links.	Arrangements in place for Preferred Bidder to join LFCWG and interface with all parties on their delivery of these works.	Adequate at present, to be progressed with Project Co on appointment as Preferred Bidder	Amber
29	Insufficient space in	Accommodation	Engagement with	Satisfactory at present.	Amber

	<p>RIB to support RHSC/DCN clinical models</p>	<p>required in RIB to support service models (e.g. adult critical care) is not feasible.</p> <p>This includes accommodation for the downstream works for transplant and renal critical care and the displaced laboratory / eHealth staff.</p>	<p>Consort and their design team to establish the Renal, Transplant HDU and Critical Care is ongoing. In parallel, commercial / supplemental agreement negotiations has commenced to meet RHSC / DCN programme and mitigate risks.</p> <p>Relocation plans for staff displaced from the above changes are underway, with detailed negotiations ongoing</p>	<p>Residual risk remains until all contracts agreed and staff relocated, but all parties now actively pursuing relocations and works to meet the programme, subject to their respective governance processes.</p> <p>Separately, the Laboratories Strategy is being supported for the longer term delivery of their pan NHS Lothian service requirements but this</p>	
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			<p>with Scottish Enterprise for space in EBQ</p> <p>Building Nine for office type uses.</p> <p>Parallel engagement with staff and services also underway to ensure clearance of the space in line with RHSC / DCN programme.</p>	<p>is not on the RHSC / DCN critical path.</p>	
10	Vacant possession of site	<p>Programme is delayed as Board unable to provide project site for NPD at Financial Close</p> <p>programme date of October 2014.</p>	<p>SA6 and SA Enabling secured rights to site. Provisional strategic programme has been provided to the Project Steering Board and SFT, with further</p>	<p>Satisfactory at present. Consort have confirmed that access to site at October 2014 will not be restricted or prevented by enabling works</p>	Amber

			<p>details requested</p> <p>of Consort. Programme to deliver</p> <p>works will be influenced by</p> <p>requirement for vacant</p>	<p>operators, and</p> <p>that only reduced access and</p> <p>hoarded off areas will be</p> <p>required post Oct 2014 by</p>	
59	Availability of funding	<p>Availability of funding, and cost of financing, could both be higher</p> <p>than anticipated with funders</p> <p>concerned over the prospect of</p> <p>Scottish independence and the</p> <p>financial covenant or credit rating</p> <p>of a newly independent Scotland.</p> <p>SFT bear the risk of</p>	<p>Dialogue with bidders suggests</p> <p>that funders are not deterred.</p>	<p>Satisfactory at this stage.</p> <p>Funders may add a premium to</p> <p>their pricing to address their</p> <p>risk. To be reviewed as part of</p> <p>the post -preferred bidder</p> <p>funding competition.</p>	Amber

		<p>any increased premium; NHSL bear the risk of delays to achieving financial close, in terms of indexation if over three months later than programme, and completion and handover of the project.</p>			
9	<p>Specification changes post Financial Close</p>	<p>Programme is delayed due to Board changing service and accommodation requirements.</p>	<p>Governance structures in place to manage approval of change. Governance structures in place to manage approval of change. Project / Clinical</p>	<p>Adequate at present but may change in future dependant upon changes in strategy. Most likely changes are around need to manage increased</p>	Amber

			<p>Management</p> <p>Team would require to make case</p> <p>to Project Steering Board.</p> <p>Activity driven bed model is</p> <p>revisited annually and currently</p> <p>being updated to explicitly</p> <p>consider the implications of the</p> <p>above although it should be noted</p> <p>that this would go against NHS</p> <p>Scotland strategy of local access.</p> <p>Provision of shelled bed space in</p> <p>the design and</p>	<p>activity</p> <p>due to failure of sustainability</p> <p>of local DGH children's</p> <p>services. Some of the potential</p> <p>shelled bed space has been</p> <p>allocated to Specialist</p> <p>Paediatric Biochemistry</p> <p>Laboratory. Review monthly.</p>	
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			<p>construction</p> <p>specification as well as flexibility</p> <p>from the location of day beds</p> <p>alongside the inpatient facility.</p> <p>Bed modelling for children's'</p> <p>services has been undertaken,</p> <p>demonstrating sufficient capacity</p> <p>in design with further options for</p> <p>change of purpose at a later date</p> <p>if required. DCN modelling has</p> <p>commenced.</p>		
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SCOTTISH CAPITAL INVESTMENT MANUAL

Introduction



1 Introduction

The Scottish Capital Investment Manual (SCIM) provides guidance in a NHS context on the processes and techniques to be applied in the development of all infrastructure and investment programmes and projects within NHSScotland.

It provides guidance on the cyclical process of project development from inception at the service planning stage, to post project evaluation of service benefits realised once a new building is occupied. The guidance not only covers issues around investment appraisal, financial (capital and revenue) affordability and procurement, but also the project management and governance arrangements required to support the development of such programmes and projects.

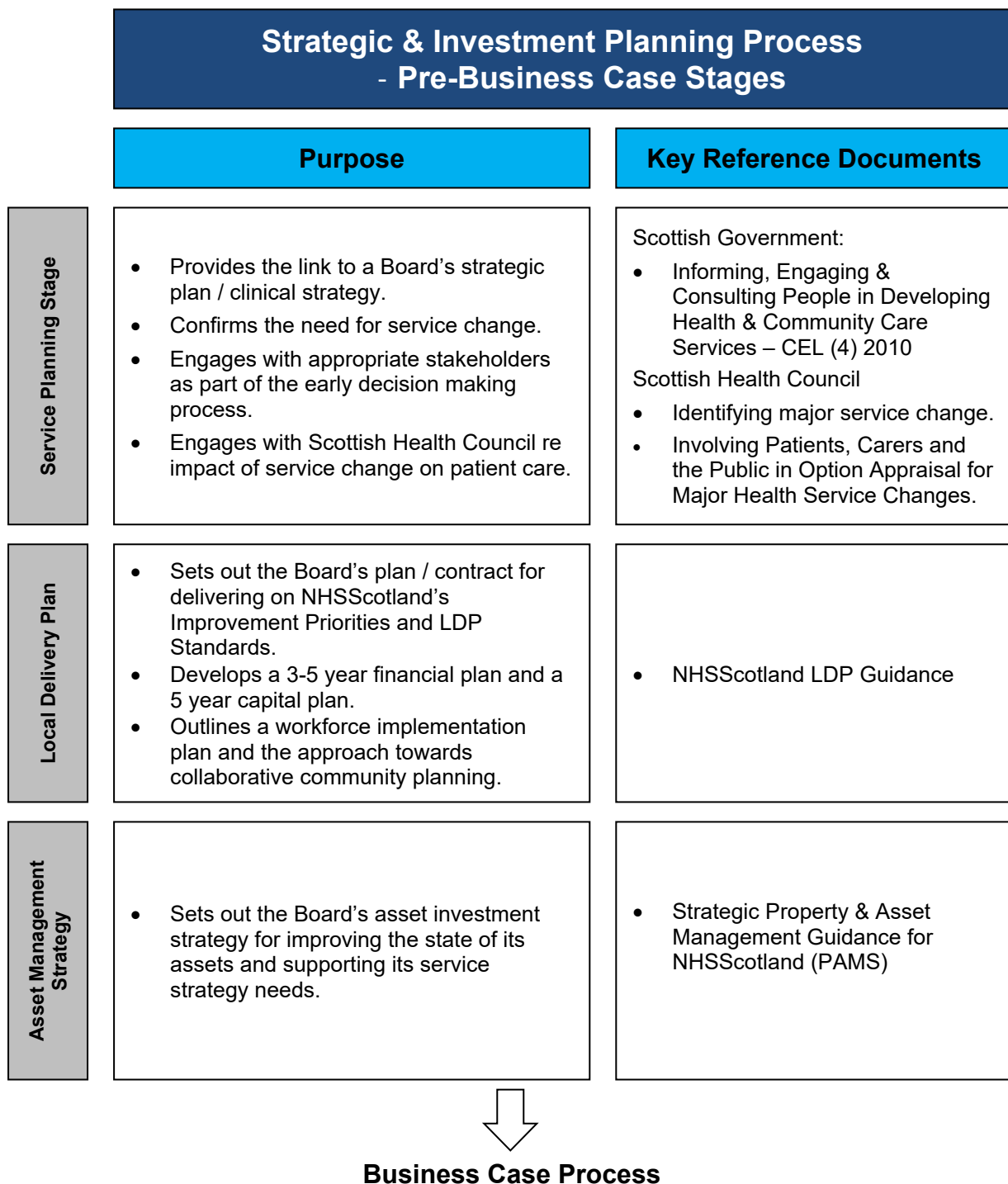
The principles set out in SCIM are applicable to the development of all infrastructure and investment schemes regardless of their size or complexity; and shall be applied by all NHSScotland Bodies (including Integration Joint Boards, and similar, requiring NHS investment support). It will thus provide an audit trail and assurances that appropriate steps have been followed in the investment decision making process. These principles are also recommended as good practice for service planning purposes when investment may not be the intended outcome.

The SCIM has been revised to update the practices and processes associated with the development and approval of capital and revenue funded projects within NHSScotland. These changes mainly result from the development of improved approaches and techniques which support the development of investment schemes across NHSScotland.

In developing the revised SCIM recognition has been made of the guidance that currently exists on a Scottish, UK and international basis (particularly from Australia and New Zealand), with a view to drawing together best practice that can be applied within an NHSScotland context.

2 Links to the Strategic Planning Process

The business case process forms the link between formative service planning stages, and investment decision making towards implementation of a project. The strategic context and purpose of these pre-business case planning processes is described below:



3 Overview of the Business Case Process

A quality business case process brings together the necessary evidence in support of the need for investment and provides assurance, (to stakeholders, the public and Scottish Ministers), that the best value solution has been identified for delivering the project's objectives, benefits and declared outcomes. There are four main stages, the purpose of which is described in the following diagram:

Strategic & Investment Planning Process - Business Case Stages		
	Purpose	Key Reference Documents
Strategic Assessment	<ul style="list-style-type: none"> • Describes the scope of a new proposal. • Informs Scottish Government of the project. • Gains consensus & support from stakeholders. • Highlights service need & benefits. • Demonstrates priority over competing projects. 	<ul style="list-style-type: none"> • Strategic Assessment guide (ref. New SCIM website)
Initial Agreement	<ul style="list-style-type: none"> • Sets out current arrangements from which change will take place. • Provides the evidence base supporting the need for change & benefits to be realised. • Sets out the initial benefits realisation plan • Reviews alternative strategic / service solutions against investment objectives • Identifies a preferred strategic / service solution(s). 	<ul style="list-style-type: none"> • Initial Agreement guide (ref. New SCIM website)
Outline Business Case	<ul style="list-style-type: none"> • Confirms status of the Strategic Case • Economic appraisal of alternative options for implementing the preferred strategic / service solution(s) • Identifies a preferred & affordable option. • Sets out the arrangements for delivering the preferred option and realising benefits • Confirms a readiness to proceed to procurement. 	<ul style="list-style-type: none"> • Outline Business Case guide (ref. New SCIM website)
Full Business Case	<ul style="list-style-type: none"> • Confirms that management, commercial, funding and financial arrangements are in place to deliver the project • Sets out the contractual details of the project which the Board is being asked to sign-off 	<ul style="list-style-type: none"> • Full Business Case guide (ref. New SCIM website)

3.1 The Business Case Stages

Further details of the main focus of the four business case stages are described below:

The overarching purpose of the **Strategic Assessment** stage is to briefly outline the need for service change and describe early thoughts on the potential benefits to be gained from such an investment. It will become an integral component of a Board's Property & Asset Management Strategy (PAMS), used to identify its own priorities for investment. It will also present an outline of the proposal to Scottish Government who will consider it against other competing investment needs before giving its support for a project to proceed to Initial Agreement stage.

The **Initial Agreement** stage will provide the evidence behind the need for investment and demonstrate that the proposal is a good thing to do. It will identify the preferred strategic / service solution(s) for realising the project's investment objectives and expected benefits. It shall only be developed once a proposal's Strategic Assessment has been incorporated into the Board's PAMS and demonstrated to be an investment priority over other competing investment needs.

The **Outline Business Case** stage will identify the preferred option for implementing the strategic / service solution confirmed at Initial Agreement stage. It will demonstrate that the preferred option will deliver the necessary service change, optimise value for money, and be affordable. It will also set out the supporting commercial and management arrangements to be put in place to successfully implement that option.

The **Full Business Case** stage will set out the agreed commercial arrangements for the project whilst also confirming that it remains value for money, is affordable, and that the organisation is ready to proceed towards implementation of that option. It will be developed within the final procurement phase of the project and record the detailed assessment and/or negotiations with potential service providers / suppliers prior to the formal signing of contracts.

3.2 Scalability and Delegated Authority

The business case process is intended to be scalable and flexible to ensure that the analytical effort is fit for purpose and matches the scale and type of decision required. The level of detail required will be dependent upon the scale, risk and nature of the investment proposal. It should, however, meet the expectations and information needs of Scottish Government's Capital Investment Group who can be consulted for further advice on these expectations.

The following sets out the current delegated limits with regards to business case submission and subsequent approval process for all NHSScotland bodies. It is supported by CEL 32 (2010) Annex C:

NHS Board	Delegated Limit (£m)	Approval Process		
		Capital Value <£1m	Capital Value £1-5m	Capital Value >£5m
Borders	1.0	FBC approved locally	SA, IA & FBC to CIG	SA, IA, OBC & FBC to CIG
Dumfries & Galloway	1.0			
Orkney	1.0			
Shetland	1.0			
Western Isles	1.0			
Special Boards and NSS	1.0			
Ayrshire & Arran	1.5		SA, IA & FBC to CIG above D.L.	
Fife	1.5			
Forth Valley	1.5			
Highland	1.5			
Grampian	3.0			
Lanarkshire	3.0			
Tayside	3.0			
Greater Glasgow	5.0			
Lothian	5.0			

All hub & NPD projects will require a Strategic Assessment, Initial Agreement, Outline Business Case, & Full Business Case (all requiring Scottish Government approval).

Further details, including the approval process for IM&T projects, and delegated authority for approvals is available on the Scottish Government's SCIM website.

3.3 Responsibility for Producing the Business Case

The 'ownership' and responsibility for the investment planning process rests with the NHSScotland body developing or leading the development of the programme/project in question.

Issues of governance are dealt with in the Management Case of each business case stage. Most projects are likely to need a Senior Responsible Officer, Project Director and Senior Project Manager; however, smaller or less complex projects may not need separate individuals for these roles. The suitability and capability of individuals for these roles is discussed in the Management Case of the Outline Business Case.

Under no circumstances should responsibility for the direction and lead production of the business case be 'outsourced' to external consultants. However, external consultants could be considered to support the project where the necessary skills and resources are not available in house.

Similarly, the production of the business case should not be regarded as an adjunct to the project manager's role, and a hurdle to jump for approval purposes. Instead, it must be viewed as a fundamental part of the overall investment planning process, which requires advice and guidance from business managers, clinicians, users and technicians involved in the scheme.

3.4 Stakeholder Engagement and Communication

The Scottish Health Council rightly advocates the importance of involving patients, carers and the public in the planning process leading to changes in local health services, and guidance is available on their website on how this should be managed at service planning stage. There is also a requirement across the Scottish public sector to optimise collaboration and co-production between public bodies and this should be demonstrated at all stages of investment planning.

Experience shows that a combination of workshops and meetings are a useful way of engaging stakeholders in a project's planning and decision making processes. Opportunities for such events should be determined locally, which may include some or all of the following:

1. Strategic Assessment (SA) stage: reviewing the needs and scope of the proposal in order to complete the SA template.
2. Initial Agreement (IA) stage: developing the service model; confirming the need for change; identifying the investment objectives, benefits to be realised and risks to be managed; reviewing alternative solutions; and confirming the preferred strategic solution.
3. Outline Business Case (OBC) stage: carrying out an option appraisal exercise to confirm the preferred option; developing proposals for service change arrangements, benefits realisation, risk management, etc.
4. Full Business Case (OBC) stage: reviewing submitted commercial offers / tenders to agree on the preferred contractor / commercial partner.
5. Design Assessment process: agreeing the design statement and assessing the developing design at OBC & FBC stages.
6. Service Benefits Evaluation: covering a review of benefits realised, user feedback on the new facility, and the impact of any service change.

Any such event should be planned ahead and carefully managed to ensure that outcomes are optimised and continued support for the project is maintained.

3.5 Project Assurance

In respect of Scottish Government funded projects and programmes, the two main models of independent project assurance are Gateway Reviews and Key Stage Reviews.

Gateway reviews are managed by Scottish Government's Programme and Project Management Centre of Expertise (PPM-CoE) and all Key Stage Reviews are managed by Scottish Futures Trust (SFT). Further details of the Gateway Review process are available on the Programme and Project Management Centre of Expertise website.

It is mandatory for PPM-CoE to be able to consider all programmes and projects for Gateway Review with a total budget of £5m+ inclusive of fees and VAT. All NPD (and similar) and hub projects will undergo a Key Stage Review.

The Scottish Government also reserves the right to instigate an early stage review on any major change initiatives

A diagram is available on the new SCIM website which describes how the business case process aligns with both the project assurance and the design development stages - the 'SCIM process and outcomes' diagram.

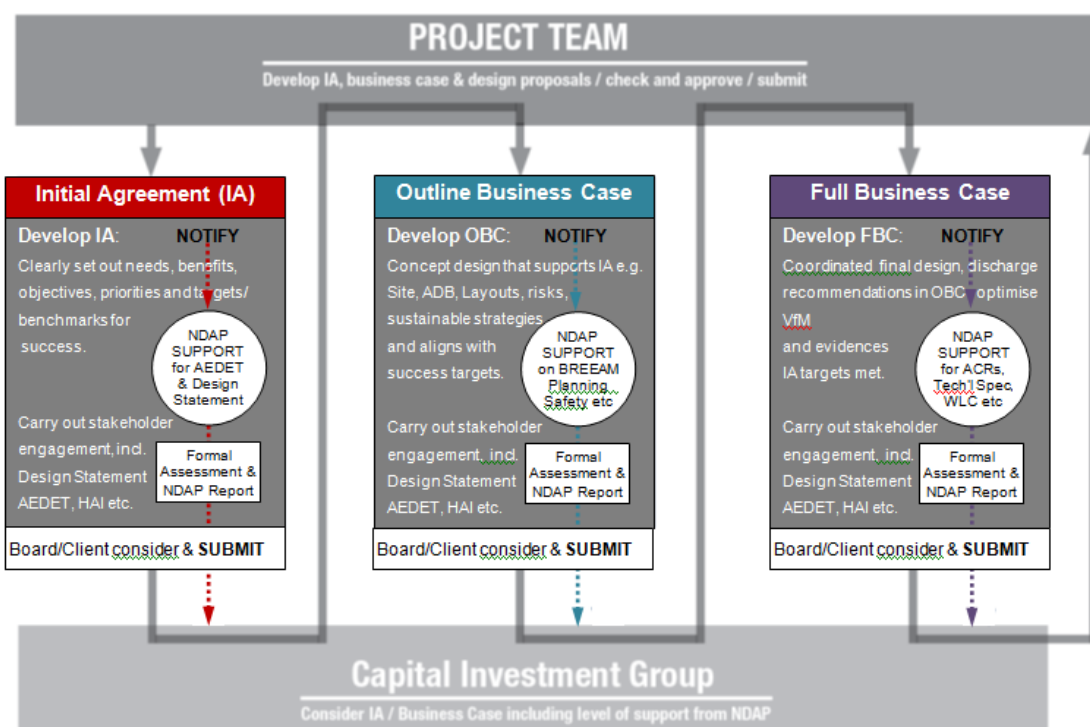
4 Links to Design Process

The assessment of design quality is an integral part of the business case approval process which aims to ensure that the outcomes of design development projects meet the Government's strategic objectives and expectations for public investment.

The requirement to refer projects to the NHSScotland Design Assessment Process applies to all projects that are to be considered by the Capital Investment Group (CIG). It is expected however that Boards will develop 'design statements' and utilise the self assessment methodologies on all development projects.

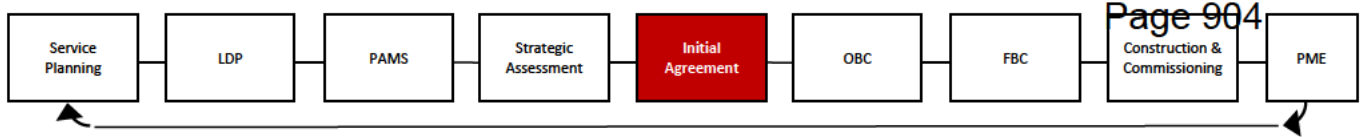
The Design Statement, which is to be produced by the Boards for each project prior to the submission of the Initial Agreement (IA), is central to the consideration of design matters within the business case approvals process as it is this document that establishes the design criteria against which the project will be assessed. The benchmarks set by the Board will also be assessed to ensure that they are in line with the expectations established in national policy.

The following flow diagram shows the key NDAP activities and information flow at each Business Case stage. Early engagement and dialogue with Project Teams in NDAP is key to reducing surprises / risks at the Formal Report stage.



SCOTTISH CAPITAL INVESTMENT MANUAL

Initial Agreement - summary of stages



1 Overview

2 What is the proposal about?

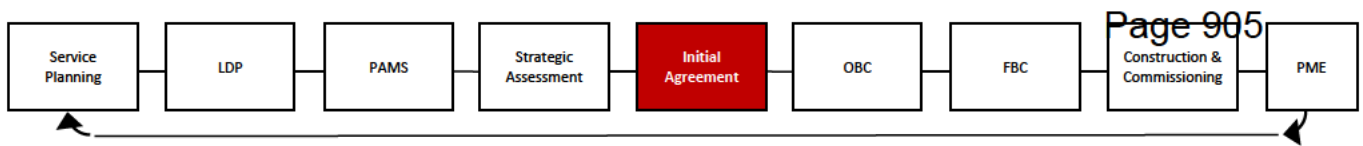
- Executive Summary

3 What are the Current Arrangements?

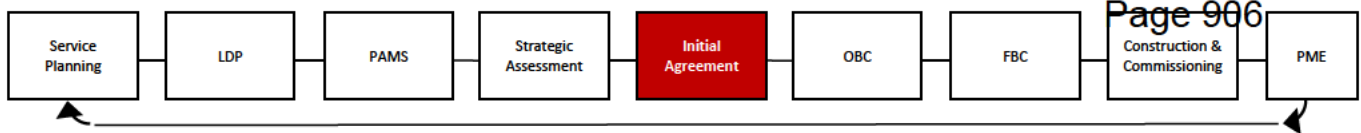
- A description of the existing service / activity including:
 - Description of the relevant service(s).
 - Service location – geographically & departmental relationships.
 - Location of service users / catchment areas.
 - The functional size of service / activity.
- Existing service arrangements:
 - Care pathways, patterns of working, service models, etc.
 - Existing service capacity and current utilisation of this capacity.
 - Service performance data, with reference to national or local key performance indicators.
 - Existing service demand and/or supply throughput.
- Service provider(s) / organisation affected by this proposal and/or any particular workforce arrangements /issues.
- State of existing assets affected by this proposal. Property assets should use an AEDET review of existing facilities to describe their limitations.
- Confirmation that the current services are still needed, etc.

4 Why is this proposal a good thing to do?

- The need for change:
 - Public perception / opinion:
 - On existing arrangements.
 - Future expectations.
 - Any safety / other concerns.
 - Access preferences.



- Opportunities for improvement:
 - To enhance service provision?
 - Better use of technology?
 - Invest to save scheme?
 - Joint working for better outcomes?
- Problems with existing arrangements:
 - Any capacity issues?
 - Service delivery issues?
 - Poor service performance?
 - Poor accommodation / equipment etc?
- Other drivers:
 - National policy / strategy?
 - Local policy / strategy?
 - Economic / legislative change?
 - Social / demographic change?
- Summarising the Need for Change (from above):
 - What is the cause?
 - What effect/impact is this having / likely to have?
 - Why action now?
- Identifying investment objectives:
 - Against each effect / impact, ask “What has to be achieved to deliver the necessary change?”
- Benefits to be achieved, e.g.:
 - Meets public expectations on:
 - Service delivery.
 - Accommodation.
 - Community enhancement, etc.
 -
 - From addressing the need:
 - Capacity able to meet demand.
 - Improved service performance.
 - Better accommodation.
 - Reduced backlog.
 - Etc.

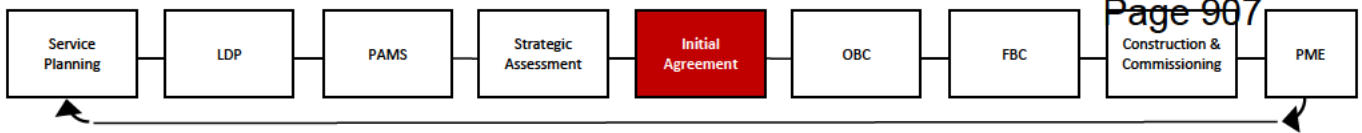


- Supporting national outcomes, such as:
 - Quality outcome indicators.
 - HEAT / LDP standards.
 - SAFR performance indicators.
 - Other service indicators.

- Community benefits:
 - Employment.
 - Skills & training.
 - Environmental.
 - SME & 3rd sector.

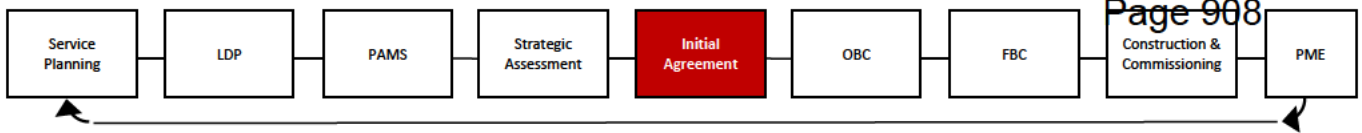
- Risks of undermining success:
 - Risks to organisation.
 - Risks to service delivery.
 - Risks to patients.
 - Delivery risks.
 - Financial risks.
 - Etc

- Any constraints or dependencies?
 - E.g. limitations on resources?
 - E.g. anything that needs to occur to enable this project to progress.



5 What is the preferred strategic / service solution?

- Summarise Do Nothing from 'Current Arrangements'.
- Consider if there is a 'Do Minimum' option.
- Summarise current stakeholder engagement carried out.
- Develop & describe long list of proposed solutions:
 - Can changes to the assumed functional size of service / activity provide different outcomes and/or benefits?
 - Could changes to the presumed service activity, catchment area, or assumed demand, affect the proposed solution?
 - Would changes to the scope of assumed outcomes change the proposed solution; ranging between delivering do minimum outcomes, essential future outcomes, and desirable or aspirational outcomes?
 - Would changes to the arrangement and/or strategic location of services change the way in which services are provided?
 - Could the service / activity be delivered differently whilst still meeting the investment objectives?
 - Can alternative solutions be developed which deliver longer term sustainable benefits in health, social, community and environmental terms?
 - Could a collaborative one public sector approach contribute to a place based solution with shared benefits?
- Prepare indicative costs for each proposed solution.
- Assess each proposed solution for its advantages (strengths & opportunities) and disadvantages (weaknesses & threats).
- Summarise assessment of each proposed solution meeting the project objectives in standard template.
- Confirm preferred strategic / service solution(s) and why chosen.
- Use NDAP & AEDET processes to confirm design objectives.

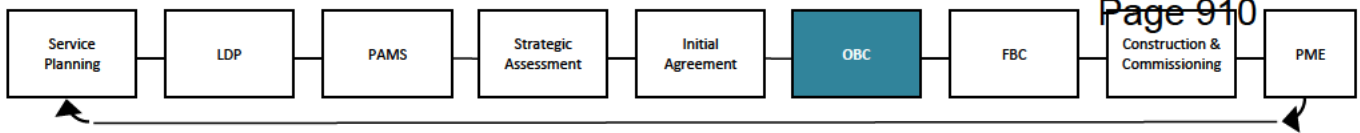


6 Is the organisation ready to proceed with the proposal?

- Commercial Case:
 - Procurement route & project timetable.
- Financial Case:
 - Financial impact of proposed solution & affordability likelihood / funding needs.
- Management Case:
 - Governance arrangements & support for project.
 - Proposed project resources and competencies.
 - Any need for external advisors.
 - Next steps and project plan.

SCOTTISH CAPITAL INVESTMENT MANUAL

Outline Business Case - summary of stages



Executive Summary

- Summary of key decision points and outcomes.

1 Strategic Case

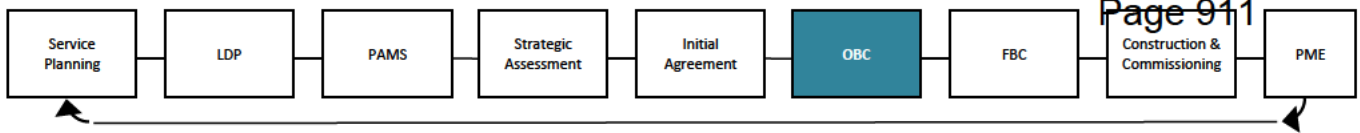
- Provide summary of strategic case from IA, including any updates.
- Revisit and update details of current arrangements.
- Re-confirm case for change and suitability of investment objectives.
- Confirm that any changes to strategic case do not alter outcome of IA i.e. the preferred strategic / service solution.

2 Economic Case

- Identify a long list and then a short-list of practical options for implementing the preferred strategic / service option identified at IA stage.
- Set out, and explain assumptions behind, the capital and revenue cost inputs used in the GEM model for each option.
- Prepare whole life NPV costs for each option.
- Carry out non-financial benefits appraisal for each option.
- Carry out a risk appraisal of each option.
- Carry out sensitivity analysis on the main assumptions behind the costs and benefits (scores and criteria weighting) to test how reactive the appraisal results are to changes in these assumptions.
- Review NPV/NPC per benefit point.
- Make decision on preferred implementation option and explain why.

3 Commercial Case

- Set out the various procurement routes to be followed and prepare a procurement plan for each one (i.e. the approach to procurement & selection either carried out or to be done).



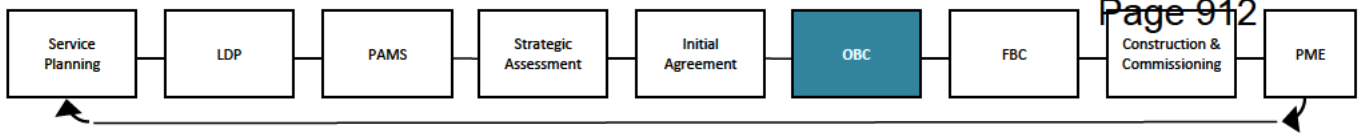
- Set out the scope of services, building works, and other works that will form part of the commercial arrangements.
- Prepare a risk allocation table for the main project.
- Set out the main principles behind the payment structure to be adopted for the project.
- Reference the main contract to be used, the key contractual arrangements to be followed, and their current status.
- Identify any personnel implications directly associated with the proposed contract e.g. transfer of undertakings, etc.

4 Financial Case

- Prepare the financial model for the preferred option along with details of assumptions made and how calculated, plus summary information on the financial differences with other options.
- Prepare summary information on the capital and revenue impact of the preferred option.
- Provide a clear statement on the affordability of the project in revenue and capital terms, including details of how this has been assessed.
- Details of how any affordability gap has been, or will be, closed.
- Provide the 'in principle' written support for this project from stakeholders

5 Management Case

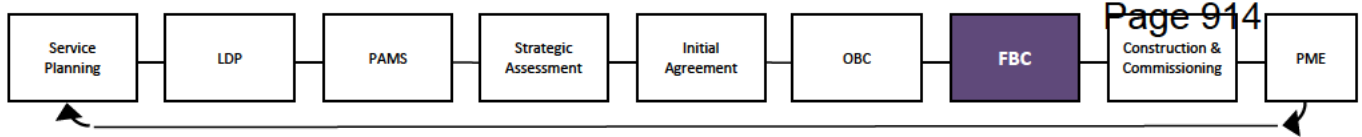
- Provide details of the full project team, using the competency framework where appropriate. Also add recruitment needs to fill any gaps.
- Provide details of the following project plans:
 - Project delivery plan.
 - Operational / services change management plan.
 - Facilities change management plan.
 - Stakeholder engagement & communication plan.



- Update project benefits register and add benefits realisation plan (including adding a Community Benefits project objective).
- Review and update the project risk register, including adding any further construction related risks.
- Outline the commissioning arrangements being planned for the project.
- Outline the arrangements being planned for project monitoring and evaluation.

SCOTTISH CAPITAL INVESTMENT MANUAL

Full Business Case - summary of stages



Executive Summary

- Confirmation of the project scope, affordability, and that appropriate contractual, commercial, and management arrangements are in place.

1 Strategic Case

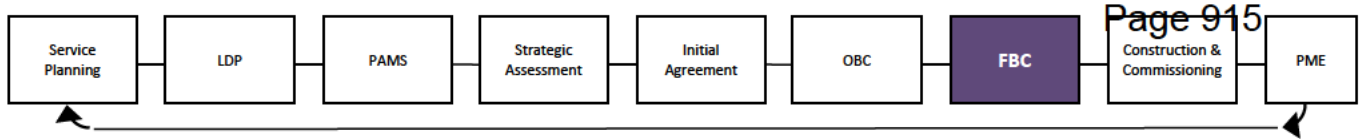
- Provide summary of Strategic Case from OBC, including any updates (note, any material changes that could have altered the outcome of the OBC should be reviewed with Scottish Government before proceeding further).

2 Economic Case

- Confirm whether any new information has come to light which might impact on the economic appraisal carried out at OBC stage.
- Then either re-visit the economic appraisal and the robustness of the preferred option, or, explain how after reasonable consideration of this the preferred option remains valid.

3 Commercial Case

- Set out, or summarise and refer to separate reports, the selection process for the recommended commercial offer(s) / suppliers i.e. the tender report.
- For a building related project, set out the NDAP assessment observations, the Board's compliance / response to the advisory and essential recommendations, and confirm project information compliance with NDAP & BIM expectations.
- For non-building related elements / services, set out how the assessment of the suitability of the procured offer(s) was carried out and outline any observations or recommendations related to the appropriateness of the services or works being offered.
- Outline the main contractual arrangements of the recommended offer, covering:
 - Confirmation of the standard form of contract being used.



- Key contractual issues, covering similar items included within the OBC.
- Any contractually based personnel implications.
- Details of how any payment structure will function.
- An update of the project risk allocation table.

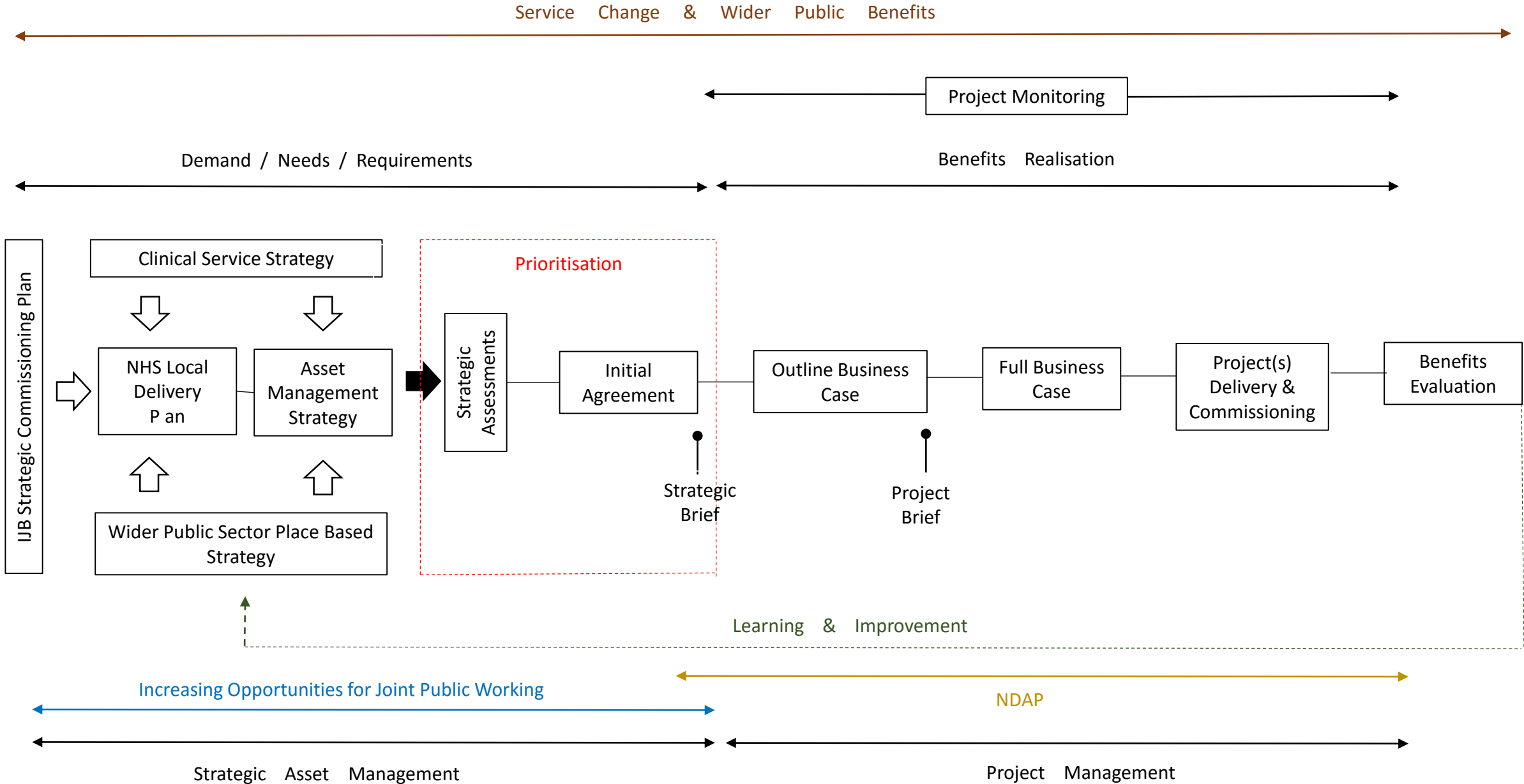
4 Financial Case

- Set out the full financial implications for the project, including the project's overall funding and affordability arrangements.
- Written confirmation from all stakeholders of their specific and explicit commitment to the project following suitable involvement in the project's development and an understanding of the impact of its financial and commercial arrangements.

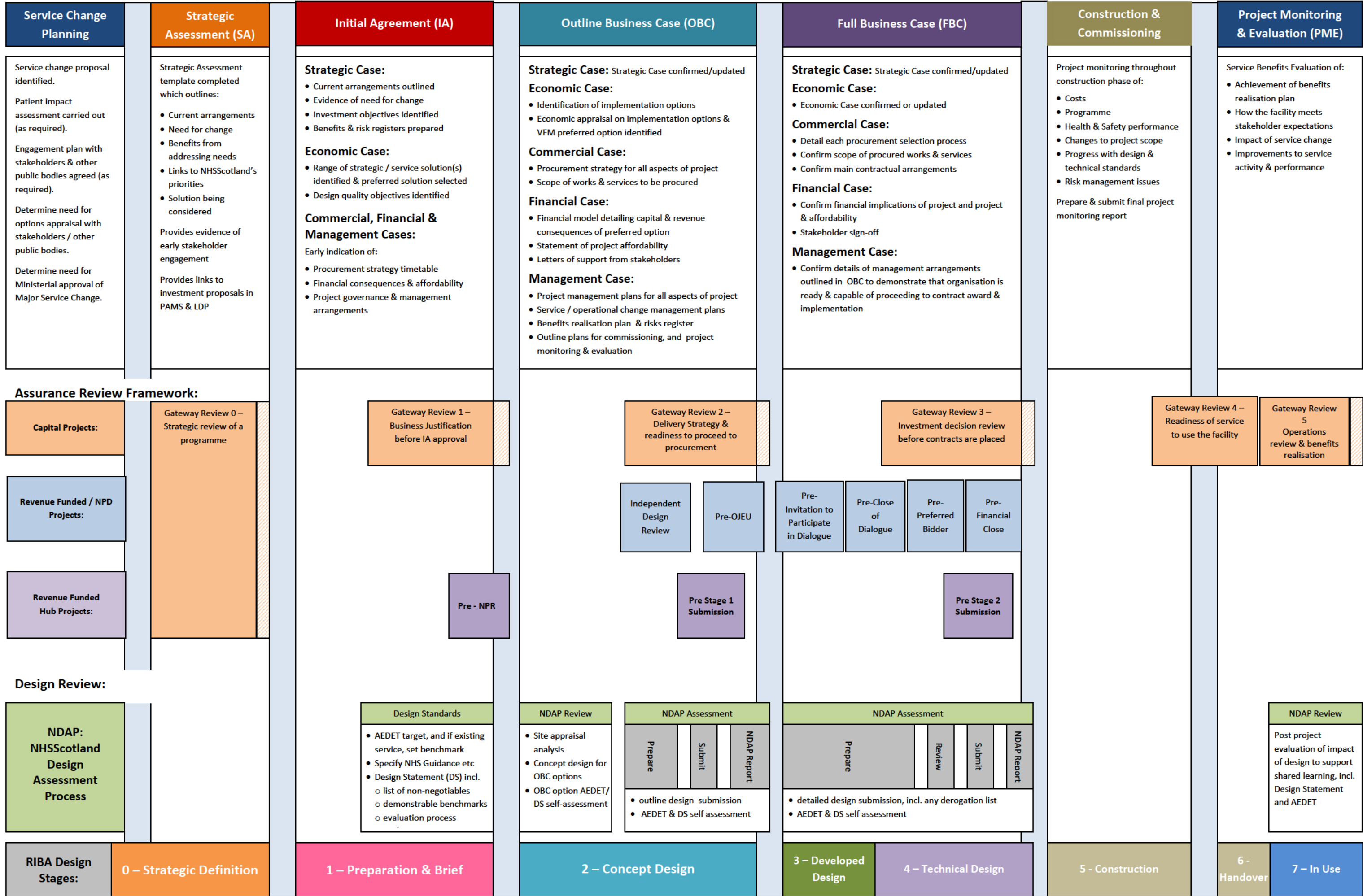
5 Management Case

- Confirmation (with details) that the following management arrangements are in place to ensure the project's successful implementation:
 - Project management arrangements.
 - Organisational, service, and facilities change management arrangements, including details of the management of impact on existing service delivery during implementation.
 - A comprehensive benefits realisation plan.
 - A comprehensive and up to date project risk register.
 - A Commissioning Master Plan.
 - A Full Project Monitoring and Service Benefits Evaluation plan.
 - A Project Monitoring Report.

Note, an FBC addendum will need to be submitted if, for any reason, there are key movements in any material information about the project between FBC approval and contract signature.



SCIM, Assurance Framework & Design Stages

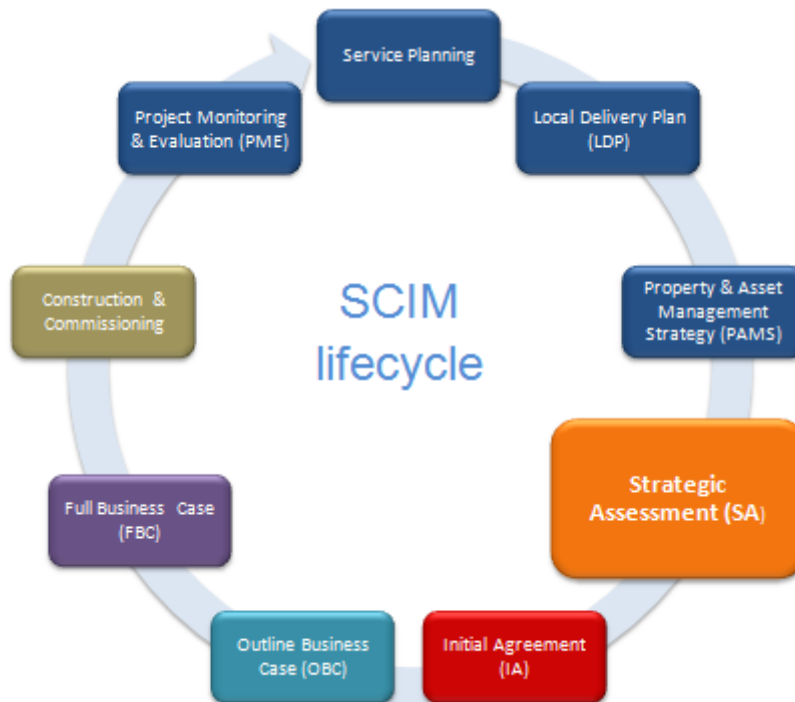


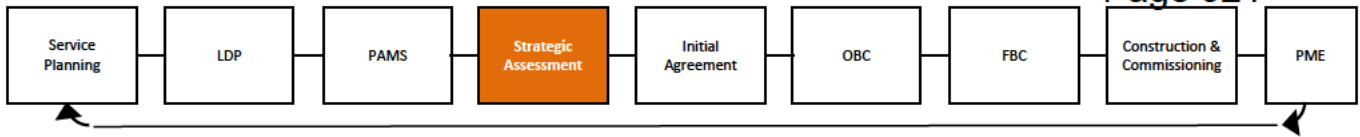
Strategic Assessment	Initial Agreement (IA)		Outline Business Case (OBC)	Full Business Case (FBC)			Project Monitoring & Evaluation (PME)	
0 – Strategic Definition	1 – Preparation & Brief		2 – Concept Design	3 – Developed Design	4 – Technical Design		6 - Handover 7 – In Use	
<p>RIBA Stages : 2013 ↑ 2007 ↓</p>	A	B	C	D	E	F	L	
<p>PM & Technical Information:</p>	Appraisal	Design Brief	Concept	Design Development	Technical	Production Info.	Post Practical Completion	
<p>Design Information:</p>	<p>PM & Technical Information: Establish Objectives:</p> <ul style="list-style-type: none"> Project Benefits Quality Objectives Sustainability Aspirations <p>Establish PM Documents:</p> <ul style="list-style-type: none"> Stakeholder groups Initial Brief, incl. Design Standards Initial Programme Initial Risk Register Cost Plan, incl. WLC Project Execution Plan (PEP) <p>Submit:</p> <ul style="list-style-type: none"> NDAP: pro-forma (appendix A) NDAP: Draft IA, incl. Design Info below CIG: Board verified NDAP report 		<p>PM & Technical Information: Early Stage:</p> <ul style="list-style-type: none"> Outline Brief , incl. Strategic Context & IA stage NDAP report High Level Information Pack(s) for Contracted Service(s) Site(s) Information Site Selection & Option Appraisal* Process <p>Develop:</p> <ul style="list-style-type: none"> Master Programme Master Risk Register Cost Plan, incl. WLC Project Execution Plan (PEP) Commissioning, O&M and Soft Landing Strategy Responsibility matrix & Communications plan <p>Submit:</p> <ul style="list-style-type: none"> NDAP: *Early Stage: interim feedback on Design Info below NDAP: pro-forma (appendix A) NDAP: Draft IA, incl. Design Info below CIG: Board/ Client verified NDAP report 		<p>PM & Technical Information: Finalise:</p> <ul style="list-style-type: none"> Down-selection of any bidders/ competitors # Final Brief, incl. OBC (& Interim) stage NDAP report(s) Site Information incl. investigations Master Programme Master Risk Register Cost Plan, incl. WLC Project Execution Plan (PEP) Commissioning, O&M and Soft Landing Strategy Responsibility matrix & Communications plan <p>Submit:</p> <ul style="list-style-type: none"> NDAP: #pre-down-selection: interim feedback on Design Info below NDAP: pro-forma (appendix A) NDAP: Draft IA, incl. Design Info below CIG: Board/ Client verified NDAP report 			<p>PM & Technical Information: Handover:</p> <ul style="list-style-type: none"> Confirm compliance e.g. Commissioning, O&M and soft landing & sustainable <p>Submit:</p> <ul style="list-style-type: none"> CIG: post occupational Project Monitoring & Evaluation (PME) reports, incl. Design Info below
<p>Design Information:</p>	<p>Design Information -Brief: Establish:</p> <ul style="list-style-type: none"> AEDET or equal, healthcare (DQI) Design Quality Indicator, Target & Benchmark Design Statement to realise all Project Objectives, & list of stakeholders present Commitment to Sustainability incl. BREEAM Healthcare target statement. Commitment to Equality, incl. access, Dementia Health Promotion targets. list NHS guidance/ & technical standards to follow e.g. SHPNs, SHTMs, CIBSE etc. Accommodation Schedules based on above & NHS Activity Data Base Strategic Context: SA, PAMS, CPS, EAMS, Planning, Masterplan, etc. 		<p>Design Information -Concept Design: Early Stage:</p> <ul style="list-style-type: none"> Strategic Context & Masterplan studies e.g. ≥ 1:1000 . Site & Option Appraisal e.g. ≥ 1:500, photos,3Ds, HAI,CDM, VfM Initial concept sketches & sustainable design strategy Evidence of stakeholder consultation & DQI on preferred option <p>Late Stage:</p> <ul style="list-style-type: none"> Concept Design incl. Arch, M&E, C&S, Fire and Landscape Outline drawings & specifications Outline sustainability strategy Outline Construction Strategy incl. HAI, CDM H&S Plan Completed Design Statement OBC self assessment Completed AEDET OBC self assessment Photographs of site showing broader context Evidence of Local Authority Planning consultation and/or alignment with Local Development Plan. Extract from draft OBC detailing benefits and risks analysis Evidence of HAI & CDM compliance Evidence Sustainability commitments will be met. (e.g. accurate & NCM model information e.g. BREEAM, .CAB files and BRUKL Evidence Equality commitments will be met. Evidence of VfM e.g. outline WLC on key design options Evidence that Activity Data Base (ADB) is being fully utilised. Evidence design guidance will be met; list any derogations. Design Report evidencing above - ≥ 1:500, ≥ 1:200, key ≥ 1: 50; diagrams, plans, sections, 3Ds, specs, comfort & energy DSMs. 		<p>NDAP Information -Developed Design: Mid - Late Stage:</p> <ul style="list-style-type: none"> IA Design Standards, with any updates in benchmarks highlighted. Completed Design Statement FBC self assessment Completed AEDET FBC self assessment Evidence Local Authority Planning & other consents, plus any risks Draft FBC incl. benefits and risks analysis e.g. SCIM appendix 3. 3D images for key spaces identified in Design Statement. Evidence of HAI & CDM compliance and design optimised Evidence Sustainability compliance and design optimised, e.g. NCM plus accurate comfort & energy models (DSMs), BRUKLs, CAB files Evidence Equality and accessibility compliance & design optimised Evidence design coordination in place and resilient e.g. BIM Evidence commissioning, O&M & soft landings in place and resilient Evidence of VfM e.g. detailed WLC options, and design optimised Evidence that Activity Data Base (ADB) use is optimised. Evidence guidance & standards are met; list derogations & reasons Final Design Report, coordinated response across multi-disciplines, evidencing all above - ≥ 1:500, ≥ 1:200, ≥ 1: 50, ≥ 1: 20; 3Ds, plans, sections, specs, comfort & energy DSMs BREEAM, WLCs etc. 			<p>Design information -PME:</p> <ul style="list-style-type: none"> Complete BREEAM 1st annual energy NDEP PME Design Statement and AEDET, plus share any design learning. O&M/ Soft Landings, on going use optimisation and shared learning Submit for Design Awards

Strategic Assessment		Initial Agreement (IA)		Outline Business Case (OBC)	Full Business Case (FBC)		Project Monitoring & Evaluation (PME)		
0 – Strategic Definition		1 – Preparation & Brief		2 – Concept Design	3 – Developed Design	4 – Technical Design		6 - Handover	7 – In Use
RIBA Stages : 2013 ↑ 2007 ↓		A	B	C	D	E	F	L	
Appraisal		Design Brief		Concept	Design Development	Technical	Production	Post Practical Completion	
Design Statement (DS):		<p>Design Statement (DS):</p> <ul style="list-style-type: none"> Establish workshop stakeholder group incl. service user reps and public Establish IA Design Standards, incl: Workshop DS1a: set 'non-negotiables' Workshop DS1b: set 'benchmarks' Develop and Consult NDAP Notification Submit & Review IA Design Standards NDAP Report IA 		<p>Design Statement (DS):</p> <ul style="list-style-type: none"> Establish early NDAP dialogue Informal consultations (early OBC, plus OA*) Workshop DS 2 a&b*: (late OBC, plus OA*) design self-assessments NDAP Notification (late OBC) Submit & Review Concept Design NDAP Report OBC <p>* additional OA Site/ Option Appraisal requirement, as well as for formal NDAP late OBC stage report.</p>		<p>Design Statement (DS):</p> <ul style="list-style-type: none"> Informal consultation (pre-down selection(s)# & mid FBC) – interim reports on request Workshop DS 3 a&b#: (pre-down selection(s)# & late FBC) design self-assessments NDAP Notification (mid-late FBC) Submit & Review Developed Design NDAP Report FBC <p># additional pre-down selection(s) requirement, as well as for formal NDAP late FBC stage report</p>		<p>Design Statement (DS):</p> <ul style="list-style-type: none"> Workshop DS 4: (PME at circa +1yr) assessment PME report on learning NDAP report, on request 	
AEDET / ASPECT:		<p>AEDET / ASPECT:</p> <ul style="list-style-type: none"> Workshop stakeholder group as above Workshop 1 benchmark current service facility(ies) - if applicable; 		<p>AEDET / ASPECT:</p> <ul style="list-style-type: none"> Workshop 2 a&b*: (late OBC, plus OA*) design self-assessments 		<p>AEDET / ASPECT:</p> <ul style="list-style-type: none"> Workshop 3 a&b#: (pre-down selection(s)# & late FBC) design self-assessments 		<p>AEDET / ASPECT:</p> <ul style="list-style-type: none"> Workshop 4: (PME at circa +1yr) assessment 	
Technical / Guidance:		<p>NHS Guidance & technical Standards:</p> <ul style="list-style-type: none"> Agree key Guidance & Standards appropriate for the project; incl, shared learning on prior projects 		<p>NHS Guidance & UK technical Standards:</p> <ul style="list-style-type: none"> Update Guidance & Standards Agree key Derogations list 		<p>NHS Guidance & UK technical Standards:</p> <ul style="list-style-type: none"> Evidence contract terms, Guidance & Standards Evidence Derogations lists; incl. technical reasons/ mitigations. 		<p>NHS & technical Standards:</p> <ul style="list-style-type: none"> Final Standards and Derogations Prepare O&M manuals 	
BREEAM:				<p>BREEAM:</p> <ul style="list-style-type: none"> Pre Assessment – Agree project specific target score with HFS support Design Stage Assessment 		<p>BREEAM:</p> <ul style="list-style-type: none"> Assessment – Confirm project target score and extent final credits now evidenced Issue interim 'design' certificate 		<p>BREEAM:</p> <ul style="list-style-type: none"> Assessment – evidence construction score Issue NDEP energy cert. 	
HAI SCRIBE:		<p>HAI SCRIBE:</p> <ul style="list-style-type: none"> Establish multi-disciplinary HAI group HAI process & controls to be briefed incl, shared learning on prior projects 		<p>HAI SCRIBE:</p> <ul style="list-style-type: none"> HAI applied in concept and space planning Workshop H2 a&b*: (late OBC, plus OA*) HAI risk assessments 		<p>HAI SCRIBE:</p> <ul style="list-style-type: none"> Confirm HAI applied in design details & specs. Workshop H3 a&b#: (pre-down selection(s)# & late FBC) HAI risk assessments 		<p>HAI SCRIBE:</p> <ul style="list-style-type: none"> HAI Construction confirmation & records 	
CDM:		<p>CDM:</p> <ul style="list-style-type: none"> Establish multi-disciplinary CDM group CDM process & controls to be briefed incl, shared learning on prior projects 		<p>CDM:</p> <ul style="list-style-type: none"> CDM applied in concept and space planning Workshop C2 a&b*: (late OBC, plus OA*) CDM risk assessments 		<p>CDM:</p> <ul style="list-style-type: none"> Confirm HAI applied in design details & specs. Workshop C3 a&b#: (pre-down selection(s)# & late FBC) CDM risk assessments 		<p>CDM:</p> <ul style="list-style-type: none"> CDM Construction confirmation & records 	
BIM:		<p>Building Information Modelling:</p> <ul style="list-style-type: none"> Data Drop 1 – Initial Brief of operational requirement & Model 		<p>Building Information Modelling:</p> <ul style="list-style-type: none"> Data Drop 2 – Outline Solution Model 		<p>Building Information Modelling:</p> <ul style="list-style-type: none"> Data Drop 3 – Construction Information Model 		<p>BIM:</p> <ul style="list-style-type: none"> Data Drop 4 – Operational and Maintenance Model 	
Planning:				<p>Planning:</p> <ul style="list-style-type: none"> Pre Planning Consultation* (If applicable) NDAP report used as consultation evidence Planning In Principle Approval (If applicable) 		<p>Planning:</p> <ul style="list-style-type: none"> NDAP report used as evidence of A&DS Design Review undertaken by Planning Planning Approval 			

SCOTTISH CAPITAL INVESTMENT MANUAL

Strategic Assessment





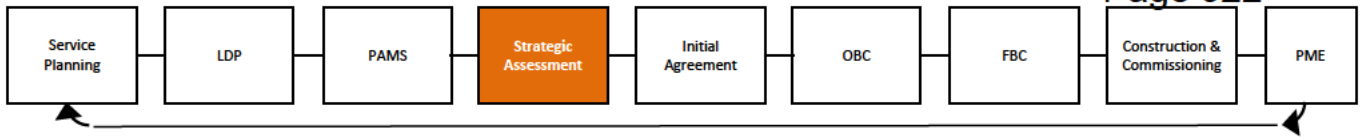
1. Overview

The main purpose of the Strategic Assessment is to identify and briefly outline the need for change, the benefits it might deliver, and the case for potential investment. It will do this by responding, as appropriate, to the following questions:

Strategic Assessment (SA)	
Question	Response
Why is this proposal a good thing to do?	Brief Outline of: <ul style="list-style-type: none"> • Current arrangements • Need for change • Benefits to be gained • Fit with Strategic Investment Priorities
What solution is being considered?	Early thoughts on: <ul style="list-style-type: none"> • Scope of services covered • Proposed service arrangement • Service providers • Impact on assets • Value & procurement

The Strategic Assessment can also be used to gain consensus and support from stakeholders and Scottish Government on the scope of change needed and the case for it being an investment priority. The objective is thus to provide clarity, challenge, consensus, and organisational support for the proposal. It is therefore important that the Strategic Assessment is not prepared in isolation or based on a single viewpoint.

A Strategic Assessment is to be completed for all proposals anticipated to need funding approval above the Board's delegated authority, but it is also considered best practice for consideration of all the Board's service change and investment proposals. The submission will consist of a single page Strategic Assessment Template which is to be incorporated into the Board's Property & Asset Management Strategy (PAMS). Blank templates are available on the SCIM website and an example of a completed Template is included in Appendix A.



2. Why is this proposal a good thing to do?

Question	Response
Why is this proposal a good thing to do?	Brief Outline of: <ul style="list-style-type: none"> • Current arrangements • Need for change • Benefits to be gained • Fit with Strategic Investment Priorities

A compelling rationale for investment should demonstrate that the benefits to be gained are significant in relation to the level of investment required, and that they strongly support NHSScotland's strategic investment priorities. If the rationale for investment is unable to demonstrate these two criteria then the proposal may not be considered further.

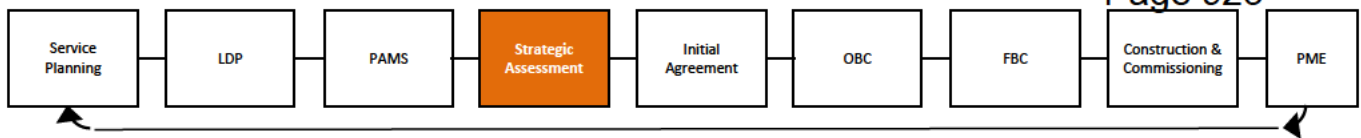
Completion of the Strategic Assessment Template is based on responding to the following questions:

1. What are the current arrangements?
2. What is the need for change?
3. What benefits will be gained from addressing these needs?
4. How do these benefits link with NHSScotland's Strategic Investment Priorities?

The expectation is that the information provided will be high level in nature but formed from a wider understanding and appreciation of the case for change and investment need. If the proposal gains support for the development of an Initial Agreement then at that stage a more detailed evidence base will be expected.

2.1. What are the current arrangements?

A brief description is required of current arrangements affected by the need for change. This might consider factors such as the type and scope of service provision



and/or its location, functional size, service providers, or the properties which support this service, etc.

2.2. What is the need for change?

This should identify the greatest needs for change driving forward the investment proposal.

A need for change can relate to an opportunity to provide significant outcomes when compared to existing arrangements, overcoming a problem, or responding to any other driver for change.

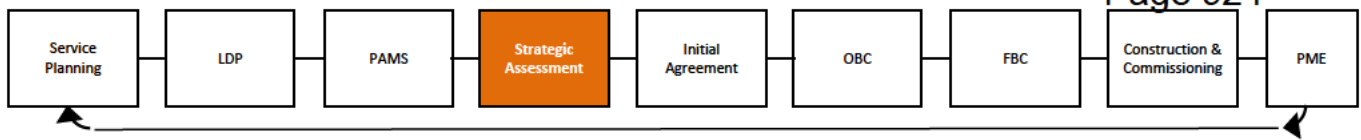
Examples of drivers influencing the need for change might include:

- Responding to public opinion / concerns about a service.
- The organisation needing to enhance its service provision or performance.
- The organisation needing to change in order to maintain the quality of service delivery or comply with regulatory requirements.
- Concerns regarding the effectiveness of assets to support modern service delivery.
- Needing to respond to NHSScotland's policy agenda and its triple aim of improving quality of care, health of the population, and value & sustainability.

At Strategic Assessment stage no more than five drivers for change should be short-listed and described. More detailed evidence of the cause and effect of those needs is not expected until Initial Agreement stage.

2.3. What benefits will be gained from addressing these needs?

Up to seven key benefits that will flow if the need for change is addressed should be short-listed and described on the Strategic Assessment. These should be sufficient to demonstrate that the benefits to be gained are significant in relation to the level of investment required. Any dis-benefits may also be noted.



Examples of the types of benefits to be considered include:

- Those which meet public expectations for the service.
- Those which arise from directly addressing the need for change.
- Those which support national outcomes – examples of which can be found in Appendix B.
- Those which might deliver wider public and community benefits.

Lines should also be drawn on the Strategic Assessment Template showing links between each need for change and the responding benefits to be gained from addressing that need.

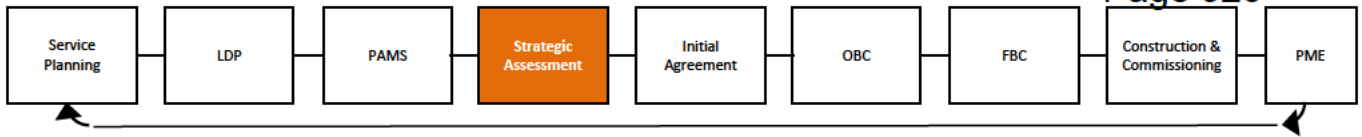
Details of how these demonstrable benefits will be identified are expected at Initial Agreement stage.

2.4. How do these benefits link to NHSScotland’s Strategic Investment Priorities?

The Strategic Assessment Template is also to be used to map links between the proposal’s expected benefits and NHSScotland’s strategic investment priorities. This will help to explain the importance of this proposal and why it should be considered a priority for investment. Further information on the scope and definition of each Strategic Investment Priority is available in Appendix B.

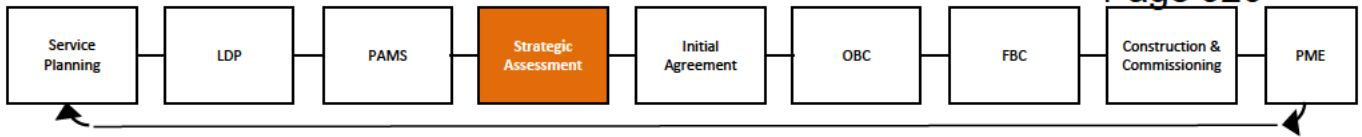
Each strategic investment priority should be scored from a range of 1 - 5 for the proposal’s potential to deliver benefits against this priority. This process needs to align with the following score guide:

Score 5: Substantial	Significant benefits to be delivered against this priority.
Score 4:	In between 5 and 3.
Score 3: Moderate	Reasonable benefits to be delivered against this priority.
Score 2:	In between 3 and 1.
Score 1: Negligible	Small level of benefits to be delivered against this priority.



The 'Total Score' on the template is to be gathered from the Capital Planning System (CPS) once the proposal has been created on the system and the individual prioritisation scores entered. This will create a total score which is different from the sum of the individual scores due to inherent weighting of the strategic investment priorities in the CPS.

A prioritised list of Strategic Assessment proposals is to be included in the Board's Property & Asset Management Strategy. Further information is available in this related guidance.



3. What solution is being considered?

Question	Response
What solution is being considered?	Early thoughts on: <ul style="list-style-type: none"> • Scope of services covered • Proposed service arrangement • Service providers • Impact on assets • Value & procurement

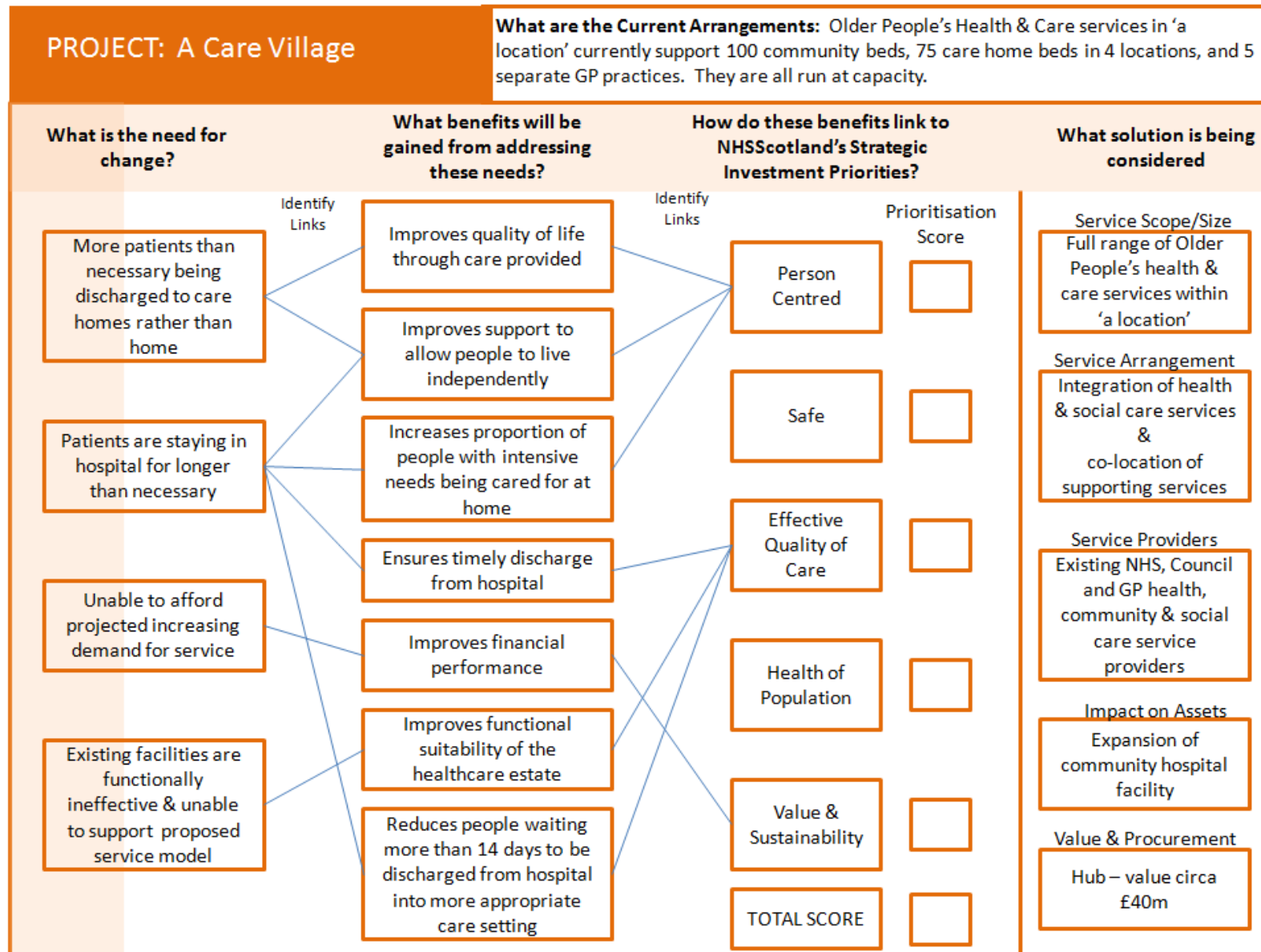
This should describe early thoughts on the solution being considered to address the need for change and investment; however, as not all proposals will have formed ideas on potential solutions at this stage then a limited response to this question is acceptable in these circumstances.

A brief description is required, based around the following five questions:

- What is the scope and/or size of services being considered?
- What is the proposed service arrangement and/or capacity expectation?
- Who are likely to be the future service providers?
- What impact is likely on assets (new, replacement, refurbishment, etc)?
- What is the likely value of the investment (this should align with any figure already stated on the Board's Local Delivery Plan) and any thoughts on likely procurement route.

Appendix A

Strategic Assessment Template example



Appendix B

Definitions of NHSScotland's Strategic Investment Priorities

Person Centered

General Definition	Ensures that resources are in place to support people powered health and care services, and promotes personal responsibility and self-management for individuals health and wellbeing		
Indicator	Potential Measure:		
1	QOIs	Supports people in looking after and improving their own health and wellbeing	Percentage of adults able to look after their health very well or quite well
			Rate of emergency inpatient bed days for adults
	Ensure that people who use health and social care services have positive experiences and their dignity respected.	Percentage of adults supported at home who agree that their health & care services seemed to be well co-ordinated	
		Percentage of adults receiving any care or support who rate it as excellent or good	
		Indicator on people's experience of their GP practice	
		Proportion of Care and Care at Home services rated 3 or above in Care Inspectorate Inspections	
		Proportion of last 6 months of life spent at home or in community settings	
	Improves support to allow people to live independently	Percentage of adults supported at home who agree that they are support to live as independently as possible	
		Rate of emergency inpatient bed days for adults	
		Percentage of adults with intensive needs receiving care at home	
		Patient re-admission rate	
		Delayed discharge rate	
	Improves quality of life through care provided	Percentage of adults supported at home who agree that their services and support had an impact in improving or maintaining	

			their quality of life
		Increases proportion of people with intensive needs being cared for at home	TBC
		Increases support for carers	Percentage of carers who feel supported to continue in their caring role
		Improves care home environment	TBC
2	SAFR	Improves the Physical condition of the health / care estate	Proportion of estate categorised as either A or B for the Physical Condition appraisal facet
		Improves the quality of the healthcare estate	Proportion of estate categorised as either A or B for the Quality appraisal facet
		Improves peoples opinion of the hospital environment	Proportion of positive responses to the In-Patient Questionnaire on patient rating of the hospital environment
		Reduces the age of the Healthcare Estate	Percentage of estate less than 50 years old
	HEAT / LDP	N/A	
3	Project Specific	All other local and national measurement for quality improvement and performance management.	To be locally developed by the NHS Board

Safe

General Definition	Improves safety in the healthcare environment - building on the Scottish Patient Safety Programme in Acute Care, Primary Care, Maternity Services, Paediatrics and Mental Health Care.		
	Indicator	Potential Measure:	
1	QOIs	Reduces Healthcare Associated Infection	Percentage prevalence in acute hospitals
		Reduces adverse harmful events	TBC
		Reduces Hospital Standardised Mortality ratio	Rate per 100,000 for people aged under 75 in Scotland
		Increases safety of people receiving care and support	Percentage of adults supported at home who agree they felt safe
2	SAFR	Improves statutory compliance	Overall percentage compliance score from SCART
		Reduces backlog maintenance	Reduction in backlog maintenance costs
		Reduces significant and high risk backlog maintenance	Significant & high risk backlog as percentage of total backlog
	HEAT / LDP	Reduces C.Difficile Infections	Number of cases per 1,000 acute occupied bed days
		Reduces MRSA/MSSA Infections	Number of cases per 1,000 acute occupied bed days
3	Project Specific	All other local and national measurement for quality improvement and performance management.	To be locally developed by the NHS Board

Effective Quality of Care

General Definition	Improves the effective Quality of Care particularly focused on increasing the role of primary care, integrating health and social care, improving the delivery of unscheduled and emergency care, and improving the current approach to supporting and treating people who have multiple and chronic illnesses		
Indicator	Potential Measure:		
1	QOIs	Improves end of life care to be as comfortable as possible in a homely environment	Percentage of people who spend last 12 months of life at home or in a community setting
		Reduces emergency admissions to hospital	Rate of emergency admissions per 100,000 population
		Reduces readmissions	TBC
		Ensures timely discharge from hospital	TBC
2	SAFR	Improves the Functional Suitability of the Healthcare Estate	Proportion of estate categorised as either A or B for the Functional Suitability appraisal facet
	HEAT / LDP	Supports newly diagnosed Dementia patients with access to the range of post-diagnostic services	Proportion of dementia patients given access to post-diagnostic services
		Reduces the rate of emergency inpatient bed days for people aged 75	Patients aged 75+ per 1,000 population –as a proportion of acute occupied emergency bed days
		Avoids people waiting more than 14 days to be discharged from hospital into a more appropriate care setting, once treatment is complete	Number of discharges that took more than 14 days
		Reduces the rate of attendance at A&E	Number of unplanned A&E attendances per 100,000 population
		Enables eligible patients commencing IVF treatment within 12 months	TBC

	Enables delivery of 18 weeks referral for treatment for Psychological Therapies.	TBC	
	Enables delivery of 18 weeks referral for treatment for specialist Child and Adolescent Mental Health Services (CAMHS) services	Percentage of people who start treatment at CAMH services in Scotland within 18 weeks of referral	
	Supports 95% of patients waiting less than 4 hours from arrival to admission, discharge or transfer for accident and emergency treatment	Percentage of people waiting less than 4 hours at A&E	
3	Project Specific	All other local and national measurement for quality improvement and performance management.	To be locally developed by the NHS Board

Health of Population

General Definition		Improves health of the population particularly focused on the importance of Early Years, reducing Health Inequalities, and preventative measures on alcohol, tobacco, dental health, physical activity and early detection of cancer	
		Indicator	Potential Measure:
1	QOIs	Supports reduction of premature mortality	Death rate among those aged under 75 per 100,000 population
		Supports increase in the number of babies born with a Healthy birth-weight	Percentage of babies born at a healthy birthweight
	SAFR	N/a	N/a
2	HEAT / LDP	Supports early cancer detection	Percentage of breast, colorectal and lung cancer cases (combined) diagnosed at stage 1
		Supports smoking cessation initiatives (12 weeks post quit)	Number of successful quits at 12 weeks post quit in the 40% most deprived within Board SIMD areas
		Supports antenatal access	Percentage of pregnant women in each SIMD quintile who will have booked for antenatal care by the 12 th week of gestation
		Supports suicide reduction initiatives	Suicide rate per 100,000
		Supports SIMD child fluoride varnishing initiatives	Percentage of 3 & 4 year old children in each Scottish Index of Multiple Deprivation (SIMD) quintile to receive at least two applications of fluoride varnish (FV) per year
		Supports child healthy weight interventions	Number of interventions delivered
3	Project Specific	All other local and national measurement for quality improvement and performance management.	To be locally developed by the NHS Board

Value & Sustainability

General Definition	<p>Supports implementation of the 2020 Workforce Vision through modernisation, leadership and management.</p> <p>Introduces investment in new innovations to increase quality of care and reduce costs.</p> <p>Increases efficiency and productivity through unified approaches, local solutions and decision making.</p>		
Indicator		Potential Measure:	
1	QOIs	Increases level of staff engagement	Percentage of staff who they say they would recommend their workplace as a good place to work
		Optimises resource usage	Cost of delayed discharge
	Cost of end of life care in acute hospital		
	Cost of emergency admissions		
2	SAFR	Improves accommodation space utilisation	Proportion of estate categorised as 'Fully Used' for the Space Utilisation appraisal facet
		Optimises overall running cost of buildings	Total occupancy cost of building
		Optimises cleaning costs	Cleaning cost £ per sq.m.
		Optimises property maintenance costs	Property maintenance cost £ per sq.m.
		Optimises PPP Facilities management costs	PPP Facilities management cost £ per sq.m.
		Optimises energy usage costs	Energy cost £ per sq.m.
		Optimises rent or rates costs	Rent or rates £ per sq.m.
		Optimises catering costs	Catering cost £ per consumer week or sq.m.
		Optimises portering costs	Portering cost £ per consumer week or sq.m.
		Optimises laundry costs	Laundry cost £ per consumer week or sq.m.
		Optimises waste costs	Waste cost £ per consumer week or sq.m.
		Reduces financial burden of backlog maintenance and/or	Backlog maintenance cost

	future lifecycle replacement expenditure	Facilities Condition Index (FCI)
	Improves design quality in support of increased quality of care and value for money	AEDET score
HEAT / LDP	Improves financial performance	Recurring revenue budgets
	Reduces carbon emissions and/or energy consumption	Percentage reduction in CO2 emissions
		Percentage reduction in energy consumption
3 Project Specific	All other local and national measurement for quality improvement and performance management.	To be locally developed by the NHS Board

PROJECT:

What are the Current Arrangements:

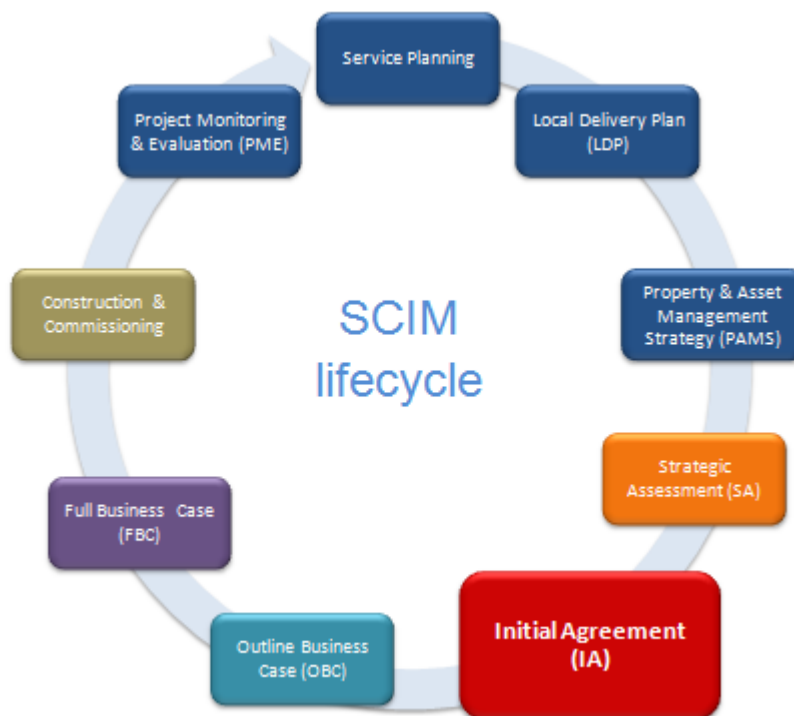
What is the need for change?	What benefits will be gained from addressing these needs?	How do these benefits link to NHSScotland's Strategic Investment Priorities?	What solution is being considered														
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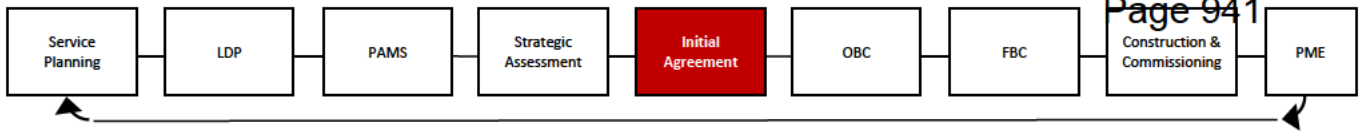
PROJECT:

What are business needs for change?	What measurable benefits will result from resolving the business need?	How do these benefits link to NHSScotland's Strategic Priorities?	What choices are being considered to deliver these benefits?	
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SCOTTISH CAPITAL INVESTMENT MANUAL

Initial Agreement



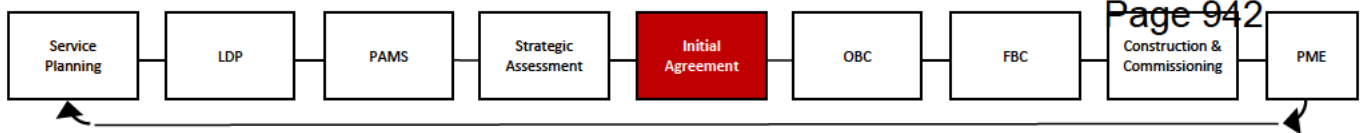


1 Overview

1.1 Purpose

The main purpose of the Initial agreement (IA) is to confirm the need for investment and to demonstrate that the proposal is a good thing to do. It will do this by responding, as appropriate, to the following questions:

Initial Agreement (IA)		
	Question	Response
Executive Summary	What is the proposal about?	Prepare Executive Summary of responses to the following questions:
Strategic Case	What are the current arrangements?	Outline existing: <ul style="list-style-type: none"> • Service details • Service arrangements • Service providers • Associated buildings & assets
	Why is this proposal a good thing to do?	Outline: <ul style="list-style-type: none"> • Need for change • Investment objectives • Benefits register • Risk management strategy
Economic Case	What is the preferred strategic / service solution?	Confirm: <ul style="list-style-type: none"> • Stakeholder involvement • The Do Nothing / Minimum option • Service change proposals • Indicative costs • Assessment of proposed solutions • Preferred strategic / service solution • Design Quality objectives
Commercial, Financial & Management Cases	Is the organisation ready to proceed with the proposal?	Confirm: <ul style="list-style-type: none"> • Procurement strategy & timetable • Affordability & financial consequences • Governance & project management arrangements
Conclusion	Is this proposal still important?	Update: <ul style="list-style-type: none"> • Strategic Assessment



1.2 Service Planning expectations

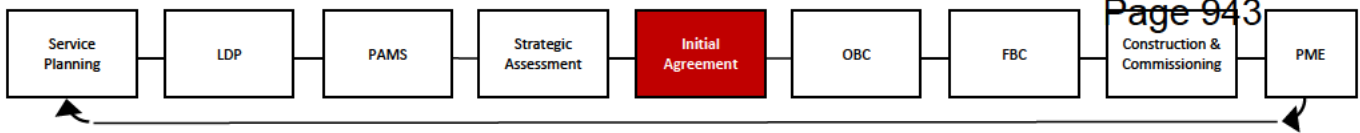
Many capital investment projects are associated with changes in the model of service care delivery, hence in such situations it is expected that any service planning necessary to support such changes has already been carried out, and that NHS Boards have sought and followed the advice from the Scottish Health Council on the level of public and stakeholder engagement expected both prior to and beyond this stage. Where this has not taken place, or there is uncertainty over the validity of any engagement exercises carried out so far, the Scottish Health Council and/or the Board's performance management representative from Scottish Government should be consulted on these requirements prior to further development of the Initial Agreement.

1.3 Guidance on drafting the Initial Agreement

The effort required in preparing the Initial Agreement should be proportionate to the size and complexity of the project. A common sense approach is thus expected on the level of detailed to be provided and advice can be gained from Scottish Government where there may be uncertainty over this matter.

Also, within this guidance there are several examples and tables provided to indicate an expected response; these are intended as drafting aids to summarise a response, which in most cases will require a more detail narrative explanation to support any conclusions contained within such tables.

It is further advised that, as part of the preparation of the Initial Agreement document, each of the proceeding headings in this guidance is used to form a template from which a comprehensive Initial Agreement can be prepared.



2 What is the proposal about?

	Question	Response
Executive Summary	What is the proposal about?	Prepare Executive Summary of responses to the main IA questions.

The intention of this section is to provide a short executive statement against each of the questions raised in Section 1: Purpose. It will provide an Executive Summary of the proposal which can thus only be completed once all other parts of the Initial Agreement have been completed. It should confirm the need for investment, demonstrate that it is a good thing to do, and identify the strategic / service solutions to be taken forward to OBC stage.

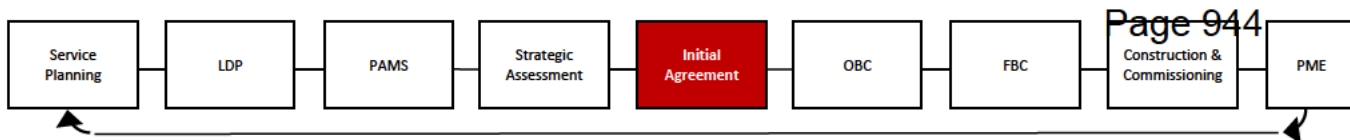
3 What are the Current Arrangements?

	Question	Response
Strategic Case	What are the current arrangements?	Outline current: <ul style="list-style-type: none"> • Service details • Service arrangements • Service providers • Associated buildings & assets

The intention of this section is to provide details of the current arrangements which will help set out the basis of the 'Do Nothing' option. Illustrative diagrams, maps, photographs, etc., are all useful and recommended aids for illustrating these current arrangements.

This section should cover the following information, as relevant:

- A description of the existing service / activity provision including information, where relevant, on:
 - The services or activities affected by this proposal.
 - The location of these services / activities (including GIS mapping)

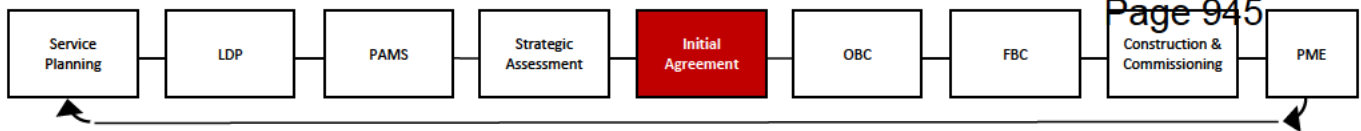


information or departmental relationship diagrams, as appropriate).

- The location of service users and associated catchment areas.
 - The functional size of the service or activity e.g. numbers of theatres, beds etc.
- Information on existing service arrangements, including quantifiable information where relevant, on:
 - Care pathways, patterns of working, service models, etc.
 - Existing service capacity and current utilisation of this capacity.
 - Service performance data, with reference to national or local key performance indicators.
 - Existing service demand and/or supply throughput.
 - A description of each service provider / organisation affected by this proposal and/or any particular workforce arrangements (and potential implications from this proposal).
 - A description of the condition and performance (as identified in the Board's PAMS) of existing assets affected by this proposal; covering issues such as condition, safety, backlog maintenance, functional suitability, space utilisation, etc. Each appropriate asset type will need to be addressed i.e. existing properties, IM&T infrastructure, key medical equipment, and fleet & transport arrangements.
Property assets will also be expected to use a multi-stakeholder AEDET review of existing facilities to describe their limitations.

Confirmation is also needed (with supporting evidence) that the current services are still needed, that they still need to be provided in this way, and as to whether things might get worse if nothing is done about these arrangements.

This information will also set the baseline data for the Benefits Realisation plan.



4 Why is this proposal a good thing to do?

	Question	Response
Strategic Context	Why is this proposal a good thing to do?	Outline: <ul style="list-style-type: none"> • Need for change • Investment objectives • Benefits register • Risk management strategy

The main intention of this section is to identify the need for change and then demonstrate that the benefits to be gained from addressing this need are sufficiently worthwhile to proceed.

The Strategic Assessment will have already made statements on the need for change and some of the benefits to be gained from this proposal; therefore, this section needs to focus on providing the evidence base behind those statements whilst also identifying all further expected benefits associated with this proposal. It will thus follow a similar question set as the Strategic Assessment, i.e.:

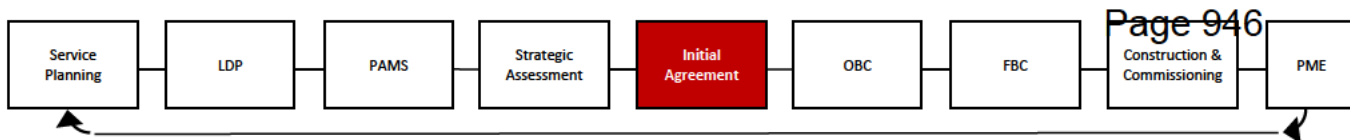
- What is the need for change?
- What is the organisation seeking to achieve?
- What are the benefits & risks to success?

4.1 What is the need for change?

There are various reasons why a need for change can be driving forward an investment proposal; including presenting an opportunity to improve outcomes when compared to existing arrangements, overcoming a problem with the current arrangements, and responding to any other driver for change.

Public and service user feedback / views of the service should also be considered as part of identifying the need for change including, where relevant:

- Collected information of their opinion on the existing arrangements, and



expectations of what they would like to see changed.

- Any safety related matters which they may have concerns over.
- Their preferred access arrangements for the service.

A full description (including demonstrable evidence) of the main things causing the need for change, or likely to do so in the future (e.g. population / age profile changes, etc.) is to be provided here. It should also describe the effect it is having (or likely to have) if nothing is done about it, and an explanation of why action needs to be taken now and through this proposal.

4.1.1 What opportunities for improvement are there?

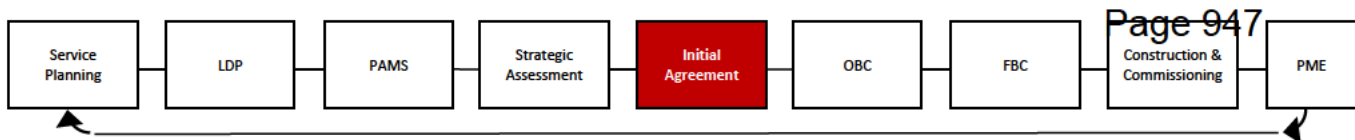
There may be aspects of the current arrangements that present an opportunity to improve on the existing situation. Examples of this type of need for change, which will need to be supported with demonstrable information, might include:

- There may be an opportunity to enhance either the quality of service or asset provision by doing things differently to current arrangements.
- Better and more joined up use of IT, technology, and information sharing may present an opportunity for improvement.
- Invest to save initiatives can present opportunities for efficiency and/or quality savings.
- Taking a place based approach which considers how all public services and assets in a locality might contribute to better outcomes

4.1.2 What are the problems with the current arrangements?

Problems with the current arrangements may form a significant part of the need for change. Typical examples, which would need to be supported with demonstrable information, may include:

- Existing capacity is unable to cope with current or future projected demand for the same services.
- Existing service arrangements are inefficient, or result in poor service



access issues.

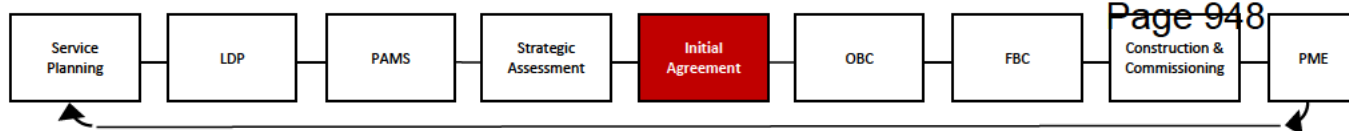
- Poor service performance (demonstrated through performance benchmarking and performance KPI's etc).
- Service standards do not meet user expectations or requirements.
- Accommodation is functionally inadequate for modern service delivery.
- Unsatisfactorily levels of physical condition and/or backlog maintenance of property assets.

4.1.3 What other drivers for change are there?

The response to this question shall summarise any other factors which may be influencing this proposal and driving the need for change, such as:

- The impact of national strategies such as NHSScotland's Quality Strategy, the 2020 Vision for Health and Social Care, the National Clinical Strategy for Scotland, and/or any other national strategy driving the need for change.
- The impact of a NHS Board's clinical or service strategies on the need for change and investment.
- The impact of a NHS Board's operational strategies; such as its strategic vision, corporate plan, LDP, PAMS, eHealth strategy, etc.
- Any further policy, economic, or legislative changes.
- Demand for a new requirement.
- Social / demographic changes to the population.
- Joint locality strategies with other public sector organisations.

The above examples should only be referenced if they have a key influence on this proposal and can be supported with evidence of the impact, benefits and/or opportunities it is likely to offer.



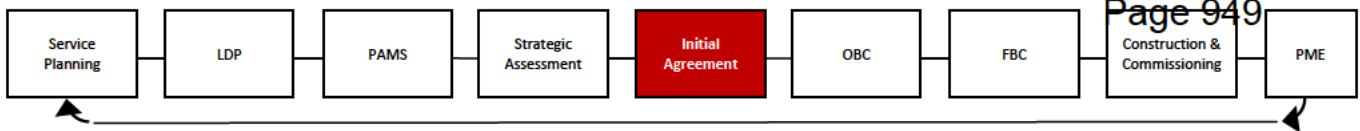
Referencing of policy, strategy or other publicly available documents only needs a short description of a sentence or two to describe its impact; with a hyper-link provided to the relevant section of these strategies for further information.

4.1.4 Summarising the Need for Change

The preceding sections will have provided the detailed narrative in support of the demonstrable cause and effect of the need for change and investment. It may be helpful to then summarise this information in a table format; an example of which is provided below:

What is the cause of the need for change?	What effect is it having, or likely to have, on the organisation?	Why action now:
<i>Future service demand</i>	<i>Existing capacity is unable to cope with future projections of demand</i>	<i>Service sustainability will be at risk if this proposal isn't implemented now</i>
<i>Dispersed service locations</i>	<i>Existing service arrangements affect service access and travel arrangements</i>	<i>Service access is currently inequitable for this locality when compared with other catchment areas</i>
<i>Ineffective service arrangements</i>	<i>Inefficient service performance</i>	<i>Continuation of the existing service performance is unsustainable</i>
<i>Service arrangements not person centred</i>	<i>Service is not meeting current or future user requirements</i>	<i>A service that isn't meeting user requirements is unsustainable, even in the short term</i>
<i>Accommodation with high levels of unsatisfactory physical condition / backlog maintenance.</i>	<i>Increased safety risk from outstanding maintenance and inefficient service performance</i>	<i>Building condition, performance and associated risks will continue to deteriorate if action isn't taken now</i>

Note: the words in italics in the above table are examples only of what might be presented.



4.2 What is the organisation seeking to achieve?

Once the need for change has been identified, then the next step is to identify what can be achieved to address this need, or needs. At this stage it is not aimed at identifying the potential solution but more identifying what needs to be achieved to deliver the necessary change i.e. the investment objectives.

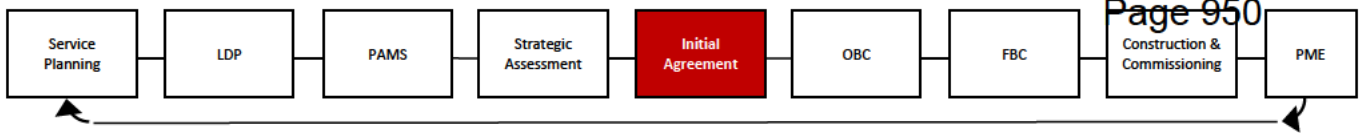
4.2.1 Investment Objectives

A useful technique for developing a proposal's investment objectives is to identify what has to be achieved to deliver the necessary change for the organisation. The following table provides a summary example of how this can be developed:

Effect of the need for change on the organisation:	What has to be achieved to deliver the necessary change? (Investment Objectives)
<i>Existing capacity is unable to cope with future projections of demand</i>	<i>Improve service capacity</i>
<i>Existing service arrangements affect service access and travel arrangements</i>	<i>Improve service access</i>
<i>Inefficient service performance</i>	<i>Improve service performance</i>
<i>Service is not meeting current or future user requirements</i>	<i>Meet user requirements for service</i>
<i>Increased safety risk from outstanding maintenance and inefficient service performance</i>	<i>Improve safety and effectiveness of supporting accommodation</i>

Each of the identified investment objectives needs to be further described in full to explain how this is likely to be achieved and this begins to envisage what the future state might look like. It is therefore important that these investment objectives are necessary and specific.

Also, whilst there is no restriction on the number of investment objectives, five or less is recommended to make further analysis manageable and focussed on the vital ones.



4.3 What are the benefits and risks to success?

A successful outcome for a project will be to deliver each of its objectives to demonstrably realise the desired benefits. In order to achieve this, all benefits, priorities, risks, and other issues need to be identified early in the proposal's development so that they can be better managed, monitored and evaluated throughout its delivery.

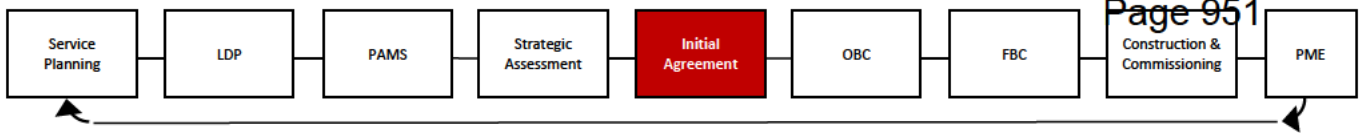
4.3.1 What benefits are to be gained from this proposal?

The rationale for an investment should also be reflected in the potential benefits to be gained from that investment. This provides both the evidence base that a proposal is worthwhile and that it presents value for money. They need to be comprehensive to avoid under-statement of the proposal's impact, whilst being mutually exclusive to avoid double-counting that impact.

A Benefits Register is therefore needed to record all the main benefits that are expected to flow from addressing the need for change. It is expected to cover the following types of benefits:

- Those which meet public expectations for the service.
- All benefits associated with addressing the need for change.
- Indicators which help to demonstrate the national, regional and local importance of this proposal.
- Wider social, environmental and economic benefits.
- Expected reduction in backlog maintenance for property based investment proposals.
- Those which support national outcomes.

A separate SCIM guidance document on Benefits Realisation is available and should be referenced to develop a suitable and proportionate Benefits Register for a proposal at Initial Agreement stage (note, a full Benefits Realisation Plan is required at OBC stage).



4.3.2 What risks could undermine the proposal's success?

The emphasis at this stage is to identify the top 20% of risk events which could account for 80% of the total potential risk to the proposal's success.

Risks result from uncertain events that either improve or undermine the realisation of benefits. The main risks that might create, enhance, prevent, degrade, accelerate or delay the achievement of the investment objectives should be identified and analysed in the proposal's risk register.

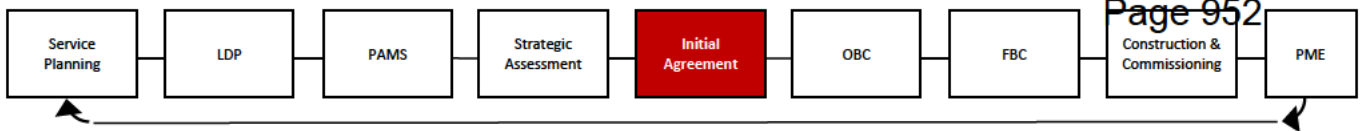
A separate SCIM guidance document on Risk Management is available and should be referenced to develop a suitable and proportionate Risk Register for a proposal at Initial Agreement stage, which includes a series of typical risks that might be relevant to a proposal at Initial Agreement stage.

4.3.3 Are there any constraints or dependencies?

Constraints are limitations on the investment proposal, which can include constraints on available resources. Dependencies are where actions from others are needed to ensure the success of the proposal. A common dependency, when relevant, is the need to acquire land as part of a solution; in this instance, an outline of the process to be followed will be required.

Where the proposal is part of a larger programme then the inter-dependencies of activities should also be outlined.

All constraints and dependencies need to be recorded here and subjected to careful monitoring throughout the proposal's development.



5 What is the preferred strategic / service solution?

	Question	Response
Economic Case	What is the preferred strategic / service solution?	Confirm: <ul style="list-style-type: none"> • The Do Nothing option • Service change proposals • Indicative costs • Assessment of proposed solutions • Preferred strategic / service solution(s) • Design Quality objectives

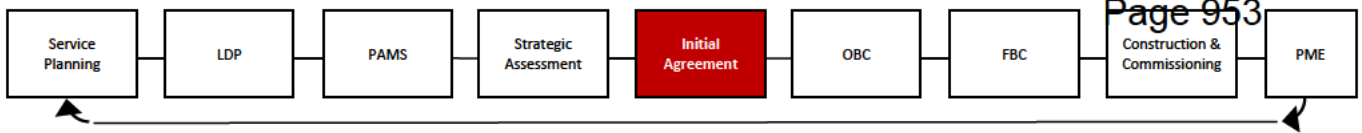
The purpose of the Economic Case at Initial Agreement stage is to identify the preferred strategic or service solutions(s) which are suitable for further assessment at Outline Business Case stage. It will do this by comparing a range of proposed solutions to identify which one(s) best meet the requisite investment objectives.

5.1 The Do Nothing / Minimum option

An assessment of the Do Nothing option will have already been carried out when describing the current arrangements related to this proposal. A summary description of this Do Nothing solution should be presented in the following table:

Strategic Scope of Option:	Do Nothing
Service provision:	
Service arrangements:	
Service provider and workforce arrangements:	
Supporting assets:	
Public & service user expectations:	

In some cases of significant change or service delivery failure some restorative action may need to be assumed to be taken against the Do Nothing solution, which will thus create a 'Do Minimum' solution. Details of any 'Do Minimum' solution will



need to be fully explained, including whether or not this is to replace the Do Nothing solution, and why.

5.2 Service change proposals

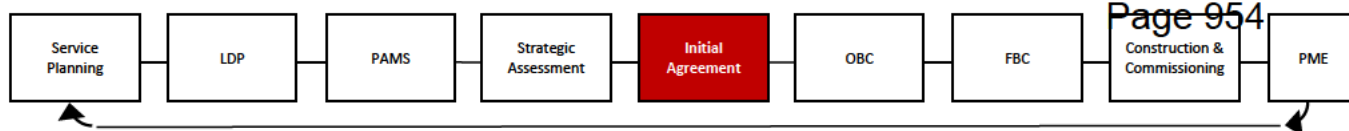
As mentioned at the beginning of this guidance, it is expected that for any service change proposal NHS Boards will have already sought and followed the advice from the Scottish Health Council on the level of public and stakeholder engagement expected in identifying appropriate solutions.

Where this has been appropriately carried out then this section can be used to merely summarise what has already taken place and to outline the outcome of such engagement. Any process already followed is expected to be similar to the proceeding sections of this guidance.

In such cases, this section will be used to outline the following:

- A list of identified stakeholders, a summary of their engagement, and an indication of their support for any proposals; similar to the format outlined in Section 5.3.
- A brief description of the process followed.
- An outline of the decision making process followed, with a link provided to a more detailed report on the process.
- Details of the proposed solution, which shall be described using the table in Section 5.1 alongside the Do Nothing solution.
- An indication of costs, compared with the Do Nothing option, in the format outlined in Section 5.5.
- The development of Design Quality Objectives, in the format outlined in Section 5.7.

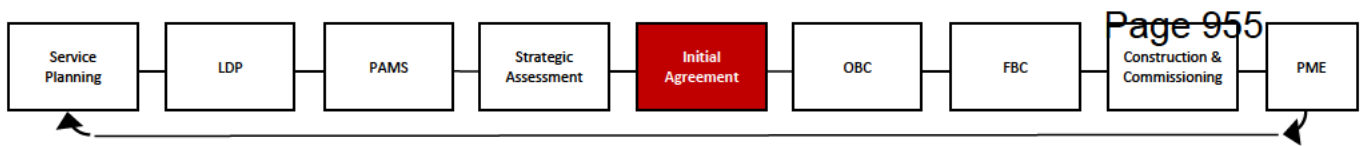
In all other circumstances, each of the following sections will need to be followed. It is also important that the scope of the service change and preferred solution(s) is set out as fully as possible at this stage.



5.3 Engagement with Stakeholders

This section will summarise (from work already undertaken) the range of stakeholders affected by this proposal, provide details of what engagement has taken place, outline any concerns they have expressed, and confirm the level of support for the proposal. The following table is an example of how this information might be summarised:

Stakeholder Group:	Engagement that has taken place	Confirmed support for the proposal
Patients / service users	<i>Patients and service users affected by this proposal include [list]. Their involvement in its development includes [list]. The impact that this has had on the proposal's development includes [outline].</i>	<i>Patient / service user groups were consulted on the final version of this Initial Agreement by [method], on [date]. Their feedback was [outline] which has been incorporated into this proposal by [outline any direct changes].</i>
General public	<i>The general public will be affected by this proposal by [outline]. This has thus required / not required a range of public consultation events, including [list where relevant]</i>	<i>Outcomes from the public consultation events have influenced this proposal by [outline]. This is demonstrated in the proposal by [outline]. The level of support from the general public for this proposal is [describe details of support and any objections].</i>
Staff / Resources	<i>Staff affected by this proposal include [list]. Their involvement in its development includes [list]. Other resources affected by this proposal includes [list any], and the impact it is likely to have on them is [outline].</i>	<i>Staff representatives were consulted on the final version of this Initial Agreement by [method], on [date]. Their feedback was [outline] which has been incorporated into this proposal by [outline any direct changes].</i>
Other key stakeholders and partners	<i>Other key stakeholders identified for this proposal includes [list]. Their involvement in the development of this proposal includes [outline].</i>	<i>Confirmed support for this proposal has been gained through [how].</i>



Note: the words in italics in the above table are indicative of expected responses; however, details may be changed to suit the specific circumstances of the proposal being developed.

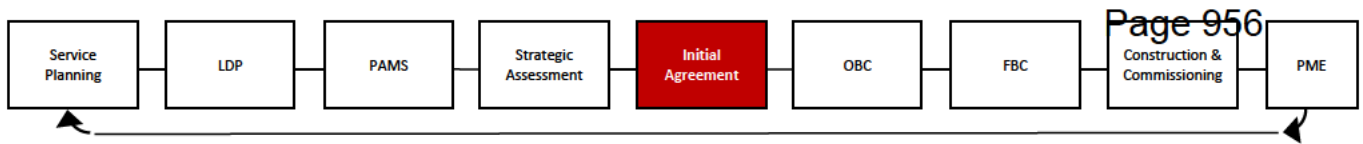
5.4 Developing a long list of proposed solutions

A range of solutions will need to be considered which test and challenge assumptions on a proposal's scope and content. Each solution should present a real step change in the presumed scope by considering the following questions when coming up with a long list of possibilities:

- Can changes to the assumed functional size of service / activity provide different outcomes and/or benefits?
- Could changes to the presumed service activity, catchment area, or assumed demand, affect the proposed solution?
- Would changes to the scope of assumed outcomes change the proposed solution; ranging between delivering do minimum outcomes, essential future outcomes, and desirable or aspirational outcomes?
- Would changes to the arrangement and/or strategic location of services change the way in which services are provided?
- Could the service / activity be delivered differently whilst still meeting the investment objectives?
- Can alternative solutions be developed which deliver longer term sustainable benefits in health, social, community and environmental terms?
- Could a collaborative one public sector approach contribute to the solution with shared benefits?

Those possibilities which are unrealistic or unachievable should then be discounted. For example, solutions should not be taken forward which:

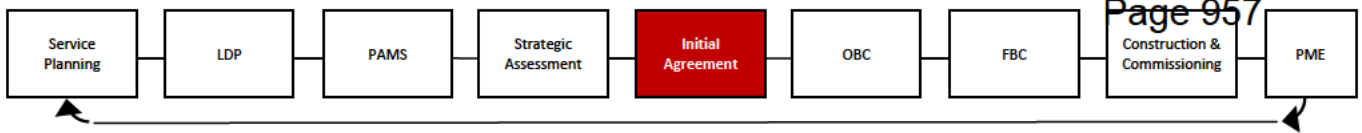
- Will not deliver the proposal's investment objectives.



- Do not fit with NHSScotland's strategic investment priorities or policy agenda.
- Do not fit with the Board's own strategic objectives and plans.
- Would be undeliverable by service providers.
- Are clearly unlikely to be affordable.

Each proposed solution will be described in its fullest using the following criteria:

- A description of the proposed service / activity provision including information, where relevant, on:
 - The services or activities to be delivered by this solution.
 - The proposed location of the services / activities, including GIS mapping information or departmental relationship diagrams, as appropriate. This should make clear any changes from existing arrangements.
 - Any changes to the expected location of service users and associated catchment areas.
 - The proposed functional size of the service or activity e.g. numbers of theatres, beds etc.
- Quantifiable information on the proposed service arrangements, including information, where relevant, on:
 - Care pathways, patterns of working, service models, etc.
 - Improved service performance measured through supporting KPI's.
 - Proposed service capacity and planned utilisation.
 - Proposed or expected service demand and/or supply throughput. Sensitivity testing of any assumptions may be required to demonstrate the robustness of the proposed solution.

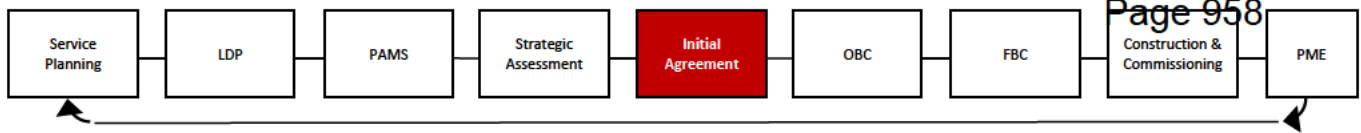


- A description of any changes to, or impact on, service providers affected by the proposal and/or any particular workforce arrangements.
- A description of expected improvements to the condition and performance of existing assets affected by the solution; including, as appropriate, properties, IM&T infrastructure, key medical equipment, and fleet & transport arrangements.
- Information on any expected changes to public and service user expectations from the proposal.

The level of detail provided should be proportionate to the relative merits of the proposal being described. Also, where particular elements within a proposed solution are similar or identical to current arrangements, or to other proposed solutions, then this should be made clear without the need to provide repeating detail across different solutions. For example, for solutions with the same service provide as 'Current Arrangements' then 'as Current Arrangements' is all that is needed as long as this has already been fully described.

Once the details of each proposed solution has been fully described; which may include the use of maps, diagrams, photographs, etc. as helpful descriptive aids, then the following table can be used to summarise each of them:

Strategic Scope of Option:	Proposed Solution 1	Proposed Solution 2	Proposed Solution 3
Service provision:			
Service arrangements:			
Service provider and workforce arrangements:			
Supporting assets:			
Public & service user expectations:			



5.5 Indicative costs

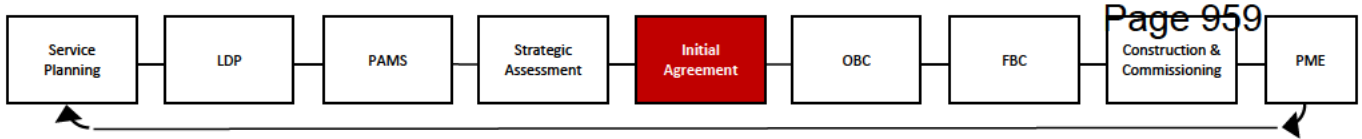
Indicative costs for each of the proposed solutions shall be prepared and added to the table below. They will be used to identify whether each proposal is likely to present value for money and its potential affordability.

Costs in £millions	Do Nothing: As existing arrangements	Proposed Solution 1	Proposed Solution 2	Proposed Solution 3
Capital cost (or equivalent value)				
Whole of life capital costs				
Whole of life operating costs				
Estimated Net Present Value of Costs				

The breakdown of the whole of life capital and revenue based operating costs should, where relevant, cover the similar cost categories used in the Generic Economic Model, and as described in the Option Appraisal Guide i.e.:

- Property & opportunity costs.
- Capital & lifecycle costs.
- Clinical services costs.
- Non-clinical operating costs.
- Building running costs.
- Net contribution / costs.
- Transitional costs.
- Externalities

At this stage indicative costs can be formed from unit rates for similar projects, and/or realistic lump sum costs for individual items of specific costs relevant to a particular solution (note that Scottish Futures Trust hosts a Community



Infrastructure Benchmark Database which may be a useful source of relevant construction cost information).

Details of the assumptions made in determining these costs need to be described. This will include details of the level of optimism bias incorporated into the costs (see Risk Management guide for further details), along with an explanation of how this has been calculated.

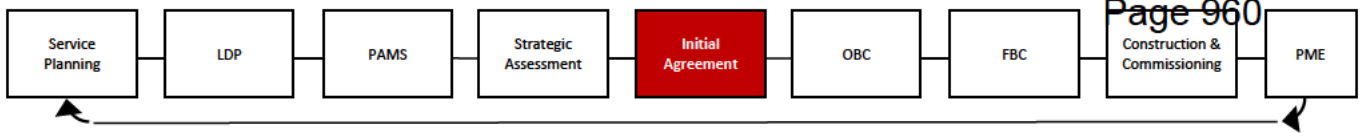
Also, due to the strategic nature of these proposed solutions, indicative costs can be expressed as a range of costs; potentially differing in the level of optimism bias (or other factors) included within them.

5.6 Initial assessment of proposed solutions

Each proposed solution must be assessed for its advantages and disadvantages to determine the preferred solution(s). This will review the advantages of each solution by describing its strengths and opportunities, and its disadvantages by describing its weaknesses and associated threats. This is then used to determine whether the solution fully, partially, or does not (no) meet the project's investment objectives.

A detailed narrative is required to fully explain the advantages and disadvantages of each solution before they can be summarised in an assessment template. A typical format for such a template is outlined in the table over the page, which concludes by expressing whether each solution is preferred, possible, or rejected.

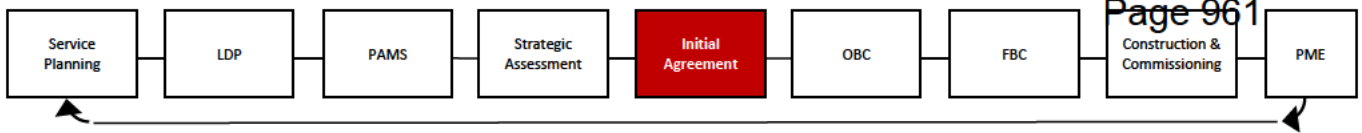
The base case of the 'Do Nothing' (or Do Minimum) option must be included in this assessment as it provides a benchmark for determining the relative value of the other proposed solutions under consideration.



	Do Nothing: As existing arrangements	Proposed Solution 1	Proposed Solution 2	Proposed Solution 3
Advantages (Strengths & Opportunities)				
Disadvantages (Weaknesses & Threats)				
	Does it meet the Investment Objectives (Fully, Partially, No, n/a):			
Investment Objective 1				
Investment Objective 2				
Investment Objective 3				
Investment Objective 4				
Investment Objective 5				
	Are the indicative costs likely to be affordable? (Yes, maybe / unknown, no)			
Affordability				
Preferred / Possible / Rejected				

On the basis of the above, and in consideration of the indicative costs, the preferred strategic / service solution(s) should be declared, along with an explanation of the reasons why. The anticipated outcome is that a single solution is identified; however, where more than one solution meets all of the Investment Objectives and/or there is little to choose between solutions then each one should be declared as preferred.

Each preferred strategic / service solution shall then be taken forward to Outline Business Case stage where the implementation of the solution(s) shall be further developed and tested for value for money.



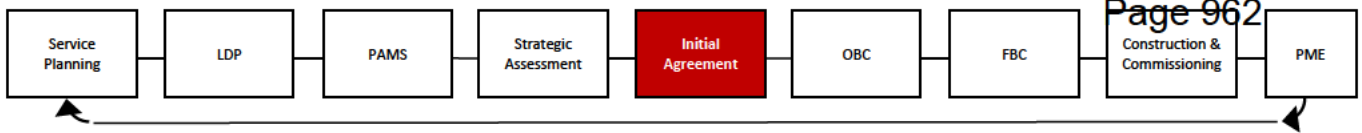
5.7 Design Quality Objectives

For all preferred strategic / service solutions which are likely to need a designed physical solution, separate design objectives shall be developed by taking the following steps:

1. Use the AEDET review of existing property arrangements to set a benchmark score from which change is needed.
2. Carry out a multi-stakeholder AEDET review to identify the main features a new proposal will need to focus on and to set a target score from which design expectations can be measured
3. Develop design objectives that explain what the design needs to achieve to overcome or improve on the existing arrangements.
4. Develop the NDAP design statement.

A summary table from the AEDET process should be provided to demonstrate how the target for improvement has been set against the existing arrangements.

Further guidance information on the NDAP and AEDET requirements during the business case stages is available and should therefore be referenced to understand the full expectations at this stage.



6 Is the organisation ready to proceed with the proposal?

	Question	Response
Commercial, Financial & Management Cases	Is the organisation ready to proceed with the proposal?	Confirm: <ul style="list-style-type: none"> • Procurement strategy & timetable • Affordability & financial consequences • Governance & project management arrangements

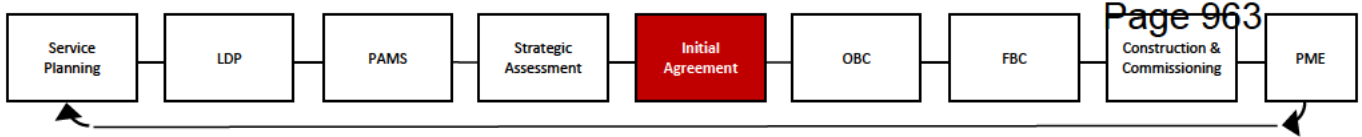
6.1 The Commercial Case

This section will provide a statement of the proposed procurement route likely for the preferred solution(s), along with a timetable covering the key business case stages, design development milestones, main procurement steps and likely implementation period.

6.2 The Financial Case

This section will provide the following information, to be further developed during the Outline Business Case stage:

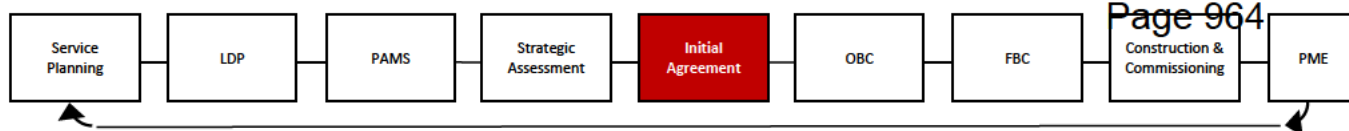
- A statement of the organisation's financial situation in relation to the proposal, including confirmation of its affordability.
- Identification of resources proposed for the project, including their suitability and availability.
- Any capital or revenue constraints on the project.
- Description of any financial contributions to be made by external partners, and the current status of that commitment.



6.3 The Management Case

A benefits register and initial risk register will have already been prepared as part of this Initial Agreement therefore the further information that needs to be provided at this stage includes:

- An organisational diagram demonstrating appropriate governance arrangements in place to take forward the proposed solution(s).
- A summary of how those identified within such a diagram have been involved in the development of the proposed solution(s), along with an indication of their confirmed support for this outcome (the following section provides further advice on expectations).
- Information on the capability of those involved in taking the project forward, from both inside and outside of the organisation.
- A statement of the organisation's readiness to take this project forward, and its commitment to ensure that the necessary resources, including appropriate workforce arrangements, are in place.
- Details of current and planned use of specialist external advisors
- A high level project plan; outlining main activities, timescales, dependencies and other deliverables.
- Details of any further work needed in preparation for developing the Outline Business Case for the proposal. This may include service, organisational and facilities change management plans.

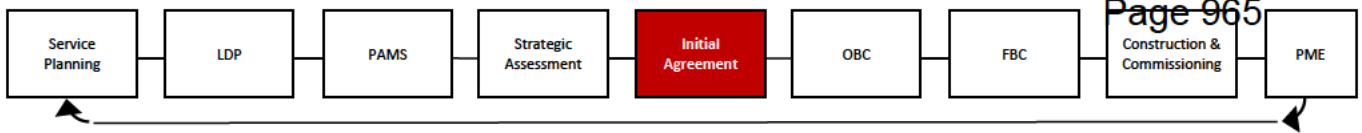


6.3.1 Summary of Governance support for the proposal

The following table is an example of how to set out how members of the proposal's governance arrangements have been involved in its development and continue to support its current outcome(s):

Governance Group:	Engagement that has taken place	Confirmed support for the proposal
Organisation:	<p><i>NHS [Board name] are fully supportive of this proposal, with Director [title & name] taking the lead role in its development.</i></p> <p><i>Any workshops attended by Board members include [who and event attended]</i></p> <p><i>This proposal is also incorporated into the Board's [ref] clinical strategy, [ref] service plan, ref [LDP, and [ref] PAMS. All of which have received NHS [Board name] approval.</i></p>	<p><i>This Initial Agreement was approved by the NHS [Board name] on [date].</i></p>
Service or Department	<p><i>The Service Director(s) involved in this project is/are [list]. Their responsibility and involvement includes [list].</i></p>	<p><i>This Initial Agreement was approved by the service directors at [meeting/event] on [date].</i></p>
Scottish Health Council	<p><i>Scottish Health Council have been informed on [date] of the impact of any proposed service change on patient care</i></p>	<p><i>Scottish Health Council have confirmed via [method of communication] on [date] that they are content with the kind and level of engagement carried out to date, and that it is in line with guidance. Further details on such engagement will be provided later in this IA.</i></p>

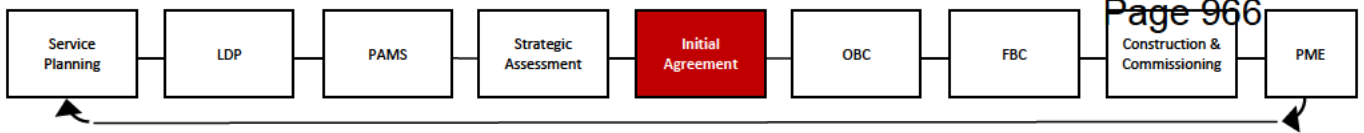
Note: the words in italics in the above table are indicative of expected responses; however, details may be changed to suit the specific circumstances of the proposal being developed. Where other partners are involved the joint arrangements should be included



6.4 Readiness to proceed

The following is a useful checklist to follow once the Initial Agreement has been drafted which will provide comfort that the organisation is ready to submit the document for approval and are ready to proceed to the Outline Business Case stage:

- Is the reason made clear why this proposal needs to be done now?
- Is there a good strategic fit between this proposal, NHSScotland's Strategic Priorities, national policies and the organisation's own strategies?
- Have the main stakeholders been identified and are they supportive of the proposal?
- Is it made clear what constitutes a successful outcome?
- Are realistic plans available for achieving and evaluating the desired outcomes and expected benefits to be gained, including how they are to be monitored?
- Have the main project risks been identified, including appropriate actions taken for mitigating against them?
- Does the project delivery team have the right skills, experience, leadership and capability to achieve success?
- Are appropriate management controls explained?
- Has provision for the financial and other resources required been explained?



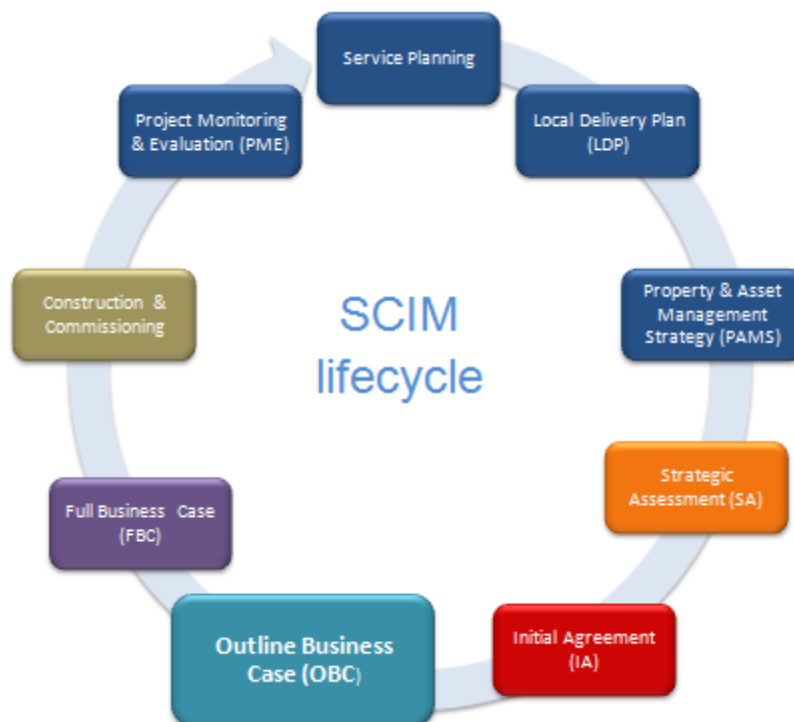
7 Is this proposal still a priority?

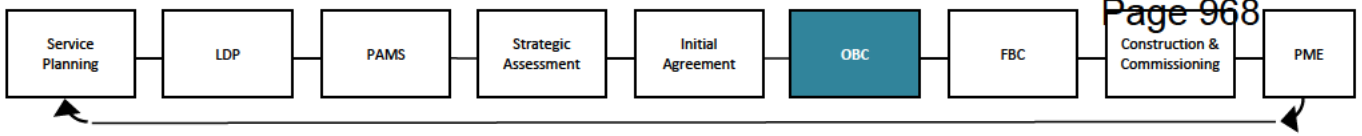
	Question	Response
Conclusion	Is this proposal still important?	Confirm: <ul style="list-style-type: none"> • Strategic Assessment template

This final section shall confirm or update the investment priority scores for the proposal, updated where necessary in light of the evidence base developed as part of this Initial Agreement. An updated Strategic Assessment should therefore be produced where changes are needed, accompanied with details of reasons behind any changes. This will confirm that the proposal remains a priority for the NHS Board and Scottish Government.

SCOTTISH CAPITAL INVESTMENT MANUAL

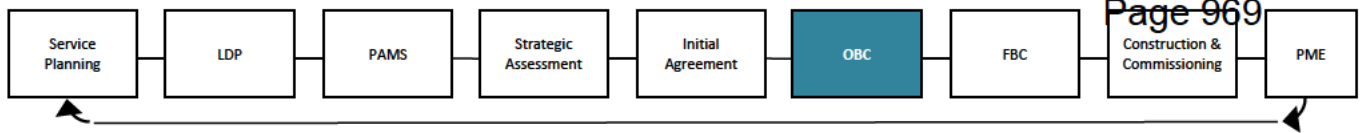
Outline Business Case





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Introduction

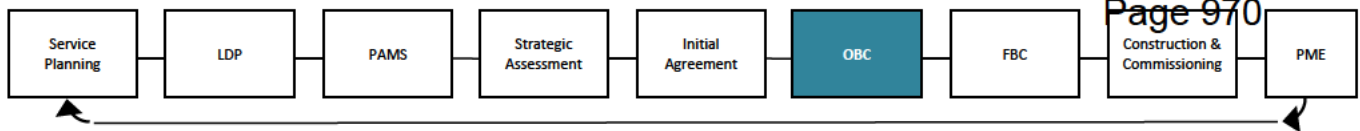
The Scottish Capital Investment Manual (SCIM) provides guidance in a NHS context on the sector-specific processes and techniques to be applied in the development of service, infrastructure and investment programmes and projects within NHSScotland.

The guidance adopts the ‘five case model’ methodology for developing a robust and comprehensive business case, which is centred on the need to address the following issues:

- Does the proposal support a compelling **case for change**; providing national and local strategic synergy? – the Strategic Case.
- Will the proposal optimise **value for money**? – the Economic Case.
- Is the proposal **commercially viable**? – the Commercial Case.
- Is it **financially affordable** – the Financial Case.
- Is it **achievable and deliverable**? - the Management Case.

While each business case stage will need to address each of the above questions, the main focus of attention on these issues is likely to change as a project develops. For example, at Initial Agreement stage attention should be on developing a robust Strategic Case, at OBC stage attention may shift to the Economic Case, and the FBC should confirm proposals initially set out in the OBC for the Commercial, Financial and Management Cases.

The purpose of the **Outline Business Case** is thus to identify the preferred option for implementing the strategic / service solution confirmed at Initial Agreement stage. It will demonstrate that the preferred option optimises value for money and is affordable. It will also set out the supporting commercial and management arrangements to be put in place to successfully implement that option.



STRATEGIC CASE

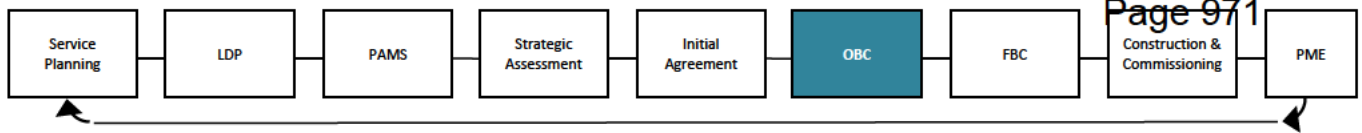
1 Strategic Case: Overview

The main purpose of the Strategic Case at OBC stage is to confirm that the background for selecting the preferred strategic / service solution(s) at Initial Agreement stage has not changed. It will do this by revisiting the Strategic Case set out in the Initial Agreement whilst responding, as appropriate, to the following questions:

Strategic Case (OBC)	
Question	Response
Have the current arrangements changed?	Confirm details on (for example): <ul style="list-style-type: none"> Proposed changes to service model. Service activity changes. Service provider & workforce changes. Impact on Board's assets.
Is the case for change still valid?	Summary confirmation of the: <ul style="list-style-type: none"> Need for change. Investment objectives.
Is the choice of preferred strategic / service solution(s) still valid?	Confirmation of the preferred strategic / service solution(s).

1.1 Introduction to the Outline Business Case (OBC)

The preceding Initial Agreement (IA) for this proposal will have identified and/or confirmed the proposal's strategic / service solution(s), from which this OBC will develop and test the value for money of the implementation options for that solution(s). Typically, this may include options that retain and reuse existing assets, the purchase or construction of new facilities, and/or different phasing of works. It will not involve testing of different procurement methods as these are



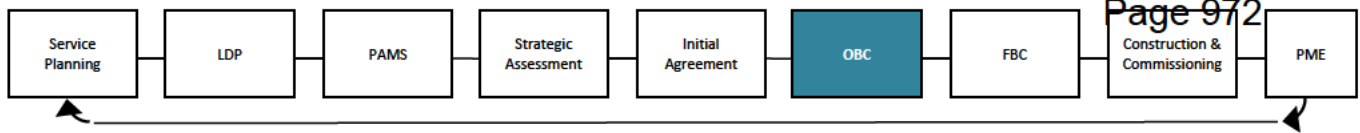
predetermined within NHSScotland based on the value and type of project being considered (further details of this are included in the Commercial Case section).

1.2 Revisiting the Strategic Case

The case for change will need to be reviewed and revised to reflect any changes due to:

- Any conditions made as part of the earlier approval of the Initial Agreement.
- Stakeholders influencing the scope, content, or assumptions behind the proposal following earlier engagement on the Initial Agreement.
- The impact of the time taken between approval of the IA and subsequent commencement of this OBC.
- Further details becoming available to confirm or change some of the early stage assumptions made when describing the case for change.

The intention of the Strategic Case at OBC stage is therefore to provide an update on that described within the Initial Agreement. If no material changes have occurred then this can be stated. The following sections provide further guidance on how to update the Strategic Case for the OBC.



2 Have the current arrangements changed?

	Question	Response
Strategic Context	Have the current arrangements changed?	Confirm details on (for example): <ul style="list-style-type: none"> • Proposed changes to service model. • Service activity changes. • Service provider & workforce changes. • Impact on Board's assets.

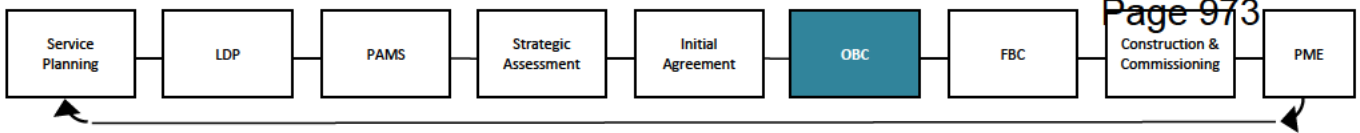
The current arrangements appropriately express details of the 'Do Nothing' solution, which can be used as a benchmark to demonstrate the benefits and value of other solutions. It is therefore important that the description of the current arrangements is kept up to date throughout the business case process.

Completion of this section will be dependent upon the size, complexity, and overall risk associated with the programme or project.

For a relatively straightforward project, the current arrangements may have already been fully explained at IA stage, therefore, only a brief summary of those details and how they are likely to change is required at OBC stage, alongside confirmation that nothing of material importance has changed since the IA.

An update on the design quality objectives still needs to be provided to take account of progress with the design development.

For a more complex project, details of the current arrangements may not have been fully developed at IA stage and therefore needs to be presented at this stage of the business case process. Typically, this may include more details of the existing and proposed service model, service activity levels, and the expected impact on the NHS Board's assets, (this may include an update on the design quality objectives - see the NDAP and AEDET guidance for further details).



3 Is the case for change still valid?

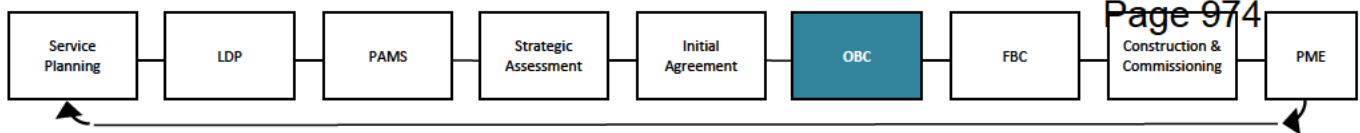
	Question	Response
Strategic Context	Is the case for change still valid?	Summary confirmation of the: <ul style="list-style-type: none"> • Need for change. • Investment objectives.

The case for change and reasons why this proposal is a good thing to do should have been fully developed and described at Initial Agreement stage; therefore, this section is aimed at confirming the current status of these details.

A short summary, taken from the IA, is to be provided of the problems needing to be addressed, the opportunities for improvement, and any other factor influencing this proposal and driving the need for change. The proposal’s Investment Objectives describing what needs to be achieved to deliver the necessary changes should also be described

Commentary is then needed on whether or not any material change has occurred which change these drivers for change or subsequent investment objectives (including details of how).

The benefits and risks to success previously described in this section of the Initial Agreement will need to be further developed as part of the Management Case for the OBC.



4 Is the choice of preferred strategic solution still valid?

	Question	Response
Strategic Context	Is the choice of preferred strategic solution(s) still valid?	Confirmation of the preferred strategic / service solution(s).

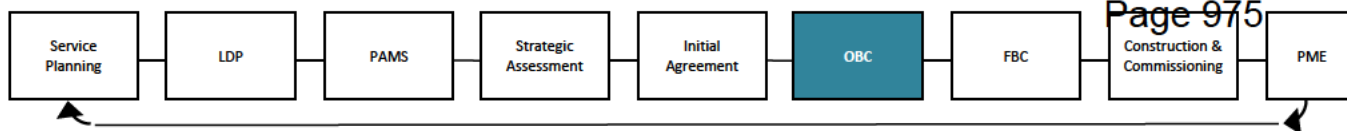
The purpose of this section is to identify whether any changes to the Strategic Case have the potential to change the recommendation of the preferred strategic / service solution(s).

For example:

- Has the solution become impractical or unfeasible to achieve?
- Is the solution now unlikely to deliver sufficient benefits to justify the investment, noting the aim to improve value for money?
- Is it possible that the preferred solution may have become inferior to another proposed solution, particularly due to significantly greater costs or lower benefits?
- Has the proposal become clearly unaffordable or too risky to proceed?

Such changes may not necessarily need a resubmission of the Initial Agreement if they can be fully described and addressed in this section of the OBC to reconfirm the suitability of the preferred strategic / service solution.

A statement is therefore needed which either confirms that any changes since the IA do not materially change its outcome, or, that the selection process is to be repeated to confirm the outcome; with updated details provided of the process followed and conclusions made.



ECONOMIC CASE

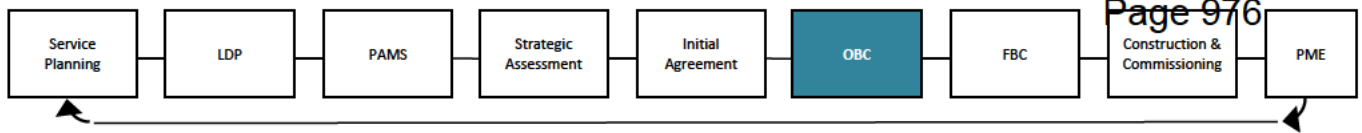
5 Economic Case: Overview

The purpose of the Economic Case is to undertake a detailed analysis of the costs, benefits and risks of a short list of options, including a do nothing and/or do minimum option, for implementing the preferred strategic / service solution(s) identified within the Initial Agreement.

The objective is to demonstrate the relative value for money of the chosen option in delivering the required outcomes and services. This analysis includes the following steps:

Economic Appraisal	
Key Steps	Guidance and Resources
Identify a short-list of implementation options	<ul style="list-style-type: none"> Section 6 of this OBC guide
Identify and quantify monetary costs and benefits of options	<ul style="list-style-type: none"> Section 7 of this OBC guide. Section 3 of Option Appraisal Guidance
Estimate non-monetary costs and benefits	<ul style="list-style-type: none"> Section 8 of this OBC guide Section 4 of Option Appraisal Guidance Appendix 2 of Option Appraisal Guidance
Calculate Net Present Value of options	<ul style="list-style-type: none"> Section 9 of this OBC guide Section 5 of Option Appraisal Guidance Generic Economic Model (see SCIM website)
Present appraisal results	<ul style="list-style-type: none"> Sections 10 & 11 of this OBC guide Section 6 of Option Appraisal Guidance

The following pages provide a high-level introduction to the above steps, with the SCIM Option Appraisal Guide providing a more detailed primary guide on

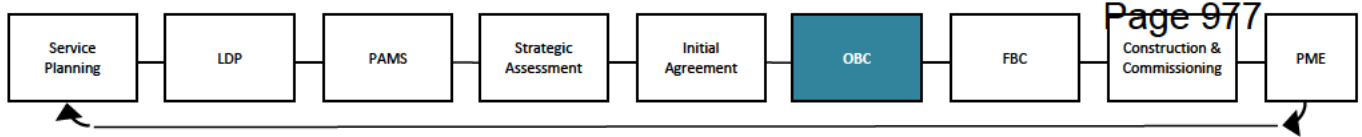


Appraisal for NHSScotland. Further reading can also be found in the *HM Treasury Green Book*.

As an Economic Appraisal uses up resources, the effort that should go into it and the detail to be considered should be in proportion to the scale or importance of the objectives and resource consequences. Particular weight should be given to the TOTAL PUBLIC FUNDS involved since it is for these that public bodies are primarily accountable to the taxpayer.

It is also important that the appraisal is *appropriate* i.e. that the correct methodology is used and tailored to suit the case in hand as there are variations in how appraisal should apply in different spending areas. Small scale decisions may not require as detailed an appraisal or evaluation as larger scale decisions. Judging this can be a matter of experience and SGHSCD economists should be consulted where there is any doubt.

Also, at the early stages of appraisal there is a potential for confusion to arise between what should be included in the Economic Case with what is included in the Financial Case. Economic appraisals focus on value for money analysis whereas Financial appraisals should focus on affordability – this is outlined in the Financial Case section and further explained in Appendix 1 of the Option Appraisal Guide ‘Comparison of Economic and Commercial Appraisal’.



6 Identify a short-list of implementation options

The Economic Case at OBC stage will seek to confirm the value for money of the option for implementing the preferred strategic / service option(s) identified at Initial Agreement stage.

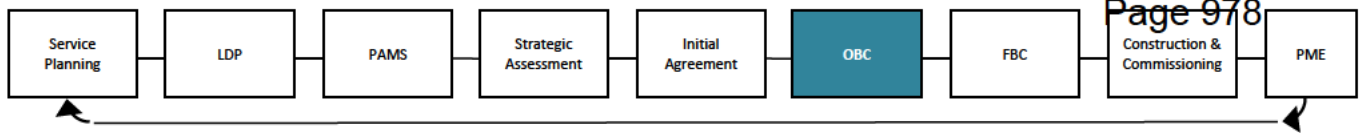
6.1 Develop a short-list of implementation options

A full range of practical implementation options will need to be identified and tested as part of the Economic Appraisal, which will be based on variations to the way in which each preferred strategic / service solution(s) can be implemented. This will include a Do Nothing (and/or Do Minimum) option associated with the existing arrangements considered at IA stage.

For construction related projects, implementation options may include variations on some or all of the following:

- The ability to use the retained estate, and in different ways e.g. different refurbishment and reconfiguration options.
- Different design solutions for new build solutions (where the differences are significant).
- The availability of different sites.
- The potential to phase the works in different ways to overcome site or service constraints.

A summary will be required of how a short-list of practical implementation options has been selected from a potential long list of possibilities. It is possible, particularly for more complex projects, that a more robust decision making process towards short-listing will need to be followed and explained. For example, a site feasibility option appraisal exercise may need to be carried out to confirm the preferred site prior to including this outcome within the scope of other implementation options.



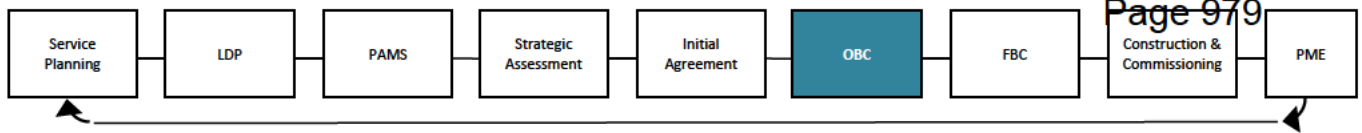
7 Identify and quantify monetary costs and benefits of options

Section 3 of the SCIM Option Appraisal Guidance provides more information on the principles behind the application of monetary costs and benefits within the Economic Appraisal, including details on:

- The relevant costs and benefits.
- Principles of cost measurement.
- Total versus incremental costs.
- Treatment of taxes and subsidies.
- Treatment of transfer payments.
- Estimating the value of benefits.
- Cost savings, efficiency improvements and redundancies.
- Adjusting for displacement.
- Multiplier effects.
- Appraisal of land, buildings and other assets.
- The acquisition and disposal of assets.

The following list provides a checklist of typical capital and revenue costs to be considered as part of the Economic Appraisal, which follows the cost headings found in the Generic Economic Model (GEM model):

1. **Opportunity costs** reflect the value of an asset when used in its best alternative activity and is based on up-to-date market valuations of capital assets which are already in ownership, such as land, buildings, equipment and vehicles.

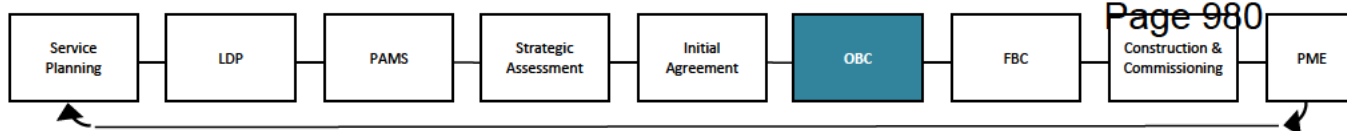


2. **Initial capital costs** are those incurred in order to implement the development, such as:

- purchases of land and buildings, including accommodation for staff, computers, equipment, communications, furniture and vehicles;
- purchases of equipment, vehicles, hardware and software;
- installation and implementation costs;
- development costs including staff costs and consultancy fees;
- testing;
- training;
- infrastructure and works services; and
- initial security and contingency costs.

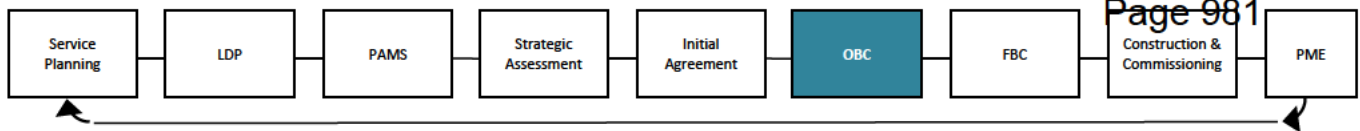
For building projects, the total construction cost should be supported with a full elemental breakdown in the form of a Construction Cost Plan (see the Project Monitoring & Service Benefits Evaluation guide for further details). Also, comparative costs are available from the Value for Money Scorecard and the Community Infrastructure Benchmark Database hosted by Scottish Futures Trust.

3. **Lifecycle replacement costs** are those required to replace individual elements of an asset during the appraisal period which have reached the end of their intended life and will no longer maintain the asset in good / reasonable condition. This may be needed in respect of any of the capital assets employed on the project.
4. **Transition period capital costs** are those which are incurred in order to maintain an existing asset in an appropriate condition until the new asset is available.
5. **Costs of 'embedded accommodation'**, refers to the accommodation impact of changes in NHS facilities on an external organisation. It would



include, for example, when a NHS Board plans significant change to its accommodation which contains embedded, or enclosed, accommodation of another organisation. The accommodation impact of the NHS Board's proposal on the other organisation will need to be included in the Economic Appraisal. Such public sector organisations may include the Local Authority, University, or voluntary / charity sectors.

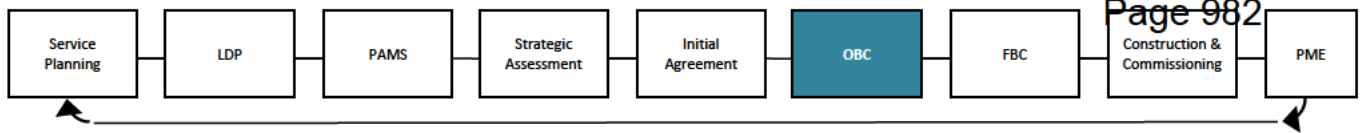
6. **Clinical and non-clinical service costs (and savings)** describe the operating costs of a service or scheme. These shall consider the cost implications of anticipated levels and mix of future activity, the different way in which the service will be delivered in the future, and the revenue implications of the key differences across the shortlisted options. Staff costs will not only include salary costs but also the costs of accommodation, superannuation, employers' national insurance contributions, allowances and other overheads. Double counting with other cost categories should, however, be avoided. Relevant staff may include those involved in management, operation, support and ongoing training.
7. **Buildings related running costs** include the costs of running the facility, inclusive of ongoing buildings (revenue) maintenance, heat, light and power and business rates. Buildings related running costs will take account of the proposed facility design and other buildings characteristics, as well as other factors that will affect the different elements of these costs. Building maintenance costs will need to be consistent with life-cycle costs which will not necessarily reflect historic maintenance costs. These costs will be **included** within the total revenue costs of the options (rather than as part of capital).
8. **Net income contribution** shall include income generated from non-public sector organisations as a consequence of the investment (for example, as a consequence of private patients' facilities or other income generation activities). A negative (that is, beneficial) sum, equivalent to the net contribution generated by the activity, will be included within the revenue cost estimate and a positive sum should the net contribution be detrimental to the NHS.



9. **Transition period revenue costs** will include any double running costs and decanting costs associated with project implementation, and/or any change management costs required to deliver the new service (i.e. training costs).
10. **Revenue costs of embedded accommodation** should only be provided at OBC stage if the impact of this investment generates a slightly different (higher or lower) revenue cost for the organisation that is embedded in NHS buildings.
11. **Displacement costs** are those likely to be incurred by any external organisation as a consequence of proposed changes in a NHS Board's service provision (location or modality).

In addition to the above, all financial benefits - cash releasing and non-cash releasing – must be accounted for in the discounted cash flow to derive the Net Present Value / Cost in the Economic Appraisal. Their identification should be incorporated into the investment project's Benefits Register, which will typically fall into the following four categories:

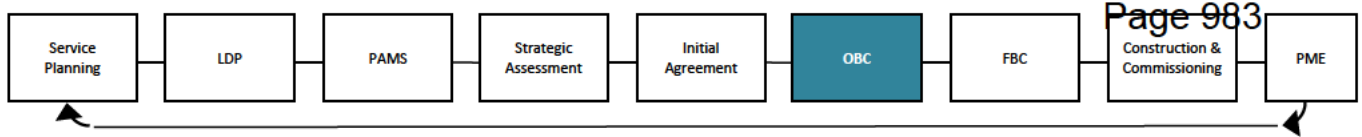
1. **Cash Releasing Benefits (CRB)** reduce the costs to an organisations in such a way that the resources can be re-allocated elsewhere. This typically means that the entire resource is no longer needed for the task for which it was previously used. This can be either staff or materials.
2. **Financial but non-cash releasing benefits (non- CRB)** usually involves reducing the time that a particular resource takes to do a particular task, but not sufficiently to re-allocate that resource to a totally different area of work.
3. **Quantifiable benefits (QB)** can be quantified, but not easily in financial terms – for example 'reduced travelling time for patients'. The extent to which QBs are measured will depend on their significance but every effort should be made to quantify them financially whenever possible.
4. **Non-quantifiable (non-QB)** are qualitative benefits which are of value to the public sector but cannot be quantified e.g. increased staff morale, protecting biodiversity or enhancing access to green spaces. Whilst the direct benefits of these can be difficult to quantify their associated impacts



often can be e.g. evidence that patient recovery times can be faster when views/ access to green space is available.

The purpose of valuing benefits is to ascertain whether an option's benefits are worth its costs, and to allow alternative options to be compared systematically in terms of their net benefits or costs.

All benefits should, where possible, be quantified in monetary terms. The Economic Appraisal will then take these into account from the perspective of society and the public and private sectors, as well as the organisation. If the perceived benefits are difficult to quantify then weighting and scoring techniques should be used to evaluate the non-financial benefits. More information is given in the next section. Note however that any benefit demonstrated as cash releasing savings should be accounted for in the financial appraisal.



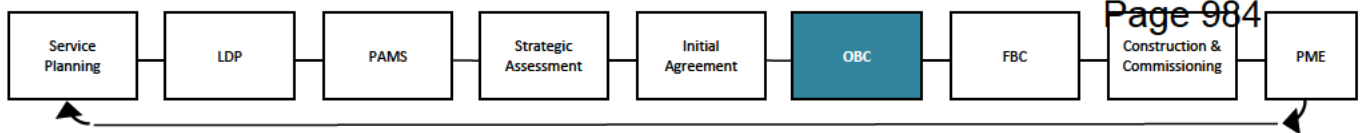
8 Estimate non-monetary costs and benefits

As noted in the previous section, wherever possible costs and benefits should be valued in money terms, however, it may not always be practical or cost effective to do so. Environmental, social or health effects on a project must be taken into account in this category and it should not be assumed that these are any less important than those that can be monetised.

Section 4 of the SCIM Option Appraisal guidance provides information on suitable ways to carry out assessment of these non-monetary costs and benefits for a given project, which are often referred to as ‘non-financial benefits’ i.e. benefits which cannot be monetised. Of the methods described in section 4 of the Option Appraisal guidance, the weighted scoring method approach is the preferred methodology for SGHSCD. It involves identification of (all) the non-monetary factors (‘attributes’ or ‘criteria’) that are **related to the project’s stated investment objectives** and should be defined as far as possible in service or output oriented terms; **they should also be consistent with the benefits identified in the benefits register**. These criteria then have weights allocated to each of them to reflect their relative importance; and the allocation of scores to each option to reflect how it performs in relation to each criterion. The result is a single weighted score for each option, which may be used to indicate and compare the overall performance of the options in non-monetary terms.

More information regarding this approach is described in Appendix 2 of the Option Appraisal Guidance which covers the following six stages:

1. Identify the relevant non-monetary criteria;
2. Weight the criteria to reflect their relative importance;
3. Score the options to reflect how each option performs against each criterion;
4. Calculate the weighted scores;
5. Test the results for robustness; and
6. Interpret the results.



9 Calculate Net Present Value (or Cost) and assess uncertainties

9.1 Net Present Value

Following the identification and measurement of the costs and benefits for each short listed option, a calculation of their Net Present Value (NPV) should be included using the appropriate discount rate. The NPV is the key summary indicator of the comparative value of an option. It is the name given to the sum of the discounted benefits of an option less the sum of its discounted costs, all discounted to the same base date. Where the sum of the discounted costs exceeds the discounted benefits, the net figure may be referred to as Net Present Cost (NPC). The decision rule is to select the option that maximises NPV or minimises NPC.

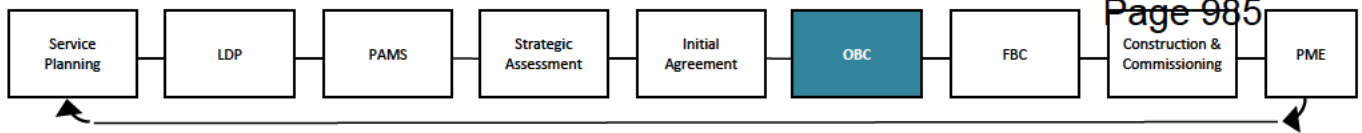
Discount rates are currently 3.5% for up to 30 years. Values for long term discount rates can be found in Annex 6 of the Green Book.

Discount calculations can be facilitated by the use of software packages. The Generic Economic Model (GEM) is an Excel spreadsheet suitable for the needs of NHSScotland bodies. SGHSCD expects the GEM to be utilised for option appraisal and for GEM outputs to be contained within business cases prepared by NHSScotland bodies.

A copy of the GEM model is available on the SCIM website.

Section 5 of the SCIM Option Appraisal document provides further guidance on the calculation of NPV in relation to the following:

- Discounting rate and net present values / costs
- Treatment of Inflation
- Adjustment for Optimism Bias
- Calculation of NPV and NPC
- Required Rates of Return and Pricing Rules



9.2 Assessing Uncertainty

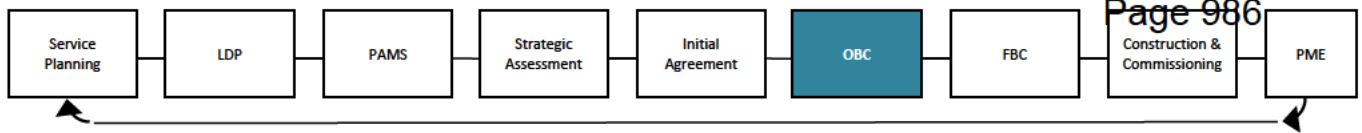
The future is inherently uncertain therefore no matter how thoroughly costs, benefits, risks and timing are identified and analysed there will remain uncertainty over the accuracy of the assumptions made. It is essential to test how these uncertainties may affect the choice between options. Assessment of uncertainty is chiefly about testing the rigour of the appraisal conclusions.

The basic procedure is to alter an assumption, recalculate the NPC for each option, and then consider the impact on both the total net benefits and costs on the balance of advantage between the options.

Sensitivity analysis is the key technique for this purpose and it is fundamental to appraisal. It is the process of examining how options are affected relative to each other by reasonable variations in key assumptions. Its purpose is to influence the option selection decision; it is not something to be applied merely to a preferred option after it has been selected.

The areas of uncertainty which might be considered in the Economic Appraisal include variations in assumptions in respect of:

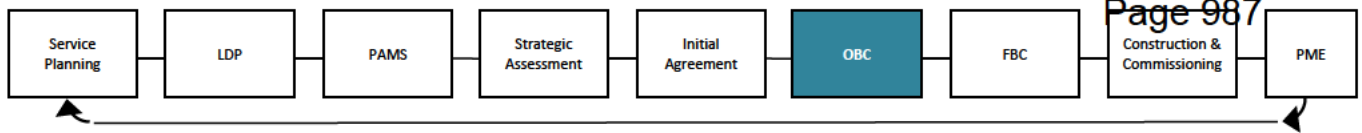
- Activity forecasts (and hence potentially provision levels and costs)
- Performance targets (and hence potentially provision levels and costs)
- Timing and value of property purchase, sale and transactions
- Capital cost estimates (initial and life-cycle)
- Revenue costs and savings (in total and/or key categories)
- Net income effects
- Displacement costs/externalities
- The scheme implementation programme (and hence transition costs and the timing of investment costs)
- Any potential differential impact of inflation on the cost components of the



economic analysis not reflected in the baseline analysis

- Discounting assumptions such as appraisal period.

Further guidance on Sensitivity Analysis is provided in Section 5.6 of the SCIM Option Appraisal Guide, with the GEM model providing the facility to carry out this testing.



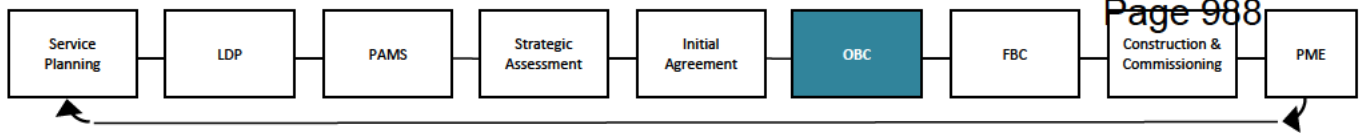
10 Present Appraisal Results

The ultimate outcome of any appraisal is a decision on whether or not to proceed with a proposal or a particular option. Such decisions can have far reaching consequences therefore the presentation of the results and conclusions of an appraisal to decision makers and stakeholders can be as important as the analysis itself.

In all cases transparency is vital. The presentation of the option appraisal in the business case should be comprehensive and include all of the steps of appraisal listed and make the analysis accessible to personnel who do not have an intimate knowledge of the project but need to make judgements based upon the information given. Presentation should be clear, logical, well founded and geared towards helping the decision at hand. Business Cases in particular should be drafted in non-technical language wherever possible, but if it is necessary to use technical terms, they should be explained.

It is important to include a section which draws together the main findings and conclusions of the appraisal. The next section provides an example of how the results of the Economic Appraisal can be presented.

Section 6 of the SCIM Option Appraisal guidance provides further information on this important topic.



11 Economic Appraisal Template

The following sections provide an example of how the results of the Economic Appraisal can be presented and an indication of the principles to follow. This may, however, be adapted to suit local circumstances.

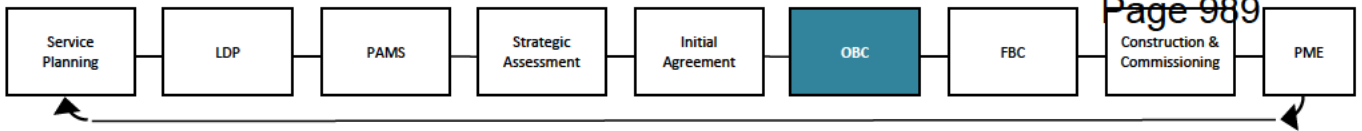
11.1 Introduction

This section should start by explaining the approach taken in developing the economic appraisal, the level of engagement with stakeholders, the date of any workshops held, and reference to those who attended.

11.2 Monetary Costs and Benefits

The following two tables can be used to set out the initial capital and revenue cost inputs to the GEM model related to each option. They should be expressed as an undiscounted annual recurring cost for each category. Where this changes over the appraisal period (e.g. life cycle costs) then an indicative average annual cost over that period can be given, but with supporting information explaining that variance. The cost categories in the following table align with the GEM model cost headings, which may be indicated as n/a where not applicable to any options.

Initial Cost Implications:	Option 1	Option 2	Option 3	Option 4
Opportunity Costs				
Initial Capital Costs				
Transitional Period Costs				
Costs of Embedded Accommodation				
Total of initial cost implications				



Revenue Cost Implications:	Option 1	Option 2	Option 3	Option 4
Life Cycle Costs				
Clinical Service Costs				
Non-clinical Support Service Costs				
Building Related Running Costs				
Net Income Contribution				
Revenue Costs of Embedded Accommodation				
Displacement Costs				
Total recurring revenue cost implications				

Assumptions and details will need to be explained for the costs and timings of a Do Nothing / Do Minimum option, plus the first main implementation option. Variations of costs in the other options will then need to be further explained.

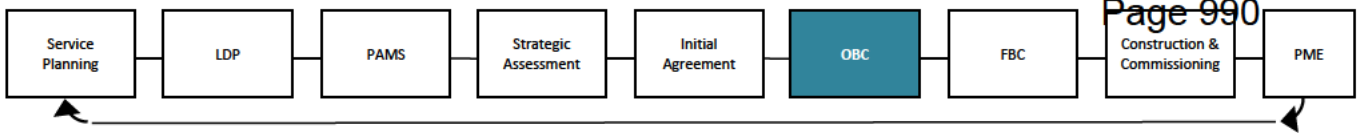
The extent of this supporting information shall be commensurate with the complexity and value of the project options.

11.3 Non-Monetary Costs and Benefits

The results of the non-financial benefits appraisal exercise can be presented in a similar table to the exemplar below:

Benefit Criteria	Weighting (%)	Weighted Score			
		Option 1	Option 2	Option 3	Option 4
Total Weighted Score:					
Rank:					

Definitions of the benefit criteria and how they were developed needs to be explained; along with key considerations that influenced the weighted scores.



11.4 Non-financial Risk Appraisal

In relation to non-financial risks only, (financial risks being included in the economic appraisal costs), a risk appraisal of each option shall be undertaken as follows:

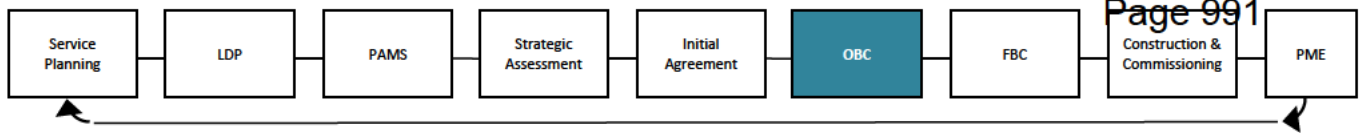
- Identify all main organisational, service, project and external risks associated with each option.
- Assess the impact and probability for each option.
- Calculate a risk score.

The results can then be presented in a similar fashion to the exemplar table below:

Risk	Impact Score	Risk Score (Impact x Probability)							
		Option 1		Option 2		Option 3		Option 4	
		Prob	Score	Prob	Score	Prob	Score	Prob	Score
Total Risk Score:									
Rank:									

11.5 Net Present Value

In line with the Optional Appraisal Guide, the NPV or NPC for each option can be calculated using discounted cash flow techniques on the capital and revenue costs associated with each option as entered into the GEM model. The outcomes of these calculations can be summarised in the exemplar table below:



	Option 1	Option 2	Option 3	Option 4
Net Present Value / Cost (£)				

11.6 Assessing Uncertainty

Sensitivity analysis of both the Net Present Value / Cost and non-financial benefits of each option can then be carried out to understand how reactive these results are to changes in underlying assumptions.

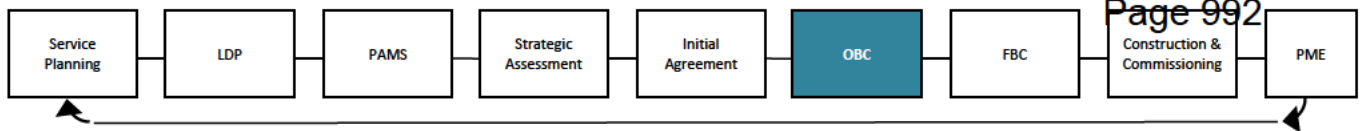
Section 5.2 of the Option Appraisal Guide provides a list of potential uncertainties that could be analysed. Those with greatest potential to change the ranking of options should be selected and tested.

The GEM model can be used to carry out the sensitivity analysis, with the results presented in a similar manner to the exemplar table below:

Sensitivity Scenario	Option 1		Option 2		Option 3		Option 4	
	NPV (£m)	Rank	NPV (£m)	Rank	NPV (£m)	Rank	NPV (£m)	Rank
Scenario 1: no changes								
Scenario 2:								
Scenario 3:								
Scenario 4:								
Scenario 5:								

The first assumed scenario should represent no changes to assumptions, which can then be used for comparative purposes with the other scenarios. Commentary on the details behind each scenario must be provided, along with the switching value of each variable necessary to make each Option have the highest NPV or lowest NPC.

It is also important to examine how reactive the ranking of options in the non-financial benefits appraisal are to changes in weights and scores used. The following are examples of possible sensitivity analysis testing that could be carried out:



- Equal weighting applied to all criteria e.g. all criteria were weighted at maximum.
- Excluding benefit scores for the highest weighted benefit criterion.
- Altering the scores of the benefit criteria with the greatest scoring range, so that all options score the same mid-range value for that benefit criterion.

The results can then be presented in a similar manner to the exemplar table below:

Non-financial benefits Sensitivity Scenario	Option 1		Option 2		Option 3		Option 4	
	Weighted Score	Rank	Weighted Score	Rank	Weighted Score	Rank	Weighted Score	Rank
Scenario 1: no changes								
Scenario 2: Equal weight								
Scenario 3: Exclude top rank score								
Scenario 4: Mid-range								

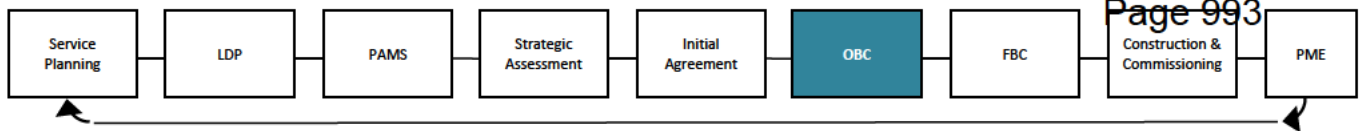
The first scenario should represent no changes to assumptions, which can then be used for comparative purposes with the other scenarios. Commentary on the findings from this sensitivity testing should be provided.

11.7 Identifying the Preferred Option

The purpose of this section will be to present the case for the selection of a preferred option. It will begin by merging the results of NPV / NPC and non-financial benefits to identify the cost per benefit point of each option. This can be set out in the following table:

	Option 1	Option 2	Option 3	Option 4
Net Present Cost (£'000's) per weighted benefit score				

The differential between these results will need to be explained.



A summary of the results of all the evaluation criteria of the economic and risk appraisals should be presented together. The following table can be included to demonstrate the results:

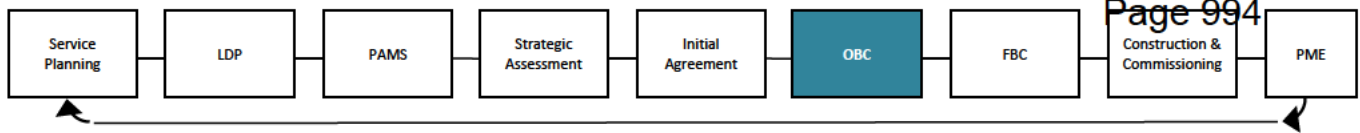
Evaluation Results (out of 100)	Option 1	Option 2	Option 3	Option 4
	Rank	Rank	Rank	Rank
Economic Appraisal				
Risk Appraisal				

The overall ranking will be based on a judgement of the comparative difference between the cost per benefit point of each option and risk. This should be supported by summary information on the previous sensitivity analysis exercise carried out to demonstrate how non-reactive these results are to changes in underlying assumptions.

Boards should consider the use of the SFT Whole Life Appraisal Tool dashboard to more clearly present the outputs of the economic appraisal for the project.

A statement should then be made on the reasons behind the recommendation of a preferred option including a summary of the benefits that this option will provide when compared against the existing arrangements.

Note: the above is intended as an indicative approach to presenting the outcome of the Economic Appraisal and is not meant to be so prescriptive as to hinder a more appropriate presentation for a specific project.



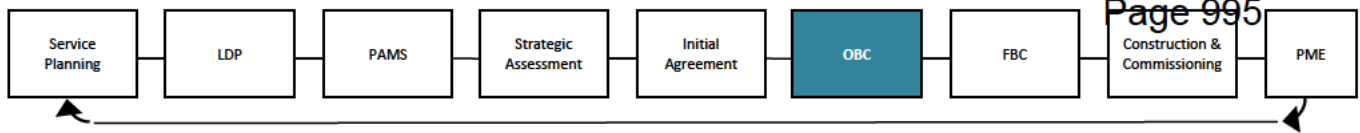
COMMERCIAL CASE

12 Commercial Case: Overview

The main purpose of the Commercial Case at OBC is to outline the proposed commercial arrangements and implications for the project. It will do this by responding, as appropriate, to the following questions:

	Question	Response
Procurement Strategy	What is the appropriate procurement route for the project?	Outline: <ul style="list-style-type: none"> • Procurement route selected • Compliance with EU Rules and Regulations • Procurement plan & timescales
Scope of Works & Services	What is the scope and content of the proposed commercial arrangement?	Outline: <ul style="list-style-type: none"> • Scope & content of included services • Scope of building works • Scope of other works
Risk Allocation	How will the risks be apportioned between public and private sector?	Outline: <ul style="list-style-type: none"> • Risk allocation table
Payment Structure	How is payment to be made over the life span of the contract?	Outline: <ul style="list-style-type: none"> • Proposed payment structure • Other payment principles • Any non-standard arrangements
Contractual Arrangements	What are the main contractual arrangements?	Outline: <ul style="list-style-type: none"> • Type of contract proposed • Key contractual issues • Personnel implications

The availability of the requested information for this section of the OBC may be affected by the selected procurement route, therefore, in such instances the response provided should cover the key principles as outlined, whilst explaining when more detailed information will be confirmed at FBC stage.



13 Determine the Procurement Strategy

	Question	Response
Procurement Strategy	What is the appropriate procurement route for the project?	Outline: <ul style="list-style-type: none"> • Procurement route selected • Compliance with EU Rules and Regulations • Procurement Plan & timescales

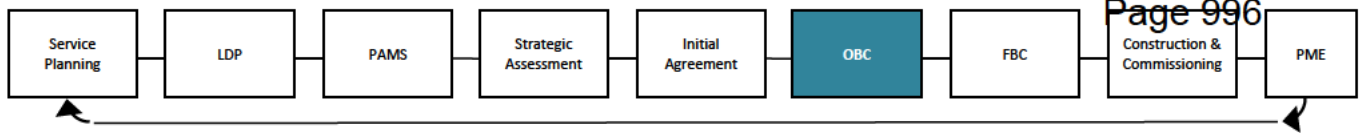
13.1 Procurement Route

NHSScotland has established national procurement routes for major asset investment which have been fully developed within the EU public sector procurement regulation framework. The reason for selecting one of these, or an appropriate alternative, must be explained within the OBC.

Where a project is expected to apply a series of procurement routes for different aspects of the project then each one should be stated and explained. For example, there may be different procurement routes necessary for the main project, early preparation works, equipment arrangements, and appointment of external consultants.

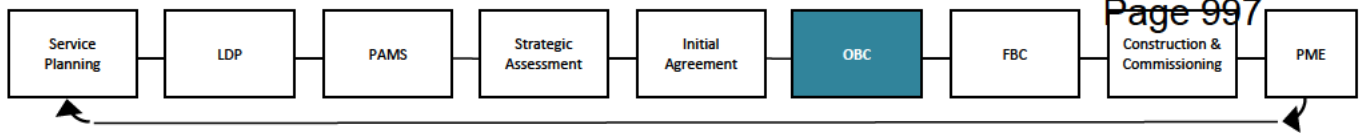
The following are example statements which can be used within the OBC to explain why a particular procurement route has been selected. If one is used, it may need to be added to or amended to suit a project's particular circumstances.

- This project is a health (or other Public body) project with an investment cost in excess of £1m. It is to be publically funded under the NHSScotland Frameworks Scotland2 arrangement, (further reasons and benefits of choosing this procurement route need to be added).
- This is a community project utilising the hub procurement initiative, (further reasons and benefits of choosing this procurement route need to be added).
This is (either):



- A revenue funded project with a Design Build, Finance Manage (DBFM) contract arrangement.
- A public capital funded project with a Design and Build option.
- This project's investment cost is less than £1m and utilises local tendering as a preference, (incorporating local framework arrangements).
- The project relates to an energy efficiency initiative and will utilise (either):
 - An energy performance contract.
 - Local tendering arrangements, as the project investment cost is less than £1m,
 - A capital works project, as the investment costs and scope of works is sufficient to meet the requirements of hub, Frameworks Scotland2, or other arrangements (specify).

All investment projects, including any individual arrangements not covered by the above, must comply with relevant Scottish Government procurement regulations.



13.2 EU Rules and Regulations

Under hub and Frameworks Scotland2 there is no need to advertise in the OJEU, however, their particular procurement process recommendations must be followed.

For any other procurements that sit above EU thresholds, it is obligatory to advertise in the Official Journal of the European Journal (OJEU). If the sum is below the threshold, advertisements may be placed in trade periodicals and national/ local newspapers as deemed suitable. When applicable, the draft OJEU notice should be attached to the OBC, which must have been reviewed and approved by legal and procurement experts.

13.3 Procurement Plan

An outline of the project's procurement plan is required which highlights the project's current procurement status, making clear what has already been achieved and what still needs to be done. It will cover the appointment of the Preferred Partner / Contractor, as well as any external advisors, and will detail either of:

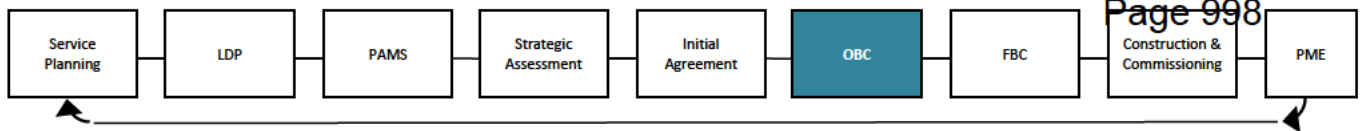
- The planned procurement process, setting out the general approach to be taken and the procurement timetable to be followed.
- The selection process followed, including the evaluation criteria used and a summary of the scoring and general approach taken.

There is a legal requirement to have agreed the evaluation criteria prior to the formal commencement of procurement, which needs to have been reviewed and approved by legal and procurement experts. The evaluation criteria used should be attached to the OBC.

The general approach (to be) taken will need to comply with one of the following:

13.3.1 Frameworks Scotland2 Procurement

Under Frameworks Scotland2 there are two guidance documents for the appointment of PSCPs and PSCs for all projects detailed in: 'Selection Processes for NHS Clients'.



It should be noted that a two stage process can be applied for both PSCPs and PSCs, with the first stage being a qualitative submission and the second stage a pricing proposal.

Further advice and guidance on Frameworks Scotland2 is available from the Frameworks team at NHS National Services Scotland.

13.3.2 hub Procurement

Under the hub initiative there are five designated hub territories in Scotland: North, South East, West, East Central and South West. These are joint venture type arrangements between the local public sector organisations (the Participants) and the private sector (the hub company – hubCo).

The long term partnership between the Participants and a hubCo offers a flexible procurement route for the delivery of community infrastructure. The appointed private sector development partner will be able to source the required expertise to provide a wide range of construction solutions.

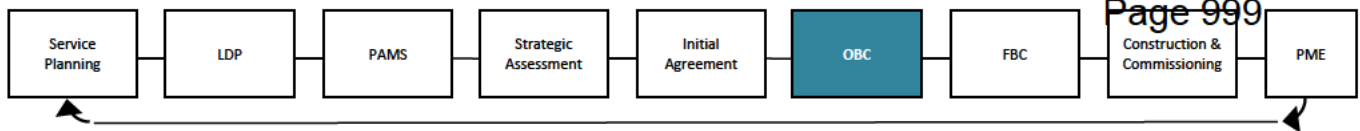
There is an agreed staged process for project development and delivery. Further advice and guidance is available from Scottish Futures Trust.

13.3.3 External Advisor Procurement

There are separate national Technical, Legal, and Financial Advisor Frameworks for hub that allows NHSScotland and other public bodies to select advisors through a mini competition process. These are administered by Scottish Futures Trust.

There are also separate Technical / Design Advisor frameworks administered through Frameworks Scotland2.

The OBC shall outline the status, process applied, and planning for any procurement of external advisors.



14 Scope and Content of Proposed Commercial Arrangements

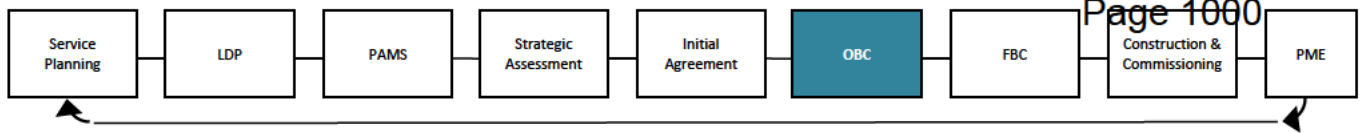
	Question	Response
Scope of Works and Services	What is the scope and content of the proposed commercial arrangements?	Outline: <ul style="list-style-type: none"> • Scope & content of included services • Scope of building works • Scope of other works

The purpose of this section is to specify the scope and content of the proposed works / services included within the proposed commercial arrangements. Note that this may be different from the scope and content of the overall project which may include works or services that are not part of any commercial arrangements e.g. internal service arrangements.

14.1 Scope of Services

This section should describe (or reference other documents where this information is contained) the scope and content of any services included within the proposed commercial arrangements. The following information will be needed to fully outline this scope:

- A description of the services to be included in the commercial arrangements.
- A summary of existing and proposed service activities and/or arrangements.
- The service standards to be set within the commercial arrangements; including essential outputs, important performance measures, and any other quality standards expected.
- The specification of these required outputs.
- A summary of stakeholders and customers associated with these services.
- The possibility for changing any assumptions in the solution offered.



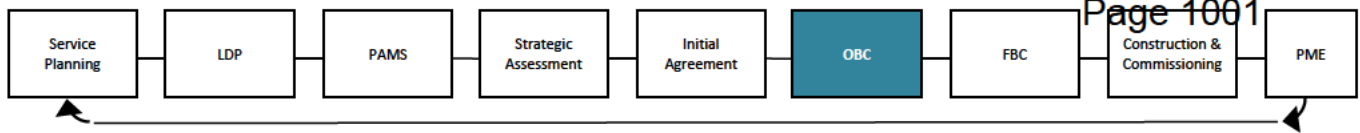
- Any potential future changes external to this project that might affect any of the above.
- The timescales for procuring and delivering these services.

14.2 Scope of building works

For building related projects reference should be made to the NHSScotland Design Assessment Process (NDAP) and related information requirements. A summary is needed within the OBC of the assessment observations, the Board's compliance / response to the advisory & essential recommendations, and details of any site identification & assessment process carried out. The NDAP guidance document and SCIM process diagrams provide further information on required building and engineering design standards and the information expectations to accompany any OBC submission. All information should comply, where appropriate, with the Building Information Modelling requirements for this stage of project development.

14.3 Scope of other works

For non-building related assets (e.g. medical equipment); or other types of investment projects, a similar overview is required within the Outline Business Case with accompanying reference to further information which fully outlines the scope and content of the commercial arrangements to be procured.



15 Risk Allocation

	Question	Response
Risk Allocation	How will the risks be apportioned between public and private sector?	Outline: <ul style="list-style-type: none"> Risk allocation table

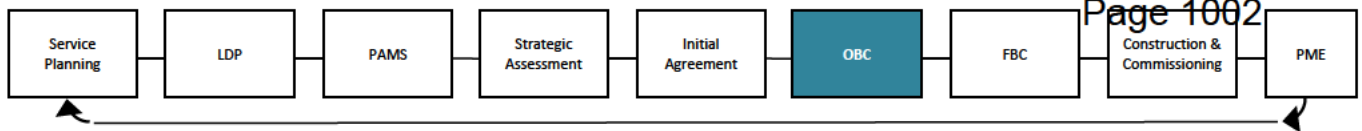
15.1 Key Principles

This section explains the principles of how project risks are generally to be allocated between the NHS body and the private sector partner. This is especially important when the successful delivery of the project is subject to significant risk, regardless of the procurement route adopted.

The key principle is that risk should be allocated to the party best able to manage it. The objective is to optimally allocate risk, rather than maximising risk transfer.

Other principles that need to be considered include:

- The degree to which risk may be transferred depends on the specific proposal under consideration.
- Successful negotiation of risk transfer requires a clear understanding by the Board of the risks presented by a proposal, the broad impact that these risks may have on the private sector partner incentives and financing costs (cost drivers) and the degree to which risk transfer optimises value for money.
- Where the market has clear ownership, responsibility and control, it should be encouraged to take all of those risks it can manage more effectively than the Board. If the Board seeks to reserve control, yet still seeks to transfer significant risk, then this could attract an added cost premium.
- Appropriate transfer of risk generates incentives for the market to supply timely, cost effective and more innovative solutions.



- Consider transferring risk to the private sector partner whenever they are better able to influence the outcome than the Board.

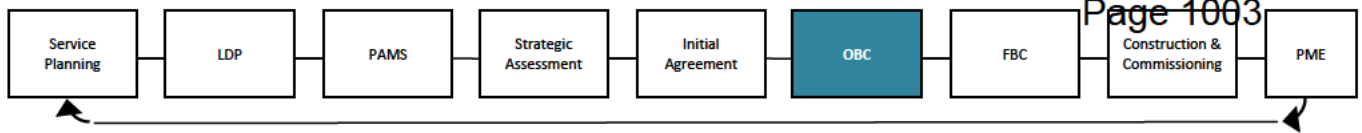
15.2 Risk Allocation Table

A risk allocation table is needed that clearly shows the potential allocation of risk between the parties. This should be shown as percentage allocation wherever possible.

The allocation of risks is influenced by the different procurement approaches taken and the following table outlines the typical allocation of risks for a capital funded design and build project. These should be reviewed for each individual project against the key principles described above and adjusted accordingly before incorporating into this section of the OBC.

Risk Category	Potential allocation of risk		
	Public	Private	Shared
Client / Business risks	100%	0%	
Design	0%	100%	
Development and Construction	25%	75%	√
Transition and Implementation	60%	40%	√
Availability and Performance	0%	100%	
Operating	100%		
Revenue	100%		
Termination	100%		
Technology and Obsolescence	50%	50%	√
Control	100%		
Financing	100%		
Legislative	100%		
Other Project risks	100%		

When risk allocation has been defined within the project, the Board should seek to reflect this within the proposed contract but minimise contract amendments where possible.

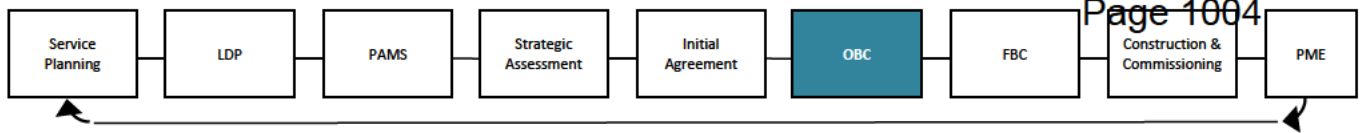


16 Payment Structure

	Question	Response
Charging Mechanism	How is payment to be made over the life span of the contract?	Outline: <ul style="list-style-type: none"> Proposed payment structure Non-standard arrangements Other payment principles

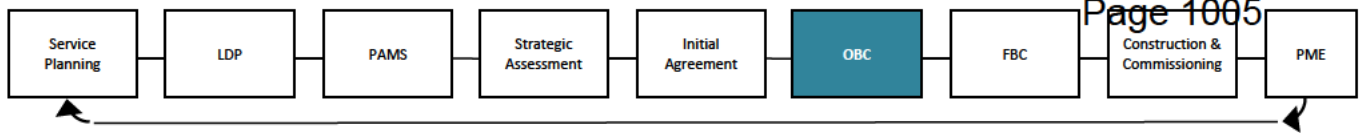
The chosen NHSScotland national procurement route will dictate the payment structure to be adopted, with their main principles described below. Where appropriate, one of the following statements can be adapted to describe the project's planned payment structure, which should be edited to suit the particular project procurement option and any non-standard arrangements chosen. Note that the Financial Case should be used to outline the project's financial arrangements and costs, and therefore does not need to be repeated here.

- Under NHSScotland Frameworks Scotland 2 (FS2) PSCs and PSCP are appointed under the Frameworks Scotland 2 NEC form of contract under Options A, C, E. Under option A a fixed price is submitted and payment made on completion of each activity in the activity schedule. Option C is a target price paid monthly up to the target cap (unless compensation events are added) Option E allows payment for time and materials applied. The selected option will need to be stated.
- The Hub initiative can be revenue funded as a Design, Build, Finance Manage (DBFM), or public capital funded as a Design and Build (D&B) option. Under the D&B option traditional monthly payments are made to the private sector hubCo partners. Under DBFM some payments are made to the private sector hubCo partners on Stage 1 and 2 completion, or otherwise, ongoing payments are made during the operational phase. Enhanced payment terms are also possible within the Hub model, which considers fair and reasonable payment terms to designers and consultants and ensures compliance with maximum 30 day payment terms (see hub guidance for more details).



The confirmed payment structure should be accompanied with a further statement addressing each of the following subjects (where appropriate), along with any other non-standard arrangements:

- Risk contingency management.
- Contract variations.
- Disputed payments.
- Payment indexation.
- Utilities and service connection charges.
- Performance incentives.



17 Contractual Arrangements

	Question	Response
Contractual Arrangements	What are the main contractual arrangements?	Outline: <ul style="list-style-type: none"> • Type of contract • Key contractual issues • Personnel implications

This section will outline the contractual arrangements for the procurement, including the use of a particular contract, the key contractual issues for the commercial deal, and any personnel implications:

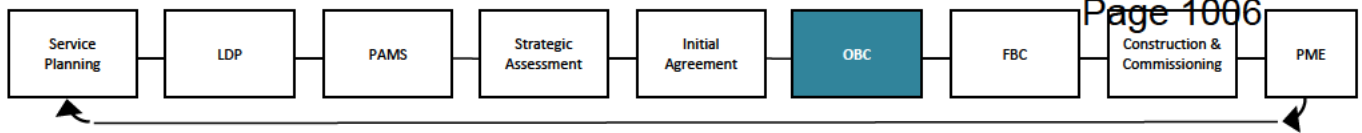
17.1 Type of Contract

This section will describe the standard form of contract to be used, as linked to the chosen procurement route. Under FS2 this would include the Contract Option (if known) and under hub whether it will be D&B or DBFM.

17.2 Key Contractual Issues

Contract management arrangements and key contractual issues should be considered and their current status recorded in the OBC. These will vary with project and procurement route, but there is commonality across the exemplar headings below that allows identification and discussion within this section of the OBC for the specified project and procurement route:

- Contract duration and any key milestones within the term of the contract.
- Roles, responsibilities and governance arrangements of client and contracting partners in relation to the proposed arrangements.
- Asset ownership arrangements (including land) and maintenance responsibilities.
- Remedies in event of failure of the Preferred Partner / Contractor and Service Provider(s).



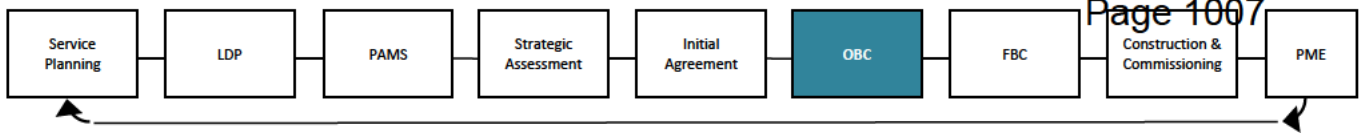
- Compliance with appropriate regulations and standards etc.
- Dispute resolution procedures.
- Operational and contract administration arrangements.

17.3 Personnel Implications

As public sector organisations are legally and morally obliged to involve their staff and representatives in a process of continuous dialogue during projects involving considerable internal change, the OBC will need to state explicitly whether there are any contractually based personnel implications to the scheme e.g.

- Confirmation that codes of practice are in place for the well being and management of staff (within the public sector).
- Whether the Transfer of Undertakings (Protection of Employment) Regulations 1981 (TUPE) will apply, directly or indirectly;
- Details of any terms regarding subsequent transfers at market testing intervals (if these apply)
- Descriptions of terms regarding Trade Union recognition (if these apply)
- Details of requirements for broadly comparable pensions for staff upon transfer (if these apply)

All other non-commercial personnel matters associated with this project should be described within the Management Case.



FINANCIAL CASE

18 Financial Case: Introduction

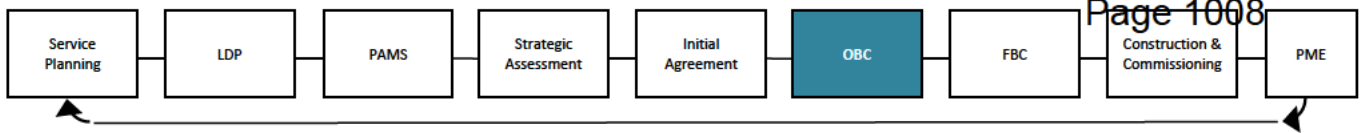
18.1 Overview

The purpose of the Financial Case is to demonstrate the affordability of the preferred option, both in the context of the Board’s overall financial plans and in comparison with the other short-listed options. In practice, this involves determining:

- The financial profile and funding consequences (both capital and revenue) of the preferred option, as well as sufficient information on the consequences of other short-listed options to set the preferred option in context; and
- The impact of the proposed project on the Board’s accounts, primarily the Statement of Comprehensive Net Expenditure (SOCNE), cash flow and Balance Sheet.

These can be achieved by taking the following steps:

Financial Case		
	Key Steps	Outcomes for OBC
1.	Prepare the financial model	Detailed narrative & summary information on key inputs to financial model.
2.	Review capital & revenue financed impact	Completed cost template & supporting information for capital or revenue financed project.
3.	Assess affordability	Statement of affordability and explanation of any funding gaps.
4.	Confirm stakeholder support	Duly signed letter(s) of stakeholder support.



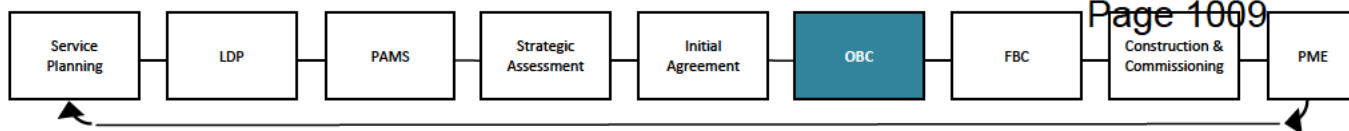
18.2 Focus of the financial case

Many practitioners confuse the Financial Case with the Economic Case. The Economic Case focuses mainly on value for money in the identification of a preferred option, taking into account costs and quantifiable / non-quantifiable benefits. In contrast, the Financial Case focuses on 'affordability', with a particular emphasis on the preferred option.

The Financial Case must reflect an estimate of total expenditure for the preferred option, including the impact of all government related taxes and non-cash costs e.g. VAT & depreciation, which are normally excluded from the economic appraisal.

The key differences between an economic and a financial appraisal can be summarised as follows:

Economic Appraisal	Financial Appraisal
Focus: VFM – net present value/cost (NPV/NPC).	Focus: Affordability – impact on statutory financial targets i.e. Revenue Resource Limit and Capital Resource Limit.
Coverage: Wide coverage – Government and society ('UK Ltd').	Coverage: Relevant organisation(s).
Relevant standards: HM Treasury Green Book rules. Discount rate applied.	Relevant standards: Scottish Public Finance Manual (SPFM) and Government financial reporting manual (FREM)
Analysis: <ul style="list-style-type: none"> • Cash flow basis • Constant (real) prices (excludes inflation) • Includes opportunity cost • Includes indirect and attributable costs – costs of others • Includes all quantifiable and non quantifiable benefits and risks • Includes environmental costs • Excludes sunk costs • Excludes non-cash items e.g. depreciation and government taxes. 	Analysis: <ul style="list-style-type: none"> • Income and Expenditure basis • Current (nominal) prices (includes impact of inflation) • Gross costs including sunk costs and non cash items e.g. depreciation and government taxes e.g. VAT.



19 Preparing the Financial Model

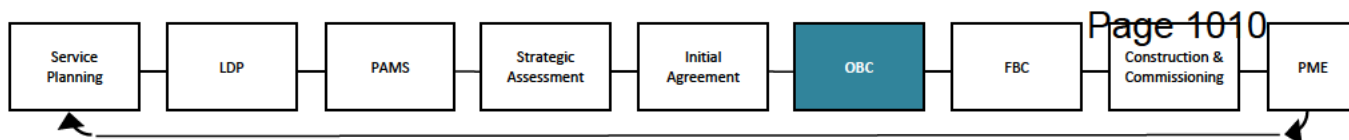
Full details are required of the Board's financial model for the preferred option, along with summary information on differences in the other short-listed options. The goal should be to provide clear information and explanation of the key financial differences between each option.

The approach used to develop a financial model will typically involve agreeing a series of key assumptions on factors which are influencing the project and quantifying the impact of these on the Statement of Consolidated Comprehensive Net Expenditure and the Balance Sheet, including any likely impact on cash flows.

The following table provides an example of how the financial model can be appropriately summarised in the business case:

Key Information / Assumption	Associated Costs	Comments
Impact on operating costs (differentiating between direct clinical costs associated with redesign and property running costs)		
Depreciation		
Property Lifecycle Costs		
Inflation		
Taxation		
Proposed method of capital financing and any associated charges		
Proposed funding sources and potential for income generation (including any likely contribution from partners)		

The above information and costs will need to be accompanied with detailed narrative explaining how these costs have been calculated, any key assumptions



behind them, and an explanation of any significant differences between options.

The Financial Model should comply with the Board's accounting policies and with applicable accounting standards. Guidance on the interpretation of accounting standards in the NHSScotland context can be found in the NHSScotland Annual Accounts Manual and the Capital Accounting Manual, which are updated annually by the Technical Accounting Group and distributed to Directors of Finance.

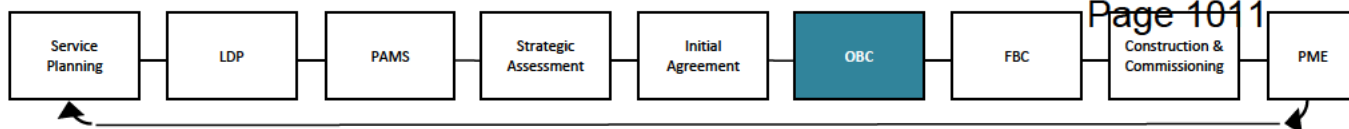
20 Capital and Revenue Financed Impact

A table and supporting narrative showing the capital and revenue impact of the preferred option also needs to be prepared, which sets out:

- The capital and revenue consequences of the preferred option over the life span of the service and/or contract period (where the life span of the service is not predetermined, Boards should identify the recurring annual impact)
- How this compares with the original capital ceiling for the scheme (if any)
- Any shortfall in capital and revenue requirements (the 'funding gap')
- The different sources of funding expected to cover these costs
- The status of any project risk contingency and optimism bias, including how funds are to be controlled and managed
- A list of any costs not included in the main project costs, an explanation of the reasons why, and any actions needed to determine their expenditure.
- A summary of any changes in costs since previously reported, with an indication of the reasons why.

This information should further indicate the capital sum being requested and detail how the Board will meet the ongoing costs of the project.

Note: recurring and non-recurring revenue / operating costs should have been set out in the Financial Model, and thus do not need to be repeated here.



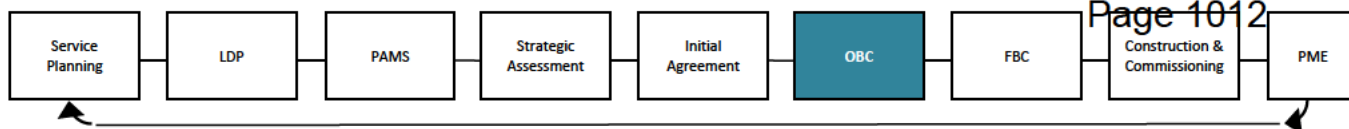
20.1 Summary of conventional capital costs and funding requirements

The following tables form a standard template for presenting in a clear, consistent and concise manner the capital financials for a typical public capital funded building project. This will need to be accompanied with detailed narrative and Construction Cost Plan explaining how these costs have been calculated, any key assumptions behind them, and an explanation of any significant differences between options.

Capital Costs:	Total £000s	Funding			Change to OBC (FBC only)	
		Existing Resources £000s	Partner contri- butions £000s	SG Additional Funding Requirmt £000s	Total at OBC £000s	Movement from OBC £000s
Building & Engineering works						
Location adjustment						
Quantified Construction Risk						
<i>Additional itemised costs</i>						
Total Construction costs						
Site acquisition						
Other enabling works						
<i>Additional itemised costs</i>						
Total other construction related costs						
Furniture						
IT						
Medical Equipment						
<i>Additional itemised costs</i>						
Total furniture and equipment						
Additional Quantified Risk						
Total estimated cost before VAT and fees						
VAT						
Professional Fees						
Total estimated cost including VAT and fees but before optimism bias						
Allowance for optimism bias						
Total estimated cost						

Profile of Capital Expenditure

Year	Total Capital Spend £000s	Existing Resources £000s	Partner contributions £000s	SG Additional Funding Requirement £000s	Total at OBC £000s	Movement from OBC £000s
Year 1						
Year 2						
Year 3						
Year 4						
<i>etc</i>						
Total						



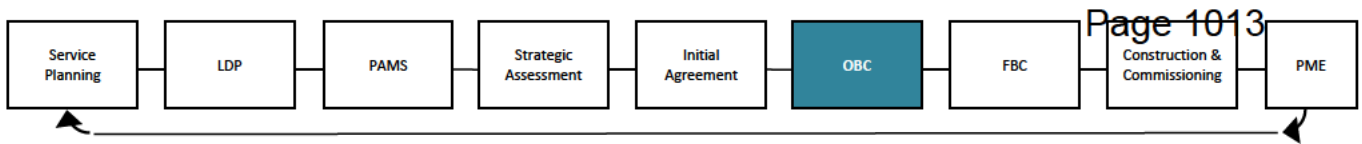
20.2 Summary of revenue financed capital costs and funding requirements

The following table is a standard template for presenting in a clear, consistent and concise manner, the capital financials for a revenue financed building project. This will need to be accompanied with detailed narrative and Construction Cost Plan explaining how these costs have been calculated, any key assumptions behind them, and an explanation of any significant differences between options.

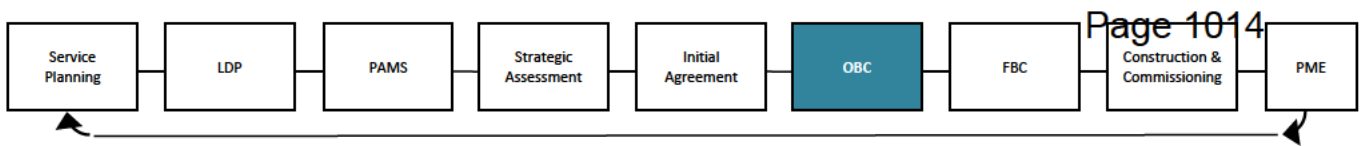
Capital Cost	Total £000s	Funding			Change to OBC (FBC only)	
		Existing Resources £000s	Partner contributio ns £000s	SG Additional Funding Requiremnt £000s	Total at OBC £000s	Movement from OBC £000s
Building & Engineering works						
Location adjustment						
Quantified Construction Risk						
<i>Additional itemised costs</i>						
Total Construction costs						
Site acquisition						
Other enabling works						
<i>Additional itemised costs</i>						
Total other construction related costs						
Furniture						
IT						
Medical Equipment						
<i>Additional itemised costs</i>						
Total furniture and equipment						
Additional Quantified Risk						
Total estimated cost before VAT and fees						
VAT						
Professional Fees						
Total estimated cost including VAT and fees but before optimism bias						
Allowance for optimism bias						
Total Estimated Cost						

Estimated Unitary Charge

	£000s
Financing, repayment and SPV costs (100% SG funded)	
Lifecycle costs (50% SG funded)	
Hard FM costs (100% locally funded)	
Other costs	
Total estimated Unitary Charge	
Scottish Government funding	
Local funding	
Contributions by partners	
Total estimated Unitary Charge	



For revenue financed projects (e.g. hub DBFM), it is important to be clear on the implications of the project on the Board's revenue and capital finances, as this will underpin the assessment of affordability. The capital costs of the revenue-financed assets will be reflected as part of the on-going service payment. However, it is important to also set out the total capital equivalent value of the project, including both the capital funded and revenue financed investment, as this will support an assessment of affordability in the context of the overall revenue financed programme. In addition, this presentation will assist with control of capital costs and give a transparent picture of the value of public investment in the project. The templates for revenue financed projects have been designed to ensure that this full picture is captured.



21 Assessing Affordability

21.1 A Statement of Affordability

The Financial Case should contain a clear statement on the affordability of the project, in revenue and capital terms, as well as detail to demonstrate how this assessment has been reached.

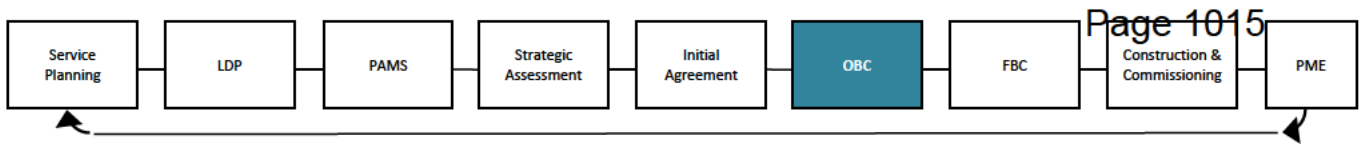
Assessing affordability requires sound judgment of the organisation's business and requires that:

- The balance sheet has been correctly organised and properly accounts for current and non-current assets and liabilities; and that the necessary allowance has been made for risks including optimism bias.
- The financial consequences of the project can be met within the Board's agreed Financial Plans.

Various techniques can be used by public sector organisations to help judge affordability. The risks and uncertainties will vary from project to project, but some key questions to consider are:

- Would the project be affordable if capital costs were to be 10% higher than expected?
- What if the expected savings were to fall by 10%?
- What circumstances might cause saving targets to be breached?
- What if income to the organisation were to be reduced by 5% or more?
- Is there a robust strategy in place to guard against these outcomes?

Finally, there is the payback period. As implied by the term, this method measures the rate at which the financial benefits from the investment 'pays back' the initial investment costs. In general, projects with a short payback period are preferable to those with long pay back periods.



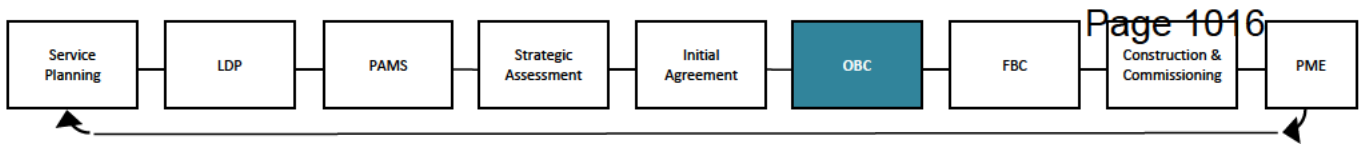
Each of these considerations, plus any other appropriate issues, should be described within the accompanying narrative for this section.

21.2 Closing the affordability gaps

Where affordability problems have emerged during the development of the project, these should be clearly described in the business case, along with the action taken to close the gap, and any residual gap following those actions.

If the affordability analysis reveals the preferred option is unaffordable, there are a number of potential remedies including one or more of the following:

- Phasing the implementation of the preferred option differently.
- Adopting a different design solution.
- Altering the scope of the preferred option – for example, its functional content or the quantity and quality of the services offered.
- Finding additional sources of funding – for example, disposal of surplus assets (if available), further revenue support from the commissioners of the organisation’s services.
- Considering different ways of financing the project – for example, private finance, operating and financial leases.
- Negotiating more competitive or flexible prices from the service provider(s).
- Finding other ways of reducing the costs and/or increasing cash releasing savings.
- Allowing the service provider to create additional revenue streams and new business and sharing in the resultant revenue streams.



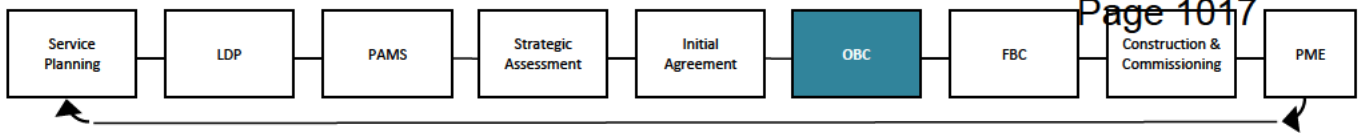
22 Confirming Stakeholder(s) Support

It is unlikely that a business case will be successful unless consultation has been held along the way between the Board seeking investment for the improved services and its stakeholders and other NHSScotland/ public sector organisations commissioning services. NHSScotland policy on consultation and engagement is clear. Business cases must contain specific and explicit statements confirming that such requirements have been fully satisfied.

It is crucial to the overall process that agreement, in principle, is obtained from the NHSScotland bodies involved in the programme/ project. This should be in written form and included in the annex to the OBC. Issues to cover in a letter of stakeholder support include:

- Demonstration that all participant bodies have been actively involved in developing the scheme through its various stages.
- Confirmed acceptance of the strategic aims and investment objectives of the scheme, its functional content, size and services.
- Confirmation that the financial costs of the scheme can be contained within the agreed and available budget and a willingness and ability to pay for the services at the specified contribution level (capital and/ or revenue)
- Statement of the margins of leeway beyond which support must be re-validated
- Demonstration that suitable contingency arrangements are in place to address any current or unforeseen affordability pressures

The letter should be provided by the appropriate individual(s) within the organisation – usually the chief executive officer.

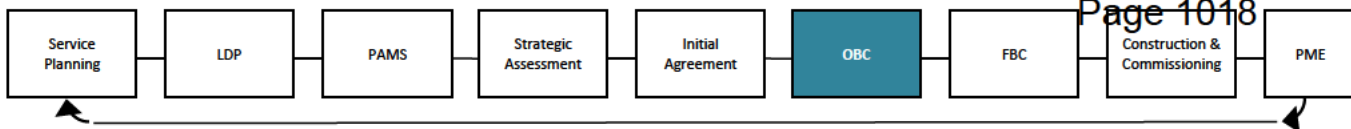


MANAGEMENT CASE

23 Management Case: Overview

The main purpose of the Management Case is to demonstrate that the organisation is ready and capable of delivering a successful project. The effort required will be dependent upon the size and complexity of the project and therefore the response to the following questions should be proportionate to the level of risk of not delivering the project successfully:

	Question	Response
Project Management	What are the project management arrangements in place?	Outline: <ul style="list-style-type: none"> Reporting structure & governance arrangements Key roles & responsibilities Project recruitment needs Project plan
Change Management	What change management arrangements are being planned?	Outline, where appropriate: <ul style="list-style-type: none"> Operational & service change plans Facilities change plan Stakeholder engagement & communication plan
Benefits Realisation	How will the project's benefits be realised?	Outline: <ul style="list-style-type: none"> Updated benefits register Full benefits realisation plan
Risk Management	How are the project risks being managed?	Outline: <ul style="list-style-type: none"> Updated risk register Risk control measures Governance arrangements
Commissioning	What commissioning arrangements are being planned?	Outline: <ul style="list-style-type: none"> Reporting structure aligned to main project structure Person dedicated to leading this process Key stages Resource requirements
Project Evaluation	How will the success of the project be assessed?	Outline: <ul style="list-style-type: none"> Person dedicated to leading this process Key stages Resource requirements



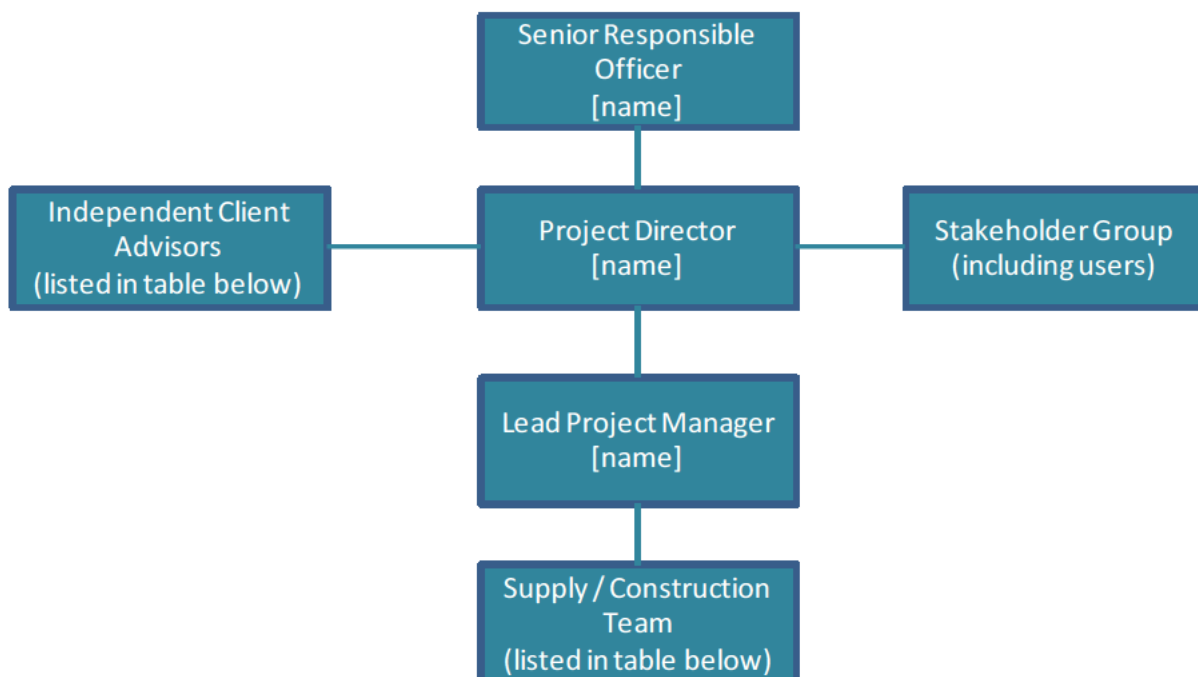
24 Project Management Proposals

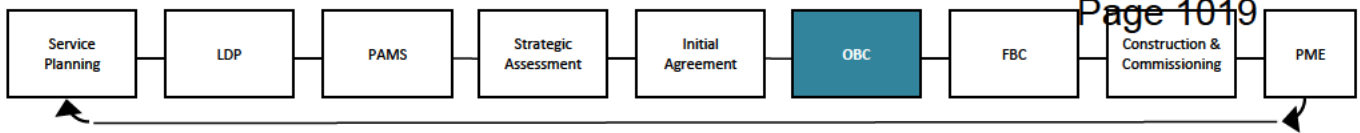
	Question	Response
Project Management	What project management arrangements are in place?	Outline: <ul style="list-style-type: none"> • Reporting structure & governance arrangements • Key roles & responsibilities • Project recruitment needs • Project plan

24.1 Reporting structure and governance arrangements

A diagram of the project organisation structure is required, with named individuals included where already appointed. The project structure should be kept as lean and straightforward as possible whilst retaining an assurance that the project will be well organised.

The following is an example of a typical project structure which outlines the appropriate reporting and governance arrangements for a project. Such an example should be supplemented with an explanation of roles, responsibilities and suitability for each position, as explained in the following section:





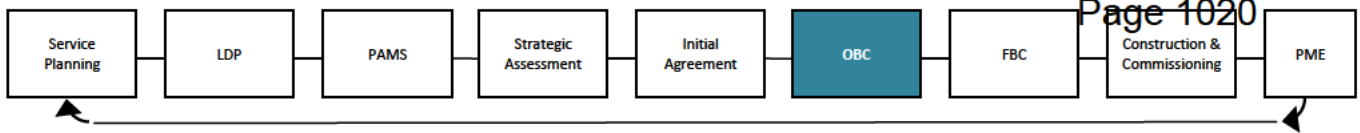
24.2 Key roles and responsibilities

The Board needs to demonstrate that suitable resources and skills are in place to deliver the project. This should focus primarily in relation to the Senior Responsible Officer, Project Director and Lead Project Manager. A skills assessment which provides a gap analysis and action plan should be included in this section of the OBC. Boards should use the baseline skill set guidance to assist in this requirement (see SFT website for further details).

The **Senior Responsible Officer (SRO)** for the project needs to be a senior person within the organisation with the status and authority to provide the necessary leadership and clear accountability for the project's success. They will have ultimate responsibility at Board / Executive level for delivery of the project's benefits and the appropriate allocation of resources to ensure its success.

The **Project Director** needs to be someone who has adequate knowledge and information about the organisation and business operations to make informed decisions on behalf of the SRO. They will be responsible for the ongoing day to day management and decision making on behalf of the SRO to ensure that the desired project objectives are delivered. They are also responsible for the development, maintenance, progress, and reporting of the business case to the SRO.

The **Lead Project Manager** will lead, manage and co-ordinate the project team on a day to day basis. The person assigned to this role needs to be identified, along with confirmation of their experience and suitability for the role. They will be responsible for leading, managing and coordinating the integrated project team on a day-to-day basis.

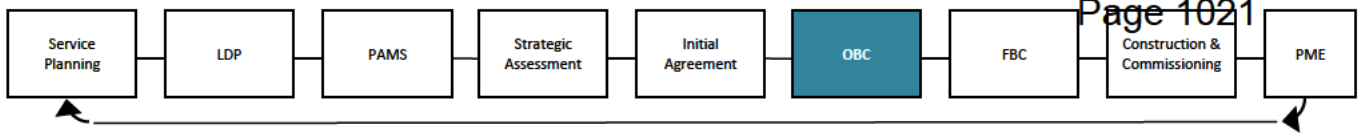


For projects where a **Project or Programme Board** is required to oversee the project (not always necessary for smaller and relatively straightforward projects) then members who are in addition to the above roles should be recorded in a similar table to the following:

Project / Programme Board Members:		
Project role & main responsibilities:	Named person:	Experience of similar project roles:
Organisation's senior business / finance representative - Representing the organisation's business & financial interests.		
Senior service representative - Representing the end user interests.		
Senior Technical / Estates / Facilities representative - Representing the technical aspects of the project		
Stakeholder representative(s) - Representing stakeholders' interests:		

All Independent Client Advisors assigned to the project should be named in the following table, along with their employer organisation. NHS Boards should consider the suitability and availability of knowledge and resources from within the NHS and other public sector organisations before considering the use of external consultants, particularly when another NHS Board may have recently delivered a similar project to the one being considered here.

Independent Client Advisors:	
Project role:	Organisation & Named lead:
Clinical / service lead:	
Project Manager:	
Business Case author:	
Technical advisor:	



Financial advisor	
Legal advisor	
IM&T advisor	
Medical equipment advisor	
Commissioning advisor	
Other advisors:	

Note: not all advisors listed above will be required for every project and some roles may be combined for delivery by a single individual.

Note that the **Supply / Construction Team Details** should be included within the Commercial Case.

24.3 Project recruitment needs

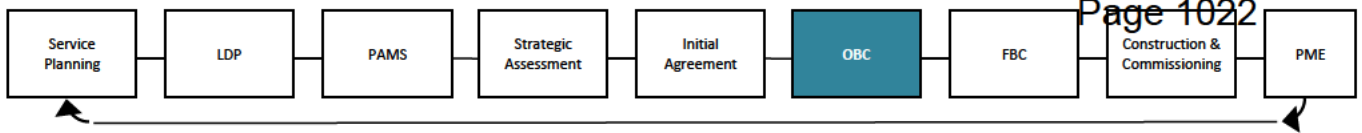
This section is to be used to identify any resource gaps in the project structure which includes the intended plan to fill those roles. This may identify, where appropriate, the planned use of shared support from other NHS Boards, or other parts of the public sector that have similar relevant experience.

External advisers may be considered where the necessary skills and capabilities are limited or in short supply; especially in the case of large, significant, complex and novel schemes. In such cases, this aspect of recruitment should make reference to the external advisors' procurement plans in the Commercial Case.

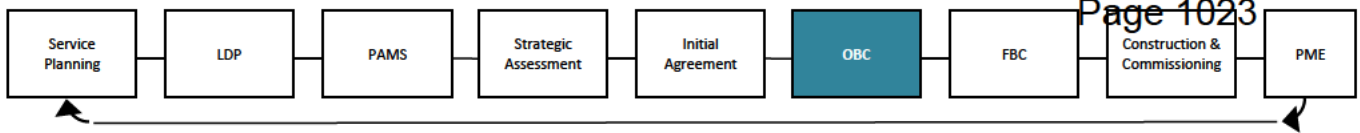
24.4 Project plan and key milestones

A summary of the project plan needs to be included in the Management Case which addresses the following areas:

- Details of the main outcomes required to deliver the preferred implementation option for the project e.g. the new build facility.
- Details of any site investigation, purchase and/or assembly plans.



- The activities for delivering these outcomes throughout the planning, procurement and implementation journey e.g. resource recruitment, design, site purchasing, construction phases, equipment purchasing, commissioning, hand-over, operational change arrangements, etc.
- The resource plan for completing these activities, including any concerns / risk related to a lack of suitable resources and the plan for resolving this.
- Any notable constraints towards completing these activities and an indication of what is being planned to overcome those constraints.
- A tabular schedule of when these activities will occur (the inclusion of a supporting Gantt chart may be useful).
- The stages when progress against this plan will be reviewed, including key points during the business case development, such as Gateway Reviews, Key Stage Reviews, and any health checks.



25 Change Management Arrangements

	Question	Response
Change Management	What change management arrangements have been put in place?	Outline: <ul style="list-style-type: none"> Operational & service change plan Facilities change plan Stakeholder engagement & communication plan

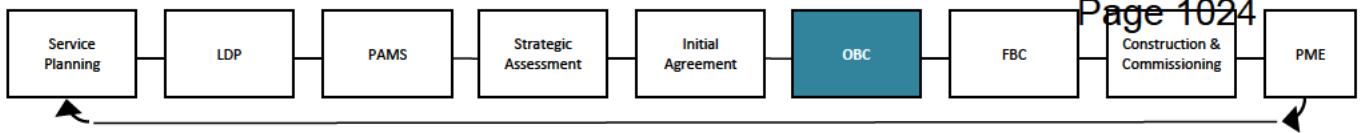
25.1 Operational and service change plan

The potential impact of the project on the NHS Board's operational and service activities, processes and people should be assessed and, where this identifies a need for further planning to take place, then an operational and service change management plan should be prepared. This will cover the following elements:

- Details of reporting structure and governance arrangements for the operational change which aligns with the overarching project structure.
- Identification of the person dedicated to leading on this aspect of the project; including an outline of their role and responsibilities, an indication of their competency for carrying out this role, and continuity plans in place for this important role.
- An outline of the resources needed to implement this plan, including any recruitment plans to fill any vacant roles.
- An operational change plan, similar in content to the main project plan.

25.2 Facilities change plan

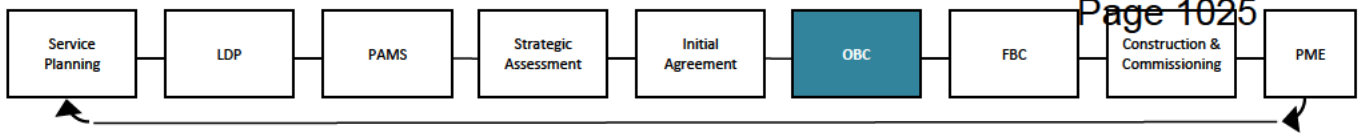
Facilities services may also be impacted by a proposed investment project. If so, then a facilities change management plan will be required which is similar in content and structure as the operational change strategy, and which also confirms adoption of the 'Government Soft Landings' principles. It will also need to align with the overarching project plan and any operational & service change plans.



25.3 Stakeholder engagement and communication plan

In most instances, a stakeholder engagement and/or communication plan is required which should include the following elements:

- Identification of stakeholders.
- Communications and engagement carried out to date.
- Information and/ or engagement events still to be carried out
- Frequency of communications and engagement.
- Method of communication (letter, e-mail, newsletter, etc) and/ or details of engagement events.
- Workforce training and development plans.



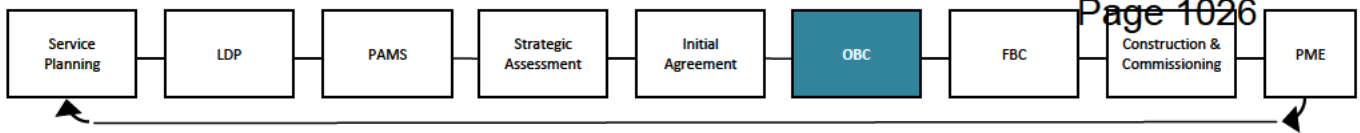
26 Benefits Realisation

	Question	Response
Benefits Realisation	How will the project's benefits be realised?	Outline: <ul style="list-style-type: none"> • Updated benefits register • Full benefits realisation plan • Community benefits objective

The rationale for an investment needs to be reflected in the realisation of demonstrable benefits, as this will provide the evidence base that a proposal is worthwhile and that a successful outcome is achievable.

A separate Benefits Realisation guide is available as part of the SCIM manuals which describes the process to follow and details of what information to include at this stage of the business case process. The following is a summary from this guide on the expectations at OBC stage:

- Review and update the Benefits Register developed for the Initial Agreement.
- Remove any benefits that are no longer considered to have a reasonable expectation of achievement, indicating the reasons why.
- Indicate the 'Target Value' for each benefit, confirming the level of improvement expected once the benefit is realised. The comparable 'Baseline Value' should have been provided for the Initial Agreement.
- Develop a Benefits Realisation Plan which identifies individual responsibilities, actions necessary to realise each benefit, and how this will be monitored throughout the project.
- Prepare a Community Benefit project objective, which defines the approach to achieving social, economic and environmental benefits for this project. It should be location specific and align with the Board's community benefit policy within their organisational procurement strategy. For further details and examples refer to the 'Community Benefit Toolkit for Construction'.



27 Risk Management

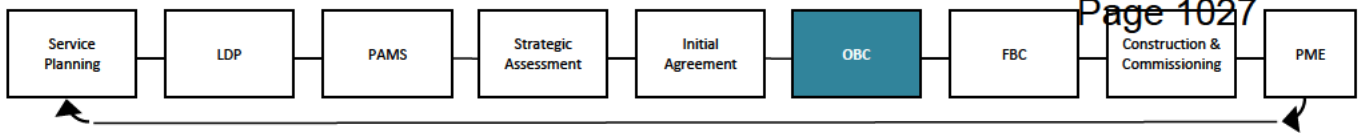
	Question	Response
Risk Management	How are the project risks being managed?	Outline: <ul style="list-style-type: none"> • Updated risk register • Risk control measures • Governance arrangements

Risk management is a structured approach to identifying, assessing and controlling risks that emerge during the course of the policy, programme or project lifecycle. It is a critical and continuous process throughout the planning, procurement and implementation journey of a project.

A Risk Management guide is available as part of the SCIM manuals which describes four defined stages as identification, assessment, control, and monitoring. It also includes details of how to quantify financial risks to form the risk contingency within a project's cost estimate, and details of what information to include at each stage of the business case process.

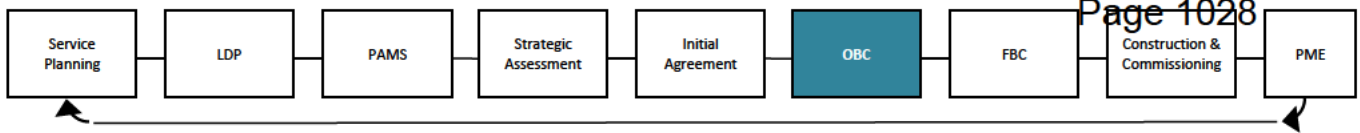
The following items are taken from this guide and provide a guide to the development of a risk management and quantification process appropriate at Outline Business Case stage:

- Review the existing risk register developed at Initial Agreement stage (focussed on strategic and client risks), update it for any change in assumptions, and record the impact of any control measures.
- Add any further project / construction related risks to the risk register – the Risk Management guide provides a list of typical risks that might be expected at this stage of a project.
- Update the assessment of each risk as a financial or non-financial risk, or confirm that it remains unquantifiable at this stage. These risks should then be treated as follows:
 - All financial risks shall be used as the basis of the bottom-up quantification of risks for the project risk contingency.



- The main non-financial risks should be used as part of the non-financial risk appraisal of project options in the Economic Case.
 - Reliance on unquantifiable risks shall be kept as low as reasonably possible, and replaced with financially quantifiable risks where appropriate to do so.
- Provide more detailed information of control measures introduced, their effectiveness, and further measures to take.
 - Identify and record the individual owner to be responsible for the control of each risk.
 - Review the outturn project cost (inclusive of risk contingency) against suitable benchmark costs to confirm that they are reasonably reported.
 - Follow confirmed governance arrangements for independent review (and reporting) of the project risk register and risk quantification by the project's Senior Responsible Owner (SRO) or Project / Programme Board.

The outcome from these steps should be presented within this section of the OBC.



28 Commissioning

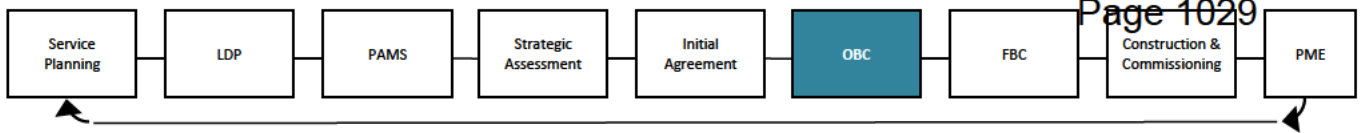
	Question	Response
Commissioning	What commissioning arrangements are being planned?	Outline: <ul style="list-style-type: none"> • Reporting structure aligned to main project structure. • Person dedicated to leading this process • Key stages • Resource requirements

A separate Commissioning guide is available as part of the SCIM manuals which describes the main activities expected throughout the planning and delivery of the commissioning process, and how it overlaps with the business case and 'BIM soft landing' processes.

At OBC stage, an outline is required of the commissioning arrangements being planned for the project, which will set out the following information:

- Details of the reporting structure and governance arrangements for commissioning which align with the overarching project structure.
- Identification of the person dedicated to leading on this aspect of the project; including an outline of their role and responsibilities, an indication of their competency for carrying out this role, and continuity plans in place for this important role.
- An outline of the key stages expected within the commissioning process and an indication of appropriate time scales.
- An outline of the resources needed to implement this plan; including any recruitment plans to fill any vacant roles.

A full Commissioning Master Plan will need to be developed and presented in the Full Business Case.



29 Project Evaluation

	Question	Response
Project Evaluation	How will the success of the project be assessed?	Outline: <ul style="list-style-type: none"> • Person dedicated to leading this process • Key stages • Resource requirements

A separate Project Monitoring and Service Benefits Evaluation guide is available as part of the SCIM manuals which describes how to monitor project progress and evaluate the realisation of the expected benefits from the project as an indication of a successful outcome to the project.

At OBC stage, an outline is required of the project evaluation arrangements being planned for the project. This will set out the following information:

- Identification of the person dedicated to leading on this aspect of the project; including an outline of their role and responsibilities, an indication of their competency for carrying out this role, and continuity plans in place for this important role.
- An outline of the key stages expected for monitoring and evaluating the success of the project.
- An outline of the team who will be responsible for undertaking Project Monitoring and Evaluation, and their respective roles. It should include any recruitment plans needed to fill vacant roles.

A full Project Evaluation Plan will need to be presented in the Full Business Case.

SCOTTISH CAPITAL INVESTMENT MANUAL

Option Appraisal Guide

A practical guide to the Appraisal, Evaluation, Approval and Management of Policies, Programmes and Projects

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1. Introduction

The need to get the best possible value from spending public money will always remain a constant for those entrusted with spending decisions. It is essential that resources associated with infrastructure investment across NHSScotland are allocated efficiently and effectively and the impact/ benefit of such investment decisions are maximised.

In order to arrive at such decisions, sound analysis is essential. This **Option Appraisal Guide** builds on the HM Treasury Green Book guidance and specific Scottish Government guidance issued on assessing Value for Money.

As part of the Scottish Capital Investment Manual, this guidance is mandatory for all NHSScotland Bodies taking forward infrastructure investment proposals. The **Option Appraisal Guide** is the primary guide for information regarding appraisal in NHSScotland. It should be read in conjunction with both the *Green Book*, which remains an authoritative guide to the principles of appraisal and evaluation and the SCIM Business Case Guide.

The principles of this guide apply to all infrastructure investments regardless of whether they are above or below NHS Board delegated limits. However, it is important that they are applied with appropriate and proportionate effort.

2. General Appraisal Guidance

This guidance is based on a step- by-step approach to simplify the practical business of carrying out an appraisal.

By the time a full appraisal is to be undertaken as part of an Outline Business Case, the following steps should be understood and captured as part of the strategic context and Initial Agreement.

- The strategic context.
- The need / rationale for expenditure.
- Defined investment objectives, benefits, risks and constraints.
- Identification and description of the preferred/ strategic option.

Whilst there is a degree of flexibility in the following appraisal steps, e.g. it is not necessary to wait until all the options are defined before starting to consider costs or to identify all the costs and benefits, something that should be interpreted rigidly is that the conclusions and recommendations should not be decided before analysis is undertaken!

The main steps in the appraisal process are to:

- Identify and Quantify the Monetary Costs and Benefits of Options (Including Do nothing or Do Minimum).
- Outline Non-Monetary Costs and Benefits.
- Calculate Net Present Value.
- Sensitivity Analysis and Risk assessment.
- Present NPVs across all Options and Present Preferred Option.

3. Identify and Quantify the Monetary Costs and Benefits of Options

3.1. The Relevant Costs and Benefits

The relevant base case costs and benefits to government and society of all options should be valued, and the net benefits or costs calculated. Relevant costs and benefits are those that will be affected by the decision at hand. These will vary depending on the scope of the proposal but it is useful to consider which potential costs and benefits may be relevant early on in the appraisal process.

Before discounting is applied, costs and benefits should generally be adjusted for both optimism bias and inflation. Other adjustments may be needed in some cases e.g. for tax differences among options or for displacement. Guidance on most of the necessary adjustments is given in this section together with general principles of cost and benefit measurement. Wider social and environmental costs and benefits for which there is no market price also need to be assessed. These will often be more difficult to assess but are no less important and should not be ignored simply because they cannot easily be costed. This guidance provides more information on how to take into account the impacts of proposals that cannot be expressed in money terms.

3.2. Principles of Cost Measurement

Costs should generally be valued on an *opportunity cost (or economic cost)* basis. The opportunity cost of using a resource is its value in its next best alternative use (i.e. its most valuable use other than in the project). An emphasis on opportunities foregone is central to the way of thinking that underpins all the costings in an economic appraisal.

Current market prices should generally be used to measure opportunity costs, because they reflect what firms, households or other entities are willing to pay to draw resources into the next best alternative use. Households and firms generally know their own costs and preferences best and have strong incentives to respond to market signals by putting their resources to their best possible use.

It is important to cost *all* the public resources used in each option, not just those for which cash will change hands, or which fall to a particular NHSScotland Body or budget. Resources should be costed even if they are already owned by the public sector; they have an opportunity cost because they could be sold or put to another use.

Costs and benefits considered should cover the useful lifetime of the assets encompassed by the options, although if the appraisal concerns the contractual purchase of outputs and outcomes, the appraisal period may be different. A whole life costing approach is expected to be demonstrated in assessing options.

A number of different types of costs can be categorised to aid sensitivity analysis but the categorisation should be used carefully e.g. a cost that is fixed relative to one factor may change with another. More complex modelling may be required to describe how costs change over time and with different variables. The following table describes some common examples of differing cost types:

Table: Different Cost Types

Fixed costs remain constant over wide ranges of activity for a specified time period (such as an office building);

Variable costs vary according to the volume of activity (external training costs, for example, varying with the number of trainees);

Semi-variable costs include both a fixed and variable component (maintenance is an example, where there is usually a set planned programme, and a responsive regime whose costs vary in proportion to activity, i.e. the number of call-outs); and,

Semi-fixed, or step costs, are fixed for a given level of activity but they eventually increase by a given amount at some critical point (e.g. after telephone call volumes reach a certain level, a new call centre may be required).

In substantial proposals, the relevant costs are likely to equate to the full economic cost of providing the associated goods and services. For these proposals the full economic cost should be calculated, net of any expected revenues, for each option and include direct/ indirect costs and attributable overheads. The full cost of the base case for each option (i.e. the best estimate of its costs and benefits) should also equal the total of the analysis of costs into their fixed, variable, semi-variable and stepped elements. A dual cost analysis of this kind enables opportunity costs to be fully considered, and sensitivity analysis to be conducted later on.

Cost estimation can be difficult and will normally involve input from accountants, economists and other specialists, depending on the type of appraisal. The appraiser needs to understand and communicate clearly the scope of the appraisal to ensure that specialists provide relevant cost information, whilst ensuring that opportunities have been thoroughly explored.

Depreciation is an accounting device used to spread the expenditure on a capital asset over its lifetime. Capital charges reflect the opportunity cost of funds tied up in capital assets once those assets have been purchased. They are used to help test the value for money of retaining an asset. However, they should not be included in the analysis of economic costs and benefits informing the decision whether or not to purchase the asset in the first place.

Even where an appraisal covers the full expected period of use of an asset the asset may still have some residual value:

- in an alternative use within an organisation;
- in a second-hand market; or as scrap

These values should be included and tested for sensitivity as it may be difficult to estimate the future residual value at the present time.

Costs and benefits should reflect opportunity cost values. Affordability analysis should be conducted separately. Cash flows are important for this purpose. Proposals are

also likely to require resource budgets, so that it is clear how they will be funded, and, ex post, accounted for. However, cash flows and resource budgets do not reflect opportunity costs.

Public spending should be cost-effective. Judgement of this is aided by comparing the ratios for a proposal with those for other similar cases e.g. cost per treatment, cost per m² of floor space. If unit costs appear too high, the costings may need to be reviewed, or the proposal re- designed or rejected.

Expenditures that have already been incurred on goods and services or resources that are already irrevocably committed should be ignored in an appraisal as these are “**sunk costs**” and the focus should be on costs about which decisions can still be made. However, the latter includes the opportunity costs of continuing to tie up resources that have already been purchased e.g. assets such as land, buildings, machinery or vehicles that are already owned have an opportunity cost because if the project were not to proceed, these assets could be sold or put to an alternative use. Current market values of such assets should therefore be included as opportunity costs when appraising any option that will make use of them.

3.3. Total Versus Incremental Costing

In order to enable fair comparison of options costs and benefits should be measured by reference to a common baseline to:

- clarify the differences between the options; and to ensure that all the resources used in the project are accounted for
- The approach that addresses both of these aims best is to include the **total** resource consequences of all options, including the do nothing or do minimum ('status quo') baseline option.

The project boundary should be sensibly defined e.g. if a new management information system is to be introduced to an NHS Board, in regard to staff costs it should be sufficient to cost only the staff time directly affected by the new system, not

the cost of the entire NHS Board's staff. Large blocks of cost that are common to *all* options do not need to be appraised in detail, although they should generally be indicated.

There is an alternative **incremental** approach which is to set the baseline for cost/benefit measurement equal to those of current provision or a 'do minimum', so that only the costs and benefits over and above this are included for the alternative options.

This incremental resource approach is however:

- less informative than the total resource method,
- provides poorer accountability by distracting attention from the totality of the resources devoted to a proposal, and
- can pose problems for post implementation evaluation.

For these reasons, the **total cost approach** is recommended.

If estimating the total resource consequences of options proves difficult, for example because of serious data limitations, some flexibility in approach may be needed. Direction from economists from SG Analytical Services Division should be sought to help determine the most suitable modified approach. In such cases, SG approval is required, agreement to the use of the proposed modified approach should be sought in advance of the submission of business cases from SG Analytical Services Division.

3.4. Treatment of Taxes and Subsidies

Goods and services procured by government should generally be costed gross of tax and subsidies. The ideal would be to assess all options net **of tax and subsidies** but this is not generally straightforward whereas in most cases the costs of options can be compared gross of tax and subsidies without biasing the appraisal.

In practice it is rarely worthwhile to adjust market prices for taxes or subsidies.

However, in certain circumstances e.g. where the tax structures of options differ very substantially such that failure to allow for differing tax treatment could distort the choice of best option, it will be appropriate to consider adjusting for taxes and subsidies..

It is important to adjust for any tax differences between options arising from different contractual arrangements such as in-house supply versus buying in, or lease versus purchase. For example, when considering contracting out a service that was previously provided in-house, at least a part of the tax payable by the contractors and their funders would not have been paid under a 'do minimum' option of continued in-house provision.

Adjustment for indirect taxes such as VAT is not generally required. It is appropriate only where the adjustment may make a material difference, and this is a matter for case by case judgement. However, where options attract different VAT conventions e.g. new build versus refurbishment they should usually be compared as if none were made in all options.

3.5. Treatment of Transfer Payments

A transfer payment is one for which no good or service is obtained in return. Social security payments are an example of this, where there may be a change to the distribution of income but this does not represent a direct economic cost, except for any associated costs of administration or compliance. Transfer payments should be excluded from the costs and benefits in an appraisal, but recorded separately and taken into account in financial analysis.

3.6. Estimating the Value of Benefits

The purpose of valuing benefits is:

- to consider whether an option's benefits are worth its costs, and to allow alternative options to be systematically compared in terms of their net benefits or net costs.

The general rule is that benefits should be valued unless it is clearly not practicable to do so. Even if it is not feasible or practicable to value all the benefits of a proposal, it is important to consider valuing the differences between options.

In principle, appraisals should take account of all benefits to Scotland/the rest of UK. This means that as well as taking into account the direct effects of interventions, the wider effects on other areas of the economy should also be considered. These effects should be analysed carefully as there may be associated indirect costs, such as environmental costs, which would also need to be included in an appraisal. In all cases, these wider effects should be clearly described and considered.

Real or estimated market prices provide the first point of reference for the value of benefits. There are a few exceptions where valuing at market prices is not suitable however if a market is dominated by monopoly suppliers, or is significantly distorted by taxes or subsidies, prices will not reflect opportunity costs and adjustments may be required and specialist economic advice will be needed.

The results of previous studies may sometimes be used to estimate the economic value of changes stemming from current programmes or policies. As databases expand there will be increasing scope for using this 'benefit transfer' method, although care must be taken to allow for differences in circumstances e.g. the characteristics of the consumers or client group for which data exist may differ from those of the proposal under consideration. These factors can limit the extent to which values can be transferred or generalised.

In cases where there is an absence of an existing reliable and accurate monetary valuation of an impact, a decision must be made whether to commission a study, and if so how much resource to devote to the exercise. Annex 2 of the *Green Book* sets out the key considerations that may govern a decision to commission research.

Where it is concluded that a research project to determine valuations is not appropriate, a central estimate, together with a maximum and minimum plausible valuation, should be included if possible. These figures should be included in

sensitivity analyses to give assurance that benefit valuation is not critical to the decision to be made. A plausible estimate of the value of a benefit or cost can often be drawn out by considering a range of issues which are summarised in Annex 2 of the *Green Book*.

Most appraisals will identify some costs and benefits such as environmental, social or health impacts for which there is no readily available market data but which are still important enough to value separately. In these cases, a range of techniques can be applied to elicit values, even though they may be subjective. Annex 2 of the *Green Book* describes the relevant techniques, and provides further information on how they are being applied in practice.

Costs and benefits that have not been valued should also be appraised; they should not be ignored simply because they cannot easily be valued. All costs and benefits must therefore be clearly described in an appraisal, and should be quantified where this is possible and meaningful. Guidance on the appraisal of non-monetary cost and benefits is given in Section 2.2.

3.7. Cost Savings, Efficiency Improvements and Redundancies

Cost and efficiency savings or improvements may be claimed as part of the justification for projects. In such cases, the appraisal report should make it clear whether the projected cost savings are intended to result in financial savings or in re-deployment of resources. Details of the expected financial savings or planned re-deployment should be given. This is particularly important where *staff savings* are projected. Specific points to note about cost savings include:

When **total costs** are used for all options including the baseline option, cost savings are automatically accounted for in the differences in cost between the baseline option and the alternative options. In these circumstances it is ***incorrect to include cost savings on the benefit side of the calculations*** as this would be double counting.

Where staff reductions are projected, a detailed analysis should be included separately. This should show the numbers and organisation of staff by grade prior to

implementation (which should generally be the same as that assumed at the commencement of the baseline option); and how the numbers and organisation of staff by grade are expected to change year by year over the term of the appraisal under the preferred option.

Where it is assumed that staff time savings will be taken up by extra output, or reallocation to other duties, *justification must be provided*.

Redundancy payments should generally be treated as **transfer payments**. Details of any redundancy proposals should be explained fully in the appraisal report, including their financial implications. In some cases they may give rise to local economic and social difficulties, in which event their impact should be assessed. Such impacts may be significant where the numbers of redundancies are relatively large and where unemployed workers with characteristics similar to those being made redundant are taking longer than average to find jobs or are becoming inactive.

3.8. Adjusting for Displacement

Consideration should be given to Displacement. This is:

- the degree to which a promoted activity will be offset by reductions in activity elsewhere

It is important to assess this because appraisal is about identifying a proposal's *net* impact on the UK. Displacement occurs when a service development/ reconfiguration in one region will draw service users to/ from similar service provision in an adjacent region.

Where Displacement can be quantified in money terms, the cost/ benefit streams should be adjusted to reflect the proposal's net impact. This is more likely to be the case for a business expansion than a service development. In any case, the nature and extent of anticipated Displacement should be identified and reported fully in appraisal reports. Where significant potential Displacement is foreseen, it may be appropriate to reconsider the nature or scale of the proposed service development.

3.9. Multiplier Effects

In most appraisals it is sufficient to cost direct or 'first round' expenditure and employment effects. Multiplier or 'second round' effects should normally be *excluded* on the grounds that the alternative uses to which the resources would otherwise be put would also generate multiplier effects, and differences in such effects are often difficult to distinguish with confidence or without disproportionate effort. Also, to include them in some appraisals but not in others would distort project comparisons.

However, in a minority of appraisals, such as those concerned with regeneration of specific sub-regions, there may be justification for calculation of multiplier effects in order to estimate the full impact of a particular proposal. Thus, there is flexibility to calculate multiplier effects in cases where they are of special interest.

3.10. Appraisal of Land, Buildings and other Assets

The employment of assets including land and buildings should be costed using **opportunity cost** values. The valuation of property should be based on the higher of the most valuable feasible alternative use, or the best value that could be obtained for its current use.

Determining the right values requires expert advice. Advice should be sought from suitably qualified and experienced valuation surveyors, for instance, members of the Royal Institution of Chartered Surveyors or the Institute of Revenues, Rating and Valuation. Where the planning context is unclear advice should also be sought from surveyors experienced in planning matters.

In many cases, an up-to-date market value should provide a satisfactory measure of opportunity cost. However, valuations based on market prices reflect private rather than social costs and benefits, hence they will not always reflect opportunity costs. For example:

- they may not take full account of the actual or potential amenity value or environmental impact of a particular land use; or

- where the current use of land is subsidised, market prices may need adjustment to reflect the impact of the subsidy; or
- where the market value of a site is enhanced by planning permission the property should be valued to reflect the actual planning approval.

Assessing the value of buildings in their most profitable use is fairly straightforward where the building can be readily adapted to different users' requirements, such as standard office accommodation. However many public sector buildings, such as prisons and hospitals, may not be readily adaptable to other purposes. In the absence of an alternative use for the buildings, the higher of the value of the site for redevelopment and a valuation in current use of the site plus buildings should be used. The latter can be estimated in terms of depreciated replacement cost (DRC).

DRC value may represent what the land and buildings are worth to the occupier, but a DRC approach is normally only used where no markets exist for a property for its existing use. It would not be unusual for the alternative use value, which represents market value, to be much less than DRC value therefore the DRC value should not be used to represent the expected proceeds of any sale/ disposal as it is unlikely that the market would pay as much as the DRC value.

Land and buildings should generally be costed in terms of either capital values or annual rents. It is normally appropriate to use **capital values** in appraising:

- freehold property;
- properties with development value; and
- longer leasehold interests

In other cases it is usually appropriate to use **annual rentals**. Actual rent paid on leasehold property (the passing rent) will often differ from the market rent. It is the market rent that should be used in appraisal but only from that point in the lease where the rent is subject to review. Common errors in appraisal are either to omit the

rental or capital value of land and buildings already owned, or to double count the cost by including both the capital cost and rental value.

Capital values of land, buildings and other assets should be attributed as costs at the beginning of any period in which they are employed by an option. Property should be costed whether or not any financial transaction is anticipated. For instance, it should be costed whether or not it is already owned or needs to be purchased. In new build cases, the cost of construction should be included. Costs of refurbishment should be included in the years in which they are expected to occur.

Where assets have a residual life, their residual values should be included as benefits in the year in which they are released by an option, or the last year of the appraisal period, whichever is sooner. Any enhancement of the value of a building during its life, for instance due to refurbishment, should be taken into account in estimating its residual value. Residual values should be attributed whether or not the property is to be sold or retained.

Double counting of the cost difference between options should be avoided. It is generally sufficient to cost in the alternative option(s) the sites actually employed in those options. For example:

- Suppose there is an option to use a site already in ownership worth £5,000 ("Option 1") and an alternative option to acquire and use another site worth £8,000 ("Option 2").
- The difference in cost between these options is adequately reflected by including a cost of £5,000 in Option 1 and a cost of £8,000 in Option 2.
- It would be incorrect to add a benefit of £5,000 to Option 2 to reflect the sale or release of the owned site.
- That would give the misleading impression that Option 2 is less costly than Option 1 by £2,000; whereas it is more costly by £3,000.

Deciding the correct treatment of **opportunity costs** can be less straightforward than in the above example. For instance:

- suppose there is another alternative (“Option 3”) that involves employing the £5000 site for the first two years and then moving the function to a new £8000 site.
- in this case, £5000 should be included as an opportunity cost at the start of the appraisal period;
- a residual value for the same site should be included as a benefit in Year 2; an opportunity cost of £8000 should also be included in Year 2; and a residual value for the new site should be included at the end of the appraisal period.

In some cases it may be helpful to separate the value of the land from the buildings. This is because buildings usually depreciate in real terms over their lifetime due to contamination, mineral workings, or poor ground conditions but site values may appreciate or depreciate.

Appraisals should include any land price *appreciation* as a consequence of the project or programme. This may occur with appraisals of urban regeneration projects, or of flood protection. In such cases great care is needed, as the appreciation itself is likely to be most uncertain.

Costs to the public sector as a whole must be taken into account in the appraisal calculation. This will be important in the case of jointly occupied buildings where there might be difficulties in finding a replacement tenant if one occupier were to quit, so imposing additional costs on the major occupier.

Allowance should be made for an appropriate level of ongoing maintenance costs. If maintenance is not carried out to an appropriate standard this will be reflected in the increased costs of refurbishment, or reduced sale price of a freehold property, while in the case of leasehold property dilapidations payments will be incurred at the termination of the lease.

Costs of providing temporary accommodation and other costs of decanting staff should be included in appraisals.

When a building requires refurbishment, the relative merits of refurbishment, and alternative options such as redevelopment, relocation and disposal should be appraised.

Where possible, appraisals should include both freehold and leasehold options to test both for value for money.

The time period for appraisal should relate to the life of the services being provided and be sufficiently distant to cover all the important cost and benefit differences between options. The appropriate period may be shorter than the physical life of the buildings or longer than the period for which they are leased. A time period of 60 years is typically used, with suitable allowance for refurbishment costs and residual values. However, there is flexibility to tailor the time period to suit the circumstances of the case in hand.

3.11. The Acquisition and Disposal of Assets

NHSScotland bodies have a duty to dispose of property surplus to requirements within three years and should not hold land speculatively. Disposals should be conducted in accordance with the requirements of the NHSScotland Property Transactions Handbook.

Projects should not use more land than is cost effective. Available plots of land for new developments may not precisely match requirements, and where a plot exceeds requirements the surplus should be disposed of as soon as possible.

Decisions involving the acquisition or disposal of assets require the application of appraisal with proportionate effort, including examination of different options and their associated costs and benefits.

The use of appraisal is intended to ensure that NHSScotland bodies acquire assets only where the resulting benefits are greater than or equal to the cost of the asset

including any revenue costs. Similarly NHSScotland bodies considering the disposal of an asset should ensure that the options have been subject to appraisal.

Disposal of property, the sale of freehold property, or the assignment or subletting of leasehold property, will generally involve significant costs, e.g. legal fees, marketing costs and removal costs. In a depressed market the timing of disposal must be appraised and appropriately qualified advisers can provide guidance. Timing will be critical where there is excess supply in the market for the particular type of accommodation, or where the property is 'over rented'. In such cases it might be possible to dispose of a lease by paying a reverse premium, which will be at least equal to the present value of the difference between the passing rent and the market rent until the market improves or the termination of the lease.

Strenuous efforts should be made to dispose of surplus property; but in poor markets it may be necessary to include in an appraisal the costs of holding the property until disposal, or to cover such initiatives as refurbishment to enhance marketability.

Suitably qualified advisers can provide NHSScotland bodies with assessments of the open market values of assets in order to ensure that they obtain the highest possible price for an asset which it decides to sell and pays no more than a reasonable market value for an asset which it decides to purchase. Apart from exceptional circumstances, and then only with the prior approval of SGHSCD Capital Planning & Asset Management, NHSScotland bodies should not:

- propose to acquire assets at a price in excess of open market value notwithstanding the appraisal results;
- consider disposal restricted to open market value where the appraisal indicates a higher continuing operational use value to Government.

Under the SGHSCD Capital Property and Asset Management Policies NHSScotland bodies are now charged with adopting a more active strategy towards disposals. Through the introduction of formal property audits, NHSScotland bodies will be required to justify the retention of all property assets.

4. Weigh Up Non-Monetary Costs and Benefits

Where possible, costs and benefits should be valued in money terms, using techniques such as those presented in Annex 2 of the Green Book. However, it is not always cost-effective or practical to value costs and benefits in money terms. In many assessments there are non-monetary impacts such as environmental, social or health effects that cannot be valued cost-effectively. These non-monetary costs and benefits must be taken into account and should not be assumed to be any less important than the monetary values. Their values may be crucial to the decision.

4.1. Multi- Criteria Analysis

The aim is to find a suitable way to assess non-monetary factors and present them alongside monetary values. In the simplest cases, it may be adequate just to list and describe them however it will often be appropriate to use a more sophisticated technique. The umbrella term Multi-Criteria Analysis (MCA) is frequently used to describe the range of techniques available.

MCA brings structure and transparency to judgement of how non-monetary options compare. It should relate closely to the stated objectives of the project and consist of comparative assessments, both quantitative and qualitative of how well each option meets the objectives. Sometimes the stated project objectives are sufficient to serve as the relevant criteria for the MCA, in other cases they may need to be developed into a set of more detailed criteria.

The nature of the option assessment can vary from qualitative description (in the simplest cases), or ticking a box to indicate that an option satisfies a particular constraint. In larger or more complex cases, measurement of impact in suitable non-monetary units or the use of relative weights for each criterion and explicit scoring or ranking of each option should be adopted.

MCA techniques include, for example:

- *Impact statements or performance matrices.* This method tabulates the impact of each option upon each non-monetary factor. This can be a versatile approach but is not *generally* recommended by SGHSCD.
- *The weighted scoring method.* This involves assigning numerical weights to each factor to reflect its comparative importance, scoring the performance of each option against each factor on a numerical scale and calculating a 'weighted score' for each option.

Multi criteria analysis can be used as a way to bring data expressed in units other than money values into the appraisal process. It can be used to rank options or choose a preferred option and usually involves an explicit relative weighting system for the different criteria relevant to the decision. This often involves an implicit quantification of different impacts – especially once the performance against the various criteria is compared to the costs that are deemed worth spending to secure or to avoid them.

The available techniques should be considered carefully before choosing the method most appropriate to the case in hand. It is good practice to cover all non-monetary factors by *either* the impact statement method or the weighted scoring method. It is not helpful to cover some factors in a weighted scoring calculation and others in an impact statement. This can cause confusion and invalidate the rankings emerging from the weighted scores.

The weighted scoring method approach is the **preferred** methodology for SGHSCD.

Whatever the technique adopted:

- It is important to make clear how the options compare in regard to the non-monetary factors. Information should be presented in a way that facilitates this e.g. by use of suitable tables or matrices.

- Costs and benefits should be quantified in suitable non- monetary units where possible. For example, performance indicators may be used to differentiate the performance of options in relation to achievement of the needs and objectives established at the outset of the appraisal. Research may be needed to determine the best units of measurement.
- Details of the methods and assumptions used should be recorded.

Impact statement consists of a table summarising the impact of each option upon each objective or ‘difficult to quantify’ factor. The cells of the table should contain suitable quantitative impact measures or indicators; and/ or qualitative impact analysis. The size of the table can be scaled to suit the needs of the case in hand. An accompanying commentary summarising the main trade-offs and other features of the analysis should generally be provided. Departmental economists can advise on the design of suitable impact statements and may be able to provide examples.

Table XX: Impact Statement Layout

	Option 1	Option 2	Option 3
Objective 1			
Objective 2			
Objective 3			

The **weighted scoring** method is the one generally recommended by SGHSCD and this is described in more detail in Appendix 2. Where the weighted scoring method is used, SGHSCD requires the results to be supplemented with details of:

- the criteria used - including the agreed definition of each criterion;
- the weightings applied;
- the scoring process;
- details of, and rationale for, the option scores.

Failure to explain weights and scores properly has been a feature of a number of past appraisals, and can delay approvals. SGHSCD will not accept figures that are not fully explained.

In some cases the primary concern of an appraisal may be to determine the least-cost option for achieving a specified level of service provision. However, even when this is the case there may be a need to appraise benefits as well as costs. It is rarely the case that options offer identical benefits; there will usually be some differences in performance that need to be appraised along with the cost information.

4.2. Distributional Effects

Policies, programmes and projects may give rise to distributional effects between people of different incomes, ages, genders, religions, ethnic groups, health states, skills, or locations. Expenditures or other policy proposals invariably leads to both gainers and losers, and information on how the costs and benefits are distributed among different individuals, organisations, or sectors of the economy can be very important. In general, proposals that deliver greater net benefits to lower income groups should be rated more favourably than those that benefit higher income groups.

Significant distributional effects should be identified and as far as possible, quantified in appraisals and evaluations. How the options differ regarding these effects should be analysed in much the same way as for other non-monetary factors. For instance, where an impact statement is being used the distributional impacts should be summarised in it, together with those of all the other non-monetary factors. Alternatively, they may be scored as criteria in a weighted scoring exercise.

The *Green Book* includes a method for applying explicit distributional weights. It is only applicable in cases where benefits to income groups are monetised, and this can require a substantial effort in terms of information collection and analysis. Judgement of the appropriate approach should be informed by consideration of the scale and significance of the distributional impact of the proposal in view; and the ease or cost-effectiveness with which distributional impacts can be measured.

5. Calculate Net Present Values and Assess Uncertainties

5.1. Discount Rates and Net Present Values

In appraisals, we generally need to compare options that will impact over a period of years into the future. This raises the question of how future cost and benefits should be valued in today's terms. Normally people prefer to receive cash sooner rather than later, and pay bills later rather than sooner. This is referred to as the *time preference*.

In the public sector, likewise, *social time preference* is reflected by giving more weight to earlier than to later costs and benefits. This is achieved by applying a 'discount rate' to future costs and benefits. The discount rate defines how rapidly the value today of a future real pound declines through time, just as a real rate of interest determines how fast the value of a pound invested now will increase over time.

Discount rates are currently 3.5% for up to 30 years. Values for long term discount rates can be found in Annex 6 of the Green Book.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_complete.pdf **Discount**. This rate should be applied in all cases

The following table shows how net present value of £1000 declines in future years with the 3.5% discount rate:

Net Present Values and the 3.5% Discount										
Time (yrs)	0	1	2	3	4	5	6	7	8	9
NPV (£)	1000	966	934	902	871	842	814	786	759	734

The 3.5% rate is the standard discount rate up to and including the 30th year of an appraisal. However, there is good reason for discounting longer term impacts less heavily. This is explained in Annex 6 of the *Green Book*. The main rationale for declining long-term discount rates arises from uncertainty about the future. Thus, instead of applying 3.5% to all future years, the following schedule should be used:

Years	0 - 30	31 - 75	76 - 125	126 - 200	201 - 300	300+
Discount Rate	3.5%	3.0%	2.5%	2.0%	1.5%	1.0%

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_compl_ete.pdf

In addition it has become increasingly common to discount health benefits differentially. If health effects are measured in quantities – e.g. quality adjusted life-years – and the value of health effects is increasing over time, discounting the volume of health effects at a lower rate than costs is a valid method of taking account of the increase in the future value of health effects. In practice the only reason to discount quantities of health is the existence of pure time preference and it is suggested that this is around **1.5%** in real terms (HM Treasury, *Green Book: Appraisal and Evaluation in Central Government*, 2003). Sensitivity analysis should be conducted around this rate. When health effects are valued in monetary terms, they should be discounted at the same rate as other monetary values – i.e. at 3.5% in real terms.

5.2. Treatment of Inflation

The standard discount rate is defined in *real terms*, and should therefore be applied to values which are also expressed in real terms, as opposed to nominal or cash values. This means that the anticipated effects of general inflation should be removed from all the figures before discounting.

The most common assumption is that inflation will affect all prices equally, in which case all values are expressed in constant prices at a given date. This is adequate in a majority of appraisals. The effect of expected future inflation in the general price level

should be removed by deflating future cash flows by forecast levels of the relevant deflator. The GDP deflator is the appropriate measure of prices to use as a general deflator. See [HM Treasury's Gross Domestic Product \(GDP\) Deflators: A User's Guide](#) for latest figures and examples of use.

In some cases, it may be anticipated that a certain cost or benefit item for example wage earnings or oil prices, will experience inflation at a significantly different rate to that of general inflation. In such circumstances, the cost or benefit stream for that item should be adjusted accordingly before discounting. Specialist advice should be sought about how to do this if necessary.

5.3. Adjustment for Optimism Bias

It is important to note that where applicable the adjustment for optimism bias (OB) should be made *before* the calculation of NPVs. Following HM Treasury terminology, the base case for each option is the best estimate of its costs and benefits after allowance for appraisal optimism. The base case NPV for each option is its OB-adjusted NPV. Optimism Bias is further explained in the Risk Management SCIM guide.

5.4. Net Present Value

For each option of an appraisal a calculation of its Net Present Value (NPV) should generally be included.

The NPV is the key summary indicator of the comparative value of an option. It is the name given to the sum of the discounted benefits of an option less the sum of its discounted costs, all discounted to the same base date. Where the sum of the discounted costs exceeds the discounted benefits, the net figure may be referred to as Net Present Cost (NPC).

Following the identification and measurement of the costs and benefits for each short listed option a calculation of their Net Present Value (NPV) should be included using the appropriate discount rate.

The decision rule is to select the option that offers to maximise NPV, or minimise NPC. This is subject to account being taken of those impacts which cannot be valued in money terms. Conceptually, these also have an NPV or NPC, but inability to express them in money terms means that they must be judged by other means and weighed alongside the monetary values in reaching a decision.

The time horizon for NPV calculations should reflect the economic life of the services being appraised or the useful life of relevant key assets and should be sufficiently distant to cover all the important cost and benefit differences between options. For projects expected to have a very long life, the effect of shorter horizons should be illustrated for key years.

Discount calculations should be shown in detail. Net Present Value (NPV) calculations should show a breakdown of the main cost/ benefit items covered, and how their incidence is distributed over time. In addition, SGHSCD expects the calculations to show:

- the discount factors used, year by year;
- the total NPV (or NPC) for each individual year; and
- the cumulative total NPV (or NPC), for each year of the calculations.

Appraisal reports should record both:

- the *price basis* of the money values (i.e. the date at which prices have been held constant); and
- the *base date for discounting* (i.e. the date corresponding to start of the appraisal - usually the beginning of Year 0 in the NPV calculations).

Discount calculations can be facilitated by the use of software packages. The Generic Economic Model (GEM), developed in conjunction with Department of Health is an Excel spreadsheet suitable for the needs of NHSScotland bodies. SGHSCD expects the GEM to be utilised for option appraisal and for GEM outputs to be contained within

business cases prepared by NHSScotland bodies. **The GEM and the guidance for its use is accessible at:**

http://www.dh.gov.uk/en/Procurementandproposals/Publicprivatepartnership/Privatefinanceinitiative/GenericeconomicmodelPFIschemes/DH_4016193

5.5. Required Rates of Return and Pricing Rules

Some central government bodies sell goods or services commercially, including to the government itself. These activities may be controlled by requiring prices to be set to provide a required rate of return (RRR) on the capital employed by the activity as a whole. Government policy is generally to set charges for goods and services sold commercially at market prices, and normally to recover full costs for monopoly services, including the cost of capital as defined in the HM Treasury Fees and Charges Guide.

5.6. Assessing Uncertainty

The OB-adjusted NPVs provide a starting point for understanding the impact of risk between different options. However, the future is inherently uncertain therefore no matter how thoroughly costs, benefits, risks and timing are identified and analysed, and even after best efforts have been made to adjust for optimism bias, there will remain uncertainty over the accuracy of the assumptions made. It is essential to test how these uncertainties may affect the choice between options. Whereas OB-adjustment is primarily about ensuring NPVs are based on best estimates, assessment of uncertainty is chiefly about testing the rigour of the appraisal conclusions.

Sensitivity analysis is the key technique for this purpose and it is fundamental to appraisal. It is the process of examining how the preferred *option is* affected by reasonable variations in key assumptions. Its purpose is to aid the option selection decision; it is not something to be applied merely to a preferred option after it has been selected. The need for sensitivity analysis should always be considered and dispensed with only in exceptional cases. It is always potentially useful but is

particularly valuable when the NPVs of options are relatively close to each other.

The basic procedure is to alter an assumption, recalculate the OB-adjusted NPV for each option, and consider the impact on both the total net benefits and on the appraisal results.

It is generally recommended to consider the effect of varying assumptions one at a time as this helps to isolate the assumptions that have the most impact. Some variations may have little impact on NPVs or option ranking, in which case they may not be regarded as a cause for much concern. Other variations may alter the ranking of options or significantly change the NPV. Such variations should be considered carefully and may require specific risk management actions. For example, it may be appropriate to seek to reduce the uncertainty over particular assumptions in order to make them stronger, and improve the chances of a good outcome.

The calculation of 'switching values' is a particular form of sensitivity test. It shows by how much a variable would have to fall (if it is a benefit) or rise (if it is a cost) to switch the balance of advantage from one option to another, or switch the NPV from positive to negative. This may be a crucial input into the decision as to whether a proposal should proceed. For example, it can help answer key questions such as:

- By how much can we allow benefits to fall short of expectations, if the project is to remain worthwhile? How likely is this?
- How much can operating costs increase without jeopardising the VFM of the proposal? How likely is this?

In any particular case, judgement should be used to decide upon the assumptions that are worth subjecting to sensitivity analysis, and the range of variation to be examined for each assumption. A prior analysis of costs into fixed, step, variable, and semi-variable categories can help in understanding the sensitivity of the total costs of proposals. Examples of the assumptions which should be considered for sensitivity analysis include:

- projections of need or demand e.g. projected sickness incidence rates, demographics
- estimates of key costs and benefits e.g. items of capital or recurrent costs, forecasts of revenue income
- changes in real prices e.g. growth of real wages or real energy prices
- weights and scores attached to non-monetary factors
- the phasing of costs or benefits
- the time horizon for the appraisal

The reasons for choosing the assumptions investigated and the range of variations examined should be recorded. In- depth analyses of variations in every assumption should be avoided.

Presentation of sensitivity analyses is important, particularly when many are undertaken. Summary tables should generally be provided, comparing the key results of all the sensitivity tests undertaken. Inclusion of large numbers of spread sheets that repeat most of the rows of figures in the main spread sheets is not very helpful. Sufficient information should be provided to facilitate checking of sensitivity calculations.

NHSScotland bodies should explain the implications of sensitivity analysis for option selection. It is not good practice simply to append sensitivity analyses to appraisal reports without explaining their significance.

It can sometimes be helpful to group potential variations into scenarios, for example, to enable consideration of 'optimistic' and 'worst case' scenarios. 'Scenario planning' looks at the consequences of various possible states of the world for anything from an individual investment project to an entire corporate strategy. Scenario planning supplements sensitivity analysis by describing alternative internally consistent possible future economic and political environment, and outcomes. Scenarios are

often useful for planning an investment programme and may also be justified for exceptionally large and complicated projects, or for policies that are very sensitive to the external environment.

Scenarios should be chosen to draw attention to the major technical, economic and political uncertainties upon which the success of the project or option or strategy depends. Generally the best approach is to set up two or three scenarios that differ in important dimensions. The expected NPV can be calculated for each scenario. It may also be helpful to undertake some sensitivity analysis within and between scenarios.

More sophisticated techniques should be used as appropriate in particularly large or complex appraisals. More explanation is given in the *Green Book*. For example,

In certain cases, it may be appropriate to use Monte Carlo analysis to calculate expected values rather than single point estimates for NPVs. Specialised computer software and expert assistance may be required.

Proposals requiring sequential decisions can be analysed using 'decision trees', which are graphical representations of the set of possible strategies. Different strategies result in different NNPVs depending on the events (or states of the world) that occur. An extension of the technique can be employed when the probability of any particular risk is assigned.

6. Option Appraisal Results

The result of the appraisal is a critical part of the evidence base on whether or not to proceed with a particular option. Such decisions can have far reaching consequences. Therefore the presentation of the results and conclusions of an appraisal to decision makers and stakeholders can be as important as the analysis itself.

In all cases transparency is vital. The presentation of the option appraisal in the business case should be comprehensive and include all of the steps of appraisal listed and should make the analysis accessible to personnel who do not have an intimate knowledge of the project but need to make judgements based upon the information given. Presentation should be clear, logical, well founded and geared towards helping the decision at hand. Business cases in particular should be drafted in non-technical language wherever possible, but if it is necessary to use technical terms, they should be explained.

The summary results of sensitivity and scenario analysis should be included in business cases (not just single point estimates of NPV values), with detailed discounted cash flow analysis (using the Generic Economic Model) and optimism bias calculation (using DH guidance) as appendices to the business case.

It is important to include a section which draws together the main findings and conclusions of the appraisal. Decision makers need to understand that there are ranges of potential outcomes to judge the capacity of proposals to withstand future uncertainty. The main results for each short listed option *should be shown* including:

- NPV and/or NPC
- Capital and recurrent costs
- Non-monetary impacts, including costs and benefits not easily valued and distributional issues,
- Main risks and uncertainties

- Budget, Cash Flow and Funding implications

Summary tables or matrices should be used to facilitate comparison of the results of the option analysis.

The option appraisal results should be assessed along with other relevant evidence, and a preferred option should be identified. In the simplest cases, this may be a matter of choosing the option with the lowest NPC. In other cases, non-cost factors may be crucial and may justify selection of an alternative that is not the least costly. Timing considerations and affordability may also influence option choice. Whatever the justification for the preferred option is, its VFM should be confirmed and its advantages over the main alternatives should be explained specifically.

1. APPENDIX 1: Comparison of Economic and Commercial Appraisal

Introduction

- 1.1. Differences between economic appraisal and commercial appraisal can be a source of confusion for practitioners.

Economic Appraisal

- 1.2. Economic Appraisal should always include an assessment of value for money in terms of the national interest, therefore its scope is very wide.

- 1.3. Economic Appraisal always values costs and benefits on an economic (opportunity) cost basis. However, the approach to costs and benefits may fall into one of the following three main categories:

- **Cost Benefit Analysis (CBA)** which attempts to quantify *all* the costs and benefits *in money terms*;
- **Cost Utility Analysis (CUA)** this is like CBA except that it seeks to measure benefits using non-monetary indicators of utility. Utility is an economist's term for the satisfaction or usefulness derived from a product.
- **Cost Effectiveness Analysis (CEA)** in which *either* the benefits *or* the costs are held constant. In the former case CEA compares the costs of different ways of producing the same or similar outputs, which are not necessarily given a monetary value; in the latter case various ways of allocating a fixed sum are considered in order to maximise the benefits.

- 1.4. CBA is rarely applicable in its purest form because relevant costs and benefits are often difficult to measure in money terms. Even when appraising projects producing tradable goods and services (e.g. investments by the nationalised industries, grants to commercial firms) there may be non-monetary effects to take into account, such as environmental impacts and other qualitative outputs. CEA is used to some extent, particularly when the emphasis is upon choosing the least cost method of achieving particular objectives. However, many appraisals

fall somewhere between CEA and CUA. They involve options which vary regarding both costs *and* outputs, and it is a matter of judging which of the alternatives is best by comparing the different costs and outputs which they offer.

- 1.5. Commercial Appraisal shares some of the characteristics of Economic Appraisal but is much narrower in scope. Its purpose is to establish whether a proposed activity will be viable in a commercial sense.
- 1.6. Establishing a project's viability covers several elements including analysis of projected cash flows, examination of the financing, marketing and management arrangements for the specific proposal in view, and assessment of the historical performance and general financial position of the relevant company or public sector trading body.
- 1.7. The crucial differences of substance are that costs and benefits are generally estimated:
 - based on **economic cost** values in Economic Appraisal, but **financial values** in Financial Appraisal;
 - in **Economic Appraisal**, but **only for an individual public sector trading body or private company** in Financial Appraisal.
- 1.8. Many of the mistakes made in appraisals arise from failure to recognise these differences. Some of the more common errors are listed below under Common Errors in Economic Appraisal.
- 1.9. Confusion can also arise through misuse of terminology. In Financial Appraisal, an NNPV calculation is often referred to as a Financial Appraisal. This can confuse in two ways.
 - Firstly, the term Financial Appraisal is sometimes used to describe the NNPV calculations in an Economic Appraisal, which is misleading because NNPs in an Economic Appraisal are not based on financial values.
 - Secondly, Financial Appraisal may be used to describe a variety of financial assessments, including, for example, an affordability assessment, or an

analysis of sources of funds.

Common Errors in Economic Appraisal

1.10. Some common errors in Economic Appraisals include:

- **Statement of objectives in vague qualitative terms** such that their achievement can not be measured
- **Failure to cost assets already in public ownership.** These have an opportunity cost and should be costed at their current market value.
- **Inclusion of capital financing charges** such as loan charges. These may be relevant to a Commercial Appraisal or Affordability Assessment but do not represent an economic cost. In an Economic Appraisal, capital should be costed according to its purchase cost at current market values.
- **Double counting of capital expenditure with interest and depreciation charges.** In Economic Appraisal the cost of capital is adequately covered by including expenditure on capital costs in the years in which it occurs. In Financial Appraisal the conventional approach is to include depreciation and interest charges. To combine these approaches is to count capital costs twice.
- **Inclusion of transfer payments** such as social security or redundancy payments. These do not represent economic costs.
- **Applying the test discount rate to cash or nominal values.** This is wrong because the discount rate is defined in real terms and must be applied to values expressed also in real terms.
- **Failure to consider costs and benefits to other bodies or budget holders.** Economic Appraisal is about *all* the costs and benefits to Scotland/rest of UK and needs to go beyond the horizons of an individual NHSScotland body or other body.

- **Ignoring Displacement.** The impact upon the business of other service providers or market competitors should be taken into account.
- **Lack of a clear explanation of the basis of all weights and scores,** leading to misunderstanding and delays until clarification is obtained.

Checklist

1.11. The checklist below provides an aide-memoire on whether particular costs should or should not be included in each type of appraisal. It is in the nature of a checklist like this that it cannot cover every eventuality, so it should not be regarded as a substitute for more detailed guidance on the treatment of costs and benefits.

Table: Checklist of Costs

1. COSTS	Economic Appraisal	Financial Appraisal
a) Capital Costs		
Land purchases	✓	✓
Land already owned	✓	✓
Fixed Capital purchases	✓	X
Fixed Capital already owned	✓	X
Depreciation on Fixed capital purchases	X	✓
Depreciation on Fixed capital already owned	X	✓
Interest payments, capital charges	X	✓
Change in Working capital requirement	✓	✓
Capital subsidies/grants from UK	✓	✓

b) Current Costs		
Cost of inputs & outputs (excluding capital)	✓	✓
Insurance costs	✓	✓
Corporation Tax	✓	✓
VAT	X	✓
Import Duties	X	✓

2. APPENDIX 2: The Weighted Scoring Method

- 2.1. There are a number of approaches to the appraisal of costs and benefits that are difficult to value in money terms. These include, listing and describing them, developing a matrix or impact statement, and applying the weighted scoring method. The various approaches should be considered carefully before choosing the method most suited to the case in hand.
- 2.2. The weighted scoring method approach is the preferred methodology for SGHSCD. It involves identification of all the non-monetary factors ('attributes' or 'criteria') that are relevant to the project; the allocation of weights to each of them to reflect their relative importance; and the allocation of scores to each option to reflect how it performs in relation to each criterion. The result is a single weighted score for each option, which may be used to indicate and compare the overall performance of the options in non-monetary terms.
- 2.3. This process necessarily assigns numeric values to judgements. These judgements should not be arbitrary or subjective, but should reflect expert views, and should be supported by objective information. To achieve meaningful results which decision-makers can rely on, it is important that:
 - the exercise is not left to the 'experts', but is undertaken by a group of people who represent all of the interested parties, including those who are directly affected by the project, and those who are responsible for its delivery;
 - the group possesses the relevant knowledge and expertise required to make credible measurements and judgments of how the options will impact upon the criteria.
 - the group is led by an independent chairman to steer the process, probe opinions, promote consensus and avoid prejudice; and
 - the justification for the group's chosen weights and scores is fully explained.

- 2.4. Appraisal reports should identify the personnel involved in the exercise, including an indication of their credentials, so that decision-makers are fully aware of whose views are represented. If there is a lack of consensus among members of the group regarding any of the weights or scores, the views of the dissenting individuals should be recorded.
- 2.5. The process of deriving weights and scores is explained below step by step, covering the following stages:
 1. Identify the relevant non-monetary criteria;
 2. Weight the criteria to reflect their relative importance;
 3. Score the options to reflect how each option performs against each criterion;
 4. Calculate the weighted scores;
 5. Test the results for robustness; and
 6. Interpret the results.

Step 1: Identification of Non- Monetary Criteria

- 2.6. Identifying the criteria may sound straightforward, but criteria must be clearly defined so that both appraisers and those reviewing appraisal reports have a clear understanding of them. To help in the scoring of options, criteria should be defined as far as possible in service or output oriented terms, and they should generally relate closely to the service objectives and performance measures established at the outset of the overall appraisal.

- 2.7. Criteria are best defined so that the status quo or do minimum baseline option can be given a score other than zero. For example, if one of the project objectives is to improve access for the disabled, the criterion is better defined as ‘accessibility for the disabled’ than as ‘improvement in accessibility for the disabled’. The first definition allows all of the options, including the baseline option, to be scored and thus enables the options to be compared in proportion to the baseline. The second definition necessitates a zero score for the baseline option, which means that the scores for the alternatives can not indicate how much better they perform than the baseline option¹.

Step 2: Decide the Weights for Each Criterion

- 2.8. The second stage is to decide on the weights to be attached to each of the criteria identified. This should reflect the group consensus about the relative importance of the criteria, which is a matter for judgement, based on, for instance, relevant policy statements. The most common approach, and the one which is most readily comprehended, is to express the weights in percentage terms so that they sum to 100.
- 2.9. Justification for the weights ascribed should be recorded. Such an explicit approach helps to ensure that the basis of the weights is fully understood and accepted by all those participating in the exercise as well as those using its results.

Step 3: Scoring the Options

- 2.10. The third stage is to score each option against each criterion on a suitable scale. The approach described here uses a *cardinal* scale. This means that if Option A is considered to perform three times as well as Option B, then Option A is given a score that is three times that of Option B. Simpler alternatives to cardinality are

¹ This is not to say that the baseline option should never be given a zero score. In the accessibility example, the baseline option will deserve a score of 0 if the current provision is completely inaccessible to the disabled. However, the more likely position is that the disabled can access it with a degree of difficulty, in which case a suitably small positive score would be appropriate

possible, for example an *ordinal* scale may be used. This provides a simple ranking of options against each criterion, which enables one to say that Option A is better than Option B, but it does not indicate *how much* better A is than B. Such an approach may be useful in some circumstances, but a cardinal approach, if sustainable, is more informative.

- 2.11. Options are scored against the criteria by reference to a scale, say from 0 to +20. A score of 0 will indicate that the option offers no benefits at all in terms of the relevant criterion, while a score of +20 will indicate that it represents some "maximum" or "ideal" level of performance. Scores between 0 and +20 will indicate intermediate levels of performance. The scale used does not have to be from 0 to +20, but the same scale should be used for all criteria.
- 2.12. To achieve cardinality, the group needs to think carefully about the differences in the scores awarded to the options, and to provide meaningful justification for them.
- 2.13. The weighted scoring method should not be used to avoid the effort of measuring differences between options in measurable non-monetary units nor should it be used to substitute vague subjective judgments of comparative performance for hard measurement. The credibility of the scores depends upon the provision of a rational justification to support them, including measurement where possible. In any case, project sponsors must be able to provide justification for each and every score that is awarded, and SGHSCD will expect this to be recorded in full detail.
- 2.14. Scores should be allocated to all of the options, including the baseline option (i.e. the status quo or 'do minimum'). A common error has been to overlook the baseline, but it is important to include it. However inadequate it may seem, the existing or 'do minimum' level of service will normally impact on the criteria to some extent, and scoring this helps to give a sense of proportion to the scores of the other options, and to compare their performance to that of the current or minimum level of provision.

Step 4: Calculate the Weighted Scores

- 2.15. This simply involves multiplying each score by the weight for the relevant criterion. Thus weighted, the scores are totalled to obtain an aggregate weighted score for each option.

Step 5: Test the Strength of the Results

- 2.16. It is important to examine how reactive the results are to changes in the weights and scores used. This can be done with the aid of sensitivity analysis.
- 2.17. Details of the sensitivity analysis should be recorded, and the strength of the results confirmed. Where appropriate, attention should be drawn to circumstances in which the ranking of options or the differences in weighted scores are particularly sensitive to plausible changes in certain weights or scores.

Step 6: Interpret the Results

- 2.18. Non-monetary factors are generally important in public sector appraisals therefore weighted scores can have a crucial influence upon option selection.
- 2.19. These scores should act as indices for comparing the options' overall performance on non-monetary factors, indicating not only how the options rank but also how great the differences between them are. Thus they should serve a similar purpose in respect to non-monetary factors as NPVs do in respect to monetary factors.
- 2.20. The results of a weighted scoring exercise are specific to individual cases, and are not readily transferable to others. However, the criteria relevant to one project are likely to be relevant to other projects of a similar type. The weights given to these criteria may not be the same, but the principles for deciding the weights should show some consistency across similar projects. There should also be some consistency in the principles used for scoring options within similar categories of project.

3. APPENDIX 3: Basics of Discounting

Introduction

- 3.1. Using a discount rate has the effect of reducing the value of future costs and benefits in present day terms. If society has a discount rate of 3.5% per annum, this implies that £1 in a year's time is worth only 96.62p now, because $1/1.035$ equals 0.9662. The 96.62p figure is called the Net Present Value (NPV) of the £1, and the 0.9662 figure is the relevant 'discount factor'.
- 3.2. The following figures show how the NPV of £1 declines in future years when the rate of discount is 3.5% per annum.

Year of Payment (mid year)	Net Present Value (at middle of year 0)
0	£1.0000
1	£0.9662 (= £1 x 1/1.035)
2	£0.9335 (= £1 x 1/1.035 ²)
3	£0.9019 (= £1 x 1/1.035 ³)
10	£0.7089 (= £1 x 1/1.035 ¹⁰)

- 3.3. It is important to remember that the discount rate should generally be applied to figures that are:
- **expressed in real terms** i.e. excluding allowance for general inflation; and
 - **adjusted for appraisal optimism**
- 3.4. In most appraisals it is sufficient to carry out discounting on costs and benefits identified at *annual intervals*. For example, it is common to identify streams of costs and benefits assumed to occur in the middle of Years 1, 2, 3 etc and to discount them all back to the middle of Year 0. Similarly, they may be assumed to

commence at the start of Year 1, 2, 3 etc and discounted back to the start of Year 0.

- 3.5. Table 1 of this appendix (see below) shows the discount factors needed to calculate NPVs at 3.5% per annum. Table 2 provides discount factors for discount rates from 1% to 10% per annum. Detailed discounting calculations are facilitated by the use of suitable computer software, avoiding the need to refer to discount tables. However, tables can be useful in some circumstances, for instance when simple calculations are required. Departmental economists can advise on the design of spread sheets to suit particular cases.

Equivalent Annual Costs

- 3.6. In some cases it can be helpful to calculate NPVs in terms of Equivalent Annual Costs (EAC). A cost of £100 in the middle of Year 0 is equivalent to a stream of 10 annual costs of £12.03 starting in the middle of Year 1 when using a 3.5% annual discount rate. It can be demonstrated that such a cost stream has a NPV of £100 when discounting at 3.5% per annum. An asset that costs £100 and has an expected life of 10 years is thus said to have an EAC of £12.032. Table 3 below provides EAC factors for a 3.5% discount rate.
- 3.7. EACs can be useful when contemplating replacement of a capital asset, where there is a need to compare alternative assets with different lives.
- 3.8. **Example:** Consider two options for replacing a boiler. In Option X a boiler with an expected life of 7 years may be purchased for £2,000. Under Option Y another boiler with an expected life of 10 years may be purchased for £2,500. Which should be purchased?
- 3.9. The relevant costs may be annuitised using EACs as follows:

Option	Life (yrs)	Cost (£)	EAC Factor (@3.5%)	EAC (£)
X	7	2,000 X	0.1635	= 327
Y	10	2,500 X	0.1203	= 301

- 3.10. In this case, the initially more expensive boiler would be the more cost-effective choice.

Discounting Constant Annual Costs or Benefits

- 3.11. Table 3 contains annuity factors, which are convenient for discounting a series of constant annual costs or benefits. For instance, suppose a constant annual payment of £10,000 in real terms has to be paid every year from Year 1 to Year 20. The NPV of this cost stream may be calculated by applying the annuity factor for 20 years, which is 14.2339 using a 3.5% discount rate. The NPV in this example is £142,339.
- 3.12. Annuity Factors may still be used where the constant stream of costs or benefits begins later than Year 1.
- 3.13. **Example:** What is the NPV in the middle of Year 0 of 15 constant real annual costs of £75 starting in the middle of Year 7?
- First, calculate the NPV as if the costs started in Year 1. Using the annuity factor for 15 years and a 3.5% per annum discount rate, the NPV is £865 (= £75 x 11.5281).
 - However, given that the costs start in Year 7, this £865 figure represents the NPV at the middle of Year 6.
 - To convert this to the NPV at the middle of Year 0, apply the discount factor for Year 6, which is 0.8135.
 - The solution is thus £704 (= £865 x 0.8135) or (= £75 x 11.5281 x 0.8135).

TABLE 1: Discount Factors @ 3.5% p.a.

Year	Discount Factor	Year	Discount Factor
0	1.0000	23	0.4533
1	0.9662	24	0.4380
2	0.9335	25	0.4231
3	0.9019	26	0.4088
4	0.8714	27	0.3950
5	0.8420	28	0.3817
6	0.8135	29	0.3687
7	0.7860	30	0.3563
8	0.7594	40	0.2651
9	0.7337	50	0.1973
10	0.7089	60	0.1468
11	0.6849	75	0.0942
12	0.6618	80	0.0833
13	0.6394	90	0.0651
14	0.6178	100	0.0508
15	0.5969	125	0.0274
16	0.5767	150	0.0167
17	0.5572	200	0.0062
18	0.5384	250	0.0029
19	0.5202	300	0.0014
20	0.5026	350	0.0009
21	0.4856	400	0.0005
22	0.4692	500	0.0002

TABLE 2: Discount Factors @ 1% TO 10% p.a.

Year	1.0%	2.0%	3.0%	3.5%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10%
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1	0.9901	0.9804	0.9709	0.9662	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091
2	0.9803	0.9612	0.9426	0.9335	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264
3	0.9706	0.9423	0.9151	0.9019	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513
4	0.9610	0.9238	0.8885	0.8714	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830
5	0.9515	0.9057	0.8626	0.8420	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209
6	0.9420	0.8880	0.8375	0.8135	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645
7	0.9327	0.8706	0.8131	0.7860	0.7599	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132
8	0.9235	0.8535	0.7894	0.7594	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665
9	0.9143	0.8368	0.7664	0.7337	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241
10	0.9053	0.8203	0.7441	0.7089	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855
11	0.8963	0.8043	0.7224	0.6849	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505
12	0.8874	0.7885	0.7014	0.6618	0.6246	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186
13	0.8787	0.7730	0.6810	0.6394	0.6006	0.5303	0.4688	0.4150	0.3677	0.3262	0.2897
14	0.8700	0.7579	0.6611	0.6178	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633
15	0.8613	0.7430	0.6419	0.5969	0.5553	0.4810	0.4173	0.3624	0.3152	0.2745	0.2394
16	0.8528	0.7284	0.6232	0.5767	0.5339	0.4581	0.3936	0.3387	0.2919	0.2519	0.2176
17	0.8444	0.7142	0.6050	0.5572	0.5134	0.4363	0.3714	0.3166	0.2703	0.2311	0.1978
18	0.8360	0.7002	0.5874	0.5384	0.4936	0.4155	0.3503	0.2959	0.2502	0.2120	0.1799
19	0.8277	0.6864	0.5703	0.5202	0.4746	0.3957	0.3305	0.2765	0.2317	0.1945	0.1635
20	0.8195	0.6730	0.5537	0.5026	0.4564	0.3769	0.3118	0.2584	0.2145	0.1784	0.1486
21	0.8114	0.6598	0.5375	0.4856	0.4388	0.3589	0.2942	0.2415	0.1987	0.1637	0.1351
22	0.8034	0.6468	0.5219	0.4692	0.4220	0.3418	0.2775	0.2257	0.1839	0.1502	0.1228
23	0.7954	0.6342	0.5067	0.4533	0.4057	0.3256	0.2618	0.2109	0.1703	0.1378	0.1117
24	0.7876	0.6217	0.4919	0.4380	0.3901	0.3101	0.2470	0.1971	0.1577	0.1264	0.1015
25	0.7798	0.6095	0.4776	0.4231	0.3751	0.2953	0.2330	0.1842	0.1460	0.1160	0.0923
26	0.7720	0.5976	0.4637	0.4088	0.3607	0.2812	0.2198	0.1722	0.1352	0.1064	0.0839
27	0.7644	0.5859	0.4502	0.3950	0.3468	0.2678	0.2074	0.1609	0.1252	0.0976	0.0763
28	0.7568	0.5744	0.4371	0.3817	0.3335	0.2551	0.1956	0.1504	0.1159	0.0895	0.0693
29	0.7493	0.5631	0.4243	0.3687	0.3207	0.2429	0.1846	0.1406	0.1073	0.0822	0.0630
30	0.7419	0.5521	0.4120	0.3563	0.3083	0.2314	0.1741	0.1314	0.0994	0.0754	0.0573

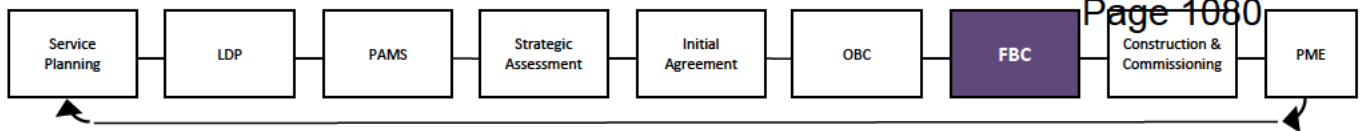
TABLE 3: Equivalent Annual Cost & Annuity Factors (3.5% p.a)

Years	Equivalent Annual Cost of £1 p.a. ("EAC Factors")	Present Value of £1 p.a. ("Annuity Factors")
1	1.035	0.9662
2	0.5264	1.8998
3	0.3569	2.8019
4	0.2723	3.6735
5	0.2215	4.5158
6	0.1877	5.3296
7	0.1635	6.1162
8	0.1455	6.8762
9	0.1315	7.6107
10	0.1203	8.3206
11	0.1111	9.0066
12	0.1036	9.6696
13	0.0971	10.3013
14	0.0916	10.9296
15	0.0869	11.5281
16	0.0827	12.1067
17	0.0791	12.6659
18	0.0759	13.2064
19	0.0730	13.7289
20	0.0704	14.2339
21	0.0681	14.7221
22	0.0660	15.1940
23	0.0641	15.6502
24	0.0623	16.0913
25	0.0607	16.5176
26	0.0593	16.9298
27	0.0579	17.3283
28	0.0567	17.7136
29	0.0555	18.0861
30	0.0544	18.4462

SCOTTISH CAPITAL INVESTMENT MANUAL

Full Business Case

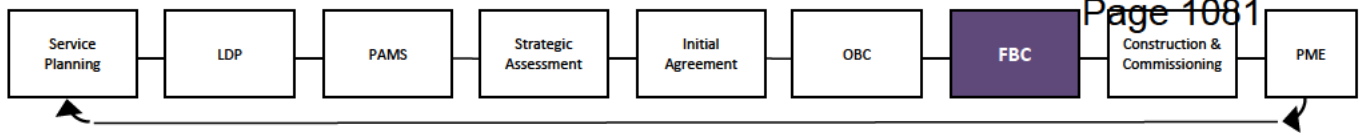




1 Introduction to the Full Business Case

The purpose of the Full Business Case is to confirm that the procured offer represents the best value commercial solution for delivering the project requirements within the project's affordability limits; and to demonstrate that appropriate contractual, commercial and management arrangements are in place to successfully deliver the project. It will do this by responding, as appropriate, to the following questions:

Full Business Case (FBC)		
	Question	Response
Executive Summary	Is the project ready to proceed to contract signature?	Prepare Executive Summary of responses to the following questions.
Strategic Case	Has the strategic case for investment altered?	Confirm or update case for investment
Economic Case	Does the OBC's preferred option remain valid?	Confirm or update OBC preferred option
Commercial Case	What is the recommended v.f.m. commercial offer / service?	Confirm: <ul style="list-style-type: none"> • Selection process for preferred commercial offer/supplier • Commercial arrangements • Contractual arrangements
Financial Case	Is the project financially viable?	Confirm: <ul style="list-style-type: none"> • Project affordability • Stakeholder support & sign-off
Management Case	Is the organisation ready to proceed to contract award and implementation?	Confirm: <ul style="list-style-type: none"> • Project management arrangements • Change management arrangements • Benefits realisation plan • Project risk register • Commissioning Master Plan • Monitoring & evaluation plan • Project Monitoring report



2 Strategic Case

The main purpose of the Strategic Case at FBC stage is to confirm or update the case for investment outlined within the OBC.

2.1 Has the Strategic Case for investment altered?

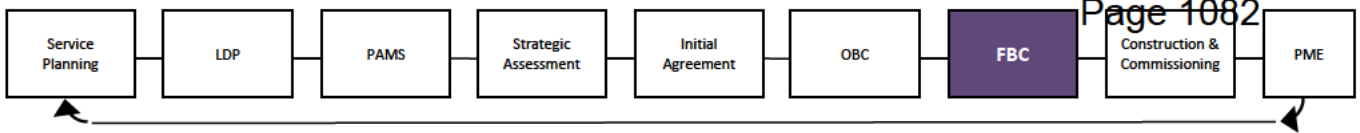
It is possible that the case for investment may have changed since OBC submission due to evolving business needs, service changes, or alterations to project scope. This section should therefore be used to describe any material changes that have taken place and also identify any that may have an impact on previous investment decisions.

If no changes have taken place then this should be stated, including a short summary of the Strategic Case confirmed at OBC.

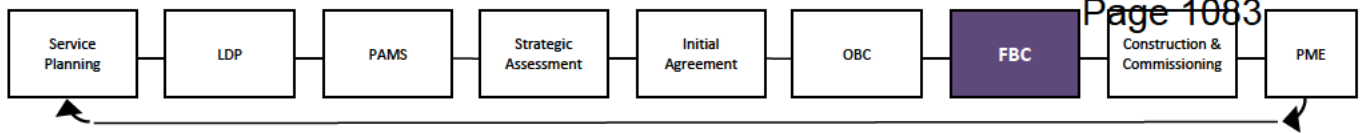
The following questions may help to clarify whether any material changes to the case for investment have taken place:

- Have any stakeholders, or their needs / expectations, altered?
- Have any policies, procedures or other factors external to the project changed which have had (or are likely to have) a material impact on the project?
- Have previous assumptions on current / existing asset or service arrangements changed e.g. activity levels, performance standards, etc.
- Is the need for change, or associated investment objectives, different from those confirmed within the OBC?
- Has the scope of the project changed; such as service change proposals, design objectives, engineering or other technical matters?
- Have the expected benefits of the investment, risks or costs to the project materially changed?

Any such material changes will need to be recorded, including their impact on the current project proposals.



If the impact of any material change is such that it has the potential to alter previous decisions made about the project then this should be discussed with Scottish Government before proceeding further with the Full Business Case. A strategy will need to be agreed for resolving the impact this may have on the validity of the current project and its business case approval.



3 Economic Case

The purpose of the Economic Case at Full Business Case stage is to demonstrate that the preferred option identified at OBC stage remains valid. It will do this by responding to the following question:

3.1 Does the OBC's preferred option remain valid?

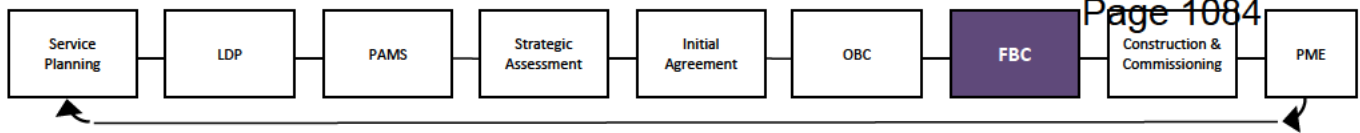
Even if the strategic case for investment has not changed sufficiently to make alterations to the preferred option necessary, the FBC must still demonstrate that the conclusions of the economic appraisal in the OBC remains valid.

Since approval of the OBC new information affecting the ranking of the options may have become available. This may include procured costs exceeding the OBC's Economic Appraisal sensitivity thresholds. Where any such information is available then an update of the preferred option is needed which takes account of this new information whilst also demonstrating how it continues to:

- Offer better value for money than the 'Do Nothing' or 'Do Minimum' options, so that the case for change and procurement remains robust.
- Offer better value for money than the other available options.

If no changes have taken place then this should be stated, explaining how reasonable consideration of this matter has taken place and that the OBC's preferred option remains valid.

If new information suggests that the an alternative option might be recommended then a full economic appraisal will be needed and its implications discussed with Scottish Government to agree the best way forward for the project.



4 Commercial Case

The main purpose of the Commercial Case at FBC stage is to confirm that the recommended procured offer(s) / supplier(s) represent the best value commercial solution(s) for delivering the project requirements, and to demonstrate that appropriate commercial and contractual arrangements are in place to successfully deliver the project.

Where a project consists of a series of procured offers for different aspects of the project then each one should be addressed here. For example, there may be different procured offers covering the main project, early preparation works, equipment arrangements, appointment of external consultants, etc.

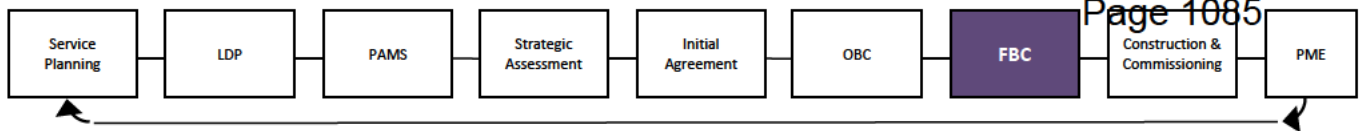
4.1 How was the preferred commercial offer(s) / supplier(s) selected?

This section will summarise the selection process for the recommended commercial offer(s) / supplier(s). It will follow the approach and evaluation criteria described within the procurement plan included within the OBC, whilst also addressing the following typical issues:

- The procurement approach taken
- The evaluation panel.
- The service providers / contractors who expressed interest.
- The selection process followed.
- The evaluation criteria used.
- A summary of the scoring process.
- Details of reasons for rejection of any offers at any stage in the process.
- A summary of how the final recommended selection was made.

Boards should consider using the Whole Life Appraisal Tool dashboard to more clearly present the results of the evaluation of the commercial offer(s) / supplier(s).

Where the above has been included within a separate evaluation report then this can be attached to the FBC and only a brief summary provided in this section.



4.2 What are the Commercial Arrangements of the recommended offer?

The purpose of this section is to confirm that the scope and content of works and services included within the recommended procured offer(s) meets the project requirements set out in the OBC, and that they are sufficient and capable of delivering a successful outcome for the project.

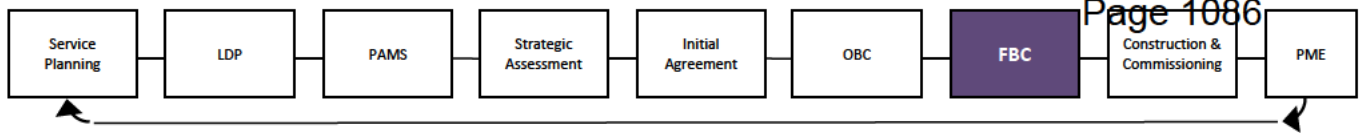
This section will therefore need to demonstrate that the procured offer(s) will deliver the required scope and content of services and works described within the OBC.

Only a summary overview needs to be described within the FBC but reference will be needed to any more detailed information on the source information or its assessment.

For building related projects reference should be made to the NHSScotland Design Assessment Process (NDAP), with a summary provided in the FBC of the assessment observations and the Board's compliance/response to the advisory & essential recommendations. The NDAP guidance document and SCIM process diagrams provide further information on required building & engineering design standards and the information expectations to accompany any FBC submission. All information should comply, where appropriate, with the Building Information Modelling requirements for this stage of project development.

For non-building related elements / services, a similarly appropriate level of project information, review and assessment will need to be provided. This will typically need to describe the following:

- How the assessment of the suitability of the procured offer(s) was carried out.
- Reference to the source information which adequately outlines the content of the procured offer(s).
- Any observations or recommendations related to the appropriateness of the services or works being offered.

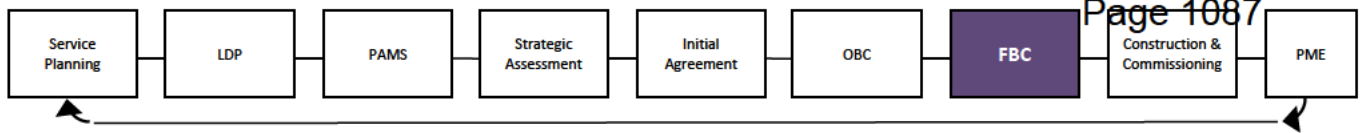


4.3 What are the Contractual Arrangements of the recommended offer?

The purpose of this section is to confirm the main contractual arrangements for the recommended procured offer(s). Draft arrangements will have been described in the OBC therefore this section will provide an update of those details covering the following items:

- Confirmation of the standard form of contract being used.
- Key contractual issues, covering similar items included within the OBC.
- Any contractually based personnel implications associated with the project.
- Details of how any payment structure will function.
- An update of the project risk allocation table.

This information should be sufficient to enable decision makers to confirm their commitment to entering into a contract for the implementation of this project. Some of the background information may however be provided as a separate annex / attachment with only a brief summary provided within the FBC.



5 Financial Case

The purpose of the Financial Case at FBC stage is to explain in detail the financial implications to the organisation of the recommended procured offer or service, and to confirm its affordability.

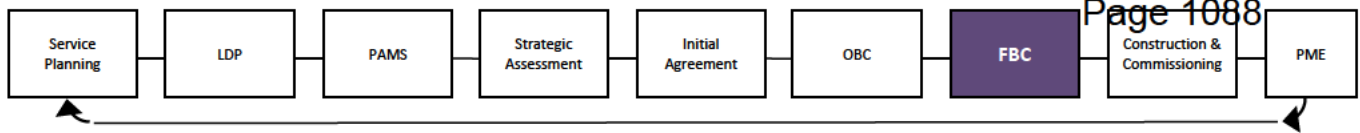
5.1 Is the project affordable?

This section should provide a final, detailed update of the Financial Case initially outlined within the OBC and thus follow similar headings to explain:

- The capital and revenue implications of the resultant deal, including any financial costs falling to the organisation. Such costs should fully consider IFRS implications.
- The net effect on the organisation's charges (prices) – if any.
- The impact on the organisation's income and expenditure account and balance sheet – duly confirmed by an external auditor.
- The overall affordability and funding arrangements for the project, including any specific implications for other affected organisations or stakeholders.
- Any contingency arrangements remaining for over-spends, uncertainty and risk.

5.2 Stakeholder(s) support & sign-off

Written confirmation of stakeholders' 'in principle' support for the project will have been obtained at the end of the OBC. At FBC stage, final confirmation is required of each stakeholder's specific and explicit commitment to the project. This needs to consist of a signed statement that they have been satisfactorily engaged and/or consulted on the project's development; that they have a clear understanding of the financial implications of the proposed commercial arrangements, associated spend, and contractual obligations; and that they are committed to supporting the project with the appropriate resources. Each signed statement can be included in an annex to the main FBC document.



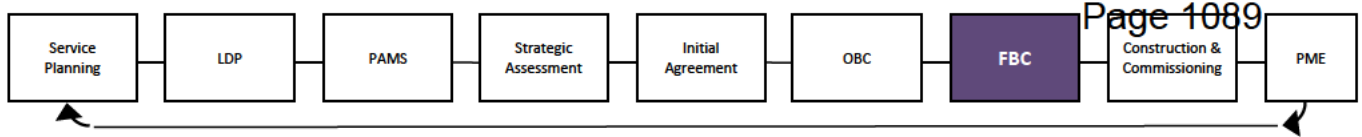
6 Management Case

The main purpose of the Management Case at FBC stage is to confirm that the organisation is ready and capable of proceeding to contract award and project implementation. It will do so by providing more detail of the initial proposals made at OBC stage and will thus follow similar headings to confirm that:

- Project management arrangements are in place to ensure its successful implementation.
- All necessary change management arrangements are in place to ensure the smooth transition of services into a new facility; and that the organisation's existing activities (including health, care & facilities services), processes and people are not unnecessarily affected by the project.
- A comprehensive benefits realisation plan is available; including baseline data and details of how each benefit will be monitored and evaluated.
- A comprehensive and up to date project risk register is available; including details of appropriate control measures and individual risk owners.
- A Commissioning Master Plan is available which sets out how the planning and commissioning process will be managed and carried out.
- A Full Project Monitoring and Service Benefits Evaluation plan is available, which sets out how project progress will be monitored, and how its successful outcome will be identified and evaluated.
- A Project Monitoring Report has been completed covering the development of the technical aspects of the project from Initial Agreement through to FBC.

The effort and detail required for the above will be dependent upon the size and complexity of the project.

A further summary of what is required is described in the following sub-sections. Reference should also be made to the OBC guide for more information.



6.1 Confirm Project Management arrangements

This section will provide an update of the project management arrangements shown in the OBC with the focus now shifting from the procurement phase to the detailed arrangements in support of the design, build, implementation, and commissioning phases.

This will include an update, and further details where not originally provided, of:

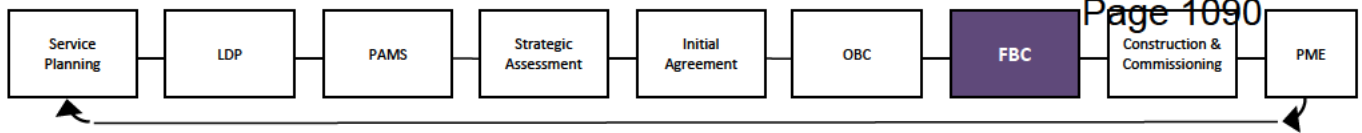
- The project organisational structure diagram.
- Named persons for each key role identified in the OBC, and confirmation of their experience and suitability for the role.
- Any outstanding recruitment needs and plans to resolve them.
- The latest version of the project plan with key milestones identified. Evidence will be needed of service user sign-off of milestones involving their transition to any newly completed facility.

6.2 Confirm any change management arrangements

This section will provide an update of any operational, service or facilities change management arrangements included within the OBC, or subsequently deemed necessary. Details plans should now be available, developed through engagement with those stakeholders affected by the project.

This update will include further details of:

- The reporting structure and governance arrangements for such change.
- The person leading on this aspect of the project, and their suitability.
- The further resources and training/development needs necessary to successfully implement these arrangements.
- A final operational change plan signed off by stakeholders of the affected services and an indication of appropriate patient / end-user involvement.
- An updated stakeholder engagement and communication plan.



6.3 Finalise the benefits realisation plan

At FBC stage there is a final opportunity to review the project's Benefits Register and Realisation Plan and to confirm that each individually identified benefit is still appropriate and viable. It should also incorporate benefits and monitoring procedures associated with how (where relevant to the project) the building contractor will deliver the project's objective for community and public benefits.

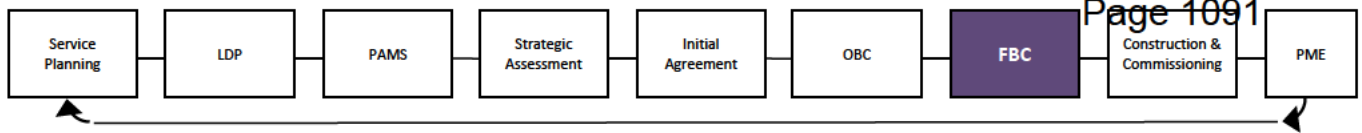
The Benefits Realisation Plan should be updated to confirm how and by whom each of the benefits will be monitored throughout the implementation stage of the project and then evaluated as part of the project evaluation process. It should also confirm how the benefits register and realisation plan will be reviewed regularly and form part of the project monitoring arrangements.

The finalised benefits register and benefits realisation plan should be included, or referenced, in this section of the FBC.

6.4 Confirm the status of the project risk register

The following steps, taken from the SCIM risk management guide, provide a guide to the continued development of a risk management and quantification process appropriate at Full Business Case stage:

- Review the existing risk register developed at OBC stage, update it for any change in assumptions, and record the impact of any control measures.
- Add any further project specific risks to the risk register.
- Update the assessment of each risk as a financial or non-financial risk, or confirm that it remains unquantifiable at this stage. These risks should then be treated as follows:
 - Financial risks with a high cost certainty shall be transferred from the project contingency into the main project base cost. All other financial risks shall be identified within the business case with an explanation as to why they remain within the project contingency, when they are most likely to occur, and how they are to be managed.



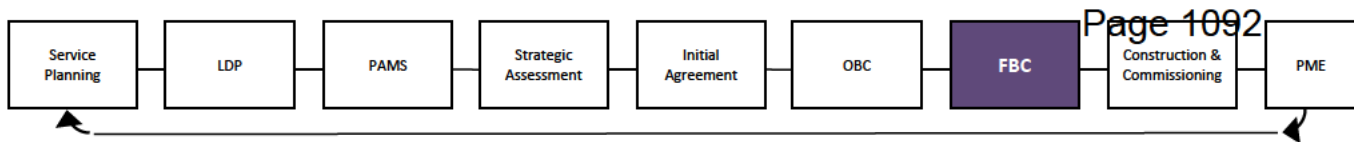
- Non-financial risks should be reduced to Low or Medium risk through appropriate control measures; or an explanation provided as to why they remain High or Very High, how they are to be monitored and controlled, and whether they are a threat to the success of the project.
 - Unquantifiable risks should at this stage be minimal, if not eliminated altogether. Any remaining unquantifiable risks shall be identified within the business case whilst being excluded from the project costs. Risk ownership will transfer to Scottish Government at this stage.
- Confirm that all outstanding project risks have an appropriate control measure and individual risk owner associated with it.
 - Review the outturn project cost (inclusive of risk contingency) against suitable benchmark costs to confirm that they are reasonably reported.
 - Follow confirmed governance arrangements for independent review (and reporting) of the project risk register and risk quantification by the SRO.

The finalised project risk register should be included, or referenced, in this section of the FBC.

6.5 Confirm the commissioning process arrangements

This section will provide firm details of the project's Commissioning Master Plan. It will need to include details of the following:

- The reporting structure and governance arrangements for the commissioning process.
- The person leading on this aspect of the project, and their suitability.
- The key stages within the commissioning process and timescales.
- The further resources and training/development needs necessary to successfully implement these arrangements.
- The latest version of the 'Commissioning Requirements Brief' (see the Commission guidance document for further details).

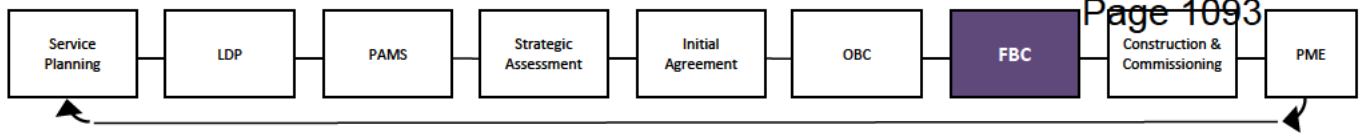


6.6 Finalise the Project Monitoring and Service Benefits Evaluation Plan

This section will provide firm details of the Project Monitoring and Service Benefits Evaluation Plan previously outlined at OBC stage, while also expanding on the following information:

- A detailed programme setting out when Project Monitoring events will take place.
- A detailed programme setting out when key Service Benefits Evaluation events will take place, covering information gathering, analysis and reporting stages for each element of the evaluation.
- Identification of all stakeholders who will be involved in both the monitoring and evaluation processes and their expected involvement. Depending on the type and size of project, this may include the following:
 - Board management staff.
 - Clinicians.
 - Nursing staff.
 - Healthcare planners.
 - Patients.
 - General public
 - Scottish Government staff.
 - Estates professionals.
 - Accountants and financial specialists.
 - IM&T professionals.
- A communication plan which explains how and when stakeholders will be kept informed of their agreed input to these processes.
- Confirmation of any additional financial or human resources required to carry out either of the monitoring or evaluation processes (including the need to prepare written reports and dissemination activities).

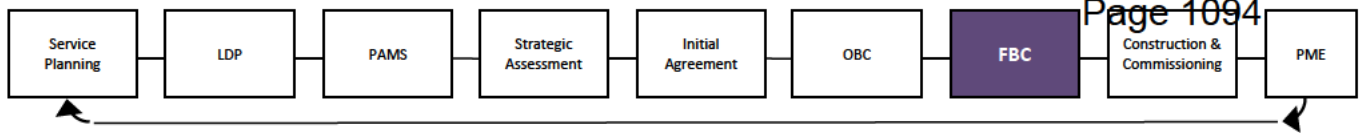
A Project Monitoring Report is also required at FBC stage, which can then be used to further monitor the project throughout the construction and commissioning



stages of the project. This document will incorporate the following:

- A Project Cost Monitoring Form.
- A Construction Cost Plan.
- A Programme Monitoring Form.
- A summary of any significant project scope changes and their impact.
- An outline of how health & safety performance will be monitored and reviewed.
- Highlights of the main design, engineering, and specification information and standards agreed for this project, with reference to where further information can be found.
- Details of how construction quality will be monitored throughout project delivery.
- Links to the current and ongoing NDAP design assessment process for the project, and details of how this will be used to assess the overall design and engineering impact upon completion.
- An overview of the current status of the project risk register.
- A community benefit project plan with associated benefits and monitoring procedures.

A separate Project Monitoring Report can be attached to the FBC and only a brief summary provided in this section.



7 Completion of the FBC

Once the FBC document has been completed then a Gateway 3 or Key Stage Review will need to be considered for the project, prior to formal submission of the FBC.

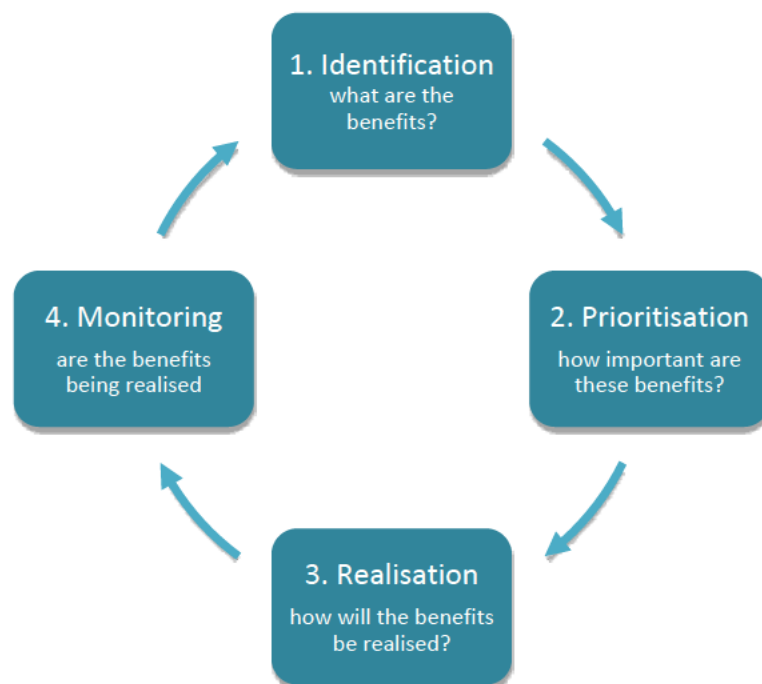
The outcome of the FBC should be that all parties are content for the project to proceed to contract signature, providing that the information contained within the document has been completed satisfactorily and the resultant scheme remains affordable.

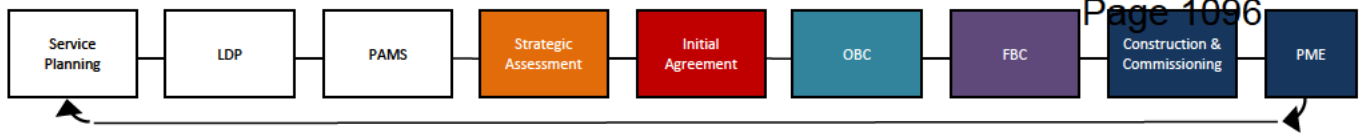
An FBC addendum will need to be submitted if, for any reason, there are key movements in any material information about the project between FBC approval and contract signature.

The Capital Investment Group (CIG) will review all Full Business Cases above NHS Boards' delegated limits. Upon successful consideration of an FBC, CIG will make a recommendation for approval to the appropriate official who will then issue a letter of approval to the Board's Chief Executive. The approving official will typically be the Director General for Health & Social Care or the Director of Health Finance. If, for whatever reason, CIG isn't in a position to recommend approval of a FBC then CIG members will engage with the project team to provide feedback and agree how to progress the project.

SCOTTISH CAPITAL INVESTMENT MANUAL

Benefits Realisation





1 Introduction

The rationale for an investment should be reflected in the potential benefits to be gained from that investment. This provides both the evidence base that a proposal is of value and worthwhile to do. The recording of a project's key benefits will commence at the Strategic Assessment stage when addressing the need for change is initially considered. The likely outcomes will continue to be developed, recorded, monitored and realised throughout the planning, procurement and implementation stages of a project. Benefits realisation will therefore be a key measure in determining the success of a project.

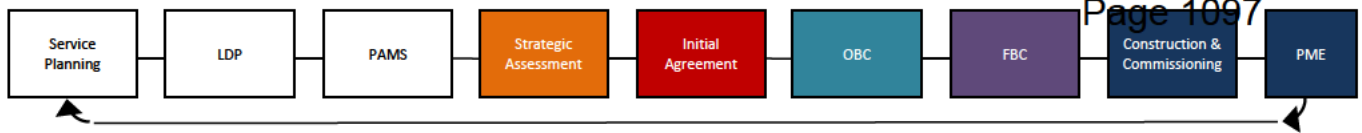
1.1 What are benefits?

Benefits can be defined as demonstrable and positive consequences of change. They are about the advantages gained and value received from the outcomes of a solution, and not the delivery of that solution. They can include a better experience, improved performance, positive outcomes, efficiency savings, etc.

1.2 Why is benefits realisation important?

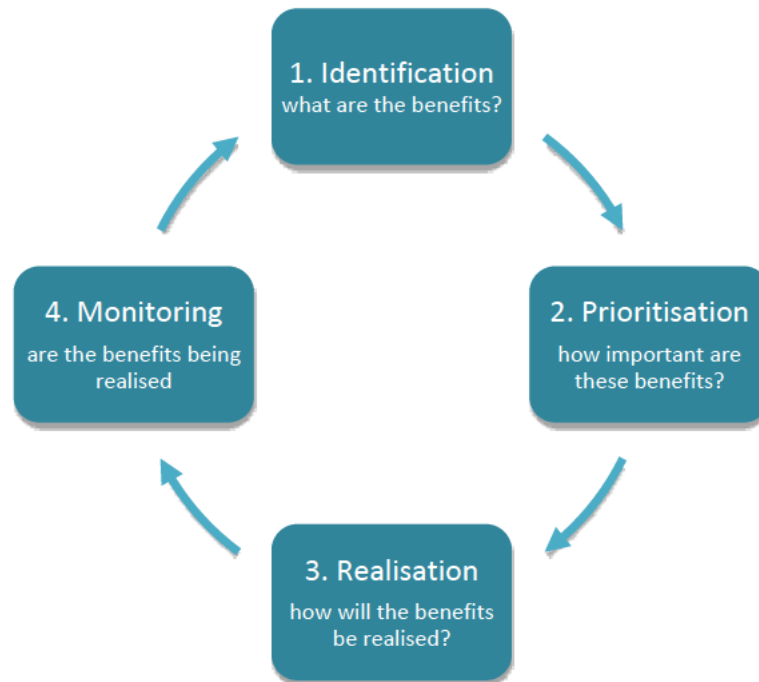
At the business case stage, the identification of a project's potential benefits is crucial in determining whether it is a good thing in which to invest. The realisation of these benefits is then vital in determining the success of an investment. Benefits realisation is therefore a process which helps to ensure that these potential benefits are achieved. It will also help towards:

- Substantiating the case for investment.
- Focussing efforts on benefits with the greatest reward.
- Engaging with stakeholders to agree expected outcomes.
- Managing risks associated with benefits realisation.
- Creating a framework for project evaluation.



2 Benefits Realisation Process

Benefits Realisation is a planned and systematic process consisting of 4 defined stages:

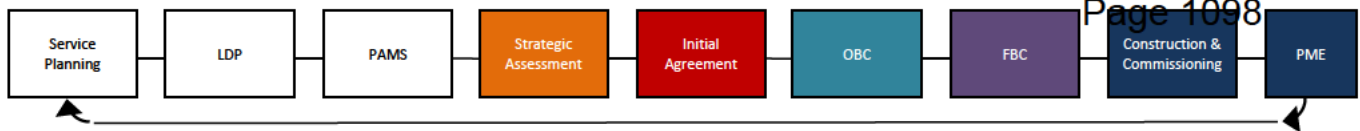


These four stages are described in more detail below:

2.1 Benefits Identification

Benefits identification should begin by asking what improvements will flow from addressing the need for change. For example, will the proposed change bring about a better experience, improved performance, positive outcomes, resolution of a problem, efficiency savings, etc? This might relate to improvements in:

- Experience of a service or building environment.
- Service throughput or performance effectiveness.
- The condition and/or performance of related assets (e.g. building condition, reduction in backlog, etc).
- Accessibility to services or buildings.
- Efficiency savings.



- NHSScotland's strategic investment priorities i.e. person centredness, safety, effective quality of care, improved health of the population, value and sustainability.
- Wider social, environmental and employment benefits for the local community.

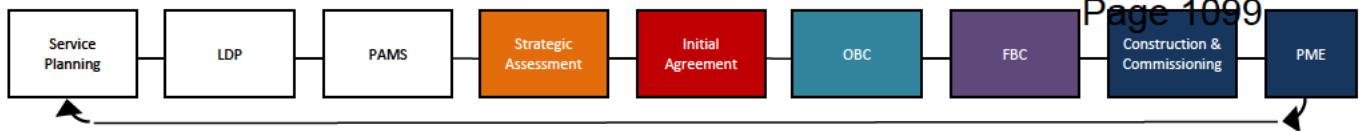
The range of benefits to be identified should be commensurate with the planning stage that the proposal is at, and the proposed level of investment. At Strategic Assessment stage, no more than seven key benefits are expected, but this should be expanded upon as the project develops through Initial Agreement and Outline Business Case stages. The aim will be to provide sufficient evidence that the proposal is worthwhile and will be an important investment for NHSScotland.

It will also be important to identify any wider social, environmental and employment benefits for the local community that the project might influence. These may cover:

- Employment benefits, such as opportunities available for new entrants, graduates, apprenticeships, etc.
- Skills and training benefits, such as opportunities available for work placements, curriculum support, school / college visits, educational engagement, etc.
- Environmental benefits, such as opportunities to recycle waste, reduce waste to landfill, reduce site pollution, enhance the local habitat, reduce carbon emissions, etc.
- SME & 3rd sector benefits, such as opportunities to award them work (subject to appropriate procurement rules), enhance supplier engagement & training, support community events, etc.

Community benefits must be identified for all projects above a £4million investment threshold, but it is acknowledged that at Initial Agreement stage specific details might not be fully developed until the proposal is closer to procurement at OBC / FBC stages.

Identification of each benefit will also need to consider how their achievement could be identified and assessed. This will not only acknowledge their relevance to the proposed investment, but also confirm the potential for evaluating them at



project evaluation stage. This means that for every benefit identified, a suitable method of assessment will need to be recorded.

This assessment can be qualitative or quantitative. Qualitative assessments can be informed from interviews, questionnaires, and other judgement based / demonstrable assessments e.g. workshop scoring against set criteria, before & after images, etc . Quantitative assessments can include the attainment of measurable standards (e.g. KPI targets), and quantifiable cash saving or cost avoidance measures. Financial benefits also need to be included within the Economic Appraisal at Outline Business Case stage.

There are a range of benefit indicators already available within NHSScotland in the form of Quality Outcome Indicators, LDP Standards, and performance indicators such as those used in the SAFR performance framework, (see Appendix A for examples of such benefit measures). If relevant to the proposal, these can be selected to begin a proposal's benefits register, but, as they are only a source of typical examples to choose from they should be supplemented with locally gathered benefits measures that are more relevant to the specific proposal.

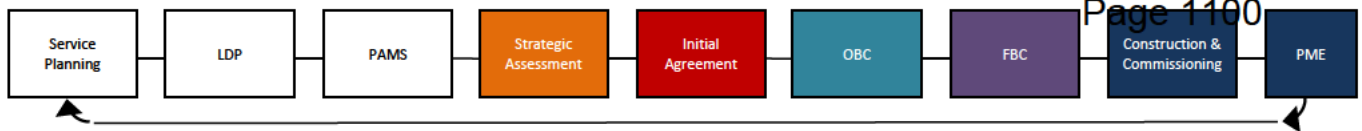
Facilitated, multi-stakeholder workshops are a useful method to identify the full range of benefits associated with a proposal which, once identified, should be documented in a Benefits Register similar in style to the one outlined below:

<i>Benefits Register</i>						
<i>1. Identification</i>						<i>2. Prioritisation (RAG)</i>
<i>Ref No.</i>	<i>Benefit</i>	<i>Assessment</i>	<i>As measured by:</i>	<i>Baseline Value</i>	<i>Target Value</i>	<i>Relative Importance</i>
1.	<i>Supporting people in looking after and improving their own health and wellbeing</i>	<i>Quantitatively via QOI.</i>	<i>The proportion of adults within 'A place' who assess their health as good or very good</i>	74%	80%	4

The above is an example of how each benefit might be recorded in the Benefits Register

The benefits register should include the following:

- A brief description of the benefit.



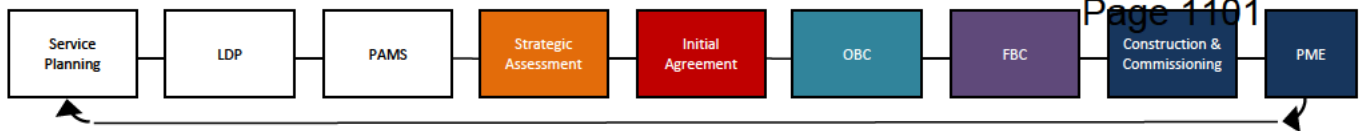
- An indication of how the benefit is to be assessed i.e. qualitatively, quantitatively, or financially (more details will need to be given by OBC stage).
- A description of the benefit measure (or an indication of why it is currently unquantifiable).
- The baseline value of that measure which reflects the current arrangement.
- The target value which indicates the level of improvement expected of that measure once the benefit is realised (this may be indicative at IA stage but needs to be confirmed by OBC stage).
- Information on the assumptions used in setting the baseline and target values should be provided where it is necessary. This will ensure appropriate assessment when monitoring and evaluating the benefits at a later stage.
- Dis-benefits which have a negative impact on beneficiaries.
- The relative importance of each benefit (see below).

If benefits are uncertain or contingent on other events then they should be classified as risks.

2.2 Benefits Prioritisation

Each identified benefit needs to be prioritised so that resources can be focussed on the delivery of those of greatest importance and/or highest impact. The following is an example of how this might be done, but the important feature is the ability to evaluate the relative importance of each benefit to the proposal:

Scale / RAG	Relative Importance
1	Fairly insignificant
2	↕
3	Moderately important
4	↕
5	Vital



2.3 Benefits Realisation

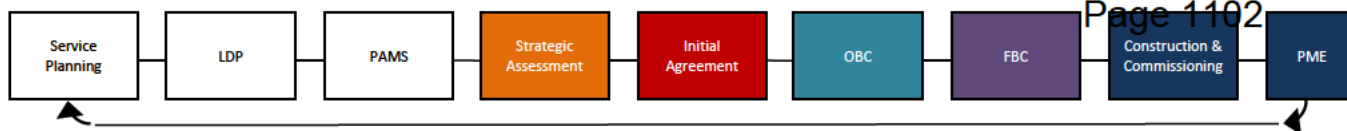
The benefits register should be supported with a benefits realisation plan once the proposal reaches Outline Business Case stage. This will identify who will be responsible for the delivery of each benefit and what actions are necessary to realise them. The benefits realisation plan should identify and record the following information:

- Who will each benefit affect the most (public, patients, service director, clinicians, management)?
- Who will be responsible for ensuring that each benefit is realised.
- How each benefit links to the project's investment objectives.
- What interdependencies are necessary to enable the proposed change to take place?
- What support is necessary to implement that change?
- The date of expected realisation.

<i>Benefits Realisation Plan</i>							
<i>1. Identification</i>		<i>3. Realisation</i>					
<i>Ref. No.</i>	<i>Main Benefit</i>	<i>Who Benefits?</i>	<i>Who is responsible?</i>	<i>Investment Objective</i>	<i>Dependencies</i>	<i>Support Needed</i>	<i>Date of Realisation</i>
1.	<i>Supporting people in looking after and improving their own health and wellbeing</i>	<i>Public / Patients</i>	<i>Service Director</i>	<i>Meet user requirements</i>	<i>Dependent upon public / patient's taking positive steps following service improvement</i>	<i>Promotion of self-care linked to service improvement</i>	2020

2.4 Benefits Monitoring

Benefits monitoring should be a **continuous** process throughout the project planning, procurement and implementation stages. It should be overseen by the Project Board but managed by the project team and become part of the normal project status reporting processes.



Regular reviews of the Benefits Register & Realisation Plan will help to ensure that:

- Progress against project milestones is monitored and evidenced.
- Changes made are delivering the desired benefits.
- Benefits are on track to be realised in the agreed timescales.
- Action plans are in place for benefits which fall behind schedule.

If any benefits are not progressing towards their target value as predicted, it may be because they were not realistic or achievable from the outset. These should be reviewed and, if not achievable or worth of the resource required, removed from the business case with the reasons clearly explained.

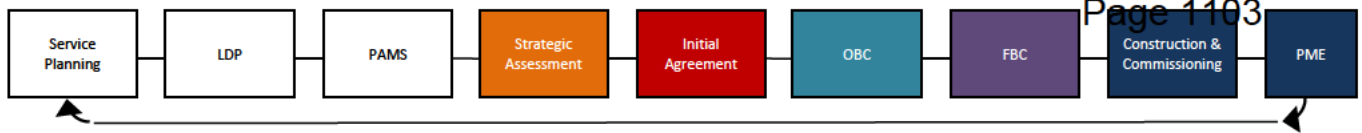
Once the project is complete then benefits monitoring will become benefits evaluation and form part of the Service Benefits Evaluation process (see further SCIM guide on Project Monitoring & Service Benefits Evaluation).

3 Expectations at Business Case Stages

As the project progresses through the business case stages, the project's Benefits Register and Realisation Plan will mature from an early indication of possible benefits to be gained towards a more specific and detailed understanding of the benefits to be realised from the investment commitment. The following section provides more information on the different expectations at each business case stage:

3.1 Strategic Assessment stage

At Strategic Assessment stage, no more than seven key benefits need to be short-listed indicating the likely gains to be realised if the identified need for change is addressed through the proposed investment.



3.2 Initial Agreement stage

At Initial Agreement stage, the proposal's Benefits Register should be developed following the benefits identification and prioritisation processes described earlier.

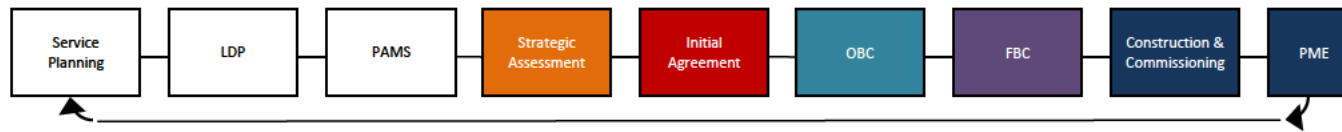
The Benefits Register should record all the main benefits that are expected to flow from addressing the need for change, including a specific benefit of the expected reduction in backlog maintenance for property based investment projects.

3.3 Outline Business Case stage

At Outline Business Case stage, the Benefits Register should be reviewed to confirm any outstanding information e.g. further details of previously identified benefits, the approach towards benefit assessment, and the target values for each benefit measure. It is also an opportunity to review the appropriateness of each benefit to ensure that there remains a reasonable expectation of achievement. Once confirmed, then the project's Benefits Realisation Plan should be developed following the corresponding section within this guide.

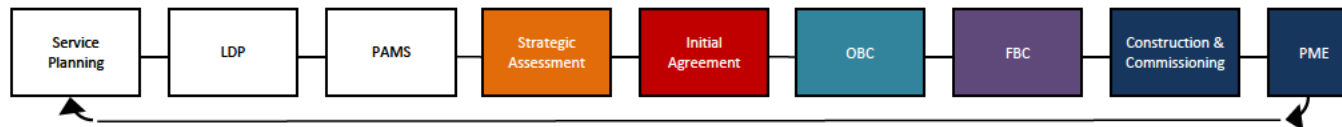
3.4 Full Business Case stage

At Full Business Case stage, there is a final opportunity to review the project's Benefits Register and Realisation Plan before setting out the details of how they will be monitored throughout the implementation stage of the project and then evaluated as part of the service benefits evaluation process.



Appendix A

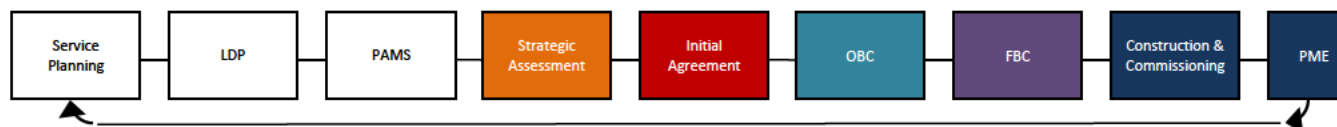
Benefits linked to NHSScotland's Strategic Investment Priorities



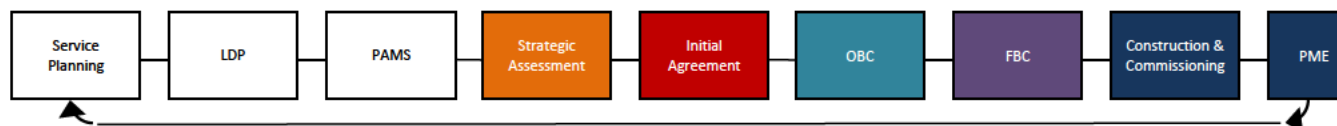
Person Centered

General Definition	Ensures that resources are in place to support people powered health and care services, and promotes personal responsibility and self-management for individuals health and wellbeing
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Indicator		Potential Measure:
1	Supports people in looking after and improving their own health and wellbeing	Percentage of adults able to look after their health very well or quite well
		Rate of emergency inpatient bed days for adults
		Percentage of adults supported at home who agree that their health & care services seemed to be well co-ordinated
	Ensure that people who use health and social care services have positive experiences and their dignity respected.	Percentage of adults receiving any care or support who rate it as excellent or good
		Indicator on people's experience of their GP practice
		Proportion of Care and Care at Home services rated 3 or above in Care Inspectorate Inspections
		Proportion of last 6 months of life spent at home or in community settings
	Improves support to allow people to live independently	Percentage of adults supported at home who agree that they are support to live as independently as possible
		Rate of emergency inpatient bed days for adults
		Percentage of adults with intensive needs receiving care at home
		Patient re-admission rate
		Delayed discharge rate

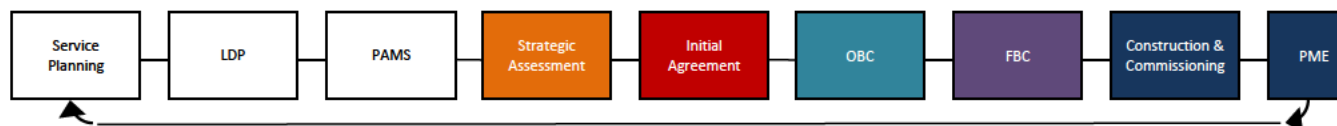


		Improves quality of life through care provided	Percentage of adults supported at home who agree that their services and support had an impact in improving or maintaining their quality of life
		Increases proportion of people with intensive needs being cared for at home	TBC
		Increases support for carers	Percentage of carers who feel supported to continue in their caring role
		Improves care home environment	TBC
2	SAFR	Improves the Physical condition of the health / care estate	Proportion of estate categorised as either A or B for the Physical Condition appraisal facet
		Improves the quality of the healthcare estate	Proportion of estate categorised as either A or B for the Quality appraisal facet
		Improves peoples opinion of the hospital environment	Proportion of positive responses to the In-Patient Questionnaire on patient rating of the hospital environment
		Reduces the age of the Healthcare Estate	Percentage of estate less than 50 years old
	HEAT / LDP	N/A	
3	Project Specific	All other local and national measurement for quality improvement and performance management.	To be locally developed by the NHS Board



Safe

General Definition		Improves safety in the healthcare environment - building on the Scottish Patient Safety Programme in Acute Care, Primary Care, Maternity Services, Paediatrics and Mental Health Care.	
		Indicator	Potential Measure:
1	QOIs	Reduces Healthcare Associated Infection	Percentage prevalence in acute hospitals
		Reduces adverse harmful events	TBC
		Reduces Hospital Standardised Mortality ratio	Rate per 100,000 for people aged under 75 in Scotland
		Increases safety of people receiving care and support	Percentage of adults supported at home who agree they felt safe
2	SAFR	Improves statutory compliance	Overall percentage compliance score from SCART
		Reduces backlog maintenance	Reduction in backlog maintenance costs
		Reduces significant and high risk backlog maintenance	Significant & high risk backlog as percentage of total backlog
	HEAT / LDP	Reduces C.Difficile Infections	Number of cases per 1,000 acute occupied bed days
		Reduces MRSA/MSSA Infections	Number of cases per 1,000 acute occupied bed days
3	Project Specific	All other local and national measurement for quality improvement and performance management.	To be locally developed by the NHS Board

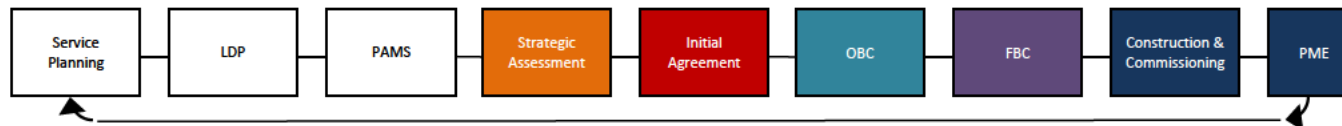


Effective Quality of Care

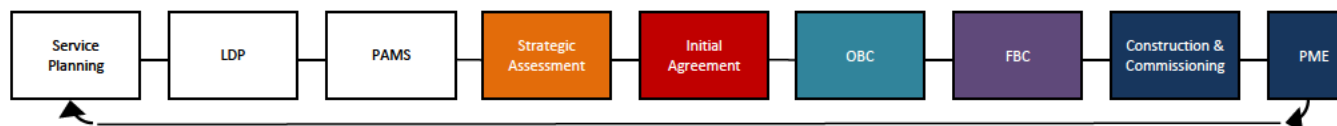
General Definition	Improves the effective Quality of Care particularly focused on increasing the role of primary care, integrating health and social care, improving the delivery of unscheduled and emergency care, and improving the current approach to supporting and treating people who have multiple and chronic illnesses
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		Indicator	Potential Measure:
1	QOIs	Improves end of life care to be as comfortable as possible in a homely environment	Percentage of people who spend last 12 months of life at home or in a community setting
		Reduces emergency admissions to hospital	Rate of emergency admissions per 100,000 population
		Reduces readmissions	TBC
		Ensures timely discharge from hospital	TBC

2	SAFR	Improves the Functional Suitability of the Healthcare Estate	Proportion of estate categorised as either A or B for the Functional Suitability appraisal facet
	HEAT / LDP	Supports newly diagnosed Dementia patients with access to the range of post-diagnostic services	Proportion of dementia patients given access to post-diagnostic services
		Reduces the rate of emergency inpatient bed days for people aged 75	Patients aged 75+ per 1,000 population –as a proportion of acute occupied emergency bed days
		Avoids people waiting more than 14 days to be discharged from hospital into a more appropriate care setting, once treatment is complete	Number of discharges that took more than 14 days
		Reduces the rate of attendance at A&E	Number of unplanned A&E attendances per 100,000 population
Enables eligible patients commencing IVF treatment within 12 months	TBC		

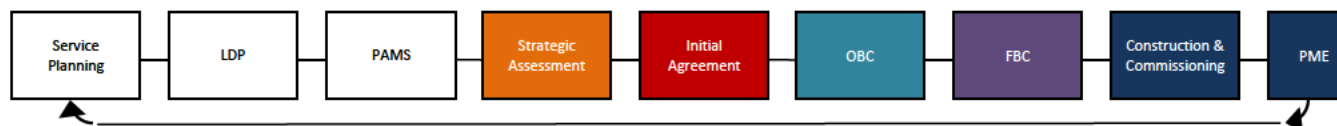


	Enables delivery of 18 weeks referral for treatment for Psychological Therapies.	TBC	
	Enables delivery of 18 weeks referral for treatment for specialist Child and Adolescent Mental Health Services (CAMHS) services	Percentage of people who start treatment at CAMH services in Scotland within 18 weeks of referral	
	Supports 95% of patients waiting less than 4 hours from arrival to admission, discharge or transfer for accident and emergency treatment	Percentage of people waiting less than 4 hours at A&E	
3	Project Specific	All other local and national measurement for quality improvement and performance management.	To be locally developed by the NHS Board



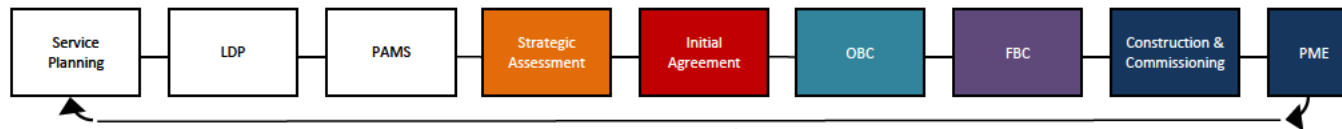
Health of Population

General Definition		Improves health of the population particularly focused on the importance of Early Years, reducing Health Inequalities, and preventative measures on alcohol, tobacco, dental health, physical activity and early detection of cancer	
		Indicator	Potential Measure:
1	QOIs	Supports reduction of premature mortality	Death rate among those aged under 75 per 100,000 population
		Supports increase in the number of babies born with a Healthy birth-weight	Percentage of babies born at a healthy birthweight
	SAFR	N/a	N/a
2	HEAT / LDP	Supports early cancer detection	Percentage of breast, colorectal and lung cancer cases (combined) diagnosed at stage 1
		Supports smoking cessation initiatives (12 weeks post quit)	Number of successful quits at 12 weeks post quit in the 40% most deprived within Board SIMD areas
		Supports antenatal access	Percentage of pregnant women in each SIMD quintile who will have booked for antenatal care by the 12 th week of gestation
		Supports suicide reduction initiatives	Suicide rate per 100,000
		Supports SIMD child fluoride varnishing initiatives	Percentage of 3 & 4 year old children in each Scottish Index of Multiple Deprivation (SIMD) quintile to receive at least two applications of fluoride varnish (FV) per year
		Supports child healthy weight interventions	Number of interventions delivered
3	Project Specific	All other local and national measurement for quality improvement and performance management.	To be locally developed by the NHS Board



Value & Sustainability

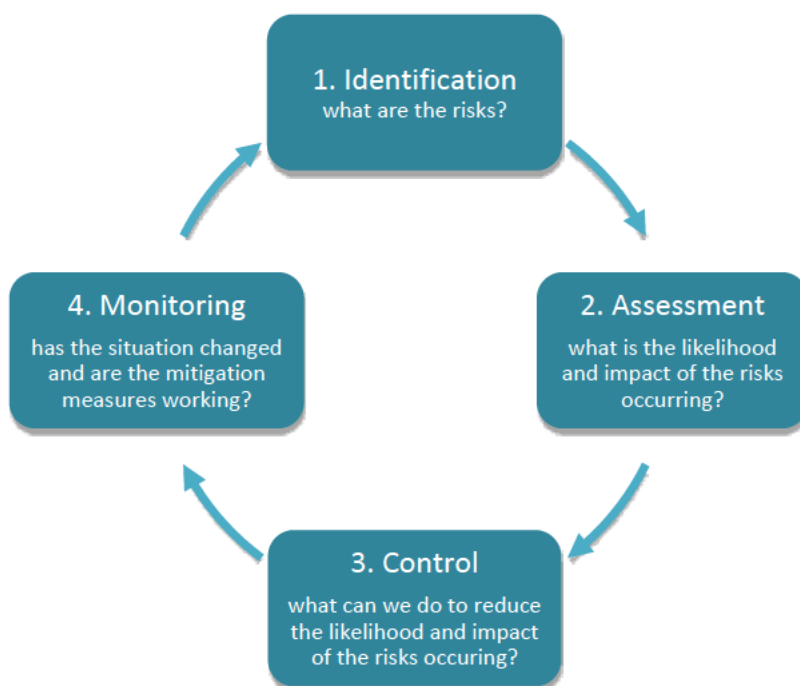
General Definition		Supports implementation of the 2020 Workforce Vision through modernisation, leadership and management. Introduces investment in new innovations to increase quality of care and reduce costs. Increases efficiency and productivity through unified approaches, local solutions and decision making.	
		Indicator	Potential Measure:
1	QOIs	Increases level of staff engagement	Percentage of staff who they say they would recommend their workplace as a good place to work
		Optimises resource usage	Cost of delayed discharge
	Cost of end of life care in acute hospital		
	Cost of emergency admissions		
2	SAFR	Improves accommodation space utilisation	Proportion of estate categorised as 'Fully Used' for the Space Utilisation appraisal facet
		Optimises overall running cost of buildings	Total occupancy cost of building
		Optimises cleaning costs	Cleaning cost £ per sq.m.
		Optimises property maintenance costs	Property maintenance cost £ per sq.m.
		Optimises PPP Facilities management costs	PPP Facilities management cost £ per sq.m.
		Optimises energy usage costs	Energy cost £ per sq.m.
		Optimises rent or rates costs	Rent or rates £ per sq.m.
		Optimises catering costs	Catering cost £ per consumer week or sq.m.
		Optimises portering costs	Portering cost £ per consumer week or sq.m.
		Optimises laundry costs	Laundry cost £ per consumer week or sq.m.
Optimises waste costs	Waste cost £ per consumer week or sq.m.		

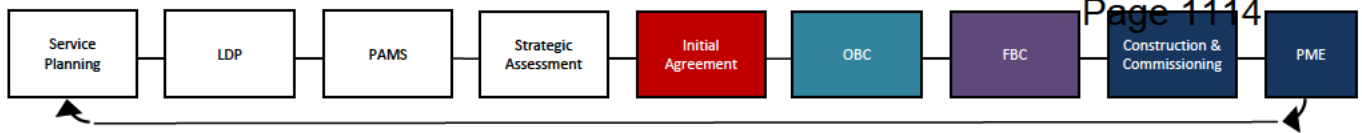


	Reduces financial burden of backlog maintenance and/or future lifecycle replacement expenditure	Backlog maintenance cost
		Facilities Condition Index (FCI)
	Improves design quality in support of increased quality of care and value for money	AEDET score
HEAT / LDP	Improves financial performance	Recurring revenue budgets
	Reduces carbon emissions and/or energy consumption	Percentage reduction in CO2 emissions
		Percentage reduction in energy consumption
3 Project Specific	All other local and national measurement for quality improvement and performance management.	To be locally developed by the NHS Board

SCOTTISH CAPITAL INVESTMENT MANUAL

Risk Management





1 Introduction

Risk management is a structured approach to identifying, assessing and controlling risks that emerge during the course of the policy, programme or project lifecycle. It is a critical and continuous process throughout the planning, procurement and implementation journey of a project.

Project risks should be recorded and managed through the use of a project risk register which will be developed by the project team and overseen by the Senior Responsible Officer and/or Project Board for the project.

The project risk register will mature from an overview of a project’s main strategic, organisational and service risks at Initial Agreement stage towards a more specific and detailed understanding of a project’s design and construction related risks between OBC and FBC. The project risk contingency will also develop from an optimism bias allowance at Initial Agreement stage towards a fully costed risk contingency by the time of submission of the FBC.

1.1 Risks & Issues

A ‘Risk’ can be defined as a factor that can affect the achievement of an outcome (either positive or negative) at a future date.

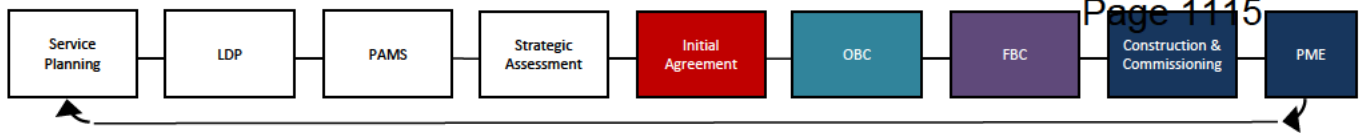
An ‘Issue’ is a factor affecting the development or the implementation of a project at the present time. Actions are therefore immediately put in place to resolve the issue due to its urgency.

All projects will contain risks that may impact on their progress therefore it is important to identify and assess risks in the present so that they can be managed to prevent them from becoming an issue.

1.2 Why is risk management important?

Effective management of risk helps to promote innovation and improve performance by contributing to:

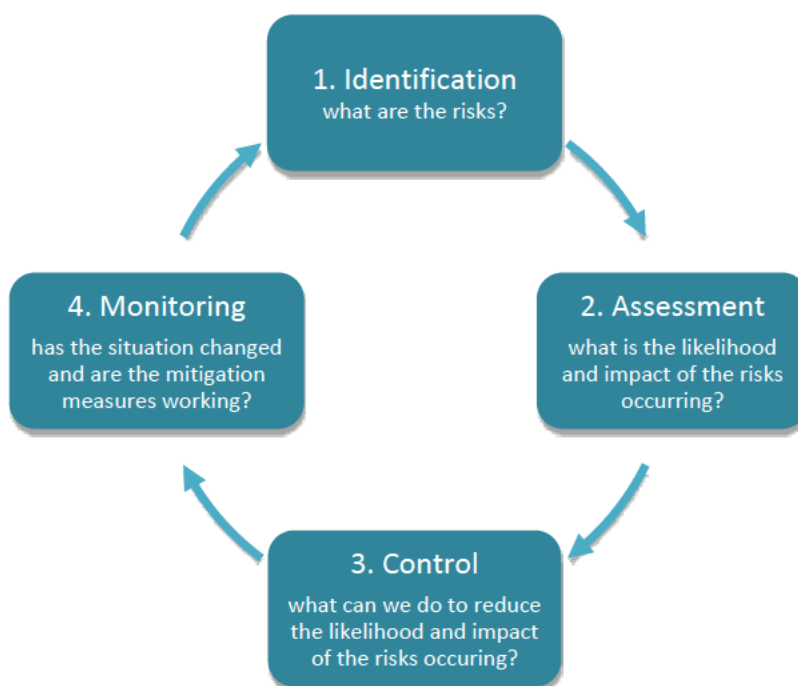
- Increased certainty and fewer surprises
- Better service delivery



- More effective management of change
- More efficient use of resources
- Better management at all levels through improved decision making
- Reduced waste
- Innovation
- Management of contingent and maintenance activities

2 Risk Management Process

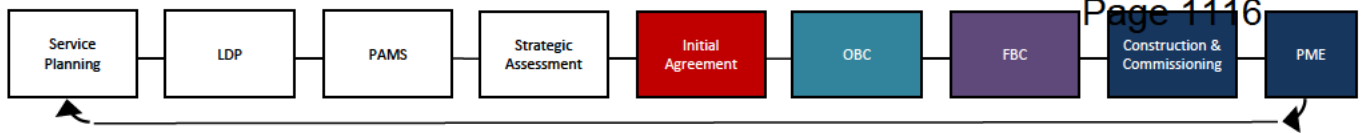
Risk management is a planned and systematic process consisting of 4 defined stages:



Each of the above stages is described in more detail below:

2.1 Risk Identification

The initial identification of risks and issues with the potential to impact on the achievement of the project's objectives and benefits realisation is essential in terms of understanding the actions needing to be undertaken to ensure the



success of a project.

Risks fall into three main categories:

- Business related risks which remain with the public sector and should never be transferred.
- Service / Project risks which mainly occur during the design, build and operational phases of a project and may be shared between the public and private sectors.
- External risks which relate to society and the impact of the economy as a whole.

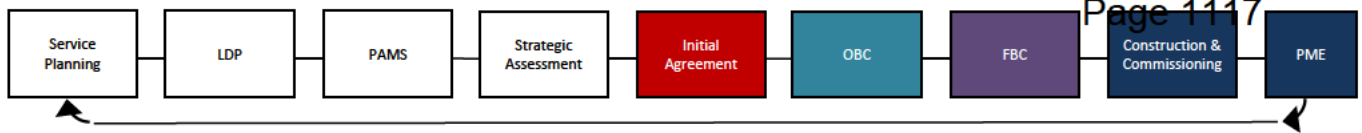
Facilitated, multi-stakeholder workshops are useful tools to identify the risks associated with a project. As they are identified they should be documented in a project risk register similar in style to the one outlined below.

The ownership of each risk must also be clearly defined within the risk register and agreed with the individual owners. This will ensure understanding of roles, responsibilities and ultimate accountability. Individual owners should have the capability, authority and experience to deal with risk/s allocated to them.

It should also include an indication of whether the risk will have a financial and/or non-financial impact on the project, or is unquantifiable at that stage of the project:

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial/ Non-Financial /Unquantifiable	Consequence	Likelihood	Risk Rating	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual

Note that the project risk register should be a single register that is developed as it progresses through the business case process and not a suite of different registers.



2.2 Risk Assessment

The purpose of risk assessment is to assess the likelihood of risks occurring and their potential consequence or impact.

Likelihood	Consequence
The evaluated chance of a particular outcome actually happening (including a consideration of the frequency with which the outcome may arise).	The evaluated effect or result of a particular outcome actually happening.

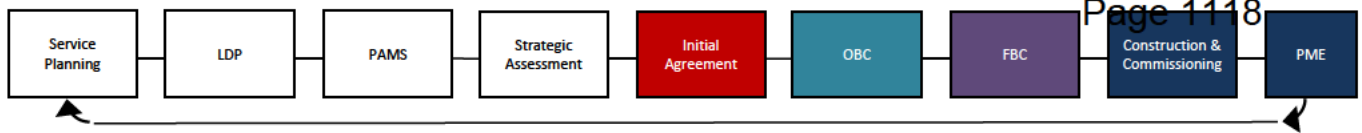
Establishing the likelihood and consequence of each risk occurring is key to determining the risk rating and subsequent actions to be taken.

2.2.1 Likelihood

The likelihood of a risk occurring can be assessed either quantitatively (% occurrence) or qualitatively (chance of occurrence). The most appropriate method should be selected in each case. The assessment of the current likelihood of a risk occurring should take into account the controls in place to prevent it.

Having assessed the likelihood of the event happening, the following table should be used to determine the likelihood score (1-5) for the event. For example, if the chance of an event happening was 50% then the score would be 3:

LIKELIHOOD			
Score	Description	% Occurrence	Chance of Occurrence
1	Rare	< 5%	Hard to imagine this event happening – will only happen in exceptional circumstances.
2	Unlikely	5 - 24%	Not expected to occur but might – unlikely to happen.
3	Possible	25 - 59%	May occur – reasonable chance of occurring.
4	Likely	60 – 84%	More likely to occur than not.
5	Almost Certain	85 – 100%	Hard to imagine this event not happening.



2.2.2 Consequence

The consequence of a risk occurring can impact on an organisation's responsibilities in different ways and its assessment will therefore need to consider which of the consequence descriptors described in Appendix A is most relevant for the assessment of each risk.

The consequence score (1-5) can be determined using the following criteria:

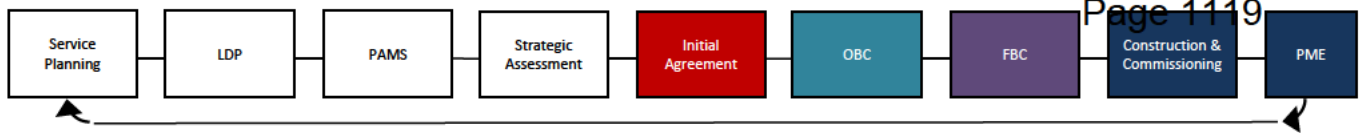
CONSEQUENCE	
Score	Description
1	Negligible
2	Minor
3	Moderate
4	Major
5	Extreme

The assessment of the current consequence of a risk occurring should take into account the controls currently in place to minimise the impact.

2.2.3 Risk Rating (likelihood x consequence)

The risk rating is assessed by multiplying together the likelihood and consequence scores. Risks are then classified as Red, Amber, Yellow or Green based on the table below:

Likelihood	Potential Consequences				
	Negligible (1)	Minor (2)	Moderate (3)	Major (4)	Extreme (5)
Almost Certain (5)	Medium	High	High	Very High	Very High
Likely (4)	Medium	Medium	High	High	Very High
Possible (3)	Low	Medium	Medium	High	High
Unlikely (2)	Low	Medium	Medium	Medium	High
Rare (1)	Low	Low	Low	Medium	Medium



2.3 Control

Once risks have been identified and assessed they must then be addressed and controlled. The response will need to be proportionate to the level of risk that will have been determined as part of the risk assessment. The following suggests four response types that can be used to address risks at different levels.

2.3.1 Tolerate

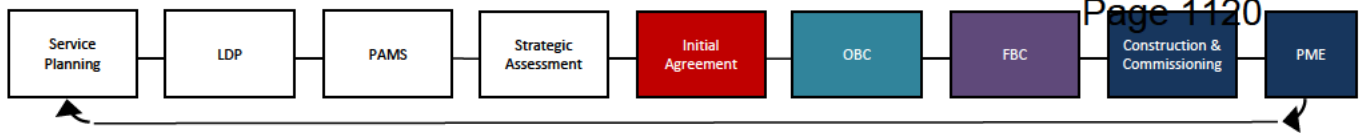
Risks should only be tolerated if the result of their assessment is that they are Low risk and that the cost of taking an action would be disproportionate to the potential benefit gained. This does not mean no action should be taken at all. They should continue to be monitored and any changes in the situation noted that may result in an increased level of risk.

2.3.2 Mitigate

The purpose of 'mitigating' a risk is to reduce the risk to an acceptable level for the organisation. It is likely that a large number of risks will belong to this category. There are many courses of action an organisation could take to mitigate against risks, for example:

- Consulting early;
- Avoiding irreversible decisions;
- Carrying out pilot studies;
- Building in flexibility from the start;
- Taking precautionary action;
- Transferring risk through contractual arrangements (insurance being an example);
- Reinstating, or developing different options; or,
- Abandoning the project because it is too risky.

Appendix B provides more information on mitigating actions that might typically be taken both before and during project implementation.



2.3.3 Transfer

Before deciding to transfer a risk to a third party, consideration should be given as to who is best placed to manage the risk. It may be that the risk is best managed internally within the organisation. It is also possible that transferring risk to a supplier will result in a significant cost to the organisation and this should be considered before taking this course of action. Also remember that whilst transferring responsibility for a risk is possible, accountability for that risk is not.

2.3.4 Review & Rethink Strategy

If the assessed level of a risk is Very High, consideration will need to be given to the overall approach to the project. In some circumstances it may be necessary to stop the current course of action and start over. It should be noted that the option to terminate activities should be exercised as a last resort, where other courses of action have not mitigated the risk to an acceptable level. It should, however, be realised that the reason a number of activities are conducted in the public sector is because the associated risks are so great that there is no other way in which the output or outcome, which is required for the public benefit, can be achieved.

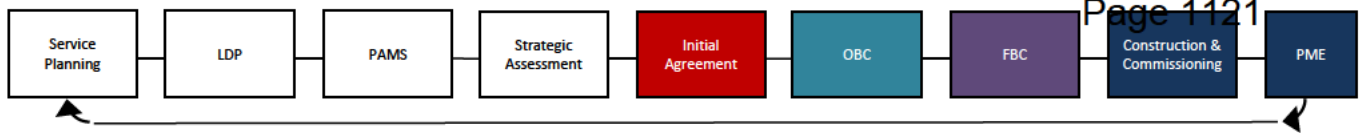
When controlling risks at the contract management stage, cooperation and dialogue between a contract manager and supplier should be actively encouraged. If suppliers feel able to share information about potential problems at the earliest opportunity then small issues can be dealt with and not escalate.

2.4 Risk Monitoring

One of the most common approaches to monitoring risks is the use of a risk register. This will be developed first at Initial Agreement stage and then be reviewed at each further stage of the business case, procurement and contract management processes.

Risk monitoring by the project team should thus be a **continuous** process throughout the project planning, procurement and implementation stages.

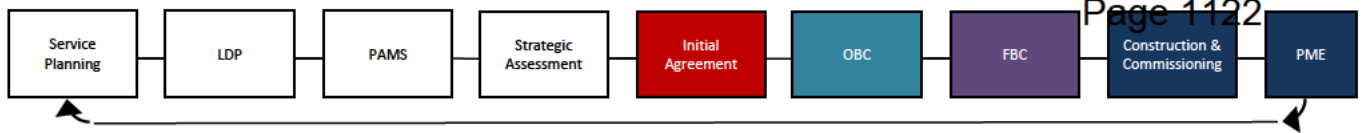
The risk management and reporting processes shall be developed by the project team and overseen by the Senior Responsible Officer (SRO) and/or Project Board



who will be able to scrutinise and challenge some of the following:

- That an appropriate risk management process has been suitably adopted.
- That assumptions behind High and Very High risks are appropriate.
- That Major and Extreme consequence risks are suitably assessed for their likelihood of occurrence.
- That appropriate control measures have been put in place to mitigate against these risks.
- That the presumed affect of the mitigation measures isn't overly optimistic.
- That those mitigation measures have been effective.
- That the project isn't inherently too risky to proceed,
- That the subsequent risk quantification process is robustly developed.

In order to maintain a historical record of risks identified and mitigating actions taken, a new version of the risk register should be completed at each review stage.



3 Risk Quantification

3.1 Introduction

Early project cost estimates are inherently uncertain which can result in them being misrepresented or misunderstood at the various reporting stages, therefore, a framework of appropriate risk quantification is required that better supports the appraisal of these project costs.

As the risk register is formed at Initial Agreement stage there is an expectation that each risk is determined to either have a financial and/or non-financial impact on the project, or is unquantifiable at that particular stage of the project.

Financially quantifiable risks shall be incorporated into a risk contingency for a project, whereas unquantifiable risks shall be covered by an allowance of 'optimism bias' – a financial adjustment to project costs to redress the tendency of estimators to overstate benefits and understate project timings and costs.

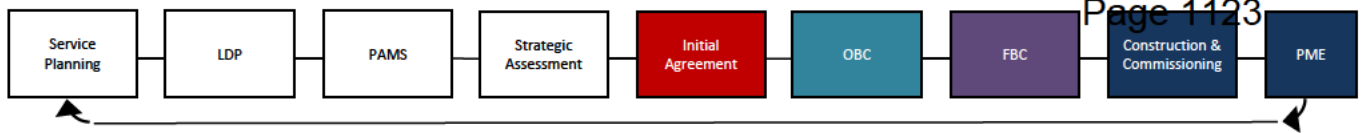
As a project develops from Initial Agreement through to Full Business Case and procurement, it is expected that the level of unquantifiable optimism bias is minimised through a combination of increased quantification of known risks, elimination of risks through mitigation measures, and the transfer of contingencies into the project base cost.

3.2 Use of Optimism Bias

Optimism bias shall be used at Initial Agreement stage where only minimal risk quantification for a project can be undertaken; however, if historical precedents of similar types of projects are available then they can be used as an alternative source for setting an early cost benchmark for a project.

The following five steps should be followed to derive the appropriate Optimism Bias adjustment factor to use for a project:

- Step 1: Determine the type of project that the business case relates to.
- Step 2: Identify the starting upper bound percentage for Optimism Bias.
- Step 3: Assess the level of mitigation already carried out.



- Step 4: Apply the Optimum Bias adjustment to project costs.
- Step 5: Continually review the Optimism Bias adjustment.

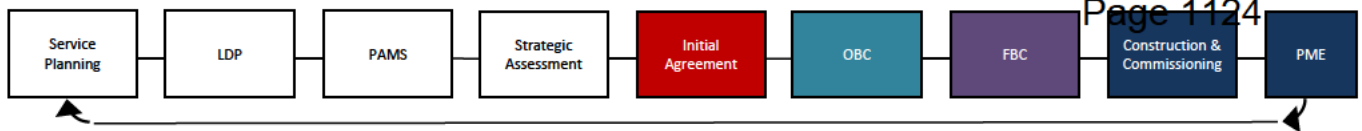
Each of these steps is described in more detail below:

3.2.1 Step 1: Determine the type of project

The definitions of generic project types are as follows:

- **Standard building projects** – those which do not require special design considerations such as general hospitals, health centres, office accommodation, etc.
- **Non-standard building projects** – those which require special design considerations due to space constraints, complicated site characteristics, specialist innovative buildings or unusual output specifications (i.e. specialist hospitals, high technology facilities, and other unique buildings or refurbishment projects)
- **Standard civil engineering projects** – these involve the construction of facilities, in addition to buildings, not requiring special design considerations – for example, most new roads and some utility projects
- **Non-standard civil engineering projects** – these involve the construction of facilities, in addition to buildings, requiring special design considerations due to space constraints or unusual output specifications – for example, innovative rail, road, utility projects, or upgrade and extension projects
- **Equipment and development projects** – these are concerned with the provision of equipment and/or development of software and systems (i.e. manufactured equipment, information and communication technology development projects or leading edge projects)
- **Outsourcing projects** – these are concerned with the provision of hard and soft facilities management services – for example, information and communication technology services, facilities management and maintenance projects.

A project which includes several project types (for example, an element of



standard building, non-standard building, standard civil engineering, outsourcing and equipment/development) should be considered as a 'programme' with five 'projects' for Optimism Bias assessment purposes.

3.2.2 Step 2: Identify the starting upper bound percentage

The table below provides adjustment percentages for these generic project categories that should be used as the starting point for calculating the level of optimism bias in the absence of more robust evidence.

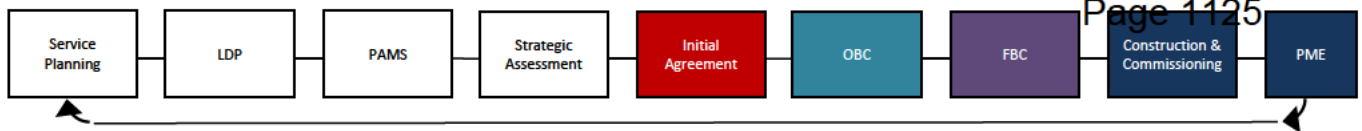
Project Type	Optimism Bias (%)			
	Works Duration		Capital Expenditure	
	Upper	Lower	Upper	Lower
Standard buildings	4	1	24	2
Non-standard buildings	39	2	51	4
Standard civil engineering	20	1	44	3
Non-standard civil engineering	25	3	66	6
Equipment/development	54	10	200	10
Outsourcing	n/a	n/a	41*	0*

* the optimism bias for outsourcing projects is measured for operating expenditure.

If, however, historical precedents of similar types of projects are available then this can be used as a source of cost information for setting an alternative upper bound percentage. An explanation will be required of the assumptions made and robustness of this alternative adjustment factor.

3.2.3 Step 3: Assess the level of mitigation already carried out

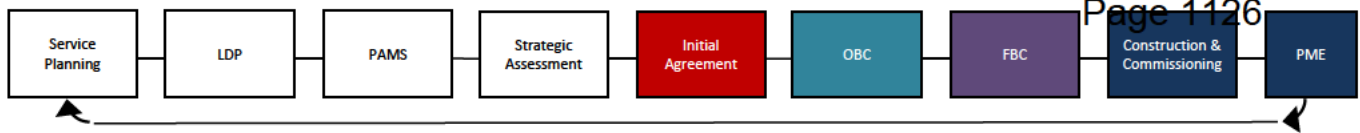
The identified upper bound level for optimism bias should be reduced to take account of the extent to which each Optimism Bias contributory factor has been mitigated. The following table provides a list of typical Optimism Bias Contributory Factors and their proportion related to a building related project:



Contributory Factor to Upper Bound	% Factor Contributes	% Factor Contributes after mitigation	Explanation for rate of mitigation
Progress with Planning Approval	4		
Progress with other Regulatory approvals	4		
Depth of surveying of site/ground information	3		
Detail of design	4		
Innovative project/design (i.e. has this type of project/design been undertaken before)	3		
Design complexity	4		
Likely variations from Standard Contract	2		
Design Team capabilities	3		
Contractors' capabilities (excluding design team covered above)	2		
Contractor Involvement	2		
Client capability and capacity (NB do not double count with design team capabilities)	6		
Robustness of Output Specification / project brief	25		
Involvement of Stakeholders, including Public and Patient Involvement	5		
Agreement to output specification / project brief by stakeholders	5		
New service or traditional	3		
Local community consent	3		
Stable policy environment	20		
Likely competition in the market for the project	2		
TOTAL	100		- Adjusted Factor

The degree by which these Contributory Factors is reduced may be dependent upon a combination of increased quantification of known risks, elimination of these factors through mitigation measures, and/or the transfer of these factors into the project base cost where a 90-95% cost certainty has been developed.

Note that there should be no double counting between these Contributory Factors



and quantifiable project risks.

3.2.4 Step 4: Apply the Optimum Bias adjustment to project costs

The present value of the capital costs should be multiplied by the adjusted optimism bias factor. The result should then be added to the total net present cost (or NPC) to provide the base cost. The base cost, as defined in the Green Book, is the best estimate of how much a proposal will cost in economic terms, allowing for risk and optimism bias.

3.2.5 Continually review the Optimism Bias adjustment

Clear and tangible evidence of the mitigation of contributory factors must be presented, whilst also being verified independently, before reductions in optimism bias are made. Procedures for this include the Gateway Review and Key Stage Review processes.

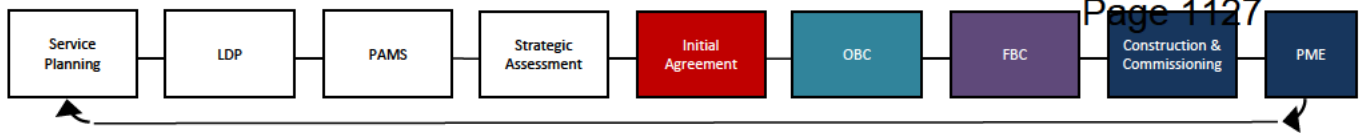
3.2.6 Presenting the Results

Following these steps will provide an optimism bias adjustment that can be used to provide a better estimate of the base case. Sensitivity testing can be used to consider uncertainties around the adjustment for optimism bias to show the range of potential outcomes, not just the single optimism bias adjustment. This can then be used to inform the range of costs applicable for reporting at Initial Agreement stage.

3.2.7 Operating Costs and Benefits

Optimism bias should also be considered for operating costs and benefits. If, however, there is no evidence to support adjustments to operating costs or benefits, appraisers should use sensitivity analysis to check switching values to answer key questions such as:

- By how much can we allow benefits to fall short of expectations, if the proposal is to remain worthwhile? How likely is this?
- By how much can operating costs increase, if the proposal is to remain worthwhile? How likely is this to happen?



- What will be the impact on benefits if operating costs are constrained?

3.3 A Bottom up Approach to Risk Quantification

The need to use generic 'Optimism Bias', or any other provision for unknown uncertainty, in a project cost estimate implies that there is significant elements of the project that are not defined or understood. As these project details become better understood the intention should be to develop an integrated project base cost and risk contingency that all but replaces optimism bias. This, however, should be done in stages as the project develops between Initial Agreement, Outline and Full Business Cases.

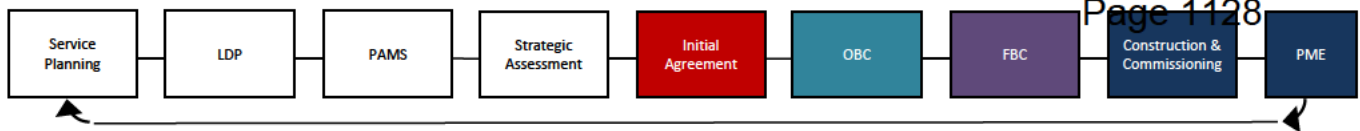
This risk contingency must therefore be generated from a 'bottom-up' risk quantification based on a comprehensive risk register and associated mitigation plans.

The following describes three approaches for calculating this risk contingency, with the Monte Carlo simulation technique regarded as the most beneficial approach to take.

3.3.1 Single point probability analysis

At its most basic, a risk analysis consists of an estimate of the cost of each risk occurring, multiplied by a single likelihood of that risk occurring – see the example below.

Case Study Single Point Analysis	
Element of Cost being considered	£2 million
Estimated consequence of risk of cost over-run	£200,000
Estimated likelihood of risk occurring	10%
Estimated value of risk = £200,000 x 10%	£20,000



3.3.2 Multi-point probability analysis

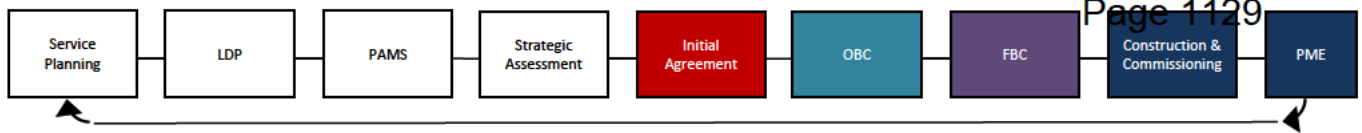
For any risk, a range of possible outcomes is more likely. An output probability distribution provides a more complete picture of the possible outcomes and recognises that some of these outcomes are more likely to occur than others. An ‘expected outcome’ is the average of all possible outcomes, taking into account their different probabilities. An example is given below:

Case Study			
Multi point analysis.			
It is estimated that a particular facility will cost £50m to build. The expected costs associated with construction cost uncertainties have been calculated as follows:			
Possible Cost (£m)	Difference from estimated cost (£m)	Estimated likelihood of the event occurring	Risk Value (£m)
45	-5	0.1	-0.5
50	0	0.6	0
55	+5	0.1	+0.5
60	+10	0.1	+1.0
65	+15	0.1	+1.5
The most likely outcome is that of no extra cost, as this outcome has the highest likelihood (60%). However, the expected outcome – the sum of each possible outcome multiplied by its likelihood – is an additional cost of £2.5 million. This needs to be calculated in NPV terms, taking into account the time period over which the risk occurs.			

3.3.3 Monte Carlo or Latin Hypercube simulation

It is unlikely that all risk items will occur and there are a variety of packages available that take the analysis of risk a step further, using probability distribution.

Information included in the Risk Register detailing risks, likelihood and consequence (lowest cost impact, most likely cost impact and highest cost impact) are fed into the Monte Carlo or Latin Hypercube IT programmes which then calculate an overall cost of the risk. Generally the programme is run several times to avoid any “rogue” results being included thereafter in the process.



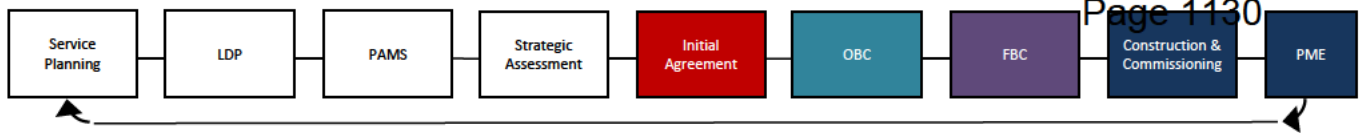
Monte Carlo analysis is a risk modelling technique that presents both the range as well as the expected value of the collective impact of various risks. It is useful when there are many variables with significant uncertainties. However, expert advice is required to ensure it is applied properly, especially when risks are not independent of each other.

Latin Hypercube is designed to reproduce accurately the input distribution through sampling using fewer iterations compared with the Monte Carlo approach.

3.3.4 Testing of risk quantified allowances

A problem that can arise when using a bottom-up approach to the quantification of risk is that the more comprehensive the project's risk register is, the greater the potential to develop a similarly comprehensive list of risk costs and thus an abnormally high risk contingency.

The most reliable way to crosscheck the scale of the overall risk allowance is to integrate it with the project base cost and then compare it with out-turn data from comparable projects at similar stages of development. If these benchmark costs are significantly higher or lower than the project estimate, this suggests that it would be prudent to include an adjustment to the bottom-up calculation used to inform the project risk contingency.



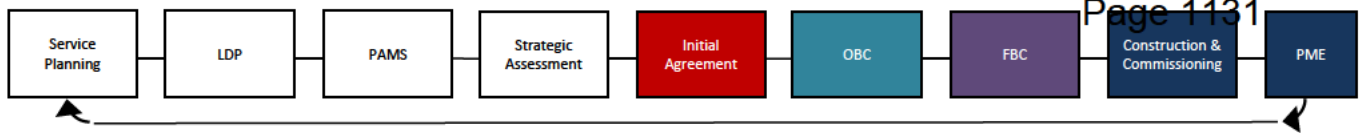
4 Expectations at Business Case Stages

As the project progresses from Initial Agreement towards OBC and FBC Stages, the project risk register will mature from an overview of a project's main strategic, organisational and service risks towards a more detailed understanding of a project's design and construction related risks. The project risk contingency will develop from an optimism bias allowance towards a fully costed risk contingency. The following provides more information on the different expectations at each business case stage:

4.1 Initial Agreement stage

The following steps will provide a guide to the development of a risk management and quantification process appropriate at Initial Agreement stage:

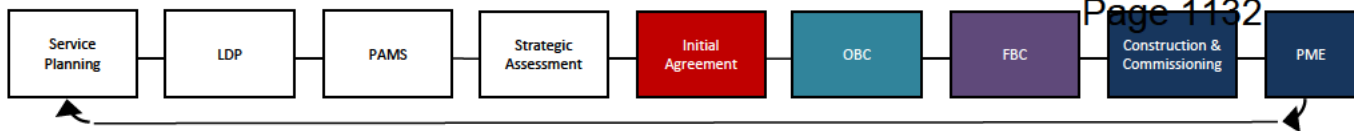
- Develop a project risk register by initially identifying the strategic risks associated with the project. Appendix C provides an indication of typical risks expected to be considered at this stage.
- Indicate whether these risks have a financial and/or non-financial consequence, or are unquantifiable at this stage.
- Assess each risk to determine its risk rating.
- Outline the action taken, or to be taken, in controlling each risk.
- Identify the likely owner type for each risk.
- Where appropriate, calculate the risk contingency to be added to the project base cost by identifying a suitable adjustment for optimism bias.
- Alternatively, use historic cost data from projects of similar type and stage of development to calculate the combined project base cost and risk contingency.
- Review the outturn project cost (inclusive of risk contingency) against suitable benchmark costs to confirm that they are reasonably reported.
- Follow confirmed governance arrangements for independent review (and reporting) of the project risk register and risk quantification by a senior management governance committee.



4.2 OBC Stage

The following steps will provide a guide to the development of a risk management and quantification process appropriate at Outline Business Case stage:

- Review the existing risk register developed at Initial Agreement stage, update it for any change in assumptions, and record the impact of any control measures.
- Add any further project specific risks to the risk register. Appendix D provides an indication of typical risks expected to be considered at this stage.
- Update the assessment of each risk as a financial and/or non-financial risk, or confirm that it remains unquantifiable at this stage. These risks should then be treated as follows:
 - All financial risks shall be used as the basis of the bottom-up quantification of risks for the project risk contingency.
 - The main non-financial risks should be considered as part of the non-financial risk appraisal of project options in the Economic Case.
 - Reliance on unquantifiable risks shall be as low as reasonably possible, and replaced with financially quantifiable risks where appropriate to do so.
- Provide more detailed information of control measures introduced, their effectiveness, and further measures to take.
- Identify and record the individual owner to be responsible for the control of each risk.
- Review the outturn project cost (inclusive of risk contingency) against suitable benchmark costs to confirm that they are reasonably reported.
- Follow confirmed governance arrangements for independent review (and reporting) of the project risk register and risk quantification by the project's Senior Responsible Owner (SRO) or Project / Programme Board.



4.3 FBC Stage

The following steps will provide a guide to the continued development of a risk management and quantification process appropriate at Full Business Case stage:

- Review the existing risk register developed at OBC stage, update it for any change in assumptions, and record the impact of any control measures.
- Add any further project specific risks to the risk register. Appendix E provides an indication of typical risks expected to be considered at this stage.
- Update the assessment of each risk as a financial and/or non-financial risk, or confirm that it remains unquantifiable at this stage. These risks should then be treated as follows:
 - Financial risks with a high cost certainty shall be transferred from the project contingency into the main project base cost. All other financial risks shall be identified within the business case with an explanation as to why they remain within the project contingency, when they are most likely to occur, and how they are to be managed.
 - Non-financial risks should have been reduced to Low or Medium risk through appropriate control measures; otherwise, an explanation is needed in the business case as to why they remain High or Very High, how they are to be monitored and controlled, and whether they are a burden to the potential success of the project.
 - Unquantifiable risks should at this stage be minimal, if not eliminated altogether. Any remaining unquantifiable risks shall be identified within the business case whilst being excluded from the project costs. Risk ownership will transfer to Scottish Government at this stage.
- Confirm that all outstanding project risks have an appropriate control measure and individual risk owner associated with it.
- Review the outturn project cost (inclusive of risk contingency) against suitable benchmark costs to confirm that they are reasonably reported.
- Follow confirmed governance arrangements for independent review (and reporting) of the project risk register and risk quantification by the SRO.

Appendix A – Risk Consequence Descriptor Table

Descriptor	Negligible (White)	Minor (Green)	Moderate (Yellow)	Major (Amber)	Extreme (Red)
Patient Experience	Reduced quality of patient experience / clinical outcome not directly related to delivery of clinical care.	Unsatisfactory patient experience / clinical outcome directly related to care provision – readily resolvable.	Unsatisfactory patient experience / clinical outcomes; short term effects – expect recovery within 1 week.	Unsatisfactory patient experience / clinical outcomes; long term effects – expect recovery longer than 1 week.	Unsatisfactory patient experience / clinical outcomes; continued ongoing long term effect.
Objectives / Project	Barely noticeable reduction in scope, quality or schedule.	Minor reduction in scope, quality or schedule.	Reduction in scope or quality of projects, project objectives or schedule.	Significant project overrun.	Inability to meet the project objectives; reputation of the organisation seriously damaged.
Injury (physical and psychological) to patient / visitor / staff	Adverse event leading to minor injury not requiring first aid.	Minor injury or illness. First aid treatment required.	Agency reportable (e.g police (violent and aggressive acts). Significant injury requiring medical treatment and / or counselling.	Major injuries / long term incapacity or disability (loss of limb) requiring medical treatment and / or counselling.	Incident leading to death or major permanent incapacity.
Complaints / Claims	Locally resolved verbal complaint.	Justified written complaint peripheral to clinical care.	Below excess claim. Justified complaint involving lack of appropriate care.	Claim above expected level. Multiple justifiable complaints.	Multiple claims or single major claim. Complex justified complaint.
Service / Business Interruption	Interruption in a service which does not impact on the delivery of patient care or the ability to continue to provide service.	Short term disruption to service with minor impact on patient care.	Some disruption in service with unacceptable impact on patient care. Temporary loss of ability to provide service.	Sustained loss of service which has serious impact on delivery of patient care resulting in major contingency plans being invoked.	Permanent loss of core service or facility. Disruption to facility leading to significant “knock on” effect.
Staffing and Consequences	Short term low staffing level, temporary reduce service quality (less than 1 day). Short term low staffing level (greater than 1 day), where there is no disruption to patient care.	Ongoing low staffing level reduces service quality. Minor error due to ineffective training / implementation of training.	Late delivery of key objectives / service due to lack of staff. Moderate error due to ineffective training / implementation of training. Ongoing problems with staffing levels.	Uncertain delivery ok key objective / service due to lack of staff. Major error due to ineffective training / implementation of training.	Non delivery of key objective / service due to lack of staff. Loss of key staff. Critical error due to ineffective training / implementation of training.
Financial (including damage / loss / fraud)	Negligible organisational / personal financial loss (less than £1K) (N.B. Adjust for context).	Minor organisational / personal financial loss (£1K - £10K).	Significant organisational / personal financial loss (£10K - £100K).	Major organisational / personal financial loss (£100K - £1m).	Severe organisational / personal financial loss (greater than £1m).
Inspection / Audit	Small number of recommendations which focus on minor quality improvement issues.	Recommendations made which can be addressed by low level of management action.	Challenging recommendation that can be addressed with appropriate action plan.	Enforcement action. Low rating. Critical Report.	Prosecution. Zero rating. Severely critical Report.
Adverse Publicity / Reputation	Rumours, no media coverage. Little effect on staff morale.	Local media coverage – short term. Some public embarrassment. Minor effect on staff morale / public attitudes.	Local media – long term adverse publicity. Significant effect on staff morale and public perception of the organisation.	National media / adverse publicity, less than 3 days. Public confidence in the organisation undermined. Use of service affected.	National / international media / adverse publicity, more than 3 days. MSP/MP concerns (Questions in Parliament). Court enforcement. Public Inquiry / FAI.

Appendix B – Risk Mitigation

There are a number of approaches that can be taken to mitigate against the impact of the identified risks, such as:

- **Active risk management** – Effective management of risks involves:
 - identifying possible risks in advance and putting mechanisms in place to minimise the likelihood of their materialising with adverse effects;
 - having processes in place to monitor risks, and access to reliable, up-to-date information about risks;
 - the right balance of control in place to mitigate the adverse consequences of the risks, if they should materialise; and,
 - decision-making processes supported by a framework of risk analysis and evaluation.
- **Early consultation** – Experience suggests that costs tend to increase as more requirements are identified, or the later that these requirements are identified. Early consultation will help to identify what those needs are and how they may be addressed.
- **Avoidance of irreversible decisions** – Where lead options involve irreversibility, a full assessment of costs should include the possibility of delay, allowing more time for investigation of alternative ways to achieve the objectives.
- **Pilot Studies** – Acquiring more information about risks affecting a project through pilots allows steps to be taken to mitigate either the adverse consequences of bad outcomes, or increase the benefits of good outcomes.
- **Design Flexibility** – Where future demand and relative prices are uncertain, it may be worth choosing a flexible design adaptable to future changes, rather than a design suited to only one particular outcome. For example, different types of fuel can be used to fire a dual fired boiler, depending on future relative prices of alternative fuels. Breaking a project into stages, with successive review points at which the project could be stopped or changed, can also increase flexibility.
- **Precautionary Principle** – Precautionary action can be taken to mitigate a perceived risk. The precautionary principle states that because some outcomes are so bad, even though they may be very unlikely, precautionary action is justified. In cases where such

risks have been identified, they should be drawn to the attention of senior management and expert advice sought.

- **Procurement / contractual** – risk can be contractually transferred to other parties and maintained through good contractual relationships, both formal and informal. Insurance is the most obvious example of risk transfer. The main text of this Appendix provides further information about the types of risk that can, and often are, transferred.
- **Reinstate, or develop different options** – Following the risk analysis, the appraiser may want to reinstate or options, or develop alternative ones that are either less inherently risky or deal with the risks more efficiently.
- **Abandon proposal** – Finally, the proposal may be so risky that, whatever option is considered, it has to be abandoned.

Appendix C: Strategic Risks at Initial Agreement stage

1. Identification			2. Assessment		3. Control		4. Monitoring		
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
CLIENT / BUSINESS RISKS									
1.0	Business risk								
1.1	The project disrupts day to day business operations					Set up regular review points throughout the life of the project to monitor and respond to the impact of the project on normal activities			
1.2	Client doesn't have the capacity or capability to deliver the project					Develop appropriate governance arrangements for the project including resource planning and individual skills review			
1.3	The clinical need for change and expected outcomes isn't clearly defined					Set out a plan to engage with service providers to fully understand the service based need for change and the expected outcome from investment			
1.4	Poor stakeholder involvement results in a lack of support for the project					Prepare and implement an appropriate project communication plan which engages with all appropriate stakeholders at appropriate stages of the project			
2.0	Reputational risk								
2.1	Adverse publicity occurs due to an issue with the project					Review the reputational impact of all risks in this register and take action			

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
2.2	Poor communication ignores stakeholder interests					Ensure that the project communication plan covers issues of public perception / consultation feedback / media interest / parliamentary interest / organisational reputation, etc			
3.0	Demand risk								
3.1	Demand for the service does not match the levels planned, projected or presumed					Carry out sensitivity testing of assumptions behind service demand projections to understand and manage any underlying risks			
4.0	Occupancy risk								
4.1	Review any project specific risks								
5.0	Operational risk								
5.1	The available accommodation is unable to support the proposed service model					Review service model & activity levels at early design planning stages and test assumptions throughout design development and implementation.			
6.0	Decant risk								
6.1	Unable to decant staff / clients from one site to another in a timely manner					Regularly review decant plan against project plan to ensure that they remain aligned			
7.0	Technology risk								
7.1	Review any project specific risks?								

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
PLANNING & DESIGN RISKS									
8.0	Planning risk								
8.1	Local community objects to the project					Engage with local communities to gain their support for proposals re new site developments			
9.0	Project information risk								
9.1	Information used as part of the strategic & project brief is unreliable					Assumptions which have a material impact on the project should be clearly defined in the Initial Agreement, with a process for confirming those assumptions set out as the project develops between OBC & FBC			
10.0	Design risk								
10.1	The design does not meet the Design Assessment expectations					The design team need to engage with the Design Assessment team from early design planning stages onwards to avoid confusion over expectations			

CONSTRUCTION / PROPERTY RELATED RISKS									
11.0	Procurement risk								
11.1	Review any project specific risks at this stage								
12.0	Construction risk								
12.1	Critical programme dates are unrealistic					A realistic project programme should be developed from IA stage onwards which is regularly monitored and reviewed			
13.0	Maintenance risk								
13.1	Review any project specific risks at this stage								
FINANCE RISKS									
14.0	Funding risk								
14.1	The project estimate is poorly prepared and inaccurate					The level of detail required for project cost estimates should align with guidance on each planning stage			
14.2	The project becomes unaffordable					The affordability of the project should be tested at IA stage and further explored as part of the OBC and FBC stages of the project			
15.0	Residual value risk								
15.1	Review any project specific risks								

EXTERNAL RISKS									
16.0	Economic risk								
16.1	Inflation costs rise above those projected					The likelihood of this occurring needs to be considered as part of the Financial Case			
17.0	Legislative risk								
	Changes in legislation or tax rules increase project costs					The likelihood of this occurring should be considered as part of this risk register			
18.0	Policy risk								
	Changes to non-legislation policy affects project cost or progress					The likelihood of this occurring should be considered as part of this risk register			
	There are uncertainties over future policy changes					The likelihood of this occurring should be considered as part of this risk register			

Appendix D: Additional Project Risks at OBC stage

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
CLIENT / BUSINESS RISKS									
1.0	Business risk								
1.5	A safe environment for staff, patients and visitors is not maintained during the course of the project					Ensure that an appropriate health & safety plan is developed in line with CDM regulations etc			
1.6	A safe clinical environment is not maintained during the course of the project					Ensure that the health & safety plan incorporates issues related to infection control and clinical governance			
2.0	Reputational risk								
3.0	Demand risk								
3.2	Demand for accommodation does not match the levels planned, projected or presumed					Ensure that service demand assumptions are closely link with accommodation needs, and that there is sufficient flexibility in the arrangements to meet reasonable variations in demand			
4.0	Occupancy risk								
4.1	The accommodation remains empty following completion of works					Ensure that the operational commissioning plan is aligned with any construction programme and that service move arrangements are in place and ready to move at the appropriate time			

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
5.0	Operational risk								
5.2	Service provision or performance is below that contracted or normally expected					Where service performance is linked to contractual arrangements then appropriate monitoring arrangements need to be set out along with service change proposals			
5.3	Operating service costs are higher than budgeted					Set out proposals for monitoring service costs, with contingency plans if costs begin to rise above budget projections			
5.4	New service model cannot be implemented					A service change plan should be developed which is closely aligned to the design development process and implementation of the project			
5.5	Plans for service integration between different providers or organisations is not achieved					The project's service change plan should incorporate, where required, consultation between the various service providers on proposed new working arrangements			
6.0	Decant risk								
6.2	Lack of available decant space impacts on service provision					The availability of decant space should be identified at OBC stage and confirmed at FBC stage			

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
7.0	Technology risk								
7.1	Changes in technology result in services being provided using non-optimal technology					Opportunities to take advantage of potential future technology advances should be explored as part of the OBC			
PLANNING & DESIGN RISKS									
8.0	Planning risk								
8.2	Progress with Planning Approval takes longer than planned					The project programme should consider the complexity of design and any planning risks when projecting a reasonable time period for this stage			
8.3	Progress with other regulatory body approvals takes longer than planned					The project programme should consider the complexity of design when projecting a reasonable time period for this stage			
8.4	Requirements of Planning or Statutory consents result in an increase to project scope/requirements					The planning authority should be engaged at an early stage once design proposals are formed to understand any planning constraints or further planning expectations			
8.5	Planning constraints delay project progress and thus increase costs					The project programme should consider the complexity of design and any planning risks when projecting a reasonable time period for this stage			

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
8.6	There are objections to the use of the proposed site					A full site feasibility report should be prepared when potential new sites are being considered, which includes consultation on local community support for the proposed use of each site			
9.0	Project information risk								
9.2	The client's project brief is lacking in the required information or is insufficient					A project brief should be fully developed as the project reaches OBC stage and before FBC stage. This should be further tested as part of the business case approval process			
9.3	Inadequate depth of surveying of site constraint / ground information					The need for site constraint / ground investigation information should be considered at OBC stage where there is a risk to the project budget, and a detailed investigation carried out during the FBC stage			
10.0	Design risk								
10.2	The design team does not have sufficient capacity or capability for the project					The capacity and capability of the design team should be fully explored by the client and contractor during the procurement stage, and evidenced in the project's OBC			

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
10.3	Client requirements regularly change throughout the duration of the project					The client's project brief should be fully explored and confirmed during the OBC stage and prior to any in-depth design development work			
10.4	The design isn't capable of delivering the services to the required performance or quality standards					The quality and appropriateness of design should be fully explored with all stakeholders as part of the design development process			
10.5	Service providers or users cannot agree the project brief					A design consultation / stakeholder engagement plan should be developed to minimise confusion or disagreements between service providers and users			
10.6	The design does not meet the Design Assessment expectations					The design team need to engage with the Design Assessment team from early design planning stages onwards to avoid confusion over expectations			
10.7	The complexity or innovative nature of design is difficult to implement					Ambitions for complexity of design should be balanced with the design team and contractor's capabilities to implement such designs			
10.8	There is insufficient car parking for the number of occupants and their service users					A traffic management plan should be developed as part of the project brief at OBC stage which also considers the appropriate number of car parking spaces required			

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
CONSTRUCTION / PROPERTY RELATED RISKS									
11.0	Procurement risk								
11.1	The contractor does not have sufficient capacity or capability to deliver the project					The capacity and capability of the contractor should be fully explored by the client during the procurement stage, and evidenced in the project's OBC			
11.2	The Contractor's involvement in the project is too late to impact on the design solution					The contractor should be involved at an early stage in the design development in line with the appropriate procurement route recommendations			
11.3	The project varies from standard contracts					A statement explaining the reasons behind deviation from standard contract arrangements should be declared at OBC and confirmed at FBC			
11.4	Disputes arise between client and contractor affecting project cost and time					A partnering type arrangement should be developed whereby both client and contractor are aware of each other's expectations from the project and a good working relationship is formed			

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
12.0	Construction risk								
12.2	The construction project is poorly managed causing delays and cost overruns					The capacity and capability of the project director and project manager should be fully evidenced in the project's OBC & FBC			
12.3	Construction of the physical solution is not completed to time, budget or specification					A construction based risk register should be developed and confirmed at FBC stage to minimise changes to programme, budget or specification			
13.0	Maintenance risk								
13.2	Ongoing maintenance costs are higher than projected					Expected maintenance costs should be discussed throughout the design development stage and subsequently monitored post completion			
FINANCE RISKS									
14.0	Funding risk								
14.3	Additional funds are required to support increased capital costs					The availability of contingency funds needs to be considered at OBC and addressed as part of the FBC			
14.4	Income receipts supporting the project are not as high as expected					Realistic market estimates need to be obtained if this is critical to project funding			

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
15.0	Residual value risk								
15.1	There is uncertainty over the value of the physical asset at the end of the contract term					A plan needs to be set out to regularly review the value of the physical asset during the contract term			
EXTERNAL RISKS									
16.0	Economic risk								
17.0	Legislative risk								
17.2	Changes are made to clinical regulations or other related legislation					Status of clinical regulations and other related legislation should be regularly reviewed and current status confirmed prior to each business case submission			
18.0	Policy risk								

Appendix E: Additional Project Risks at FBC stage

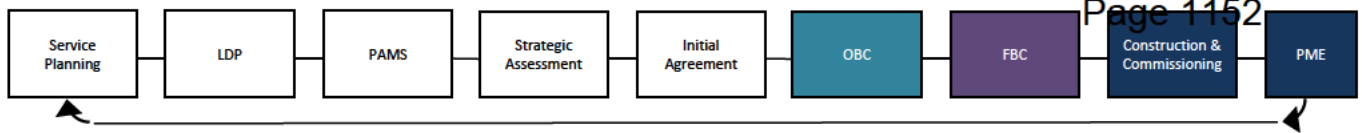
1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
PLANNING & DESIGN RISKS									
10.0	Design risk								
10.9	The design fails to incorporate infection control standards					A stage within the design development process should incorporate engagement with Infection Control representatives			
10.10	The proposed design isn't buildable					Innovative design solutions should engage with contractors to ascertain ease of construction			
CONSTRUCTION / PROPERTY RELATED RISKS									
11.0	Procurement risk								
11.5	The planning and procurement of equipment is inadequate					Ensure that the procurement of equipment is part of the project implementation plan			
12.0	Construction risk								
12.4	The works do not pass required project inspections / audits					Arrangements for monitoring quality expectations from the works should be explained in the FBC and implemented appropriately			

1. Identification			2. Assessment			3. Control		4. Monitoring	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence	Likelihood	Risk	Proposed Treatment / Mitigation	Action Taken	Risk Owner	
			(1 - 5)	(1 - 5)				Type	Individual
12.5	Person safety and security is compromised during the construction stage					All construction health & safety standards should be controlled as part of CDM procedures & regulations			
12.6	Unforeseen events occur during construction					These eventualities should form part of the contract clauses			
12.7	There are delays in gaining access to the site					Set out within the project execution plan how and when access will be available, any permissions required, any dependencies, and who needs to be consulted			
12.8	Contractors don't have the capacity, capability or appropriate resources to deliver the project					This should form part of a detailed scrutiny process prior to contractor selection			

SCOTTISH CAPITAL INVESTMENT MANUAL

Project Monitoring & Service Benefits Evaluation





1 Introduction and Policy Requirements

1.1 Monitoring & Evaluation

This guidance defines monitoring as the systematic collection and review of information while a project is proceeding, whereas evaluation is described as the process of assessing the impact of a project (or programme) after it has come to an end. When used in combination, they become an essential aid in realising, determining, and sharing the success of any project.

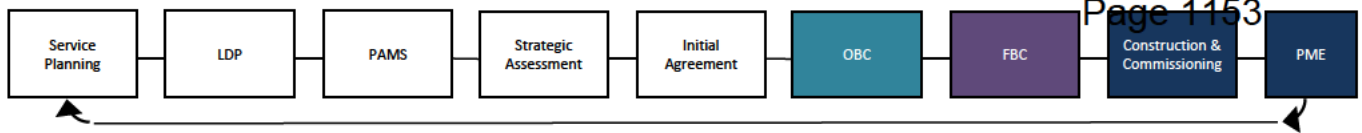
Guidance and instruction is provided on the appropriate use of these processes during the planning, implementation and completion of a project. Two stages are defined; namely Project Monitoring and Service Benefits Evaluation. Both of these stages will require a combination of both monitoring and evaluation but their names signify the influencing feature of each stage.

Project Monitoring will cover the technical aspects of the planning, implementation and completion phases of a project (i.e. generally, the construction phase), and the Service Benefits Evaluation will cover the impact of the project on service change and benefits realisation – the project's benefits register and realisation plan will form a significant part of this latter assessment.

1.2 Why is monitoring and evaluation important?

If properly planned and resourced, monitoring and evaluation can produce significant benefits to an organisation, such as:

- Monitoring:
 - Gaining a better understanding of whether the project is running smoothly and to programme so that any corrective action can be taken in a timely manner.
 - Enabling service plans / changes to progress at a correct pace to align with the project programme.
 - Better understanding of the risk contingency status (i.e. has some of it been used or not).
 - Better understanding of the impact of project scope changes on costs, programme, and delivery of the project's outcomes or benefits.



- Evaluation
 - Demonstrates that the project was worthwhile by, for example, achieving its investment objectives, realising its expected benefits, and carefully managing its associated risks.
 - Promotes organisational learning to improve current and future performance.
 - Avoids repeating costly mistakes.
 - Improves decision-making and resource allocation (e.g. by adopting more effective project management arrangements)
 - Recognises how the impact of good design can improve stakeholder satisfaction, service performance, and the efficiency and effectiveness of the NHS Board's operations.

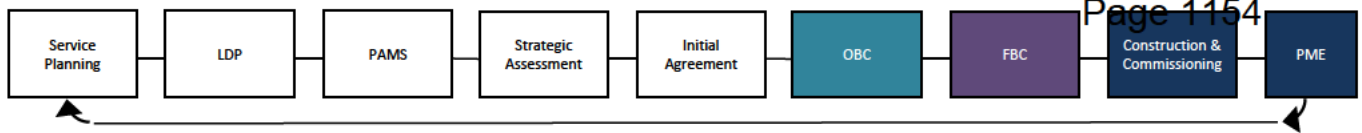
1.3 Policy Requirements

NHS Boards are mandated by this guidance to monitor, evaluate and learn from all their capital and major investment projects valued above their delegated limit, but it is also recommended as best practice for all other projects.

For projects under £5m, monitoring and evaluation should be carried out and reported through NHS Boards' internal governance arrangements. For projects in excess of £5m, individual reports should be submitted to Scottish Government by the agreed timescales outlined within the project's Full Business Case.

A summary report of the main findings and lessons learnt in respect of all such projects should be submitted to Scottish Government by 30th June annually. Scottish Government is committed to sharing these lessons learnt across NHSScotland.

Business cases for capital and major investment projects will not be approved unless both project monitoring and evaluation have been properly planned in advance.



2 Project Monitoring and Service Benefits Evaluation

The following four stages set out the process requirements for successful project monitoring and service benefits evaluation:

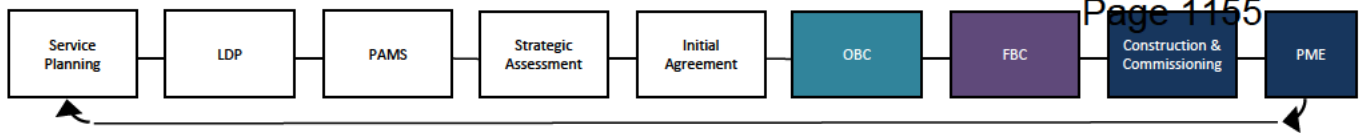


These four stages are described in more detail below:

2.1 Planning – how will it be carried out?

The planning stage will determine the scope of work and resources required to carry out Project Monitoring and then Service Benefits Evaluation for any project. As with all SCIM guidance expectations - the size, level of risks, and complexity of a project will determine the level of detail required.

At OBC stage, an 'Outline Plan' is needed, whereas at FBC stage a 'Full Plan' is required. For all projects, it needs to be recognised that individuals involved in setting out such plans may change by the time it is implemented, which is why it is crucial that good documentary evidence supporting such plans is maintained.



2.1.1 Outline Monitoring & Evaluation Plan at OBC stage

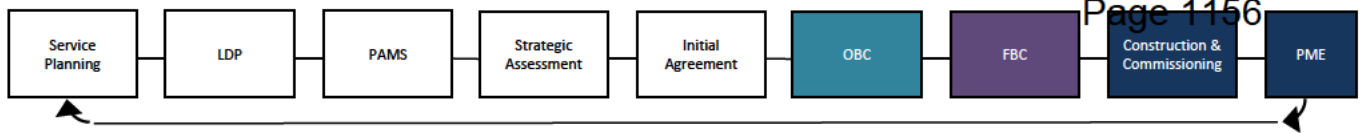
The Outline Plan, which will be incorporated into the Management Case at OBC stage, will set out the following:

- What aspects of the project will be monitored and evaluated?
- When it will be carried out, including milestone dates and report submission dates.
- How it will be done. This might include proposals for a comparative review of the benefits realisation plan, an overview of project risks, stakeholder questionnaires, focussed interviews, comparisons of estimated and actual costs & programme milestones, analysis of performance indicators, confirmation of performance standards reached, findings from professional reports, formal design assessments, etc.

Narrative on the above points is required at OBC stage, which can then be supported with a summary table outlining the key points - an example of which is provided in Appendix A 'Outline Monitoring and Evaluation Plan'.

In addition, a resource plan for carrying this out is needed which covers the following information:

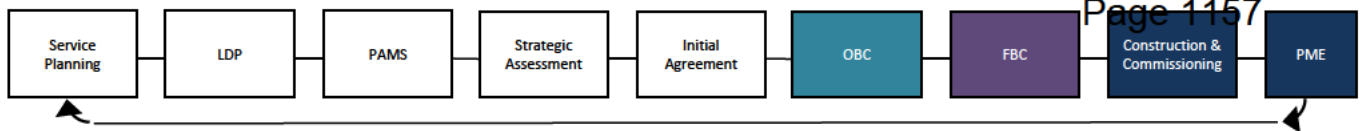
- The project lead and project team dedicated to this aspect of the project (size and scale of project will determine the level of detail); including an outline of their role and responsibilities, an indication of their competency for carrying out this role, and continuity plans in place in the event of changing circumstances.
- An outline of any additional financial or human resources needed to carry out this part of the project and report on the outcomes. Any recruitment plans needed to fill vacant roles should be provided.



2.1.2 Full Monitoring & Evaluation Plan at FBC stage

The Full Plan submitted at FBC stage should confirm the full details previously outlined at OBC stage, while also expanding on the following information:

- A detailed programme setting out when Project Monitoring events will take place.
- A detailed programme setting out when key Service Benefits Evaluation events will take place, covering information gathering, analysis and reporting stages for each element of the evaluation.
- Identification of all stakeholders who will be involved in both the monitoring and evaluation processes and their expected involvement. Depending on the type and size of project, this may include the following:
 - Board management staff.
 - Clinicians.
 - Nursing staff.
 - Healthcare planners.
 - Patients.
 - General public
 - Scottish Government staff.
 - Estates professionals.
 - Accountants and financial specialists.
 - IM&T professionals.
- A communication plan which explains how and when stakeholders will be kept informed of their agreed input to these processes.
- Confirmation of any additional financial or human resources required to carry out either of the monitoring or evaluation processes (including the need to prepare written reports and dissemination activities).



2.2 Project Monitoring – how well is the project progressing?

Project Monitoring covers the assessment of the technical aspects of a project as it proceeds through its planning, implementation and final completion phases. The main elements to be covered are:

- Project costs
- Project programme
- Health & safety performance
- Project scope changes
- Design and technical aspects
- Risk management issues

It should also include any other technical element of the project that would benefit from being monitored as the project progresses.

For projects within a NHS Board's delegated authority the scope and detail of Project Monitoring can be determined by the scale and complexity of the project.

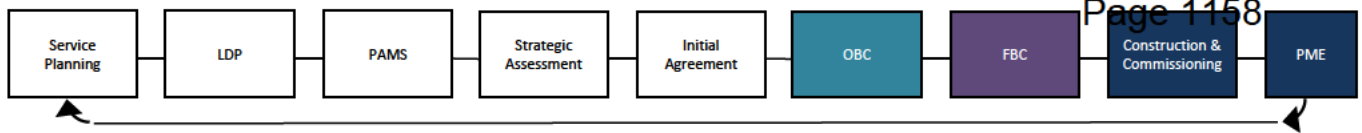
It should be noted that Project Monitoring is deemed a separate exercise to Gateway and Key Stage Reviews; however, the information gathered through appropriate monitoring can be used to support these reviews.

The following sections provide further information on what should be included within the Project Monitoring stage:

2.2.1 Project Costs

Monitoring of project costs (capital, equivalent capital investment, and operational revenue costs) provides continuous assurance that appropriate cost control measures are in place and that actual costs are contained within the project budget.

At Full Business Case stage, a summary is needed of how all costs have developed from Initial Agreement stage through to OBC and then FBC. Example Project Cost Monitoring Forms are provided in Appendix B for both capital and



revenue cost reporting. A Construction Cost Plan is also required at OBC and FBC stages which provides a more detailed breakdown of the proposed Construction Costs. An example cost plan template is provided in Appendix B, which is in line with the Building Cost Information Service (BCIS) cost plan standards.

At the end of the project implementation stage (e.g. end of construction), a further comparison of construction costs is required between those reported at FBC and actual outturn costs. This will utilise, as necessary, the information contained within the Construction Cost Plan to provide a detailed breakdown of any evident cost changes.

The programme for assessing actual operational revenue costs may need to wait until a reasonable period after occupation for them to become typical, recurring costs. The final review of these outturn revenue costs is therefore more likely to align with the Service Benefits Evaluation programme.

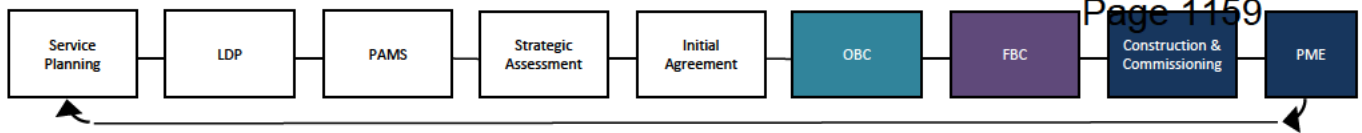
2.2.2 Project Programme

Monitoring of project milestones will indicate whether initial programme estimates were overly optimistic or not, and then provide assurance that critical milestones will be delivered on time or identify any slippages that have occurred. The potential impact on any key interdependencies can then be reported.

At Full Business Case stage, a summary is needed of how a project's key milestones have / have not altered over the planning and procurement stages between Initial Agreement and FBC. An explanation will be needed of all significant time changes between each stage. An example Programme Monitoring Form is provided in Appendix C. At project completion stage, a further comparison will be required between FBC and actual milestones.

2.2.3 Project Scope Changes

The most critical aspect of controlling project cost and time is to develop a clear, comprehensive and detailed specification and design that takes account of stakeholder service requirements. To supplement this, a robust Change Control Plan must be developed and implemented, identifying the control points and



thresholds (i.e. cost limits) supported by the management arrangements responsible for overseeing, controlling and approving any changes.

Any significant project scope change should be recorded; identifying at what stage of the project it occurred, the reasons behind it, and what impact it has had or is likely to have on the project programme, costs, and/or delivery of the project's outcomes or benefits.

2.2.4 Health & Safety Performance

Monitoring and review of health & safety performance will enable a full understanding of the adequacy of health and safety practices during the construction and commissioning of the project, as well as identify any lessons to be learnt on all future NHS investment projects. For example, information on the following should be regularly reported and assessed:

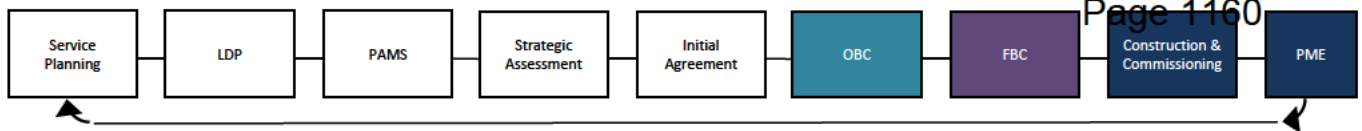
- Number of accidents occurring.
- Number and percentage of those accidents coming under RIDDOR.
- Number and percentage of those accidents occurring due to
 - Operative not using required Personal Protective Equipment (PPE)
 - Ineffective PPE
 - Inadequate training of using PPE
- Number of days lost due to injuries.
- Number of treatments carried out on site.

When required for a project, the Construction Design Management (CDM) Co-ordinator will be an essential contributor to this part of Project Monitoring.

2.2.5 Design, Engineering & other Technical items

Monitoring and inspection of the quality, accuracy and progress of any project is expected to form part of a good practice approach to construction project management.

Boards are to outline in their project monitoring report their proposal for monitoring construction quality. This will be based on meeting the agreed construction,



architectural design, engineering, and specification requirements for that project.

Upon completion, a project's overall design and engineering impact will also need to be assessed. This will incorporate a review against the project's original design objectives to ask whether it meets or exceeds user expectations. It shall also determine whether its engineering and other technical standards have met the requisite level / indicator / measure, and why. Reference should be made to the NDAP design assessment process for further details of expectations at this stage.

2.2.6 Risk Management Issues

A review of the project's risk register will be needed to identify the following:

- Where particular client and contractor risks have been successfully managed through planned mitigation measures.
- Instances where the risk share between client and contractor may have shifted during the contract.
- Any issues that arose due to an identified risk occurring; detailing the impact that the issue caused and the further actions needed to resolve the issue.
- Any issues that weren't originally identified on the project risk register; detailing the impact this has caused and the actions needed to resolve it.

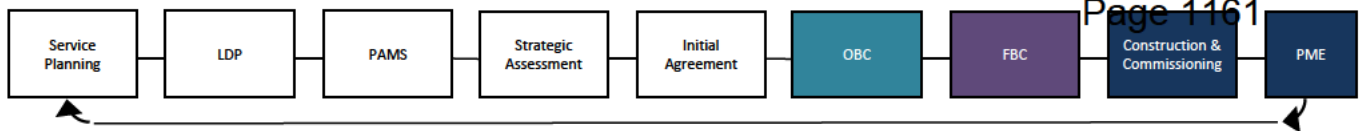
This review should focus on the main points of interest, rather than an individual risk by risk summary.

2.2.7 Project Monitoring Report

A Project Monitoring Report will be required within the Management Case of the Full Business Case, which can then be used to further monitor each of the above elements throughout the construction and commissioning stages of the project.

This document will need to incorporate the following:

- A Project Cost Monitoring Form (see Appendix B for an example format).
- A Construction Cost Plan (see Appendix B for an example template).
- A Programme Monitoring Form (see Appendix C for an example format).

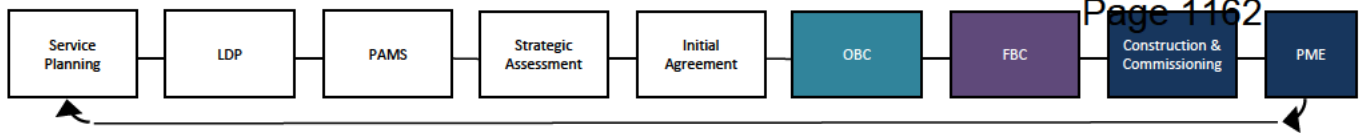


- A summary of any significant project scope changes and their impact.
- An outline of how health & safety performance will be monitored and reviewed.
- Highlights of the main design, engineering, and specification information and standards agreed for this project, with reference to where further information can be found.
- Links to the current and ongoing NDAP design assessment process for the project, and details of how this will be used to assess the overall design and engineering impact upon completion.
- A review of the current status of the project risk register.

Once developed, this document can then be used as part of the ongoing Project Monitoring process during the construction and commissioning phases of the project. Scottish Government may, on some projects, request to see a copy of the regular monitoring reports during project delivery.

A final Project Monitoring Report is to be submitted to Scottish Government shortly after project completion to the timescales determined within the Full Business Case. This will incorporate the following:

- An updated Project Cost Monitoring Form which compares costs agreed at FBC stage with actual outturn costs, giving reasons for any differences.
- A Programme Monitoring Form which compares the programme milestones agreed at FBC stage with actual dates achieved, giving reasons for any differences.
- A summary of any significant project scope changes between FBC and project completion, and their impact on the project.
- A summary of health & safety performance throughout the construction and commissioning phases.
- An overview of achievement of the project's design objectives, design standards, user expectations, and recommendations for future improvements.
- A review of the management of risks throughout the project development.



2.3 Service Benefits Evaluation – was the project a success?

The rationale for a project will have identified the potential benefits to be gained from the successful delivery of the project. These benefits will include those directly associated with service improvement, as well as others with a more indirect supporting influence. All benefits within the project's benefits realisation plan should therefore be assessed as part of the Service Benefits Evaluation process. It will also encompass the project's impact on service delivery, activity and performance.

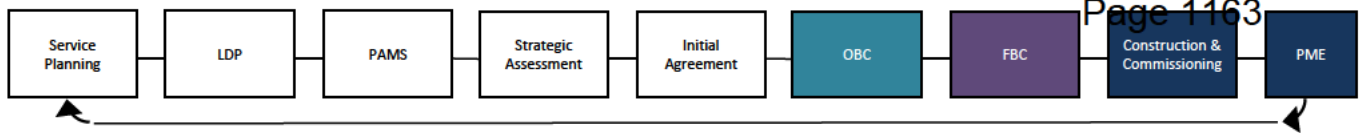
The evaluation will need to be carried out by the milestone dates set out in the project's full evaluation plan, which should allow for a reasonable bedding-in period following occupation of a new, or substantially altered, facility. The main focus of this evaluation will involve:

- Assessing whether, and to what extent, the project has realised its expected benefits.
- Gaining feedback from users and other stakeholders on how well the project outcome, e.g. a new facility, meets their expectations.
- Reviewing the impact of any service change on operational activities, processes and people.
- Understanding how well the project has impacted on service activity and performance.

The Service Benefits Evaluation process should thus cover the following elements:

2.3.1 Realising the expected benefits

The project's benefits realisation plan will form a significant and important role in the evaluation of a project's success, as it should cover how the project was expected to deliver its investment objectives; facilitate service improvement, respond to NHSScotland's Strategic Investment Priorities; influence wider social, environmental and employment benefits; engender partnership working; and realise any other benefits as a result of the successful delivery of the project.



The evaluation process will involve a range of qualitative and quantitative techniques as set out in the project's benefits realisation plan. The evaluation should therefore use these techniques to assess whether, and to what extent, the project has realised its expected benefits by their anticipated date.

2.3.2 Meeting stakeholder expectations

Meeting stakeholder expectations should have formed some part of the project's benefits realisation plan. If not, then this service benefits evaluation will still need to gain their feedback on how well the facility does indeed meet their expectations.

The process will need to select stakeholders who are most capable of providing relevant insight into the success of the project from their perspective. It will be important to clearly outline what the original expectations were prior to asking whether the project has met them. Techniques for this process often include gaining feedback from questionnaires and / or structured interviews.

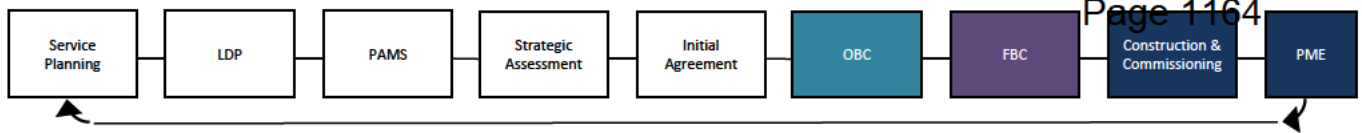
The NHS Board is expected to devise their own project specific questionnaires and structured interview questions; however, the following may be useful reference materials for such an exercise:

- The Scottish Inpatient Experience Survey, which asks questions about the quality of service delivery, different aspects of facilities management delivery, and the appropriateness of the internal environment of hospital facilities.
- The ASPECT toolkit, which asks questions on the quality of both staff and patient environments.

The aim of this part of the evaluation is to gain a better understanding of user and stakeholder opinion on what they regard as a success, what could have been done better, what alterations to the facility may still need to be made, and what improvements could be made to the benefit of future projects.

2.3.3 Reviewing the impact of service change

The Management Case of the project's business case will have identified the impact of service change associated with the project on the NHS Board's current operational activities, which will have resulted in the presentation of an operational



or service change management plan. This plan will become the source document for comparing the expected impact against the actual impact of the project on service activities.

The aim of this aspect of the evaluation is to review how successfully the operational change management plan was implemented, but also what lessons could be learnt to enhance similar change plans in the future.

2.3.4 Service activity and performance

Projects with a direct impact on service delivery will need to demonstrate how well it has delivered against projected service activity and performance assumptions included within the business case.

The evaluation process will compare data on existing, proposed, and actual service activity and performance associated with the project. This may include information, where relevant, on:

- Changes to care pathways or patterns of working.
- Changes to service capacity, demand and/or supply throughput.
- Service performance improvements, including reference to supporting KPI's and targets.

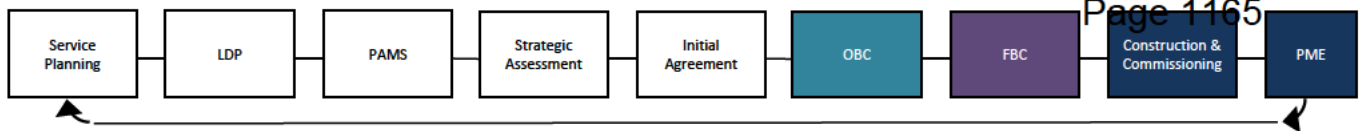
The outcome of this element of the evaluation is to confirm the accuracy of service activity assumptions used within the project's business case, and that the project has had a positive impact on service performance when compared with what would have happened from doing nothing.

2.3.5 The Service Benefits Evaluation Report

The programme for submitting a Service Benefits Evaluation Report to Scottish Government will be set out and delivered in accordance with the Full Monitoring and Evaluation Plan included within the FBC. This will normally be within 1.5 to 3 years of the project completion date.

The report is expected to include the following information:

- A short overview of the evaluation process carried out.



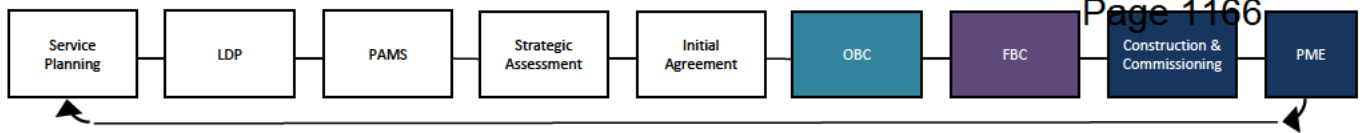
- Details of the stakeholders involved in each exercise, and when.
- An explanation of how successful the project has been in realising its expected benefits, whilst also acknowledging and explaining the reasons behind why any benefits didn't achieve their expected outcome.
- A summary of user and stakeholder opinion on how well the facility meets their expectations, what could have been done better, what alterations still need to be made, and what further improvements could be made.
- An overview of the lessons to be learnt and shared in relation to implementing the operational change management plan.
- Comparative data and analysis of existing, proposed, and actual service activity and performance outcomes.

The concluding part of the Project Evaluation Report should reflect on the main things that went well, as well as what could have been improved, so that lessons can be learnt for future projects. This is described further in the following section.

2.4 Learning – what lessons can be learnt?

The potential value of a monitoring and evaluation process will only be realised when action is taken on the findings and recommendations coming from it. The final stage in this process should therefore bring to the fore the lessons to be learnt for future projects both within the organisation carrying out the evaluation and for the wider benefits of NHSScotland. This should form the final concluding part of the Service Benefits Evaluation Report by including the following information:

- A summary from the evaluation information of what went well and why.
- A summary of what could be improved upon gained from an overview of the evaluation results as well as from recommendations raised in any feedback process.
- An action plan for disseminating these lessons learnt within the NHS Board and across the wider NHSScotland. The annual State of NHSScotland Assets & Facilities Report can be used to report on any best practice recommendations.



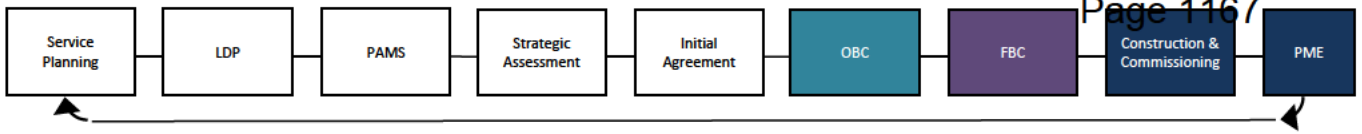
3 Summary of Monitoring & Evaluation Output Requirements

The requirements for monitoring, evaluating, and learning from all capital and major investment projects are outlined within Section 1.3.

Planning and reporting requirements described in this guidance include:

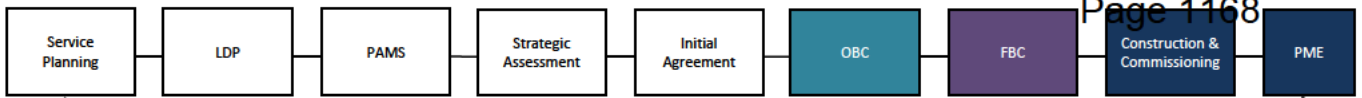
- An Outline Monitoring & Evaluation Plan is required at Outline Business Case (OBC) stage (see Section 2.1.1 for further details).
- A Full Monitoring & Evaluation Plan is required at Full Business Case (FBC) stage (see Section 2.1.2 for further details).
- A Project Monitoring Report (Section 2.2.7) is required within the Management Case of the FBC, and then a further update provided shortly after project completion.
- A Service Benefits Evaluation Report (Section 2.3.5) is required at a suitable post-occupancy point as determined within the Full Monitoring & Evaluation Plan. This will include a summary of lessons learnt (Section 2.4).

The content and expectations of these reports is described throughout this guidance document.



Appendix A

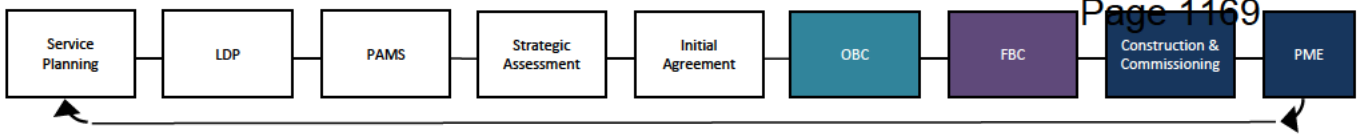
Outline Monitoring & Evaluation Plan



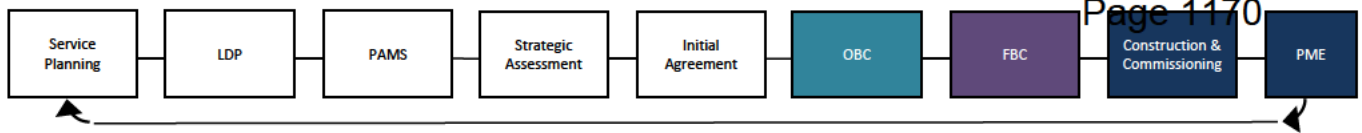
Outline Monitoring & Evaluation Plan

What will be assessed:	When it will be carried out		How it will be done (approach)
	Milestone Date	Report submission	
Project Monitoring stage:			
Project Costs			
Project Programme			
Project Scope Changes			
Health & Safety Performance			
Design & Technical Aspects			
Risk Management Issues			
Service Benefits Evaluation stage:			
Expected benefits			
Stakeholder expectations			
Impact of service change			
Service activity & performance			

Note: the approach adopted for monitoring and evaluating each element may be dependent upon a project's scale and complexity.



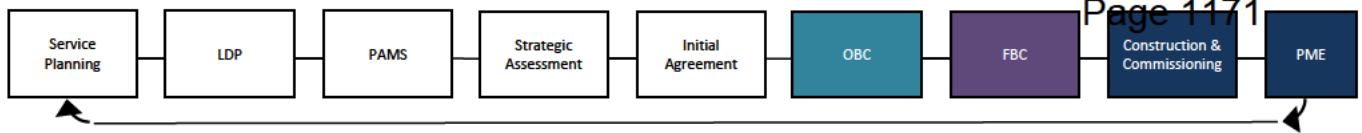
Appendix B: Project Cost Monitoring Form



Capital / Equivalent Investment Cost Monitoring Form:

Project Title:				
Floor Area (GIA):				
	IA	OBC	FBC	Actual
Construction / Investment Cost:				
Quantified Construction Risk:				
<i>Additional itemised costs:</i>				
Total Construction Costs:				
Site acquisition:				
Enabling works not included in cost plan:				
Additional itemised costs:				
Total Other Construction Related Costs:				
Furniture not included in Cost Plan				
IM&T				
Medical Equipment				
Non-medical Equipment				
Additional itemised costs:				
Total Furniture & Equipment Costs:				
Additional Quantified Risk:				
Allowance for Un-quantified risk (Optimism Bias)				
Total Cost before VAT & Fees:				
Move-in costs and double running cost for migration of services:				
VAT:				
Professional Fees:				
Total Estimated / Actual Cost:				

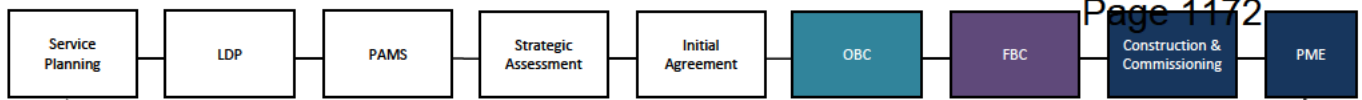
An explanation is needed of all significant cost changes between each stage.



Operational Revenue Cost Monitoring Form:

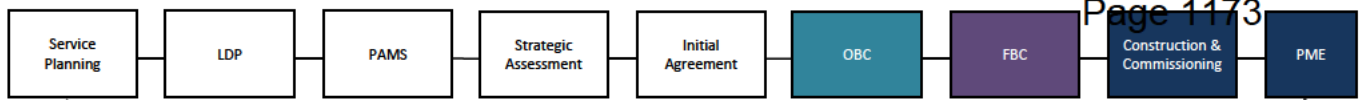
Project Title:				
Floor Area (GIA):				
	Existing	OBC	FBC	Actual
Clinical Services staff costs:				
<i>Additional itemised costs:</i>				
Non-Clinical Services staff costs:				
<i>Additional itemised costs:</i>				
Building occupancy / running costs:				
<i>Additional itemised costs:</i>				
Income contribution / costs:				
Other recurring costs:				
<i>Additional itemised costs:</i>				
Allowance for Optimism Bias				
Total Cost before VAT:				
VAT:				
Total Estimated / Actual Cost:				

An explanation is needed of all significant cost changes between each stage.



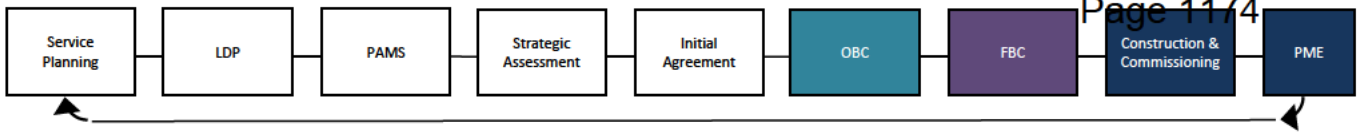
Construction Cost Plan

	ELEMENT	Element				
		Total Cost £	Cost per m ² GIFA	Unit Quantity		Unit Rate
1	SUBSTRUCTURE				m ²	
2	SUPERSTRUCTURE					
2.1	Frame				m ²	
2.2	Upper Floors				m ²	
2.3	Roof				m ²	
2.4	Stairs and Ramps				Nr	
2.5	External Walls				m ²	
2.6	Windows and External Doors				m ²	
2.7	Internal Walls and Partitions				m ²	
2.8	Internal Doors				Nr	
	Total Superstructure					
3	INTERNAL FINISHES					
3.1	Wall Finishes				m ²	
3.2	Floor Finishes				m ²	
3.3	Ceiling Finishes				m ²	
	Total Internal Finishes					
4	FITTINGS, FURNISHINGS AND EQUIPMENT				m ²	
5	SERVICES					
5.1	Sanitary Installations				Nr	
5.2	Services Equipment				Nr	
5.3	Disposal Installations				Nr	
5.4	Water Installations				m ²	
5.5	Heat Source				kW	
5.6	Space Heating and Air Conditioning				m ²	
5.7	Ventilation Systems				m ²	
5.8	Electrical Installations				m ²	
5.9	Fuel Installations				m ²	
5.10	Lift and Conveyor Installations				Nr	
5.11	Fire and Lightning Protection				m ²	
5.12	Communications, Security, and Control Installations				m ²	
5.13	Specialist Installations				m ²	
5.14	Builders Work in Connection with Services				m ²	
	Total Services					
6	PREFABRICATED BUILDING AND BUILDING UNITS				m ²	
7	WORK TO EXISTING BUILDING					
7.1	Minor Demolition and Alteration Works				m ²	
	Total Work to Existing Building					

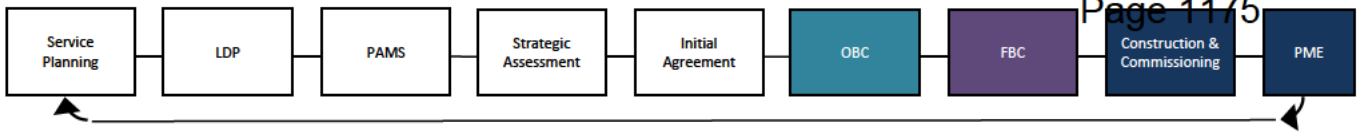


	ELEMENT	Element			
		Total Cost £	Cost per m ² GIFA	Unit Quantity	Unit Rate
	BUILDING SUB-TOTAL				
8	EXTERNAL WORKS				
8.1	Site Preparation Works			m ²	
8.2	Roads, Paths, Pavings and Surfacing			m ²	
8.3	Soft Landscaping, Planting and Irrigation Systems			m ²	
8.4	Fencing, Railings and Walls			m ²	
8.5	External Fixtures			m ²	
8.6	External Drainage			m ²	
8.7	External Services			m ²	
8.8	Minor Building Works and Ancillary Buildings			m ²	
	Total External Works				
0	FACILITATING WORKS				
0.1	Toxic/Hazardous/Contaminated Material Treatment			m ²	
0.2	Major Demolition Works			m ²	
0.3	Temporary Support to Adjacent Structures			m ²	
0.4	Specialist Ground Works			m ²	
0.5	Temporary Diversion Works			m ²	
0.6	Extraordinary Site Investigation			m ²	
	Total Facilitating Work				
9	MAIN CONTRACTOR'S PRELIMINARIES				
10	MAIN CONTRACTOR'S OVERHEAD & PROFIT				
	TOTAL CONSTRUCTION / INVESTMENT COST* (excluding contingencies and fees)				
11	PROJECT / DESIGN TEAM FEES				
12	OTHER DEVELOPMENT / PROJECT COSTS				
13	QUANTIFIED CONSTRUCTION RISK				
	TOTAL CONTRACT / PROJECT COST				

* Total Construction / Investment Cost to be included in the Capital Cost Monitoring Form.



Appendix C: Programme Monitoring Form



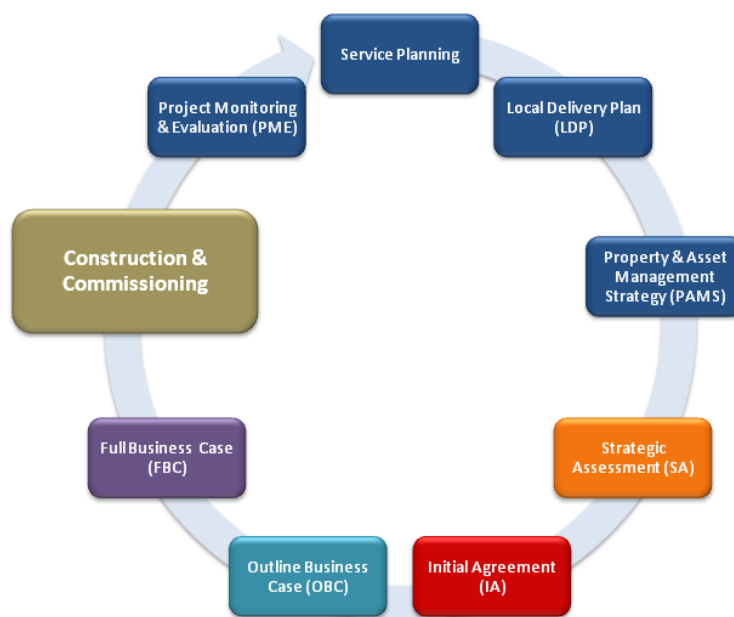
Programme Monitoring Form:

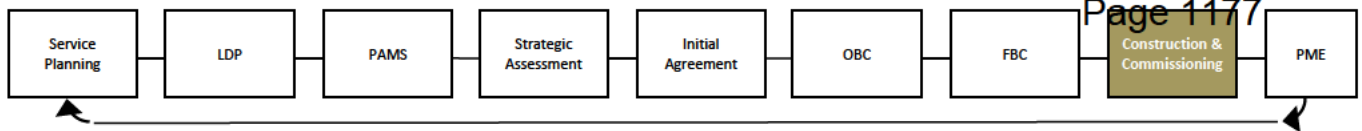
Project Title:				
	IA	OBC	FBC	Actual
Project Milestones: (taken from Project Plan in Management Case)				
Procurement Timetable: (taken from Commercial Case)				

An explanation is needed of all significant programme changes between each stage.

SCOTTISH CAPITAL INVESTMENT MANUAL

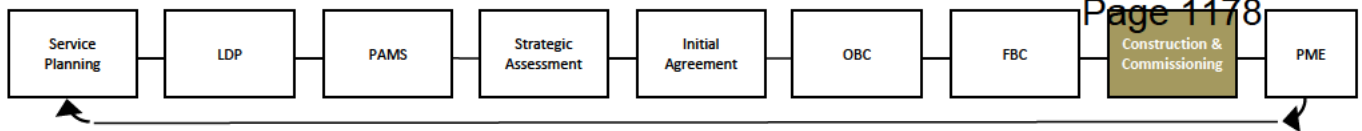
NHSScotland Commissioning Process





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1 Overview

The purpose of this guide is to provide a best practice overview of the technical and operational activities needing to be completed to ensure the smooth transition of services into a fully functioning new facility. Although this is intended for projects to be considered by the Capital Investment Group (CIG), it is anticipated that Boards/ Clients will use these best practice principles on all investment projects.

1.1 Introduction

The importance of the commissioning process cannot be under-estimated, as failure to adequately consider this process is likely to cause increases to project costs and failure to deliver agreed service benefits and project outcomes.

Figure 1 establishes how the commissioning process should be organised, the key tasks to be addressed, and provides advice on:

- Technical Commissioning and Operational Commissioning.
- BIM and Soft Landings: the best practice principles of BIM and Government Soft Landings must be embedded at every stage to deliver a high quality, safe, and efficient care facility.

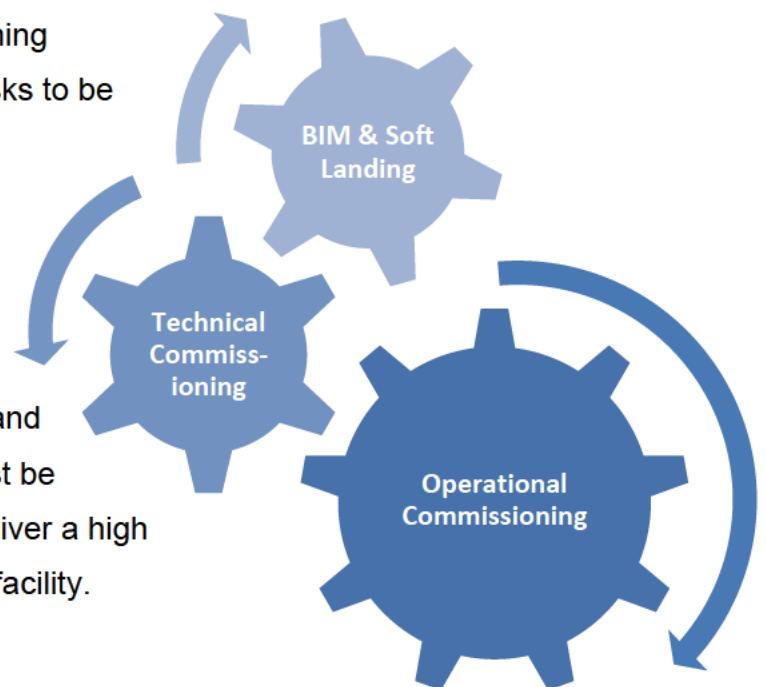


Figure 1: Health & Social Care facilities commissioning diagram

The commissioning process should be treated as a distinct sub-project, but fully integrated into the overall project to enable a smooth transition to the new working arrangements and realisation of the anticipated benefits.

Inputs will range from establishing teams and processes e.g. brief for the Building Information Management (BIM) technical data format, to coordination and PR communication of a comprehensive migration plan.

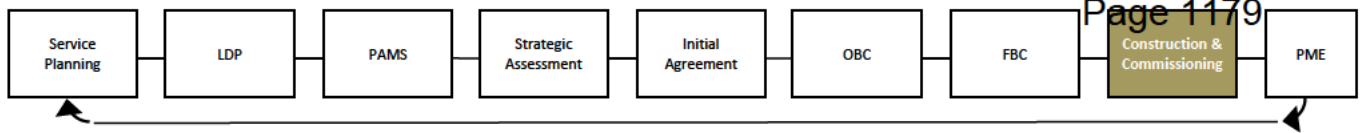
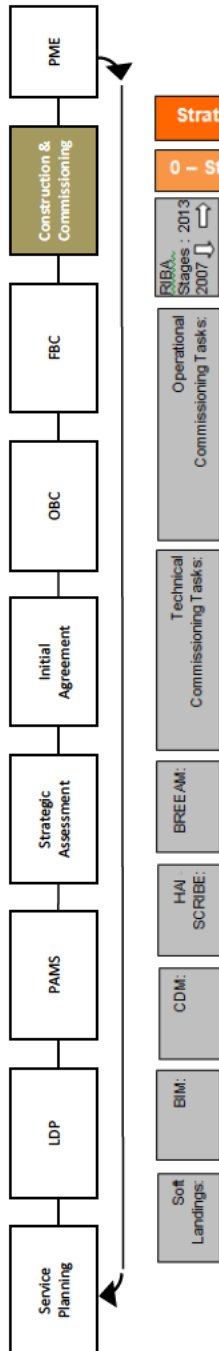


Figure 2, overleaf (and repeated as A3 in Appendix E), provides a high level summary of the main activities expected throughout the planning and delivery of the commissioning process, and how it overlaps with the business case process and soft landings best practice.

All resources necessary to fulfil the requirements of the commissioning process need to be identified within Commissioning Master Plan developed at Outline Business Case stage. This will include setting up a commissioning team which may include senior, departmental, estate, and facility managers; plus other technical support and service users. Appropriate administration support will be crucial to coordinate the flow of information within these dynamic groups in a timely manner.

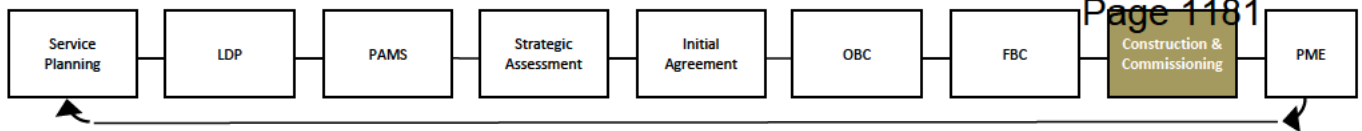
Projects procured through PPP / private finance, AND contain facility management responsibilities within the contract, will need to define within the Commissioning Master Plan how shared (NHS / private sector) and individual responsibilities and risk ownership for technical and operational commissioning are to be allocated. The public sector client will, however, still need to be assured that all activities are carried out appropriately to ensure delivery of a high quality, safe and efficient care facility, irrespective of the chosen procurement method.

A checklist of key commissioning tasks is provided in Figure 3. Reference should also be made to the relevant sections in this guide, where more detail can be found.



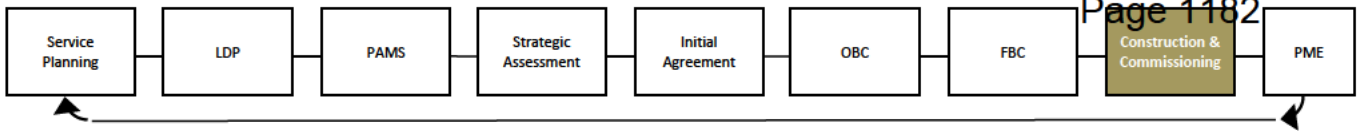
Strategic Assessment	Initial Agreement (IA)		Outline Business Case (OBC)		Full Business Case (FBC)			Construction & Commissioning	Project Monitoring & Evaluation (PME)		
0 – Strategic Definition	1 – Preparation & Brief		2 – Concept Design		3 – Developed Design	4 – Technical Design		5 – Construction	6 – Handover	7 – In Use	
	A	B #	C	D	E	F	K	L			
	Appraisal	Design Brief #	Concept	Design Development	Technical	Production	Construction	Post Practical Completion			
RIBA Stages: 2013 RIBA Stages: 2007	<p># denotes: commissioning briefing elements. These could occur at end of IA stage or, the very start of Outline Business Case</p>										
Operational Commissioning Tasks:	<p>Commissioning: #</p> <ul style="list-style-type: none"> Establish initial commissioning brief, processes & protocols incl. prior projects learning 		<p>Operational Commissioning (OC): Early OBC</p> <ul style="list-style-type: none"> Appoint Commissioning Manager Establish commissioning team & processes Establish communications e.g. PD, PM, FM etc Review feasibility /options appraisal <p>Late OBC</p> <ul style="list-style-type: none"> Review Concept Design Outline Equipping strategy Outline Commissioning Master Plan (CMP) 		<p>Operational Commissioning (OC):</p> <ul style="list-style-type: none"> Reviews (min. pre-downs selection(s) & mid FBC) Standard Operating Procedures (SOPs) Develop migration / occupation / decant strategy Develop equipping strategy Develop communications & PR strategy Develop & coordinate enabling strategy Initial safety, security & decant strategy Outline communications & PR strategy Outline Commissioning Master Plan (CMP) 			<p>Operational (OC) pre-handover:</p> <ul style="list-style-type: none"> Review mock-ups, design changes etc, by Board/ Client or Contractor Arrange security & decant etc Commissioning Master Plan (CMP) Communications & PR Strategy Arrange Visits & Training Health Information & Technology Final Equipping strategy Final SOPs and FM protocols 		<p>Operational (OC):</p> <ul style="list-style-type: none"> Migration & Occupations Safety, Security & Decants IT, Equipping & Logistics Decommissioning Communications & PR <p>In Use/ Handover + circa 1yr</p> <ul style="list-style-type: none"> PME report on learning Ongoing monitoring and Reviews (min annually) 	
Technical Commissioning Tasks:			<p>Technical Commissioning (TC): Early OBC</p> <ul style="list-style-type: none"> Establish working groups & technical 'champions' Review Guidance & Standards Review feasibility /options appraisal <p>Late OBC</p> <ul style="list-style-type: none"> Review Concept Design Agree key Derogations list Outline Commissioning risks, resources & budget 		<p>Technical Commissioning (TC):</p> <ul style="list-style-type: none"> Review contract terms, Guidance & Standards Review Technical Design; record risks etc Review Derogations lists; record risks etc Agree target NDEP (kW/m²), with HFS support Therapeutic & Accessible Design Strategy (TADs) Develop Commissioning Brief Requirement (CBR) Develop Commissioning risks, resources & budget 			<p>Technical (TC) pre-handover:</p> <ul style="list-style-type: none"> Final Standards and Derogations Report on risks, budgets etc Final TADs and Coordination Monitor technical commissioning Review Snagging / additional works Review NDEP and O&M manuals Initial Handover report 		<p>Technical (TC):</p> <ul style="list-style-type: none"> Final Handover report Decommissioning <p>In Use: (+ circa 1yr)</p> <ul style="list-style-type: none"> PME report on learning ongoing O&M (min 3yrs) e.g. rebalancing vent system Ongoing monitoring and Reviews (e.g. annual NDEP) 	
BREEAM:			<p>BREEAM (BRE Environmental Assessment Method):</p> <ul style="list-style-type: none"> Pre assessment – Agree project specific target score with HFS support Design Stage Assessment 		<p>BREEAM (BRE Environmental Assessment Method):</p> <ul style="list-style-type: none"> Assessment – Confirm project target score and extent final credits now evidenced Issue interim 'design' certificate 			<p>BREEAM pre-handover:</p> <ul style="list-style-type: none"> Assessment – evidence construction score Issue NDEP energy cert. 		<p>BREEAM: (+ circa 1yr)</p> <ul style="list-style-type: none"> Issue 'final' certificate PME report on learning for future projects and O&M 	
HAI SCRIBE:	<p>HAI SCRIBE: #</p> <ul style="list-style-type: none"> Establish multi-dis. HAI group Brief HAI process & protocols incl. prior projects learning 		<p>Healthcare Acquired Infection -HAI SCRIBE:</p> <ul style="list-style-type: none"> HAI applied in concept and space planning Workshops (pre-downs selection(s) & late FBC) 		<p>Healthcare Acquired Infection -HAI SCRIBE:</p> <ul style="list-style-type: none"> Confirm HAI applied in design details & specs. Workshops (pre-downs selection(s) & late FBC) 			<p>HAI SCRIBE pre-handover:</p> <ul style="list-style-type: none"> HAI Construction confirmation & records 		<p>HAI SCRIBE: (+ circa 1yr)</p> <ul style="list-style-type: none"> PME report on learning for future projects and O&M 	
CDM:	<p>CDM: #</p> <ul style="list-style-type: none"> Establish multi-dis. CDM group Brief CDM process & protocols incl. prior projects learning 		<p>Construction Design Management (CDM):</p> <ul style="list-style-type: none"> CDM applied in concept and space planning Workshops: (late OBC, plus OA*) CDM risk assessments 		<p>Construction Design Management (CDM):</p> <ul style="list-style-type: none"> Confirm CDM applied in design details & specs. Workshops (pre-down selection(s) & late FBC) 			<p>CDM pre-handover:</p> <ul style="list-style-type: none"> CDM Construction confirmation & records 		<p>CDM: (+ circa 1yr)</p> <ul style="list-style-type: none"> PME report on learning for future projects and O&M 	
BIM:	<p>BIM: #</p> <ul style="list-style-type: none"> Data Drop 1 – Initial Brief of operational requirement & Model 		<p>Building Information Modelling (BIM):</p> <ul style="list-style-type: none"> Data Drop 2 – Outline Solution Model 		<p>Building Information Modelling (BIM):</p> <ul style="list-style-type: none"> Data Drop 3 – Construction Information Model 			<p>BIM pre-handover:</p> <ul style="list-style-type: none"> Data Drop 4 – Operational and Maintenance Model 		<p>BIM: (+ circa 1yr)</p> <ul style="list-style-type: none"> Data Drop 5 – in-use Validation Information Model and ongoing O&M 	
Soft Landings:	<p>Soft Landings (SL): #Stage 1</p> <ul style="list-style-type: none"> Initial SL Brief, incl. SL training for all participants Establish multi-dis. SL group 		<p>Soft Landings (SL): Stage 2</p> <ul style="list-style-type: none"> Pitstop review 1: outline scheme reality check, incl. performance metrics & design/FM targets Pitstop review 2: developed design reality check, incl. report on progress/ risks to achieving above Pitstop review 3: tender/ contract award reality check, incl. as above, with key future FM staff input 				<p>Soft Landings (SL): Stage 3</p> <ul style="list-style-type: none"> Pitstop review 4: pre handover review with actual FM staff input, test protocols etc. SL sign-off 		<p>Soft Landings (SL): 4 & 5</p> <ul style="list-style-type: none"> +1yr in dependent review On-site set-up & monitoring Ongoing review (min annual) 		

Figure 2: Schedule of Activities



Summary of Key Tasks	Relevant Section	Owner Initials	Date Action Complete
Section 2 – Project Initiation			
Confirm and publish the management structure	2.1		
Appoint a commissioning manager	2.2 - 2.3		
Appoint a commissioning team	2.4 - 2.5		
Appoint a soft landings champion	2.6 - 2.8		
Establish smaller working groups	2.9		
Establish/maintain link with the client project team	2.10		
Establish/maintain link with the designer(s) ; contractor(s) and suppliers	2.11		
Section 3 – Planning For Commissioning			
Establish/maintain commissioning master plan (CMP)	3.1		
Establish whether enabling schemes are required	3.3		
Establish/maintain project risk register (commissioning elements)	3.4		
Establish/maintain the commissioning requirements brief (CRB)	3.5		
Section 4 – The Commissioning Programme			
Establish operational procedures	4.1		
Establish communications strategy	4.2 & 4.24		
Establish / maintain resource & budget plan	4.3		
Review/ Agree OBC and FBC proposals	4.4 - 4.5		
Establish/maintain the migration plan	4.6 - 4.8		
Establish a strategy for equipping including selection, delivery, storage, removal etc.	4.9 – 4.15		
Review/agree site visits and training plan	4.16		
Review/agree technical commissioning plan	4.17		
Review/agree therapeutic environment plan	4.18		
Review/agree wayfinding / signage plan	4.19		
Review/agree snagging plan	4.20		
Arrange post-handover building security	4.21		
Decommission redundant facility	4.22 - 4.23		
Review/agree operational handover plan	4.25		
Arrange official opening ceremony	4.26		

Figure 3: Key Tasks Checklist



2 How do we start the commissioning process?

	Question	Response
HOW	How do we start the commissioning process?	Establish commissioning structure; establish leads & communication lines; establish initial brief, programme & budgets.

2.1 Organising the Commissioning Process

It is essential that an appropriate commissioning structure is in place to meet the requirements of the commissioning function, with clear lines of accountability and reporting established. The organisation of the commissioning process should flow directly from the overall project management structure, for which a Senior Responsible Officer and Project Director will have been identified.

A typical organisational chart used in the commissioning process, which identifies hierarchical relationships, is shown in Figure 4 below.

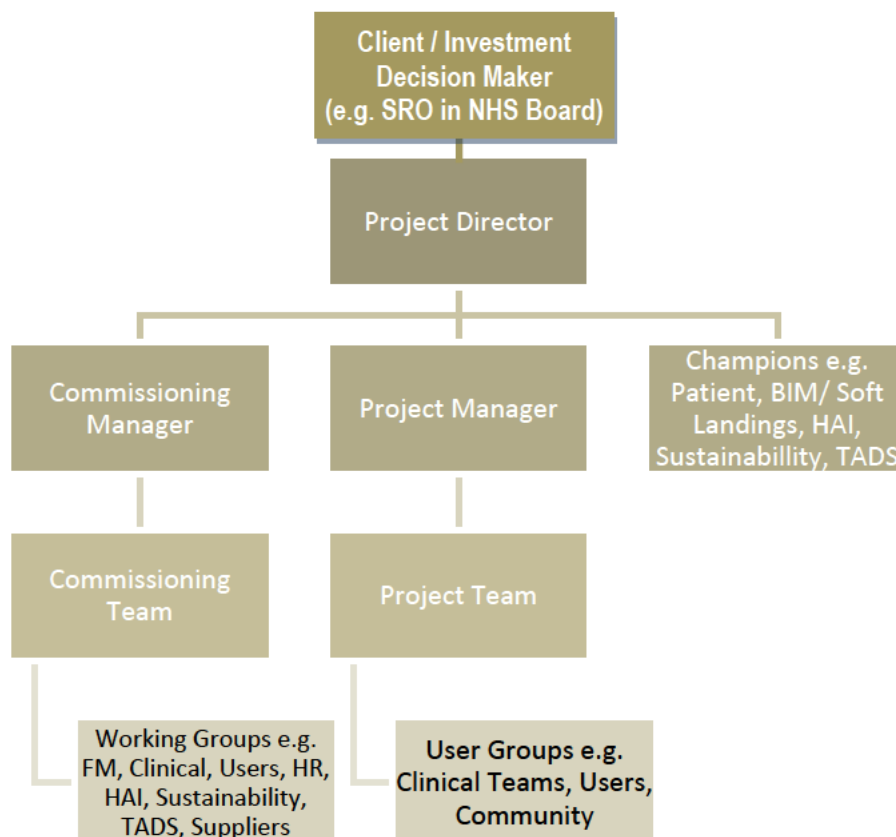
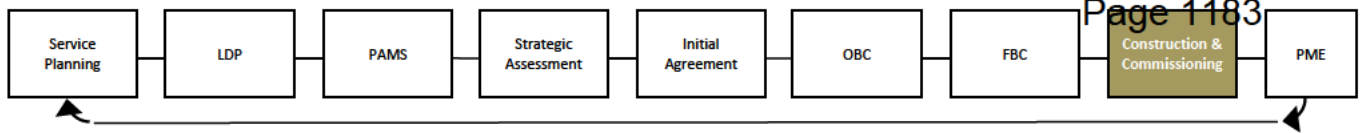


Figure 4: Typical Public Procurement Management Structure



2.2 Appointment of the Commissioning Manager

The Commissioning Manager will be identified within the Commissioning Master Plan at OBC stage. This will include an outline of their role and responsibilities, an indication of their competency to carry out this role, and any continuity plans in place for this important role. This is to be fully defined and confirmed at FBC stage.

The Commissioning Manager/ Team should be appointed as early as practicable during the investment planning process so that the commissioning costs, resources and associated risks are understood and allocated appropriately.

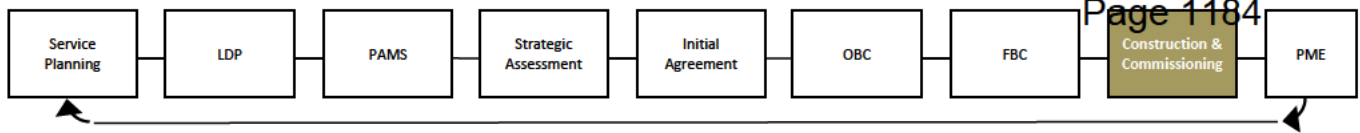
The Commissioning Manager could be:

- *An existing lead service manager*
- *A new Commissioning Manager appointed by and working for the Project Director.*
- *A new Commissioning Manager working for the overall programme development manager (with the Project Director responsible for the construction project).*
- *The existing Project Manager (temporary role)*

Dependent upon the complexity of the project, the Commissioning Manager could be a lead service manager in smaller projects. Ideally the Project Manager and Commissioning Manager should be two distinct roles to ensure there is no conflict of interest/ workload, with the Commissioning Manager reporting separately to the Project Director.

The Commissioning Manager could be a senior manager within NHSScotland or an external appointment. They could be an existing employee, specifically recruited, or a secondee for the period of the commissioning process. What is essential is that the commissioning manager holds the required skill sets and experience that is required for this specific and complex task.

For very large/ complex projects/ programme it may be necessary to appoint a Senior Commissioning Project Manager to co-ordinate the activities of a team of Commissioning Managers on behalf of the Project Director.



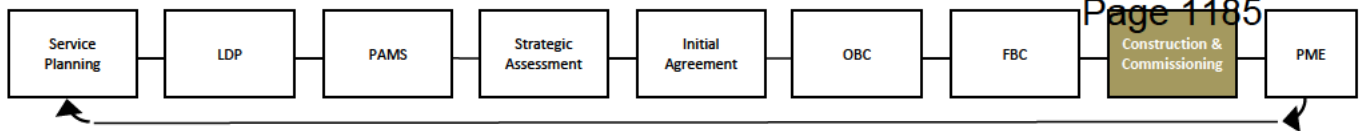
The size of the project may require the Commissioning Manager to have a number of commissioning support teams. It is important that appropriate resource/workforce planning is undertaken to address the needs of staff and the different stages in the procurement.

Appropriate administrative support and resources will be essential for the Commissioning Manager to ensure timely flow of information between the various stakeholders and organisations.

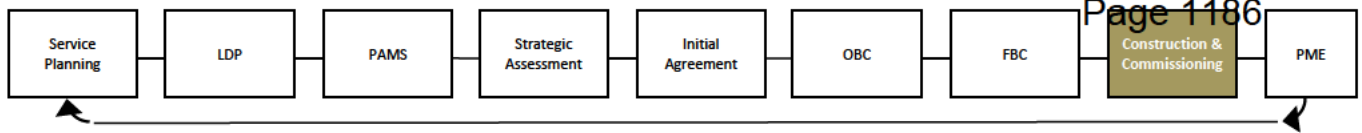
2.3 Duties of the Commissioning Manager

The duties of the Commissioning Manager should encompass:

- Chairing and managing the business of the commissioning team and overseeing any supporting working groups set up to undertake detailed work, co-ordinating input where appropriate, particularly in relation to cross-group issues.
- Establishing the key programme for bringing the facility into use - the Commissioning Master Plan (CMP) - and agreeing this with senior management, plus internal/ external stakeholders.
- Maintaining and developing the CMP as the project progresses.
- Establishing commissioning needs and processes - the commissioning requirements brief (CRB) - with the senior management, plus internal/ external stakeholders.
- As above, establishing decommissioning need where required. Refer to www.hfs.scot.nhs.uk for de-commissioning guidance.
- Maintaining and developing the CRB as the project progresses.
- Arranging review of Outline then Full Business Case proposals and report on commissioning compliance (CRB) and risks.
- Establishing and maintaining a commissioning risk register.
- Managing the commissioning and decommissioning budget.



- Establishing and maintaining the communications strategy for a variety of internal and external parties, including PR.
- Managing the effective involvement and support of the key stakeholders in the commissioning process – working groups.
- Liaising closely with the Project Manager on the progress of the construction project, particularly if commissioned in phases.
- Liaising with operational management on testing working and operational procedures, and identify risks for functions to be carried out within the facility.
- Ensuring that the strategy for equipment is appropriately defined at the Outline then Full Business Case stages; with procurement routes, budgets and programmes for equipment, surveys, storage, installation and waste removal in place.
- Reporting progress / risks to the Project Director against the Outline and Full Business Case assumptions.
- Liaising with the Project Manager for the briefing, delivery and storage requirements of equipment which will need to be put in place by the designers / contractor as part of the project.
- Liaising with the Project Manager to coordinate the briefing and delivery requirements, etc, of Arts, Wayfinding and Greenspace commissioning into an integrated therapeutic environment (including Therapeutic & Access Design Strategy (TADs)).
- Providing regular reports on progress against the Commissioning Master Plan (CMP), and on staffing and revenue projections, to the Project Director and key stakeholders.
- Organising / managing the transfer of services and patients into the new facility – the migration plan.
- Managing the transition of the facility over to operational management including establishing training, site visits, snagging and handover needs, agreeing processes and liaising with contractor and key stakeholders.



- Collecting and reviewing information relevant to the future post project evaluation.

2.4 Commissioning Team

The commissioning team should operate under the direction of the Commissioning Manager. Its function is to support bringing the building into use and the efficient delivery of the project's business objectives.

The commissioning team should be drawn from staff and users of the facility, including representatives from the range of support staff required for the facility.

To ensure consistency between implementation of the construction project and commissioning, clear actions and reporting mechanisms across teams are required. The Project Director and Project Manager should be members of the commissioning team.

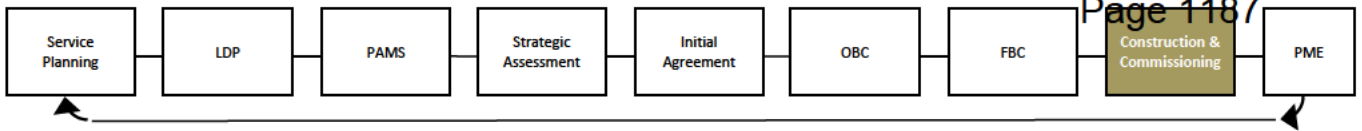
The resources required for commissioning need to be planned for at Outline Business Case stage and then confirmed in the Full Business Case, as the overall briefing, programme and cost must include commissioning.

2.5 Working Groups

It is recommended for projects with a large number of different operational user groups, that smaller working groups are established. Figure 5 below outlines typical functions of these groups.

Working groups will be chaired and managed by the Commissioning Manager, or commissioning team deputy. The frequency of meetings should reflect the number/ complexity of issues being managed.

Membership of working groups should utilise service users who are also involved in the design development process. It should also consider the need for specialist or technical champions on subjects such as Soft Landings, BIM, Sustainability, Design, Health Promotion, Fire Safety, Infection Control (HAI), Therapeutic & Access Design Strategy (TADS), etc. to include patients/ users, carers, access panellists, key staff, art and greenspace representatives.



Each member of the working group has a responsibility to liaise with colleagues/ representatives to ensure relevant commissioning information is available timeously, and disseminated appropriately.

Plans drawn up by the working groups must be formally accepted in writing by the designated operational service manager. Thereafter any changes to the plans must be formally agreed by the Commissioning Manager.

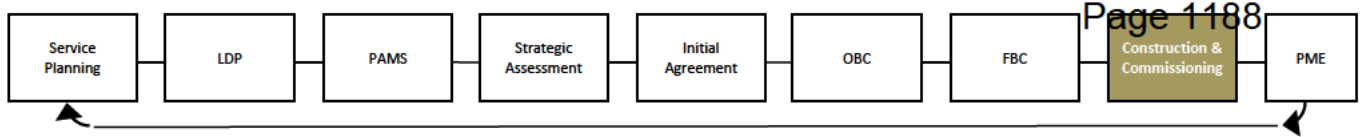
All documentation shall be dated and supported by action notes arising from each meeting of the working group.

Figure 5: Working Groups Typical Functions Diagram



2.6 Links with the Project Team

Strong relationships and reporting mechanisms are essential between members of



the client commissioning team and the client project team on the establishment of and regular review of the project brief, design and construction against the following:

1. Commissioning Requirements Brief (CRB)
2. Commissioning Master Plan (CMP)
3. Migration Plan
4. Risk Register
5. Communication Strategy
6. Ongoing work of the Working Groups.

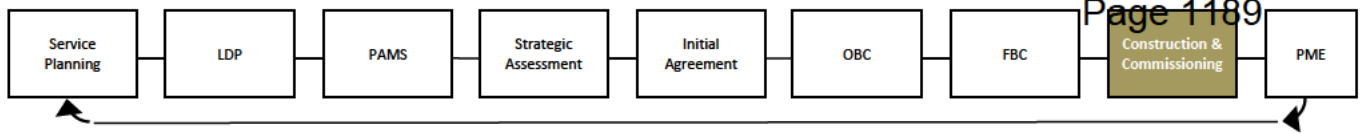
The Commissioning Manager will report regularly on the above and any budget / resource implications to the Project Director, who will in turn report to the Senior Responsible Officer (SRO). This is necessary as senior management are integral to the governance of the project and need to be made aware of emerging difficulties or changes to the agreed programme of implementation.

2.7 Links with the Contractor, Designers and Suppliers

The first point of contact with the contractor, designers and suppliers should be through the Project Director, or where agreed the Project Manager. The Commissioning Manager or a member of the commissioning team should be present at key progress meetings throughout, and particularly during the later stages of the project. This will ensure good working relationships and facilitate coordination of the project, thus reducing potential problems arising in-use.

The Commissioning Manager should develop good relations with the contractor, designers and suppliers to ensure they understand the Commissioning Requirements Brief (CRB), and coordinate the delivery of effective, practical solutions to identified in-use issues. A typical example might be equipping coordination where imaging rooms are designed to accommodate not yet procured NHS specialist machines.

It is essential that any changes required by the Commissioning Manager / team follow an approved formal change control process.



2.8 Soft Landings and BIM

Soft Landings (GSL) is a process designed to assist the construction industry and its clients to deliver better, more operationally effective buildings. It involves those that use and maintain the facility at the outset and in the design, requires extended aftercare, and mandates feedback (BSRIA, BG54/2014 - The Soft Landings Framework).

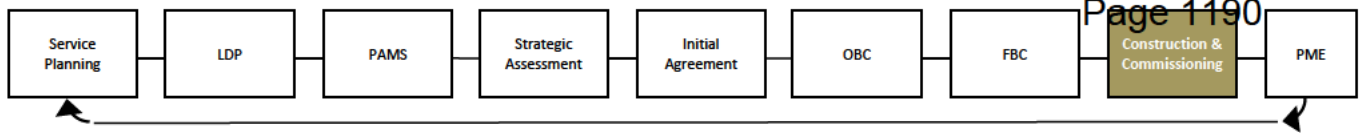
Building Information Management (BIM) is a strategy for asset management, information exchange and collaboration using current digital media. PAS 1192:2 defines BIM level 2 maturity and should be employed to improve quality and efficiency of the facility. The success of BIM is the client's development of an appropriate BIM Strategy at IA, supplemented by the Employer's Information Requirements (EIRs) and the Asset Information Requirements (AIR) early in OBC stage.

NHSScotland has mandated the use of both the Soft Landings and BIM level 2 as an integrated approach for new-build projects over £3m construction value from April 2017. However, they are considered as 'best practice' for the procurement, design and commissioning of ALL care facilities. HFS has developed NHSScotland BIM Standards, see www.hfs.scot.nhs.uk for templates etc.

2.9 Appointment of Soft Landings and BIM Champion(s)

The Project Director will identify Soft Landings and BIM Champion(s) who have the responsibility to ensure that the Soft Landings and BIM Strategy(s) are developed / delivered at each stage of the project. Initially reporting to PD/PM until the Commissioning Manager is appointed, they will brief, report on and monitor progress to ensure that their strategy is embedded into the entire procurement, design, commissioning and operational use of the facility.

The appropriate Champion(s) will have technical aptitude plus an interest in the in-use performance of the building, and should be in-place / available to the team for the full duration of the project. Examples include: project manager, commissioning manager, client technical / support representative, or an external design consultant.



The PD /PM or Commissioning Manager will ensure that the Soft Landings and BIM Champions are part of the routine management of the project and are properly resourced.

2.10 Soft Landings and BIM processes

The Soft Landings (GSL) process raises awareness / embeds in-use performance at early stages of briefing. It then assists the management of expectations through OBC feasibility to FBC design, and later into construction and operational use; with particular attention to the technical commissioning and detail in the weeks immediately before and after handover. Extended aftercare, with monitoring, performance reviews and feedback, all help occupants to make better use of their buildings while clients, designers, builders and managers gain a better understanding of good practice for future projects.

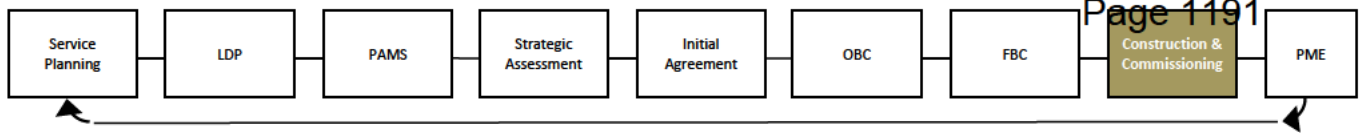
BIM describes a series of client decision gateways that have data exchanges / 'drops' aligned with them that facilitate the development of a robust interrelated shared electronic data environment. These data drops align with key stages in the Business Case process:

Further information on Soft Landings & BIM can be found at:

- *DATA DROP 1* Late IA / or very start of OBC
- *DATA DROP 2* Early OBC
- *DATA DROP 3* Late OBC
- *DATA DROP 4* FBC
- *DATA DROP 5* Handover and Close Out

The alignment of the BIM data drops and the Soft Landings process with the project work stages and gateways will provide a fully co-ordinated and streamlined approach to brief inputs and conclusion, design sign-offs, user interfaces, handover, commissioning and facility operation; together with future asset reporting requirements.

Soft Landings procedures are designed to augment standard professional scopes



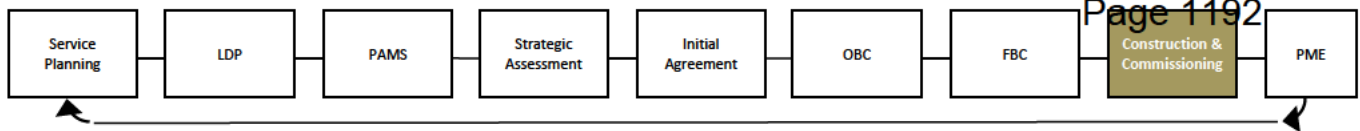
of service, not to replace them. They are tailored to run alongside standard procurement routes to create the most appropriate service to suit the project concerned.

The scope of key Soft Landing (GSL) requirements across the critical planning stages are:

1. **Inception and briefing:** appoint BIM / GSL champions, set brief (e.g. EIR), and manage expectations for performance in-use. Plus clarify the GSL duties / procedures of client, FM, design and building team members.
2. **Design development:** Set up Common Data Environment (CDE) for drawings, specification and construction. Review, report on and monitor the likely performance against the brief / expectations and achieving specific in-use outcomes.
3. **Pre-handover:** Set out and implement programme to involve / train client, FM, design building team, incl. specialists e.g. controls, in commissioning to strengthen the operational readiness of the building.
4. **Initial aftercare:** Facility based representative or team to pass on FM knowledge, optimise FM, and rapidly respond to queries / problems on site during the facility /users' settling-in period.
5. **Aftercare in years 1 to 3 after handover:** Quarterly reports with periodic monitoring and review of building performance.

Further information on Soft Landings & BIM can be found at:

- www.softlandings.org.uk
- www.bsria.co.uk
- www.bimtaskgroup.org/gsl/
- www.bimtaskgroup.org/pas11922-overview
- www.hfs.scot.nhs.uk



3 What are the key elements of the commissioning process ?

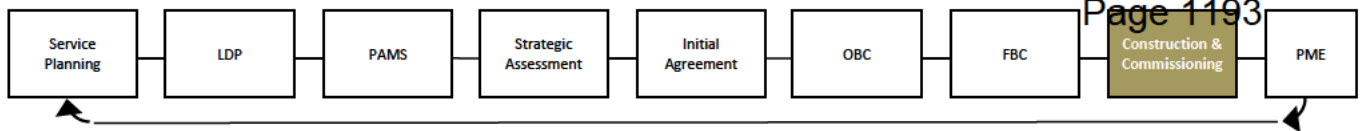
	Question	Response
WHAT	What are the key elements of the commissioning process?	Set commissioning requirements brief (CRB); prepare commissioning master plan (CMP); establish procurement methods; identify any enabling schemes; provide risk register.

3.1 Organising the Commissioning Process

The Commissioning Manager; drawing on the advice of the commissioning team and the working groups, will establish the Commissioning Requirements Brief (CRB) as a key document early in the project's inception. As the project develops it will be developed, maintained and signed-off at key stages by the Commissioning Manager for issue to internal and external stakeholders. It is an integral part of the Employer's Information Requirements (EIRs) and Asset Information Requirements (AIR) under BIM.

A typical project Commissioning Requirement Brief (CRB) includes:

1. Project overview.
2. Soft Landings and BIM strategy.
3. Technical commissioning & aftercare.
4. Equipping strategy.
5. User guides and templates.
6. Training and site visits protocols.
7. Handover and snagging protocols.
8. Commissioning Master Plan (CMP) & supporting programmes.
9. Communications strategy.
10. Risk Register (restricted).
11. Resources & budgets (restricted).



The Commissioning Requirements Brief (CRB) needs to be outlined at Outline Business Case (OBC) stage to enable incorporation into contractors', designers' and suppliers' briefs. Following initial development of the design / solution the detailed CRB is to be confirmed in the Full Business Case (FBC).

3.2 The Commissioning Master Plan (CMP)

The Commissioning Master Plan is to be outlined at Outline Business Case stage with firm details confirmed at Full Business Case stage.

The Commissioning Manager, drawing on the advice of the commissioning team and the working groups, will establish and regularly maintain a Commissioning Master Plan (CMP) to:

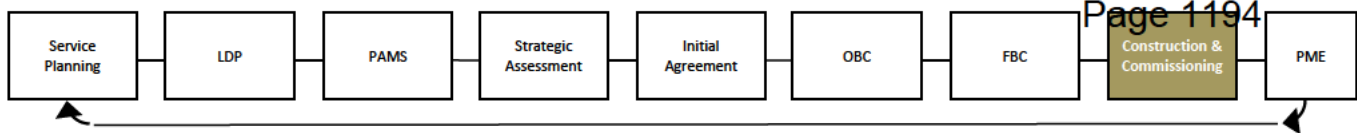
- Identify key dates/ phases for occupying or bringing the facility into use.
- Identify key tasks, targets and responsibilities.
- Identify a critical path for an integrated transfer of operations, addressing clinical need and functional interdependencies.
- Identify key briefing, design and construction interfaces.
- Identify key dates for selecting and ordering equipment.
- Identify any closures, security arrangements, site disposals, if relevant.
- Ensure that there is little or no disruption to patient services.

3.2.1 The Commissioning Master Plan should be represented by a simple bar or Gantt chart to enable communication to key stakeholders.

3.2.2 It is an essential role of the Commissioning Manager to ensure that all key stakeholders are consulted on and are signed up to the CMP.

3.3 Risk Register

The Commissioning Manager's Risk Register will cover key issues related to the commissioning process. This is distinct from, but needs to interface with, the overarching project risk register. This must form a regular agenda item for the Project Board. Appendix A provides an example Commissioning Risk Register.



The Commissioning Manager is responsible for regular updates and reporting of the Commissioning Risk Register as the project develops

3.4 Procurement Methods

All current public procurement strategies should follow this guidance to ensure delivery and commissioning of anticipated project benefits.

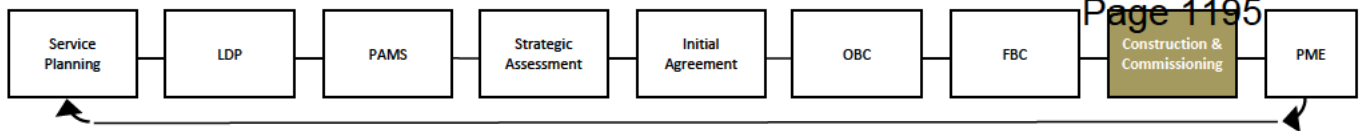
Under 'design and build' procurement routes, an outline CRB and performance specification for commissioning the project shall be given to the contractor at OBC stage for the design team to develop their design/ solution. Where project design is already well underway, adding CRB late on is still useful but will inevitably require risk assessment / compromise to ensure whole life cycle value for money.

The 'design, build, finance and maintain' procurement routes is as above, however some elements of asset maintenance, and therefore commissioning, will be provided by the contracting team directly. The interface of these with the facility operations must be defined in CRB, e.g. contractor team members invited to join the commissioning team.

The Commissioning Requirements Brief (CRB) must be fully defined by the time the contract is let, as this allows senior management and key stakeholders appropriate control in ensuring effective use of the assets. It also supports the public sector duties on ensuring both value for money and sustainability, as well as delivery of any other listed project benefits stated in the project's business case.

3.5 Enabling Schemes

The project may require a number of enabling schemes either prior to the start of the development or during the contract period. These will be identified in the Commissioning Master Plan (CMP). Any links to supporting commissioning and decommissioning plans to inform the main CMP must be clarified by the Commissioning Manager, with any gaps / risks identified and reported up to senior management.



4 List the various typical tasks in a commissioning programme?

	Question	Response
LIST	List the typical tasks in a commissioning programme?	Standard Operating Procedures (SOPs); Communication; Resource & Budget plan; Reviews; Migration & Occupation plan; Equipping; Training; Safety; TADs; PR; Handover and on-going operations.

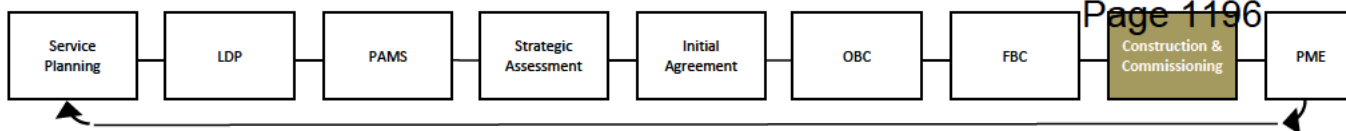
4.1 Standard Operating Procedures (SOPs)

Standard Operating Procedures (SOPs) describe the operation and staffing of a facility and how support services will be delivered in the new facility e.g. imaging; specimen transport, etc.

Figure 6 below provides an example check sheet. In order to ensure consistency of approach, an agreed template or sample SOP should be issued by the commissioning team at an early stage.

It is important to distinguish between operational policies which form part of the project design brief, and Standard Operating Procedures (SOP). The operational policies are used to inform the design process and are basic statements of intent on how a facility should operate and the inter-relationships between different functional areas. The policies must be agreed and officially signed-off at the initial project brief stage by their key stakeholders and senior management. Without agreement on common issues SOP matters; such as finance, staffing, support and relationship requirements will be unclear. This foundation is required to formulate consistent, compatible SOPs.

SOPs will draw on project design brief and design proposals. User input plus specialist and technical roles e.g. HAI, Sustainability, Fire Safety, etc is critical within this process to establish, test and review the assumptions underpinning the SOP.



Given the time from planning to commissioning of large complex facilities, proposed policies and procedures should be reviewed to encompass new legislation and/or service development.

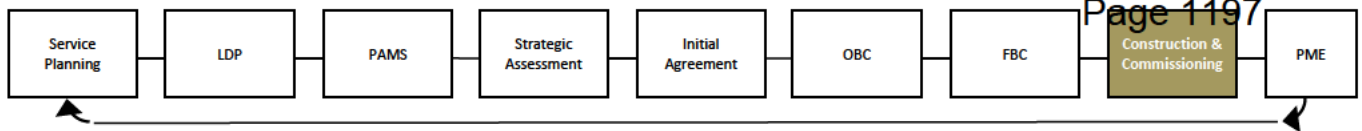
A Working Group should provide SOP templates and reviews, to ensure consistency and application of policy. However, responsibility for producing a SOP will normally rest with the relevant service manager.

An important SOP issue will be the relationship between the functions within the new facility and relationships with the external organisations involved. There needs to be consistency as well as compliance with the overall policies of the relevant NHSScotland and partner bodies.

Standard Operational Procedures shall provide the mechanism for staff training and orientation of the facility, and shall be carefully documented, signed off and disseminated via an agreed protocol and communication strategy before the migration into the new facility.

Soft Landings and BIM SOPs should support the strategy developed by the Soft Landings and BIM Champion(s) providing protocols and templates for the relevant data drops to ensure compatibility in-use.

SOPs can form the basis of project monitoring and assessment of appropriate delivery of the facility. Once the facility is in-use, SOPs support continuous improvement and so should be regularly reviewed, with lessons learnt disseminated as per Soft Landings and in accordance with SCIM Project Monitoring and Service Benefits Evaluation guidance.

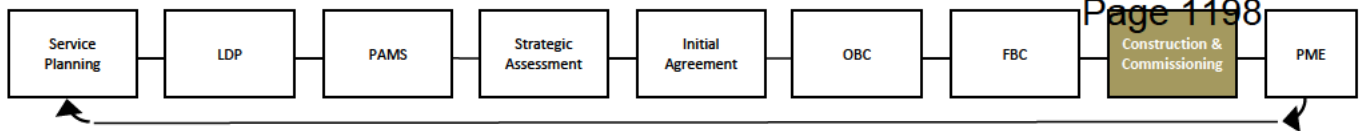



Standard Operating Procedures Checklist



- Services** – Confirmation of services to be provided by department
- Hours of Operation** – opening hours, visiting hours etc
- Predicated Workload** – this should be taken from projections in the Full Business Case at the outlet, but should be modified by contracting targets.
- Staffing Requirements** – confirmation of number and grades of staff
- Shift Arrangements** – confirmation of staff shift arrangements.
- Management Arrangements** – required for each staff group.
- Staff Training** – general staff induction, training arrangements in use of specialised equipment
- Space Utilisation** – management of patient flows, how each room or activity space will be utilised.
- Quality Standards** – details of how these will be achieved.
- Logistics** – Arrangements for delivery and collection of supplies, post, patient notes, materials management, transfer of deceased etc.

Cont...

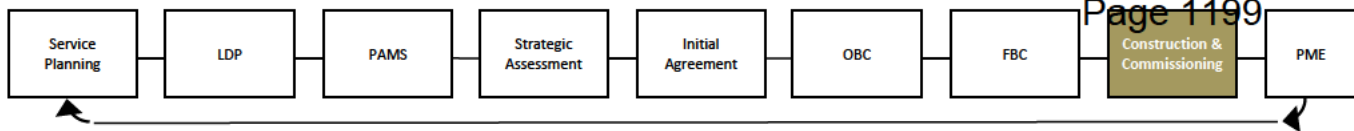




Standard Operating Procedures Checklist

- Waste and Environmental Management Strategy – How will waster be collected, disposed of etc
- Interdepartmental relationships – How departments interacts with the operation of the facility. How patients will be received, directed or transported to the services they require. Effects on other departments staffing levels and budgets.
- Data Collection – How is data collected for patients records, clinical audit, financial systems etc.
- Health and Safety Legislation – requirements relating to COSHH (Control of Substances Hazardous to Health) and other relevant legislation.
- NHSScotland – requirements relating to other NHSScotland Body policies.

Figure 6: Checklist for Creating Standard Operating Procedures (SOPs)



4.2 Communication Strategy

Establishing and maintaining good communication is vital to integrate briefing, design, construction, commissioning and in-use processes.

Those managing the project are likely to be committed and motivated for it to be successful; however, recognition is needed that change is always unsettling and stakeholders transferring from a facility they have known for years will need comfort and reassurance, particularly if closure is anticipated. Frequent 2-way communication is vital as part of a wider organisational 'change management' strategy.

It is important for senior managers to:

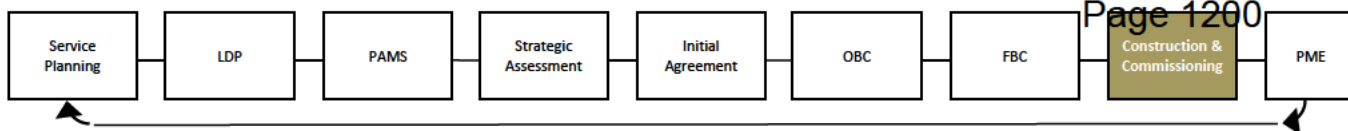
- Widely circulate project developments on a regular basis in a variety of media to promote ownership & prepare for change.
- Ensure progress information is up to date and readily available.
- Set key dates early and monitor them to assist preparation.
- Encourage and disseminate feedback to assist engagement.
- Manage expectations, monitor progress and morale.

It is recommended that the Client / Senior Responsible Officer (SRO) is involved, underlining the import of communication and engagement.

Suggestions for ways of updating stakeholders include:

- Regular newsletter(s) following the project's progress.
- Exhibition(s) of project images and photographs.
- Website page(s) with project progress and images.
- Regular talks and site visits.
- Local community / public consultation / PR to limit disruption.

Support may need to be sought to ensure Equality and Human Resource issues are properly considered.



In larger projects / change programmes, a Communications group should be formed who reporting to the SRO. They will be responsible for planning, coordinating and driving forward an integrated communication strategy.

4.3 Resource and Budget Plan

The PD / Commissioning Manager should establish, develop, maintain and report on commissioning resources and budget requirements, appropriate to each project stage.

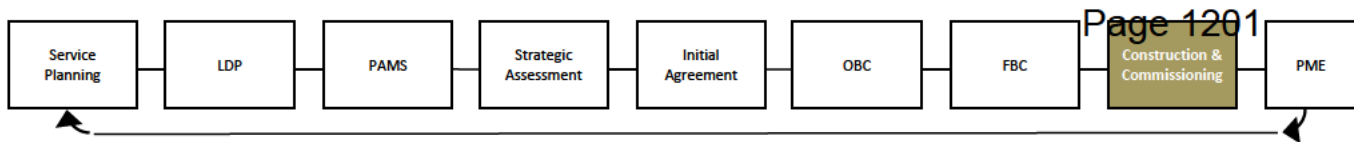
An initial resource and budget estimate is required at the IA stage. At OBC stage an outline commissioning resource and budget plan is required. This will be coordinated with the Commissioning Requirement Brief (CRB) and the Commissioning Master Plan (CMP). This should be reviewed, developed and confirmed by FBC stage. This should be re-validated prior to the outset of key commissioning tasks.

Variations in budgets between Outline, Full Business Case, and prior to the outset of key commissioning tasks, must be carefully monitored and explicitly identified in the overall strategy of the project implementation plan. This is essential to feed into the final Project Monitoring Report (see the Project Monitoring & Service Benefits Realisation guide for further details).

It is crucial that operational managers of the service(s) are involved in this process. As day-to-day resource and budget holders they should have full ownership of and participation in discussions relating to commissioning, training, equipping etc requirements. For example, all income and expenditure projections must take account of 'double running costs' in the transition between old and new facilities.

In order to provide detailed advice and support to the commissioning team, one of the key members should be a finance representative.

Depending upon the size of the scheme, it may be appropriate to establish a separate finance working group to co-ordinate and monitor the financial arrangements for the project. This could be the case for each 'functional' aspects in a large project / works programme.



4.4 Integration with business case and design review process

It is vital that the commissioning process is integrated into the normal business of procurement. The Business Case process will have demonstrated how the project contributes to strategic and business objectives and services will be monitored in-use to confirm realisation.

It will be the responsibility of the Project Director to ensure that the work on commissioning; in defining resources, budgets and standard operational procedures, is integrated into the business case process.

The Commissioning Manager is responsible for contributing to reviewing and reporting on the project brief, Outline then Full Business Cases, including the design proposals in relation to commissioning.

The assumptions underpinning the Business Cases (and ultimately the contract), should be reviewed as part of the commissioning process. This process of reconfirming the business objectives of the project will form an integral part of the wider service planning, whole life costing and support the final Project Monitoring Report on time, cost and quality.

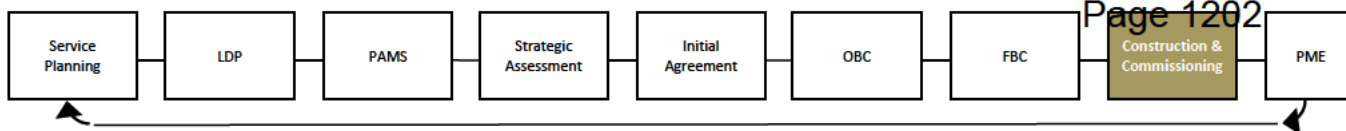
It will be the responsibility of the SRO to ensure appropriate reviews are undertaken. The Project Director, through the Project Manager and Commissioning Manager, will be responsible for monitoring and delivering on business objectives.

During the implementation of a scheme, it is possible that changes in national, regional or local policies may trigger changes to the functional content. The effects of such changes should be explored, quantified and reported by the commissioning team / working group(s). The formal project change control process shall manage these proposed changes.

4.5 Migration Plan

The key transfer dates of services into the new facility should be widely communicated and publicised to internal and external stakeholders.

The Migration Plan is a key document for all stakeholders (e.g. table /bar chart),



and will demonstrate coordination of key transfer dates for patients, public and staff. It is both dependent on and integral to the Commissioning Master Plan (CMP). It can be combined or separate from the Equipping Plan. An example migration plan is shown in Appendix B.

Key milestones, such as completion of the commissioning process and first patient day, should be clear. Local community, GP's and other key groups should be encouraged to visit the facility on open days.

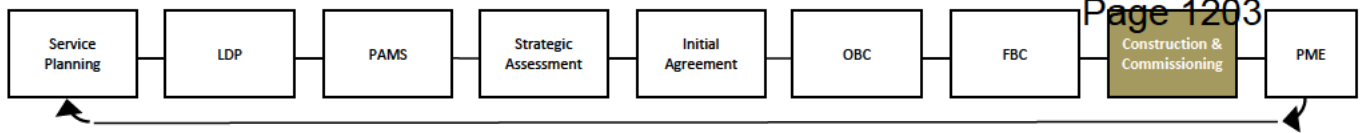
Patient representative groups and other key stakeholders should have been consulted about the design of the facility to ensure that it meets their needs. These groups shall also be kept up to-date with the details of the Commissioning Master Plan. Requests for visits shall be well organised and permitted wherever possible. Whilst this may be resource intensive for large projects it is important that user groups are properly engaged. Such groups may also be engaged to assist in communicating with service users.

The Migration Plan will need coordination with the Equipping Plan, i.e. transfer of existing / delivery of new equipment. If a large percentage of fixed equipment is to be transferred, a considerable amount of resource and support will be required to survey and coordinate with designers / contractors to dismantle and refit in the new facility.

The Commissioning Manager / team shall ensure commissioning risk assessments are undertaken as appropriate to scale / complexity. For example, the safety impacts on the local community of large deliveries, or moving large amounts of equipment in partially occupied facilities. It is vital to have procedures in place for maintaining adjacent clinical and other critical services safely; plus contractor protocols and contingency planning for when things inevitably do not always go to plan.

4.6 Phased or Sectional Occupation

Many projects require occupation of the new facility to be undertaken on a phased basis. This will be reflected in the Commissioning Requirements Brief (CRB), Commissioning Master Plan (CMP) and Migration/ Equipping Plans. Phases will



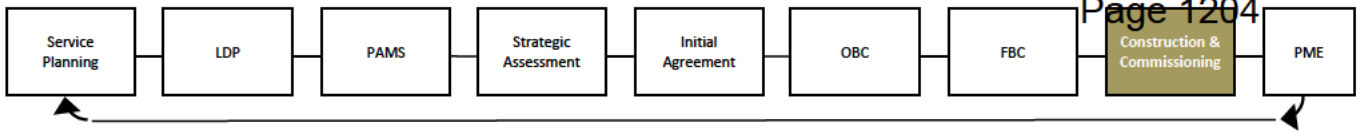
require close liaison between the Project and Commissioning teams on contracts, access, security, plus the risks of any potential construction delays.

Under one or more contracts, a number of different buildings may be handed over, on different dates. Arrangements must be in place to bring these facilities into use, as they become available, unless there are safety, operational or clinical reasons why this cannot be done.

Standard Operating Procedures (SOPs) should take full account of these arrangements and ensure that the relevant staffing, budgets and delivery arrangements are in place to cope with this eventuality.

A facility handed over to users in phases or sections require additional consideration of the following:

- *Contracts - arrangements should be in-place prior to tendering, and need to be explicit prior to signing.*
- *Safety - access and handover protocols needed for each phase/ section, as they are released by the contractor.*
- *Risk & Benefit assessments - potential for extra cost, e.g. fire, insurance, O&M manuals, maintenance; but also support of key activities e.g. staff training, health & safety, infection control, technical commissioning, SOPs.*
- *If areas through which users have to pass are still under the control of the contractor, potential implications for fire, security, insurances etc, plus additional delay /cost risks*



4.7 Decanting

'Decanting' is the term used to describe the temporary relocation of facilities, for example to permit refurbishment or closure of an old facility before the final accommodation is ready for use. This has implications for stakeholders and support services throughout pre, during and post decant periods.

Full account of this must be reflected in the Migration Plan, the Commissioning Master Plan (CMP), and Commissioning Requirements Brief (CRB) plus Standard Operating Procedures (SOPs). Decanting will require close liaison between the commissioning and project teams on potential construction delays.

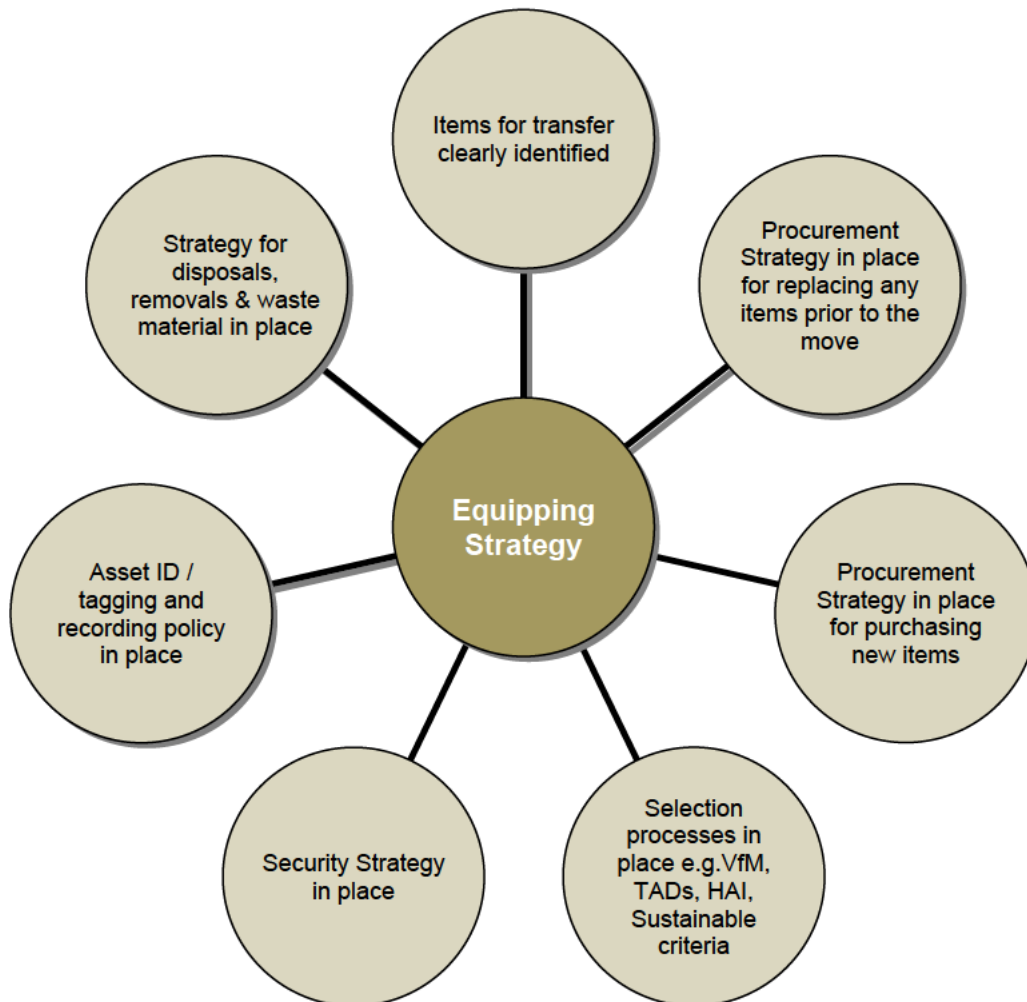
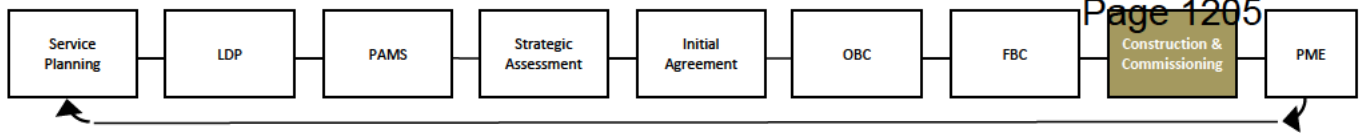


Figure 7: Typical Equipping Strategy Diagram



4.8 Equipping Strategy

The Project Director, supported by the Commissioning Manager, who in turn may be supported by an Equipping manager, shall establish, maintain and report on the Equipping Strategy /plan, as appropriate to the size/ complexity of the project, and for each stage.

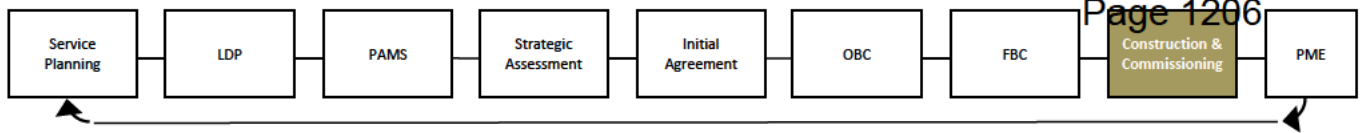
The Equipping Strategy should consider the items identified in Figure 7. At initial stages identify the key elements, followed by an outline Equipping plan with budget at Outline Business Case stage. This should be reviewed regularly, developed, e.g. with an Equipping Responsibility Matrix (see Appendix D), confirmed at Full Business Case, and finally validated just prior to the outset of equipping.

Variances in budgets between Outline and Full Business Case, and prior to the outset of equipping, must be carefully monitored and explicitly identified in the overall Equipment Strategy and Implementation Plan.

Professional equipping support should be sought, particularly for large or complex projects to assist on procurement policy / OJEU etc. NSS Health Facilities Scotland (HFS) equipping team can provide this. An HFS Equipment manager, technical and product support services are available as a cost neutral service to the NHSScotland Board /client.

The Commissioning Manager should retain a pre-agreed equipping contingency budget for the above eventuality, plus any last-minute or overlooked items which need to be ordered urgently at handover.

Operational and maintenance training should be coordinated effectively as part of Equipping Strategy, to ensure that all staff members receive appropriate training in order that the equipment can be in-use when new facilities open for service. This is particularly onerous with lots of new systems or equipment, plus for large volumes of staff. Planning for this training should be incorporated into the overall Commissioning Master Plan (CMP).



4.9 Equipping Processes

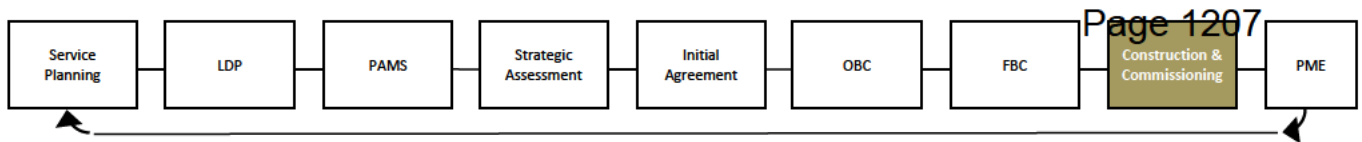
The initial equipment list is based on the mandatory NHS Estates Activity DataBase (ADB) room data sheets (RDS) and should be signed off by users during the design briefing period of the project. This provides the basis for the project and design team to develop their initial proposals and costs, including Equipping Strategy.

The commissioning team, supported by Equipping manager, will review the ADB room data sheets, extract and develop equipment schedules. They must confirm the ADB equipment groups 1-4, plus identify any sub-sets, e.g. transferred items, or budget holder if new:

Group 1	Fixed items supplied and fitted new, via project construction contract. For example: sanitaryware, cabinetry, worktops, racking, electrical and data points, x-ray, autoclaves, fridges, soap dispensers, clocks etc.
Group 2	Fixed items with space, construction or engineering requirements and are fitted within the contract but supplied under separate arrangements. For example: transferred fixed equipment, x-ray, dental chair, autoclaves, fridges, racking, soap dispensers, clocks, furniture etc. (Group 2Tx, 2Ax or 2Bx are equipment sub-sets, where specialist fitting is deemed necessary, e.g. ICT, linac, x-ray, dental, lab etc.)
Group 3	Non-fixed items, but with space, construction or engineering requirements supplied and installed after handover, outwith the construction contract. For example: new furniture, transferred non-fixed equipment, racking, mobile clinical equipment, mobile x-ray, beds etc.
Group 4	Loose items, without space, construction or engineering requirements supplied and positioned after handover, outwith the construction contract. For example: transferred loose equipment, new phones, computers, bins. Often not on room data sheets, but they have storage / ICT implications.

Figure 8: Typical Equipment Group definitions

Note: client selection of Groups 1, 2 & 3 for the same equipment can vary, e.g. racking, dependant on project budget and contract.



If not using the sample Equipping Responsibility Matrix as developed by HFS equipping team in Appendix D, or similar; the following budget related sub-sets should be identified for ADB Groups 2-4 equipment:

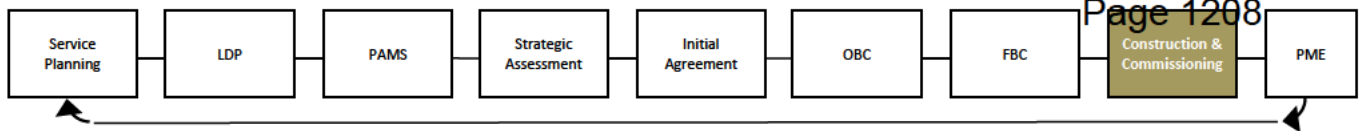
- **T** – Transferred: equipment currently in-use & will move to new facility
- **A** – New: supplied by client, via project Commissioning budget
- **B** – New: supplied by client, via non-project separate budget(s)
- **x** – Specialist fitting: added to Group 2 for any above. For example, transfer of CT scanner on existing manufacturer’s maintenance contract, by their approved mover, to retain warranty: group 2Tx .

Group 2 equipment is **supplied** outwith the construction contract, but fitted as part of it. Group 2 requires careful liaison to fit with the contractor’s design and programme. For example, if any space, construction or engineering requirements are not provided on time, extra costs /delay can occur. Storage is often an issue, so supply of just-in-time batches, may be required. Fitting, and commissioning, by the contractor can need long lead-in periods prior to service migration; therefore not all items will be appropriate for transfer.

Group 2 **fitted** outwith the project construction contract (sub set **x**) requires particular consideration and liaison to suit the contractor’s proposals/ programme, as supply and fitting is not directly via the contractor, the risk of claims for extra costs /delay are high. This option is usually only for highly specialist equipment with built-in maintenance / commissioning needs, often by the manufacturer, e.g. imaging. A risk assessment must be carried out to ensure VFM, if any specialist fitter is not contracted as domestic sub-contractor.

Effective liaison between the Equipment manager, Commissioning Manager and Project Manager is essential to successful equipping.

The contractor’s room design and technical proposals need to be regularly reviewed against the Equipment Strategy. This allows updates to the budget, Equipment Strategy/ CMP, but also advice and verification of design proposals suitability, e.g. space for equipment maintenance. The room design must be fit-for-purpose, but also flexible to suit changing equipment needs, as far as practicable.



ADB provides each equipment item with a code and a default Group 1-4.

Dependant on contract and budget, this group can be varied by agreement in final contract, e.g. using Equipment Responsibility Matrix. Some items, e.g. storage racking or lockers, are better VFM as Group 1, rather than default Group 2, but indeed may be best VFM transferred as Group 3 out with the building contract.

4.10 Equipment Selection

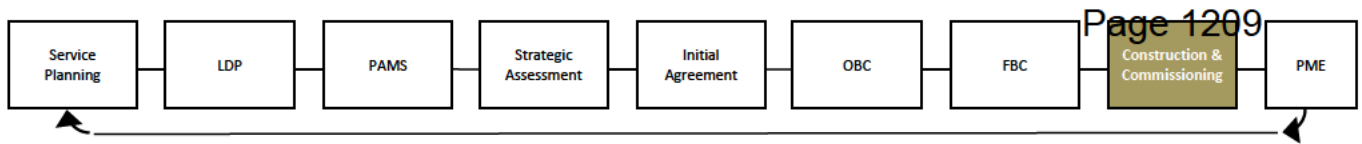
Equipment qualities, e.g. operability, maintainability, lifespan, and sustainability, are an intrinsic part of the mandatory whole life cycle value for money (VFM) assessment. The specification of quality requirements and their assessment must be undertaken in consultation with the users, the Therapeutic & Access Design Strategy (TADs) group, and all relevant Champions e.g. Sustainability, HAI, Equality. Standardise wherever practicable across all departments, to benefit quality, costs, maintainability, flexibility & sustainability.

Equipping Note:

It is essential that Clinical, Infection Control, Sustainability, Facility, Manual Handling & Equality requirements are fully considered during procurement. VFM means capital cost is often dwarfed by operating and disposal costs. Operating costs must include: energy, maintenance and replacements over agreed lifespan, of not just the equipment, but also effect on overall building systems, e.g. an inefficient fridge increases room ventilation / cooling needs. (EU rated A+ approx twice energy use of A+++ <22 kW/yr fridge)

The selection of equipment is a time consuming process, from assessing offerings from different suppliers, to surveying all potential transfer items, and complying with OJEU / NHS procurement policy timescales. It is essential that equipping is mapped onto the early CMP, and then refined to fit in with procurement and supplier lead in times and contractor's deadlines for design, supply and commissioning.

The interior design of the facility, will influence, and be influenced by, the equipment selection. The architect or a specialist interior designer will, in conjunction with user groups, agree colour schemes to fit a Therapeutic & Access



Design Strategy (TADS) plan, as well as key transferred items. This concept design will include guidance for complementary furniture e.g. tables, chairs, textiles, for each area.

Initial focus should be given to key pieces of equipment which could have a significant impact on the design. These may include Imaging, Decontamination, Pathology, Pharmacy, Operating Theatre and other equipment which have major services, space, loading, commissioning or access requirements. Designers and Contractors will require relevant information at an early stage in order to accommodate the equipment which will subsequently be procured. Consideration must also be given early to mitigating high risk equipment selection, e.g. suitability for transfer, any items where delays are highly likely.

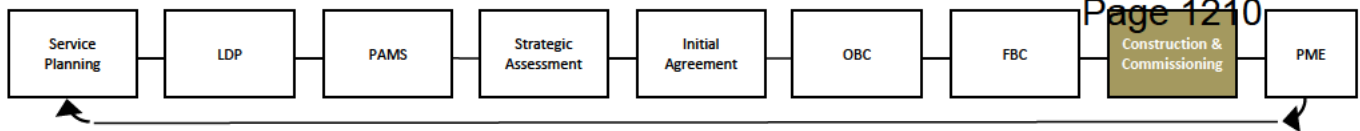
Group 2, and particularly specialist-fitter equipment (sub-set **x**), need particular consideration; to ensure they are mapped early into CMP. These items risk incurring contract delay / costs, and must be specified, ordered, delivered, and especially if 'x' fitted, to suit the contract programme and design proposals. Potential for variance to this must be carefully monitored and reported to the Project Manager by the Commissioning manager in their risk register.

Use of an Equipment Responsibility Matrix (ERM, Appendix D) or similar is recommended to ease communication, monitoring and budgeting throughout the selection process. For example it allows testing of VFM if selected equipment items are moved from ADB Groups or into varying sub-sets of supply / fitting and maintenance.

4.11 Equipment & Furniture Removal & Delivery

Good planning, coordination and communication is paramount to ensure a smooth transfer of furniture and equipment. It requires to be appropriately resourced for the project, and incorporated within CMP and contract master programme, e.g. Group 2 supplies need to suit contractor's installation dates, and Group 3 -4 supplies need to suit handover dates, however these often vary if programme runs late/ early

Phased delivery of furniture and equipment is often required. This can be due to



the large volumes, logistical constraints for access and storage, contractor's Group 2 equipment programme, or a staged opening of the operational facilities.

If large amounts of Group 3 -4 furniture and equipment are to be moved, it is advisable to engage specialist removers who have experience working with and in healthcare facilities, including HAI risk.

Transfer of equipment from existing operational facilities is likely to occur immediately prior to occupation of the new accommodation and deliveries and installation/placement of new equipment should be scheduled to be completed before the transfer commences.

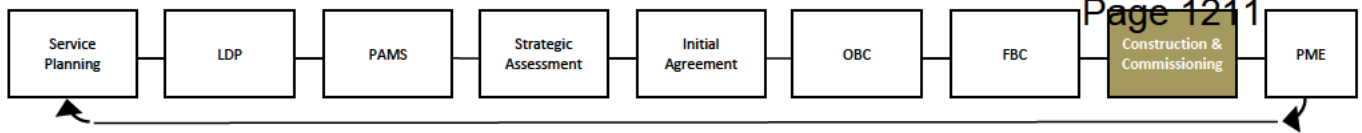
4.12 Storage of Furniture & Equipment

The temporary storage of furniture and equipment should be avoided where possible as it results in double-handling with additional costs and will reduce the useable warranty period when equipment is eventually put into use. Good supply scheduling will generally obviate the need for prolonged storage. If temporary storage is essential, the area should be secure and clean, the risk of water or other damage low, and location should be accessible to the new facility and for deliveries.

Spare client space may be utilised as temporary storage area for furniture and equipment. This or any alternative storage option, e.g. local warehousing, early handover of an area in new facility, should be detailed by FBC, including related cost allowances and risks.

Matters to be considered in respect of storing furniture and equipment are:

- *Ensure security issues are managed appropriately.*
- *Cleaning and decontamination of equipment.*
- *Plan in place to have all medical equipment checked by Medical Physics, Anaesthetic and Technical Staff.*
- *Asset tagging is best done at this stage.*



4.13 Equipment & Furniture Placement

The Commissioning Manager is responsible for placing/ installing all Group 3-4 furniture and equipment. Labelling with the room number and the code shown on the 1:50 room drawing, by the supplier or immediately on receipt, enables a quick and easy installation.

Some items need to be tested in place to confirm they work properly, e.g. fridges, which operate at a certain temperature range. Many items require to be monitored in their new location, to ensure the technical commissioning e.g. ventilation balancing by the contractor, is accurate, will work, and is monitored appropriately in operation.

Medical equipment requires Acceptance Testing in line with the NHS Scotland Body's Medical Physics Department's policies. Small items of medical equipment therefore are often delivered to the Medical Physics testing workshops rather than directly to their final location.

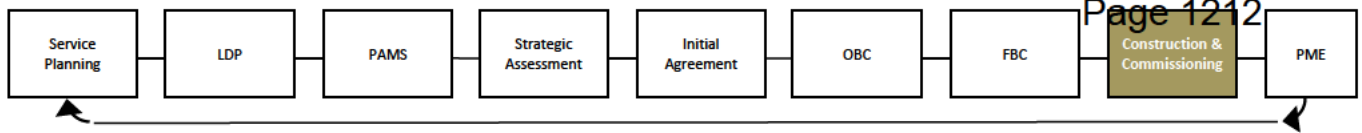
For all potential transferred equipment, the space, services, logistics etc requirements need careful surveying and compatibility checking, e.g. electrical, wall fixings, plumbing and dimensions. Non compatible equipment is unlikely to be suitable for transfer to the new facility.

4.14 Equipping a Room

Activity DataBase (ADB) is the NHSScotland mandatory briefing software. ADB provides generic coding and graphics, allowing every room to be fully scheduled and drawn at 1:50 scale. This room layout sheet (RLS) should be displayed in the room prior to equipping, for easy placing and checking.

To assist locating a room, each should have a unique number consistent with that shown on the design drawings at 1:200 and 1:50 scale. 1:200 drawings should be placed at entry to each floor.

Staff often bring additional, unscheduled items, these will require approval by the Commissioning Team. If accepted, these will often require improvisation to ensure compatibility with overall designs.



Other matters to be considered in respect of placing furniture and equipment are:

- *PAT testing – must be scheduled/ resourced*
- *Asset ID/ registering/ management*
- *Cleaning and Infection Control.*
- *Management of keys, accessories and user manuals etc.*
- *Training requirements*

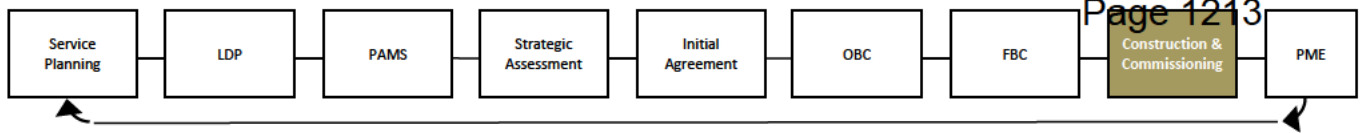
4.15 Site Visits and Training

Pre-handover, the facility is technically and contractually a site run by the contractor. Health and Safety (H&S) for staff making site visits is essential. The commissioning team should be trained on H&S procedures on site and they should put in place strict controls on access and protocols for staff conduct on site visits. Users must not enter the site without the explicit agreement of the Project Manager (PM) and the Contractor.

As the facility comes closer to completion, site visits for staff training and familiarisation should be organised by the Commissioning team well in advance with the contractor and PM. Development of CMP is particularly important as the contractor often requests areas to be “locked down” to avoid mess / finishes deterioration etc, just prior to handover.

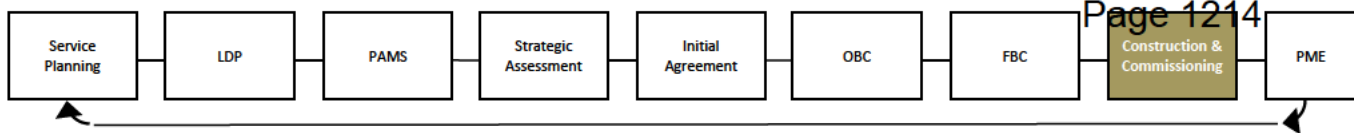
The run up to Handover is often frenetic and has many competing priorities; however the importance of on-site operational and maintenance training and documentation cannot be underestimated. A facility handover cannot occur without fit-for-purpose and safe operation.

At pre-handover, strict management of access is essential, particularly for client, users, third parties, nominated sub- contractors or ‘specialist fitters’ e.g. x-ray, (equipment group sub set **x**). All will require the contractor’s permission to be on



site/ 'permit to work', unless they become a domestic sub-contractor and are under the contractor.

Post Handover, the contractor should observe similar strict controls and protocols for their workers and visits to the new care facility, which is now under the control of the client. It is easy to underestimate the number of people who will wish to visit the facility during the commissioning period. The Commissioning Manager should be made responsible for controlling access post handover, until all users are in. See 4.6 on Phased or Sectional Occupation.



4.16 Technical Commissioning

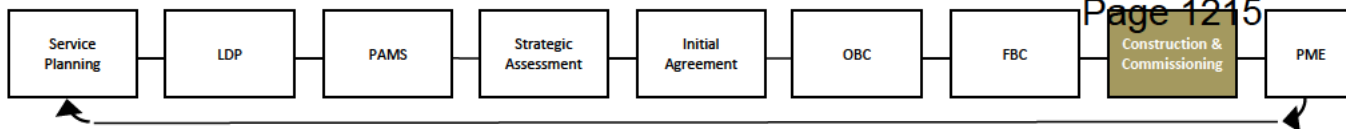
Technical commissioning primarily involves bringing the mechanical and electrical services and equipment in the building into use as well as testing of the building fabric, acoustics, below ground drainage, fire hydrants etc. This must include setting and monitoring of targets e.g. NHSScotland Design Energy Performance (NDEP) will include bespoke kW/m² targets), with HFS support for each facility. NDEP must be monitored and updated min. annually, to ensure operational optimisation in our ever-changing service need / climate.

Commissioning is undertaken by the contractor and relevant sub-contractors. It will be the task of the contractor / design team to ensure that all services and equipment provided under the contract are operating according to the contract specification and be consistent with the user requirements in the Commissioning Master Plan.

It will be the responsibility of the Project Manager to ensure that the contractor draws up a full programme of technical training and demonstrations as part of this process. Dates and times of these will be agreed with the Commissioning Manager, who will arrange for the relevant personnel from the users of the facility to be in attendance, so that they can understand how the facility/ equipment operates.

It will be the responsibility of the contractor, under the terms of the contract, to ensure that all technical manuals, Health & Safety, CDM and literature relating to the operation and maintenance of the facility, equipment and plant are passed to the Commissioning manager for review, then final submission, to the format and timetable agreed in the Commissioning Master Plan. User manuals, in 'non technical speak', are required to support staff to use the facility safely and effectively. The Project Manager must ensure that this is done.

An extract from a typical Technical Commissioning Plan is provided for illustrative purposes in Appendix C.



4.17 Fire Safety

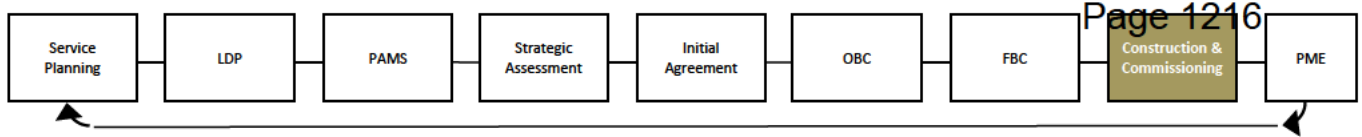
The procedure to be adopted in relation to Fire Safety during the lead in period to commissioning is contained within CEL 11 (2011), which introduces the Fire Safety Policy for NHSScotland 2011. Although the policy often refers to new build premises, the same principles apply to refurbished facilities as detailed in NHSScotland 'Firecode' publications e.g. SHTM 81.

CEL 11 (2011) provides both policy and the mandatory requirements covering the commissioning period of premises prior to occupation. In particular Annex C, provides fire safety management guidance through the critical transition period of commissioning. Compliance with CEL 11 (2011) and current Technical Standards, is deemed to satisfy the Fire (Scotland) Act 2005, its regulations and amendments.

NHS MEL (1997)⁸⁰ "Health and safety issues in NHSScotland" states safety of patients, staff and visitors is to be given high priority at NHS board level, as is meeting statutory obligations on health and safety. Fire safety is not a stand-alone issue but one to be risk managed as part of an overall approach on health and safety matters.

Key fire safety management and equipping decisions must be made and relevant fire safety information gathered and developed in plenty of time prior to hand over. Key dates for these should be highlighted as part of the overall coordination in the Commissioning Master Plan (CMP). A supplementary more detailed programme may also be required for larger, complex or phased projects. This may also require to cover safety of existing as well as new facilities, e.g. partial decants. Appropriate time is required for input, coordination and approvals across all parties, particularly if multiple organisations.

The operational development of local policy, procedures and training of staff prior to opening a facility to patients / public, will normally be undertaken by the fire safety advisor(s), in consultation with key management staff. However clear responsibilities, roles and functions required for this will be defined and coordinated through the Commissioning Manager, to ensure consistency and a



safe transition into, or from, an occupied, operational health & care facility.

The initial requirement at start of fire safety commissioning is to check and confirm to Commissioning Manager that fire safety design, and construction, is appropriately incorporated for the facility / stage. This should be done in a written report, so any potential issues can be addressed.

Loose fire fighting equipment can be Equipment Group 1, 2, or 3. See Figure 8 above for definitions. Early engagement by all parties should agree an optimum project specific arrangement for their supply, maintenance and replacement/ addition of fire equipment.

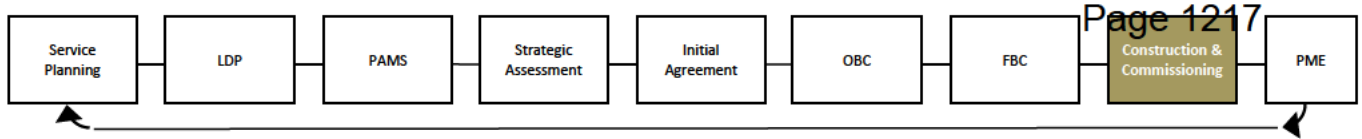
4.18 Health Information & Technology

The initial requirement at the start of health information and technology (HI&T) commissioning is to check and confirm to the Commissioning Manager that HI&T design and construction is appropriately incorporated into the facility / stage. This should be done in a written report so that any potential issues can be addressed.

An element of the above report is a confirmation of the IT infrastructure, e.g. cable trays, containment etc, and HI&T installation extent, included within the construction contract. Refer to section 4.8, for guidance on equipping process, VFM and risks associated with HI&T, particularly if not provided via a domestic subcontractor under the construction contract.

The following provides a list of typical things that should be considered at design development stage. It provides a useful checklist and reminder of the scope and complexities of commissioning this technology:

- Will there be a single IT network, or will separate clinical / academic facilities, or other multiple IT networks, be required?
A single, shared network will need early capital expenditure on HI&T infrastructure and hardware to support the facility's commission prior to handover. A separate facility IT network is likely where FM is provided via a commercial contract e.g. PPP/ NPD/ Hub.
- Are multiple networks secure and/ or compatible?



- Has the hardware specification been checked to ensure that it is compatible with NHS systems?

This may require direct procurement of switches and chassis, although elements of these are required for Building Management Systems (BMS) and for communications systems such as Automated Guided Vehicles (AGV's). If these are part of a single network then, as above, early procurement and installation will be necessary, plus consideration on warranties, security and insurances are required for use of high value equipment in a construction site.

- What is the scope / need for hard wiring, wireless provision and mobile coverage?

In terms of device use, consideration needs to be given to selection of fixed and portable devices for both clinical and Estates/FM use, particularly where interfaces with other systems e.g. BMS/FM First/AGVs.

- What data storage, security and back-up is required, particularly for clinical data/ images?

There are increasing interfaces between recording technology and server storage capacity. Departments such as Medical Illustration, Audiology, Child Protection all have requirements to store recorded video images for prolonged periods via fixed cameras, and interfaces with the network require to be assessed and accommodated.

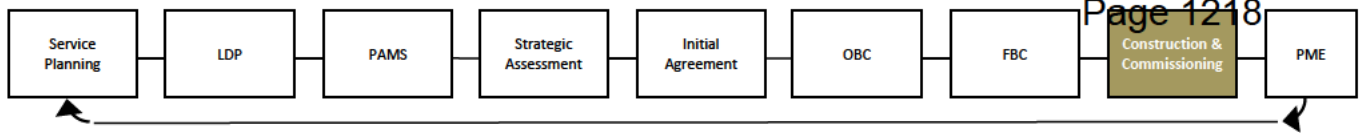
- What voice/ telecoms systems have been considered, including provision of contingency back-up lines?

- Is provision for incoming ducts and IT/ comms room space adequate?

- Has the design of patient areas, i.e. wards, included for electronic information screens at or close to nurse bases to allow for displaying of patient locations etc?

- Has provision for similar screens, for patient calling, been included in waiting and out-patient areas?

The HI&T commissioning timelines are dependent upon the amount of integration between building systems and the clinical network. It is vital to get final design / as



built data layouts as early as possible in order to compile the patching schedules. Therefore delivery of these layouts should be identified as a key delivery milestone within the commissioning master plan programme.

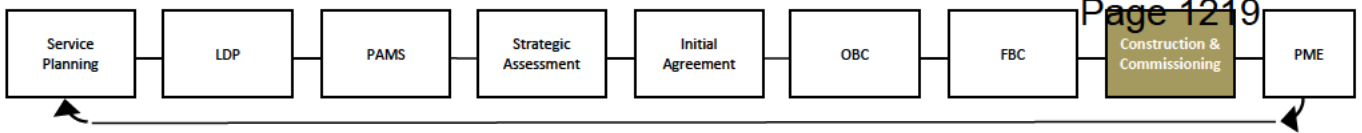
Comms Rooms and IT/ Hub room cooling should be another key milestone to ensure that servers/switches are within a controlled environment when in-use and security access systems should similarly be in place/commissioned prior to going live.

NHS network N3 access agreements need to be put in place as early as possible and Anti-virus software has to be to NHS specification, to ensure that going forward patches can be applied as required.

Integration of alarms and life safety systems with the clinical network may be necessary via pop-up screens on NHS Boards etc. and at PC's at locations such as receptions, nurse bases and touchdown desks where a dispersed nursing model is utilised, and these may include the following:

- Medical Gas alarms
- Nurse call messages
- Fire alarm notifications
- Door entry systems
- AGVs and pneumatic tube delivery messages
- BMS comfort controls

These integrations may need “fast access” signs on protocols for acceptance or cancelling of alarms and should be considered in the design stage and fully implemented during commissioning stage.



4.19 Therapeutic & Accessible Design Strategy (TADs)

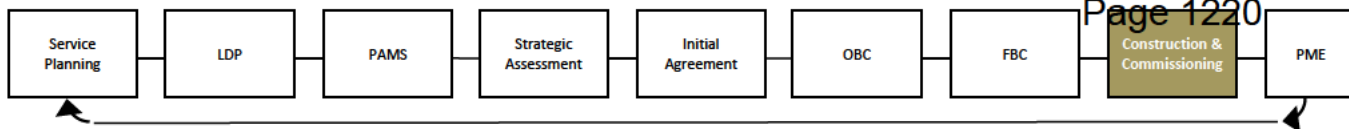
Section 4.10 above states the selection of equipment, furniture, textiles etc, is to be consistent with a Therapeutic & Access Design Strategy (TADs).

The purpose of a TADs is to plan, commission and realise, the interior and exterior design and all fittings as part of a seamless and integrated environment to ensure key therapeutic and accessible objectives for each project are delivered, e.g. health promotion, accessibility, greenspace, art, intuitive wayfinding, signage, sustainability, maintainability. See Figure 9 below:



Figure 9: Typical TADs Considerations Diagram

The initial development of the project TADs plan is during design stage as a response to the brief i.e. ACRs and Design Statement, but its development should be shaped and then taken on by the Commissioning Team to ensure realisation of the design concepts.



To ensure operational outcomes meet the diverse needs / inputs for successful health and care requirements, the Commissioning Team will require input from the TADs working group and/or the relevant champions, e.g. HAI, FM, Arts, Health Promotion, Design, Sustainability, Greenspace, Equality/ Access, Users, and procurers (e.g. NSS NP/HFS Equipping team).

4.20 Artworks & Greenspace

The therapeutic benefits of artworks, and in particular greenspace, to aid and de-stress patients, carers, staff and the wider community, are well documented. Scottish Government policy [CEL 1 -2012](#), and its addendum Health Promoting Health Service encourage the active promotion of health and wellbeing for patients, staff and public.

The initial requirement at start of art and greenspace commissioning is to check and confirm to Commissioning Manager that TADS plan, and construction, is appropriately incorporated for the facility / stage. A written report will enable any potential issues to be addressed.

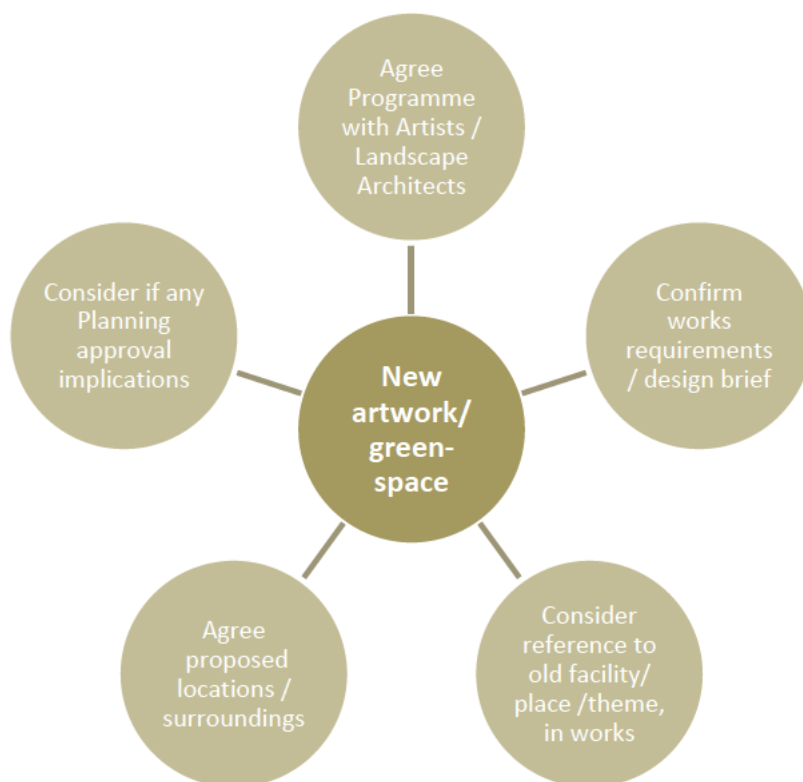
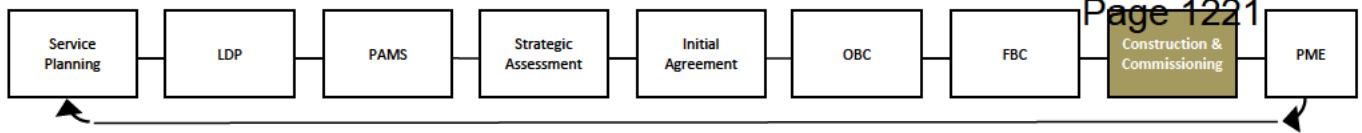


Figure 10: Typical Art /Greenspace Considerations Diagram



4.21 Access & Wayfinding

An Equality and Access Statement should be developed as part of the TADs, supporting an integrated approach to Equality Act public duty delivery. Commissioning must build on and coordinate with this strategy.

The initial requirement at start of access & wayfinding commissioning is to check and confirm to Commissioning Manager that the TADs plan and construction is appropriately incorporated for the facility / stage. A written report will enable any potential issues to be addressed

Access & intuitive wayfinding, both internally and externally, are very important for patients and visitors who often attend health & care facilities in great stress.

Detailed guidance and checklists are available at

www.hfs.scot.nhs.uk/publications-/ ; including:

www.hfs.scot.nhs.uk/publications/wayfinding-v4.pdf;

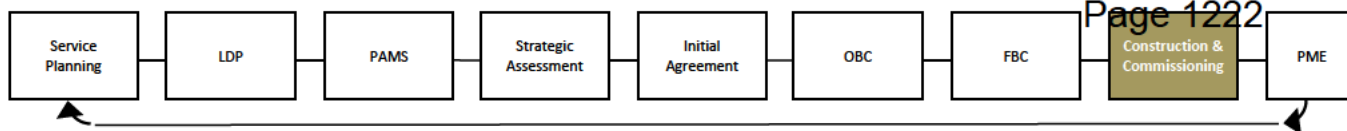
www.hfs.scot.nhs.uk/publications/dementia-checklist-v1.pdf;

www.hfs.scot.nhs.uk/publications/access-audit-checklist-feb-2000.pdf

Required wayfinding signage should comply with NHSScotland Corporate Identity Guidance. A design toolkit and further detailed information can be accessed at www.nhsscotlandci.scot.nhs.uk.

Some key access & wayfinding considerations include:

- *Allow sufficient time for obtaining planning permission for external access/ lights /signage from the Local Authority.*
- *Agree routes, parking, access, delivery points and WC facilities policies in time for the relevant signs to be ordered.*
- *Arrange for temporary signage for a facility closing, as a result of new development, so the public are well-informed.*
- *Ensure new road signs agreed and installed by the Roads/ Highways Department and only unveiled to coincide with the transfer of services.*
- *Ensure coordination of Health & Safety, Fire and statutory signage e.g. no smoking, cctv/ data protection.*



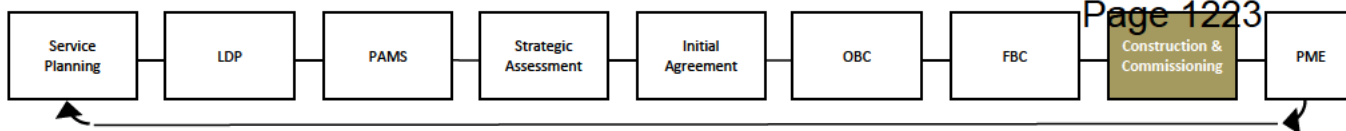
4.22 Pre-handover and the ‘Snagging’ list

Upon completion of the contract / pre-handover, the Project Manager working with the design team, Clerks of Works/ Verifier etc., will recommend that the facility be handed over to the client. Often, even with ‘zero defects’ policies, a list of outstanding small works is required; this is commonly referred to as the contractor’s ‘snagging list’. The Commissioning Manager should review and report on any missing elements, ongoing risks etc.

Outstanding works may be completed by the contractor(s) after the formal handover of the building. It is important to note that the building has now passed out of the ownership of the contractor and into that of the provider. The contractor and the client must therefore agree rules governing security and access to the facility while snagging is being undertaken. Snagging may consist of minor works such as touching up paintwork, fitting door furniture etc. but may in some cases need more significant repairs/snagging to be carried out which may require planning / risk assessments and temporary relocation of services.

During this period, it is essential for the Commissioning Manager to be aware of the areas in which the contractor is still undertaking these works so that care and safety precautions can be taken.

A formal process of monitoring snagging, or any additional works, should be agreed, e.g. agree a list of items jointly with the contractor and arrange weekly reviews of ‘completed’ items until all are resolved. All outstanding items will be prioritised to ensure high risk snags (i.e. any preventing a service moving or making it very difficult for it to operate) are completed first.



4.23 The Post-handover Period

The main task after building handover by the contractor is to move clinical and support services into the new facility. The first consideration after handover must be to ensure that the building is secure and appropriate insurances in place where required, as it may be some time before users actually occupy the building.

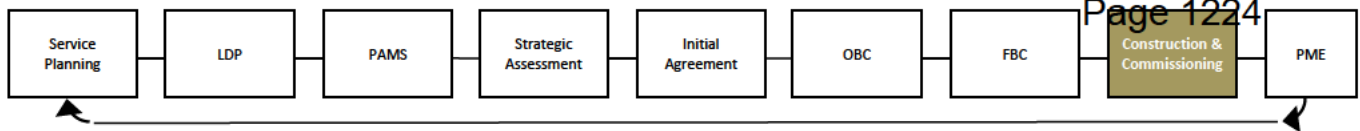
Establish Post-handover procedures, appropriate to the project scale:

- *The facility is locked up out of hours or when it is known that no one will need to be inside it.*
- *There is a security presence, whether in-house or contract, in the facility, if appropriate.*
- *Regular checks are made to detect any leaks or other problems that might delay bringing the facility into use.*
- *There is a 'signing in' book, so that access can be controlled and it is always known how many people are in the facility at any time.*

After the contractor has completely finished, or finished the majority of snagging works, all floors etc are to be cleaned in accordance with the Maintenance Manual. Several days should be allowed for this activity depending upon the size of the facility. It is best to pre-agree the time to be taken for this and for it to be recorded in the commissioning master plan.

It is possible that some items or parts of the specification have been omitted by the contractor in error. These should be identified by the Project Manager and dealt with by the Contractor. The Commissioning Manager must be made aware of the extent of the works and any impact of such works on the commissioning master plan.

Requests for works which fall outside the original brief should be agreed with the Client / Senior Responsible Office through appropriate change control processes, and should be dealt with as part of normal maintenance or minor capital works through local NHSScotland Body procedures. These works should not be deemed



part of the contract or commissioning costs unless it is decided that not to undertake the works would prejudice the effectiveness of patient care. The final adjudication on this should rest with the Client / Senior Responsible Office. Within a PPP project a formal Change Order may be raised.

The commissioning team should assess any post-contract works required by the users. These should be matched against the brief and action taken if it is decided that the contract has not met the brief.

4.24 Decommissioning Redundant Facilities

Decommissioning is the process by which a redundant site or facility is taken out of operational use following the transfer into the new facility. The new owners of the site may influence this process.

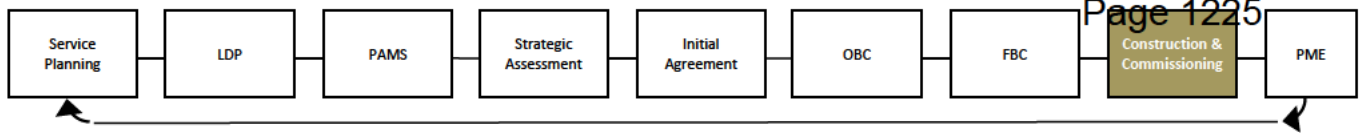
A policy for the disposal of all surplus assets must be agreed, in order that they can be redistributed elsewhere in the NHSScotland Body, recycled, sold or scrapped. The policy should refer to the Procurement/ Financial Standing Orders and/or the NHSScotland Property Transactions Handbook in order to ensure that the process is administered correctly. This shall also involve the process by which unwanted items could be sold to staff. This again requires careful management.

It is useful to identify a central storage facility for surplus assets where equipment can be transferred after the transfer and closure of each department. An inventory shall be kept so that the assets can be removed from the NHS Board's asset register when necessary.

If services are to be transferred from old buildings or another site on a phased basis, ongoing maintenance and security will be necessary during this period.

Temporary signs should be provided indicating departments which have closed and been transferred. The local police should be informed of closures in advance of the event.

Measures should be taken to make safe any plant or equipment not to be removed. Lifts and other plant should be deactivated and sealed off. Any large built-in refrigerators will need to have their doors removed and consideration given



to the removal/disposal of hazardous materials/medical records and clinical waste.

Ensure early consideration is given to amend/ phase out all relevant contracts, e.g. maintenance, utilities etc.

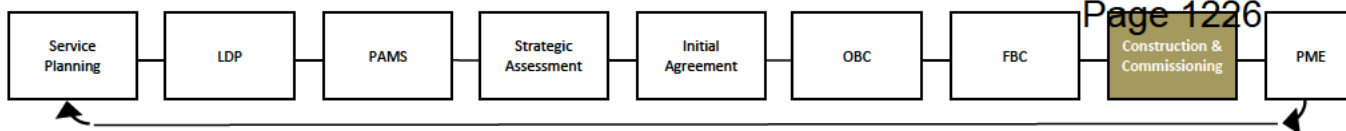
This process must be well managed for large schemes and responsibilities well defined. A contingency budget is essential.

4.25 Closed Facilities

Once the facility has been closed, all redundant facilities must be secured, signposting removed (particularly to emergency facilities), security arranged and arrangements made for disposal.

Given the potential fluctuation in land values or complexity over land sales over the life of even a relatively small scheme, contingency plans should be prepared if a site cannot be disposed of shortly after it has been vacated.

This risk should be assessed as part of the full business case and relevant allowances made for the security of the site and any other associated costs as part of the project contingency sum.



4.26 Public Relations

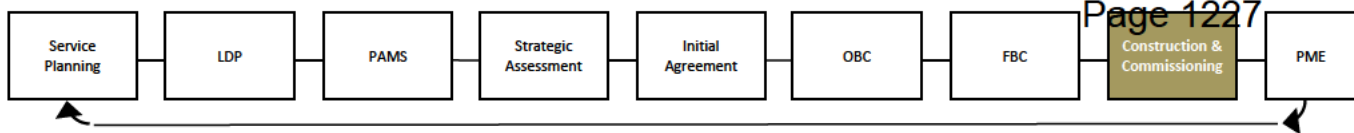
It is essential that the NHSScotland body's Communications Team is involved in drawing up the PR/ communications strategy. They can advise on the best way of generating publicity through the media to ensure maximum coverage, appropriate communication to the public on progress of the scheme, and the programme for opening services in the new facility. Individual NHSScotland bodies should also liaise with the Scottish Government Health Directorates Communications Team regarding their proposals.

It is important to capitalise on the interesting features of the new facility such as the establishment of a new service, the original design of the facility, or the art installations.

Public relations should be a high priority on the Commissioning Manager's work plan to ensure that patients and service users know where to go, particularly for A&E services to ensure that the public always know where to get emergency help. A Communications Strategy should be developed to address this issue using media, advertising, and promotions.

By ensuring steady coverage of the scheme there is an opportunity to inform the general public of what is going on and keep them in touch with developments throughout the life of the scheme.

All members of staff who will have contact with the media or who will be undertaking presentations should have some training in how to answer questions and put across the key messages.



4.27 Operational Handover Plan and ongoing optimisation

Commissioning is not just a single point in time when all systems are 'optimised' e.g. handover day. It is a continuous process that ramps up from OBC to Handover, but also must be on-going, e.g. min. yearly reviews, to ensure operational optimisation in our ever-changing service need / climate.

The initial requirement is to check and confirm to the Commissioning Manager that the Contractor's Operational Handover Plan is appropriately robust for the facility / stage. A written report will enable any potential issues to be addressed

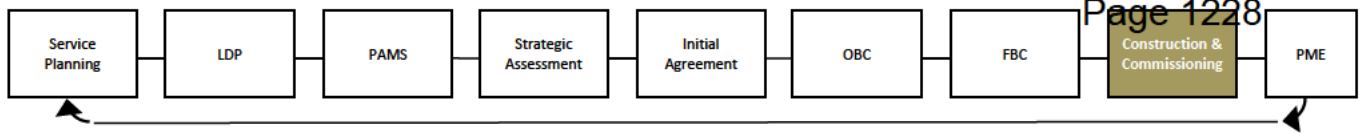
It will be essential to maintain the commissioning team for at least three months after the facility is operational. The team and the Commissioning Manager should be available to deal with issues from occupation and use of the new facility. The Soft Landings Framework – 'Stage 4: Initial Aftercare', provides further details.

FM and operational management must work alongside the commissioning team to ensure that day-to-day queries or problems can be dealt with by managers of the service in the normal way.

It is essential during the construction phase that strong working relationships are established between the client and contractor / FM teams to ensure that the transition through commissioning to operation of the facility works well and feedback is given to build a longer term partnership relationship.

Handover needs to be a formalised process with appropriate sign off by the relevant accountable individuals. Appropriate record keeping of all handover procedures should be maintained.

Site Management and who will be the direct contact for PPP/ FM provider discussion should be agreed well before transfer. All contractual obligations, protocols, communications channels and indeed the teams, need to be understood and final arrangements in place in plenty of time prior to actual handover, e.g. helpdesk protocols; monthly reports (samples) review; escalation protocols & processes. Appropriate monitoring / reviews are also needed.



4.28 Official Opening

The official opening of the facility should be undertaken about three to six months after full occupation has been achieved. This provides an opportunity for staff to become used to their new working environment and any residual post-contract issues to be dealt with. The arrangements for the opening shall be the responsibility of the Commissioning Manager.

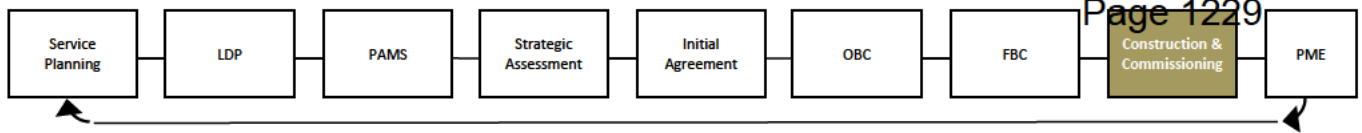
NHSScotland Bodies shall produce their own local guidelines for dealing with official openings. The person who should undertake the opening usually depends on the size of the facility and its status within the local community. As section 4.26 above, the Communications Team will be able to advise on this.

The official opening should be one of the key dates on the master plan and shall be publicised and arranged well in advance to provide maximum impact.

To open the facility, and depending on impact, it will be appropriate to select either the chairperson of the provider, a local dignitary e.g. MSP, MP, MEP, Councillor; or alternatively a media celebrity with local links,.

For very large schemes, it may be appropriate to approach a senior member of the Government or a member of the Royal Family to undertake the duty. Protocol relating to Royal or Government visits shall be checked carefully with the appropriate private office. Many months notice is required to arrange this. Informal contact should be made with the Ministerial / Royal Private Office in the first instance. It is advisable to have a list of second and third choices on standby.

The list of official opening invitees should be carefully selected to ensure that it represents a good cross-section of the staff and team involved in the design, commissioning and construction of the facility.



Appendix A - E

NHSScotland Commissioning Process (NCP)

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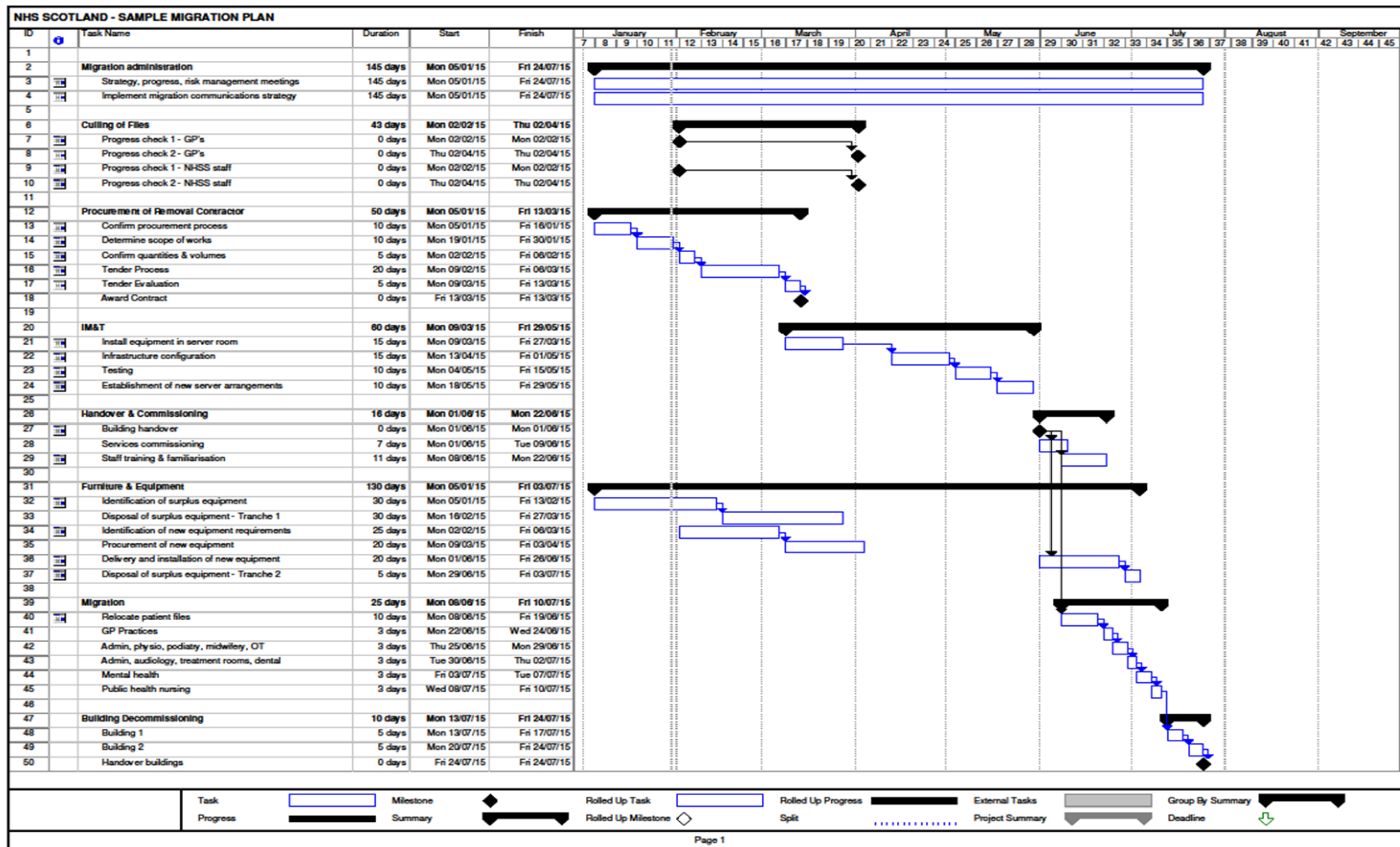
Appendix A – Sample Commissioning Risk Register

1. Identification			2. Assessment				3. Control	
Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence (C)	Likelihood (L)	Risk (C x L)	Owner	Proposed Treatment / Mitigation	Action Taken
			(1 - 5)	(1 - 5)				
COMMISSIONING RISKS								
1.0	Commissioning risk							
1	Delay to migration programme due to unforeseen delay in construction process						Allow contingency period within migration period and adopt an early warning system.	
2	Delay to migration due to adverse weather conditions						Develop contingency plan for any delay to the programme and liaise with project team on construction progress	
3	Issues arising with the delivery or commissioning of new equipment prior to migration						Identify suitable person to manage deliveries and storage on site	
4	Staff are not ready for the new facility, e.g. domestics, estates						Assess need and develop recruitment and training programme	
5	Staff unavailable to support migration over the weekend						Prepare register of staff availability and appropriate communication strategy	
6	Loss of key staff						Identify key staff and identify their availability at key stages. Also develop contingency plan for any unavailability	
7	Issue arising from disposal of surplus equipment prior to building closure						Develop disposal strategy and ongoing monitoring process	

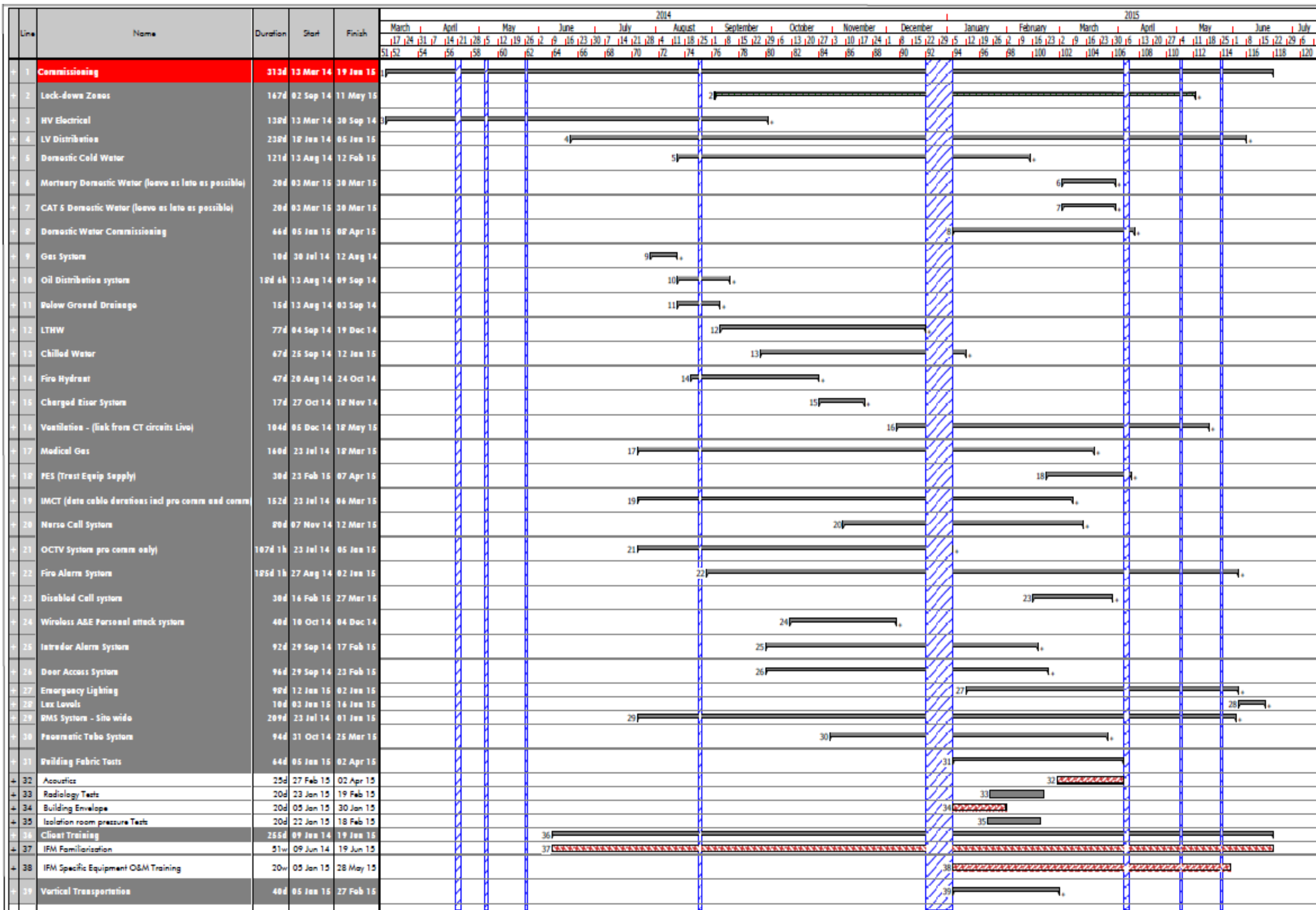
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Risk No	Risk Description	Financial / Non-Financial / Unquantifiable	Consequence (C)	Likelihood (L)	Risk (C x L)	Owner	Proposed Treatment / Mitigation	Action Taken
			(1 - 5)	(1 - 5)				
8	Risk of patient information being lost during migration						Develop information transfer strategy that complies with appropriate information governance policies.	
9	Failure to ensure security of vacated site						Develop security strategy for vacated site	
10	Delay in demolition of vacated building, e.g. added costs						Develop demolition plan which aims to appoint demolition contractor at least 6 months prior to handover	

Appendix B – Sample Migration Plan



Appendix C – Sample extract from a Technical Commissioning Plan



Appendix D – Sample extract from an Equipping Responsibility Matrix (ERM)

Group (ADB)	Sub groups	Generic Code (ADB)	Description	Purchase Qty	Transfer Qty	Initial Spec	Initial Procure	Initial Install	Initial Commissioning & training (IQ)	Operational Comm'g (OQ)	Performance Qualification (PQ)	Operation	Main-tenance	Repair	Testing	Refresh Spec	Refresh Replacement	Refresh Install	Decommissioning	Disposal	Validation
1		CAB119	CABINET, laminar flow, floor standing,	6	0	Client	contractor	contractor	contractor	contractor	Client	Client	contractor	contractor	Client	Client	contractor	contractor	contractor	contractor	Client
1		CAB119A	Cabinet Laminar Flow	1	0	Client	contractor	contractor	contractor	contractor	Client	Client	contractor	contractor	Client	Client	contractor	contractor	contractor	contractor	Client
1		RAC908D	Racking, metal, heavy duty	48	0	contractor	contractor	contractor	contractor	N/A	N/A	Client	N/A	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1		RAC909	RACKING, metal, heavy duty, 4 shelves, 2100 H x	4	0	Client	contractor	contractor	contractor	N/A	N/A	Client	contractor	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1		SHE132E	Shelving/ Racking: 2300L x 6000H x 1000D	4	0	contractor	contractor	contractor	N/A	N/A	N/A	Client	N/A	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1		SIN002	SINKTOP, stainless steel, bowl left hand,	6	0	contractor	contractor	contractor	N/A	N/A	N/A	Client	N/A	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1		SIN013a	Janitorial Unit, Stainless Steel, Hinged Grid & Tap,	7	0	contractor	contractor	contractor	contractor	N/A	N/A	Client	N/A	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1		VAN993	Vacumn system, to service labs	1	0	contractor	contractor	contractor	contractor	N/A	N/A	Client	contractor	contractor	contractor	N/A	N/A	N/A	N/A	N/A	N/A
1		WAT005	WATER BOILER, 10 litres resevoir, electric, wall	1	0	contractor	contractor	contractor	N/A	N/A	N/A	Client	N/A	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1		WOR004	WORKBENCH, heavy duty, 920 H mm, to design	5	0	Client	contractor	contractor	contractor	N/A	N/A	Client	contractor	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1		WOR993	WORKBENCH, Straight, 750D	49	0	Client	contractor	contractor	contractor	N/A	N/A	Client	contractor	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1		WOR994	Workbench, Laboratory, 720mmH, to design	4	0	Client	contractor	contractor	contractor	N/A	N/A	Client	contractor	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	x	WOR995	Workbench, Pharmaceutical, 920mmH, to design,	12	0	Client	Client	contractor	Client	Client	Client	Client	Client	Client	Client	Client	Client	contractor	Client	Client	Client
2	A	BOA006	BOARD; marker, whiteboard; dry wipe; with pen	2	0	Client	Client	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	A	BOA013	BOARD, Notice/Pin, Wall Mounted, 900 x 1200	18	0	Client	Client	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	A	CLO001	CLOCK, Battery, Wall Mounted	51	0	Client	Client	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	A	DIS013	DISPENSER, Paper towel, Wall Mounted	21	0	Client	Client	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	A	DIS014	DISPENSER/HOLDER, Paper Roll Wall Mounted	2	0	Client	Client	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	A	DIS015	DISPENSER, toilet paper, individual sheets	10	0	Client	Client	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	A	DIS024	DISPENSER, Soap, Wall Mounted	20	0	Client	Client	contractor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	A	DIS032	DISPENSER, Gel alcohol, wall mounted	13	0	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	N/A
2	B	LAB969	Containment Cabinet, Extracted, working area	2	0	Client	Client	contractor	Client	Client	Client	Client	Client	Client	N/A	Client	Client	contractor	Client	Client	Client
2	B	NET993	Wireless Network Access Point (Building Wide)	50	0	Client	Client	contractor	Client	Client	Client	Client	Client	Client	N/A	Client	Client	contractor	Client	Client	Client
2	B	RAC1000	Rack, Server, Switch, Router or Patch panel	4	0	Client	N/A	contractor	N/A	Client	Client	Client	Client	Client	Client	Client	Client	contractor	Client	Client	Client
3	Bx	BAL011	Balance, electronic, 300g 180H x 60W x 240D, with	8	0	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client
3	Bx	BAL012	BALANCE, electronic, 6kg, 70H x 20W x 250D, with	12	0	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client
3	Bx	BAL905	BALANCE, heavy Duty, 30kg, floor standing	3	0	Client	Client	Client	Client	N/A	N/A	Client	N/A	N/A	N/A	Client	Client	Client	N/A	Client	N/A
3	Bx	COM025	COMPUTER	65	0	Client	Client	Client	Client	N/A	N/A	Client	N/A	N/A	N/A	Client	Client	Client	N/A	Client	N/A
3	Bx	COM038	PRINTER (Computer), laser, A4, 220x450x450mm	3	0	Client	Client	Client	Client	N/A	N/A	Client	Client	Client	N/A	Client	Client	Client	N/A	Client	N/A
3	A	DES022A	Desk Unit, 1600 wide	9	0	Client	Client	Client	Client	N/A	N/A	Client	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	A	HOL003W	HOLDER, Sack, Small, 20L Capacity Freestanding	8	0	Client	Client	Client	Client	N/A	N/A	Client	N/A	N/A	N/A	Client	Client	Client	Client	Client	N/A
3	A	HOL007B	HOLDER, Sack, Large, 70L Capacity Freestanding	51	0	Client	Client	Client	Client	N/A	N/A	Client	N/A	N/A	N/A	Client	Client	Client	Client	Client	N/A
3	B	LAB906	FREEZER, -20 degree c, underbench	3	0	Client	Client	Client	Client	N/A	N/A	Client	Client	Client	N/A	Client	Client	Client	Client	Client	N/A
3	B/T	LAB917	FREEZER, -20 deg.C, upright, floor standing	1	1	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client	Client
3	A	TRO133	TROLLEY, dressing/instrument, stainless steel,	31	0	Client	Client	Client	Client	N/A	N/A	Client	N/A	N/A	N/A	Client	Client	Client	Client	Client	N/A
3	A	TRO235	TROLLEY, Soiled linen, single ring, stainless steel	3	0	Client	Client	Client	Client	N/A	N/A	Client	N/A	N/A	N/A	Client	Client	Client	Client	Client	N/A
3	A	TRO303B	TROLLEY, Refuse, 1200 W x 1000 H x 700 D mm,	1	0	Client	Client	Client	Client	N/A	N/A	Client	N/A	N/A	N/A	Client	Client	Client	Client	Client	N/A
4	A	CUR902	CURTAIN; shower to fit	2	0	Client	Client	Client	N/A	N/A	N/A	Client	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	A	DRA058	PEDESTAL, Mobile, 1 Deep & 2 Shallow Drawers,	41	0	Client	Client	Client	N/A	N/A	N/A	Client	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	A	LIC925	Licences (Network Access Point & Manaq't)	1	0	Client	Client	Client	N/A	N/A	N/A	Client	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	A	PIG924	Filing Tray, 3 high	41	0	Client	Client	Client	N/A	N/A	N/A	Client	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	A	SCR993	Deck Scrubber	4	0	Client	Client	Client	N/A	N/A	N/A	Client	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	Bx	TEL001	TELEPHONE, Handset	41	0	Client	Client	Client	N/A	N/A	N/A	Client	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	Bx	TEL912	TELEPHONE, for conference calls, desk top	2	0	Client	Client	Client	N/A	N/A	N/A	Client	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	A	TRA061	MOP	14	0	Client	Client	Client	N/A	N/A	N/A	Client	N/A	N/A	N/A	Client	Client	Client	Client	Client	N/A

Appendix D – Sample extract from an Equipping Responsibility Matrix (ERM)

Group (ADB)	Sub groups	Generic Code (ADB)	Comments	Emergency Supply	UPS	Electrical Supply	Domestic Water	WFI	RO	Drainage	Data	Heat Output	Dirty Steam	Pure Steam	O2	N2	Natural Gas	Compressed Air	Vacuum	Extraction	Special Services	Electrical Safety Testing	Service Requirement comments
1		CAB119	0	Y	0	230V 13A	n/a	n/a	n/a	n/a	n/a	500W	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Spur to wall	n/a
1		CAB119A	0	Y	0	230V 13A	n/a	n/a	n/a	n/a	n/a	500W	n/a	n/a	n/a	n/a	n/a	yes	yes	yes	n/a	Spur to wall	n/a
1		RAC908D	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1		RAC909	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1		SHE132E	0	0	0	n/a	yes	n/a	n/a	yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1		SIN002	0	0	0	n/a	yes	n/a	n/a	yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1		SIN013a	0	0	0	n/a	yes	n/a	n/a	yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1		VAN993	0	Y	0																	n/a	
1		WAT005	0	0	0	n/a	yes	n/a	n/a	yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1		WOR004	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1		WOR993	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
1		WOR994	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	x	WOR995	Group 3?	Y	0																	EST	
2	A	BOA006	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	A	BOA013	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	A	CLO001	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	A	DIS013	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	A	DIS014	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	A	DIS015	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	A	DIS024	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2	A	DIS032	0	Y	0	230V 13A	n/a	n/a	n/a	n/a	n/a	1KW	n/a	n/a	n/a	n/a	n/a	n/a	n/a	yes	n/a	EST	n/a
2	B	LAB969	3-phase	Y	0																	PAT	
2	B	NET993	0	0	0																	n/a	
2	B	RAC1000	0	0	Y																	n/a	
3	Bx	BAL011	0	Y	0	230V 13A	n/a	n/a	n/a	n/a	Yes	150W	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	EST	n/a
3	Bx	BAL012	0	0	0	230V 13A	n/a	n/a	n/a	n/a	Yes	150W	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	EST	n/a
3	Bx	BAL905	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	Bx	COM025	0	0	0	230V 13A	n/a	n/a	n/a	n/a	yes	100W	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	PAT	n/a
3	Bx	COM038	0	0	Y	230V 13A	n/a	n/a	n/a	n/a	yes	100W	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	PAT	n/a
3	A	DES022A	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	A	HOL003W	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	A	HOL007B	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	B	LAB906	0	0	0	230V 13A	n/a	n/a	n/a	n/a	yes	500W	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	EST	n/a
3	B/T	LAB917	0	0	0	230V 13A	n/a	n/a	n/a	n/a	n/a	50W	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	EST	n/a
3	A	TRO133	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	A	TRO235	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
3	A	TRO303B	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	A	CUR902	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	A	DRA058	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	A	LIC925	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	A	PIG924	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	A	SCR993	0	0	0	n/a	n/a	n/a	n/a	n/a	yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	Bx	TEL001	0	0	0	n/a	n/a	n/a	n/a	n/a	yes	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	Bx	TEL912	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	A	TRA061	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

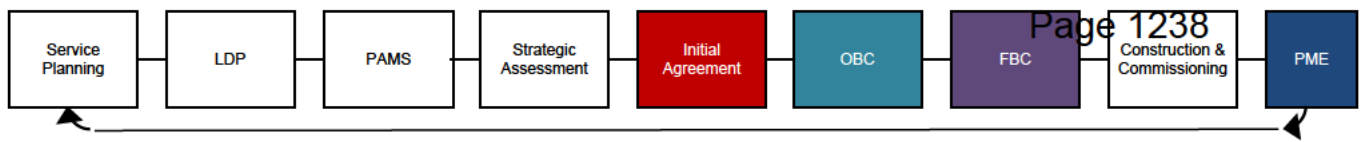
Appendix E – Schedule of Activities

Strategic Assessment	Initial Agreement (IA)		Outline Business Case (OBC)	Full Business Case (FBC)		Construction & Commissioning	Project Monitoring & Evaluation (PME)		
0 – Strategic Definition	1 – Preparation & Brief		2 – Concept Design	3 – Developed Design	4 – Technical Design	5 – Construction	6 – Handover	7 – In Use	
RIBA Stages : 2013 ↑ 2007 ↓	A	B #	C	D	E	F	K	L	
	Appraisal	Design Brief #	Concept	Design Development	Technical	Production	Construction	Post Practical Completion	
Operational Commissioning Tasks:	<p># denotes: commissioning briefing elements. These could occur at end of IA stage or, the very start of Outline Business Case</p>		<p>Operational Commissioning (OC): Early OBC</p> <ul style="list-style-type: none"> Appoint Commissioning Manager Establish commissioning team & processes Establish communications e.g. PD, PM, FM etc Review feasibility /options appraisal <p>Late OBC</p> <ul style="list-style-type: none"> Review Concept Design Outline Equipping strategy Outline Commissioning Master Plan (CMP) 	<p>Operational Commissioning (OC):</p> <ul style="list-style-type: none"> Reviews (min. pre-down selection(s) & mid FBC) Standard Operating Procedures (SOPs) Develop migration / occupation/ decant strategy Develop equipping strategy Develop communications & PR strategy Develop & coordinate enabling strategy Initial safety, security & decant strategy Outline communications & PR strateav 		<p>Operational (OC) pre-handover:</p> <ul style="list-style-type: none"> Review mock-ups, design changes etc, by Board/ Client or Contractor Arrange security & decant etc Commissioning Master Plan (CMP) Communications & PR Strategy Arrange Visits & Training Health Information & Technology Final Equipping strategy 	<p>Operational (OC):</p> <ul style="list-style-type: none"> Migration & Occupations Safety, Security & Decants IT. Equipping & Logistics Decommissioning Communications & PR <p>In Use/ Handover + circa 1yr</p> <ul style="list-style-type: none"> PME report on learning Ongoing monitoring and Reviews (min annually) 		
Technical Commissioning Tasks:	<p>Commissioning: #</p> <ul style="list-style-type: none"> Establish initial commissioning brief, processes & protocols incl. end-user/ staff learning 		<p>Technical Commissioning (TC): Early OBC</p> <ul style="list-style-type: none"> Establish working groups & technical 'champions' Review Guidance & Standards Review feasibility /options appraisal <p>Late OBC</p> <ul style="list-style-type: none"> Review Concept Design Agree key Derogations list 	<p>Technical Commissioning (TC):</p> <ul style="list-style-type: none"> Review contract terms, Guidance & Standards Review Technical Design; record risks etc Review Derogations lists; record risks etc Agree target NDEP (kW/m²), with HFS support Therapeutic & Accessible Design Strategy (TADs) Develop Commissioning Brief Requirement (CBR) 		<p>Technical (TC) pre-handover:</p> <ul style="list-style-type: none"> Final Standards and Derogations Report on risks, budgets etc Final TADs and Coordination Monitor technical commissioning Review Snagging / additional works Review NDEP and O&M manuals 	<p>Technical (TC):</p> <ul style="list-style-type: none"> Final Handover report Decommissioning <p>In Use: (+ circa 1yr)</p> <ul style="list-style-type: none"> PME report on learning ongoing O&M (min 3yrs) e.g. rebalancing vent system Ongoing monitoring and Reviews (e.g. annual NDEP) 		
BREEAM:			<p>BREEAM (BRE Environmental Assessment Method):</p> <ul style="list-style-type: none"> Pre assessment – Agree project specific target score with HFS support Design Stage Assessment 	<p>BREEAM (BRE Environmental Assessment Method):</p> <ul style="list-style-type: none"> Assessment – Confirm project target score and extent final credits now evidenced Issue interim 'design' certificate 		<p>BREEAM pre-handover:</p> <ul style="list-style-type: none"> Assessment – evidence construction score Issue NDEP energy cert. 	<p>BREEAM: (+ circa 1yr)</p> <ul style="list-style-type: none"> Issue 'final' certificate PME report on learning for future projects and O&M 		
HAI SCRIBE:	<p>HAI SCRIBE: #</p> <ul style="list-style-type: none"> Establish multi-dis. HAI group Brief HAI process & protocols incl. prior projects learning 		<p>Healthcare Acquired Infection -HAI SCRIBE:</p> <ul style="list-style-type: none"> HAI applied in concept and space planning Workshops (pre-down selection(s) & late FBC) 	<p>Healthcare Acquired Infection -HAI SCRIBE:</p> <ul style="list-style-type: none"> Confirm HAI applied in design details & specs. Workshops (pre-down selection(s) & late FBC) 		<p>HAI SCRIBE pre-handover::</p> <ul style="list-style-type: none"> HAI Construction confirmation & records 	<p>HAI SCRIBE: (+ circa 1yr)</p> <ul style="list-style-type: none"> PME report on learning for future projects and O&M 		
CDM:	<p>CDM: #</p> <ul style="list-style-type: none"> Establish multi-dis. CDM group Brief CDM process & 		<p>Construction Design Management (CDM):</p> <ul style="list-style-type: none"> CDM applied in concept and space planning Workshops : (late OBC, plus OA*) CDM risk assessments 	<p>Construction Design Management (CDM)::</p> <ul style="list-style-type: none"> Confirm CDM applied in design details & specs. Workshops (pre-down selection(s) & late FBC) 		<p>CDM pre-handover:</p> <ul style="list-style-type: none"> CDM Construction confirmation & records 	<p>CDM: (+ circa 1yr)</p> <ul style="list-style-type: none"> PME report on learning for future projects and O&M 		
BIM:	<p>BIM: #</p> <ul style="list-style-type: none"> Data Drop 1 – Initial Brief of operational requirement & Model 		<p>Building Information Modelling (BIM):</p> <ul style="list-style-type: none"> Data Drop 2 – Outline Solution Model 	<p>Building Information Modelling (BIM):</p> <ul style="list-style-type: none"> Data Drop 3 – Construction Information Model 		<p>BIM pre-handover:</p> <ul style="list-style-type: none"> Data Drop 4 – Operational and Maintenance Model 	<p>BIM: (+ circa 1yr)</p> <ul style="list-style-type: none"> Data Drop 5 – in-use Validation Information Model and ongoing O&M 		
Soft Landings:	<p>Soft Landings (SL):#Stage 1</p> <ul style="list-style-type: none"> Initial SL Brief, incl. SL training for all participants Establish multi-dis. SL group 		<p>Soft Landings (SL): Stage 2</p> <ul style="list-style-type: none"> Pitstop review 1: outline scheme reality check, incl. performance metrics & design/ FM targets Pitstop review 2: developed design reality check, incl. report on progress/ risks to achieving above Pitstop review 3: tender/ contract award reality check, incl. as above, with key future FM staff input 			<p>Soft Landings (SL): Stage 3</p> <ul style="list-style-type: none"> Pitstop review 4: pre handover review with actual FM staff input, test protocols etc. SL sign-off 		<p>Soft Landings (SL): 4 & 5</p> <ul style="list-style-type: none"> +1yr independent review On-site set-up & monitoring 	

SCOTTISH CAPITAL INVESTMENT MANUAL

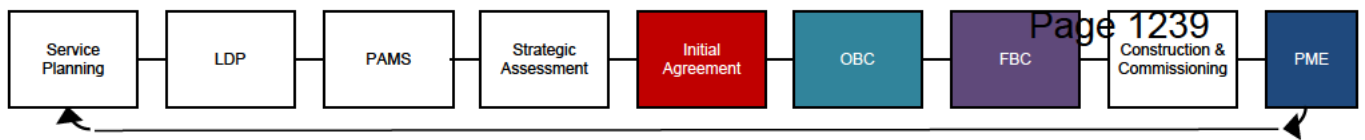
NHSScotland Design Assessment Process (NDAP)





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1 Overview

The purpose of the NHSScotland Design Assessment Process (NDAP) is to promote design quality and the service outcomes realised through this. It does this by mapping design standards to the key investment deliverables plus Scottish Government objectives and expectations for public investment, then demonstrating their delivery via self, and independent, assessments. NDAP supports continuous investment improvement, through sharing design standards and learning from comparable projects, thus building upon the best of what has gone on before.

1.1 Introduction

NHSScotland Design Assessment Process (NDAP) has been an integral part of the Scottish Capital Investment Manual (SCIM) since the 1st July 2010. The full SCIM suite of business case guidance is available at www.scim.scot.nhs.uk.

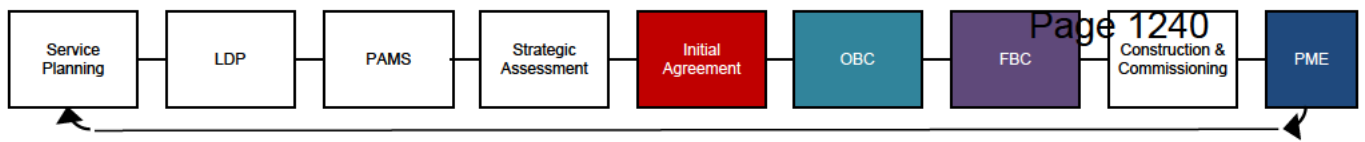
This guidance answers the following questions:

- how are project specific design standards established,
- when are the design assessments carried out,
- what are the submission requirements and responses,

Although the full process described below, and the requirement to refer projects to the NHSScotland Design Assessment Process (NDAP), applies only to projects that are to be considered by Capital Investment Group (CIG), it is intended and expected that Boards/ Client will develop Design Standards and utilise the assessment methodologies described below on all development projects.

NDAP supports Boards/ Clients achieve sustainable and best value investment. Early and regular dialogue at key project decision points will ensure this aim is achieved within an appropriate programme for each project.

NDAP support commences at the end of IA, and runs through-out OBC and FBC stages. Board/ Client submit their Business Case to CIG only following appropriate consideration of the formal NDAP responses. CIG approval is conditional on the level of support verified in the formal NDAP report sent at OBC or FBC submission. Feedback at Project Monitoring & Evaluation will ensure continuous improvement.

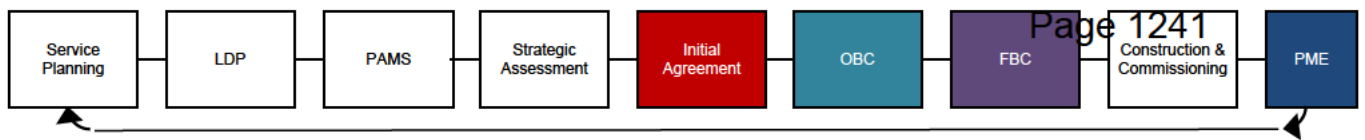


2 How are project specific design standards established ?

	Question	Response
HOW	How are project specific design standards established?	Prepare Brief: AEDET benchmark & target; map objectives into Design Statement; Design guidance & technical requirements.

There are two complimentary key aspects of quality consideration in the design of healthcare buildings. These can broadly be described as healthcare specific design - those aspects generally covered by NHSScotland Design Guidance; and general good practice in design – incorporating the whole human experience and effective resource use. Both aspects are key to delivering Board /Client investment objectives and Scottish Government /NHSScotland policy, they must work together to be sustainable, including providing whole life value for money (VfM).

Towards the close of IA stage, NDAP requires NHS Board/ Client to establish Design Standards in their brief. Architecture & Design Scotland (A&DS) and NHS Health Facilities Scotland (HFS) collaborate across the two aspects above, and on request, may be able to provide support. The bespoke Design Standards will incorporate NHSScotland Guidance, technical standards, AEDET benchmark and target, BREEAM and energy targets, plus a Design Statement; see details below. These form the first design control documents and establish the key demonstrable targets used to assess the design proposals at each key stage. The first NDAP report is a joint HSF/ A&DS review of the Board/ Client IA stage brief, recording their incorporation of appropriate Design Standards, i.e. in-line to deliver Board /Client investment objectives and Scottish Government /NHSScotland policy, plus any aspects of best practice. The report will state any recommendations; essential for attaining NDAP ‘supported’ status, or advisory ones to achieve good practice.



2.1 Design Standards -compliance with NHSScotland Design Guidance

“The SGHD must provide guidance on compliance with those aspects of statutory and mandatory requirements which are particular to the procurement, design and delivery of healthcare buildings and guidance on best practice. This will be effected through the support to be provided by HFS and A&DS under the tripartite working partnership with SGHD.”

[NHS CEL 19 \(2010\)](#) A Policy on Design Quality for NHSScotland.

NDAP will assess for compliance with current published Design Guidance. To facilitate this, Boards/ Clients must submit, at IA business case stage, a project specific list of the guidance they consider applicable to their development (see inset box below). This will be updated at OBC and FBC stage and will include any derogations, together with the technical reason for this proposed mitigation.

Projects submitted for NDAP will be assessed for compliance with:

a) NHSScotland current guidance:

NHSScotland policy letters (DLs, CELs, CMOs)	Scottish Government: Health and Social Care; Chief Medical Officer directorates
Scottish Health Planning Notes (SHPN)	Health Facilities Scotland
Scottish Health Facilities Notes (SHFN)	Health Facilities Scotland
Scottish Health Technical Memoranda (SHTM)	Health Facilities Scotland
Health Building Notes (HBN)	Dept of Health (England)
Health Technical Memoranda (HTM)	Dept of Health (England)
Health Facilities Notes (HFN)	Dept of Health (England)

plus relevant UK construction industry bodies best practice or design guidance publications: e.g. HSE, CIBSE, BRE, safety, sustainability, dementia, and equality.

Note: where there is a current SHPN or SHTM relating to a subject then it takes precedence over the equivalent HBN or HTM. Where there is no Scottish version of a document the English or Welsh document may be used. For further information on the current guidance status refer to Health Facilities Scotland (HFS) website: www.hfs.nhs.scot.uk/publications .

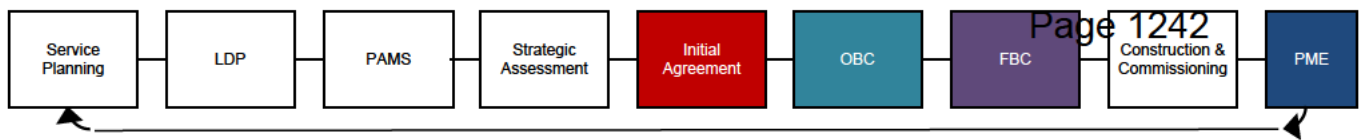
Including, but not limited to:

b) Statutory requirements

- Planning permission
- Building Regulations compliance
- Equality Act compliance
- Health and Safety Executive (HSE) compliance
- Construction (Design and Management) Regulations compliance

c) Other mandatory NHSScotland requirements – use of:

- Activity Data Base (ADB): www.adb.dh.gov.uk
- Achieving Excellence Design Evaluation Tool (AEDET): www.hfs.nhs.scot.uk
- #BREEAM Healthcare (BRE environmental & sustainability tools) www.breeam.org



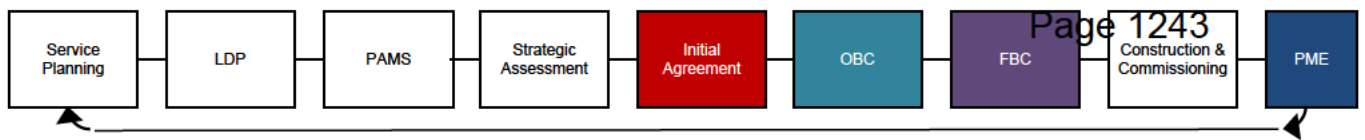
“All NHSScotland bodies engaged in the procurement of both new build and refurbishment of healthcare buildings must carry out an independent environmental accreditation for projects. The Scottish Capital Investment Manual requires that all new build above £2m are required to obtain a BREEAM Healthcare (or equivalent) 'Excellent' rating; all refurbishments above £2m to obtain a 'Very Good ' rating. If the capital costs are less than £2m, projects should undertake a BREEAM pre-assessment to establish whether BREEAM is a viable option.”

BREEAM - [NHS CEL 19 \(2010\)](#) Annex A - Mandatory Requirement 6.

NDAP will assess for ADB, AEDET, and BREEAM/ energy sustainability compliance and optimisation for Value for Money (VfM). To facilitate this, Boards/ Clients must submit at IA stage, a statement of project compliance and targets. At OBC and FBC business case stages, the Board/ Client must provide evidence of their progress or compliance and the technical reasons for any project specific mitigations. On request, HFS may be able to provide support..

2.2 Design Standards –development of the Design Statement

The development of a Design Statement is intended to assist Boards / Clients in using good design to get the most out of their development projects. The project specific Design Statement will link directly to Board / Client Strategic Assessment service outcomes, or a Design Action Plan, which sets the investment objectives for the development. The Design Statement is produced by the Board / Client, with initial workshops undertaken near the end of IA stage. These will map out what the physical and environmental solution must do in order to deliver success. The stakeholders agree a series of clear statements of intent, describing the essential issues in a ‘day in the life of’ their user groups. They then define demonstrable benchmarks i.e. the parameters for what success might look like for each user group, without pre-determining the actual design outcome. Thirdly, they agree an action plan, stating how their Design Statement will inform key decision-making throughout the project, including OBC and FBC stages, plus the evaluation of its ultimate success post-occupancy at Project Monitoring & Evaluation (PME) stage.



NDAP will assess if the Design Statement is line with Board /Client investment objectives and Scottish Government/ NHSScotland policy expectations. Boards/ Clients must submit their draft Design Statement towards the end of at IA stage. NDAP 'supported' formal report is then submitted to CIG in IA submission and on approval, establishes the design control document/ criteria for future NDAP review. On request, A &DS may be able to support your Design Statement development. We strongly recommend early discussions, to ensure NDAP integrated into your project programme, particularly if project is novel/ unusual.

The final 'supported' Design Statement is a key, project specific, design quality control document. It also supports the project as a user-friendly tool for:

- **briefing:** it describes the design intent, or design vision (to be included in the HLIP -High Level Information Pack). This is subsequently developed into the final design brief, supplemented by more detailed briefing materials such as schedules of accommodation, key adjacencies and room data sheets as and when prepared. Public sector briefing is often identified as under-developed and therefore the Design Statement is intended to address this.
- **communication:** it starts a conversation on the project direction with a wide range of stakeholders, in non-technical language. It captures a consensus view of benefits and benchmarks. It builds momentum, obtaining early buy-in and allays some frequent concerns on public sector commissioning.
- **promotion:** it will stimulate interest in the market in the direction and viability of the project. The Design Statement raises the profile of design to deliver outcomes; and will motivate the market to bring its best and most appropriate skills to the table

Appendix B provides guidance on the form and content of a 'Design Statement'. **Appendix C** describes how to develop your statements of intent and benchmarks, including 'non- negotiables' workshop.

3 When is the design assessment carried out?

	Question	Response
WHEN	When is the design assessment carried out?	IA: draft Design Standards /Statement etc -late OBC: strategy/ site/ OA -early; evidence IA met -late FBC: pre-down selection –mid; evidence IA met -late

The NHSScotland Design Assessment Process (NDAP) for all projects over the delegated value, sits in an advisory role to decision makers in both the Board / Client commissioning the project, and in the Capital Investment Group (CIG) within the Scottish Government Health & Care Directorate (SGHCD). This service is at no cost to NHS Boards under SGHCD’s tripartite partnership with HFS and A&DS.

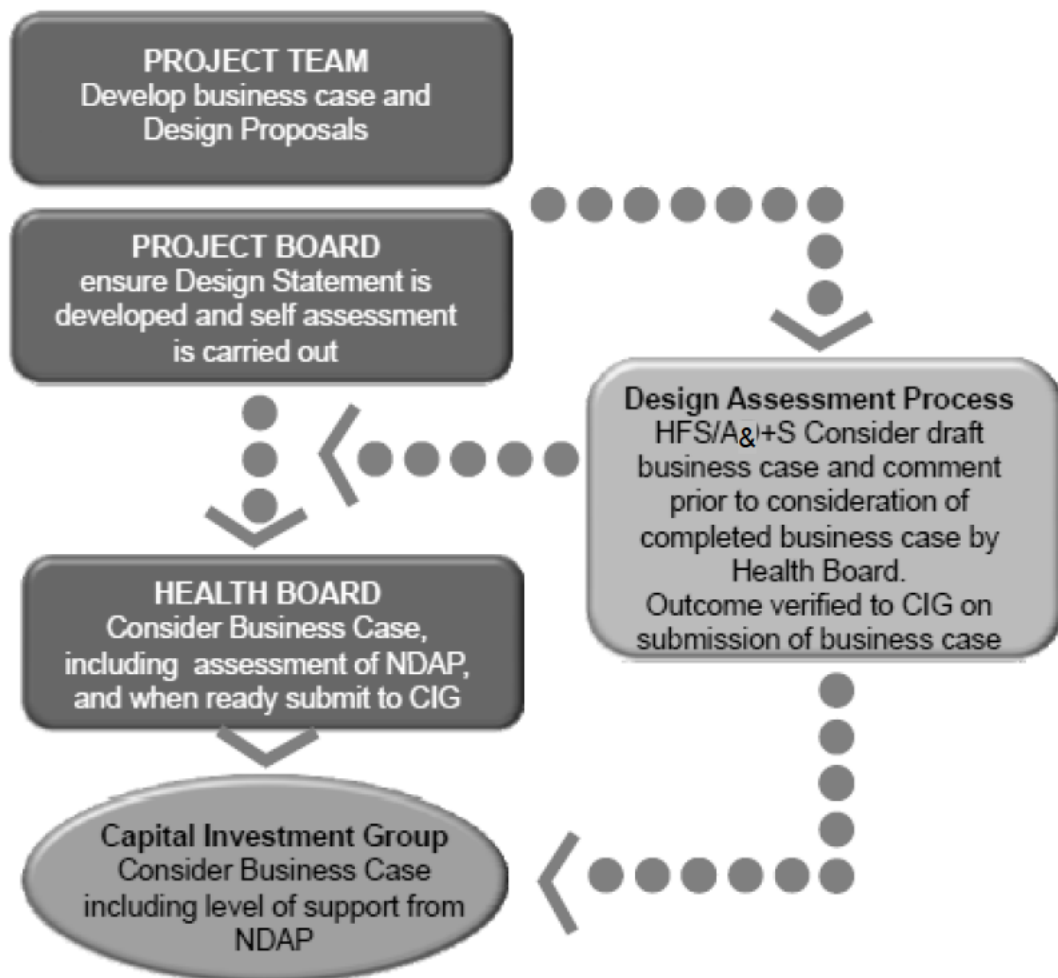
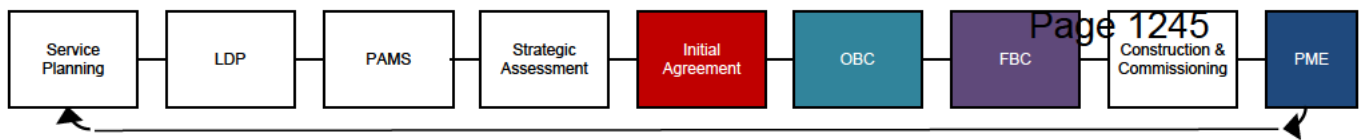


Figure 1: NHSScotland Design Assessment Process (NDAP) role in Business Case governance



The NHSScotland Design Assessment Process (NDAP) commences at IA stage. The development of project specific Design Standards, incorporating the Board/ Client bespoke Design Statement, provide the key criteria for future NDAP reviews. Formal NDAP reports are submitted to CIG at IA, OBC and FBC stage with Board/ Client submissions. Interim NDAP responses are available on request at strategic design stages. Interim response will be sought at early in OBC at site selection/ option appraisal; plus mid FBC pre-down-selection; to provide comfort/ confidence. We strongly recommend early discussions, to ensure NDAP integrated into your project programme, particularly if project is novel/ unusual.

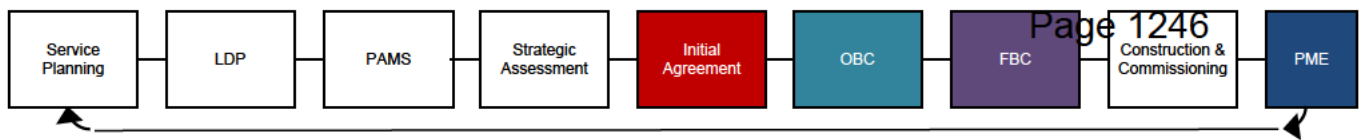
3.1 NDAP programme and time periods

It is recognised that different projects and different Boards/ Clients will require different lead-in and consultation periods, from the point of notification and to the submission to the Capital Investment Group (CIG). Therefore In order to provide NDAP services in a timely manner project teams are advised to establish an early dialogue with HFS and keep them informed of the project programme and key dates. Teams are encouraged to maintain the dialogue, particularly at key design development points, rather than waiting always until the formal reporting points in the business case, to ensure that risks can be identified and addressed timeously. **Appendix A** contains the NDAP pro-forma for both Notification and Submission. NDAP Activities and Information Flow diagrams are in **Appendix D**.

There are two methods of NDAP assessment at formal reporting points:

- **Desktop** assessment by staff at HFS and A+DS, based on submitted information, supplemented by project team conversations to clarify any matters.
- **Panel** assessment, based on submitted information and supplemented by presentation by, and discussion with, the project team including designers.

All schemes at IA will be viewed as a desktop assessment. Some schemes at OBC and/or FBC stage will be taken to a larger panel. If this is anticipated it will be notified to the Board/ Client in the response to the IA or OBC submitted previously. Teams are encouraged to maintain a dialogue between these reporting points to



ensure that risks can be identified and addressed timeously.

Notification Period: is the notice given by the Board to HFS that a scheme is to be submitted to the NDAP to allow resources for a timeous turn-around.

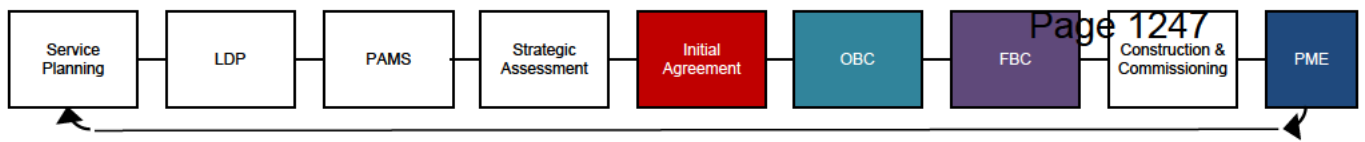
- **desktop** assessment: 14 days.
- **panel** assessment: 28 days. Submission information must be submitted 7 days in advance of the panel assessment to allow the panel to digest and prepare.

Period of consideration (from receipt of full information to NDAP response issue to Board/ Client): This is dependent on the scale of data and the group required to consider the proposals.

- **desktop** assessment: 14 days (unless extended discussions are necessary)
- **panel** assessment: 21 days(i.e. circa 14 days from panel discussion)

Note: a slightly quicker turn-around may be possible by prior consultation, and a verbal response will be provided at any panel meeting to allow work to progress whilst the paperwork is being done.

The Board/ Client is responsible for ensuring that the consultation is sought in a timeous manner to allow the NDAP response to be appropriately considered, and where necessary designs and costs to be updated, prior to Board/ Client approval, and in-line with their overall programme. We would recommend contingency time allowances for both the in-complete information at submission, plus design / cost incorporation of any NDAP response. This should be prior to the Board/ Client's CIG submission of each business case stage.

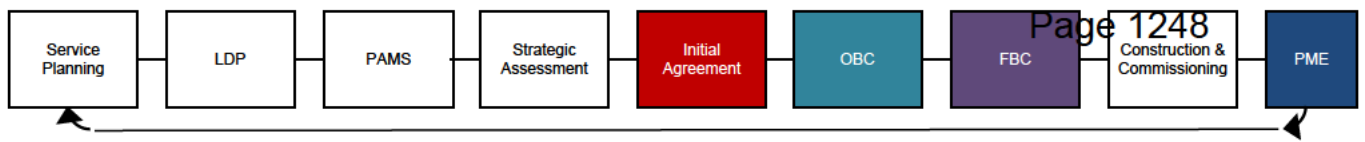


4 What are the submission requirements?

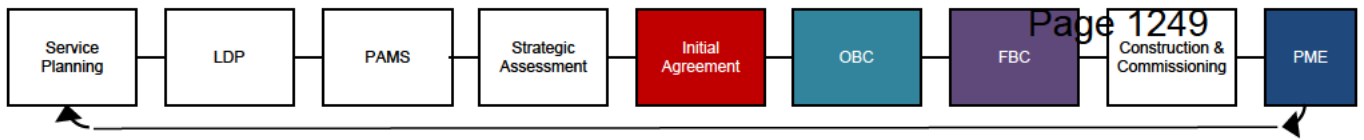
	Question	Response
WHAT	What are the submission requirements?	IA: set Design Standards, incl. IA Design Statement. OBC: concept design info. to evidence IA met FBC: detail design & VfM info. to evidence IA / OBC met.

The aim of the NHSScotland Design Assessment Process (NDAP) is to provide confidence that each project’s key investment deliverables, plus general Scottish Government policy are met. Each project team must satisfy itself that their brief is optimally met. NDAP is therefore not an additional information burden, but merely formalises both the self- and independent assessments, of each project teams own evidence of their design’s optimisation. Other than **Appendix A**’s pro-forma, NDAP deliverables will vary depending on scale, complexity and risks. **Appendix D** and tables below, follow RIBA guidance on expected level information at key stages.

		INITIAL AGREEMENT
IA	Stage -late	Late in the IA process when a facility investment project appears to be a serious possibility
	Methodology	Desktop assessment based on submitted information, supplemented by project team conversations to clarify any matters
	Submission requirements	Completed IA notification NDAP form (Appendix A) Design Statement in line with the enclosed guidance, and a note of the stakeholders involved at each stage (Appendix B & C) Commitment to Sustainability incl. BREEAM targets Commitment to Equality, incl. Access, Dementia, Health Promotion, etc. Initial list of key NHSScotland design guidance & technical Standards to be followed – e.g. SHPNs, SHTMs, SHFNs, HBNs; Activity Data Base; CIBSE etc Initial NHSScotland AEDET or equivalent healthcare Design Quality Indicator (DQI) incl. IA Target for proposed service investment; plus, IA Benchmark (for the existing service -if appropriate)

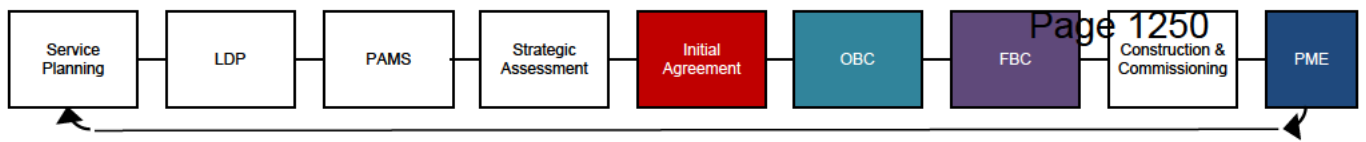


		OUTLINE BUSINESS CASE
OBC	Stage-early*	Early in the OBC process an informal consultation on strategy/ site/ option appraisals –*as required.
	Methodology	Interim assessment based on submitted information, supplemented by panel if appropriate, and project team conversations to clarify any matters
	Submission requirements	<p>Completed OBC notification NDAP form (Appendix A)</p> <p>Strategic context and Masterplan - (e.g. $\geq 1:1000$). If a project is one of a series or a key development for a site, a masterplan is required to demonstrate the potential interaction on other services & infrastructure.</p> <p>Site Selection /Option Appraisal- analysis of each option (e.g. $\geq 1:500$, photos, 3Ds, risks, HAI, VfM,); state strength/ risks for achieving the brief e.g. SWOT/; incl AEDET & Design Statement; plus HAI Scribe & WLC</p> <p>Initial concept sketches & sustainable design strategy</p> <p>Any key derogations, and their technical reasons</p> <p>Evidence of stakeholder engagement on option quality, incl AEDET, Design Statement self-assessment</p> <p>Confirmation Activity Data Base (ADB) use optimised</p>
	Stage-late	Late in OBC development, when the design is nearly formed yet is still open to influence – consultation and response /formal report to use in CIG and Planning.
	Methodology	<p>Will be as advised in the IA NDAP response, either:</p> <p>Desktop assessment based on submitted information, supplemented by conversations with project team to clarify any matters.</p> <p>Panel assessment, based on submitted information and supplemented by presentation by, and discussion with, project team including designers.</p>
	Submission requirements	<p>Completed OBC submission NDAP form (Appendix A)</p> <p>Concept Design incl. Arch, M&E, C&S, Fire, Landscape</p> <p>Outline drawings ($\geq 1:200$, key $\geq 1: 50$) & specifications</p> <p>Outline sustainability strategy</p> <p>Outline construction strategy incl. HAI, CDM H&S Plan</p>

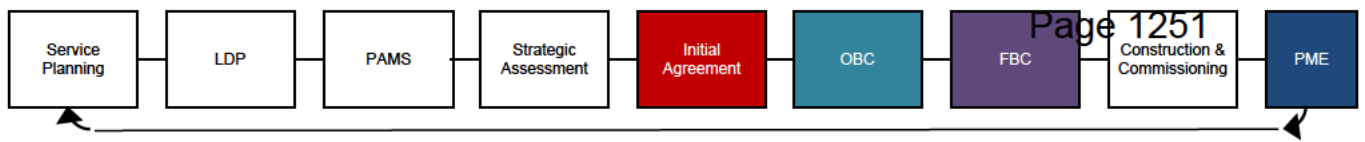


OBC	<p>Submission requirements (cont)</p> <p>3D sketches of key Design Statement spaces</p> <p>Completed Design Statement OBC self assessment</p> <p>Completed AEDET OBC self assessment</p> <p>Photographs of site showing broader context</p> <p>Evidence of Local Authority Planning consultation and/or alignment with Local Development Plan.</p> <p>Extract of draft OBC detailing benefits& risks analysis</p> <p>Evidence of HAI & CDM consultation</p> <p>Evidence Sustainability commitments will be met. e.g. accurate & NCM models (DSM). BREEAM, .CAB files and BRUKL; show how design will be optimised</p> <p>Evidence Equality & access commitments will be met.</p> <p>Evidence of VfM e.g. WLC on key design options</p> <p>Evidence Activity Data Base (ADB) use optimised.</p> <p>Evidence NHS guidance & technical standards will be met; list any derogations, with their technical reasons.</p> <p>OBC design report evidencing all above & IA brief met $\geq 1:500$, $\geq 1:200$, key $\geq 1: 50$; diagrams, sections plans, 3Ds, specs, comfort & energy DSMs, to RIBA Stage 2 Concept plus key elements developed to Stage 3</p> <p>For SFT schemes, also include: Design/ VfM/ Benefits related extracts of additional info required under current SFT procurement guidance</p>
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FULL BUSINESS CASE	
FBC	<p>Stage-mid#</p> <p>In mid FBC process an informal consultation, prior to competition or bidder down selection –#as required.</p>
	<p>Methodology</p> <p>Interim assessment based on submitted information, supplemented by panel if appropriate, and project team conversations to clarify any matters</p>
	<p>Submission requirements</p> <p>Completed FBC notification NDAP form (Appendix A)</p> <p>Evidence of development incorporation of OBC NDAP</p> <p>Developing Design incl. Arch, M&E, C&S, Fire, Landscape, plus specialists e.g. acoustics, biodiversity</p> <p>Developing drawings ($\geq 1:200$, key $\geq 1: 50$) & spec's</p> <p>Developing equality strategy incl. Access, Health Promo</p>



FULL BUSINESS CASE	
	<p>Developing sustainability strategy incl. BREEAM RAG ratings, BRUKL, accurate thermal & energy DSMs</p> <p>Developing construction strategy incl. HAI, CDM</p> <p>Developing commissioning strategy incl BIM, Soft Land'gs</p> <p>Update list of derogations, & their technical reasons</p>
Stage-late	Late in FBC development, when the design is nearly formed yet is still open to influence – consultation and response /formal report to use in CIG and Planning.
Methodology	<p>Will be as advised in the OBC NDAP response, either:</p> <p>Desktop assessment based on submitted information, supplemented by conversations with project team to clarify any matters.</p> <p>Panel assessment, based on submitted information and supplemented by presentation by, and discussion with, project team including designers.</p>
Submission requirements	<p>Completed FBC submission NDAP form (Appendix A)</p> <p>Developed & coordinated design incl. Arch, M&E, Fire C&S, Landscape, plus any specialists e.g. acoustics</p> <p>3D images of key Design Statement spaces</p> <p>Contract drawings (≥1:200, key ≥1: 50) & spec's</p> <p>Developed sustainability plan incl. BREEAM RAG ratings, BRUKL, accurate thermal & energy DSMs</p> <p>Developed equality plan incl. Access, Health Promo</p> <p>Developed construction plan incl. HAI, CDM</p> <p>Developed commissioning plan (CMP) incl BIM, Soft Landings, Equipping Responsibility Matrix,</p> <p>Evidence OBC /Interim NDAP response incorporated</p> <p>Completed Design Statement FBC self assessment</p> <p>Completed AEDET FBC self assessment</p> <p>Evidence of Local Authority Planning & Warrant status</p> <p>Extract of draft FBC detailing benefits& risks analysis</p> <p>Evidence of HAI & CDM consultation</p> <p>Evidence Equality & access commitments are met.</p> <p>Evidence of VfM e.g. WLC on key design options</p>



FULL BUSINESS CASE	
FBC	<p>Submission requirements (cont)</p> <p>Evidence Sustainability commitments are met. e.g. accurate & NCM models (DSM). BREEAM, .CAB files and BRUKL; show how design is optimised</p> <p>Evidence Activity Data Base (ADB) use optimised</p> <p>Evidence NHS guidance & technical standards are met; list any derogations, with their technical reasons.</p> <p>FBC design report evidencing all above & IA brief met $\geq 1:500$, $\geq 1:200$, key $\geq 1:50$; diagrams, sections plans, 3Ds, specs, comfort & energy DSMs, to RIBA Stage 3 Developed Design, plus key elements to Stage 4.</p> <p>For SFT schemes, also include: Design/ VfM/ Benefits related extracts of additional info required under current SFT procurement guidance</p>

Project teams are encouraged to maintain a dialogue with NDAP at key project decision points to allow smooth information flow and reduce programme risks.

4.1 Standard Business Case (SBC)

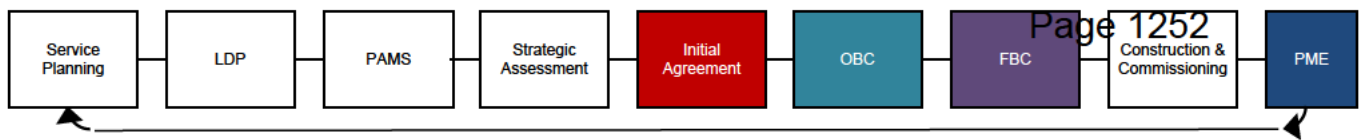
This is a combination of OBC and FBC into one Business Case Stage. Therefore the design assessment is a combination of both, and the level of final information submitted should be as FBC in tables above. NDAP IA stage report will confirm whether panel or desktop assessment is anticipated. Early NDAP engagement is required to determine the exact requirements to suit an SBC project programme.

4.2 NDAP response

The outcome of the assessment will be encapsulated in a brief report to cover: Joint Statement of Support (one of following options):

SUPPORTED : this may include recommendations as follows:

- Essential Recommendations: those areas requiring amendment or alteration in order to meet either national guidance or established benchmarks but which, in the opinion of the panel, can be amended without significant re-working. The Board will be required to submit agreed evidence to the panel before the 'supported' statement will be verified to the CIG.



- Advisory Recommendations: areas of potential for further improvement for the board’s consideration, including notes on aspects which (though not falling short of standards set in the Design Statement) are potential risks in relation to the development planning process.
- Notes of potential to deliver good practice: where the panel sees that the project is demonstrating the potential to deliver best practice in a particular area of design this will be noted.

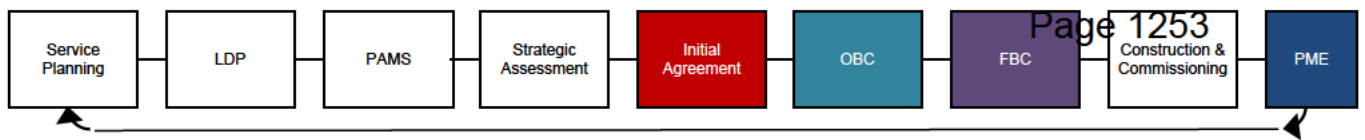
UNSUPPORTED: this will include a statement of the areas of concern that leads the panel to consider that the project is likely to fall seriously short of either the benchmarks set by the Board / Client, the standards established for healthcare buildings, or the expectations established in national policy (i.e. if the benchmarks established by the board do not address significant areas of policy or are low). Such areas of concern are considered, by the panel, to require significant reworking or reconsideration and are therefore unable to be resolved using the ‘essential recommendations’ above.

Next Stage Process: the notification required for the next assessment stage and the methodology of assessment that will be applied which will vary depending on the scale and complexity of the project.

Where a project is ‘unsupported’ it is anticipated that a further dialogue will be established to promote improvement in the areas identified. An amended submission, addressing these areas, would allow the report to be updated and the support status amended prior to progressing the project further through the business case process and prior to any verification to CIG.

4.3 NDAP sustainability response

NDAP supports sustainability by combining the mandatory BREEAM requirement and whole life value for money (VfM) brief with an independent assessment of the integrated design proposals. This allows BREEAM credits to be assessed on a project specific basis; and only where NDAP agreed unsustainable, eliminated from final target score. The NDAP formal report for each project and stage will confirm the ‘equivalent’ BREEAM scheme and minimum credits, for Board/Client



compliance with CEL19(2010) BREEAM Healthcare 'Excellent' or 'Very Good'.

4.4 Interaction with Capital Investment Group (CIG) process

HFS will notify the CIG when the process is completed and verify, to the CIG, the recommendation given to the Board. The submission sent, by the Board, to the Capital Investment Process (CIG) should include the information sent previously to the NHSScotland Design Assessment Process (NDAP) and the response received.

CIG will take the NDAP's response into consideration as follows:

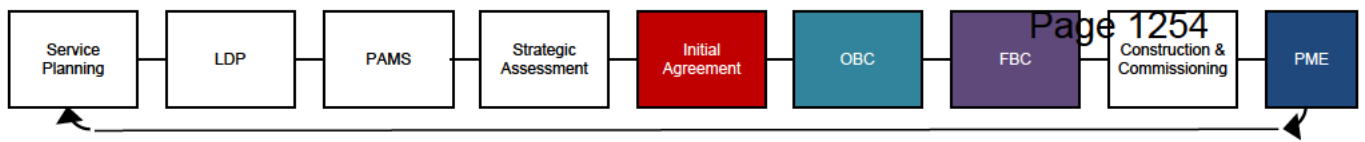
- Supported with no qualifications: CIG can approve.
- Supported with Essential or Advisory Recommendations: Evidence of how these will be addressed is required prior to CIG approval.
- Supported with notes of potential to deliver good practice : CIG can approve
- Unsupported: CIG will not approve.

Post occupancy Project Monitoring & Evaluations (PME) submitted to the CIG should have design related information copied to HFS to inform future projects and NDAP. This will include a PME AEDET and a 'Design Statement' self-assessment for those projects that incorporated these.

4.5 NDAP information publication

SGHD requires Boards to publish the outcome of Business Cases within one month of the CIG meeting. After the business case is in the public realm; key information submitted to the Design Assessment Process will be added to the NHSScotland Project Resource (Pulse) on the Healthier Places website www.healthierplaces.org .

The published information will include key project details, selected images and design documents such as the Design Statement. This is to aid briefing, shared learning between Boards/ Clients and to raise the profile of NHSScotland's developing estate. See Appendix B for further details on the web-based resources'.



4.6 NDAP Support, notifications and submissions

For NDAP **Notification** fill-in top 6 (min) rows and email the Appendix A pro-forma to:

NDAP: [REDACTED]

plus [REDACTED]

For NDAP **Submission** complete and email the pro-forma in Appendix A as above. Plus, email (as above), or send (2no electronic copies e.g. CDs, USB; and on request 2no scaled hardcopies), all stage specific information relevant to submission to:

- **NHSScotland Design Assessment Process**

c/o Director, Health Facilities Scotland

3rd Floor, Meridian Court, 5 Cadogan Street, Glasgow G2 6QE

Support and advice is available from HFS and A+DS staff, contact firstly:

- **Principal Architect** (Susan Grant)

Health Facilities Scotland, PCF part of NHS National Services Scotland

3rd Floor, Meridian Court, 5 Cadogan Street, Glasgow G2 6QE

For support and advice on the development of Design Statements see

www.healthierplaces.org and contact A+DS directly:

- **Healthcare Design Team** (Heather Chapple –Head)

Architecture and Design Scotland

Bakehouse Close, 146 Canongate, Edinburgh EH8 8DD

Appendix A

NHSScotland Design Assessment Process (NDAP)

Notification & Submission Pro-forma

APPENDIX A: NDAP NOTIFICATION & SUBMISSION PRO-FORMA	
PROJECT NAME	
NHSScotland Board/ Client	
Other client partners (such as Local Authority)	
Business Case Stage (*IAs will be desktop, thereafter as advised in previous NDAP response)	IA / OBC / FBC
Type of assessment anticipated*	desktop / panel
Client Contact (person who can respond to queries during review period)	name: phone: e-mail:
Additional Contact (such as the lead designer or design manager -if applicable)	name: phone: e-mail:
Project general details: (broad estimates)	GIFA construction value: procurement route:
Project Website (if available)	
Key dates	
• Target date for business case to be submitted to own Board	
• Target date for business case to be submitted to CIG	
• Date notification pro-forma submitted to NDAP	
• Target date Information submitted to NDAP	
• (if applicable) pre-agreed date for panel assessment	
• Date NDAP response needed	
Any other relevant information	

for Notification: complete 6 top rows (as a minimum); for Submission: ALL rows;
e-mail completed form to NDAP: [REDACTED]
plus: [REDACTED]

Note: key information submitted to NDAP will, after the business case is made public, be used in the NHSScotland project resource: www.healthierplaces.org

Appendix B

NHSScotland Design Assessment Process (NDAP)

Design Statement Guidance and examples

APPENDIX B: Design Statement Guidance and examples

The Design Statement sets out your approach to the project and how it will be delivered. The Design Statement should have three basic elements:

- The Non- Negotiables
- The Benchmarks
- The Self- Assessment Process

Design Statement Elements – The Non-Negotiables

As we use buildings, for the most part, to house and support human activity, the Design Statement is built around the needs of the people who the facility will directly impact upon and whole life value for money. It is then expanded to consider the elements needed to deliver on the broader responsibilities of using public money – that of addressing local and national needs – for the public purse to achieve economies of benefit .



Figure 2: People and Policy Areas for the 'Non-negotiables'

These are incorporated into the Design Statement by establishing, early in the project's development, agreed statements that give the core objectives of the project: non- negotiables that all key stakeholders can sign up to that derive from and articulate the Investment Objectives. These are the fundamental aspects that define

the success of the scheme - the criteria which, if you cannot achieve them, will seriously call into doubt the viability of the project.

It is anticipated that the non- negotiables will be established and agreed by the Project Board to encapsulate a broad consensus - from a range of points of view, from strategic planners to those with a more intimate and ongoing relationship with the proposed facility - rather than be written by one person. Appendix D suggests a series of questions that might be helpful in debating the non- negotiables with key stakeholders. Once established, these non negotiables encapsulate an agreed direction and as such can help resist incremental change in the brief due to external pressures or subjective opinions.

Design Statement Elements – The Benchmarks

One of the strategies that could bring real change, but which the public sector generally under-utilises, is benchmarking developments. The private developer knows that it has to surpass its competitor to obtain market advantage. The advantage to the public sector is less clear as we have yet to fully use the lessons learnt through POE's to understand the impact of a good design on the people and policy factors described previously. However benchmarking against the best and most relevant that NHSScotland and its sister bodies have delivered, and in doing so learning from the work of others, is perhaps the single most helpful tool available to improve both the standard of care environment and the image of the NHS in the community.

There are three basic ways of benchmarking:

- **Number** - by giving a numerical minima or maxima ...the entrance space must be at least 100m² in area
- **Relative** - by describing how you want it to be different to something that already exists ...the entrance space should be much bigger than the one in the current facility...
- **Comparator** - by pointing to something you want it to be like ...the entrance space should be like the one provided elsewhere...

Each of these has its benefits and pitfalls in terms of the extent of description and even prescription given to the designer and therefore this must be balanced in the methods and skills being employed to assess if this benchmark is being achieved. When setting a benchmark by using a comparator it is important to bear in mind that the purpose of choosing comparators is not to choose a predetermined design solution; it is to provide an example (or better still a range of examples) of 'what success might look like'.

The setting of benchmarks requires an understanding of what has gone before, and this is likely to require the project team to do some research and carry out site visits to learn from what others have done. As an initial step into this there are a number of web resources that can be used for scoping and as a source of reference projects or criteria. The most likely to be relevant are:

Healthier Places - www.healthierplaces.org

This website has been commissioned by SGHCD, HFS and A+DS to house information on good healthcare design to assist Boards/ Client in brief development and to raise awareness of the good practice being developed and delivered across NHSScotland and elsewhere. In addition to providing guidance on the development of 'Design Statements', and articles on healthcare design topics, the website holds a project resource (called 'pulse') that can be used in two main ways:

- Search by project type: to find out about recent and current developments in NHSScotland, and elsewhere, that are of a similar type to the one being considered by the client team. This will provide basic details on the project, the key team members involved and images where available. Key design documents, such as the 'Design Statement' and post occupancy Project Monitoring & Evaluations (PME) will be included once they are in the public realm to allow greater learning from what has gone before. It is envisaged client teams will use this search primarily at the outset of a project to:
 - to Establish similar works by colleagues in other Boards /Clients
 - Facilitate contact to allow shared learning
 - Establish possible visit lists for the client team and key stakeholders to raise awareness and understanding.
- Search by area: to find photographs of different areas of the healthcare

estate (such as entrance areas and consulting rooms) to raise awareness of what has been achieved elsewhere. It is envisaged client teams will use this search primarily to assist benchmarking within the Design Statement being developed for projects.

This resource will be maintained by A+DS using project information submitted to the NHSScotland Design Assessment Process (once the Business Case is in the public realm), case studies of completed developments, and supplemented by images submitted by users of the site. NHS Boards are encouraged to upload photographs taken during visits to inspirational developments (especially those outwith Scotland) to assist knowledge transfer between project teams.

Ideas - <http://ideas.dh.gov.uk>

Developed by NHSEstates in England this site describes design challenges of particular built elements (such as bedrooms or consulting rooms) and numerous examples of completed buildings that respond to these challenges.

Macmillan Quality Environment Mark -

www.macmillan.org.uk/HowWeCanHelp/CancerEnvironments/MQEM/MQEM.aspx

This self- assessment toolkit establishes aims for cancer care environments and views of what success might look like. Though designed particularly with cancer patients in mind many objectives have a much wider applicability. Case studies of environments that have been awarded the mark may be added to the site over time.

Over recent years, some well- designed developments have been delivered in Scotland and elsewhere that are supporting care and improving community infrastructure in the areas they serve. The purpose of mapping design into the business case is to extend this higher level of design quality across NHSScotland, and to promote a culture of continuous improvement by facilitating learning from what has gone before. Boards are expected to seek out and choose examples of good practice in design against which to benchmark their projects, such as those given in the example statements attached.

Benchmarks can be refined, as the project develops and more information is understood, or if better benchmarks become available. It is anticipated that the

benchmarks set at IA may be revisited in advance of the OBC and FBC to check that they are still the most relevant and useful means of checking that the project is achieving real value. The benchmarks should also be used in the Post Occupancy and Post Project Evaluation processes.

Design Statement Elements – The Self Assessment Process

This section of the Design Statement should establish the key design milestones for the project; then for each milestone set out the methodology and authority of the assessment, and the information and skills needed to carry it out. There are three areas to cover, **when**, **who** and **how**:

When

The business case process is designed to seek approval at key financial milestones, however these do not always coincide with key design milestones. Therefore the client team must consider and set out the key milestones that are most appropriate to their particular project. These may move relative to each other and relative to the business case milestones, dependant on the procurement route chosen, but are likely to include the following key milestones:

- Strategic Context, Site selection, or Option Appraisal
- Completion of Brief (inc. Public Sector Comparator if relevant) or High Level Information Pack (HLIP)
- Selection of Delivery/Design Team or pre-down selection
- Approval of early design concept / feasibilities (approx. RIBA stage 2)
- Approval of design to submit to Planning.
- Approval of design and specification to allow construction.
- Post occupancy Project Monitoring & Evaluations (PME)

Who

This is likely to be different depending on the milestone reached, the decision being made, and the risk associated with that decision.

The first thing to be decided therefore is the position of the particular assessment within the project governance - i.e. does the assessment sit within the project team (a matter that the project manager handles and reports to the project board on), or is the Project Board looking to undertake this function either itself or by seeking an

opinion that is independent from the reporting being given by the project manager and forms part of the Project Board's assurance process.

Thereafter the skills set of the people, process or advisor assessing the options or proposals must be established. It is likely that specific design training and/or expertise would be of value in assessing the information being given and in differentiating between alternatives.

For example: A common issue in design team selection is that many people do not feel they have the competence or confidence to differentiate strongly between the ability of different designers to design. This can result in them assessing the 'quality' aspect of the scoring in terms of the clarity and coverage of the written information submitted - their essay writing skill – rather than their potential to design a facility of lasting value.

How

Firstly, and most importantly, the decision making process for these key points must allow you to ascribe a value to the elements needed to achieve the benchmarks you have set yourself.

Secondly, set out how you will approach the assessment. This would include both the tools you might use (such as an AEDET or ASPECT workshop) and the information you will need to inform the decision: i.e. the shortlist of sites for selection are likely to require some level of design feasibility study to provide reliable information on whether the 'Non- negotiables' can be delivered on the site and the implications of doing so.

For example, a site that is ideal in terms of transport connections and immediate availability may be very close to a busy road and therefore building on that site will require significant investment in the building envelope (wall and window construction) to attenuate sound, and a more sophisticated building layout and section is likely to be needed to allow the use of natural ventilation to keep the development within the sustainability criteria. This knowledge may either prompt the choice of a different site, where all of these factors are more easily achieved, or if this site is still the preferred option will allow the proper planning and budgeting of a project on this site.

The information required to make good and informed decisions at these key points needs to be allowed for in the programme and budget of the project and therefore the process of self- assessment must be understood early in the project to allow the proper planning of this.

Example Design Statements

The following three example Design Statements have been worked up based on real NHSScotland projects.

They are included in this guidance both as an illustration of the likely form and content of such statements, but also as a demonstration of the standard of benchmark that is 'deemed to satisfy' policy. Projects submitted to the NDAP that set benchmarks below these standards will be unsupported by the Process.

As stated previously - it is expected that the Design Statements developed for each project will be the product of cross disciplinary working and represent the core objectives and benchmarks that have been agreed by a broad spectrum of stakeholders including those involved in strategic planning for the board and those with a more intimate link to the particular facility under consideration. A list of those persons involved in the development of the statement should be appended to the initial submission. The self- assessment process may more readily be written by the project manager, but must be agreed by the project board.

- [Example Primary Care Design Statement](#)
- [Example Acute Care Design Statement](#)
- [Example in-patient Design Statement](#)

Appendix C

NHSScotland Design Assessment Process (NDAP)

Design Statement Workshop - the 'Non-Negotiables'

APPENDIX C: Design Statement Workshop the 'Non-Negotiables'

Appendix B includes recommended headline areas (Figure. 2 people and policy) under which to consider and set the objectives of the project, but how these are used or interpreted will be specific to the aims of the project. To assist, the headline areas are expanded upon below by a series of questions and prompts, the responses to which should inform the development of project specific 'non- negotiables' .

PEOPLE

PATIENTS ...a welcoming, healing and reassuring place

Converting patient pathways into the patient experience, from leaving their home to returning home.

- **Accessibility and approachability** - Is this facility to be somewhere that is part of their experience of the community structure; a familiar place they go past when shopping, maybe even pop into for information or coffee, or somewhere that is likely to be a special trip for a significant purpose?
Therefore how important is location in terms of prominence, links with public transport, parking space etc. Is it something that's an integral part of the built fabric of the community or a place apart from it? What should the initial impression be like? Can we say that drivers (other than those with a specific physical need or urgency) will not be given priority over those arriving by other means - that the facility will not face the world through a sea of car parking?
- **Welcome and wayfinding** - a place that doesn't stress you out just finding where you have to be.
A single entrance space from which you can see all secondary reception points has been achieved in a number of primary and acute buildings - is this a non- negotiable for your project?
- **The overall ethos and appearance of the facility.**
A place that gives me confidence that I'll receive good care/treatment, and where I can retain some sense of myself rather than feel subsumed by the system - see also notes above on ethos.
- **The patient environment** - evidence based design links basic placemaking aspects such as views (positive distractions), control over your environment (noise, heat, ventilation and light etc), and a sense of privacy and human dignity to improved recovery. Can you pick a few key location types (reception/waiting areas, bedroom, and social space) and benchmark these?
- **Will there be somewhere nearby I can escape to if there's an opportunity – a breath of fresh air on a difficult day.**

PATIENTS ...a place that supports life

- For a children's hospital - a play space I can get to from my bed – an external space I can get to every day if I want - a place my family or friends can be with me....
- For a dementia unit - a place that doesn't add to my confusion, that is reassuring and somehow familiar. A place I can still do some things for myself.
- For many wards - a place I can rest, where I can think, where I can talk in confidence or be comforted in private. A place to get away for a moment to feel I've still some choices and control.
- For outpatient facilities - a place that doesn't depress me / stress me to go to and where those that have to come with me (a carer / a driver / my children) can be kept occupied.

STAFF ...a place that supports the work

- What is the working model that is to be supported by the new/altered facility? Does it transpose current working practices or are new more integrated working methods to be used?
Can this be embodied in any specifics such as only one reception point (as opposed to one for NHS, one for social work etc) or a commonality of room specification to allow space to be used as a resource rather than a territory?
- Is it a stand-alone facility, or are links to other services/ departments/ community facilities critical?
This will affect both the location and the facilities that will be needed within the development.
- What do staff need to function effectively in terms of accessibility of the facility, functionality of working space and places to escape. Are there particular spaces you wish to benchmark?
e.g. deciding early days that there's a particular theatre design that you wish to benchmark (perhaps open plan with windows) will inform very early design approaches to ensure a view that cannot be reciprocated.
- What is the ethos of the facility? What messages is it trying to convey and what behaviours are you looking to engender? The physical nature of the building (imposing or friendly) both embodies and influences the staff/patient relationship and the types, places and modes of communication.
- What level of efficiency are you looking for and how will you approach it? Does 'lean design' mean concentrating solely on staff walking distances (and potentially making the building deep plan and artificially lit/ventilated) or are you really looking at making the briefing and design work harder so that you get more than one benefit from any space (internal and external) that you build?

e.g. - Designing areas that have more than one use such as combined circulation/waiting spaces with something such as an atrium that assists with daylighting and ventilation: or, placing accessible external spaces (which may be need as lightwells etc) where they can have others uses such as formal and informal therapy, play space, additional waiting, respite and contribute to the biodiversity commitment?

- What are the additional benefits you're looking for from the development?
Are you looking for it to help with staff retention or event to attract new staff - if so which facilities does it have to beat to attract the skilled employees you want?

STAFF ...a place that'll not constrain future work

- How serious are you about future flexibility?
Will you require all consulting rooms to be the same, and a proportion of such rooms serviceable from more than one sub-reception to allow different users to occupy different areas as needs change? Will you require services to be routed such that walls can be removed/reconfigured more cheaply and the building refurbished on a floor by floor basis? What does flexibility mean in terms of your project?
- Is expansion space an absolute?

VISITORS ...a place to meet and discuss...a place that I can leave loved ones

- Do those accompanying, or visiting patients have a significant impact on the building function and the experience of patients?
Will they take residents for a walk, or need space to meet and chat with in-patients? Will they be waiting for loved ones to come out of treatment, and need information and reassurance? Will they be there for extended periods and need a breath of fresh air whilst not feeling too out of touch?
- How important are play and even crèche facilities to allow patients to attend and keep accompanying children occupied?
- Are there complimentary facilities or services that'd help meet broader objectives of community perception or accessibility of services / encouraging healthy lifestyles? Are there any other visitors you'd wish to encourage by facilities such as drop-in information point?
One of the community health facilities in Belfast has a cafe for use by those attending the GP, but it's so nice that it's popular with other locals and helps maintain the vibrancy and 'normality' of the place as it's a familiar part of the community structure rather than a place you go only when unwell.

POLICY

LOCAL NEEDS ... regeneration, community context and development

- **Local Board context:** how does this project link into the board's wider strategic asset management plan? Is it a piece in the onward development of a larger site and therefore must include elements that deliver on broader site masterplanning and infrastructure elements or set a standard for future developments on the site?
- What additional benefits does the board want from the project in terms of public perception?
- **Community Context:** The project is undoubtedly a significant investment in the community it serves, how should that be used to support the community structure including local needs for healthier places, regeneration and sustainable growth in the community?
e.g. The construction of a facility in a run-down area is a chance to develop local civic pride and a feeling of worth (thereby potentially increasing community ownership and reducing vandalism as well as setting a benchmark for future projects in the area) as opposed to developing something that is simply 'in keeping' with the current dilapidated nature.
- **Planning and Local Development:** In broad terms, the new Planning Act shifts the emphasis of planning to consider and plan "what goes where and why" and therefore local development plans should be supporting the identification and protection of community facilities, such as those for health. This, combined with Single Outcome Agreements, is a real opportunity to plan the location of facilities to support local development rather than in response to it.
An agreed 'non-negotiable' objective that requires the facility to be placed in a location the supports local regeneration or a planned shift in population, on a project commissioned jointly with the local authority, is likely to be a very powerful tool.
- **Local Board context:** how does this project link into the board's wider strategies such as commitments under the Single Outcome Agreement or local initiatives on health promotion, carer support etc?
How does the project fit into the board's strategic asset management plan? Is it a piece in the onward development of a larger site and therefore must include elements that deliver on broader site masterplanning and infrastructure elements or set a standard for future developments on the site? What additional benefits does the board want from the project in terms of public perception of the board?

e.g. the location and approachability of the facility can increase or reduce the likelihood of people walking or cycling to the facility and even using it.

NATIONAL NEEDS ... NHSScotland Policies

- **Better Health Better Care:** how does the project support the shift in care patterns and embody the concept of mutuality.
- **Sustainability and Asset Management:** how the project will allow you to improve your reporting on these elements.
- **Design Quality:** This is unlikely to need a specific objective as it should be met in achieving the others.

NATIONAL NEEDS ... Broader Governmental Objectives

- **The 5 Strategic Outcomes and 45 National Indicators:** Health boards, as bodies spending the public purse, are expected to contribute across all of these outcomes.
- **National policies on placemaking and design:** the call for leadership by example in the public sector.

Scotland's Infrastructure Investment Plan 2008 establishes that good design is key to achieving best value from all public sector investment.

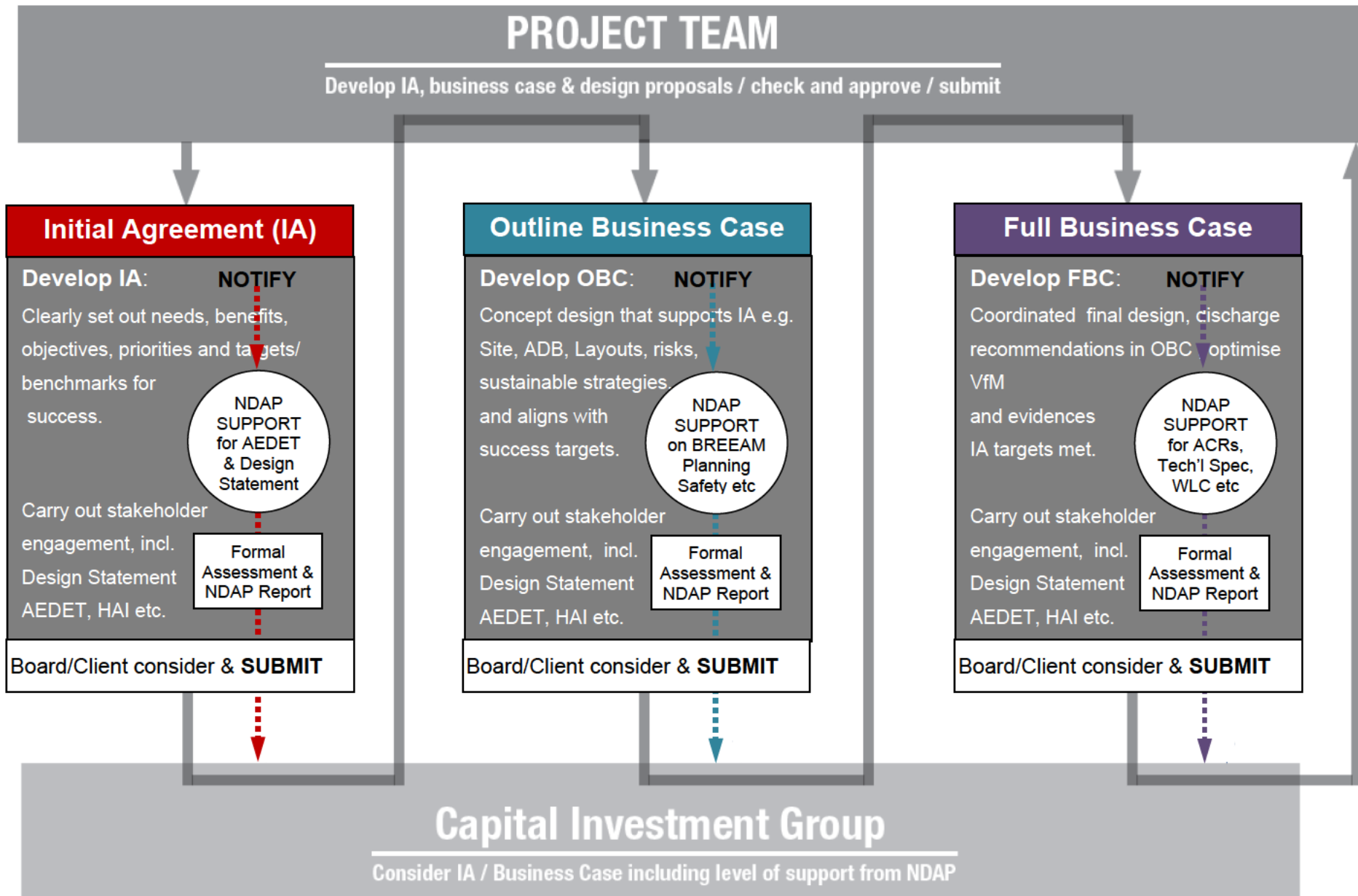
“In developing Scotland's infrastructure, the Scottish Government recognises that good building design should be responsive to its social, environmental and physical context. It should add value and reduce whole life costs. Good building design should be flexible, durable, easy to maintain, sustainable, attractive and healthy for users and the public; and it should provide functional efficient adaptable spaces ... Equally important to the design of individual buildings is the design of sustainable places. Well-designed buildings and places can revitalise neighbourhoods and cities; reduce crime, illness and truancy; and help public services perform better”.

It is this approach - which is underpinned by national policies on Architecture and on Place Making - that will inform appraisal of all projects.

Appendix D

NHSScotland Design Assessment Process (NDAP)

Activity and Information Flow Charts



Strategic Assessment		Initial Agreement (IA)		Outline Business Case (OBC)		Full Business Case (FBC)			Project Monitoring & Evaluation (PME)	
0 – Strategic Definition		1 – Preparation & Brief		2 – Concept Design		3 – Developed Design	4 – Technical Design		6 - Handover	7 – In Use
RIBA Stages : 2013 2007	A	B	C	D	E	F	L			
	Appraisal	Design Brief	Concept	Design Development	Technical	Production Info.	Post Practical Completion			
PM & Technical Information:	<p>PM & Technical Information: Establish Objectives:</p> <ul style="list-style-type: none"> Project Benefits Quality Objectives Sustainability Aspirations <p>Establish PM Documents:</p> <ul style="list-style-type: none"> Stakeholder groups Initial Brief, incl. Design Standards Initial Programme Initial Risk Register Cost Plan, incl. WLC Project Execution Plan (PEP) <p>Submit:</p> <ul style="list-style-type: none"> NDAP: pro-forma (appendix A) NDAP: Draft IA, incl. Design Info below CIG: Board verified NDAP report 		<p>PM & Technical Information: Early Stage:</p> <ul style="list-style-type: none"> Outline Brief , incl. Strategic Context & IA stage NDAP report High Level Information Pack(s) for Contracted Service(s) Site(s) Information Site Selection & Option Appraisal* Process <p>Develop:</p> <ul style="list-style-type: none"> Master Programme Master Risk Register Cost Plan, incl. WLC Project Execution Plan (PEP) Commissioning, O&M and Soft Landing Strategy Responsibility matrix & Communications plan <p>Submit:</p> <ul style="list-style-type: none"> NDAP: *Early Stage: interim feedback on Design Info below NDAP: pro-forma (appendix A) NDAP: Draft IA, incl. Design Info below CIG: Board/ Client verified NDAP report 		<p>PM & Technical Information: Finalise:</p> <ul style="list-style-type: none"> Down-selection of any bidders/ competitors # Final Brief, incl. OBC (& Interim) stage NDAP report(s) Site Information incl. investigations Master Programme Master Risk Register Cost Plan, incl. WLC Project Execution Plan (PEP) Commissioning, O&M and Soft Landing Strategy Responsibility matrix & Communications plan <p>Submit:</p> <ul style="list-style-type: none"> NDAP: #pre-down-selection: interim feedback on Design Info below NDAP: pro-forma (appendix A) NDAP: Draft IA, incl. Design Info below CIG: Board/ Client verified NDAP report 			<p>PM & Technical Information: Handover:</p> <ul style="list-style-type: none"> Confirm compliance e.g. Commissioning, O&M and soft landing & sustainable <p>Submit:</p> <ul style="list-style-type: none"> CIG: post occupational Project Monitoring & Evaluation (PME) reports, incl. Design Info below 		
	Design Information:	<p>Design Information -Brief: Establish:</p> <ul style="list-style-type: none"> AEDET or equal, healthcare (DQI) Design Quality Indicator, Target & Benchmark Design Statement to realise all Project Objectives, & list of stakeholders present Commitment to Sustainability incl. BREEAM Healthcare target statement. Commitment to Equality, incl. access, Dementia Health Promotion targets. list NHS guidance/ & technical standards to follow e.g. SHPNs, SHTMs, CIBSE etc. Accommodation Schedules based on above & NHS Activity Data Base Strategic Context: SA, PAMS, CPS, EAMS, Planning, Masterplan, etc. 		<p>Design Information -Concept Design: Early Stage:</p> <ul style="list-style-type: none"> Strategic Context & Masterplan studies e.g. ≥ 1:1000 . Site & Option Appraisal e.g. ≥ 1:500, photos,3Ds, HAI,CDM, VfM Initial concept sketches & sustainable design strategy Evidence of stakeholder consultation & DQI on preferred option <p>Late Stage:</p> <ul style="list-style-type: none"> Concept Design incl. Arch, M&E, C&S, Fire and Landscape Outline drawings & specifications Outline sustainability strategy Outline Construction Strategy incl. HAI, CDM H&S Plan Completed Design Statement OBC self assessment Completed AEDET OBC self assessment Photographs of site showing broader context Evidence of Local Authority Planning consultation and/or alignment with Local Development Plan. Extract from draft OBC detailing benefits and risks analysis Evidence of HAI & CDM compliance Evidence Sustainability commitments will be met. (e.g. accurate & NCM model information e.g. BREEAM, .CAB files and BRUKL Evidence Equality commitments will be met. Evidence of VfM e.g. outline WLC on key design options Evidence that Activity Data Base (ADB) is being fully utilised. Evidence design guidance will be met; list any derogations. Design Report evidencing above - ≥ 1:500, ≥ 1:200, key ≥ 1: 50; diagrams, plans, sections, 3Ds, specs, comfort & energy DSMs. 		<p>NDAP Information -Developed Design: Mid - Late Stage:</p> <ul style="list-style-type: none"> IA Design Standards, with any updates in benchmarks highlighted. Completed Design Statement FBC self assessment Completed AEDET FBC self assessment Evidence Local Authority Planning & other consents, plus any risks Draft FBC incl. benefits and risks analysis e.g. SCIM appendix 3. 3D images for key spaces identified in Design Statement. Evidence of HAI & CDM compliance and design optimised Evidence Sustainability compliance and design optimised, e.g. NCM plus accurate comfort & energy models (DSMs), BRUKLs, CAB files Evidence Equality and accessibility compliance & design optimised Evidence design coordination in place and resilient e.g. BIM Evidence commissioning, O&M & soft landings in place and resilient Evidence of VfM e.g. detailed WLC options, and design optimised Evidence that Activity Data Base (ADB) use is optimised. Evidence guidance & standards are met; list derogations & reasons Final Design Report, coordinated response across multi-disciplines, evidencing all above - ≥ 1:500, ≥ 1:200, ≥ 1: 50, ≥ 1: 20; 3Ds, plans, sections, specs, comfort & energy DSMs BREEAM, WLCs etc. 			<p>Design information -PME:</p> <ul style="list-style-type: none"> Complete BREEAM 1st annual energy NDEP PME Design Statement and AEDET, plus share any design learning. O&M/ Soft Landings, on going use optimisation and shared learning Submit for Design Awards 	

Strategic Assessment		Initial Agreement (IA)		Outline Business Case (OBC)		Full Business Case (FBC)		Project Monitoring & Evaluation (PME)			
0 – Strategic Definition		1 – Preparation & Brief		2 – Concept Design		3 – Developed Design	4 – Technical Design		6 - Handover	7 – In Use	
RIBA Stages : 2013 ↑ 2007 ↓		A	B	C		D	E	F	L		
Appraisal		Design Brief		Concept		Design Development	Technical	Production	Post Practical Completion		
Design Statement (DS):		<p>Design Statement (DS):</p> <ul style="list-style-type: none"> Establish workshop stakeholder group incl. service user reps and public Establish IA Design Standards, incl: Workshop DS1a: set 'non-negotiables' Workshop DS1b: set 'benchmarks' Develop and Consult NDAP Notification Submit & Review IA Design Standards NDAP Report IA 		<p>Design Statement (DS):</p> <ul style="list-style-type: none"> Establish early NDAP dialogue Informal consultations (early OBC, plus OA*) Workshop DS 2 a&b*: (late OBC, plus OA*) design self-assessments NDAP Notification (late OBC) Submit & Review Concept Design NDAP Report OBC <p>* additional OA Site/ Option Appraisal requirement, as well as for formal NDAP late OBC stage report.</p>		<p>Design Statement (DS):</p> <ul style="list-style-type: none"> Informal consultation (pre-down selection(s)# & mid FBC) – interim reports on request Workshop DS 3 a&b#: (pre-down selection(s)# & late FBC) design self-assessments NDAP Notification (mid-late FBC) Submit & Review Developed Design NDAP Report FBC <p># additional pre-down selection(s) requirement, as well as for formal NDAP late FBC stage report</p>		<p>Design Statement (DS):</p> <ul style="list-style-type: none"> Workshop DS 4: (PME at circa +1yr) assessment PME report on learning NDAP report, on request 			
AEDET / ASPECT:		<p>AEDET / ASPECT:</p> <ul style="list-style-type: none"> Workshop stakeholder group as above Workshop 1 benchmark current service facility(ies) - if applicable; 		<p>AEDET / ASPECT:</p> <ul style="list-style-type: none"> Workshop 2 a&b*: (late OBC, plus OA*) design self-assessments 		<p>AEDET / ASPECT:</p> <ul style="list-style-type: none"> Workshop 3 a&b#: (pre-down selection(s)# & late FBC) design self-assessments 		<p>AEDET / ASPECT:</p> <ul style="list-style-type: none"> Workshop 4: (PME at circa +1yr) assessment 			
Technical / Guidance:		<p>NHS Guidance & technical Standards:</p> <ul style="list-style-type: none"> Agree key Guidance & Standards appropriate for the project; incl, shared learning on prior projects 		<p>NHS Guidance & UK technical Standards:</p> <ul style="list-style-type: none"> Update Guidance & Standards Agree key Derogations list 		<p>NHS Guidance & UK technical Standards:</p> <ul style="list-style-type: none"> Evidence contract terms, Guidance & Standards Evidence Derogations lists; incl. technical reasons/ mitigations. 		<p>NHS & technical Standards:</p> <ul style="list-style-type: none"> Final Standards and Derogations Prepare O&M manuals 		<p>NHS & technical Standards:</p> <ul style="list-style-type: none"> PME report on learning for future projects and ongoing O&M (circa +1yr) 	
BREEAM:				<p>BREEAM:</p> <ul style="list-style-type: none"> Pre Assessment – Agree project specific target score with HFS support Design Stage Assessment 		<p>BREEAM:</p> <ul style="list-style-type: none"> Assessment – Confirm project target score and extent final credits now evidenced Issue interim 'design' certificate 		<p>BREEAM:</p> <ul style="list-style-type: none"> Assessment – evidence construction score Issue NDEP energy cert. 		<p>BREEAM: (circa +1yr)</p> <ul style="list-style-type: none"> Issue 'final' certificate PME report on learning for future projects and O&M 	
HAI SCRIBE:		<p>HAI SCRIBE:</p> <ul style="list-style-type: none"> Establish multi-disciplinary HAI group HAI process & controls to be briefed incl, shared learning on prior projects 		<p>HAI SCRIBE:</p> <ul style="list-style-type: none"> HAI applied in concept and space planning Workshop H2 a&b*: (late OBC, plus OA*) HAI risk assessments 		<p>HAI SCRIBE:</p> <ul style="list-style-type: none"> Confirm HAI applied in design details & specs. Workshop H3 a&b#: (pre-down selection(s)# & late FBC) HAI risk assessments 		<p>HAI SCRIBE:</p> <ul style="list-style-type: none"> HAI Construction confirmation & records 		<p>HAI SCRIBE: (circa +1yr)</p> <ul style="list-style-type: none"> PME report on learning for future projects and O&M 	
CDM:		<p>CDM:</p> <ul style="list-style-type: none"> Establish multi-disciplinary CDM group CDM process & controls to be briefed incl, shared learning on prior projects 		<p>CDM:</p> <ul style="list-style-type: none"> CDM applied in concept and space planning Workshop C2 a&b*: (late OBC, plus OA*) CDM risk assessments 		<p>CDM:</p> <ul style="list-style-type: none"> Confirm HAI applied in design details & specs. Workshop C3 a&b#: (pre-down selection(s)# & late FBC) CDM risk assessments 		<p>CDM:</p> <ul style="list-style-type: none"> CDM Construction confirmation & records 		<p>CDM: (circa +1yr)</p> <ul style="list-style-type: none"> PME report on learning for future projects and O&M 	
BIM:		<p>Building Information Modelling:</p> <ul style="list-style-type: none"> Data Drop 1 – Initial Brief of operational requirement & Model 		<p>Building Information Modelling:</p> <ul style="list-style-type: none"> Data Drop 2 – Outline Solution Model 		<p>Building Information Modelling:</p> <ul style="list-style-type: none"> Data Drop 3 – Construction Information Model 		<p>BIM:</p> <ul style="list-style-type: none"> Data Drop 4 – Operational and Maintenance Model 		<p>BIM: (circa +1yr)</p> <ul style="list-style-type: none"> Data Drop 5 – in-use Validation Information Model and ongoing O&M 	
Planning:				<p>Planning:</p> <ul style="list-style-type: none"> Pre Planning Consultation* (If applicable) NDAP report used as consultation evidence Planning In Principle Approval (If applicable) 		<p>Planning:</p> <ul style="list-style-type: none"> NDAP report used as evidence of A&DS Design Review undertaken by Planning Planning Approval 					

APPENDIX A: NDAP NOTIFICATION & SUBMISSION PRO-FORMA	
PROJECT NAME	
NHSScotland Board/ Client	
Other client partners (such as Local Authority)	
Business Case Stage (*IAs will be desktop, thereafter as advised in previous NDAP response)	IA / OBC / FBC
Type of assessment anticipated*	desktop / panel
Client Contact (person who can respond to queries during review period)	name: phone: e-mail:
Additional Contact (such as the lead designer or design manager -if applicable)	name: phone: e-mail:
Project general details: (broad estimates)	GIFA construction value: procurement route:
Project Website (if available)	
Key dates	
• Target date for business case to be submitted to own Board	
• Target date for business case to be submitted to CIG	
• Date notification pro-forma submitted to NDAP	
• Target date Information submitted to NDAP	
• (if applicable) pre-agreed date for panel assessment	
• Date NDAP response needed	
Any other relevant information	

for Notification: complete 6 top rows (as a minimum); for Submission: ALL rows;
e-mail completed form to NDAP: [REDACTED]
plus: [REDACTED]

Note: key information submitted to NDAP will, after the business case is made public, be used in the NHSScotland project resource: www.healthierplaces.org



ACHIEVING EXCELLENCE DESIGN EVALUATION TOOLKIT

**AEDET Refresh for NHSScotland
Instructions, scoring and guidance**

AEDET Refresh

Healthcare building design frequently involves complex concepts, which are difficult to measure and evaluate. The Achieving Excellence Design Evaluation Toolkit (AEDET) evaluates a design by posing a series of clear, non-technical statements, based on three key criteria: **Functionality, Build Quality and Impact**.

This current version of AEDET, known as AEDET Refresh, represents a minor update to the AEDET Evolution, which in turn was a significant development of the original AEDET tool. It retains the same objectives and deals with similar issues, but extends these to provide for a more sustainable, health promoting and holistic approach, in line with recent NHS policy (CELs). Although it has the same objectives and deals with similar issues, it is not possible to compare scores directly between AEDET, AEDET Evolution and AEDET Refresh

The AEDET toolkit is a checklist, assisting NHS Boards and other bodies in determining and managing their design requirements from initial proposals through to post project evaluation. It should be used as a discussion agenda, a stakeholder engagement tool and a benchmarking tool for the design briefing and for reviews. AEDET forms a Key Performance Indicator (KPI) for project procurement, including in current Frameworks Scotland 2, HUB, and NPD routes. It should be used for both NHS and non-NHS funded schemes.

The use of a Design Quality Indicator Tool such as AEDET is a mandatory requirement of the NHSScotland Design Assessment Process (NDAP) under [NHS CEL 19 \(2010\)](#) A Policy on Design Quality for NHSScotland.

THE TOOLKIT

The NHS worked closely with CABE, the CIC and Sheffield University to develop the original AEDET evaluation criteria to ensure they worked within a common industry framework. The AEDET Refresh toolkit has been updated as part of the Scottish Capital Investment Manual (SCIM) refresh 2015 to embrace current Chief Executives Letter (CELs), good practice, guidance and better define the interface with NDAP Design Statements (ds).

AEDET Refresh maintains the 3 main criteria of – **Functionality, Build Quality and Impact**; split into 10 sections. Scoring these criteria allows clients and funding bodies to assess how well a wide range of the project stakeholders have confidence in a proposed (or existing) facility performs against a series of statements defining design best practice.

The outcome is not a score, but a way of monitoring an improvement in the confidence and consensus that a range of stakeholders have that the design has/ is or will deliver. The most important records are the notes and actions from the discussions, providing design insights, lessons learned, as well as future priorities or challenges needing to be addressed.

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OVERVIEW

AEDET is designed as a tool for evaluating the quality of design in healthcare buildings. It delivers a profile that indicates the strengths and weaknesses of a design, or an existing building, at a particular stage/ time. It is not meant to produce a simplistic single overall score. The nature of the project and design priorities, means it may not be possible to produce a solution that would have the maximum score for all sections. Indeed it may be the case that a high score for one statement reflects a design that inevitably should be scored low on another statement. A single score would thus be misleading and uninformative.

Under the mandatory NHSScotland Design Assessment Process (NDAP) Guidance, all NHS Project Teams are required to set their AEDET target (and benchmark if the facility is existing) at Initial Agreement stage and submit this part of the IA NDAP submission prior to the Scottish Government Health and Social Care Department (SGHSCD) Capital Investment Group (CIG) meeting.

AEDET is most often used in workshops, by key project stakeholders. It is desirable that a stakeholder with experience of AEDET facilitate the group to avoid excessively lengthy debate on logistics rather than the project design. HFS may assist in sourcing an AEDET facilitator if required

AEDET is a checklist tool specifically directed towards achieving excellence in design quality, rather than ensuring compliance with legislation, regulation and guidance. High scores in AEDET do not therefore necessarily guarantee compliance. For example, sustainability and energy consumption rates of the design are only dealt with in AEDET on a cursory level. BREEAM Healthcare must be used for the evaluation of designs for environmental and energy issues. In addition the DESIGN STATEMENT required by NDAP, must describe the specific project benefits and their links to the specific environment qualities required to realise these. AEDET should not therefore be used in isolation, as a design can only be demonstrated to be successful in conjunction with the wider noted set of tools, used appropriately at key stages for each project.

Who should use AEDET Refresh?

AEDET is designed to be used by all those involved in the commissioning, production and use of healthcare facilities. In particular public and private sector commissioning clients, developers, design teams, project managers, estates/ facilities managers and design champions may find AEDET helpful. User clients such as patient, carer, visitor and partner representatives, plus members of the general public should also be able to use AEDET, with facilitation.

It is anticipated project stakeholders work together to ensure the group knows the facility/ design proposals, understands the AEDET statements and through discussion reach a wide consensus on the scores and record notes and actions.

When should AEDET Refresh be used?

- to evaluate existing buildings in order to compare them understand their strengths and weaknesses, or provide 'benchmark' for re-provision.
- on 'imaginary' facilities in order to set the 'target' expected from future facilities at the briefing stage
- on the proposals for new facilities in order to evaluate them, or compare designs as part of the Options Appraisal or bid evaluation process
- at various stages during the design of healthcare buildings. As the level of detail of the information available increases it may be possible to respond to more of the statements in AEDET.
- to satisfy SCIM, it is anticipated at least one AEDET (or DQI) workshop (depending on the scale and complexity of the project) should be held at the following key stages, and submitted via NDAP,
 - use AEDET generic question set only:
 - Initial Agreement (IA) – Target (& Benchmark) score(s)
 - use combination of AEDET and project specific Design Statement (DS):
 - Outline Business Case (OBC)
 - Full Business Case (FBC), or Standard Business Case (SBC)
 - Post Occupancy Evaluation (POE)

What is required for AEDET Refresh?

The minimum you need is the AEDET scoring layer. The guidance layer may be helpful particularly if you are using AEDET for the first time. At all later stages, the Design Statement (DS) should be used in conjunction with AEDET. With generic scoring elements cross-referenced to, or replaced by the project specific DS sections Therefore the Design Statement (DS) is also scored.

AEDET is a helpful tool to enable a group to come to a common understanding and consensus. It is helpful to have a facilitator who can moderate the group discussions, plus a scribe to record the agreed scores, notes and actions. There are two ways of doing this:

- You may try to arrive at a consensus for each AEDET / Design Statement scoring using discussion of the group as a whole.
- You may prefer first to score all the AEDET / Design Statements individually and then come together as a group to resolve differences.

In either case it is important that the facilitator should ensure that any representatives of the public or patients who may lack experience or technical knowledge are able to express their views and have them listened to. The suppliers of the proposal, i.e. contractor, or design team should not participate

in the scoring, but may be present to explain the proposals in response to particular issues raised during the discussions.

Always make sure about the scale at which you are using AEDET. For example this could be at a whole programme; campus; facility or department scale. It is particularly important to agree this before you begin if you are working as a group. To help decide on the scale you need to look first at the level of detailed information available. If you decide to work at a smaller scale than a complete building then the NHS ADB (Activity Database) system may be helpful in deciding how to sub-divide the building. This database holds a master project, which contains information on some 30 departments and 1,500 rooms (as room data sheets).

Instructions for AEDET Refresh use

AEDET Refresh has 3 layers:

- The scoring layer on which you score generic statements
- The guidance layer with generic descriptions of quality and best practice
- The Design Statement, mapping project specific benefits to key qualities required to realise them, using descriptions and images of success.

Different uses for AEDET Refresh

AEDET Refresh may be used in various ways, at different scales and by single or multi-disciplinary groups:

- In standalone form
- Evaluation workshops (commonest use, and preference for NDAP)
- Benchmarking uses

In standalone form

People and NHS organisations can use the toolkit as a standalone for various purposes. In this form it not only provides an evaluation toolkit but also serves as a standing agenda, which can inform many design based policies.

Evaluation workshops

Stakeholder design assessment workshops are the most common use of AEDET Refresh. These are a requirement for SCIM and submitted via NDAP.

It is important to make sure that a balanced, wide-ranging group of multi-disciplinary stakeholders are involved in the workshop. Experience to date suggests that roughly between 8 and 20 people representing the following groups should be invited to take part in an AEDET workshop, but those groups with an asterisk would not usually score:

- NHS Boards
- Patient groups
- Carer / visitor groups
- NHS staff
- Board strategic management group
- Partner staff /groups
- Community groups
- Clinical user groups
- Local health partnerships
- Arts & Therapeutic environment groups
- Health Promotion groups
- Wider public representative groups
- Project Team - contractor and designers *
- Technical Advisors - consultants and designers *
- Health Facilities Scotland (HFS) *
- Architecture + Design Scotland (A+DS) *

Benchmarking uses

Under SCIM 2015 refresh, all NHSScotland Board's Project Teams are required to set their AEDET target scoresheet (and benchmark scoresheet if the facility is existing) at Initial Agreement (IA) stage and submit this part of the IA NDAP submission to HFS.

This Board approved target (and benchmark) will form part of the design brief and will be used to evaluate the development of the design through the RIBA Stages. It will also be used at Post- Occupancy Evaluation (POE) to benchmark and record the final design qualities and lessons learnt to inform future projects.

At what stages should AEDET Refresh be used?

The AEDET Refresh tool has been devised to enable NHS Boards and their project teams to monitor and score a design. The toolkit should be used firstly to set the design quality benchmark at IA stage. It's use is then mandatory as a monitor of design quality through OBC and FBC stages, before being applied in the Post- Occupancy Evaluation (POE). Thus it cannot only be used to inform the briefing process, but to assess the degree of compliance with the original brief and also to identify lessons learnt for future projects.

The criteria used in the toolkit may be adapted by Boards (through agreement with HFS) for incorporation into their specifications of design vision, philosophy and quality, which will form an important part of their briefing, whether using NHS capital funding, or a HUBHUB or NPD project.

The AEDET Refresh design evaluation process consists of the following stages:

Set and agree the timetable of milestones against which design will need to be evaluated for the particular project (refer to the NDAP Guidance which identifies the timetable for the common procurement routes);

- Assemble the data and arrange the workshop date, venue, etc, for each milestone. These dates should be set well in advance in order to ensure the attendance of all key stakeholders. They should be identified as milestones in the master programme for the project;
- Run an interactive multidisciplinary AEDET Refresh workshop
- Return the output data to the relevant benchmarking database and/ or feed into the other evaluation criteria of the business case. Submit the AEDET scoring at each stage to HFS as part of the NDAP requirements.

Comparing /selecting schemes on the basis of design

Where several design proposals are competing, the Board should use their design evaluation tools to make direct comparisons of the competing schemes. By combining the appropriate tools, the project team should make informed comparisons on the relative merits of schemes or design options, which will enable them to confidently select the design which best meets their vision and requirements. The AEDET, BREEAM Healthcare and NDAP Design Statements tools should also facilitate the identification of key issues or areas for further development by the designer, depending on the stage of procurement.

NHS Boards are strongly recommended to ensure that they have an audit trail that is fully integrated into the final selection processes that records the design evaluations of options or competing bids at key stages, e.g. HUB or NPD.

How should AEDET Refresh be used for benchmarking

It is intended that the AEDET Refresh toolkit will be used to set a project specific target score (and a benchmark score, if facilities are existing), at IA stage. Support and guidance is available from HFS and A+DS. Boards should of course seek to achieve as high a score/ consensus as practicable, for their specific project. For the target score, we anticipate at least a score 3, for each of the ten main criteria. Where scores fall below 3, Boards should actively work with their advisors/ suppliers to improve the design and raise the evaluation scores and engage in dialogue with HFS and A+DS to support optimisation.

Design evaluation workshops

The purpose of running design evaluation workshops is to ensure engagement with a wide range of stakeholders, supported by the project team and technical advisors, to allow them the opportunity to discuss the design qualities important to them, prioritise and evaluate these together, and agree ways forward.

The AEDET and NDAP Design Statement are complementary tools. The stakeholder representation should be broadly the same, and their initial workshops, followed by later evaluations of both, may run together.

An appropriately sized room should allow the display to stakeholders, of large size plans and digital presentations, plus time for set-up, if competing bids.

Outputs from the design evaluation workshop

The main output from the workshop should be a completed AEDET Refresh worksheet for the appropriate business case stage. This will illustrate the consensus scoring of the evaluation team, plus key notes and actions from the discussions. The list of all stakeholders scoring in the evaluation team, plus those attending the workshop but not scoring, should also be recorded.

Information required for an AEDET Refresh evaluation workshop

AEDET Refresh can be used at various stages in the design and use of a building, thus there will be various levels of design information that may be available at the selected evaluation stage.

NB: It is not expected that design teams produce any extra information, over and above that already in existence, for an AEDET Refresh evaluation.

Analysing and presenting the information to the workshop

At the main evaluation stages of a large project there will be technical reports, specifications etc, which will need to be analysed by the technical advisors. They will be seeking to test the design proposals against the output specifications set in the brief. It will therefore be necessary for the technical advisors to present the evaluation team with as much pre-analysed information as possible giving them more time to make the key judgements during the workshop.

It is suggested that the following written and graphical information is made available to the team evaluating the facility/ design.

Written information

- A brief introduction of the Board, the site and the scheme
- The previous stage's AEDET worksheet
- The project specific NDAP Design Statement (ds)
- a 'History in Plans' demonstrating the original thinking, decisions and ideas from the very initial stages to the most recent stages
- Phasing of the scheme should be set out alongside a predicted or approximate time scale, with key milestone dates anticipated
- A Scheme Overview including:
 - The size and nature of scheme (DGH/mental health/primary care)
 - Whether the project is a complete new build or a refurbishment
 - The nature of the site, whether it is urban, green-field etc. with a brief description of architecture, landscape character and opportunities.
 - A description of the key service components and their inter-relationships.
 - The departmental relationship information may be specified using diagrams. The design response to the specifications of the Board, the required capacity and adaptability for future uses / change.

- The Design Vision and Philosophy should be based on creating a facility that carefully balances a building that is a statement of civic pride against the need to create a welcoming environment that instils a sense of comfort and support. The expectation is that the scheme will provide a modern, quality, functional and therapeutic environment.

Graphical information

It is recognised that the level, detail and quality of information will vary at various design stages, but it is important that the design team presents sufficient information for the evaluation to be made. The following list suggests the design information, which will be useful for a presentation at the start of an AEDET evaluation workshop, in order to provide understanding of the proposal.

It is important that design team(s) provide clear, good quality information, which can be displayed and analysed by all participating stakeholders.

Summary list of suggested presentation information

- Location and Site plans
- Development Control Plans
- Site and Building Sections
- Landscape Appraisal - identifying key opportunities
- Existing & Proposed Floor Plans
- Existing & Proposed Elevations
- Exemplar Room Plans

This list is not exhaustive and should be added to as circumstances dictate.

AEDET scoring system

AEDET Refresh has 3 main criteria areas – **Functionality**, **Build Quality** and **Impact** – split into 10 sections each of which will produce a score.

FUNCTIONALITY:	BUILD QUALITY:	IMPACT:
A- Use	D- Performance	G- Character and innovation
B- Access	E- Engineering	H- Form and materials
C- Space	F- Construction	I- Staff and patient environment
		J- Urban and social integration

The 10 sections summarise how well stakeholders feel a healthcare building will perform in relation to different aspects, related to generic design best practice. The sections have several statements that taken together build up a score for that section. Following IA, the project specific Design Statement allows teams to develop their own success criteria, based on their business case's defined strategic benefits. The Design Statement clauses should be cross referenced into the relevant sections / generic statements in AEDET, and vice versa.

Other complementary tools, which are used alongside AEDET, include: Staff and Patient Environment, Section I; the more detailed ASPECT toolkit; and

BREEAM Healthcare which allows a pragmatic approach, supported by HFS, to ensure the design meets NHSScotland targets on energy and the environment.

How to score AEDET refresh

The scoring and guidance layers (for each business case stage) are available as a Microsoft Excel spreadsheet. The instructions below assume the spreadsheet is being used for the AEDET design evaluation.

Scoring statements

You should try to respond to every statement on the scoring layer. However it is not the scores of individual statements that count, so much as the aggregated score for each section overall. The statements are primarily to break a section down into manageable and limited sets of issues that may be much easier to consider than simply trying to arrive directly at a score for the section overall.

Scoring AEDET generic statements (g)

Work on the scoring layer responding to the statements by giving each a score on the 6 point scoring scale.

The guidance layer gives a more detailed explanation of the generic statements and assistance, examples of good practice, on the criteria for achieving good scores. The guidance layer also helps to interpret the statements in relation to specific building types such as for example primary care or mental health.

Once you have scored each statement in a section the tool will calculate an average score for the whole section. The tool will take into account any weighting / priority you have applied to each statement..

Scoring NDAP Design Statement (ds)

At IA stage only the AEDET generic statements (g) are scored. After IA stage the project will have agreed specific benefits and criteria in a project Design Statement (ds). This will state how the facility will support the business case objectives through the user's key experiences; by enabling staff in their work and personal needs; and in supporting carers and other visitors. There will also be other objectives for how the investment will have wider beneficial impacts on the community. From this stage the Design Statements (ds) where relevant, should be considered as the primary benchmark for relevant sections. However standard generic statements (g) are still required as these cover many important design qualities and performance aspects not captured in the user experiences defined within the Design Statement.

To tailor your AEDET sheet, start by assigning each 'non negotiable' statement in the ds to ONE of the AEDET (g) statements. Mark this as a High (2) priority weighting and use the AEDET 'notes column' to reference the assigned 'non negotiable'. Score as normal in an AEDET workshop, but use the agreed Design Statement non-negotiable as the benchmark, not the guidance layer.

Weighting

On the scoring layer each statement may be given a weighting of High (2), Normal (1) or Zero (0). By default, the statements have a weighting of Normal (1). In a few cases a key statement may have a greater than usual importance and may be given a weighting of High (2), this will double its effect in arriving at the total score for the section.

By default, Design Statements (ds) are weighted High (2), as these directly relate to the strategic benefits agreed by stakeholders as fundamental to the success of the project. Where it is agreed a statement is not applicable to a particular project, this can be weighted as Zero (0).

Stakeholders should decide when to use these weightings, perhaps to reflect the care model. The guidance layer provides hints on weighting, and support if required, is available from HFS and A+DS.

Using the 6 point scoring scale

The scale is used to express a level of agreement of all stakeholders with the statement. In this case the scores should be used as follows:

- Virtually complete agreement (6)
- Strong agreement (5)
- Fair agreement (4)
- Little agreement (3)
- Hardly any agreement (2)
- Virtually no agreement (1)

The best score is 6 and the poorest score is 1. Make full use of all 6 points on the scale. Do not 'save' 1 for an impossibly bad, or 6 for a perfect scheme. Also a wide range of scores assists in prioritising when going forward, so be realistic.

Unable to score

You may find you are more confident about your scores for some sections than others. You may find some statements are difficult to respond to due either to lack of knowledge or a lack of available information. In these cases a score Zero (0) 'unable to score' can be used.

Notes

A notes section is provided on each stage's scoring sheets. This should be used to record project specific comments and reasoning for each statement's weighting and scoring values. The note field must be completed when a score of 'unable to score' is given.

Actions

An actions list is provided on each stage's scoring sheets. This should be used to record key actions to take forward, and check previous actions completed

Design Statement – alternative scoring

An alternative option to above methodology, is to give the (g) statements, which are assigned and referenced to a specific (ds) non-negotiable, a weighting of Zero (0). Instead the stakeholders will add bespoke (ds) statements, default weighting High (2), into the relevant AEDET section, see examples in Guidance

Layer. Then, in AEDET workshop simply use the 6 point scale to record the level of confidence in the delivery of each new (ds) non-negotiable statement.

Manually scoring overall sections

AEDET Refresh's MS Excel spreadsheet automatically calculates a section average score.

To complete a paper-based scoring, the average score for all the statements under a section, is calculated as follows:

- Statements weighted Zero (0) are excluded from the calculations
- Statements weighted Normal (1) have their score added in once
- Statements weighted High (2) have their score added in twice

Divide the total section score as above, by the number of statements to give an average. To calculate the number of statements, add in 1 for every normally weighted statement and 2 for every high weighted statement. (Do not add anything for statements weighted 0).

The average score is not to be used mechanistically but as a guide to suggest the overall score, using your judgement and local knowledge. A steady improvement as the project progresses through stages is indicative of quality, and increased stakeholder consensus.

AEDET outcomes

The desired outcome from AEDET is not a high or low score. The scoring only reflects the level of agreement / confidence that a range of stakeholders have in the facility or design to deliver against a generic checklist. This score will vary depending on project and the stakeholder representation. Its use is to monitor, stakeholders' confidence in the facility or design, to deliver. Repeated use over time, will also hopefully record an upward trend, as the project develops.

The desired outcome of both AEDET and the Design Statement is to focus stakeholder discussions. The most important records are the notes and action sections, providing stakeholder views, design insights, lessons learned, as well as future priorities or challenges needing to be addressed.

SCORING LAYER

[LINK TO EXCEL SPREADSHEET](#)

GUIDANCE LAYER

FUNCTIONALITY

The three FUNCTIONALITY sections (A, B & C) deal with all those issues to do with the primary purpose or function of the design. It deals with how well the design serves these primary purposes and the extent to which it facilitates or inhibits the activities of the people who carry out the functions inside and around the design.

A: USE

Section A is concerned with the way the design enables the users to perform their duties and operate the healthcare systems and facilities housed in the design. To get a good score under this Section the design will be highly functional and efficient, enabling people to have enough space for their activities and to move around economically and easily in a way that relates well to the policies and objective of the Board. A high scoring design is also likely to have flexibility in use.

GENERIC STATEMENTS (g)

A.01 The prime functional requirements of the brief are satisfied

The whole design must meet the needs of the core purposes it serves. Clearly this is one of the most central and important considerations.

A.02 The design facilitates the care model

The design should express and facilitate the healthcare philosophy of the Board. Design inevitably involves trade-offs, so the relative values in terms of efficiency of healthcare delivery in the care model should be reflected here.

A.03 Overall the design is capable of handling the projected throughput

The sizes of spaces, circulation and access must be adequate to meet the demands made at peak times and feel comfortable throughout the operating period.

A.04 Workflows and logistics are arranged optimally

All the appropriate adjacencies for human circulation and the flow of facilities and services are arranged in order to minimize distances travelled and lines crossed.

A.05 The design is sufficiently flexible to respond to clinical change and to enable expansion

Consider using double weighting. This item may be particularly important where forecasts already suggest future expansion that is not funded as part of

the current project. The design should be flexible for clinical changes where possible. The design is likely to last longer than the current models of care and patterns of treatment. Where changes or expansion can be predicted the design should show how it can be adapted to meet these. Therapeutic, technological, organizational innovations will take place and the design should be able to accommodate these without losing its coherence.

A.06 Where possible spaces are standardized and flexible in use patterns

Some spaces are so technically demanding that they must be very tightly designed on a functional basis. However it is highly likely that throughout the life of the design the pattern of use will change. Where possible similar kinds of spaces should be the same size and shape and be capable of changing their use as needs change. Over precise design can lead to an inflexibility that in the life of the design can cost considerably more than some small addition of initial floor area to enable future changes. It can often be the case that relatively small additions of floor space can be the most economical way of creating valuable flexibility.

A.07 The design facilitates both security and supervision

Consider using double weighting. This item may be particularly important if the site is in an area with historically high crime rates. The layout should include suitable supervision and control points. Entrances and departments should be designed to enable ready supervision and security. The layout should maximize passive supervision and overlooking so that all parts of the design internally and the site externally feel supervised and safe.

A.08 The design facilitates health promotion for staff, patients and local community

Public health promotion in the widest sense should be integral to the design. The layout, inside and out, should maximise opportunities to encourage exercise and access to outdoors, e.g. prioritising stair use, usable courtyards.

A.09 The design is sufficiently adaptable to inevitable change e.g. climate, technology, demographics.

The design should reflect duties under The Climate Change (Scotland Act) 2009 to “deliver adaptation” in a sustainable way. Adaptation should include creation of a positive microclimate around building; a sustainable urban drainage system (SUDS) and increasing urban greenspace and biodiversity; promotion of green transport, and health promotion in widest sense. The design should enable aging, frail and obese patients not to feel further ‘disabled’ by the environment. Greenspace should be integral to all the above, from therapeutic views and exercise, to providing shelter and microclimates, a setting for SUDS, and biodiversity, plus reducing ‘greenhouse gases’ e.g. a mature tree can save 22kg/ year of CO₂.

DESIGN STATEMENT (ds)

A.1ds The design meets the objectives and benchmarks in the Design Statement in relation to building and site USE.

Design statement(s) considered under section A. to be referenced in the Notes. These are ones that best relate to the generic guidance above. Scoring should consider if the design, in relation to these points, is answering the requirements in the left hand column of the Design Statement to produce an environment with the qualities noted in the right hand column of the Design Statement.

B: ACCESS

Section B focuses on the way the users of the facility can come and go. It asks whether people can easily and efficiently get onto and off the site using a variety of means of transport and whether they can logically, easily and safely get into and out of the design.

GENERIC STATEMENTS (g)

B.01 There is good access from available public transport including any on-site roads

Access requirements for staff, patients and visitors arriving at the design using public transport should be thought through. Any on-site roads should be adequate and sensitively designed. Road widths and turning circles should be safe and convenient. Consideration should be given to bringing public transport onto the site where possible and appropriate. Pedestrian routes from public transport points should be clear, safe and sensitively designed. Cars and other vehicles should not dominate the external public areas.

B.02 There is adequate parking for visitors and staff cars with appropriate provision for disabled people

In particular the design should accommodate the forecast demand in terms of staff, patients and visitors' cars. Consideration should be given to the extra demand at major staff shift handover periods. Any points of access to the existing road system should be able to cope with peak demand. Drop off points for less able people should be provided appropriately near entrances.

B.03 The approach and access for ambulances is appropriately provided

Adequate segregation and demarcation of ambulance access and drop off points should be clear. Alternative routes should be considered for emergencies.

B.04 Service vehicle circulation is good and does not inappropriately impact on the experience for service users and staff

Attention should be given to ensure unsightly, large or noisy vehicles are kept away or shielded from pedestrian/ active travel and contemplative areas. Carefully considered integration, may add interest and normalcy. Ensure suitable surfaces, widths, bends, turning circles etc, e.g. for fire tender access.

B.05 Pedestrian access routes are obvious, pleasant and suitable for wheelchair users and people with other disabilities / impaired sight

The major and minor routes should be obvious with continuity of line and materials. They should be well signposted. They should be safe from vehicles and with safe crossings where they cross roads or other vehicular access. They should be free from obstacles and changes of levels. In particular isolated steps should be avoided and appropriately shallow ramps provided where changes of level are necessary.

B.06 Outdoor spaces wherever appropriate are useable, with safe lighting indicating paths, ramps, steps and fire egress.

The inclusion of useable outdoor spaces is particularly beneficial to health and wellbeing. Provision of safe, therapeutic outdoor space, should be integral for all public health facilities. The natural environment provides opportunities to make social contact and enhance community cohesion. Greenery in even tiny urban spaces can be utilized effectively to gain positive health promotion results. Safe lighting is a Health & Safety and DDA legislative requirement.

B.07 Active travel is encouraged and connections to local green routes and spaces enhanced

Green Travel Plans and Health Promotion are linked priorities for long term sustainability of any project. The design should identify early on, opportunities to enable and enhance active travel and connect to wider green infrastructure networks. This may identify works beyond the immediate project boundaries. Appropriate time will be required for any grant or joint funding arrangements.

B.08 Car parks should not visually dominate entrances and green routes

The landscape or Art & Environment strategy should integrate the car parking into a holistic design to which balances delivery on a range of benefits. These may include SUDS or Biodiversity duties as well as promotion of active travel. On site, improved safety, pleasant setting and priority for pedestrians and cyclists, should reduce the dominance and reliance on motorised transport.

DESIGN STATEMENT (ds)

B.ds01 The design meets the objectives and benchmarks in the Design Statement in relation to services ACCESS by the community.

Design statement(s) considered under section B. to be referenced in the Notes. These are ones that best relate to the generic guidance above. Scoring should consider if the design, in relation to these points, is answering the requirements in the left hand column of the Design Statement to produce an environment with the qualities noted in the right hand column of the Design Statement.

C: SPACE

Section C concentrates on the amount of space in the design in relation to its purpose. It asks if this space is well located and efficient and whether people can move around in it efficiently and with dignity.

GENERIC STATEMENTS (g)

C.01 The design achieves appropriate space standards

In addition to the technical spaces, all general spaces must be adequate to meet normal demand comfortably and peak demand at least adequately. In particular entrance areas should be uncluttered and spacious as must all circulation and social spaces. Provision for special areas for children should be considered. Space for external franchises and other add-ons should be thought about. The design must clearly follow and at least satisfy all the minimum requirements of the relevant NHS Guidance. A good design strategy will have listed all the relevant specific notes and shown how the design meets these as opposed to making general statements.

C.02 The ratio of usable space to the total area is good

The net to gross ratios should be calculated and show high figures. Where possible, spaces should be capable of being shared to maximise utilisation. The design strategy and the brief should see space as a resource not personal territory. Dual use of circulation space should be exploited where this can be effective, for example to create informal social and gathering spaces. The overall proportion of exclusively to circulation space should be minimised.

C.03 The circulation distances travelled by staff, patients and visitors are minimised by the layout

Consider using double weighting. This item may be particularly important where emergency treatments are common. It is also likely to be particularly important for those groups of staff who need to move around as a normal part of their job. Clinical adjacencies as determined by the care model are minimised. Patients and visitors are faced with journeys that are as logical and short as possible.

C.04 Any necessary isolation and segregation of spaces is achieved

Any required clinical isolation should be achieved. In addition inherently noisy areas should be kept away from quiet ones. Similarly inherently messy or unpleasant visual areas should be isolated. Inappropriate adjacencies that might offend sensibilities should be avoided. The design should naturally isolate and screen areas which patients and visitors may not wish to see.

C.05 The design maximises opportunities for space to encourage informal social interaction & wellbeing

The design should reflect and provide this. Areas where the boundaries between genders may need to change in use should be clearly identified and solutions for providing this made apparent.

C.06 There is adequate storage space

It is very easy to underestimate the amount of storage space required. This frequently leads to other major failures in the use of designs. Common results are to see materials stored in public areas causing restrictions, adding to safety risks and giving a sense of clutter. Sustainable storage needs to be as close as practicable to actual use. The design should avoid creating core storage spaces which can easily be eliminated. Storage may be required at several stages in the various supply / use / disposal systems.

C.07 The grounds maximise potential for informal and formal therapeutic activities

Greenspaces are proven to support tackling a range of health and social problems - obesity, cardiovascular disease, mental ill health, anti- social behaviour and health inequalities. Health facilities should lead the way in using greenspace (existing and new) for therapeutic activities, including occupational therapy and green healthcare prescribing.

C.08 The design maximise benefits of internal/ external spaces working together

The outside spaces should support the work of the NHS staff inside, and provide direct benefits to patients, staff, visitors and local community. A master plan approach, highlighting external design potential early in the project development, should support the grounds and building design to be coherent, mutually supportive and deliver the widest benefits. Working with voluntary sector and community groups can maximize these opportunities.

DESIGN STATEMENT (ds)

C.ds01 The design meets the objectives and benchmarks in the Design Statement in relation to how service users relate to SPACEs inside and out.

Design statement(s) considered under section C. to be referenced in the Notes. These are ones that best relate to the generic guidance above. Scoring should consider if the design, in relation to these points, is answering the requirements in the left hand column of the Design Statement to produce an environment with the qualities noted in the right hand column of the Design Statement.

BUILD QUALITY

The three BUILD QUALITY sections (D, E & F) deal with the physical components of the design. This is where the more technical and engineering aspects of the design are evaluated. It asks whether the facility is, or is likely to be, robustly built, reliable, easy to maintain and operate, long lasting and sustainable. It also relates to the process of construction, and to what extent disruption and risks to healthcare services are minimised.

D: PERFORMANCE

Section E relates to the technical performance of the facility across its whole lifetime. It asks whether the physical components of the design are high quality, fit for purpose and sustainable. However how well the design functions for human use is in sections A-C.

GENERIC STATEMENTS (g)

D.01 The facility is easy to operate

The general organization of the design both inside and outside enables the management of the facility including grounds, over its life cycle, from construction, operation and replacement/ demolition to be as straightforward and sustainable as possible. This should include a strategy for appropriate adaption, refurbishment and /or expansion in the future.

D.02 The facility is easy to clean and maintain

The design's physical details and the materials make it easy to clean and maintain. Surfaces should have finishes that enable simple and quick methods of cleaning especially those that require to be clean for clinical reasons. Access to windows for cleaning both externally and internally should be as easy and sustainable as possible. Maintenance access and replacement of key elements, from plant, to planting is easy and sustainable. This may require the provision of safe access routes, cradles, platforms etc.

D.03 The facility has appropriately durable finishes and components

The materials both externally and internally should be able to last for their predicted lifespans. Key element lifespans should be as long as practicable, and where shorter than the predicted lifespan of the overall facility, then D.02 & F.04 become particularly important.

D.04 The facility will weather and age well

The design should be able to age gracefully. The nature of the facility, choice of materials, and detailing of junctions all affect this. As do the ease of maintenance/ replacement access. Some materials such as masonry can look better as they get older, whereas some may quickly look dirty and uncared for. Carefully considered, robustly detailed junctions between materials are needed, as these can rapidly deteriorate, especially in exposed elevations.

D.05 Access to daylight, views of nature and outdoor space are robustly detailed

Good details should ensure the investment in greenery, windows etc, achieve their potential, e.g. solar film will not diminish light quality, courtyard are usable, their floors receive daylight.

D.06 The design maximises the opportunities for sustainability

The design requires to implement a range of mandatory duties, from biodiversity to waste reduction, green transport to SUDS. This ultimately requires facilities through their whole life cycle to be sustainable and practicable, particularly to reduce long-term energy and carbon use.

DESIGN STATEMENT (ds)

D.ds01 The design meets the objectives and benchmarks in the Design Statement in relation to service and building PERFORMANCE

Design statement(s) considered under section D. to be referenced in the Notes. These are ones that best relate to the generic guidance above. Scoring should consider if the design, in relation to these points, is answering the requirements in the left hand column of the Design Statement to produce an environment with the qualities noted in the right hand column of the Design Statement.

E: ENGINEERING

Section E is concerned with the design of engineering systems as opposed to the main architectural features. It asks whether the engineering systems are, or are likely to be, of high quality and fit for purpose, reliable, easy to maintain and operate, and sustainable.

GENERIC STATEMENTS (g)

E.01 The engineering systems are well designed, flexible and effective

Engineering systems should be effective and flexible. Local controls should be provided for use by staff and patients. Engineering systems should operate quietly and respond rapidly. These systems should operate satisfactorily through all seasons of the year and be capable of adapting to reconfiguring of the design in future.

E.02 The engineering systems exploit any benefits from standardization and prefabrication where relevant

Standardisation is not sought in its own right, but may be beneficial during construction, maintenance and replacement across a facility life cycle. Unnecessary variation can be expensive. Again prefabrication is not sought in itself, but may offer value for money and may help to ensure easier and speedier construction which may cause less disruption and risks to essential services on site, provide consistency, and sustainable, easier maintenance.

E.03 The engineering systems are energy efficient

The engineering systems should be designed to be efficient and economic in use and to meet or exceed all statutory and mandatory NHS targets.

E.04 There are emergency backup systems that are designed to minimize disruption

The design should meet the emergency backup requirements of the project and the clinical requirements of the brief. In particular coverage should be considered for medical gases, emergency generators, batteries, nurse call systems, heating, theatre and other lighting, hot water, cold water storage, IT and telephones. This backup extent should be sustainable.

E.05 During construction disruption to essential healthcare services is minimised

The continuity of essential services in healthcare is vital. It is necessary using SHFN 30 and HAI Scribe to ensure risks due to the design or construction proposals are identified and minimized throughout the life cycle of the procurement process from briefing to operation. Modifications to both the design and the construction should be considered. Temporary relocation of healthcare or other services may also be necessary to ensure public safety.

E.06 During maintenance/ replacement disruption to essential services is minimised

Similar to E.05, the design requires to minimise the potential disruption and risk to healthcare services in the future maintenance and replacement of elements throughout the facility's life cycle. Key element lifespans should be as long as practicable, and where shorter than the predicted lifespan of the overall facility, then D.02 is particularly important

E.07 The design and layout contributes to efficient zoning and energy use reduction

The design layout and controls should enable efficient zoning and energy use reduction, throughout the life cycle of the facility. This should include hours of operation and similar environmental conditions being grouped together. A project specific judgement should be made as to extent of back-up depending on the kind of facility, based on sustainability, modelling and data, not generic, blanket % 'rules of thumb'.

F: CONSTRUCTION

Section F is concerned with the technical issues of actually constructing the design and with the performance of the main components. A design that scores well under this Section is likely to be constructed as quickly, easily with the lowest risks practicable, given the circumstances of the site; and to offer a robust, sustainable and easily maintained solution.

GENERIC STATEMENTS (g)

F.01 If phased construction is necessary the various stages are well organised

Consider using double weighting. This item may be particularly important if it is necessary to phase the project either for financial reasons or to keep existing services operating while the construction is in progress. If the project needs to be built in phases this is made as easy as possible by the design. In gaining access to future phases, disruption and risks to healthcare services and neighbours should be minimised. Ideally each phase should be self-contained. Any future demolition should be clearly thought through. However as the construction phase is a very short part of the total life cycle of the facility, it is often undesirable to allow the phasing itself to dominate the final design.

F.02 Temporary construction work is minimised

In order to satisfy the needs of phasing it may be necessary to construct some facilities which will then later be demolished or removed. This is obviously additional expenditure for which there is no long term benefit and yet further short term potential disruption and risks. This should be minimised, especially for essential healthcare services. However, as with F.01 the final design is the key consideration, its benefits may outweigh a short term decant.

F.03 The impact of the construction process on healthcare services is minimised

Ideally the site works should be laid out so that contractor's areas are entirely separate from continuing healthcare operations. This may not always be possible but overlaps should be avoided if possible or identified and minimised where not. Crossing points where contractors' site traffic routes may affect other traffic and pedestrians should be minimised.

F.04 The building and grounds can be readily maintained

Components in the construction should be designed to require minimal maintenance. The lifecycles of components should be known and thought through. Access to components that will need maintenance or replacement is both easy and sustainable. In particular access to items which need attention is available without disrupting the operations of patients and staff.

F.05 The construction is robust

Workmanship and junctions between materials and components should be well detailed, with sufficient strength and integrity for their functions and locations.

F.06 The construction allows easy access to engineering systems for maintenance, replacement and expansion

The design of the construction should be integrated with the design of the engineering systems. Access to engineering components that will need maintenance or replacement is easy and sustainable. In particular access to items which will need attention is available without disrupting the operations of patients and staff. Some items require more attention than others and disruption should be minimised by designing access routes, hatches and removal panels etc to enable this, e.g. en-suite WC cisterns maintained from corridor.

F.07 The construction exploits any benefits from standardization and prefabrication where relevant

Standardisation is not sought in its own right, but may be beneficial during construction, maintenance and replacement across a facility life cycle. Unnecessary variation can be expensive. Again prefabrication is not sought in itself, but may offer value for money and may help to ensure easier and speedier construction which may cause less disruption and risks to essential services on site, provide consistency, and sustainable, easier maintenance.

F.08 The construction maximises opportunities for sustainability

The build should implement the mandatory duties that range from biodiversity to waste reduction, green transport to energy and carbon reduction. This ultimately requires construction evidence of resource efficiency, e.g. WRAP toolkit, but most importantly across whole life cycle, demonstration of decision making achieving sustainable 'excellence'.

F.09 The construction contributes to being a 'good neighbour'

The contractor and client requires to work together to benefit the whole local community. This should include use of Good Corporate Citizenship Assessment Model (GCCAM) and Considerate Contractors Scheme, but also wider local health and sustainability promotion.

F.10 The construction minimises HAI risks

Team work between the contractor, designers, NHS users and NHS estates is necessary to ensure the Healthcare Acquired Infection risks are identified, monitored and reduced, particularly for to the public and vulnerable patients. Use of HAI Scribe and SHFN 30 will support this elimination, reduction and monitoring, throughout the facility's life cycle.

IMPACT

The four IMPACT sections (G, H, I, & J) deal with the extent to which the design creates a sense of place and contributes positively to both the setting and lives of those who use the facility and the local community who are its neighbours.

G: CHARACTER AND INNOVATION

Section G deals with the overall feeling of the design. It asks whether the building and grounds have clarity of design intention and whether this is appropriate to its purpose and setting. A design that scores well under this section is likely to work holistically, to lift the spirits and to be seen as an exemplar of good architecture and place-making.

GENERIC STATEMENTS (g)

G.01 There are clear ideas behind the design of the building and grounds

The building and grounds design should embody a clear and coherent vision, confidently communicating its function and aspirations through its various physical elements.

G.02 The building and grounds are interesting to look at and move around in

The design should have sufficient variety to create interest both in terms of the overall form and massing externally and the internal and external places created for people to feel comfortable in. But without losing the clear vision (see G.01) or becoming confusing.

G.03 The building, grounds and arts design contribute to the local setting

The design should be sensitive to the community and location it sits in, urban, suburban or rural. Appropriate in scale, form, materials and colour palate, the grounds and art in particular should benefit facility users and local community, with places of therapeutic value.

G.04 The design appropriately expresses the values of the NHS

Primarily a healthcare facility should be about the people who it is there to care for. A civic presence may be appropriate, but an institutional or corporate image is unlikely to be. The overall design should lift the spirits of those who work and are being treated in it as well as those who visit or reside nearby. It should communicate a strong positive image of the NHS.

G.05 The project is likely to influence future healthcare designs

The design should use and express current best practice in terms of form and technology. The design should clearly reflect new and appropriate models of

healthcare provision. It should be a design that clients, designers etc. wish to visit when working on future projects.

G.06 The design provides a clear strategy for future adaptation and expansion

The design should incorporate zones for change and growth, to deal with inevitable future changes in healthcare models and technology. See also A.09 drivers for change.

G.07 The building, grounds and art integrate to create sustainable therapeutic places

The Art and Therapeutic Environment strategy should be integral to the design, both inside and out. There should be a creative and positive benefits for the whole community.

DESIGN STATEMENT (ds)

G.ds01 The design meets the objectives and benchmarks in the Design Statement in relation to CHARACTER and INNOVATION

Design statement(s) considered under section G. to be referenced in the Notes. These are ones that best relate to the generic guidance above. Scoring should consider if the design, in relation to these points, is answering the requirements in the left hand column of the Design Statement to produce an environment with the qualities noted in the right hand column of the Design Statement.

H: FORM AND MATERIALS

Section H deals with the nature of the design in terms of its overall form and materials. It is primarily concerned with how the design presents itself to the outside world in terms of its appearance and organisation. Although it deals with the materials from which the building and grounds are constructed it is not concerned with these in a technical sense but rather the way they will appear and feel throughout the life of the facility.

GENERIC STATEMENTS (g)

H.01 The design has a human scale and feels welcoming

However large or small the design it should appear welcoming to staff, patients and visitors. The scale should be appropriate to a caring image. Scale is the result not just of the size of the project, but of the way certain features are expressed. Windows, floor to floor heights, doors and entrances all contribute to the potential for views in and out of the facility.

H.02 The design contributes to the local microclimate, maximising sunlight and shelter from prevailing winds

The design is well orientated on the site to maximise its potential. In particular the building and grounds should be designed to capture sunlight appropriately. It should shelter people approaching it from the prevailing winds and poor weather. The design should also maximise the health promotional potential, embracing views of greenery and access to the landscape from both users and local community, and from within or outwith the site.

H.03 Entrances are obvious and logical, in relation to likely points of arrival on site

Consider using double weighting. This item may be particularly important where there are likely to be large numbers of visitors on a daily basis, where there are many new or stressed users, where there may be more than one entrance or where there may be several routes onto the site. The form of the design should invite approach and entry and make the places where the public enter apparent, even without signs. The design should respond to the major expected points of arrival. The entrances should be obvious from these angles.

H.04 The external materials and detailing appear to be of high quality

Materials should be chosen to enhance the design as a whole. The form and materials should be well detailed. The design of the building and grounds should be as one, and these should combine to age gracefully rather than show unsightly staining or weathering.

H.05 The external colours and textures seem appropriate and attractive

Colours and textures should articulate and enrich the design's form and enhance its setting. As with interior colour schemes what feels appropriate will, to some extent, depend on the type of facility and style. However exterior colours and textures should also be chosen to relate positively to adjacent architecture, landscape, climate and other aspects of the setting.

H.06 The design maximises the site opportunities and enhances a sense of place

The building and landscape design should sit well on the site and enhance the overall setting. This may include using the topography to reduce the impact of the building scale, or terrace landscaping enabling disability access. It should also include enhancing site ecology and biodiversity, using existing key features, e.g. mature woodland or waterways; or new features e.g. SUDS pond, sedum roof. The facility should promote health both to its users and the wider community, all should be encouraged to use the grounds to their potential, e.g. for walking, cycling, social or growing spaces.

DESIGN STATEMENT (ds)

H.ds01 The design meets the objectives and benchmarks in the Design Statement in relation to FORM and MATERIALS

Design statement(s) considered under section H. to be referenced in the Notes. These are ones that best relate to the generic guidance above. Scoring should consider if the design, in relation to these points, is answering the requirements in the left hand column of the Design Statement to produce an environment with the qualities noted in the right hand column of the Design Statement.

I: STAFF AND PATIENT ENVIRONMENT

Section I deals with how well an environment complies with best practice as indicated by the research evidence. The statements correspond to the sections in ASPECT (A Staff Patient Environment Calibration Tool).

GENERIC STATEMENTS (g)

I.01 The design respects the dignity of patients and allows for appropriate levels of privacy and company

Consider using double weighting. This item may be particularly important for space where patients spend significant amounts of time, or where sensitive consultations, treatments or discussions may take place. Both company and privacy are highly valued by patients and staff and the design should facilitate both. The spaces where patients are likely to be for lengthy periods should provide places where they can have both visual and acoustic privacy. Patients should be able to have private conversations and to be alone if they wish. However, it should also be easy for patients to find company and be with others. Patients' dignity should be respected by the design. When being treated or examined they must be shielded from the gaze of others and should not be overheard. Toilets and bathrooms should be nearby but located discretely without being in full view of others.

I.02 The design maximises opportunities for daylight/ views of greenery or natural landscape

Consider using double weighting. This item may be particularly important for space where patients and/or staff spend significant amounts of time. Rooms where patients or staff spend long periods should have windows which afford high quality daylight and views, particularly to greenery and across natural landscape. Patients should be able to see green plants, ground and the sky. Trees reflecting seasonal changes, reinforce our connection with the world. This is particularly important where patients may be in bed for long periods or having to wait. Where patients may be concerned or under stress the view should be calming. The restorative effects of daylight and natural views are well proven.

I.03 The design maximises opportunities for access to usable outdoor space

Patients should be able to go outside easily and have access to well landscaped gardens and green infrastructure. Both staff and patients should be able to see nature especially greenery/ green vegetation. This might be in the form of interior planting or external gardens. Restorative green spaces and infrastructure are shown to be helpful to those recovering from short term treatments, to comfort visitors and provide respite for harried staff. Being able to walk or sit in such places can reduce blood pressure, relieve stress, encourage healing and restore hope/ wellbeing, providing proven benefits for local community as well as facility users. Health promotion opportunities should be maximised where practicable.

I.04 There are high levels both of comfort and control of comfort

Consider using double weighting. This item may be particularly important for space where patients and/or staff spend significant amounts of time. Patients and staff should be comfortable. The temperature should be comfortable all year round and be capable of easy local control. Patients and staff should be able to exclude sunlight and darken spaces when patients wish to sleep. Artificial light should be easily controllable offering patterns suitable for day and night and for winter and summer. Patients and staff should be able to open windows and doors easily for fresh air. The places where staff work or patients spend time should be quiet and free from unwanted levels of operational or background noise. Stress and heart rates have been proved to rise in noisy healthcare facilities, yet research shows rising noise levels in hospitals, wards and in critical care units in particular.

I.05 The design is clearly understandable and wayfinding is intuitive

Consider using double weighting. This item may be particularly important for large or complex designs or collections of buildings. The whole facility should be easily understandable allowing for easy way-finding. The entrance should be obvious from arrival on site, and the way out should also be clear. There should be a logical hierarchy of spaces in the design with varying scales appropriately indicating the public and private domain, both internally and externally. It should be clear which are staff only areas and patients and visitors should easily be able to tell where to find a member of staff. Different parts of the design should have different characters in order to avoid an overall feeling of being nowhere. Distinctive landmarks, familiar artefacts from the past, self-contained looping paths are techniques for maximizing legibility and orientation both inside and outside the building.

I.06 The interior of the facility is attractive in appearance

The interior should feel light and airy. Spaces where patients spend significant amounts of time should be made as homely as possible. There should be daylight and views of greenery, and a stimulating variety of appropriate colours and textures. The interior should look tidy and well cared for as well as clean. Ceilings should look interesting, especially where patients are likely to be on beds or trolley for any length of time. Patients should be able to store and display personal items.

I.07 There are good bath/ toilet and other facilities for patients

Bath and toilet facilities are known to be important to patients. Ideally there should be a choice of bath or shower. Well designed signage, tonal contrast, non-slip flooring, seats, handrails and shelves within easy reach, enable patients not to feel 'disabled' by the design. Places for socialization, religious observance and live performances are also important. Having the option of a relative/friend being able to stay overnight very close by, can make a big difference to patients. In their own spaces, patients should have access to a range of suitable furniture including comfortable seating and a table. Patients who are able should have places to go and facilities to use, from tea making, to vending machines and gardens.

I.08 There are good facilities for staff, including convenient places to work and relax without being on demand

Support facilities particularly impact on staff. It may be very important to be able to change into working clothes, to shower and to store clothes and belongings safely. Staff need to be able to get away from demand sometimes when working in order to concentrate, and also when taking a break. Respite space should be provided nearby, with access to facilities, from IT, to tea-making, vending, views and gardens. Shared work and social spaces encourage team building and integration. Retail facilities nearby are also important to staff.

I.09 There are good opportunities for staff, patients and visitors to use outdoors to recuperate and relax

The use of outdoor space has proven health and wellbeing benefits. Where possible waiting and respite facilities should have direct access to suitable outside waiting and respite space.

DESIGN STATEMENT (ds)

I.ds01 The design meets the objectives and benchmarks in the Design Statement in relation to STAFF AND PATIENT ENVIRONMENT

Design statement(s) considered under section I. to be referenced in the Notes. These are ones that best relate to the generic guidance above. Scoring should consider if the design, in relation to these points, is answering the requirements in the left hand column of the Design Statement to produce an environment with the qualities noted in the right hand column of the Design Statement.

J: URBAN AND SOCIAL INTEGRATION

Section J deals with the way the design relates to its surroundings. It asks whether the design plays a positive role in the neighbourhood whether that is urban, suburban or rural. A facility that scores well under this section enhances its setting rather than detracts from it.

GENERIC STATEMENTS (g)

J.01 The height, volume and skyline of the design relate well to its setting

Consider using double weighting. This item may be particularly important where the design is in either a tight urban environment or a very rural environment. The profile and skyline of the design as it is approached should fit in well with the local neighbourhood.

J.02 The facility contributes positively to its locality

The locality should be enhanced by the addition of the facility. This might be through the way it opens up vistas, closes and contains urban space, or perhaps provides a landmark or useable greenspace. The design should be sensitive to its setting, whether urban or rural, sit comfortably within it, and the interior and exterior should be cohesive/ mutually beneficial.

J.03 The hard and soft landscape contribute positively to the locality

The hard and soft landscape around the facility should be therapeutic in their qualities. They must be designed to last, to minimize maintenance, and add to sustainability, from improved air quality, micro-climate, SUDS, green travel, biodiversity and health promotion. The spaces around the facility should be green, pleasant and promote community and pedestrian links. The design should feel as if it 'belongs' to this place, optimising local features & topography.

J.04 The design is sensitive to neighbours and passers-by

Consider using double weighting. This item may be particularly important where the facility is largely in the public domain for example in a town and many people may be passing by or through the site on a daily basis. The design should be a 'good neighbour'. Those approaching the design or passing by should feel safe and connected to it. Neighbours may see the design every day and should benefit as well as occasional users.

DESIGN STATEMENT (ds)

J.ds01 The design meets the objectives and benchmarks in the Design Statement in relation to how the development fits in / improves the setting

Design statement(s) considered under section J. to be referenced in the Notes. These are ones that best relate to the generic guidance above. Scoring should consider if the design, in relation to these points, is answering the requirements in the left hand column of the Design Statement to produce an environment with the qualities noted in the right hand column of the Design Statement.

REFERENCES

Scottish Government guidance

Scottish Capital Investment Manual (SCIM)

<http://www.scim.scot.nhs.uk/>

SCIM guidance: NHSScotland Design Assessment Process (NDAP)

www.scim.scot.nhs.uk/Support/SCIM_DA_BC.doc

Scottish Government policy for NHSScotland, including, but not limited to, the following NHSScotland Chief Executive Letters (CELs) :

NHS CEL 19 (2010) A Policy on Design Quality for NHSScotland

www.sehd.scot.nhs.uk/mels/cel2010_19.pdf

NHS CEL 01 (2012) Addendum: Health Promoting Health Service

www.sehd.scot.nhs.uk/mels/CEL2012_01add.pdf

NHS CEL 02 (2012) A policy on sustainable development for NHSScotland

www.sehd.scot.nhs.uk/mels/CEL2012_02.pdf

NHS CEL14 (2010) Sustainable development: Good Corporate Citizenship Assessment Model for NHSScotland

www.sehd.scot.nhs.uk/mels/CEL2010_14.pdf

NHS References

HBN 00-01 Core elements: General design guidance for healthcare buildings

www.hfs.scot.nhs.uk/publications/1413797038-HBN_00-01%20General%20design%20guidance%20for%20healthcare%20buildings_cover.pdf

AEDET Achieving Excellence Design Evaluation Toolkit (5 parts) NHSWales

www.wales.nhs.uk/sites3/page.cfm?orgid=254&pid=7615

Design Quality Indicator (DQI) Construction Industry Council (CIC)

www.dqi.org.uk

From: [STORRAR, Ian \(NHS NATIONAL SERVICES SCOTLAND\)](#)
To: [MCLAUGHLAN, Edward \(NHS NATIONAL SERVICES SCOTLAND\)](#)
Subject: FW: 20190705 TQ - CCU Vent in NDAP Quick question
Date: 08 July 2019 08:37:35

FYI

Regards

Ian

Ian Storrar BSc CEng FCIBSE FIHEEM MIET
Head of Engineering - Health Facilities Scotland
Procurement, Commissioning and Facilities

NHS National Services Scotland
3rd Floor
Meridian Court
5 Cadogan Street
Glasgow
G2 6QE



www.hfs.scot.nhs.uk

Please consider the environment before printing this email.
NHS National Services Scotland is the common name for the Common Services Agency for the Scottish Health Service. www.nhsnss.org <<http://www.nhsnss.org/>>

From: GRANT, Susan (NHS NATIONAL SERVICES SCOTLAND) [REDACTED]
Sent: 05 July 2019 13:54
To: Morrison Alan (SCOTTISH GOVERNMENT HEALTH & SOCIAL CARE DIRECTORATE)
[REDACTED]
Cc: STORRAR, Ian (NHS NATIONAL SERVICES SCOTLAND) [REDACTED]
Subject: 20190705 TQ - CCU Vent in NDAP Quick question

Hi Alan

I caught your email as I was switching on my out of office...

So quick answer is "maybes aye – maybe no"

As you know NDAP is only a proportionate review... and we may or may not catch the many many details in each project.

What I can say is IF we saw this in the derogation list that NDAP asks for, we would flag it as a risk, and request further details plus technical reasons why...

For example. in NHS Grampian's Baird FBC stage we are requesting further details/ meetings regarding neonatal isolation rooms, on both brief and proposals... This was because their layout is novel, and they requested our input on door selection... So we are now supporting the Board to ensure the selection of specific elements in SHTMs/ SHPNs

etc; or even finding international standards, where appropriate / or NHS have gaps; so they actually will achieve the level of safety/ resilience that they clinically expect. [Please note sometimes there is a level of clinical/ technical interpretation, (e.g. is neonatal care level either SCBU (special care baby unit) =6ACH +ve or CCU (critical care unit – usually adult?) 10ACH +10pa) and which is most appropriate for the actual project / patient group?

The key benefit of NDAP is we can give this interpretation independently, and clearly identify those risks for the Board / SG to enable better / recorded decision-making.

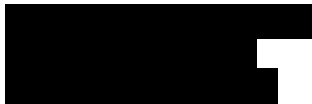
Hope this assists, and enjoy your holidays!

Best regards

Susan

Susan Grant
Principal Architect

Health Facilities Scotland
Procurement, Commissioning and Facilities
NHS National Services Scotland
Meridian Court, 3rd Floor, 5 Cadogan Street
Glasgow
G2 6QE

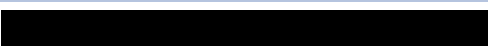


[please note I will be on annual leave from 01 – 18 July 2019]

Web: www.hfs.scot.nhs.uk

Please consider the environment before printing this email.

NHS National Services Scotland is the common name for the Common Services Agency for the Scottish Health Service. www.nhsnss.org

From: Alan.Morrison@scotland.gsi.gov.uk 
Sent: 05 July 2019 10:59
To: GRANT, Susan (NHS NATIONAL SERVICES SCOTLAND)
Subject: Quick question

Hey susan, I am sure you can guess why I am asking this question.

If a new hospital was being designed and the ventilation system in a critical care unit had a non-compliant number of air changes per hour, would the NDAP review pick that up?

If not, what would we need to do to make sure that it did?

Regards

Alan

Alan Morrison

Health Finance and Infrastructure
Scottish Government Health and Social Care Directorates



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Tha am post-d seo (agus faidhle neo ceanglan còmhla ris) dhan neach neo luchd-ainmichte a-mhàin. Chan eil e ceadaichte a chleachdadh ann an dòigh sam bith, a' toirt a-steach còraichean, foillseachadh neo sgaoileadh, gun chead. Ma 's e is gun d'fhuair sibh seo gun fhiosd', bu choir cur às dhan phost-d agus lethbhreac sam bith air an t-siostam agaibh agus fios a leigeil chun neach a sgaoil am post-d gun dàil. Dh'fhaodadh gum bi teachdaireachd sam bith bho Riaghaltas na h-Alba air a chlàradh neo air a sgrùdadh airson dearbhadh gu bheil an siostam ag obair gu h-èifeachdach neo airson adhbhar laghail eile. Dh'fhaodadh nach eil beachdan anns a' phost-d seo co-ionann ri beachdan Riaghaltas na h-Alba.



[Redacted]

Dear Colleague

DELEGATED LIMITS – CAPITAL INVESTMENT PROJECTS

Delegated Limits

This letter updates the delegated limits for capital investment projects which are contained in CEL 32 (2010) and are detailed in Annex A. The limits will again reflect each Board's size operating on a stepped basis.

These limits apply with immediate effect and will include projects that are midway through the business case process. The limits are not impacted by whether the project is funded through Board's formula capital or by way of an additional allocation from Scottish Government.

NHS Capital Investment Group

While any capital investment project that is within a Board's delegated limit does not need to be submitted to the NHS Capital Investment Group (CIG) for review, it is recognised that for some Boards, particularly ones that do not undertake many capital projects, that the additional review and scrutiny that the CIG can provide could be helpful. If a Board would like to explore that option, they should contact the Chair of the CIG to discuss.

If you have any questions please contact [Redacted] on [Redacted].

Your sincerely

[Redacted Signature]

Christine McLaughlin
Chief Finance Officer NHS Scotland, and Director of Health Finance, Corporate Governance and Value

DL(2019) 5
12 September 2019

Addresses

For action

NHS Board Chief
Executives
NHS Directors of Finance
Directors of Estates and
Facilities

For information

NHS Board Chairs

Enquiries to:

Alan Morrison
Capital Planning and Policy
Manager
St Andrew's
House

Regent Road
Edinburgh EH1 3DG

[Redacted]

Annex A

Delegated Limits – Capital Investment Projects

NHS Board	Delegated Limit
	£million
NHS Ayrshire and Arran	5.0
NHS Borders	3.0
NHS Dumfries and Galloway	3.0
NHS Fife	5.0
NHS Forth Valley	5.0
NHS Grampian	10.0
NHS Greater Glasgow and Clyde	10.0
NHS Highland	5.0
NHS Lanarkshire	7.5
NHS Lothian	10.0
NHS Orkney	3.0
NHS Shetland	3.0
NHS Tayside	5.0
NHS Western Isles	3.0

NHS Board	Delegated Limit
	£million
Golden Jubilee Foundation	3.0
Healthcare Improvement Scotland	1.0
NHS 24	1.0
NHS Education for Scotland	1.0
NHS Health Scotland	1.0
NHS National Services Scotland	3.0
Scottish Ambulance Service	3.0
The State Hospital	3.0



Chief Executives
All NHSScotland Boards

23 December 2019

Dear Colleague

Healthcare Associated Infection (HCAI) and Antimicrobial Resistance (AMR) Policy Requirements

The **purpose** of this letter is to confirm the **mandatory** HCAI and AMR policy requirements that must be adopted and implemented in all NHS healthcare settings and are deemed best practice (where relevant) in all non NHS healthcare and social care settings. **This letter updates, reiterates and replaces previous guidance set out in DL (2015) 19.**

1. Introduction

1.1 The Scottish Government Health and Social Care Directorate (SGHSCD) remains committed to containing, reducing and preventing Healthcare Associated Infections (HCAI) and Antimicrobial Resistance (AMR) across NHSScotland and beyond in order to maintain individual safety within our healthcare settings.

1.2 Despite the progress made over recent years, reducing HCAI and containing AMR remains a constant challenge. Therefore, it is important at both a national and NHS Board level and beyond, that there is ongoing and increased monitoring for accurate, and, as far as is possible, real time assessments of current and emerging threats. In addition to this, national and local level data is essential for planning and evaluating interventions. Most importantly, the collection of surveillance data with local feedback using a quality improvement methodology is an evidenced based approach that can achieve HCAI reductions.

1.3 AMR remains a major public health and clinical issue and is a threat to health in Scotland. The scale of the threat from antimicrobial resistance and the case for action is set out in the new [UK Five year action plan 2019-2024](#) and the [UK's 20-year vision](#), published in January 2019.

DL (2019) 23

Addresses

For action

Chief Executives

For information

Medical Directors
SENDS

HAI Executive Leads
Infection Control
Managers

Infection Control Doctors
Infection Control Nurses
Directors of Pharmacy
Directors of Public
Health

Estate and Facilities
Leads

Health Protection
Scotland

Health Facilities
Scotland

NHS Education Scotland
Healthcare Improvement
Scotland

Care Inspectorate
Scottish Care

Infection Prevention
Society (Scottish
Branch)

Scottish Microbiology
and Virology Network

Scottish Intensive Care
Society Audit Group

Scottish Antimicrobial
Prescribing Group

Association of Scottish
Antimicrobial
Pharmacists

Enquiries to:

[Redacted]

1.3 continued

The SGHSCD is committed to delivering on this agenda and will continue to do so using a 'One Health' approach.

We therefore seek the support and commitment of NHSScotland staff in achieving the strategic objectives set out in the new UK Five year action plan 2019-2024 and the UK's 20-year vision to reduce the burden of infection and optimise antibiotic use.

2. National HCAI Surveillance Framework

2.1 *Staphylococcus aureus* bacteraemia

Staphylococcus aureus (*S. aureus*) bacteraemia (SAB) remains an important HCAI. All NHS Boards are required to continue collecting data on both meticillin resistant *S. aureus* (MRSA) and meticillin sensitive *S. aureus* (MSSA).

It is the expectation that all NHS Boards will continue to participate in the enhanced SAB surveillance project as per the latest HPS [Enhanced *S. aureus* bacteraemia surveillance protocol](#).

As you are aware, in October 2017, Health Protection Scotland (HPS) introduced a new format for reporting the quarterly SAB and *C. difficile* infection (CDI) epidemiological data. The Chief Nursing Officer (CNO) wrote to HAI Executive Leads and Infection Control Managers on 25 June 2019 to make them aware of the changes (see Annex).

From July 2019, NHS Boards are required to distinguish between healthcare and community associated infections when reporting, using the new denominator of 100,000 total occupied bed days to reflect the healthcare cases and 100,000 population for community cases.

HPS will continue as usual to identify and advise any NHS Boards that have produced exceptions. Please see the full [Standard Operating Procedure for Production of Quarterly Exception Reports](#).

2.2 Multi-drug resistant organism (MDRO) Screening

MRSA Screening

NHS Boards are required to continue to monitor locally, and report nationally to HPS, compliance with the Clinical Risk Assessment (CRA) as a key HCAI Level 3 Indicator as per [CNO \(2013\) 01](#).

The HPS [Protocol for CRA MRSA Screening National Rollout in Scotland](#), published in November 2018, supersedes all previous versions of the national MRSA screening protocol, and represents a minimum level of screening which the SGHSCD expects NHS Boards to undertake.

Carbapenemase-producing enterobacteriaceae (CPE) Screening

In 2013, a joint Chief Medical Officer (CMO)/Chief Nursing Officer (CNO)/Chief Pharmaceutical Officer (CPO) letter [CMO/SGHD\(2013\)14](#) described the emerging threat from CPE and the requirements for an acute hospital admission screening programme for CPE.

A further letter [DL \(2017\) 2](#) reinforcing the mandatory policy requirement for CPE screening using a clinical risk assessment based approach in NHS Boards across Scotland was issued in March 2017 and this guidance remains extant.

It is the expectation that NHS Boards will inform HPS of confirmed cases as per the current guidance and the [toolkit](#) for managing CPE in Scottish non-acute care settings and the [toolkit](#) for the early detection, management and control of CPE in Scottish acute settings.

2.3 *Clostridioides difficile* infection

Mandatory surveillance for *Clostridioides difficile* infection (CDI) for patients aged 15- and over remains a requirement.

It is expected that NHS Boards will continue to follow the revised national [Guidance on Prevention and Control of CDI in Health and Social Care Settings in Scotland](#) and the latest HPS [Protocol for the Scottish Surveillance Programme for Clostridium difficile Infection](#) updated in January 2017.

As outlined in paragraph 2.1, from July 2019, NHS Boards are required to distinguish between healthcare and community associated infections when reporting, using the new denominator of 100,000 total occupied bed days to reflect the healthcare cases and 100,000 population for community cases.

HPS will continue as usual to identify and advise any NHS Boards that have produced exceptions. Please see the full [Standard Operating Procedure for Production of Quarterly Exception Reports](#).

2.4 Hospital Level Reporting

To ensure the ability to report HCAI at the hospital level, all NHS Boards are required to submit data on CDI, *Escherichia coli* bacteraemia (ECB), SAB and surgical site infection (SSI) in Scotland as per HPS Protocols. This includes using the revised standardised denominator of 100,000 total occupied bed days for healthcare cases as set out in the CNO's letter of 25 June 2019 (see Annex).

2.5 *Escherichia coli* bacteraemias

In recognition of the increasing burden of *Escherichia coli* (*E. coli*) bacteraemia, national surveillance became mandatory from April 2016. NHS Boards should continue to collect data on *E. coli* as per the [HPS *E.coli* surveillance guidance](#).

See paragraph 2.8 below regarding proposed level 3 indicators for prescribing.

2.6 Antimicrobial Use

NHS Boards are required to continue to implement surveillance of antimicrobial use as described by the [Scottish Antimicrobial Prescribing Group Local Surveillance of Antimicrobial Use](#) guidance. This guidance describes the mandatory minimum dataset required of NHS Boards for the surveillance of both Primary and Secondary Care antimicrobial use.

2.7 HCAI standards and indicators - reductions in antibiotic use and Gram-negative Bacteraemia

HCAI standards and antibiotic use indicators have been updated to reflect levels appropriate for Scotland but which complement the UK national action plan for tackling AMR, published in January 2019.

The new standards and indicators will be reflected in Scotland's One Health Action Plan on AMR, to be published in the second half of 2020.

Boards are asked to work with their teams locally to comply with the guidance contained in the CNO's letter of 10 October 2019 (see Annex).

2.8 Local surveillance of Alert Organisms and Alert Conditions

To detect and prevent outbreaks, and to minimise infections resulting from healthcare settings, NHS Boards are required to implement Local Surveillance of Alert Organisms and Alert Conditions.

Local Board infection control and health protection teams should be aware of and refer to the national minimum list of alert organisms/conditions in [Appendix 13](#) of the National Infection Prevention and Control Manual (NIPCM) Guidance.

In light of the recent outbreaks of fungal and Gram-negative infections in Scotland, Boards are asked to note their particular importance within wards or departments where high risk procedures are undertaken, or where immunocompromised patients are cared for. These would include haemato-oncology units, neonatal units, intensive care units and hard organ transplant. However, other vulnerable groups would include cystic fibrosis, oncology and those undergoing renal dialysis and therefore a risk based approach should be applied.

2.9 Surgical Site Infection Surveillance

All NHS Boards are required to undertake surgical site infection (SSI) surveillance of hip arthroplasty (elective) large bowel, (elective) major vascular and caesarean section surgical procedures as per the [HPS Surgical site infection surveillance protocol Edition 7.1 \(Updated May 2019\)](#). In addition post discharge surveillance (PDS) for caesarean section procedures is mandatory until 10 days following surgery. For other mandatory procedures it is mandatory to conduct prospective readmission surveillance for up to 30 days following surgery.

2.10 HCAI in Intensive Care Units

All NHS Boards are required to continue to undertake surveillance of HCAI within Intensive Care Units as per the [HPS/SICSAG protocol](#).

2.11 National Point Prevalence Survey (PPS) of HCAI and Healthcare Associated Infection in Long Term Care (HALT)

To inform future national policy and provide NHS Boards with an epidemiological evidence base to set local priorities and to demonstrate NHS Healthcare Quality Strategy HCAI outcome measures, all NHS Boards are required to participate in any future PPS of HCAI and HALT.

3. National HCAI Guidance

3.1 HCAI Compendium

The [HAI Compendium](#) contains links to current national policy and guidance on HAI, antimicrobial prescribing and resistance, decontamination and other related topics. The Compendium aims to provide NHSScotland staff with an overview of all up to date guidance from stakeholders/organisations.

The Compendium includes links to the National Infection Prevention and Control Manual (NIPCM).

Links to extant guidance are contained in this letter and Annex. Guidance is also listed on Scotland's Health On the Web (SHOW). We will clarify which documents are out of date on the website.

3.2 National Infection Prevention and Control Manual

All NHS Boards are required to adopt the [National Infection Prevention and Control Manual](#) (NIPCM). All non NHS healthcare settings are required to consider the NIPCM as best practice. It is expected that NHS Boards maintain local assurance of implementation through continuous monitoring in all healthcare settings.

NHS Boards are required to demonstrate that they have adopted and implemented the NIPCM through regular monitoring of IPC practice against policy using a quality improvement approach. National assurance regarding local implementation of the NIPCM is currently undertaken by Healthcare Improvement Scotland through inspections by the Healthcare Environment Inspectorate and local compliance and assurance processes are established and supported by robust governance. See also paragraph 3.4 below.

The Scottish Government is in discussion with Healthcare Improvement Scotland regarding improving the inspection process, and as a result, future inspection may be undertaken differently. Any changes to the current process will be communicated to Boards.

3.3 Hand Hygiene – Alcohol-Based Hand Rub (AHBR)

All NHS Boards are asked to re-emphasise the of the importance of hand hygiene practice in reducing the transmission of infectious agents.

[Chapter 1 of the National Infection Prevention and Control Manual \(NIPCM\)](#) specifies that ABHRs must be available for staff as near to point of care as possible. Where this is not practical, personal ABHR dispensers should be used and [CNO\(2005\)01](#) remains extant.

In accordance with the Associate Chief Nursing Officer (ACNO)'s letter of 12 June 2019 (see Annex) NHS Boards are also asked to ensure that controls are in place within all NHS Scotland hospitals to ensure that replenishment of alcohol-based hand rub dispensers in all areas happens reliably every day and that the staff involved in this activity are aware of their roles and responsibilities with regard to this.

The letter re-emphasises the importance of hand hygiene practice in reducing the transmission of infectious agents and, in particular, the importance of using ABHR as an adjunct to handwashing practice, where required.

3.4 Healthcare Associated Infection (HCAI) standards: February 2015

The [HCAI Standards \(2015\)](#) specify the minimum level of HCAI performance for NHS Boards and apply to all healthcare organisations and practitioners in Scotland, including independent healthcare providers. These HCAI Standards detail what patients and the public can expect of healthcare services in Scotland.

NHS Boards are required to continue to demonstrate that they have met or are working towards meeting HCAI Standards (2015) as part of their Healthcare Environment Inspections.

In 2019/20, a review of the current HCAI Standards will be undertaken in collaboration with key stakeholders.

3.5 The National Support Framework 2017

[The National Support Framework 2017](#) superseded the CNO HCAI Support Algorithm (2015) and is mandatory for use in all NHS Boards. The Framework is complementary to the [Healthcare Infection Incident Assessment Tool \(HIIAT\)](#) process.

The National Support Framework algorithm may be invoked by the Scottish Government HCAI/AMR Policy Unit or by a NHS Board to optimise patient safety during or following any healthcare incident/outbreak(s)/data exceedance or HEI visit/report.

3.6 HCAI Outbreak Reporting

A letter from the ACNO on 11 February 2019 (see Annex) on behalf of the CNO to HAI Executive Leads, copied to Chief Executive Officers and Infection Control Managers reiterated the mandatory requirements of assessment and reporting of infection incidents, outbreaks and data exceedance in both primary and secondary care settings.

The [Healthcare Infection Incident Assessment Tool \(HIIAT\)](#) should be used to assess every healthcare infection incident i.e. all outbreaks and incidents (including decontamination incidents or near misses) in any healthcare setting (that is, the NHS, independent contractors providing NHS services and private providers of healthcare as stated in [Chapter 3](#) of the National Infection Prevention and Control Manual (NIPCM).

Any incident/outbreak initially assessed HIIAT Amber or Red must be reported to Health Protection Scotland (HPS) and a Healthcare Infection, Incident and Outbreak Reporting Template (HIIORT) completed within 24 hours as stated in the NIPCM. Additional [supporting materials for Chapter 3](#) of the NIPCM are also available in the resources section.

To support current infection threat assessments and preparedness activities, and enhance the sharing of lessons learnt across healthcare settings, NHS Boards are required to report all HIIAT Green (non-Norovirus) assessed reports to HPS from April 2016 following the establishment of a national reporting system.

HIIAT Green should continue to go through the normal mandatory reporting and should be escalated for information to the HCAI/AMR Policy Unit where Boards have sought assistance from HPS.

NHS Boards are required to continue to report the number of hospital wards affected by norovirus outbreaks and the number of positive laboratory reports of norovirus in Scotland.

3.7 HAI-SCRIBE and Scottish Health Technical Memoranda

It is a requirement for NHS Boards to continue to adopt and implement HAI-SCRIBE when undertaking any refurbishment, new builds or remedial works within the healthcare environment. It is important to note that HAI-SCRIBE should be led by Estates/project teams with input from Infection Prevention and Control Teams and clinical teams and progress regularly reviewed throughout the lifetime of the project.

- [SHFN 30 Part A](#): Manual Information for Design Teams, Construction Teams, Estates & Facilities and Infection Prevention & Control Teams (replaces SHFN 30 Version 3); and
- [SHFN 30 Part B](#): HAI-SCRIBE Implementation strategy and assessment process (replaces HAI-SCRIBE Version 2).
- [SHFN 30: HAI-SCRIBE](#) – Question sets and checklists

Boards are asked to ensure that plant room controls set out in the Chief Executive NHSScotland's letter of 25 January 2019 (see Annex) remain in place and ventilation systems comply with [SHTM 03-01](#) Ventilation for healthcare premises Part A – Design and validation.

Following recent issues in Scotland in terms of design, planning, commissioning and ongoing planned preventative maintenance of healthcare ventilation and water systems, Boards are asked to ensure that the principles of SHTM-00 'Best practice guidance for healthcare engineering' 'are adhered to with regards their duty of care. Whilst guidance is deemed not compulsory by the Health and Safety Executive (not legally enforceable), where compliance with guidance is specified in a contract, it becomes a contractual requirement. Any permitted deviation from guidance would therefore be expected to follow a formal process with input from all relevant parties.

It is important to note that adherence with this guidance will support reduction in all risks which would include water, ventilation, electrical, medical gases, fire and infection risks. Therefore it is vital that compliance with this guidance requires engagement with the relevant parties, but overall responsibility for compliance lies with the Project Teams.

3.8 NHS Board Management of Infection Prevention and Control Services (IPCS).

One of the key recommendations arising from The Vale of Leven Hospital Inquiry Report, published on 24 November 2014, was the re-issuing of national guidance on the role of the Infection Control Manager (ICM). The guidance will be reviewed over the next year alongside the roles of other IPC team members, including Infection Control Doctors and Infection Control Nurses in collaboration with key stakeholders and professional bodies.

A letter from the CNO on 22 December 2016 (see Annex) reiterated that [HDL \(2005\) 8](#) remains extant, therefore NHS Boards should continue to comply with guidance contained in HDL (2005) 8 until the review of roles is complete and new guidance issued.

3.9 HCAI Reporting Template (HAIRT)

The mandatory HCAI Reporting Template (HAIRT) was introduced in 2009 as a consequence of the Vale of Leven outbreak and we indicated that a full review would take place following the inquiry's final report.

Currently, as per a letter from the then Head of the HCAI Policy Unit in August 2013 (see Annex), local reporting of Board progress against the nationally agreed HCAI standards for SAB and CDI, hand hygiene compliance and facilities monitoring is undertaken via the HAIRT reporting tool. Going forward, a more quality improvement focussed approach is proposed. Therefore a short life working group will be established to co-design a reporting framework which is outcomes focussed. An update to this will be sent out in due course.

3.10 Communication

The ACNO's letter of 11 February 2019 (mentioned at 3.6 above) reiterated guidance on ensuring robust communication with patients and their families during [incidents and outbreaks outlined within the NIPCM](#).

The Chief Executive NHSScotland's letter of 22 February 2019 (see Annex) further stressed the importance of appropriate communication. Boards are asked to ensure that reporting and communication requirements are being met and staff, patients and families are alerted first before making any public statements.

4. Summary and confirmation of compliance

We request that you immediately draw this letter to the attention of Consultant Microbiologists, HAI Executive Leads, Pharmacy Leads, Antimicrobial Management Team Leads, Infection Prevention Control Teams, Estate and Facility Leads, Directors for Public Health, Senior Charge Nurses, Clinical Governance and Risk Management committees along with relevant and appropriate non-NHS stakeholders.

We greatly appreciate your support and cooperation in ensuring that these mandatory requirements are put into effect within your NHS Board.

We would like to seek confirmation from Board Chief Executives that your Board is compliant with the requirements in this letter and Annex and that the staff involved are aware of their roles and responsibilities.

We should be grateful for confirmation with the requirements detailed in each paragraph to be submitted in writing to [REDACTED] by Friday 31 January 2020.

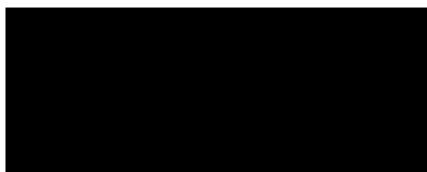
Yours sincerely



Fiona McQueen
Chief Nursing Officer



Dr Catherine Calderwood
Chief Medical Officer



Rose Marie Parr
Chief Pharmaceutical Officer

Please consult separate word document.



SCOTTISH HOSPITALS INQUIRY
Hearing commencing 9 May 2022
Bundle 3 - Governance
Volume 3 (of 3)