



SCOTTISH HOSPITALS INQUIRY

**Hearings Commencing
25 April 2023**

Day 5
Tuesday, 2 May 2023
Liane Edwards

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10:00

THE CHAIR: Good morning, ladies and gentlemen, both those of us who are together in the hearing room and those who are following us online. Before asking Mr MacGregor to lead his first witness, who I think will be Ms Liane Edwards, with Mr MacGregor's help, could I just flag up some points on timetabling? Looking-- and I am grateful to Mr MacGregor for thinking ahead and seeing the consequences of how witnesses are to be fitted in. If legal representatives could have regard to the, at least, possibility and hold themselves ready to sit perhaps at half past nine on certain days-- Now, Mr MacGregor, I think you have indicated that Thursday 4 May, Friday 5 May this week, and Tuesday 9 May next week may be days where we need more hours or we might need more hours. Now, I am taking in information you have given me and other information from the solicitor to the Inquiry. Have I sort of got that right?

MR MACGREGOR: Yes. I think in terms of additional time, I would not anticipate needing to sit on past four o'clock either today or tomorrow. I think there is a possibility that Thursday and Friday may both be full days, so it may be worth investigating

whether there could be half-nine starts those days or, equally, a possibility of sitting on slightly after four o'clock, and I think the same for Tuesday the 9th, whereby it is Miss Goldsmith and Mr Cantlay. I think if there could be investigations as to possibly a half-nine start on the ninth, recognising that we might need to sit on slightly after four, that would be beneficial to make sure that we finish within the indicated timeframe.

THE CHAIR: Right. So, if I could ask legal representatives to plan their week on that basis, and I am sure Mr MacGregor will be happy to deal with any particular enquiries. Well, with that by way of preliminary, may I ask that Ms Edwards be brought in?

Good morning, Ms Edwards. As you appreciate, you are about to be asked questions by Mr MacGregor, the Deputy Counsel to the Inquiry, but before then I understand you are happy to make an affirmation. I would ask you just to remain seated where you are.

Ms Liane Edwards

Affirmed

Questioned by Mr MacGregor

Q Thank you. You are Liane Edwards.

A That's right.

Q And you have provided a witness statement to the Inquiry. You should have a paper copy available to you. If there are any portions I want to take you to, they should come up on a screen in front of you. For anyone following in the electronic bundles, the statement is in bundle 13, pages 260 to 273. The content of that statement is going to form part of your evidence to the Inquiry, and you are also going to be asked some questions by me today. If at any point you want to refer to your statement to refresh your memory, please just do let me know. I would like to begin by just asking some questions about your qualifications and your career. You tell us at paragraph 2 of your statement that you are an architect employed by Multiplex Construction Europe Limited. Can you just explain to me what your current role is with Multiplex?

A My current role is Deputy Project Director.

Q And what does that involve?

A It is quite a varied role. It involves effectively acting as a number two to the project director. I can deputise for them as necessary, but I carry out a range of activities depending on the project and the

stage of project, but it's a managerial management role.

Q So, a management role as opposed to doing any particular technical aspects of an individual project?

A Correct.

Q Because you tell us in your statement that you qualified as an architect in 2007. Is that correct?

A Yes.

Q So from 2007 to 2014 when you joined Multiplex, you were working as an architect. Is that correct?

A Well, I've been a registered architect for 16 years, for the duration of my career, and that remains the same, but my career has really been in two halves. The first half working in private practice as an architect carrying out technical work, but the latter part is a management role with the main contractor.

Q But 2007 when you qualified to 2014 when you joined Multiplex effectively working as an architect doing technical work, and then from 2014 onwards still working in the construction sector, qualified as an architect but performing a management role in construction projects.

A That's correct.

Q Good. I want to move on and ask about your specific involvement in the Royal Hospital for Children and Young People and the Department of Clinical Neurosciences. You tell us that you joined Multiplex in 2014. Did you start working on the Royal Hospital for Children and Young People immediately when you joined Multiplex?

A Yes.

Q Okay, and am I correct in thinking that when you join in 2014, that IHSL has already been appointed as the preferred bidder, with Multiplex effectively being the building contractor for the project?

A Yes. The appointment was made in March 2014, and I joined in June 2014.

Q So, again, just so I am understanding things, you would not have had any involvement whatsoever in the production of the tender documents. Is that correct?

A No.

Q And you were involved in the period from preferred bidder in 2014 through to financial close and beyond. Can you just explain in terms of whenever you come in, working for Multiplex to work on the project? You told us in general terms it is a management role that you would have,

but what specifically are you doing on, I will just call the Royal Hospital for Children and Young People the project, what is it you come in to do on the project?

A I was employed as a design manager, and I was one of a team of design managers that Multiplex had assigned to the project, and I oversaw the architectural development of the design by our design team.

Q Okay. So, the Inquiry has also heard from a Mr Hall. Was he someone else from Multiplex you were working with?

A That's correct.

Q What was Mr Hall's role on the project?

A He's what we call the MEP design manager, so he oversaw the process in relation to mechanical, electrical, and plumbing.

Q Again, just so I can understand things, effectively do you have the same role as Mr Hall, albeit you are dealing with architectural issues from a management role, and he is dealing with mechanical and electrical engineering from a management role?

A Yes, and I think I described it in my witness statement-- I described myself as an "architectural

design manager” because that best sums up the aspects that I was looking at.

Q So if you are doing the management, who is involved in the technical aspects that you are overseeing? Is that in-house people with Multiplex or is that external subcontractors that would do it?

A No. We had a design team appointed who carried out technical work for us.

Q When you talk about managing those external groups and bodies that come in, what entities is it that you were involved in managing at this stage in the project?

A At this stage in the project, architecture. HLM Architects were the architectural designers, so I liaised with them about the project.

Q You are dealing with HLM Specialist Architects. The Inquiry has also heard that Multiplex engaged with an entity called TÜV SÜD. Were you aware of that?

A Yes.

Q Did you have any direct involvement with TÜV SÜD on mechanical and electrical engineering issues, or was that a colleague of yours that would be dealing with those issues?

A It would be Ken Hall who

would deal with them technically, but I would attend design team meetings where they were present.

Q I would like to move on and just ask you some questions about a concept called an Environmental Matrix, which you mention in your statement. Was that a document that you had seen-- that type of document a document you had seen in your previous career when you were working as an architect from 2007 to 2014?

A Yes. I had an awareness of an Environmental Matrix.

Q Again, can you just explain in general terms what your understanding of an environmental matrix was and how it would be on a project, not specifically the project we are talking about but a project of that nature?

A The Environmental Matrix is a tool which allows you to see every room within a building or group of rooms, and it is essentially a table which covers all of the environmental aspects of each room in one document. It is often used in Excel format, and it's an easy way to interrogate and see a range of information in one place.

Q In your experience, in a large project, who is producing an

Environmental Matrix? Would it be the party that was putting a contract out to tender, or would it be a party that was bidding to win a tender?

A My understanding is that it can be either. There's not one set answer to that.

Q Okay. In your experience – again, I am thinking particularly of the point that you are working in industry as an architect, 2007 to 2014 – who is producing the Environmental Matrix? By that I mean is it an architect, is it an engineer, or is it someone else?

A It would typically be an M and E engineer either, obviously, appointed by the client or a contractor, depending on contractual set-up, but it would be an engineer who prepares that type of document, definitely not an architect.

Q You mention that it has got a lot of technical information contained within it. Again, could you just explain your understanding? What is the purpose of the document? So, it collates a lot of technical information, but what is its purpose?

A Well, it's an engineering document which allows engineers to work with the design parameters or understand how the building needs to be designed to accommodate the

criteria that's set out within that matrix.

Q Okay. In addition to an Environmental Matrix, within your statement you have addressed the concept of room data sheets. Can you explain your understanding of what are room data sheets?

A Room data sheets are typically approximately-- they can be 10-15 pages long, and they cover all aspects of an individual room within a hospital building. So, in theory, you can take the room data sheet for a room and you can understand everything about it from within that data sheet.

Q Again, just so I can understand things, in terms of production of documentation on a large-scale project, you have mentioned the Environmental Matrix, you have mentioned the room data sheets. What tends to come first, or do they get produced at the same time?

A I don't have enough experience to be able to say what always comes first, because I don't think there is a standard answer to that, but room data sheets are, in my experience, generally viewed as the briefing tool.

THE CHAIR: Sorry. I missed that, entirely my fault.

A Room data sheets are typically understood to be the briefing tool.

Q Thank you.

MR MACGREGOR: And when you say that, just so I am being absolutely clear, do you mean that that is what an entity that was looking to procure someone to come in and construct would provide to the tender, as opposed to a document that a tenderer bidding for a contract award would produce?

A Yes, because they provide the briefing information for the hospital.

Q Again, just so I am being absolutely clear and in fairness to you, if we could look at your statement, it is within bundle 13. It begins at page 260, but if we could look to paragraph 19 on page 263, please?

A Yes.

Q You have got paragraph 19 in front of you. You say:

“My understanding is that the room data sheets are normally used as a briefing tool by the Health Board. This was not, however, the case on the RHSC project.”

Do you see that? Again, just for completeness, we look onto paragraph 49, page 269 of bundle 13, you say:

“In my experience, these are typically provided as briefing documents to contractors and their design teams by the ultimate client.”

Do you see that?

A Yes.

Q Now, it is not a matter of dispute that on the project that there weren't room data sheets that had been produced by NHS Lothian. Were you surprised by that when you became involved in the project?

A Yes.

Q Why were you surprised?

A Because in my previous project I knew that they had been used as a briefing tool, so I hadn't ever questioned that until I arrived on this project and there weren't any in existence.

Q Again, you mentioned that they are a standard briefing tool. They are not available in the project when you come in. What potential implications did that have for the project?

A I think, firstly, there's not one collated set of briefing information then pertaining to the room types within the hospital that can be referred to to understand exactly what is required. In this instance, there was the Environmental Matrix, but there

wasn't the room data sheets to tie the two together, and by that I mean the room data sheets cover activities which happen within a room and a full understanding of what the room is intended to be used for, and they could include the environmental data assigned to it. So you see all the information together, whereas the environmental matrix, although you can see all the environmental data listed room by room, wouldn't have the accompanying room data and type.

Q Did you have any concerns about that information not being available to you when you became involved?

A At the time I had come into the job and it had really already started, so it was case of really assisting to prepare us for financial close. It wasn't really something that I saw that had to be questioned. It was just really a case of get on with the job and keep momentum.

Q Okay, thank you. If I could just ask you to have it in front of you, the Environmental Matrix that was provided with the procurement document? So, that is in bundle 4, page 132, and it is just to look at the guidance notes. Were you provided-- I appreciate that you were not interrogating that the technical

information within the Environmental Matrix, but am I correct in understanding from your statement you had physically seen a copy of the Environmental Matrix when you were working on the project.

A I had seen it. I don't have any technical input or carry out any work in relation to the Environmental Matrix, but I knew it had existed and I have seen that document.

Q It is just-- I want to ask you just a couple of questions about the briefing notes, the guidance notes, and guidance note 1. It says:

"This workbook is prepared for the Reference Design Stage as an easier reference tool to replace ADB RDS M&E sheets for the environmental criteria elements as described in these sheets."

Do you see that?

A Yes.

Q Did you have any discussions with Mr Hall or any of your other colleagues about what was meant by the term, "prepared for the Reference Design Stage"?

A No.

Q Did you know when the reference design stage was going to end and what was going to come after

that?

A Yes, in as much as we were working towards financial close.

Q So, again, I just want to be clear in your understanding, the reference design stage is effectively going to close at financial close?

A Yes.

Q Thank you. There is a statement there that this document, the Environmental Matrix, had been prepared as an easier reference tool to replace the ADB, RDS, M&E sheets. Did you have any discussions with Mr Hall or anyone else as to whether this was a helpful or easier reference tool as opposed to room data sheets?

A I didn't have a discussion specifically, because I can agree that in terms of analysing environmental data-- Because you are seeing all the environmental data side by side on environmental matrix, it can be perceived to be an easier way to analyse M&E data.

Q Now, one of the things that had to be produced by financial close was room data sheets for 100 per cent of the hospital. Were you aware of that? Now, that did not happen, and we will come on to discuss that in a moment, but really what I wanted to ask you about is, within your statement, you mentioned

that your understanding is that room data sheets would reflect an Environmental Matrix. Is that correct? Is that your understanding?

A Yes.

Q I just want to ask you a couple of questions, because if room data sheets are normally produced as a briefing tool, as you mention, would it not be the other way around – the room data sheets populating the Environmental Matrix – or was that not the way things worked?

A One informs the other. So, if there had been room data sheets fully populated to begin with, I anticipate that, at some stage in the job, someone would extract the environmental data from the room data sheets to create an Environmental Matrix, so that they could carry out specific M&E related tasks. In the instance that an Environmental Matrix exists first, at some point that criteria-- that data is extracted back into the room data sheets. It is not advisable to have both running concurrently because you could give rise to error. One advances before the other. You have to be specific about what point you bring the two documents together and exchange the data.

A Okay. So, again, just so I am understanding things, if you had

room data sheets, those room data sheets would populate the Environmental Matrix. If you have got an Environmental Matrix, your understanding is that that data would then be used to populate room data sheets.

A It can be, yes.

Q The next issue that I would want to ask you about is the project management group. You tell us about the project management group within your statement, from paragraph 21 onwards. Can you just explain what the project management group was?

A It was a weekly meeting. I think it was weekly at that point. It may have been fortnightly, but it was the coming together of, kind of, management teams from each of the stakeholders to assess how things were going in the various work streams that we had, and issues could be escalated. It sat-- In the hierarchy of meetings, it sat at the highest level at project level, and if there were issues there, they could be escalated beyond that to, I think, the steering board meetings, but really we were dealing with issues coming up from the more granular and technical meetings.

Q Okay. So you would have the people doing technical

issues. They could then refer that up, and then if matters could not be resolved at that stage, they could be escalated further than that?

A Yes, and I think it was looking at, kind of, week-to-week progress on matters.

Q Okay. Now, you also mentioned within your statement the concept of user group meetings. What were user group meetings?

A User group meetings were a programme of meetings that ran for around three months, and the idea of them is to help progress the design from what teams would refer to as a "1:200 exercise," which shows rooms within departments in the hospital, but the idea of the user group meetings is to get each room developed in detail, and populated with all its equipment in the right place. The way we did that was to work with teams of clinicians by department on a rolling programme to review the design being proposed and the population of these rooms and listen to comments made by clinicians and adjust the drawings if necessary to accommodate what was required or requested.

Q Okay so, again, just so I am understanding things, user groups: clinicians are attending, and it is aimed at progressing the design. Now, when

you are talking about the design, are you talking about the architectural design as opposed to the technical design of things like mechanical and electrical engineering?

A Yes, yes.

Q So, would I be right in thinking that there would not be any engineers that were attending these meetings?

A No.

Q Again, could you just explain why not? If it was important that the clinicians met with the architects, why was it not important for the clinicians to meet with the mechanical and electrical engineers?

A I don't know the answer entirely, but certainly the clinicians that we dealt with were the clinicians who are medics within the hospital. They are not people who I believe understand, necessarily, the technical aspects around the room. They are the ones who are treating patients, so they're-- it is out with their scope to comment on technical parameters within a room.

Q Okay. The only reason I ask this is the Inquiry is also going to hear from individuals from Wallace Whittle, TÜV SÜD at a later stage. One of the things that Mr McKechnie, who works for TÜV SÜD, says-- he

said he had never been involved in a project of this nature before, whereby he had not effectively had direct discussions with clinicians. Are you aware of there being any of those direct-type discussions between clinicians and those that had been engaged to assist with the mechanical and electrical engineering, or would that simply be outwith your scope of knowledge because you are dealing with the architectural issues?

A Correct. I was dealing with the architectural issues, but no. My understanding was that there was a technical team appointed by the NHS to review technical aspects-- or these technical aspects of the design.

Q I appreciate that it does not seem that this did happen in terms of clinicians having direct discussions with mechanical and electrical engineers, but do you think that would have been something that may have been helpful to take place on a project of this nature? I am not talking specifically about the Royal Hospital for Children and Young People. I just mean projects of this nature in general.

A I think it would depend on the brief. In this instance, there was a clear brief in terms of the Environmental Matrix, so I'm not sure what the direct contact with clinicians

from a technical perspective would add to that.

Q So, again, if I could just make sure I am understanding things, from your perspective as someone who manages projects of this nature, if there was perhaps a general or unclear brief, you think it would be helpful for that type of discussion, but if there were set parameters that had simply to be built, you would not think there would be any point in that type of discussion taking place.

The next aspect that I want to ask you about is the input that you received back from both NHSL Lothian and their technical advisors, Mott MacDonald in particular. If I can ask you to have your statement in front of you again, so that is bundle 13, page 267 at paragraph 39. Page 267, paragraph 39. You tell us in your statement, "As part of my role in the Project I also oversaw the production of the PCP (Project Co Proposal) documents." If we just pause there, what was the Project Co Proposal document?

A These were the suite of documents which we were required to prepare in response to the Board's Construction Requirements that demonstrated that the design had developed in line with the BCRs.

Q Okay. Again, so I am understanding, the Board Construction Requirements, that is the requirements, and then Project Co Proposals are the response that comes back to those?

A Yes.

Q Thank you. Returning to your statement, you say:

"This was not something I had done on the previous healthcare projects I had worked on. I managed them through the process of being drafted by our design consultants, reviewed by the Board, redrafted in light of the Board's comments, and resubmitted to the Board. I did not comment on the documents technically but instead managed and tracked the process. Multiplex had our technical design consultants employed to prepare the information, and the Board had their technical teams to review the content of the information. The Board and their team were involved in the preparation of the PCPs."

Do you see that?

A Yes.

Q What I would like to try and understand is the volume and detail of comments that Multiplex/IHSL

is receiving back from both NHSL Lothian and Mott MacDonald engaged as their lead technical advisors. Can you just explain your understanding of what is coming back by way of comments?

A It was very detailed. Comments came back regularly on the documents. There was no set template or standard for what a PCP should look like or cover, so our teams drafted what we believed satisfied a demonstration that we'd met the BCRs, but probably 10 out of 10 times the Board's-- Well, the Board's comments were always returned via Mott MacDonald to us, and they were very detailed comments that continued, so documents had to be redrafted multiple times. So, your document was about 35 documents, so it was a meaty process.

Q The Inquiry has received a series of witness statements from Mott MacDonald, and their description of what they are doing at this stage in the process from preferred bidder up to financial close is that it was a very light-touch approach, whereby they were doing simply some sample reviews of matters. Was that your understanding of what Mott MacDonald were doing at the time?

A Absolutely not. No, they

commented on everything. There were pages of comments. Sometimes we had to meet them to understand the comments that were made, and they were extremely detailed. They wanted a lot more detail than we thought was necessary included in these documents, so I would not agree with the comment that it was a light-touch approach.

Q Your colleague at Multiplex, Mr Hall, described Mott MacDonald, at this period in the project, as acting as akin to being a shadow design team. Do you have any observations on that comment Mr Hall makes?

A I can understand why he would say that because Mott's had a member of their team for every discipline that you could imagine required by the project, so architecture, fire, acoustics, mechanical, electrical, helipad. Every discipline was covered, so they were able to analyse every aspect of the project design as it progressed.

Q You mentioned, I think, in the response to the question, and you also tell us within your statement at paragraph 1, that Multiplex's view was that effectively what NHSL Lothian and Mott MacDonald were asking for was a lot more detail, certainly, than Multiplex

and IHSL were intending to provide at that stage in the project. Could you just expand on that a little bit – what was it they were asking you to do that you thought was unreasonable at that stage of the project?

A Well, in my mind, the Board's Construction Requirements were in place. They stated what we were required to meet as a brief and, more than a brief, as the requirement for the project, so by confirming that we were going to meet these aspects of the BCRs, often that felt like it was sufficient, but they wanted to know in minute detail exactly how things might be achieved, which took time. It took time to continually add that detail which wasn't necessarily, we felt, relevant.

Q I think one thing that would be helpful to understand is why it is not relevant, because I think to a lay person coming to a project, they might think that at this stage, actually, having everything covered off and having a huge amount of detail might be helpful. Why was it not either relevant or helpful to have that level of scrutiny at that stage of the project?

A Well, it depends what aspect of the project you're looking at, but if I use an example of cladding material, for example: if you know what

the material is, the colour, where it's going to be on the building, and how it performs, basically, to meet the BCR, that would be sufficient. But, for example, they would look for how many screws and how long the screws were going to be and exactly, you know, what shade of blue the cladding was going to be. You know, one could argue that some of these were not necessarily relevant at that point. The information would come in time, and there's varying degrees of detail that you can go to on different aspects of the building, but we felt that we were giving them a fair understanding of how we were going to meet the BCRs and we were committing, obviously, to meet the BCRs.

Q The request, as you saw it, for a very granular level of detail at this stage, what impact did that have on the project and the timescale to financial close in particular?

A It's time, because that's what you're trading off. The more detail that you want to achieve in a project, the longer it takes to achieve that and, at some stage, teams, people, managers need to make a decision on what point or what kind of milestones they want to achieve.

Q We have spoken already about certain of the requirements that

were set out in the procurement documents and things that had to be achieved by financial close. So, one of those requirements was for IHSL to produce room data sheets for 100 per cent of the hospital by financial close. Now, it is not a matter of dispute that that was not achieved. Why was that not achieved?

A Partly because of time. The preparation of room data sheets is a time-consuming activity, but it wasn't relevant either because we were able to produce 100 per cent of the room types. So, actually, they could see what they were going to receive and what the hospital was going to perform.

Q Were you surprised that that requirement was not insisted upon by NHS Lothian before financial close?

A I don't remember how I reacted to that at the time. It didn't seem reasonable in the time period available to prepare 100 per cent of room data sheets. There was still a 1:50 process, which is the user group process. That was ongoing throughout the summer, and you can't really start to produce these room data sheets because they didn't exist at all. You couldn't start them until we had finished our process of design.

Q In terms of that decision

not to have 100 per cent room data sheets, was that a decision-making process you were involved in, or was that something for other people within Multiplex and NHSL Lothian to decide?

A At that time, it was for others more senior than myself.

Q Okay, and on the Multiplex/IHSL side, who would be involved in those types of discussions?

A Well, the person who sat above me at that time was John Ballantyne.

Q John Ballantyne. Can I ask you to have in front of you, please, within bundle 8, page 54, please, which should be a set of minutes for a project management group meeting on 27 August 2014? Do you see those?

A Yeah.

THE CHAIR: Sorry, my fault, MR MACGREGOR. This is bundle 4?

MR MACGREGOR: It is bundle 8.

THE CHAIR: Bundle 8, thank you.

MR MACGREGOR: Bundle 8, page 54.

THE CHAIR: Thank you.

Q This is a set of minutes from the project management group meeting on 27 August 2014. We see the attendees set out, which includes yourself – Liane Edwards – a range of

other people attending, including Graeme Greer from Mott MacDonald, Brian Currie from NHS Lothian. It is really over the page, entry 2.8 at page 55, that I would like to ask for your observations on. So, entry 2.8, there is a statement:

“LE [so Leanne Edwards] advised that during a review of the Environmental Matrix a number of discrepancies have been uncovered impacting on RDS production and requested input from NHSL. IHSL to raise RFI.

Do you see that?

A Yes.

Q Again, the Inquiry has statements from a number of individuals on the Multiplex side who considered that their understanding was that the Environmental Matrix was effectively a fixed brief. That was effectively what you are being told: “This is what I want, and this is what I want you to build.” Can you explain, why was there a review being undertaken to look for anomalies if what you had been provided was a fixed brief from a client saying, “This is what I want”?

A It was not a review looking for anomalies. It was an activity that HLM had, at this point,

concluded – the 1:50 exercise – so they were now preparing the agreed list of room data sheets and, as we talked about earlier, they were now extracting the data from the Environmental Matrix into the room data sheets. As they do that, they were finding some discrepancies, which were really about consistency, and they were highlighting through me so that I was aware, but they were highlighting them to the MEP team just to question them.

So, as an example, you know, 10 storerooms have a ventilation rate and an air change rate, whatever, of a number; the 11th storeroom has something different than all the rest. It looked unusual. It was inconsistent, so HLM would just raise that as part of a kind of due diligence as they were extracting the data. At this point in the job, and throughout the job in fact, we were in a really collaborative environment, so I was aware that this conversation had begun within our team. I attended the project management group meeting and I just highlighted it, really out of courtesy, to the Board that there potentially were some questions to come back to the Board about the brief. I didn’t know at that point the volume or time and just raised it as part of our kind of

collaborative approach to make them understand the discussion ongoing.

Q So, just so I am understanding things correctly, the review that you are talking about there, that is a review that is effectively undertaken by the architects, HLM.

A I don't think a review is the right word to use. They're extracting the information and just highlighting things that looked inconsistent.

Q Okay. At that stage, is there any similar process being conducted by Wallace Whittle TÜV SÜD on the mechanical and electrical engineering aspects?

A I couldn't comment on that. I never oversaw that aspect.

Q That would have been an issue for Mr Hall?

A Yes.

Q Again, just thinking back to this concept that there is a review and there is some what is described here as discrepancies that are being spotted. Did that have alarm bells ringing on your part or the part of Multiplex if what you thought you had was a fixed brief, but it does not appear that it 100 per cent complies with some of the published guidance that you have talked about? Was that a concern on your part?

A HLM were not reviewing the document for compliance. They don't have a remit or the ability to interrogate for compliance. Best word to use is "consistency." They were highlighting matters of inconsistency.

Q Again, at this meeting, whenever as a courtesy you raised the issue that there might be issues whereby there are discrepancies or non-compliance within the Environmental Matrix, what was coming back from individuals from NHS Lothian and Mott MacDonald? What were they saying in relation to these discrepancies being flagged?

A As I recall, they accepted the comment and understood that there may be questions to come.

Q Was there any discussion at this meeting or meetings of this type about, "You don't need to worry about that because what was provided in the Environmental Matrix is a completely fixed brief that you need to follow?" Do you remember any discussions of that nature?

A Not specifically to the Environmental Matrix, but the general view we often got back was, "We know what we want provided to us. We've been through it," but because I wasn't providing specifics on the things we were questioning, I don't suppose

anyone was really in a place to say any more in any detail. It really was just a note for the meeting at that time.

Q Again, just, I think, in fairness to you so that you get to put your full picture across, the Inquiry is going to hear from Mr Greer from Mott MacDonald later this week. He has provided a witness statement, and his recollection of events is that the IHSL were being told by Mott MacDonald that the Environmental Matrix was a document that they had to develop, take responsibility for, as opposed to the idea of it being a fixed client brief. Were you ever privy to any discussions like that involving Mr Greer?

A No, I wouldn't have taken part in any discussions. I may have been at meetings where he talked along those lines, but I wouldn't be party to the conversation itself myself.

Q So, again, just to be fair to you, you do not recall any such discussions taking place, but if they were taking place, you would not be the right person for Mr Greer to be making those comments to.

A No.

Q Now, I want to ask you about the period at financial close and, again, the Inquiry's understanding is that the Environmental Matrix gets

included within the contract as reviewable design data. Were you aware of that?

A Yes.

Q Were you involved in any discussions around the Environmental Matrix becoming reviewable design data, or was that a decision for others to take?

A It was a decision that others took. I was just aware of the decisions once it was made because I was tracking the PCP process and just the general week-to-week status. I was aware of things happening because of my attendance at meetings.

Q Okay, and from your role as a project manager, did you have any concerns about the Environmental Matrix being reviewable design data at financial close?

A I think not in the respect that we had a clear number of comments that were to be addressed post-financial close and, as I understand, update the Environmental Matrix to reflect the comments that were included in the contract. I understood that that was agreed and didn't have rise to question that.

Q Throughout your career, have you ever been involved in another similar project whereby an

Environmental Matrix has been reviewable design data at financial close?

A I can't recall. The only other project I've been involved at the relevant time was the Glasgow Hospital. I can't recall now whether that was or was not.

Q Okay. The reason I raise it is, again, the Inquiry is going to hear from Mr McKechnie from Wallace Whittle TÜV SÜD and his position – and, again, this is on the mechanical and electrical engineering side – he had never seen that happen before, of an Environmental Matrix being reviewable design data, and he describes that process as potentially being dangerous from a commercial perspective because the party that contracts to do the build of the mechanical and electrical engineering system would not know, at the point they are contracting and agreeing a price, exactly the parameters of the system that they have to build. Is that something that you would have any views on, or is that really something that it is really for mechanical and electrical engineers to comment on?

A Yeah, I think I would revert to my M&E colleagues on that one.

Q If I could ask you to have

in front of you, please, bundle 4, page 218. This is a document headed "Environmental Matrix Comments" from 13 October 2014. Do you see that?

A Yes.

Q Have you seen this document before?

A Yes.

Q So, can you just explain what is the document?

A The left-hand column is a list of comments made by the Board that were being discussed, and the right-hand column is the IHSL response to each comment.

Q Again, can I just check, this is comments that are flowing in, effectively. Are you involved in this in terms of the management of the document coming in and making sure it goes to the right people to review, or are you involved in the process of these discussions?

A I'm not involved at all in the technical discussions surrounding these. If the document came to me and didn't include Ken as my relevant colleague, I would simply pass it to him, but more often than not he would be included anyway.

Q So, if we look over the page, the top of the page on the left-hand side, you will see a comment,

“Further review and development of the Environmental matrix is required...” Do you see that?

A Yes.

Q You would be aware that there had to be further development of the Environmental Matrix, but you would not be involved in the technical details of how the Environmental Matrix was to be updated. Is that right?

A Correct.

Q We see here, effectively, a range of issues that required to be resolved. If we could just look onto the contract itself, please, bundle 5. If we could start at page 869, please. Page 869, we see the “Non-Approved Project Co’s Proposal Design Data comments.” Is this effectively items that became reviewable design data? And if you do not know, please do just say.

A Just refreshing myself. Yes.

Q If I can ask you then to look on, please, to page 880. You will see that the second main box there, we see the Environmental Matrix being included as reviewable design data. Do you see that?

A Yes.

Q We see a number of the comments that were effectively raised

by the Board in the previous document we looked at being included as reviewable design data. If I could ask you to look down to that the fourth bullet point on the right-hand side. So, we have got the box on the far left, “Environmental Matrix.” Two boxes over, the bullet points. Four bullet points down, there is an entry, “Detailed proposal awaited on bedroom ventilation...” Do you see that?

A Yes.

Q It said, “Detailed proposal awaited on bedroom ventilation to achieve balanced/negative pressure relative to corridor.” Were you aware that there had been an issue in relation to bedroom ventilation and pressure, in particular in the period of financial close, or was that something that Mr Hall was dealing with?

A Again, I would be aware that there was a discussion ongoing because of the nature of the meetings I was attending, but not involved at all in any of the technical resolution or discussion on any of these items.

Q From a project management perspective, were you surprised that by financial close issues like that had not been bottomed out and resolved?

A It's difficult to say because I didn't have enough understanding of the issues to know if that was typical or not typical. I knew that we were on an accelerated financial close programme so, in the round, I was not surprised that there would be some items for further discussion.

Q One issue, again, that crops up in witness statements from various witnesses is the volume of reviewable design data on this specific project. Are you in a position to comment whether you thought that that was more or less than you would have anticipated on a project of this nature?

A It was more than I was expecting for the reasons that we spoke about earlier. Some of the detail, I think, that was anticipated was more than would be normal or necessary.

Q Just so I am understanding things, the level of detail, full stop, was more than would be expected, or the level that gets pushed into the reviewable design data processes is more than you would have anticipated?

A Possibly a touch of both, but bearing in mind I was concerned with the architectural side of things at

that point, so I can't really comment on M&E items and that aspect.

Q Again, just so I am understanding things, if I sort of summarise what I am taking from your evidence, that there was more reviewable design data than perhaps would have been ideal, and that was really because there was the pressure to get to financial close by a certain period. If you had had more time, there could have been less reviewable design data?

A Potentially. That stands to reason, yes.

Q The next document I would ask you to have in front of you, please, is in bundle 10 at page 283. This is a document headed, "Healthcare Associated Infection System for Controlling Risk in the Built Environment," often referred to as HAI-SCRIBE by other witnesses. This is an HAI-SCRIBE report from 19 November 2014. Have you seen that document before?

A Yes.

Q Were you involved in the HAI-SCRIBE process that resulted in the production of this document?

A Yeah.

Q Could you just explain to the Inquiry the nature of your involvement? Why are you as project

manager involved in a healthcare associated infection system review?

A We were made aware of it, I think, with relatively short notice of the meeting itself taking place. I don't recall really having much of a brief of what would be required or anticipated. So, it's an NHS process that they go through, so I was invited to attend the meeting and the meeting, it turned out, is a review of the questionnaire required at certain stages of the process. It's really for NHS to complete. I think we're invited to assist them with their decision making on how they complete their own form.

Q Were you provided with a copy of the form at the end?

A Not at the end of the meeting. You know, a day later or something.

Q Yes, so within a reasonable timescale of the meeting taking place you are shown a copy of the report. If we could just look within the body of the report. If we look to page 285, section 2, the comment is headed, "consultation," and we see the second entry in the table, "Design Manager/IHSL," "Liane Edwards Scott." Is that you?

A Yes.

Q Then if we look on to page 286, we see entry 2.2: "Is the

ventilation system design fit for purpose, given the potential for infection spread via ventilation systems?" and it is ticked as "No," with the comment being:

"Some concern has been raised in relation to a potential issue with ventilation with regard to negative/balance pressure in single bed rooms. Awaiting drawings and further information to fully understand if there is a risk/issue."

Do you see that? At this point, we are in November 2014. The feedback that's being provided from NHS Lothian is that, at this stage, the ventilation system design was not fit for purpose. As an individual managing the process, did that give rise to concerns or alarm bells ringing on your part?

A Well, people who attended the meeting, with the exception of Colin Macrae, were not people who were involved in the technical resolution of M&E systems, so when it came to this question, I think there was discussion because-- well, multiple people in the room knew that a discussion had been ongoing and it was suggested that it hadn't been yet resolved. There is only a yes or no answer, and the view that the

NHS took was it couldn't be yes because they weren't sure that discussions had been concluded, so the only other option is no, and I accepted that. I didn't necessarily dispute that case, but I was surprised because I thought the discussion had potentially been closed by now, but Colin Macrae didn't confirm that it was closed, so the comment was added and we moved on. It certainly wasn't the forum that the issue was going to be discussed in technical detail or closed.

Q Again, my understanding is, from the fact that the Environmental Matrix goes in as reviewable design data, that this issue that is flagged within the HAI-SCRIBE report, that is not resolved by financial close. Was that your understanding?

A It looks to be the same comment which ended up in these bullet points which were to be included after financial close. So, in that sense, I agree.

Q Again, just so I am understanding things, by the time financial close is achieved, there is an outstanding issue in relation to whether the ventilation system design is fit for purpose or not.

A I don't think the two correlate quite like that. I don't think

that the bullet point, as it listed in the table that we just looked at, suggesting that the system is not fit for purpose. Equally, they didn't revisit the HAI-SCRIBE *pro forma*. I think it was only visited once, so I don't think there was the opportunity for them to update their answer to 2.2 in the HAI-SCRIBE *pro forma*.

Q The final issue that I would want to ask you about, and it is really a general point drawing your experience working in the industry: NHSL Lothian's position before the Public Inquiry is that there was an error, simple transcription error, in an Environmental Matrix that does not get spotted. Do you think there were any issues during the procurement exercise leading up to financial close that could be done better in future projects to try to avoid that type of issue, if it did crop up, cropping up in the future?

A Well, obviously, I wasn't involved in it at all but, as you're asking for my opinion, I understand that they'd undertaken a large exercise previously to establish their brief for the hospital and that they didn't want to lose the work that had been put in, because it does take a lot of work from technical people, specialists, clinicians, whoever, to decide what the brief is.

They mandated that in the design, and I don't think it would be unreasonable, given that they've gone to the extent of compiling the matrix, that it should be reviewed technically by their own technical team prior to making it a mandatory element of the design. They need to make clear what the brief is. A way that they could have done that would be to produce a full suite of room data sheets as is intended by their own guidance. Room data sheets are there as a briefing tool and they allow you to see the activity within the room, the purpose of each room type and the environmental data associated with it, and if that full suite had been produced as a full briefing document, perhaps some of these issues may have been picked up. The brief should have been clear.

Q Thank you. Miss Edwards, I do not have any further questions for you at this stage, but Lord Brodie may have questions, or equally there may be application from core participants, but thank you for answering my questions.

A Thank you.

THE CHAIR: Mr MacGregor, I do not have any questions at this time, but what we will do is, we will rise for about 10 minutes or so. I will ask you to be taken back to the witness room,

and this gives the opportunity of the legal representatives to consider whether any questions arise. I will then ask that you come back and either if there are questions, you will be asked these questions, but if there are no questions, I will confirm that to you. So, if Miss Edwards could perhaps be taken to the witness room. We will take about 10 minutes to allow people to consider whether there is any questions.

USHER: Please stand.

(Short break)

THE CHAIR: Now, my understanding from Mr MacGregor is that no questions arise and, therefore, what I propose is that I will ask the witness to re-join us. Apparently, coffee has not been made available yet, but is now-- or has not previously been made available but is now available and, therefore, it would seem appropriate to allow people a coffee break until, let us say, twenty to twelve, and we can then resume with Mr Macrae. So, if I can ask Miss Edwards to be brought back.

Miss Edwards, there is no further questions for you, but can I thank you on behalf of the Inquiry not just for your attendance this morning – giving

evidence to a public inquiry is not just a couple of hours off a morning. It requires preparation and work, which you have carried out. I am grateful for that. You are now free to go.

THE WITNESS: Thank you very much.

THE CHAIR: We will sit again at twenty to twelve.

USHER: Please stand.

(Short break)

11:20