SCOTTISH HOSPITALS INQUIRY

Hearings Commencing
17 June 2024

Day 1
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THE CHAIR: Good morning to those in the room, in the Inquiry offices, and good morning to those following these proceedings on the YouTube feed. Today is the occasion of what is planned to be the final session in relation to the Inquiry's investigation in relation to the Royal Hospital for Children & Young Persons in Edinburgh. What I have done is to invite the core participants in the Inquiry, if they so wish, to make final oral submissions as to what they consider to be the key issues that the evidence the Inquiry has heard give rise to and identify where they see matters of controversy and help me in determining how controversial issues should be decided.

Now, I have had the benefit of written closing statements from the core participants, and I am very grateful for these. You can take it that not only have I read them, but I will continue to read them not only in the light of the other written closing statements, but also in the light of what I am addressed on today. So, as I have indicated, this is the opportunity, and I am very grateful to those core participants who have taken it, to direct me towards what the core participants consider to be the key issues, the important matters, both for their clients, but also more generally in relation to the terms of reference which the Inquiry must address and fulfil.

Now, I have been provided with a running order, and I think I am right in saying that the first legal representative who will address the Inquiry is Ms Forster who is acting on behalf of IHSL. Now, I would invite Ms Forster and instructing solicitor to come forward and to make use of the microphone.

Submissions by Mr Gillespie

MR GILLESPIE: Good morning, my Lord. I am Mark Gillespie of Pinsent Masons and I will be (inaudible) oral statement this morning.

THE CHAIR: Right. So, arrangements can change. So, Mr Gillespie, is it?

MR GILLESPIE: Yes.

THE CHAIR: Right.

MR GILLESPIE: Yes, my Lord.

THE CHAIR: Mr Gillespie.

MR GILLESPIE: Good morning, my Lord. This oral closing statement is made on behalf of IHSL. IHSL thanks your Lordship for the opportunity to make this statement. IHSL has previously responded to the Inquiry's position papers and made closing submissions following the hearings. Mindful of direction 6, regarding the purpose of the oral statement, IHSL does not intend to repeat the written submissions, but it continues

to rely upon them.

Your Lordship has invited core participants in direction 6 to identify what they consider to be the key questions. This includes the identification of the principal material facts that they consider are controversial. IHSL accepts that the Inquiry has identified the key questions, but given the core participants' positions, it is apparent that there are material facts that are controversial. In this closing statement, IHSL has four main points which highlight the principal material facts which it considers are controversial. These are: the interpretation of the procurement documents, the interpretation of the project agreement, the financial pressures on IHSL when SA1 was executed in February 2019, and the letter from IHSL dated 31 January 2019.

THE CHAIR: Sorry, Mr Gillespie, I lost attention. Four matters you are drawing my attention to; the interpretation of the procurement document, the interpretation of the project agreement and then I missed number three.

MR GILLESPIE: The financial pressures on IHSL when SA1 was executed in February 2019.

THE CHAIR: Financial pressures, and number four?

MR GILLESPIE: And the letter from IHSL----

THE CHAIR: Right.

MR GILLESPIE: -- dated 31 January 2019. This statement will then briefly address seven of the matters addressed in your Lordship's recent note of matters. I will refer to NHSL as the Board throughout this statement, given how similar the NHSL acronym is to IHSL.

Before addressing those points, IHSL wishes to make some general opening remarks. The Cabinet Secretary's decision to delay the opening of the new hospital, announced on 4 July 2019, came as a huge shock to all those involved in the project, not least to IHSL. The delay to the opening of the hospital was not an outcome that any party involved in the project wanted or expected. The project had experienced various challenges during its construction. Many of those were challenges that are often encountered on large, complex construction projects. Others were perhaps more unique to this project. Nevertheless, the parties had worked extremely hard to resolve those issues, so that by February 2019, the hospital was certified as practically complete and was on course to open in July of that year. That, of course, did not happen. IHSL acknowledges and regrets the disappointment and the disruption that the delayed opening to the hospital

would have caused to patients and to the Board staff too.

Following the Cabinet Secretary's decision to delay opening the new hospital, IHSL focused its efforts, along with the Board, to agree the terms of the relevant change notice and to conclude the terms of Supplementary Agreement 2, or SA2. After a phased opening, the hospital became fully operational in March 2021. All of the evidence before the Inquiry indicates that the enhancement works set out in SA2 were adequate and effective. No witness has expressed any concerns about safety of any key building system at the hospital.

Despite all of the challenges and the delayed opening, the hospital is an excellent centre for the treatment of children and young people from Edinburgh and beyond. The parties worked together through all those major challenges to deliver the hospital. It is now an example of a successful NPD project in its service delivery phase. It is a facility that the Board and IHSL can now be proud of. Nevertheless, it's important that the problems that led to the delayed opening are addressed by the Inquiry by fulfilling the terms of reference. The Inquiry can then make recommendations to ensure that any past mistakes are not repeated in future, complex healthcare infrastructure projects.

Turning now to the four main points highlighting the principal material facts that are controversial. Number one, the interpretation of the terms of the procurement documents. The Board's and Mott MacDonald's view is that the procurement documents were clear that the Environmental Matrix was not intended to be mandatory or that it was to act as the Board's brief. Mott MacDonald even invites your Lordship to make findings of fact to that effect, and that's at pages 332 and 333 of the closing submission bundle, paragraphs 258 and 260.

THE CHAIR: Sorry, just give me a moment on that. Are you referring me to counsel's closing statement?

MR GILLESPIE: Mott MacDonald's closing written statement, sorry, my Lord, in the closing submission bundle.

THE CHAIR: Mott MacDonald.

MR GILLESPIE: Yes. And that is----

THE CHAIR: Could you give me the numbers again?

MR GILLESPIE: Yes, it is pages 332 and 333 of the closing submission bundle.

THE CHAIR: Sorry, 32----

MR GILLESPIE: 332 and 333.

THE CHAIR: Yes.

MR GILLESPIE: So, Mott

MacDonald do, however, accept that the procurement documentation contains some potential ambiguities and inconsistencies. The interpretation of the procurement documents is controversial. As your Lordship has said, it is not for the Inquiry to determine the correct interpretation of the procurement documents or the contractual provisions in the project agreement. But there are two key provisions in the procurement documents which neither the Board nor Mott McDonald refer to in any significant way in their analysis.

THE CHAIR: Right. Can I just take the opportunity, which I was going to take in any event, Mr Gillespie, you say that it is not for the Inquiry to interpret what is the proper construction of the tender documents, and I take it that your position would be the same in relation to the project agreement.

MR GILLESPIE: Yes, my Lord.

THE CHAIR: Therefore, when I am reporting, I will not be doing that. So, could you just steer me to say what I should do when I'm reporting?

MR GILLESPIE: So, I suppose what I am addressing here is the request from one of the core participants for you to find in fact that the procurement documents were clear in a certain interpretation.

THE CHAIR: I see. Right.

MR GILLESPIE: What I am saying is that, yes, my Lord, it is not for the Inquiry to rule on an interpretation, but there might well be findings of fact that the Inquiry make in that background, but this is a, sort of, challenge to the request made by one of the core participants for you to find, in fact, that their interpretation of the procurement documents is clear and correct. The point I will go on to explain to my Lord is that, in terms of counsel to the Inquiry's closing submissions from the previous hearing, the conclusion was that the terms of the procurement documents were ambiguous and unclear. My position, my Lord, is that given the parties hold firmly opposing views on the interpretation of the procurement documents, that is a fair assessment, that the terms must have been ambiguous and unclear if they are open to very firmly opposing interpretations.

THE CHAIR: Right, so you are essentially agreeing with counsel's assessment. Now, I interrupted you, you were about to draw my attention to two provisions.

MR GILLESPIE: Yes, my Lord, there is two key provisions that seem to be absent from the analysis carried out by Mott MacDonald and the Board in relation to the procurement documents. The first is found in section 2.5.3 of

volume 1 of the bid documents. Mott MacDonald has told the Inquiry----

THE CHAIR: That is paragraph 2.5.3 of----

MR GILLESPIE: Of volume 1----

THE CHAIR: Of volume 1.

MR GILLESPIE: -- of the bid documents. Yes, my Lord. Mott MacDonald has told the Inquiry that volume 1 was a document which explained the procurement process to the bidders. They explain it became redundant at financial close, and that description is contained in paragraph 39 of Mott MacDonald's closing statement at page 223 of the closing submission bundle. The Board explained to the bidders in section 2.5.3 of volume 1 that its specific room requirements, defined as the room information, were detailed in a combination of documents which included the Board's construction requirements and the Environmental Matrix.

The specific room requirement set out what the Board wanted and what it expected bidders to provide. In other words, its brief:

> "The Inquiry has heard that as late as August 2012, it was the Board's and Mott MacDonald's intention that the Environmental Matrix would set out specific parameters that bidders were required to meet. The Inquiry has not seen any documentary evidence, as far as IHSL is aware, recording any change that intention."

THE CHAIR: One might ask, what was the relevance of the intention?

MR GILLESPIE: I think that the Inquiry was told by one of the Mott MacDonald witnesses that the intention had changed from making the Environmental Matrix a mandatory document to one that wasn't and the documents that the Inquiry had seen were internal documents that hadn't been released to bidders at the time. So the bidders weren't aware of that, but the background point, I think, is that the Board and Mott MacDonald's position or intention had changed between August 2012 when that internal paper was prepared and the beginning of 2013 when the bid documents were issued to the bidders. I think fundamentally the point is if there was a change of intention, that was not clearly set out in the bid documents to the bidders.

THE CHAIR: But equally the original intention had not been signalled to bidders?

MR GILLESPIE: No, no, my Lord, but section 2.5.3 of volume 1 said to bidders these set out the Board's room requirements, and there's a further point,

the bidders were also instructed by section 2.5.3 of volume 1 to develop room datasheets, incorporating the room information which included the Environmental Matrix, and this involved tailoring the generic room datasheets to suit the Board's specific requirements for the project.

The second provision is the definition of the Environmental Matrix in volume 1. This was defined as the Environmental Matrix issued as part of the Board's construction requirements in volume 3 of the bid documents. Volume 3, in turn, described the Environmental Matrix as detailing the Board's room environmental condition requirements within each department, unit, space and area. Even if one accepts that volume 3 was only future-facing, pointing towards the project agreement which would ultimately be executed with the successful bidder, the bidders were being told that the Environmental Matrix would form part of the Board's construction requirements, or the BCRs, which the successful party would be obliged to meet once the project agreement was signed.

It is IHSL's view that any interpretation of the procurement documents which does not take section 2.5.3 of volume 1 as its starting point and indeed centre point, or worse, ignores it altogether is partial and incomplete. Such a one-sided view of the procurement documents does not assist the Inquiry.

The Board and Mott MacDonald appear to have arrived at their clear meaning of the procurement documents by disregarding those key provisions. Given the party's firmly held opposing views, the most that can be said is that the terms of the procurement documents were ambiguous and unclear. They were not clear in the sense contended for by the Board and Mott MacDonald, and they do not support the findings of fact that Mott MacDonald invites the Chair to make.

THE CHAIR: I will go back to the detail, but my recollection is one point that the Mott MacDonald written statement, the closing statement, is that they say of counsel to the Inquiry's analysis that it is based on a misunderstanding or an ignoring of the different functions of volume 1 as against volume 3 of the procurement documentation. I appreciate this is very broad, Mr Gillespie, but as I understand it, and as I say, this is not a detailed argument, that you have got to bear in mind that volume 1 is instructions to bidders as to how they are to go about the procurement process, whereas volume 3 is at least the first draft of the

Board's construction requirements. Now, the reason I draw that to your attention is what you have just submitted to me, that an understanding of-- and we are looking at the procurement documents at this stage, an understanding of these documents depends on taking into account 2.5.3.

MR GILLESPIE: Yes, my Lord. I think you're correct, my Lord, that the Mott MacDonald submission is that the volume 1 and volume 3 serve different purposes.

THE CHAIR: Yes.

MR GILLESPIE: Volume 1 being the instructions to bidders, volume 3 being this idea of a future-facing volume that would appear in the project agreement. We've addressed that point in closing submission following the hearing of last year. I think our view is that you can't wholly ignore volume 3 for the purpose of the procurement process. That cannot be a correct interpretation. But even if one accepts that, that volume 3 was only future-facing, it was still communicating to bidders that the Environmental Matrix would form part of the Board's construction requirements once you come to sign the project agreement, if you are successful in the bid.

Main point number two: the interpretation of the project agreement.

The interpretation of the project agreement provisions is controversial in a number of respects. IHSL wishes to highlight four specific issues.

The first relates to the status of the Environmental Matrix. The disputed status and content of the Environmental Matrix was followed through into the terms of the project agreement. The relationship between the Environmental Matrix and the BCRs is disputed. IHSL's position is that the bid documents had consistently pointed towards the Environmental Matrix as forming part of the BCRs in the project agreement. The BCRs in the project agreement required compliance with the Environmental Matrix and defined the Matrix as setting out the Board's room environmental condition requirements.

The Board, on the other hand, considers the Environmental Matrix as forming part of Project Co's proposals. However, the Environmental Matrix was identified as being Reviewable Design Data or RDD. It was found in the project agreement alongside the room datasheets in schedule 6, part 6. The Environmental Matrix was not contained in Project Co's proposals. Those were found in schedule 6, part 4.

THE CHAIR: Mr Gillespie, bear in mind that this is quite a detailed submission you are giving at reading

speed. So perhaps bear that in mind on pace. Now, what I have got is the Board's position and then you went on to-- I have noted this is the Environmental Matrix as part of the Board's construction requirements. Have I noted what you have just said correctly?

MR GILLESPIE: So the Board's position is that the matrix formed part of Project Co's proposals.

THE CHAIR: Right, yes.

MR GILLESPIE: So the Matrix was not contained in Project Co's proposals, those were found in Schedule 6, part 4. The Matrix was actually found in schedule 6, part 6 of that schedule. So it sat as a hybrid position. It was neither Project Co's proposals or the Board's construction requirements. It was found in a separate part of the schedule, and the point I was about to make, my Lord, was that the Board has no basis for saying, which it does at paragraph 66 of its closing statement, and that's closing submission bundle p.180----

THE CHAIR: Right, just give me this again. You are referring to the Board's recent closing statement?

MR GILLESPIE: Yes, my Lord.

THE CHAIR: Could you just give me the paragraph?

MR GILLESPIE: So it was paragraph 66 of the closing statement and that's closing submission bundle, page 180.

THE CHAIR: Yes.

MR GILLESPIE: I think the statement I'm referring to here is their statement that they were correct in viewing the Matrix as forming part of Project Co's proposals, but my point here, my Lord, is that the Board has no basis for saying that. They were correct in viewing the Environmental Matrix as forming part of the Project Co's proposals because it wasn't located in the relevant part that contained the Project Co's proposals. It sat outside of the schedule 6, part 4, which contained the Project Co's proposals.

There is also no basis for the Board to state that responsibility and risk for any errors in the Environmental Matrix lay with IHSL, or that this was a fundamental aspect of the risk allocation provisions of the project agreement. If that is the Board's position, the project agreement simply does not bear this out. The status of the Environmental Matrix as RDD led to ambiguity because it became subject to the Board's approval. The extent to which the Environmental Matrix became subject to the Board's approval through the RDD process is also controversial. Had the RDD process been limited to the seven outstanding points at financial close, it would have made sense to include the matrix as RDD to that limited

extent, but the Board thought that the Environmental Matrix was subject to review in its entirety and that approach caused problems on the project.

The second issue concerns the notion that compliance with SHTM 03-01 was mandatory. This is promoted by Mott MacDonald in their closing statement and they invite the Chair to make a finding in fact to this effect and that's found in paragraph 257 of their closing statement. Page 332 of the closing submission bundle.

THE CHAIR: 232?

MR GILLESPIE: Paragraph 257 and page 332 of the closing submission bundle, my Lord.

THE CHAIR: Thank you.

MR GILLESPIE: This notion appears to stem from the Board's and Mott MacDonald's view that the project agreement somehow gave primacy to the SHTM guidance. The project agreement and the BCRs did not give primacy to the SHTMs. In fact, the project agreement gave primacy to the Board's particular requirements set out in the BCRs. Clause 5.2.4 of the project agreement, which has its genesis in SFT standard form of NPD project agreement specifically said so. Paragraph 2.3 of the BCRs said the same thing.

The terms of the project agreement do not support a view that primacy was given to the SHTM guidance, or that compliance with SHTM 03-01 was mandatory.

THE CHAIR: Yes.

MR GILLESPIE: I was anticipating a question, my Lord.

THE CHAIR: No, no.

MR GILLESPIE: Perfect. Thank you. The third issue concerns compliance with guidance and what that looks like. Both the Board and Mott MacDonald have----

THE CHAIR: This is the third of your-- No, it is not.

MR GILLESPIE: So this is main point number two, which is the interpretation of the project agreement.

THE CHAIR: Yes, you are still on point----

MR GILLESPIE: This is point three of four, my Lord.

THE CHAIR: Yes.

MR GILLESPIE: Yes, so the issue of compliance with the guidance and what that looks like. Both the Board and Mott MacDonald have erred in treating the guidance as providing hard and fast rules that can act as a project specification. Indeed, the Board has stated that its brief was the obligation in the BCRs to comply with the guidance.

counsel to the Inquiry has already addressed the problems of making compliance with the guidance a contract

obligation in the closing statements following both of the hearings. On this point, however, IHSL wishes to highlight the closing statement made by National Services Scotland, or NSS. At paragraph 2 of that statement, and that is page 358 of the closing submission bundle, NSS notes the multiple references in counsel to the Inquiry's closing statement to SHTM 03-01 and SHFN 30. NSS states as follows, and this is a quote from their written closing statement, my Lord:

> "Whilst these are important documents to consider, NSS would emphasise that all applicable guidance should be considered holistically when briefing, designing and constructing facilities. This reduces the risk of an over-reliance on, or incorrect application of a single piece of guidance. Guidance should always be implemented by appropriately competent and experienced individuals."

That is the end of the quote.

THE CHAIR: So what does that mean?

MR GILLESPIE: I was about to say, my Lord. I think given the reasons for the delayed opening of the hospital in July 2019, it is understandable that so much focus has been placed on SHTM 03-01. However, NSS helpfully reminds us that the guidance must be properly approached and handled correctly because it has to be reviewed holistically and considered all in the round, without taking individual pieces out of context, or----

THE CHAIR: Well, can I ask the question in a slightly different way? That is the sort of statement that sounds excellent, but where does it take us? As you rightly say, concentration has been on a particular part; essentially, one line in a table to SHTM 03-01. Now, even that line is not entirely uncontroversial, but the majority-- but there is a majority in favour of the proposition that it requires 10 air changes an hour and 10 Pa of positive pressure. Now, where does NSS's observations about the importance of holistic interpretation take us?

MR GILLESPIE: I think the context of the point, my Lord, was more in relation to the Board's position that their brief was just this obligation to comply with guidance.

THE CHAIR: Mm-hmm.

MR GILLESPIE: And I think in that context, NSS comments are helpful. They clarify that something more in terms of direction is needed than just simply allowing parties to try and comply with the guidance, because the guidance needs to be considered holistically and in the whole, and that does not----

THE CHAIR: Right, so do you read this as a general point that the SHTMs are unsuitable as a source of a contract specification?

MR GILLESPIE: I think the point IHSL, I think, would make my Lord is that if there are specific parts that require to be complied with and are to be treated as a project specific brief, then those parts ought to be highlighted.

THE CHAIR: Right. Just give me a moment to note that.

MR GILLESPIE: This is the fourth point, my Lord, in relation to the interpretation of the project agreement, and this fourth point concerns the meaning of design risk passing to IHSL. The Board and Mott MacDonald emphasised the passing of design risk as being a feature of the NPD model, but that does not mean all risk. The Board and Mott MacDonald both failed to acknowledge that IHSL and its supply chain hold the design risk for complying with the Board's specific requirements for the project. IHSL's obligation was to ensure that its design met the BCRs. With a clear brief, IHSL takes the risk of meeting that brief, but the Board retains responsibility and the risk for those requirements.

IHSL refers to the closing statement from Scottish Futures Trust. That's closing submission bundle, pages 364 to 365.

THE CHAIR: That's the page numbers?

MR GILLESPIE: The page numbers, yes, my Lord, yes. That statement very helpfully comments on the passing of design risk in the context of the NPD model project agreement provisions, and that is particularly at para.5 of that statement.

Linked to this is the concept of operational functionality. The Board is only responsible for matters of operational functionality when it reviews the Project Co's proposals. However, the Board is wholly responsible for its own requirements set out in the BCRs. The concept of taking responsibility only for operational functionality becomes nonsensical when commenting on a document which was said to represent the Board's specific room requirements.

THE CHAIR: Let me just take that more slowly. The Board is responsible for its construction requirements.

MR GILLESPIE: Yes, my Lord.

THE CHAIR: Now, can I understand your nonsensical point?

MR GILLESPIE: Yes, my Lord, so it is that sort of interface of design risk and responsibility, and when the Board are reviewing and approving Project Co's proposals through the RDD process, they only comment and take responsibility for

matters of operational functionality. But that breaks down when we are talking about a document like the matrix, which essentially set out what IHSL considered were the Board's specific room requirements.

THE CHAIR: Again, so that I understand your point, Mr Gillespie, are you saying that once-- Well, I am not sure if this is what you are saying. Are you saying that once the Board strays into comment on, for example, the detail in the Environmental Matrix, it has gone beyond operational functionality? Is that the point you are making or not?

MR GILLESPIE: I think that that is part of the point I am making, I think, my Lord, but I think probably primarily, the point is that the matrix, given it set out the Board's specific room requirements in IHSL's view, it shouldn't have been part of the RDD process at all, except to that limited extent of the seven outstanding points at financial close.

Main point number three, my Lord, is the issue of the financial pressures on IHSL when SA1 was executed in February 2019. Given the structure of the NPD model and the unusual length of the delay to the completion of the project, it was inevitable that there would be financial pressures on IHSL. It is, after all, a special purpose vehicle. However, the risk of IHSL's insolvency and the part that such a risk played when the Board entered into SA1 is controversial. IHSL has addressed this point more fully in its recent closing statement but wishes to highlight four short points here.

First, the risk of IHSL entering into insolvency was not one that the Scottish Government considered to be a likely outcome. Mr Morrison explained to the Inquiry that when he was considering the Board's business case for SA1, he did not consider this to be a realistic risk. Had it been a real risk, it would have been escalated up to the Cabinet Secretary, but it was not.

Second, it could be said that there would have been a risk of insolvency if SA1 had not been executed, and had neither IHSL nor the senior lenders taken any preventative measures. The likelihood of neither party taking measures to prevent an insolvency would have been remote, but that requires unnecessary retrospective speculation.

Third, the reality was that SA1 was the parties' agreed method of resolving their disputes to avoid court proceedings in March 2018. IHSL did not foresee at that time that it would take a further year to execute SA1, a year in which the Board presumably thought the financial pressures were mounting.

THE CHAIR: Can I ask you maybe just to tease that point out? The dispute

in early 2018, summons drafted, as I understand it, essentially resolved by about the end of March; not in a signed agreement, but in what I am thinking of as a more informal agreement.

MR GILLESPIE: Correct, my Lord. I think, yes, in terms of the multi-bed ventilation issue, the agreed resolution to that issue had been achieved by the end of March 2018.

THE CHAIR: Right, and you make the point that IHSL might have expected an executed agreement earlier than February 2019.

MR GILLESPIE: Yes, my Lord. That was the expectation at that time.

THE CHAIR: Right, now how is this-- how does this fit in with financial pressure?

MR GILLESPIE: I think, my Lord, that the time it took to get from that agreement in principle to then executing the SA1 in 2019 was just shy of a year and so if financial pressure and the alleviation of those pressures was a driver, or the key driver for the Board to enter into the agreement, one might expect that to have happened at some point earlier than February 2019.

THE CHAIR: Right, okay. Sorry, yes, I think I am with you now. So, you are saying if the Board really were that concerned, they would have executed the agreement which would have released, if I am understanding correctly, presumably the first payments in respect of----

MR GILLESPIE: Or, my Lord, I think there were other steps that could have been taken falling shy of a full settlement agreement like SA1. I think other proposals had been put forward by IHSL through the course of 2018 that might have allowed, for example, the multi-bed ventilation room dispute and the monies relating to that to be released earlier, because the works had been completed by Multiplex at their own risk through that period of 2018. So, there are other steps that could have been taken potentially to resolve other matters, or at an earlier stage.

I think the point made on IHSL's behalf is that the Board entered into SA1 in February 2019 when it was ready and willing to do so. The fourth point, my Lord, is that it should be borne in mind that IHSL also made a significant financial contribution to the settlement, as well as the Scottish Government, through the auspices of the Board.

THE CHAIR: Was that payment made in February 2019, or had been paid before hand?

MR GILLESPIE: I think that was part of the SA1 process, a sort of injection of further subdebt.

THE CHAIR: That happened in February 2019?

MR GILLESPIE: I think that is correct, my Lord. It certainly was part of the terms of the SA1, yes. So, the context, I suppose, of this point, my Lord, is the Board has described SA1 as a bailout of the project and, indeed, the Board has said, at paragraph 20.5 of the closing statement, closing submission bundle page 164, that it had no real choice except to bail out IHSL. That was not a view shared by the Scottish Government or IHSL. Had the Board truly considered SA1 to be a bailout at the time, or had it been the Board's primary intention to avert the threat of insolvency, the Board would have taken, or could have taken, earlier opportunities to alleviate any financial pressures, but they did not do so.

Main point number four, my Lord, the letter from IHSL dated 31 January 2019. IHSL has addressed the letter in its recent closing statement. The interpretation of the terms of the letter and the reliance placed on it by the Board are controversial. The letter requires to be considered in its proper context. That context was described in Ms Freeman's witness statement. Ms Freeman sought assurance on inspection and maintenance regimes across the NHS Estate in Scotland in light of issues with pigeon droppings at the Queen Elizabeth Hospital in Glasgow.

IHSL's letter to the Board, which reflected the letter from Multiplex to IHSL, was issued in the context of inspection and maintenance. It allowed the Board to respond to the Scottish Government's request for assurance on those particular matters. The letter also requires to be viewed in terms of the factual timeline. The Board approved the terms of SA1 on 6 February 2019, but then the Board issued a further letter to IHSL six days later on 12 February. That letter specifically sought assurance on design and installation matters. IHSL's response to that letter was still outstanding when the Board and IHSL executed SA1 on 22 February.

The further letter of 12 February, requesting assurance on design and installation issues, indicates that little or no assurance was taken by the Board on those specific matters from the earlier letter of 31 January, which was issued in the context of maintenance and installation. That is the four main points, my Lord. I will turn now to your Lordship's recent note of matters.

THE CHAIR: Thank you. Yes?

MR GILLESPIE: There are 12 matters identified in the note. IHSL cannot address them all and makes no comments on matters 7, 8, 10, 11 and 12 in the note, but IHSL would briefly summarise its position on the remaining

matters as follows. In point 1 of the note, your Lordship addresses counsel to the Inquiry's suggestion that the Chair may wish to consider whether some independent advice should have been sought on the technical resolutions in SA1. IHSL understands that the basis of the suggestion by counsel is whether some independent advice should have been sought by the Board before it signed SA1. If so, IHSL is unable to comment on what requirement there may have been for the Board to obtain independent technical advice. That said, the evidence heard at the recent hearing was that the Board staff had between them the requisite knowledge of the guidance, the Board's clinical requirements for ventilation and the function of the clinical spaces.

The Board also had a lead technical advisor. If the Board had the benefit of technical advice, then that advice, combined with the knowledge of each of the relevant Board personnel, suggests that there was sufficient expertise available and no independent technical audit was required.

In point 2 of the note, your Lordship invited comments on the question of whether items 4, 7 and 13 of the technical schedule to SA1 triggered an obligation to complete stage two of the HAI-SCRIBE process again. The premise of this point

appears to be that the Board considered items 4, 7 and 13 to be changes in the design of the ventilation system. However, IHSL's understanding of the Board's position is that the agreed resolutions in the technical schedule represented a clarification of the requirements by way of an agreed resolution, not changes to it.

THE CHAIR: Yes. So, the premise is unsound?

MR GILLESPIE: Yes, my Lord, I think that is the case. There was a wider question, I think, in point 2 of the note as well, but unfortunately IHSL cannot comment on that application of the stage two HAI-SCRIBE process. In point 3, your Lordship invited comments from core participants on whether it was incumbent upon the Board to instruct an independent validation of the specialised ventilation systems. IHSL understands that the Board's position was that it always intended to procure independent validation prior to patient occupation and it was incumbent on them to do so.

THE CHAIR: Sorry, say it-- I just missed that, Mr Gillespie.

MR GILLESPIE: IHSL's understanding that the Board's position was that it always intended to procure independent validation prior to patient occupation, and it was incumbent on them to do so. So I think that point is

addressed by the Board in their closing statement, paragraph 56.

THE CHAIR: Right.

MR GILLESPIE: That is closing submission bundle page 176.

THE CHAIR: Okay, if you just maybe give me that again?

MR GILLESPIE: The reference is paragraph 56 of the Board's closing statement. It is closing submission bundle at page 176. I think, at that paragraph, the Board explains that they had always intended to carry out independent validation of the systems.

THE CHAIR: All right, just give me a moment to see, so I can have the-- Sorry, Mr Gillespie.

MR GILLESPIE: It is all right.

THE CHAIR: Just wondering if I have-- You are referring to which page?

MR GILLESPIE: So, it was page 176----

THE CHAIR: 176.

MR GILLESPIE: -- of the closing submission bundle. I think that should be paragraph 56 of the Board's statement.

THE CHAIR: Yes. Right. So, am I right in-- Just quickly reading the NHS Lothian's paragraph, am I right in reading that as a reference to the HAI-SCRIBE requirement?

MR GILLESPIE: I think that is right, yes. I think it is in the context of the HAI-SCRIBE.

THE CHAIR: Is that validation? Do you equate that with validation?

MR GILLESPIE: I think the question in point 3 of your Lordship's note referred to independent validation and whether it was incumbent upon the Board to carry that out.

THE CHAIR: I mean, the question refers to the SHTM 03-01 rather than the HAI-SCRIBE procedure.

MR GILLESPIE: Yes. All I am saying, my Lord, I think, is that the points addressed by the Board themselves in their closing statement----

THE CHAIR: All right.

MR GILLESPIE: I think-- As I understand the Board statement, they say that they had always planned on carrying out that validation process prior to (inaudible).

THE CHAIR: I think I read it differently. I thought the-- what the Board was saying-- The two things may be the same thing, but the Board as the relevant authority, has an obligation to carry out the HAI-SCRIBE, a procedure which comes from SHFN 30. Now, chapter 8 of the SHTM 03-01 talks about commissioning and validation. Now, it may be that carrying out the requirements of HAI-SCRIBE comes to be validation, but it did not appear to me that that was obvious. I take the point that Lothian said, "We're always going to do HAI-

SCRIBE, but it was too early to have done so in," for example, "February 2019."

What I was quite interested in, and this may be entirely wrong, Mr Gillespie, is whether or not chapter 8 of SHTM 03-01 imposed an additional obligation to achieve validation of the project. Within that there would be the question as to whether, if you had a contract which provides for an independent tester, whether the work of the independent tester is to be equated with validation. The other question being as to whether the independent tester under an NPD contract is in fact an independent tester.

MR GILLESPIE: Yes. Potentially straying into matters that are coming outwith the remit and the expertise of IHSL, potentially my Lord, on this, but certainly on the point of the independent tester that would not be our understanding that that would be a function of the independent tester's role, to carry out independent validation. Independent tester being a contractual appointment between the Board and Project Co to administer and fulfill the contractual appointment services. That would not be, as we understand it, a job for the independent tester. So it would require external provider to come in and do that independent validation.

THE CHAIR: Right. So, just-- I

mean, I appreciate it. It may be that this is not a matter you have given consideration to, but you are offering an answer that, if I have understood, that the independent tester under the NPD arrangements is not necessarily, or maybe not at all, an independent tester, or an independent source of advice on validation.

MR GILLESPIE: I think that is probably right, my Lord, that they would not be the party carrying out an independent validation of mechanical systems. That would not be the independent tester's role.

THE CHAIR: Yes.

MR GILLESPIE: In point four, IHSL does understand that the Lochranza Ward was designed and built to meet the environmental room conditions in the Environmental Matrix of 31 October 2014, and those parameters did not reflect the summary guidance in table A1 for neutropenic wards.

Point five of the note, perhaps to be broken into two parts. First, your Lordship invites core participants to comment on the Board's contention that, had it not been for Mr McKechnie's interpretation of the relevant guidance, the inconsistency between the specification, critical care, contained in the matrix and the terms of SHTM 03-01 would have been identified earlier. Mr

McKechnie's interpretation of the guidance is addressed elsewhere in the closing statement from Wallace Whittle. His interpretation was only one factor that might have led to the inconsistency between the specification and the guidance not being picked up earlier. As the Inquiry has heard, there were many missed opportunities. Had Mr McKechnie held a different view of the guidance, it would be speculation now whether the inconsistency would have been picked up any earlier, particularly where the matrix was understood by the designer to be the client brief.

The second part of point 5 is Mott MacDonald's proposition that any lack of a finalised document clearly setting out the technical requirements for ventilation at financial close had no causal connection to the delay in the opening of the hospital. Given the relevant legal landscape, it stands to reason that Mott MacDonald would argue that proposition given its involvement in preparing the bid documents and technical schedules of the project agreement. It is not a credible position, however. Had there been a clear and unambiguous brief setting out the parameters that the Board actually wanted the ventilation system to achieve, the issues that caused the hospital not to open as planned would have been avoided. There would have been no

room for differing interpretations of guidance on output parameters, because the Board was best placed to identify the essential output parameters for the particular clinical uses it had in mind.

Point 6 can also be broken down into two parts. The first part refers to the Board's argument that any ambiguities in the BCRs or derogations from guidance should have been brought to the Board's attention and that flagging non-compliance was a contractual obligation on IHSL under the project agreement. IHSL has addressed the relevant contractual provisions in the project agreement in its response to PPP 10. IHSL simply wishes to highlight here that the Board's view on the obligations under the project agreement is misguided. Clause 12 of the project agreement obliges IHSL to carry out the works so as to procure satisfaction of the BCRs. There was no obligation on IHSL to challenge or highlight ambiguities in those BCRs. It is interesting to note from paragraph 25 of the Board's closing statement and that is closing submission bundle, page 165.

THE CHAIR: Sorry, again, Mr Gillespie, if you would-- you are referring me to----

MR GILLESPIE: Paragraph 25 of the Board's closing statement, and that is closing submission bundle, page 165.

THE CHAIR: 165, thank you.

THE CHAIR: That the only contract provision that the Board identifies to support its position is paragraph 2.3, subparagraph K of the BCRs. This obliged IHSL to take account of guidance in the Scottish Health Facilities notes, such as SHFN 30, subject to what was expressly contained in the BCRs. The Board says that part B of SHFN 30, which describes the HAI-SCRIBE process, sets out responsibilities on various entities, including those of the lead contractor. This, they say, includes an obligation of coordinating and advising the infection prevention and control team to assist in identifying potential risks and control measures prior to and during construction. The parties will have different interpretations of this provision, but the provision does seem to concern the assistance to be given by the lead contractor to the IPC team in identifying potential risks. It provides no basis for saying that IHSL was contractually obliged to highlight any non-compliance with guidance to the Board.

The second part of point 6 asks whether IHSL, Multiplex and Wallace Whittle should have in place their own processes for design review and audit. IHSL appointed Multiplex as its design and build contractor, Multiplex in turn appointed Wallace Whittle as its M&E

sub-consultant designer. It would be inappropriate for IHSL, as the special purpose vehicle, to engage a separate independent review or audit of its supply chain's design. IHSL is not a designer, it does not have design expertise, and it would have been unrealistic and inappropriate for IHSL to have in place internal processes for design review and audit. As for the Board's comment that Mr McKechnie was a single point of failure, given the many missed opportunities to identify the inconsistency between the specification and the guidance, that comment strikes IHSL as being inaccurate and unhelpful.

Finally, my Lord, on point 9, IHSL agrees with the potential recommendations made by counsel to the Inquiry that your Lordship could make in an interim report. That concludes my remarks.

THE CHAIR: Thank you very much, Mr Gillespie. I appreciate that I have rather taken you over your estimated time. Thank you.

MR GILLESPIE: Thank you, my Lord.

THE CHAIR: I think it is probably your turn, Mr Barne, on behalf of Lothian Health Board. In previous sittings of the Inquiry, we have taken a coffee break at about half past eleven. I will just put myself in your hands and feel free to

indicate a break whenever you see it makes best sense.

Submissions by Mr Barne

MR BARNE: Thank you, my Lord. On behalf of NHS Lothian, I would like to thank the Chair for this opportunity to make closing submissions. My Lord, I intend to take this at reading speed until your Lordship wishes to investigate. A hard copy of my submissions can be made available if that would help.

THE CHAIR: Well, let us think about this. I entirely understand why legal representatives have written out what they propose to say. I mean, my impression was that what Mr Gillespie had done, and of course, it is just my job to keep up with you as best I can. In using the term "reading speed," perhaps you might bear in mind my writing speed. It had been my ambition, Mr Barne, that this would be an opportunity for your main points and the things which you think I particularly would benefit from assistance on. I mean, I do have the previous written statements.

MR BARNE: Yes.

THE CHAIR: Mr Barne.

MR BARNE: Thank you. Detailed and extensive written submissions have already been provided during the course of the Inquiry on behalf of NHS Lothian, and I adopt those. I will, therefore, restrict myself to making five brief general remarks before addressing the 12 specific issues that have been raised by the Chair. I shall then briefly address bundle 13, which was recently provided by the Inquiry and relates to research into ventilation.

Turning to my introductory remarks, my first is about patient safety. Throughout the project and beyond, NHS Lothian has prioritised patient safety above all else. All decisions taken by the Board and NHS Lothian personnel were made in good faith and with the best of intentions. There has been no evidence that the Board or the project team made any decisions in the knowledge that they might compromise patient safety in any way. There was also no evidence that any decision made by NHS Lothian was made in order to save face.

From the Board's perspective, the project proved to be extremely difficult. Even so, the project team proactively engaged throughout with the aim of delivering state-of-the-art facilities. To the extent that it might be suggested that the project team became too involved, that can be explained by the fact that the project team was acutely aware of the duty of care that NHS Lothian ultimately owes to its patients.

Perhaps one of the overriding

lessons that can be learned from what occurred with the new hospital is that all parties to this type of complex construction contract should acknowledge and operate under a duty of candour to ensure that patient safety is paramount. Any derogation from guidance should be identified and captured by the contracting parties in a manner that ensures that all parties understand, firstly, the nature and scope of the derogation, and secondly, the reason for the derogation. This approach should also apply to any ambiguities or potential derogations that may or may not be contained in the employer's requirements.

THE CHAIR: Sorry, just give me that again.

MR BARNE: I was suggesting that----

THE CHAIR: Your general point includes----

MR BARNE: Not just actual derogations, but ambiguities or potential derogations that may or may not be contained in the employer's requirements.

THE CHAIR: Right, so when you are talking about an actual derogation, presumably a derogation that is registered under the derogation procedure.

MR BARNE: Yes, but also intending to expand the point to capture ambiguities or inconsistencies in contractual documentation that may have implications for compliance with guidance and therefore potentially have implications for patient safety.

My second general remark is to acknowledge that there were missed opportunities to catch the error that ultimately led to the hospital not opening in July 2019. On behalf of NHS Lothian, I acknowledge and apologise for its role in what can only be described as the collective failure to identify the error.

My third introductory remark seeks to address the reasons why the error was not identified before July 2019. These are both straightforward and complex. The fact of the matter is that the contractor's ventilation designer, Stewart McKechnie, considered the ventilation rates as installed in critical care complied with guidance. The causal potency of Mr McKechnie's error is best demonstrated by the fact that he chose to amend Guidance Note 15 of the Environmental Matrix, which specified the correct ventilation rates for critical care without drawing that amendment to the attention of NHS Lothian or, so far as I'm aware, to anyone else. This was the only such change to the Environmental Matrix which was not highlighted in red. Had the change been flagged up, the error could and probably would have been

discovered in November 2015.

What is less straightforward to understand is why no-one on the contractor's side challenged Mr McKechnie's approach. This is not something that has been explained so far as I'm aware in the evidence. It is also not obvious why those on NHS Lothian's project team and primarily their technical advisers did not identify the error. The evidence tends to suggest that those on the project team reviewed documents narrowly from the perspective of their own particular disciplines, which may have meant that the dots were not joined, as one of the NHS Lothian witnesses suggested.

Ultimately, though, the Inquiry is invited to bear in mind that NHS Lothian was not responsible for the design of the new hospital. It was a matter entirely for IHSL and Multiplex, and in that context, it becomes clearer why members of NHS Lothian and its project team did not identify what was, after all, a design error.

THE CHAIR: Can I interrupt-- Sorry, can I interrupt at this point, Mr Barne? I think throughout the Inquiry, the error which we are talking about, which is the air change rate and the pressure difference, I think people have talked about it as a design-- feature of the design and therefore if it is not achieved that is a design error. Is it a matter-- I

mean, design to me suggests choice, how you go about doing something and would include presumably the positioning dimensions of ducts and fans and things like that. Is the specified output an aspect of design?

MR BARNE: In this context, I would suggest it is----

THE CHAIR: Right.

MR BARNE: -- because everything that is not operational functionality so far as the risk----

THE CHAIR: Right, okay.

MR BARNE: -- provisions in the project agreement falls within the scope of design, I would say.

THE CHAIR: All right. Okay. So for the purpose of-- for present purposes.

MR BARNE: Yes. Now, I do acknowledge that certainly Mr Gillespie, for instance, would say that compliance with the Board construction requirements is an aspect of design that ultimately falls onto the client, but that takes us back into an argument which I shall address briefly in due course.

My Lord, turning then to my fourth introductory remark, this relates to the issue of whether or not the reference design Environmental Matrix was a fixed brief. IHSL and Multiplex argued that it was and that they built the hospital to its terms. Much ink has been spilt in arguing about the contractual status of the

Environmental Matrix, both when it was only a reference design document, and at the stage that it was formally adopted and adapted by Wallace Whittle on behalf of the contractor.

I shall not revisit those arguments here. Instead, I would suggest that in the context of this Inquiry, such arguments are of secondary importance. Large infrastructure projects will always involve a huge number of documents. Ambiguities and inconsistencies are inevitable. This is how-- Sorry, the issue is how are such ambiguities and inconsistencies to be resolved in a way that protects patient safety? I would suggest that there was, at the time, and there still is, an obligation on a contractor to flag up any actual or potential derogations from guidance in a client's brief, whether or not they are, or appear to be, intentional.

Now, in terms of that obligation, I would say it's both a contractual obligation, and that is set out in our closing statement, but I'd also say there's a broader obligation, and that is one to which, as I'll come on to elude, Mr McKechnie recognised.

THE CHAIR: And the broader obligation is, if you had to analyse it, contractual or something else?

MR BARNE: Well, in this case, I'd characterise it as a patent ambiguity and

certainly, a designer faced with a patent ambiguity is required to flag the issue. But, over and above that, an issue that may have implications for patient safety is one that should be addressed as part of the partnership working, to which counsel to the Inquiry referred to regularly in his questions to witnesses.

This is a point that Mr McKechnie himself accepted by saying that where a client's brief appears to derogate from guidance, this should be specifically raised and checked with the client. Of course, the reason that this did not happen here is that Mr McKechnie considered the cells in the Environmental Matrix complied with SHTM 03-01 and he chose unilaterally to amend Guidance Note 15 to remove the patent inconsistency that existed. Viewed in this way and from the perspective of patient safety, the issue of the status of the Environmental Matrix, be it fixed, brief, or otherwise, is subsumed into the broader question. Why did the contractor who is required to design the new hospital fail to identify and clarify the patent inconsistency in the Environmental Matrix?

THE CHAIR: This is the internal inconsistency, the difference between the Guidance Note and the cells of the spreadsheet?

MR BARNE: Yes, and in our

written submissions that have preceded today, we make the point regularly that if one looks at the contractual documentation, the obligation to comply with SHTM 03-01 is all-pervasive. It's referred to on numerous occasions as set out in the earlier closing statement. Now, I take the point that there's an argument that the terms of the Environmental Matrix somehow is an express derogation from guidance. That is not an argument I wish to explore today, as this is a matter addressed in our first closing statement.

THE CHAIR: Right. No, I asked the question just to-- you have introduced the concept of patent ambiguity, and I am just wondering whether that was confined to the-- if you were just looking at the Environmental Matrix, or whether you are including in what you say a designer should do in relation to patent ambiguity, as to whether you include an inconsistency with another document, in this case, SHTM 03-01?

MR BARNE: Well, when I refer to patent ambiguity, I am talking about the internal inconsistency.

THE CHAIR: The internal inconsistency?

MR BARNE: But I would also make the wider point, that faced with a design that is in conflict with an important piece of guidance, and where that guidance is given a high degree of prominence in the

Board's construction requirements, then that again is an aspect of the ambiguity that I would submit requires to be explored by the designer.

My final general remark is that I wish to emphasise that NHS Lothian has already learned lessons. It has implemented an enhanced assurance framework for new capital projects in parallel with NHS Scotland Assure's development of key stage reviews. I refer to Susan Goldsmith's evidence at the most recent hearing, and this can be found at transcript pages 126 to 128, and to John Connaghan's evidence at transcript pages 160 to 162.

THE CHAIR: Sorry, I should know the name. John----

MR BARNE: Connaghan.

THE CHAIR: Does the Inquiry have the documentary statement of that from NHS Lothian?

MR BARNE: By "documentary statement"----

THE CHAIR: I mean, is there-- Well, when you began to introduce me to the already implementing-- What I gathered from what you were saying, there was some protocol or something or other?

MR BARNE: The assurance framework, yes. I think it's the assurance framework and that has been produced.

THE CHAIR: In the bundles for the

evidential hearings or since?

MR BARNE: If I may, I'll get that reference in due course. I don't have that to hand.

THE CHAIR: Right, thank you, thank you.

MR BARNE: Having said that, of course, NHS Lothian looked forward to reviewing the Inquiry's findings and recommendations, with a view to making further improvements to its processes. I suppose I would say it's a journey and not a destination.

My Lord, those are my general remarks. I'm now going to turn to the specific issues that have been raised and that might be a convenient time for a coffee.

THE CHAIR: Right. Well, we will break until quarter to 12.

(Short break)

THE CHAIR: Mr Barne.

MR BARNE: Thank you, my Lord. In relation to that reference that I did not have for your Lordship at the end of matters just before the coffee break, I understand that all the materials showing the lessons learned theme can be found in bundle 13, volume 11, and I made particular reference to the Assurance Framework, and that can be found, I understand, at page 4.

THE CHAIR: Page 4. Thank you.

MR BARNE: I am turning now to the specific issues that have been raised by your Lordship. The first issue focuses on whether it was necessary, proportionate, or appropriate for NHS Lothian or the Scottish Government to have instructed a technical audit of the technical solutions set out in Settlement Agreement 1. The Board's response to this issue would have not have been, and I shall expand on response.

At the outset, it can be observed that the phrase "technical audit" is not itself a technical term, nor is it a term of art. It is not a term that is used in any of the standard forms of construction contract, be they traditional or design and build. A simple internet search throws up various possibilities as to what a technical audit might comprise, but these are all context dependent. The importance of participants in a complex construction project having clearly defined roles is a theme that has pervaded the evidence to the Inquiry. It therefore strikes me that discussing the merits of a technical audit without knowing precisely what is meant may tend to confound matters further.

THE CHAIR: Yes, I take the point. I mean, if you use an expression which is not a term of art or is not readily understandable, begs the question as to

what on earth you are talking about. I think I am right in saying that counsel to the Inquiry may have introduced the notion of technical audit. If I am wrong about that, I apologise to him but, okay, I take the point about precision, but you are about to make more observations having made that. Right.

MR BARNE: Yes, but that really was very much an introductory comment.

THE CHAIR: Yes, okay.

MR BARNE: I go on to say, even so, it would be important to locate a technical audit within the contractual framework that existed under the project agreement. In that regard, what appears to be agreed by all core participants is that under the NPD style of contract, there was no need for NHS Lothian to have employed a shadow design team, and indeed they did not. This is because the risk transfer provisions that are at the very heart of the project agreement do not envisage any sort of shadow design team.

It should also be noted that where the Board initiates any "Changes," and I use that term contractually, capital C, "Changes," in terms of schedule part 16 of the project agreement, the risk profile of the project agreement is unaffected. In other words, Project Co still bears the risk in relation to any design associated with the Board change. This goes to

emphasise that design rests solely with Project Co.

Turning then to Settlement Agreement 1, the Inquiry is aware that this drew together into a single document the agreed solutions for a large number of disputes that had arisen during the construction phase of the project. The purpose of Settlement Agreement 1 was to fix the overall commercial terms in order to avoid the need for litigation. The solutions set out in the technical schedule had already been designed, reviewed and built out. It is therefore unclear what purpose an independent technical audit undertaken shortly before the signing of Settlement Agreement 1 would have achieved.

THE CHAIR: On a matter of detail, my understanding is that as far as the ventilation system, or at least as far as the ventilation system of critical care is concerned, that work had been completed at least by the end of October 2018. Am I right about that?

MR BARNE: That is my understanding.

THE CHAIR: Yes, right.

MR BARNE: Just pausing there, my Lord. In terms of the comments that were made this morning about the delay between March 2018 and February 2019, there were a number of issues that were ongoing. Your Lordship will be aware the

technical schedule contained, I think, 81 items, and it was a condition of the Settlement Agreement that, effectively, the independent tester signed off on it by way of practical completion. That is the context in which there was an apparent-- explains the time that passed from March 2018 through to October 2018 when the ventilation works were completed and then onto practical completion in February 2019.

THE CHAIR: Did you mention something about the independent tester? I think I may just have missed that.

MR BARNE: It was part of Settlement Agreement 1 that Arcadis, the independent tester, effectively signed off practical completion as part of the overall----

THE CHAIR: I am being slow on this. Part of the Settlement Agreement was that Arcadis would sign off once----

MR BARNE: So, my understanding is that Settlement Agreement 1 was conditional on Arcadis providing the Practical Completion Certificate.

THE CHAIR: Well, presumably-- Sorry, I am being slow in this now, Mr Barne, because-- Let me put this back to you, that Arcadis-- I do not know if I am quite understanding this. Arcadis was the independent tester under the the NPD contract which predated Settlement Agreement 1. Am I to understand what you were saying as that it was agreed that Arcadis would certify practical completion on the basis that the works identified in the technical schedule had been completed? Is that the point, or am I missing it still?

MR BARNE: My recollection is that Settlement Agreement held over certain works which did not form part of what required----

THE CHAIR: Right.

MR BARNE: -- to be part of practical completion.

THE CHAIR: Right, okay.

MR BARNE: So, in terms of the rest of the works as varied by Settlement Agreement, it was necessary as a condition of entering into Settlement Agreement 1 that Arcadis had certified----

THE CHAIR: Practical completion----

MR BARNE: -- practical completion on that revised basis.

THE CHAIR: -- notwithstanding that there were still works to be done.

MR BARNE: Yes.

THE CHAIR: Right. Sorry. My apologies for being slow.

MR BARNE: Not at all, my Lord. If the purpose of the proposed technical audit would be to ensure that a suggested design solution is reviewed prior to implementation, then the timing, nature and scope of such a review would

need to be defined before its efficacy in any particular case could be assessed but what is clear is that, for reasons already discussed, any such review would not comprise a full design review. IHSL was the designer, and the design risk transferred to IHSL under the project agreement, except in relation to operational functionality.

NHS Lothian also questions the practicality of having an additional tier of professional input which would require to be consulted during the construction phase. There would be a need for there to be clarity as to the circumstances which would trigger the need for an independent technical audit, and I make the observation that presumably it would not arise in relation to each and every potential change under the contract.

A requirement for a technical audit would also increase the potential for delay, the cost of which would be borne by the client, and the contractual consequences of the independent review would be entirely unclear. For instance, if the independent reviewer challenged aspects of the design and those challenges were not accepted by the designers, what then should happen? Standing the terms of the project agreement, NHS Lothian had no locus to raise objections to issues of design except in relation to operational functionality.

Finally, in the context of the project itself, it should be recalled that NHS Lothian received advice on technical solutions from its technical advisers, Mott MacDonald. This, it is submitted, was an entirely appropriate way for the Board to proceed. Indeed, it has not been suggested by anyone that the Board did not include within the project team a suitable group of professional advisers. For these various reasons, NHS Lothian submits that it would not have been appropriate, practical, or proportionate to have an independent technical audit of proposed solutions undertaken, either before the solutions were implemented or before Settlement Agreement 1 was signed.

THE CHAIR: All right, either at the two dates you have in mind, March 2018?

MR BARNE: I was talking more generally, but in terms of ventilation, yes, that would be March 2018.

THE CHAIR: Yes, okay.

MR BARNE: Turning then to issue two, which is whether or not changes that arise during the construction phase should be subject to a Stage 2 HAI-SCRIBE assessment. In considering this question, it is important to bear in mind that HAI-SCRIBE is an operational tool rather than a document with which to check compliance. HAI-SCRIBE is

intended only to explore infection risk. It does this by identifying a hazard, identifying the risk of acquiring infection from that hazard, and then removing or mitigating the hazard to minimise the risk of acquiring infection.

HAI-SCRIBE cannot therefore be relied on to detect all possible clinical and non-clinical risks from a design or construction perspective. It is focused only on exploring factors or hazards in a healthcare building setting that may predispose patients or staff to acquiring an infection. HAI-SCRIBE Stage 2 is about design and planning intention for the project as a whole, rather than individual spaces or infrastructure elements. This means that at Stage 2, everything is still hypothetical, the aim being to identify hypothetical hazards from collective multidisciplinary experience, such experiences gained from other projects and buildings as highlighted in contemporary guidance or unpublished peer experience.

THE CHAIR: Mr Barne, just on the question of pace, did I understand that you were prepared to share your speaking note with me at some later date?

MR BARNE: Indeed, my Lord.

THE CHAIR: Right. The reason that I asked that question is that if you are expecting me to take a note at this speed, I cannot do it, but if I am going to see the full text at a later stage, carry on at the speed you consider appropriate.

MR BARNE: It does strike me, my Lord, that there are certain issues that the Inquiry has raised that requires quite a lot of detailed input from those whom I am representing and I had to try and strike a balance between what we put into the responses and what may be available afterwards, as I will come on to discuss. But I will be slower if that is of assistance but----

THE CHAIR: No, the-- I do not necessarily need it now. I just need the assurance that-- I mean, for example, you have detailed the practical difficulties with my technical audit idea. Now, I would like to have available to me, at some stage, a list just to make sure that I have noted everything you have to say.

MR BARNE: I will make sure that those notes are available.

THE CHAIR: Okay.

MR BARNE: So, I was making the point that Stage 2 is about a hypothetical assessment. I was saying that, in the terms of the project itself, the assumption was that there would be compliance with guidance. So, it is unlikely that anybody would have flagged a hypothetical issue that nobody considered at the time was an issue. Stage 3 HAI-SCRIBE is about construction, when things are actually

being built. So, it is primarily about making sure the construction works do not interfere with and compromise the clinical environment elsewhere if there is active clinical space nearby.

Stage 4 HAI-SCRIBE assesses the building's performance based on how it has been built, and checks that the systems and spaces perform as anticipated against requirements. Where the building is found not to be performing as anticipated, Stage 4 aims to ensure that operational mitigations against any infection risk are in place. So, in terms of the particular issue raised by your Lordship, returning to Stage 2 mid-construction would be unusual. The HAI-SCRIBE process is intended to have a linear progression from Stage 1 to 2, 2 to 3, and then 3 to 4. Once construction has commenced, the HAI-SCRIBE assessment process is already considered to be at Stage 3.

It is important to note that at Stage 2 and Stage 4, the questions to be considered are essentially the same. So undertaking a Stage 2 HAI-SCRIBE during construction would be like trying to undertake a Stage 4 HAI-SCRIBE in a partially built environment, but without having the commissioning data available to test compliance. Such an assessment of clinical infection risk is more informed and fruitful once the installation is

complete and running, i.e. at Stage 4, rather than trying to anticipate during construction how it might eventually work.

It is, therefore, NHS Lothian's position that there would have been little point in undertaking a Stage 2 HAI-SCRIBE in 2018 because the design parameters which were developed from the clinical output specification remained the same for the project as a whole. The ventilation systems were already installed and construction was at an advanced stage. It was thought by NHS Lothian that the ventilation system was compliant with guidance, other than known derogations, and HAI-SCRIBE is not a tool with which to check compliance with guidance.

It is NHS Lothian's submission that the starting point for all parties in a contract must be compliance with guidance. Where any party wishes to propose either a design change or derogation, a clear process should be followed with input from all stakeholders which identifies the following: what the relevant guidance requires; the nature of the design change or derogation that is being agreed to; and the reasons for that design change or derogation. The assessment will include a formalised process involving, as a minimum, IPC, authorising engineers and clinicians, to explore whether the design change or

derogation can be accepted as appropriate in terms of patient and staff safety.

The HAI-SCRIBEs can then be completed with reference to any agreed design changes or derogations in place at the time. Any necessary design changes or derogations which arise during construction and the post-state HAI-SCRIBE Stage 2 will have been reviewed by all relevant stakeholders, including IPC, by virtue of the design change or derogation process itself. The construction phase design changes and derogations can then be taken into account in HAI-SCRIBE Stage 4.

My Lord, I turn to issue 3, which is the appointment of the independent tester. By that, I mean that the issue is whether the terms of SHTM 03-01 effectively obliged NHS Lothian to appoint an independent tester to validate the ventilation system. In NHS Lothian's submission the answer is yes, and this is what occurred via the instruction of IOM. I will address this issue first under reference to the 2014 version of SHTM 03-01, which was the version in place during the project. I explain later, with reference to issue 8, the importance of the changes made to the authorising engineer's role in the current SHTM 03-01, being the 2022 version.

SHTM 03-01 makes a distinction between commissioning and validation. In summary, commissioning can be undertaken by the specialist installer and individual items of equipment can be commissioned in isolation. However, as the 2014 version of SHTM 03-01 explains, and this is a quotation:

> "Validation differs from commissioning in that its purpose is to look at the complete installation, from air intake to extract discharge, and assess its fitness for purpose as a whole. This involves examining the fabric of the building being served by the system and inspecting the ventilation equipment fitted, as well as measuring the actual ventilation performance."

The project agreement covers commissioning both by Project Co and the board in clauses 17 and 19. Project Co was----

THE CHAIR: Sorry, just give me that again. Clauses 17 and 19 do what?

MR BARNE: This covers commissioning by both-- There are different aspects of commissioning, some undertaken by the Project Co and some undertaken by the board. Clause 17 covers commissioning by the Project Co. Clause 19 covers commissioning by the Board.

Project Co was responsible for

commissioning elements built and installed by them, which included commissioning the ventilation system. The Board's commissioning elements related to the installation of NHS Lothian equipment and was dependent on works in areas to be complete before Board commissioning could commence. In relation to validation, this did not form part of Arcadis' appointment and was not governed by the terms of the project agreement. Responsibility for validation sat with NHS Lothian. NHS Lothian instructed IOM as a suitably qualified independent party to carry out the validation of the ventilation systems when the building was ready for patient occupation. This was in compliance with the requirements of SHTM 03-01.

THE CHAIR: Right, can I interrupt with apologies? I think you have been quite clear that chapter 8 does impose an obligation on health authorities to -- presumably at the completion point but prior to occupation of a facility, to carry out validation by an independent engineer. Now, maybe a slightly unfair question, but is that what was the original intention of NHS Lothian, let us say, in January of 2019?

MR BARNE: My understanding is that that was the intention.

THE CHAIR: What-- Sorry.

MR BARNE: My understanding

was it was always the intention to undertake a validation. There was a confusion, as expressed by one of the NHSL Lothian witnesses, as to whether or not the commissioning data could be used for the purposes of a HAI-SCRIBE assessment, which is a slightly different point.

THE CHAIR: Yes. My recollection-- I am thinking of Mr Henderson. If I am right in my recollection of the evidence, Dr Inverarity was engaged or wishing to engage in the HAI-SCRIBE Stage 4, January/February 2019. One of the questions that he would have to-- or whoever, or the team, address the question set in Stage 4, would have had to apply their minds to is whether the building complied with SHTM 03-01.

Now, Dr Inverarity, as I recollect his evidence, was not satisfied with the documentation he had. Now, I have to say, I assumed it was in relation to that question and probably other questions, and there was an interaction with Mr Henderson. Mr Henderson was not presenting any difficulties but in a context where, again as I understood it, Multiplex were not producing documentation to the satisfaction of Dr Inverarity, Mr Henderson said, "We will get an independent authorised engineer." But what I took from that evidence was that Mr Henderson was producing an ad hoc

solution to Dr Inverarity's issue, which was that he did not have the documentation available for HAI-SCRIBE Stage 4. I did not pick up from Mr Henderson that he planned to-- he had always planned to instruct either IOM or some other authorised engineer to validate in compliance with chapter 8 of SHTM 03-01.

MR BARNE: My recollection of the evidence is that it aligns with what your Lordship has indicated, and there was some question raised by Mr Henderson's evidence by him. I think it showed, perhaps, a lack of clarity that in a context where the hospital is technically owned by IHSL, I think Mr Henderson was not clear in his own mind which party was required to undertake validation. It is clear, as hopefully my submission makes out, that NHS Lothian accepts that validation was a matter for them to undertake.

The interactions between Mr Henderson and Dr Inverarity involved whether or not the commissioning data that was available was in a form and sufficient to satisfy Dr Inverarity. I think Dr Inverarity's position was that it was not because it did not effectively engage with the criteria for SHTM 03-01.

THE CHAIR: Well, again, we can look at the evidence. I thought Dr Inverarity was talking about the HAI-SCRIBE process.

MR BARNE: That is my understanding.

THE CHAIR: Right. Again, I apologise for being slow. So, am I right or am I not right to have got the impression that Mr Henderson had not intended to instruct an independent engineer to carry out a chapter 8 SHTM validation process. Am I wrong in that?

MR BARNE: Unfortunately, we do not have Mr Currie's evidence, but so far as Mr Henderson was concerned-- I think as at January 2019 and thereafter, my understanding of Mr Henderson's evidence was that he was just not clear whose responsibility it was.

THE CHAIR: Right, okay. Thank you.

MR BARNE: When the issue of the validation arose, NHS Lothian initially approached their usual authorising engineers to undertake the validation testing, but they were unavailable. NHS Lothian then sought advice and recommendations from HFS for other suitable organisations. HFS referred NHS Lothian onto the British Services Research and Information Association. This association then referred the issue to Malcolm Thomas, who was a key author of SHTM 03-01. He suggested the instruction of IOM as a suitable alternative provider of the authorising

engineer services. NHS Lothian proceeded to instruct IOM as the authorising engineer for the validation of ventilation in the new facilities.

Given that validation did not form part of Arcadis' appointment, it is as well at this point, just to clarify Arcadis' role as independent tester. This is discussed in more detail at section 5 of NHS Lothian's response to P6. The scope of Arcadis' services can be found at schedule part 13 of the project agreement. The scope of the services to be provided by Arcadis was broad and included the following: clause 1.2, undertaking regular inspections of the works and to report on the completion status of the project; identifying any work that is not in compliance with the BCRs, the PCPs, the approved RDD and/or completion criteria, these are all contractual terms; clause 1.8, monitoring the works against the required standards of construction quality and reviewable design data; and clause 1.9, monitoring the works for compliance with the BCRs, PCPs and compliance with the law. I make the observation that having regard to the nature and scope of their duties, NHS Lothian relied on, and took assurance from the practical completion certificate issued by Arcadis to the extent that the ventilation system installed was compliant with guidance subject to the agreed derogations.

THE CHAIR: They relied on Arcadis because they understood that, in order for Arcadis to approve work-- Well, Arcadis' task was to approve work as having been completed in terms of the contract, and NHS Lothian assumed that the-- sorry, assumed is the wrong word, were proceeding on the basis that, in fact, all SHTMs were-- compliance with all SHTMs was contractually required.

MR BARNE: Subject to the agreed derogations.

THE CHAIR: Subject to the derogation.

MR BARNE: Well, turning to issue four, which concerns Lochanza, it is accepted that in terms of appendix 1 to SHTM 03-01, 2014, the entry for neutropenic patient ward applies to Lochanza. In NHS Lothian's view, appendix 1 applied to the treatment areas within Lochanza, but not to other areas, such as the nurses' station or corridors.

THE CHAIR: And the treatment areas will include the bedrooms. All the bedrooms.

MR BARNE: That is my understanding. It is also accepted that some of the cells in the Environmental Matrix of 31 October, 2014 for department C1.4 – that's Lochranza – were incorrect. NHS Lothian therefore accepts that these cells departed from guidance. Finally, it is accepted that

IHSL and Multiplex designed and constructed the ventilation system for Lochranza to the incorrect values in the reference design Environmental Matrix of 31 October 2014. The error was dealt with by way of Project Co change number 50 and was addressed operationally.

Issue 5 concerns Mr McKechnie's interpretation of SHTM 03-01. I have addressed this issue to some extent in my general remarks. NHS Lothian's position is that the proximate cause of the delay in the opening of the hospital was Mr McKechnie's unique interpretation of the relevant provisions of SHTM 03-01. Mr McKechnie accepted in his evidence that whatever the client brief, he would have flagged up any departures from guidance. This was clearly his obligation especially in light of the obvious inconsistency that was apparent in the reference design Environmental Matrix and we have discussed that inconsistency, and that is between Guidance Note 15 and the individual cells for critical care.

The fact that Mr McKechnie did not flag up the inconsistency was because he did not think there was any departure from SHTM 03-01. Mr McKechnie's interpretation was the golden thread that runs from the Environmental Matrix adopted by Wallace Whittle before financial close, to the discovery by IOM of the inadequate ventilation rates in critical care.

As I have already observed, there will always be uncertainties or ambiguities in a client brief for large construction projects. That is why designers should scrutinise the Board construction requirements to tease out any such ambiguities. It was not the client brief that caused the problem, it was the failure of IHSL and its subcontractors to flag up what was an obvious ambiguity in the reference design Environmental Matrix.

It will also be recalled that Multiplex imposed a design freeze during the preferred bidder stage. This included not completing a full set of room data sheets. That is why so much design was put into the reviewable design data process. But even if design had been completed pre-financial close, given Mr McKechnie's interpretation of SHTM 03-01, it is unlikely that the issue would have been flagged up.

Issue 6 concerns NHS Lothian's contentions. These relate to the suggestion that there is an obligation on a contractor to raise actual or potential derogations from guidance with the client to ensure that they are intended and understood. In this regard, I would refer to NHS Lothian's response to PPP4, which identifies a number of contractual

obligations regarding compliance with guidance. NHS Lothian would like to take this opportunity to make the broader point that, particularly in a healthcare context, the relationship between client and contractor should be one partnership working, a concept that counsel to the Inquiry regularly referred to. Parties should approach any ambiguities in construction documentation with the overriding objective of ensuring patient safety.

I would also point out in this case, the project agreement expressly addressed the possibility of ambiguity. Clause 5 of the project agreement obliges Project Co to procure that the defined term "project operations" are, at all times, performed in accordance with various specified standards and in the event of any ambiguity, clause 5.2 establishes an order of precedence in terms of those standards. This is mirrored in the Board's construction requirements, which establishes at paragraph 2.5 a hierarchy of standards in the event that there is any conflict or ambiguity in the contractual documentation.

Issue 7 relates to Mott MacDonald's role and whether or not it was properly understood. On this issue, I would observe that the evidence of Brian Currie would have been extremely important, given that he was closely involved with Mott MacDonald throughout but it is my submission that NHS Lothian knew and understood that Mott MacDonald were not providing a shadow design function. They were providing technical input, including technical assurance in relation to various disputes that arose and which were captured in the technical schedule to Settlement Agreement 1.

In her oral evidence, Susan Goldsmith explained her understanding that Mott MacDonald were providing assurance to the Board to the effect that what IHSL were delivering was a hospital that would meet the Board's construction requirements. While she accepted that that may mean that Mott MacDonald were required to consider design on some occasions, she understood that that was not their main function. This accords with a contract control order of 26 February 2015, which required Mott MacDonald to, I am quoting here:

> "...continue to be part of an integrated delivery team with NHSL and to undertake a wide range of management, advisory, and supporting tasks, both from a project management and technical advisory perspective."

One of the specified duties in the contract control order that was incumbent on Mott MacDonald was to, I quote here,

"monitor the construction of the works with respect to compliance with the building contract." So, I should read that again, "monitor the construction of the works with respect to compliance with the building contract." The phrase "compliance with the building contract" would encompass, in my submission, compliance with the Board's construction requirements.

NHS Lothian understood that providing assurance in relation to compliance with the Board's construction requirements and providing design assurance are two different things. There has been no evidence in my submission to suggest that this distinction was not understood. But what the Inquiry is invited to have close regard to is the fact that throughout the project, both NHS Lothian and Mott MacDonald repeatedly reminded IHSL and Multiplex that it was for IHSL and Multiplex to construct the hospital in accordance with the Board's construction requirements and not in accordance with the reference design.

Issue 8 concerns the updated SHTM 03-01. I have been provided with some detailed comments on this by Dr Inverarity and the Capital Project team at NHS Lothian. These can be provided to the Inquiry if that would be of assistance. Just by way of example, Dr Inverarity comments on the ambiguous use of

hyphens in appendix 2, given a hyphen might be interpreted as no value given, negative, or as part of a range of values. Indeed, I understand that such ambiguities have actually already caused some problems.

THE CHAIR: So, you are promising me Dr Inverarity's commentary?

MR BARNE: If that would be of assistance.

THE CHAIR: I can only imagine it would be.

MR BARNE: I did not think it would be helpful simply to read out everything that he had written because it was a bit---

THE CHAIR: Yes, I mean, I cannot take it in at that speed.

MR BARNE: Of course not. Although the terminology around critical care in the latest version of SHTM 03-01 is clearer, with reference to Level 2 and Level 3 than the earlier version of the guidance, there are still nebulous and ambiguous terms that are used in the table, such as “neutropenic patient ward" and "general treatment room" is my understanding that these terms are perhaps not as clear.

THE CHAIR: At the same time, you say a proper construction of 2014 version of neutropanic patients would have included all treatment areas in Department C1?

MR BARNE: Yes. In relation to the question of whether the revised guidance would have made a difference on the project, it is to be hoped that the revised wording in relation to critical care would have meant that an outlier interpretation of the requirements such as that displayed by Mr McKechnie would not arise. However, compliance with SHTM 03-01 will still require designers to identify what does and does not meet its terms. Accordingly, compliance with the revised SHTM 03-01 will still be periled on designers taking a sensible and realistic approach to its interpretation.

The updated version of SHTM 03-01 provides for a greater role for authorising engineers during the project, and in terms of the 2014 guidance, authorising engineers had an ad hoc role and were not usually involved in commissioning. However, the 2022 version, which was authored by several authorising engineers for ventilation, is explicit that the authorising engineer for ventilation should be involved in reviewing the construction of ventilation systems at several points in time before they are covered up by ceilings and walls. This would include reviewing the commissioning data, even though their role will be as the independent validator after commissioning is over.

In summary, NHS Lothian broadly agrees that the revisions in SHTM 03-01 are addressing issues that arose at the new hospitals, making it less likely that they will be repeated. In particular, NHS Lothian welcomes the increased role for authorising engineers and the role of Ventilation Safety Group.

Issue 9 relates to recommendations, and I don't wish to add to the written submissions that have been provided. Issue 10 relates to NHS Scotland Assure. As detailed in its written closing submission, NHS Lothian notes the establishment of NHS Scotland Assure and observes its progress with interest. As recommended by counsel to the Inquiry, NHS Lothian agrees that the role of NHS Scotland Assure should be part of a wider review of governance, guidance and procedures. However, the current KSAR process is very resource-intensive and could be streamlined. In addition, it is suggested that in order to add value, NHS Scotland Assure requires to do more than provide a check that Health Boards are following appropriate procedures.

Issue 11 concerns the authorising engineer. NHS Lothian has been asked to confirm whether NHS Lothian instructed an authorising engineer in respect of the project prior to the instruction of IOM. The answer to this is yes. An authorising engineer is

appointed to act as an auditor for NHS Lothian across its entire estate and across various disciplines, e.g. fire, electrical, ventilation, water and medical gases. The authorising engineer recommends competent authorised persons for each discipline. There was no formal role for authorising engineers on the project in terms of the project agreement, but it was part of the authorising engineer's wider role across the NHS Lothian estate to provide ad hoc advice as and when required.

THE CHAIR: I'm sorry, entirely my fault. I am not sure if I am following that. The reason I asked that question was that I think Mott MacDonald draw attention to the evidence that indicated that in addition to all the other advisors that Lothian had, they had consulted an authorising engineer. Now, as I understood it, the source of that was Dr Inverarity's evidence, and it appeared to me that that passage in his evidence indicated that he was speaking as a matter of what he would expect to happen, not entirely clear in what context. Now, as I understand it, "authorising engineer" is a term of art, and it is certainly used in SHTM 04. I do not know if we find "authorising engineer" in SHTM 03-01.

MR BARNE: My recollection, it is referred to, and the suggestion is that it is

unlikely for validation purposes that the authorised engineer would have sufficient expertise.

THE CHAIR: Right. But, anyway, you have given an answer in terms of sort of general advice over the Lothian Estate. I have----

MR BARNE: Yeah, I was wishing to----

THE CHAIR: Was specific advice asked or received in relation to this project?

MR BARNE: I was providing the context to the fact that the authorising engineer did not have a role in terms of the project agreement, but returning to my submission, if I may, the authorising engineer in this project did provide ad hoc advice, for example, in 2016, in relation to the resilience of the IHSL proposed ventilation strategy for isolation rooms. There were ongoing meetings between IHSL, Multiplex, Wallace Whittle and Mott MacDonald to discuss the proposed ventilation strategy, at which both the authorising engineer and IPC were present. So in answer to your Lordship's question, the authorising engineer was present as part of a wider remit across the entirety of the NHS Lothian----

THE CHAIR: Right. So, if I am remembering Mott MacDonald's written statement correctly, Mott MacDonald are right.

MR BARNE: Yes.

THE CHAIR: All right.

MR BARNE: Perhaps I should have just said that.

THE CHAIR: Right. Thank you.

MR BARNE: Issue 12 relates to the NSS report, and I have no submission on that. The final part of my submission briefly addresses the NHS Scotland Assure position on research, which forms, I understand, volume 13 of bundle 13, and that is a paper that was produced dated 13 June, 2023-- sorry 2024. In preparing a brief response to that paper, I have been assisted with some preliminary remarks provided by Dr Inverarity.

The overall approach of NHS Scotland Assure to research into the built environment seems to be to act as a conduit to provide funding opportunities to principal investigators in other academic institutions rather than initiate and perform the research themselves. This appears different to the approach taken by UK Health Security Agency where there are long-established research groups conducting their own research portfolios into the healthcare built environment, such as the Biosafety, Air, Water, and Microbiology Group at Porton Down.

The model that NHS Scotland Assure seemed to follow with regards to producing guidance is to commission scientific literature reviews about aspects of infection control and the built environment, of which there are many currently in progress but, so far, little of this has been progressed to fully operational guidance. The process relies heavily on the goodwill of Health Board IPCT members reviewing revisions of multiple documents. It is resource-intensive for the Health Board infection control teams to participate. This is particularly so when IPC teams are experiencing diminishing staff numbers and trying to deliver their IPCT duties to their own Health Boards.

Finally, Dr Inverarity notes the inclusion in the bundle of DL 2024-11. He notes that this document is contentious in the infection control community in Scotland. I understand that concerns were raised with its content at the pre-publication stage, and there are inconsistencies with other guidance, but it was issued without these being satisfactorily resolved. I am also told that it is unpopular amongst senior IPCNs, IPCDs and IPCMs in Scotland who are disappointed that it was issued before resolving the concerns that were being expressed. However, none of these points should detract from NHS Lothian's willingness to engage with NHS Scotland Assure to achieve positive outcomes.

My Lord, that is the end of my submission, and I acknowledge I have undertaken to provide two documents: first, a transcript effectively of my submission, and secondly, Dr Inverarity's comments.

THE CHAIR: Well, I find that very helpful. Thank you very much indeed, Mr Barne. Now, Mr McBrearty, on behalf of Mott MacDonald, if it is convenient for you to begin?

Submissions by Mr McBrearty

MR MCBREARTY: Good afternoon, my Lord. I of course adopt the written closing submissions for Mott MacDonald in full. Your Lordship, I think, should also have had this morning a written response that was prepared in response to your Lordship's particular queries.

THE CHAIR: Yes, I do.

MR MCBREARTY: The intention was to simply cut down on the time that is required of me and to allow, I think, me to focus on more general points.

THE CHAIR: Thank you, yes.

MR MCBREARTY: However, if your Lordship does wish to hear from me specifically on any of the points raised in that paper, I am of course happy to address them.

THE CHAIR: I will reread it. I have read it and I am working on the basis that you have said what you consider needs to be said.

MR MCBREARTY: Yes. Okay, thank you, my Lord. If I might then just emphasise those points in the generality that I wish to and if I might start my Lord just by making two general observations about the role played by Mott MacDonald.

The first is one which is just a very general point. As your Lordship is aware, Mott MacDonald's role was of course twofold. They were technical advisers, they were also project managers, and I think it is fair to that what the Inquiry has had the opportunity to look at here has simply touched on a sliver of the work that was undertaken by Mott MacDonald, because they had involvement in almost all aspects of the project, not just ventilation, of course, but architecture, electrical work, facilities management, civil and structural matters, acoustics, energy modelling, fire prevention, flood prevention, and even assisting with the provision of the helipad, and project management of all aspects of those matters.

As technical advisers, they were there in a hands-on role, sharing the same space and working collaboratively with NHS Lothian, who were, of course, an informed and experienced client. I say

all of this, my Lord, not to be defensive about Mott MacDonald's role, it is simply the fact that they hold the belief that looked at overall, they added genuine value to this project as a whole for the benefit of the client. I think it is reasonable to bear in mind the breadth and the quality of the work that they did beyond simply the small area which this Inquiry understandably has been looking at.

The second general observation I might make, Lord, is simply about a possible misunderstanding about Mott MacDonald's role when it comes to matters of design and technical assistance. I just wish to make clear what Mott MacDonald's position is. As Your Lordship will have gathered, of course, from the written submissions, Mott MacDonald's position is that they were not employed to provide design assurance. They maintain that position.

Looking to other core participants' submissions, it appears that this may have been picked up on in certain quarters as suggesting on Mott MacDonald's part that they were not providing any kind of design or technical advice or assistance. I just wish to make clear that that is not Mott MacDonald's position. They were providing technical advice in relation to matters of design, and there is no inconsistency between

providing that kind of advice on the one hand, and on the other hand, not providing design assurance. There is two quite different things. There is an important distinction between technical advice on the one hand and design assurance on the other hand.

Just to take, if I may, a very simple example – I am not suggesting it is one that necessarily occurred, but to take a simple example, my Lord – if it happened to be the case that on a particular occasion, NHS Lothian were to have come to Mott MacDonald and to say to them, "Could you please tell us what the appropriate ventilation rate or pressure was for a particular room of a particular type," then of course, as technical advisers having regard to the guidance, then one would expect that Mott MacDonald would have been in a position to provide that technical advice. However, once the party responsible for the design produces that design, it was not Mott MacDonald's task to give assurance over that design. It was not their task to check it line by line and to give the assurance that it conformed to the relevant guidance.

As I understand it, given what was said by NHS Lothian and what was said by Mr Barne today, it seems to be that Mott MacDonald and NHS Lothian are at one in their understanding as to what

Mott MacDonald's role was. It appears that between those parties, there was no lack of clarity in relation to Mott MacDonald's role.

Those responsibilities that Mott MacDonald had, in my submission, should be seen, of course, in the context of this having been an NPD contract and in that context, it was not for Mott MacDonald as technical adviser to provide design assurance. They were not there to be a shadow design team. Because even leaving aside the contractual arrangements and the understanding between NHS Lothian and Mott MacDonald, for them to have provided shadow design work would in effect have undermined the whole basis of the NPD contract. The whole purpose, understandably, is to place design responsibility onto the private sector and therefore, for the private sector to be responsible for giving the appropriate assurances. It would in effect have cut across the whole risk profile of the contract and would, indeed, in doing that, also have involved considerable extra cost to the public purse and would have prolonged the project programme because, as I understand what is said by counsel to the Inquiry, it would in effect have required a full technical audit on the part of those assisting NHS Lothian.

For Mott Macdonald, I do not make

any judgment, my Lord, on the choice of contract. It is a matter for the parties to the contract to make a commercial judgement as to the nature of the risk that they are each prepared to take on and therefore, on the back of that, to choose the form of the contract that they are prepared to enter into, but once parties choose the NPD contract, the risk profile, in my submission, is clear.

Now, having made those general observations, my Lord, if I might-- trying to get to the heart of what I say are some of the really important matters here, if I might make clear two general matters that Mott MacDonald accept, but equally in doing so make clear what is not accepted in relation to each of those matters. If I might make them in short form to begin with and then come back to expand upon them a little.

The first, my Lord, is that I accept, of course, that there is room for argument as to the proper interpretation of both the tender documentation and the contract documentation itself, and of course particularly, I mean in relation to the status of the Environmental Matrix; whether it was a fixed brief or a matter within the responsibility of those designing the project. From the written submissions that your Lordship has received, your Lordship will have seen that Mott MacDonald contend that

objectively read, the wording of the tender and contract documents was unambiguous and the matrix was a matter for those designing to deal with. Others in their written submission say that the wording unambiguously shows that the Environmental Matrix was to be read as a fixed brief. I think having had the benefit of reading all of those submissions, my Lord, what I can say is that where different parties say that the wording is "unambiguous," each in different directions, I think the only thing that we can be clear of is that there was ambiguity to that extent.

THE CHAIR: At the risk of being unduly superficial, that is a thought that has occurred to me. For example, in your closing statement, you provide a very detailed argument and, as you say, I have had the benefit of other, pretty detailed, arguments but, at the moment, I do not really see it as my role to do more than recognise that there are different respectable arguments.

MR MCBREARTY: I respectfully agree with that, my Lord. It is there in our argument. We have given it to your Lordship in detail because the ground was covered, and it seems right that we should give your Lordship the benefit of our submissions on that, but I entirely understand the position that your Lordship is in. It is not a matter for your

Lordship to determine the parties' civil rights and obligations in the context of this Inquiry, and it is exactly why I put it in the way that I do, and it is exactly why I do not intend to labour the point here about why we say we are right in our interpretation. Your Lordship is faced with competing interpretations. It is not for him to resolve that. There is ambiguity, and I recognise that.

In recognising that, my Lord, what I do not accept on behalf of Mott MacDonald is the suggestion that this ambiguity lay at the heart of the problems which then emerged. It would no doubt have been better had there been no ambiguity, although it could hardly be said to be a rarity in complex construction contracts that sometimes an ambiguity arises. But the essential point I make is that insofar as there was ambiguity, my Lord, there was no, in effect, causal connection between that ambiguity and the problem with the ventilation which then ensued. If I put that another way round, my Lord, if there had been no ambiguity, then in my submission, the problem would have arisen in any event.

THE CHAIR: And that is because of Mr McKechnie?

MR MCBREARTY: Precisely so, and I make clear, my Lord, this is not a question of me-- I do not wish it to be thought that I am seeking some vendetta

against Mr McKechnie personally or suggesting any-- The counsel to the Inquiry has noted that there could be no question of bad faith on his part, and I do not dispute that at all, but it is at the heart of the causal potency of what then ensued, and I will come on to expand on it. But I suppose there is a broader question in any event, my Lord. Mr McKechnie is at the heart of it, but if one puts to one side the wording of the contract and the tender documentation, and instead looks at the actions of the parties – and I include within that Mr McKechnie, I will come on to expand on this – then in my submission, it becomes clear that the Environmental Matrix was never really treated as a fixed brief, because there are many actions-- I will come on in a moment to expand upon them, but there are a number of actions which we can look at which are simply inconsistent with the suggestion that the Environmental Matrix was fixed brief. Mr McKechnie's is I think the best and most potent example of that, but perhaps in a moment I could come back to that, but in terms of causative potency, the review of the Environmental Matrix by Wallace Whittle is what lies at the heart of the ventilation issues which ensued. I will come back to that.

The second matter that Mott MacDonald accept, if one leaves aside Mr McKechnie's review, then of course Mott MacDonald accept that there were opportunities to discover the problem in the Environmental Matrix. Although for my part, I think I would probably prefer to use the term "occasions," occasions on which it might have been discovered. Mott MacDonald also accept that they were a party to those occasions and they could have noticed the problem, but the emphasis that I put on, my Lord, is on the word "could." In my submission, we are not in the territory of "should." In other words, of those occasions on which the problem might have been noticed, in relation to none of those-- there were none of those occasions in relation to which Mott MacDonald plainly failed to do that which was incumbent upon them and which would have led to the problem being discovered, and if we are looking again at real, truly genuine missed opportunities, the one glaring missed opportunity again is the review of the Environmental Matrix by Wallace Whittle. I will come back to expand.

If I might just expand on what I say about the actions of the parties, my Lord, and again this is against the background, the point I am essentially making here is that whatever ambiguities lay in the documentation, in my submission, the conduct of the parties was inconsistent with the Environmental Matrix being a

mandatory part of NHS Lothian's brief. Let me focus, if I may, on three general points here when I talk about the conduct of the parties.

First, I would ask your Lordship to focus on the fact that the Environmental Matrix was taken over by IHSL and that significant changes were made to it. Your Lordship has heard the evidence that IHSL took over the Environmental Matrix. It is a small matter, but they rebranded it with their own logo and thereafter, as is detailed in our submissions, multiple changes were made to it, changes, in my submission, which would be inexplicable if it had truly been regarded as being a mandatory part of the brief.

Most pointed of all of those changes is of course that which is highlighted by Mr McKechnie's evidence because his evidence, at least as we see it and have detailed in the written submissions, is that Wallace Whittle's design would always have had to comply with SHTM 03-01, that all parameters in the Environmental Matrix would have been checked by Wallace Whittle against the guidance, that they did in effect carry out a line-by-line check, and that indeed his view was that the design was compliant with SHTM 03-01. In my submission, those matters, my Lord, in his evidence, they are all inconsistent with the notion that the

matrix was a fixed brief that took precedence over SHTM 03-01.

THE CHAIR: Point of small detail, Mr McBrearty, I think "line-by-line" was an expression that was used on a number of occasions in the evidence, and we have been shown the Environmental Matrix, the main body of which is a spreadsheet. At the moment, subject to correction, when people talk about "line-by-line," I am envisaging somebody actually going-- whether they are running their finger over it or not, but looking at every single line, of which there may be-- I think we had one suggestion is there may be 50,000 of them.

MR MCBREARTY: Yes.

THE CHAIR: But when you use "line-by-line" and when the evidence uses "line-by-line," is that how I should understand it?

MR MCBREARTY: That is how I understand it, and I think that is how I understood Mr McKechnie's evidence. That is the way in which I approach it. Your Lordship, of course, has his evidence and can assess exactly what he said, but leaving aside whether it was-- he looked at every single cell or not, of course the most pointed and significant change was obviously the change to Guidance Note 15 because it's changing a requirement for 10 air changes per hour so that it applied to isolation cubicles

only.

The point I make is the obvious one: it is a significant change. It is not merely a change to add in additional spaces or to make minor, inconsequential changes, nor is it a change requested by NHS Lothian. It is change which goes to the heart of how SHTM 03-01 was interpreted and made a significant difference to the overall meaning of the Environmental Matrix. It was a change to the Guidance Note, of course, but the entries in the matrix themselves refer the reader back to the Guidance Notes, and insofar as there was previously a discrepancy between the individual cells on the matrix and the Guidance Note, that was removed as a result of Mr McKechnie's change. It was, in my submission, highly significant. I will come back to it in a moment, but in my submission, the point I make at the moment is that taking over the Environmental Matrix and the changes made to it, including Guidance Note 15, are simply not consistent with the parties having treated the matrix as if it were a fixed brief because otherwise, why would the party responsible for the design of the ventilation be making a significant change in order, it seems, to make it align with his interpretation of the guidance.

I was about to pass on to the second matter of focusing on the parties'

conduct, but I am content to come back.

THE CHAIR: We will take that as a break for lunch.

MR MCBREARTY: Yes.

THE CHAIR: Yes, well, is it convenient to you to actually supply it over lunch? This conversation is just confirming that-- with a view that everyone has the same information. We are sharing a copy of your document with the other legal representatives, and that should be available to people over the lunch break.

MR MCBREARTY: Thank you, my Lord.

THE CHAIR: We will sit again at two o'clock.

(Adjourned for a short time)

14.02

THE CHAIR: Good afternoon. Now, Mr McBrearty.

MR MCBREARTY: Thank you, my Lord. My Lord, I was of course in the middle of submitting why it is that the ambiguities in the contract and tender documentation are somewhat academic when looked at in light the party's actions, and the second aspect of the party's actions I would ask your Lordship to take into account is the question of derogation requests. In my submission, it is notable

that IHSL issued derogation requests seeking derogations from SHTM 03-01 in relation to a decrease in air change rates in single bedrooms and ensuites. Now, the detail of those derogations is dealt with at paragraph 64.15 of Mott MacDonald's written submissions, and I do not intend to go through it in detail----

THE CHAIR: Yes.

MR MCBREARTY: -- but the important point I ask your Lordship to take account of is, is that these were requests to derogate from the requirements of SHTM 03-01 in favour of what was already set out in the Environmental Matrix. Had the Environmental Matrix been a fixed brief which took precedence over SHTM 03-01, then there would simply have been no need for these derogations, and viewed in that light, my submission, the derogations make plain that IHSL recognised that they required to comply with SHTM 03-01, irrespective of what was contained in the Environmental Matrix. In my submission, once that is appreciated and one looks at those derogations, it is impossible to reconcile them with any suggestion that the Environmental Matrix was a fixed brief to be followed come what may. Otherwise, there was simply no purpose to those derogations.

The third matter in terms of the party's actions that I brought to your Lordship's attention, and I can do so very briefly, is simply the fact that the Environmental Matrix formed part of the reviewable design process after financial close. In my submission, by definition, that which was to be reviewable plainly cannot have been part of a fixed brief. So the reviewable design element of this, the fact that the Environmental Matrix fell within that scope, is irreconcilable with that matrix, having been a fixed brief.

Once one takes into account, in my submission, all of those matters, it becomes clear that whatever ambiguities there may have been in the tender and contractual documentation, and however any such ambiguities might be resolved in a different forum, the parties themselves conducted themselves in a manner which was entirely consistent with the matrix being a document which IHSL and Wallace Whittle were to take responsibility for and which was capable of being changed and which was changed by them. In so acting, in my submission, they acted in a manner which made plain that the responsibility for ensuring compliance with SHTM 03-01 remained entirely with the private sector. So to say that the ambiguities in the tender and contract documents lay at the heart of the problem which ensued, to use a phrase, "stealing" from counsel to

the Inquiry's submissions, has in my submission, an air of unreality about it because, quite frankly, it does not appear to have impacted upon party's conduct.

I would understand much better if we faced a situation where IHSL, Multiplex and Wallace Whittle were coming to the Inquiry and saying, "Well, this documentation was all ambiguous. We didn't know what it meant, and that explains why we did not make changes to the Environmental Matrix, and that explains why we did not review it, because it was ambiguous and we did not think it was our responsibility." But we can see that they did take it on board, they rebranded it, they made changes, they made critical changes, they did review it; according to Mr McKechnie, they reviewed it by reference to the guidance. So there is a disjunct, in my submission, between the ambiguities which I acknowledge on the one hand and the causal potency when one considers the problems that ensued.

In that respect, if I might just track briefly back to Guidance Note 15 and the change made to that guidance and what, in my submission, it tells us. Because if we go all the way back to the beginning of the first form of the Environmental Matrix, we know that what was in place at that stage contained a discrepancy. We know that, on the one hand, there was a

discrepancy between the values in the individual cells, which was incorrect, and the content of the Guidance Note, which was correct. I do not think it is in doubt we know that that error in the individual cells was simply human error.

Your Lordship has had the evidence of Michael O'Donnell. We know that in carrying out his initial review of the matrix, he did not notice that discrepancy, and his explanation was is that comfort might have been taken from the content of the Guidance Note 15, because one could see that the Guidance Note was at least directing the reader to the correct interpretation of SHTM 03-01, and that, it respectfully seems to me, is an understandable-- Human error happens. That sometimes happens; sometimes can be avoided. Mr O'Donnell's explanation as to why it was not picked up in review is perhaps unfortunate but understandable also, and the question then becomes, well, when could it or should it have been picked up?

It is in that context, in my submission, that Wallace Whittle's review and changes to the Guidance Note are critical, and I say that because Wallace Whittle were the party responsible for dealing with the ventilation design. As I have already indicated, on the basis of Mr McKechnie's evidence, it appears that they were concerned with ensuring

compliance with the guidance. They carried out a detailed check of the matrix. What was carried out does not appear to have been a spot check. It was a detailed review, the intended result of which was to ensure that the matrix met the requirements of the relevant guidance, and the result of that check was that the previous discrepancy between the values in the individual cells and the Guidance Note, which had not been picked up on prior to that, was resolved; the discrepancy disappears. But of course, it disappears by way of Wallace Whittle having adopted, in my submission, what is plainly an erroneous interpretation of SHTM 03-01.

The interpretation adopted by Mr McKechnie that the air change per hour for critical care applied only to isolation cubicles is one which appears to only have been favoured by Mr McKechnie. I do not intend to take your Lordship through, he has the submissions.

THE CHAIR: On a matter of tiny detail, the fact that Guidance Note 15 was changed, I suppose, is an indication that Mr McKechnie's-- the view of the interpretation which he explained in his evidence, was in fact his historical view as opposed to something which has been come to in response to events.

MR MCBREARTY: I think that must be right. I mean, it plainly indicates that he changed it contemporaneously.

THE CHAIR: Mm-hmm.

MR MCBREARTY: We could see that by virtue of having changed Guidance Note 15, he must have applied his mind to the matter on what the proper interpretation was. That was his interpretation at the time. So that is the reason for it. It is in my submission an erroneous interpretation. I have noted in Wallace Whittle's written submissions, for the purpose of this stage of the Inquiry, it is presented as if the interpretation of the relevant part of SHTM 03-01 is a matter of expert opinion on which there might be differing responsible interpretations of the guidance, and what is highlighted by Wallace Whittle is the difference of opinion between Mr McKechnie in one hand and Mr Maddocks in the other.

But I simply make the point it was not simply Mr Maddocks who disagreed with Mr McKechnie's interpretation. Mr Maddocks' approach to it was really the entire premise upon which the opening of the hospital was delayed and the remedial works were instructed; it was all because of a common understanding amongst those involved at the time that the entry in the guidance regarding critical areas was not limited to isolation rooms.

THE CHAIR: When it comes to the proper construction of SHTM 03-01, is

that really a matter of opinion?

MR MCBREARTY: I respectfully suggest it is not. Someone is perfectly entitled to express their opinion on it, but at the end of the day, it is simply a question of reading the clear words in the document, and of course, your Lordship is not in the territory here of determining civil rights and obligations as he would be if he were trying to determine the correct interpretation of the contract. It is the guidance and it is the heart of what your Lordship is looking at.

THE CHAIR: I accept that, but lawyers tend to approach documents on the basis that lawyers are at least as well equipped to understand documents as anybody else, unless special terms of art are used or-- Would it be wrong of me to consider for myself what the document, what SHTM-- and it really comes down to the table, what a proper construction means?

MR MCBREARTY: Well, I do not think it would be wrong of your Lordship to do that. I think it would be right. Your Lordship is looking at the words of the guidance himself.

THE CHAIR: Mm-hmm.

MR MCBREARTY: I think in the forum in which your Lordship is in, it would be perfectly reasonable. In the same way as if your Lordship had been sitting in court and interpreting a

contractual document, he might have regards to the factual matrix surrounding it.

THE CHAIR: Mm-hmm.

MR MCBREARTY: I think in this context, by analogy, it would be reasonable to listen to what those who are involved in the particular field, what their experience is, what light they could shed on it, whether there are any practical matters surrounding it which would make one interpretation of it more likely than another. I think if your Lordship broadens it up, now, to look at it in that way, what you can see is, is that there is only one person contending for Mr McKechnie's interpretation and that is Mr McKechnie. Mr Maddocks did not support it. Those who were responsible for delaying the opening of the hospital did not support it. I do not think any other core participant supports it and that is all for a good reason. It is because it is not what it says, and it would really make the guidance devoid of meaning in a substantial respect if one were to take Mr McKechnie's approach. Again, I do not mean this to be personally critical. This is not a witch hunt against Mr McKechnie, but when it comes to my submission, it is an incorrect interpretation.

If I am right about that, the importance is from that point on, from the point of his review, the error in the

Environmental Matrix is no longer an inadvertent human error, which is what it was prior to that point in time. It was an inadvertent human error which might have been picked up, might not have been picked up. It becomes an error at that stage, which is as a result, a positive choice on the basis of an erroneous interpretation. Positive choice on the basis of an erroneous interpretation.

I acknowledge, as I have said before, counsel to the Inquiry submits that there is no reason to think the mistake was made other than in good faith. I do not take issue with that, but it was a positive error which led to the Environmental Matrix changing, so that it no longer contained that inadvertent discrepancy and instead contained an error which came about as a result of plain mistake. That error was compounded by the fact it was not highlighted. One can see within the relevant document that minor changes were highlighted, including, for example, the insertion of the word "the." It is difficult to see that there was a satisfactory explanation for the failure to highlight the change to Guidance Note 15, but, again, I do not make a great deal of that. A simple fact of the matter is it should have been highlighted; it was not highlighted.

It is entirely understandable that

NHS Lothian and Mott MacDonald did not review a change that was not highlighted, and the result of that, in my submission, is that if the Inquiry is concerned, as it should be, with missed opportunities, this is the missed opportunity, because it was a critical change to the way in which the guidance was to be understood. In my submission, it is reasonable to infer that had it been highlighted, it would have been picked up on and that Mr McKechnie's interpretation of the guidance would have been questioned, and it is reasonable to infer that that questioning would at least have led to a consideration of the values then expressed in the individual cells. We cannot know that for sure, but given the difference of views that have been expressed about the interpretation, it is reasonable to infer that that would have triggered a review of the values.

So, when one looks at that change to Guidance Note 15, in my submission, that, rather than the ambiguities in the contract documentation, is at the heart of the problems, and I simply draw the threads to that together by making three key points, my Lord. The first is one I have already made but emphasise, even if the Inquiry is to conclude that the tender and contractual documents were ambiguous, it is difficult to see that those ambiguities actually caused the

difficulties which then arose. We know that the party with responsibility for ventilation design actively considered the Environmental Matrix with a view to assessing compliance. The Environmental Matrix thereby was not treated as a mandatory document to be blindly complied with, irrespective of what the guidance said, and we know that the discrepancy was resolved in favour of an erroneous interpretation. It is that critical issue which leads to the problem.

The second point I make from Guidance Note 15 is that this was a genuinely missed opportunity to pick up on the problem. The whole purpose of Mr McKechnie's review was to ascertain any difficulties with the Environmental Matrix. On behalf of Mott MacDonald, I respectfully agree with what was said by NHS Lothian about a single point of failure because it is difficult to see why it is that, on the private sector side responsible for design, why it is that the views of one person in relation to the interpretation of the guidance should not have been checked, cross-checked, highlighted in some way.

The third point I make arising from Guidance Note 15 is simply this, that viewed in that light, the other possible occasions on which the problem with the Environmental Matrix might have been discovered are, I would respectfully

suggest, comparatively of far less significance. With hindsight, it can be said that the problem with the Environmental Matrix could have been, or might have been, picked up at certain stages. I will come on to just say a little more about this at the review of tenders, or the review of design at financial close, or when parties were considering a change in pressure to the four-bedroom rooms. They are all occasions through which I acknowledge the problem might have been picked up, but to have picked up on the problem of those occasions would have been to pick up an issue which was not the principal focus at the point in time.

Just to expand upon that, just a little, if I may, my Lord. They are all-- Again, I do not shy away from it, these are occasions on which it is unfortunate that the problem was not picked up. It would have been better if it would have been picked up, but it is a "could have" rather than a "should have" in my submission. They can all be contrasted, in my submission, with the review by Wallace Whittle, the specific purpose of which was to consider the Environmental Matrix in detail and to assess whether it met the specific guidance.

The other occasions, in my submission, are simply not in the same category, either partly because what was

being undertaken was quite properly not a full audit of the Environmental Matrix, or partly because what was under review meant that the focus of discussion was not specifically ventilation. So, if I might just take some examples of those other occasions, my Lord, on which it might have been picked up, could have been picked up, but was not.

The tender evaluation stage. What your Lordship has heard is that, again, tracking back to what the proper role was of Mott MacDonald and NHS Lothian, they were not, at the tender evaluation stage, charged with the task of undertaking a full technical audit of the design. The design was not even fully developed by that stage. What they were doing was going through the process of undertaking tender evaluation process. Significant amount of material to get through and, understandably, consistent with the task that Mott MacDonald had, what they were doing was spot checks. Spot checks on the tender evaluation basis. It is described by counsel to the Inquiry as having been a low intensity review.

Now, if that is meant as a neutral description of it, I do not take issue with it. If it is intended to be a critical description of it, then I would take issue with it because, in my submission, the evidence that your Lordship has heard is that spot

checking of that nature at the tender evaluation stage is entirely consistent with what the proper approach was. To have done otherwise would have been a huge amount of work at very considerable cost, inconsistent with the process that was undergone. So, could it have been picked up? It could have been. Should it have been? In my submission, no.

Similarly, during the reviewable design data process, Mott MacDonald, it is true, were carrying out checks of what was being presented to them.

THE CHAIR: Sorry, we are now talking about reviewable design?

MR MCBREARTY: Design, yes.

THE CHAIR: Yes.

MR MCBREARTY: To take another example of the stage at which it could have been noticed. Conform to the contract, Mott MacDonald were not confirming the changes as having been compliant with guidance. In effect, contractually what they were simply doing was indicating that it was permissible for the changes to be used for the purpose for which they were intended. But, it was not Mott MacDonald's job nor NHS Lothian's job to carry out a detailed review, line-by-line, and to confirm that what was proposed was compliant with the guidance. This may-- I think, nears upon----

THE CHAIR: Again, I mean, this-- I mean, you draw attention to this in your written closing statement but just help me a little with the phrase "used for the purpose intended," which I appreciate is a contractual-- or at least I think is a contractual provision. That is to be understood in the context of operational functionality. In other words, the people who are intending to use the hospital see that as a possible solution given the adjacencies which-- I mean, this is maybe a simplification, but when-- I am thinking about operational functionality. I am really thinking about adjacencies and not much else. I mean, have I got that correct?

MR MCBREARTY: That would be-- I will just check with Mr Balfour. That would be my understanding and I am pleased to see Mr Balfour nodding his head in agreement with me. I think we would share your Lordship's understanding of that and, therefore, that is the purpose of that review process. One of the points that your Lordship had asked for submissions on-- I do not intend to go through that separate paper in detail but was the point picked up by another core participant to the effect that it said that Mott MacDonald carried out very detailed scrutiny at that stage. Well, it is true that they did review it. It is also true that they did pick up on some

matters which went beyond operational functionality because, no doubt, if they are reviewing it and a matter jumps off the page to them and they pick up on something, well, they are going to highlight it, but the review was for the purposes of the reviewable design process. That was the limit of Mott MacDonald's responsibility, and it was not a review for the purposes of checking that all parameters in the design complied with the relevant guidance. So, again, I make the point that, just as with the tender evaluation, it is a "could" have picked up. It is not a "should" have picked up.

Just to pick up the last example, is, unsurprisingly, the whole issue about the four-bedded rooms and the change in the pressure regime, combined with that, then what flowed through to SA1, the settlement agreement. Of course it is, I think, regrettable, everyone would recognise as regrettable, that it was not picked up that some of those rooms were critical care and therefore there was the issue of the air change that would have been applicable just as in relation to the ventilation. Could the ventilation issues have been noticed? Yes, undoubtedly. Is it understandable that they were not noticed in the context of what was under discussion? In my respectful submission, also yes. That is understandable, and

there were different people involved at different meetings. Focus of the discussion changed. I mean, to draw one example, Mr Henderson of NHS Lothian, who was someone who was involved throughout the whole of that process, I think from recollection involved at all of the key meetings, someone who, I think himself recognised that he had a good working knowledge of SHTM 03-01 and the requirements of it. He is involved in a process, the focus of which is pressure change, and he did not join the dots.

I simply make the point that, in the context of an overall discussion about pressure changes, that is understandable. I am not here to defend Mr Henderson, of course, but that is understandable in that context that that air change was not to the fore. Unfortunate, but perhaps understandable that it was not picked up on. All the more so then for Mott MacDonald who were not involved, or at least at some of the meetings, the critical meetings, we have those involved and it is all detailed in the written submissions. Those involved were not those with responsibility for ventilation. They had responsibility for project management, or so on.

When it then comes to SA1, just to pick up on-- and then this is again just picking up on one of the points which your Lordship requested further information on, and which we have dealt with in this separate paper, then, yes, it is true of course that Mott McDonald had technical input into the provision of the schedule, technical schedule to SA1. Although the point I make is it was a collaborative process which came about, there was a resolution of the matter and then there is a collaborative process to pull together technical schedule and it appears that nobody has alighted upon the issue about the air change.

I think what was-- your Lordship, in his query, picked up on the word I think used by NHS Lothian, which was that what Macdonald were "implicated." I simply make the point which we put in the paper, which is it depends what one means by the word implicated. If implicated means that Mott MacDonald, along with others as part of that process, were in the category of parties who could have noticed that the rooms involved were in critical care and therefore the air changes were inappropriate, well, yes, we accept that, if that is what implicated is taken to mean. If it were, however, to be suggested that implicated means more than that, and somehow or other Mott MacDonald, as part of that overall process, in which many others were involved, somehow or other they were in breach of contract or acted unreasonably by failing to spot the air change rates,

well, that with respect would not be submitted.

I draw out those and make those observations about those different stages of the "could" haves rather than the "should" haves. The point I make about them, again, I just reiterate, is that in relation to all of those examples, either what was being undertaken was not a full audit, the purpose of it was not-- the pointed purpose of the whole thing was not to review the Environmental Matrix having regard to the guidance and, on occasions, for example, the issue of the four-bedded rooms. The focus of discussion was not ventilation. So these are processes which arose in which there were occasions on which the problem might have been noticed, would have been noticed, but it was not the main focus.

That is why I-- my submission is correct to contrast those occasions with the whole question of Wallace Whittle's review. Should that have been noticed? Yes, absolutely, because it is not in the same category as the other occasions. The very purpose of it was the review of the Environmental Matrix from a ventilation perspective. So that really comes back to the question that I have raised and I have sought to reiterate. That is the issue that has casual potency in the overall context here.

I think that really is as much as I can usefully add. Your Lordship, I think, has had benefit of very full submissions from us in writing, which I am very grateful to Mr Balfour for bearing the burden of. They are in detail. Much more detailed, I think, than others. Brevity is often held up as being a great virtue these days, my Lord, in providing the submissions that we have done. The purpose was, one, to give your Lordship a document which does not require him to go backwards and read what we have previously provided. So it is an all-encompassing document and the effort has also been made to, when we are making statements, we have sought to provide your Lordship with the references and the evidence and the documents so that your Lordship is very clear about the basis upon which we submit it, whatever Lordship makes of the submissions that come at the end of it. So I do appreciate it it has been quite a long read but I do hope that your Lordship gets value from it.

THE CHAIR: The answer is-- the answer-- Well, yes to both your points. It is 125 pages but I have benefited from reading it and I suspect I will read it again.

MR MCBREARTY: Thank you.

THE CHAIR: Right.

MR MCBREARTY: I do not think I

can be of any further assistance. Your Lordship has the document responding to the specific queries that he has raised. I'm very happy to deal with any of those, if your Lordship wishes to me. I have touched upon probably what is the most important of those from Mott MacDonald's perspective.

THE CHAIR: No, I do not think so, Mr McBrearty. Thank you.

MR MCBREARTY: Thank you.

THE CHAIR: Now, the next core participant I would invite to address me is NSS. Now, have I detected a change of personnel or not?

MR MACGREGOR: Lord Brodie, I think it might be Multiplex next.

THE CHAIR: Well, whoever is to address me on behalf of NHS NSS, please come forward.

MR ROSS: I am perfectly happy to address your Lordship now. I think in terms of the scheduling, actually Multiplex is listed ahead of us.

THE CHAIR: You are absolutely right. I have misread the list. Hence, you are-- a quite understandable confusion. Let us stick to the list. My apologies, Mr Ross. Mr McKenzie, I beg your pardon as well. My apologies, Mr McKenzie.

MR MCKENZIE: Not at all, my Lord. Thank you.

THE CHAIR: Yes.

Submissions by Mr McKenzie

MR MCKENZIE: Thank you, my Lord. My Lord, what I propose to do is divide my submissions into three parts. The first will be to briefly emphasise what I say are the key points from Multiplex's written submissions, the second will be to respond to the particular matters raised by the Chair and the third will be to deal with some fairly minor points of detail arising from the written closing statement of NHSL. My Lord, I think before I get into that, given that we have just heard from Mr McBrearty, it may be of assistance to your Lordship if I just cut to the chase on what I took to be the two key things that he relies on in support of his position that, whatever the ambiguities in the contractual documentation and the ITPD documentation, the Environmental Matrix came not to be treated by the parties as a fixed brief. I think in that regard he relied on two things in particular; one was changes to the Environmental Matrix and the other was derogations.

Dealing first with changes to the Environmental Matrix, my Lord, my position is that with exception of the change to Guidance Note 15 made by Mr McKechnie, that all material changes to the Environmental Matrix were instigated

by the Health Board and Mott MacDonald, the detail on that, my Lord, is set out in Multiplex's interim written submissions. That is from June 2023, at paragraphs 8.1----

THE CHAIR: Could you give me the page number again, Mr McKenzie?

MR MCKENZIE: Certainly, my Lord, it is paragraph number, it was 8.1 to 8.18, which I think your Lordship should find on-- well, it is internal page 29. I am sorry, my Lord, I do not have the reference for the combined bundle.

THE CHAIR: No, if you do not have the bundle reference, I will just take take the paragraph numbers.

MR MCKENZIE: I am obliged. I am sorry, my Lord, it is just because I was----

THE CHAIR: What I have got is paragraph 6.1----

MR MCKENZIE: 8.1, my Lord, 8.1 to 8.18. The key point I make at paragraph 8.17 of the written submissions is that the change to the Environmental Matrix on 31 October 2014 and the continued scrutiny thereafter was brought about by the Health Board and Mott MacDonald identifying a change they wished to make to the Environmental Matrix, not by development of the design on the part of HSL, Multiplex, or Wallace Whittle. Now, against note 15, the change to that I think is in a separate category, my Lord, and I

accept that that----

THE CHAIR: Sorry, Mr McKenzie, I am being slow on this. Right, I have your----

MR MCKENZIE: Sorry, my Lord, the interim submissions are not in the closing bundle. The interim written submissions, the other submissions from June 2023.

THE CHAIR: These are-- Okay, these are references to the closing statement after the 2023 hearing, right?

MR MCKENZIE: Right. I am sorry, my Lord, I should have made that clear. That is my fault.

THE CHAIR: I do not have that in front of me, but that is not necessarily a problem. So I may just-- So, the reference to paragraph 8.1 to 18 and 8.17 are to your first closing statement.

MR MCKENZIE: Correct. Yes.

THE CHAIR: Right.

MR MCKENZIE: I am obliged, and as I say that deals with changes other than the change to Guidance Note 15 which I accept is a missed opportunity.

THE CHAIR: Okay, and you use the word "instigated." Now, I'll get an explanation for it once I have got your document in front of me but just to give me a heads-up, what do you mean by instigated?

MR MCKENZIE: Well, the change came from NHSL and Mott MacDonald

rather than from development of the design on the part of the project company team.

THE CHAIR: Right, so, well, I will look at the detail but thinking about it at the moment, you say the changes, other than the Guidance Notes, were effectively adopting proposals or suggestions?

MR MCKENZIE: Responding to matters which had been raised by the client team, if I can put it that way, my Lord. Turning to the derogations, similarly, my Lord, the point-- the short point there is that those were asked for by the client team, but the evidence from Mr Hall was that he did not consider that they were required because he considered the brief to be a fixed brief. So the request was-- on the part of the client team, it was understood to be something that they wanted and it was something that-- the derogations were prepared in response to that request with a view to being helpful, but it was not because the Environmental Matrix was not viewed as being as a fixed brief and that, therefore, there was a derogation from SHTM 03-01 that was required. If I can just give my Lord the reference number, references for Mr Hall's witness statement. It is this the witness statement of Mr Hall. For the purposes of the 2024 hearings, it is bundle 2 of the witness statement bundle and there is

paragraphs 45 to 56 of that statement.

THE CHAIR: 45 and 52.

MR MCKENZIE: 45 to 56.

THE CHAIR: To 56.

MR MCKENZIE: Yes.

THE CHAIR: Right, and I will get an explanation there?

MR MCKENZIE: Yes, my Lord.

THE CHAIR: Because as a point of argument, on at least first blush, it is quite a powerful point that Mr McBrearty makes, because-- is it-- I think there are two derogation requests. As I understand it, it is only the second one that is actually dealt with. Is it number 15 or number 16? But it is a totally pointless exercise to ask for a derogation from the Environmental Matrix if what you are asking for appears in the Environmental Matrix.

MR MCKENZIE: I believe the understanding of Mr Hall was the obligation is to comply with the Environmental Matrix and what was being sought on the client side was a paper trail to show that the Environmental Matrix, which is the fixed brief as we would have it, is something that is different from the requirement of SHTM 03-01.

THE CHAIR: Sorry, different from----

MR MCKENZIE: From the requirement in SHTM 03-01.

THE CHAIR: Well, I will look at-- and certainly tell me anything else I

should know, and I will look at Mr Hall's evidence, but as I say, on the face of it, it is an odd thing to do, to derogate from-- I mean, the derogation was-- I do not see why Mr Hall entertained this proposal, even if it was a proposal coming from NHSL.

MR MCKENZIE: Well----

THE CHAIR: He did.

MR MCKENZIE: He did, I think, in an attempt to be helpful, but not because it was considered to be necessary. So, my Lord, that deals with those two points. That is the starting point.

So, I turn then to the first part of my submissions and really I would like to emphasise the starting point from Multiplex's point of view, which is that in my submission the Environmental Matrix was very clearly the brief, at least at bid stage. As I say in my closing statement, I invite the Lordship to reject as improbable the contention that it was not. That is for all the reasons I have set out in writing, principally, the incompatibility with the idea that what NHSL wanted to do was to not waste the time and money that had been spent in establishing the reference design. They wanted to find a way to use that and not waste it, and the environmental was part of that work product.

I also rely on the wording of the ITP documents. I don't propose to go into

that detail here and now, it is set out in writing. But, my Lord, all of this came to be supported in my submission by the observations of Mr Maddocks. He saw no point in providing an Environmental Matrix that could not be relied on in the bid situation, and it was certainly Multiplex's understanding that the Environmental Matrix was the brief at mid-stage. My submission to the Inquiry is that on the evidence, that understanding is fully justifiable from an objective point of view. IHSL was entitled to, and did, bid on the basis that the Environmental Matrix was the brief. I say that that is the correct contextual starting point for everything that followed.

The understanding that the Environmental Matrix was the brief was never lost and, indeed, it was reinforced during the RDD process and the particular discussions over the ventilation requirements for the multi-bed rooms. If the brief was simply to comply with guidance, my submission is that that is not in accordance with the Scottish Government policy document, CEL 19 (2010), mandatory point 7. On the evidence before the Inquiry, guidance is not an alternative to ADB (Activity DataBase) in quality and value in its application as a tool for briefing, designing and commissioning. That is primarily because guidance is general

and open to interpretation. Also, because it takes no account-- guidance takes no account of the particular clinical requirements for a particular project, which can only be established by extensive dialogue with clinicians, as was done in this case for the reference design including the Environmental Matrix.

THE CHAIR: Well, that might be right, but I suppose Multiplex just had to assume that that had happened because they were not involved at that stage and if I-- or if I have not followed your point----

MR MCKENZIE: I am sorry, my Lord, I am sure the fault is mine.

THE CHAIR: No, quite likely to be mine. You are talking about the reference design, part of which was the Environmental Matrix.

MR MCKENZIE: Yes.

THE CHAIR: We do understand that there was clinical input and there was the clinical output specification. Now, if I have got my chronology correct, this was all before the respective bidders were identified.

MR MCKENZIE: Yes, I think that is correct.

THE CHAIR: Right, yes.

MR MCKENZIE: Sorry. I see-- Yes. Yes, they-- No, I take my Lord's point, yes. I think the assumption would have been that that was done. I do not know. I cannot recall----

THE CHAIR: It might be a perfectly reasonable assumption, but----

MR MCKENZIE: I cannot recall----

THE CHAIR: Multiplex, simply because when they became involved would have to assume that.

MR MCKENZIE: Yes, indeed, indeed. I cannot recall, frankly, whether there is any evidence that the extent of clinical involvement was known to bidders and made known to bidders. To what extent the history of the project up to that point was common knowledge, I am afraid I cannot recall off the top of my head, but the point I make simply is that I make this in the context of the issue that if the brief was not-- if the Environmental Matrix was not the brief, what was? If the answer to that question is the brief was simply, "You have to comply with guidance," I say that is not good enough under reference to CEL 19 (2010), because guidance is not an alternative to ADB in quality and value in its application as a tool for briefing, designing and commissioning on the evidence that your Lordship has heard.

And again----

THE CHAIR: What about the evidence as to whether the Environmental Matrix was the equivalent?

MR MCKENZIE: Well, I think that supports the point I am seeking to make, my Lord. It makes sense that the

Environmental Matrix would be the brief because it is a tool that captures all of the relevant information or is intended to capture all of the relevant information, which one might otherwise have had to derive from Room Datasheets, which themselves would have been populated by the Activity DataBase. So it is simply a more user-friendly way of presenting a very considerable quantity of data and the point I make is you get that with the Environmental Matrix, but you don't get that if the brief is simply "comply with guidance." Again, my Lord, I am simply emphasising points that are set out in the written submission, so if I can give my Lord the reference, again, this is to the interim written submissions from June 2023. More detail on these matters is at paragraph 6.1 to 6.34 of the interim written submissions, but they are also touched upon at paragraph 4.5.3 of the closing statement. The Multiplex closing statement, that is.

The next point I wish to emphasise, my Lord, is that resolution of the dispute about ventilation in multi-bed rooms, involved NHSL and Mott MacDonald giving specific consideration to ventilation in the Critical Care Department, including making specific comment on air change rates in critical care bedrooms through the RDD process. They specifically wanted a pressure regime that was

different from that called for in SHTM 03-01, and more details on those matters are to be found in the closing statement at paragraphs 4.5.8 to 4.5.15.

THE CHAIR: The point that you are making is summarised at 4.5.15, is it?

MR MCKENZIE: Yes, my Lord, that is the end point.

THE CHAIR: Sorry, Mr McKenzie. Yes?

MR MCKENZIE: The discussion of the evidence that takes us to that point is set out from paragraph 4.5.8 onwards. The follow-up point, of course, my Lord, is that the Health Board was prepared to raise legal proceedings in order to compel that result.

THE CHAIR: Correct me if I am wrong about this. The legal proceedings proceed, or at least the draft summons, proceeded on the basis that the SHTM 03-01, in fact, required for four-bedded rooms the pressure regime that NHSL was arguing for. I mean, if I recollect correctly, the table setting out the air change rates does not have a line for four bedrooms.

MR MCKENZIE: Yes.

THE CHAIR: There was a difference of view, that being the case, as to which of the other lines should be applied in the case of four bedrooms. I think it is the case that, and tell me if I am wrong about this, the NHSL summons is

premised on the NHSL preferred interpretation of the table.

MR MCKENZIE: I am trying to recall off the top of my head, my Lord, but I----

THE CHAIR: Well, I mean, it is-- I mean, I can pick it up from the statements.

MR MCKENZIE: The recollection I have, and I stand to be corrected, is that the summons proceeded on the basis of an argument that the solution, the pressure solution that NHSL favoured was compelled by good industry practice.

THE CHAIR: Ah. I think somebody makes that point.

MR MCKENZIE: Yes. I think that point is made in IHSL's submissions.

THE CHAIR: I think you are you are right about that, yes. Thank you.

MR MCKENZIE: I am obliged.

Now, my Lord, in the course of the Inquiry, the point has come up: why on earth would the Health Board ever have wanted a new hospital that did not comply with current guidance? Now I say that that is something of a double-edged sword. The more obvious it should have been that compliance with guidance including SHTM 03-01 was the Health Board's overriding requirement, the more difficult it becomes to understand why the Health Board was prepared to take legal action to compel IHSL to design and

construct ventilation in the critical care bedrooms in a way that it now considers was not compliant with SHTM 03-01.

THE CHAIR: Well, at the risk of stating the obvious, it seems to have been overlooked that what was being proposed in relation to air change rates was not compliant. Have I got that right?

MR MCKENZIE: Yes, and the question I pose is why that should be the case if it was so obvious.

THE CHAIR: Just to make sure that I have got your point here, Mr McKenzie, insofar as the solution for four-bedded rooms, which NHSL was seeking to impose through litigation, was contrary to-- in relation to air changes, contrary to what was required by SHTM 03-01, given all of that, the points that you take from that are, if this was obvious, why-- Well, what are the points you take from that?

MR MCKENZIE: So, my Lord, I am really making a point under reference to the pressure regime, which the Health Board was seeking to compel, which was not consistent with SHTM 03-01, rather than the air change rates.

THE CHAIR: All right.

MR MCKENZIE: I am just posing the observation, really. It is no more than that, that if it was so obvious that the overriding requirement here was to comply with the guidance, how is it that that situation came about where they

were prepared to sue in order to bring about a different result on pressure?

THE CHAIR: So, do you want me to classify that as an observation, as opposed to anything you are taking any further?

MR MCKENZIE: Yes, absolutely. The point just-- Yes.

THE CHAIR: A rhetorical point.

MR MCKENZIE: A rhetorical point, indeed.

THE CHAIR: Sorry for interrupting.

MR MCKENZIE: And the final point in this chapter of my submission is, my Lord, to emphasise the fact that the Health Board ultimately proceeded by way of a high value change notice to secure the provision of 10 air changes and positive pressure in Critical Care bedrooms is inconsistent with idea that that is what the project agreement had always required.

THE CHAIR: And there is no element of parties just reserving their positions on that, but wanting to get ahead with it. I mean, what we are talking about is post-July 2019.

MR MCKENZIE: Correct.

THE CHAIR: I understand that the mechanism that was used was a change, a Board change in the project agreement. If you require a change that is inconsistent with your position, that is what the contract always provided, but

my question to you is, is it possible there was just some sort of pragmatic solution there, with parties perhaps reserving their respective positions or----

MR MCKENZIE: Well, Multiplex was not there. Multiplex was not involved in matters at that stage. For what it is worth, my reading of Supplemental Agreement 2-- and I think one of the other core participants has made the point that that is sometimes been referred to inadvertently as Settlement Agreement 2, when it was not a settlement agreement.

THE CHAIR: Supplemental agreement?

MR MCKENZIE: A supplemental agreement, my Lord, and I think that is perhaps more consistent, at least with the idea that it was not about a reservation of position. It was the contractual mechanism chosen to allow the works-- to procure these changed works to be done. So, my Lord, that concludes the first part. I turn now to the questions which came from your Lordship. The first one is to do with the independent technical audit.

THE CHAIR: Yes?

MR MCKENZIE: We are invited to comment, my Lord, but Multiplex is not the best placed of the core participants to comment on this issue. It is really one for the Health Board and Mott MacDonald,

both of whom have commented on it, and perhaps the Scottish Government. From the Multiplex point of view, the technical solution ultimately agreed contractually in Settlement Agreement 1, which of course implemented a technical solution which had been agreed and implemented earlier in 2018, as has been discussed in submissions earlier on today by others. As I say, from the Multiplex point of view, that involved the Health Board clarifying exactly what it wanted on the basis of clinical input and with the technical advice of Mott MacDonald, and so an independent technical audit could only have been a truly helpful exercise if undertaken prior to the technical solution being confirmed and implemented in 2018. If a technical audit had been left just-- until just prior to the signing in 2019, it would not have been much help because by then the work had been done on the basis of the agreed solution.

THE CHAIR: I suppose other than to put parties in a position in February 2019 that they were in July 2019.

MR MCKENZIE: Yes, it might have brought matters forward on (inaudible).

THE CHAIR: But ventilation was in place.

MR MCKENZIE: Fundamentally, it was in place. We are asked about likely outcome if such an audit had been carried out and that is obviously now a matter of speculation which would, in my submission, depend heavily on the scope of the audit. With the benefit of hindsight, it might be tempting to conclude that an audit, if instructed, and if the audit had used SHTM 03-01 rather than the project agreement as the baseline, it would have detected a discrepancy between the requirements of SHTM 03-01 and the agreed technical solution, but that is with the benefit of hindsight. If one puts oneself back in March 2018 without the knowledge of subsequent events and the benefit of the focus which the work of the Inquiry has brought to bear on matters generally, the most that can be said, in my submission, is that if an audit had been instructed it may have detected a discrepancy between the agreed technical solution, and the requirements of SHTM 03-01.

So, I move on to the second question now, my Lord, about the Stage 2 HAI-SCRIBE. Now, as the Inquiry will appreciate, Multiplex's position is that Settlement Agreement 1 changed parts of the brief in relation to Critical Care bedrooms, in relation to pressure regimes, and confirmed other parts of the brief in relation to air change rates. It seems logical that any change to the brief in a healthcare project with the potential to impact on infection control risks should trigger a fresh Stage 2 HAI-SCRIBE

question set, and on that basis, the changes in Settlement Agreement 1 perhaps ought to have triggered a fresh Stage 2 HAI-SCRIBE. However, neither Multiplex nor IHSL were in control of the HAI-SCRIBE process. The HAI-SCRIBE process was led by the Health Board.

Turning to the third question, my Lord, the question of independent validation. There seems to be no reason in principle, in my submission, why an independent tester such as the independent tester appointed pursuant to clause 15.1 of the project agreement, Arcadis-- I cannot see a reason in principle why such an independent tester could not also fulfil the independent validation role envisaged by the note at the beginning of chapter 8 of SHTM 03-01, provided that (a) the independent tester is suitably qualified and trained to fulfil that independent validation role, and (b) the terms of the appointment of the independent tester provide for the performance of that particular role. But I think the Health Board's position, if I understood my learned friend Mr Barne earlier, was that independent validation from someone who is not the independent tester is what it calls for, and it is incumbent on the Health Board to put such independent validation in process, and on that basis, which I can see, it I think begs a question rather than

answers a question.

Now, the note at the beginning of chapter 8 of SHTM 03-01, it describes validation as "a process of proving that the system is fit for purpose and achieves the operating performance originally specified." That is what validation is defined to be by the SHTM. So that begs the question of what performance was originally specified, and of course, that may in turn involve a question as to the extent to which compliance with SHTM 03-01 is contractually required or not, and that in turn may also involve questions about what the proper interpretation of SHTM 03-01 actually is.

THE CHAIR: As you-- Sorry.

MR MCKENZIE: No, no. Sorry, my Lord.

THE CHAIR: As you picked up, Mr McKenzie, I was interested, and this may be a wrong-- you know, a quite erroneous thought on my part but, well, a starting position is, I suppose, if you call someone an independent tester, that suggests that he is an independent tester, but I wondered if that was right because the independent tester has duties to the contractor, possibly even different duties to the special purposes vehicle, duties to the funders of the project and duties to the Health Board. I just wondered if someone who is within that interlocking relationship of duties is what is envisaged

in SHTM 03-01 as an independent. Is it engineer, or independent advice to the healthcare authority?

MR MCKENZIE: I can quite see that, my Lord, and, you know, I think your Lordship has the Health Board's position on that, which I would not disagree with, my Lord.

THE CHAIR: All right.

MR MCKENZIE: So, the point I would-- The point I am, perhaps, labouring in making is that, in the present case, the independent tester was satisfied that the ventilation systems as designed and installed met the contractual requirements. We know that because he signed it off. IOM, however, were instructed specifically to validate from SHTM 03-01, as opposed to the contractual specification. Now, those are not my words, my Lord, those are the words of Mr Henderson in his witness statement at paragraphs 59 and 72, and his email to IOM which is at bundle 6, pages 162 to 163.

THE CHAIR: Could you give me the pages again?

MR MCKENZIE: Bundle 6, pages 162 to 163.

THE CHAIR: Thank you.

MR MCKENZIE: That is no doubt why IOM detected that the performance of what had been designed and installed did not match what they were expecting to see, as they had been instructed to validate from SHTM 03-01 as opposed to the contractual specification. So, the point simply is this, my Lord. It is not just because you have an independent validation, in this case, that the issue was discovered. It was because the independent validation was instructed from SHTM 03-01. So, having an independent validator who is a different person from the independent tester is likely to be less decisive or important than what it is exactly that they are instructed to do.

So, turning to question four, my Lord, the question about the neutropenic patient award, Lochranza Ward. The understanding stated in the question is correct. Multiplex designed and constructed the ventilation system of Department C1.4, Lochranza Ward, to the specification in the reference design Environmental Matrix. As to the question about the proper interpretation of table A1 neutropenic patient ward, this was not focused on in the expert reports or the oral evidence before the Inquiry but, of course, what was brought out in the evidence before the Inquiry was the scope for differing interpretations of the guidance and, in particular, table A1. In these circumstances, it would not really be of assistance to the Inquiry for Multiplex to offer a non-specialist view of

the proper interpretation. It may be of more assistance to hear from the specialist designers at Wallace Whittle on that point.

Turning to question five and the effects of Mr McKechnie's views, I accept, as is set out in the written-- closing statement, that had it not been for Mr McKechnie's interpretation of the relevant guidance, the inconsistency between Environmental Matrix and SHTM 03-01 in relation to critical care could-- I do not say necessarily would, I acknowledge it could have been identified earlier. That is a possible outcome, having regard to the change to Guidance Note 15. That is because had that change been in red text, it may have indicated to Mott MacDonald or the Health Board that a particular interpretation was being put on SHTM 03-01 which they may have disagreed with, but it may not have done. We simply do not know. However, Multiplex does not accept that it was under any obligation to flag derogations from guidance as a matter of generality, and I will deal with that in a little more detail when I come on to respond to question six.

Now, it is submitted that the proposition that any lack of a finalised document, clearly setting out the technical requirements for ventilation at financial close rather than being the root

of the problems, had no causal connection to the delay in the opening of the hospital. Because of Mr McKechnie's views, I submit that that proposition is unsound.

THE CHAIR: All right. Would you like to develop that?

MR MCKENZIE: Yes, indeed. In the first place, it is Multiplex's position that the Environmental Matrix did clearly set out the technical requirements for ventilation at financial close. That was certainly the understanding of Multiplex and Wallace Whittle and IHSL. In the second place, one could equally say that if the Environmental Matrix had properly reflected what NHSL actually wanted, i.e. if it had required 10 air changes and 10 pascals of positive pressure in all critical care bedrooms, then Mr McKechnie's particular interpretation of SHTM 03-01 would never have mattered. That is why the Environmental Matrix is causally connected to the delay in the opening of the hospital. The causal connection between it being erroneous, the Environmental Matrix being erroneous, from the outset and the delays in opening the hospital is not removed by the fact that Mr McKechnie's views as to the interpretation of the guidance coincided with the requirements stipulated in the body of the Environmental Matrix.

THE CHAIR: Could you just repeat

that, Mr McKenzie, so I can get a note of just precisely what you have said?

MR MCKENZIE: The causal connection between the Environmental Matrix being erroneous from the outset, which is what I contend for, and the delays in opening the hospital is not removed by the fact that Mr McKechnie's views as to the interpretation of SHTM 03-01 coincided with the requirements which were stipulated in the body of the Environmental Matrix. So, the point is simply, if the Environmental Matrix had been correct from the outset, in terms of reflecting what the Health Board wanted, Mr McKechnie's views would not have mattered because what the contractor and the project company set out to deliver was the brief, was to meet the brief. Now, if the suggestion is that-- if the brief had simply been, "Comply with guidance," then Mr McKechnie's interpretation of SHTM 03-0-- in those circumstances his interpretation of SHTM O3-01, means that the same issue would have arisen, then that does appear to be a logical conclusion. I can see that but, as I have already submitted, the problem there would be that a brief, "Comply with guidance," would not be in accordance with the Scottish Government Policy CEL 19 (2010), Mandatory Requirement 7.

So, I turn now to question six, my Lord. So, the Health Board's argument

that IHSL was under a contractual obligation to identify and flag non-compliances with guidance is made under reference to paragraph 2.3(k).

THE CHAIR: Sorry, give me that reference again.

MR MCKENZIE: Paragraph 2.3(k)---

THE CHAIR: For kilo?

MR MCKENZIE: -- of section 3 of schedule part 6 to the project agreement. That is the Board's construction requirements. It proceeds on the basis that IHSL was required to take into account the guidance and advice within SHFN 30 and HAI-SCRIBE. A note in passing, my Lord, I think the reference to paragraph 2.3(k) is an error. 2.3(k) refers to something called HDL, whereas SHTM appears at paragraph 2.3(h). I do not think anything turns on that. I have done a careful check to make sure that there are not different versions of the document lurking around in the bundles and, as far as I can tell, there are not. So, I think it is possibly just a typo.

THE CHAIR: Well, what I have got, by way of note, dealing with the proposition that Multiplex should have had in place their own processes is that paragraph 2 .3-- Now, when you originally refer to it, you said K, but is the K-- it is the K bit that is wrong?

MR MCKENZIE: The K bit appears

to be a mis-reference.

THE CHAIR: And it should be----

MR MCKENZIE: Well----

THE CHAIR: -- or might be----

MR MCKENZIE: It might be 2.3F, which refers to SHFN. It might be 2.3D, which refers to HAI-SCRIBE and, for completeness, SHTM is at 2.3H.

THE CHAIR: Right, thank you.

MR MCKENZIE: Just on this part, my Lord, in case I have set off on the wrong footing, I am dealing here with-- not with the contractor and Multiplex having to have their own processes in place. I will come on to that in just a moment. I am dealing here with the obligation, the alleged obligation, to identify and flag non-compliances with guidance.

THE CHAIR: Right. This is the flagging non-compliance with the contractor.

MR MCKENZIE: Yes, I am sorry, Lord, I should have made that clear from the outset. So, really all I have been saying is that the reference, the contractual argument is made under reference to section 3 of the BCRs, and the point I want to make to your Lordship is that paragraph 2.3 of section 3 of schedule 6, the BCRs, is the bit that commences with the following. Your Lordship has heard this phrase a number of times and will have read it a number of

I am sure. In addition to the standards listed in paragraph 2.4 of the subsection c of the Board's construction requirements:

> "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 the provisions of the NHS requirements. "

And so the very section upon which NHSL's contractual argument relies is that part of the contract that IHSL and Multiplex rely on to say that all of that is fine unless the Board has expressed elsewhere in the Board's construction requirements a specific and different requirement and of course our submission is that they did through the Environmental Matrix. I do not propose to rehearse all of that again. So it is not accepted that there was any sort of contractual obligation such as is intended for by the Health Board at paragraph 25 of its closing submissions.

The obligation contended for which is to take into account the guidance and advice, simply does not reflect the actual wording of the clause, and the clause, as I have just said, is subject to the Board expressing elsewhere a specific and different requirement which, for all the reasons set out in writing, it had done.

So for your Lordship's purposes today it is perhaps sufficient simply to note that the obligation for which NHSL contend is highly controversial without needing to decide the matter.

But leaving aside the specifics of the contractual argument, it is also suggested by the Health Board, and this is at paragraph 24 of their closing submissions. On the basis of the evidence of both Mr McKechnie and Mr Pike, that any non-compliances with guidance should have been flagged, regardless of contractual significance but, and to be fair, this is acknowledged by the Health Board, both Mr McKechnie and Mr Pike proceeded on the basis that they would have to raise items which were seen as non-compliant to guidance. So the Health Board concludes that the only reason this did not happen was because of Mr McKechnie's particular view of the interpretation of SHTM 03-01, and that is acknowledged but the evidence of Mr McKechnie and Mr Pike provides no support for an argument that things ought to have been raised which were not seen as non-compliant to guidance. That would be absurd.

THE CHAIR: Sorry, just give me that again, Mr McKenzie. The evidence of Mr McKechnie and Mr Pike does not---

MR MCKENZIE: It does not provide support for an argument that things ought to have been raised as non-compliant with guidance if they were not recognised as being non-compliant with guidance.

THE CHAIR: Well, I think I get that. Sorry, I am just wondering if I am following your line here. You point to the evidence of Pike and McKechnie as saying they could only draw attention to what they saw as non-compliant.

MR MCKENZIE: Yes.

THE CHAIR: Now, you then remind me that NHSL argued this did not happen only because of Mr McKechnie's particular interpretation of SHTM 03-01.

MR MCKENZIE: Which meant it was something that was not recognised.

THE CHAIR: Sorry?

MR MCKENZIE: Which meant that it was something which was not recognised.

THE CHAIR: Yes, right, and so where do you take me on this?

MR MCKENZIE: Well, simply, I agree with that point, insofar as it goes, and I am simply saying the obligation that is contended for is a much wider obligation to carry out a check, which would detect things which are not compliant and I am saying, "No, that is not right," not on the basis of Mr McKechnie and Mr Pike. It is certainly a point that the evidence does not support the wider obligation that it has been

contended for.

THE CHAIR: Right.

MR MCKENZIE: If I have understood that obligation correctly.

THE CHAIR: Yes, I am just anxious to get the full benefit of your argument here, Mr McKenzie.

MR MCKENZIE: I appreciate it is slightly torturous more, but I think that is because I do not-- the extent of the obligation that is being contended for on a non-contractual basis now, it must be recalled, is quite difficult to get one's head round. I suppose what I am saying is that as a matter of logic, it cannot be any more than the raising of things which are recognised.

THE CHAIR: In other words, you only have an obligation to-- As a matter of logic, you can only have an obligation to draw attention to something that you think is worth drawing attention to.

MR MCKENZIE: Indeed, yes, you are right. I have an obligation to raise unknown unknowns.

THE CHAIR: Right, okay, and that is the point-- I mean, have I captured your point?

MR MCKENZIE: I am slightly lost myself now. Yes, I think.

THE CHAIR: Right, okay.

MR MCKENZIE: The next point I wish to make, my Lord, is the reliance on the point that Mr McKechnie's

interpretation of the guidance was an outlier and that no other witness who was asked suggested that Mr McKechnie's interpretation was untenable.

THE CHAIR: Sorry, suggests that Mr McKechnie's interpretation was----

MR MCKENZIE: Sorry, was tenable. Not untenable. The point I make here is that that position has only emerged as a result of the Inquiry. There was no witness evidence available in the period between 2014 and 2018 suggesting that Mr McKechnie's interpretation was an outlier, and the short point I make is that the outlier point should be left out of account when one is considering and assessing what occurred at the time.

THE CHAIR: Well, can we maybe just tease that out a bit? Starting with the evidence the Inquiry heard as to how one should interpret table A1. I think it is the case that Mr. McKechnie is the only person who has supported his particular-- well, this is a bit tautologist here, but Mr McKechnie is the only person who has supported a particular interpretation. In other words, the requirement was limited to the 10 air changes, and the 10 pascals was limited to the isolation rooms in critical care. Now, the Inquiry has heard that this is Mr McKechnie's reading. As I observed, I think, to Mr McBrearty, the fact that he changed GN15 means that

that is what he thought at the time, as opposed to just an argument that has been produced for the benefit of the Inquiry. Now, I have not heard anyone supporting that interpretation, so why should I not regard that as-- and in fact this may be too generous an expression, an outlier interpretation of the provision?

MR MCKENZIE: My point----

THE CHAIR: Even if no one was aware of what was going on between 2014 and 2018.

MR MCKENZIE: My point is simply that the Inquiry now has the information to recognise that interpretation as an outlier, but the same was not available previously. So it is really just a point about hindsight, my Lord, where it is easy to sit here with the benefit of all the heat and light that has been generated by the Inquiry and the expert evidence about the meaning of it, of SHTM 03-01, and say, "Well, Mr McKechnie's view was, you know, way off to one side, an outlier." But nobody was-- you know, there was no such body of evidence available at the time, and so the clarity which the Inquiry is able to look at things with now did not exist at the time. That is the only point I am making.

THE CHAIR: What is your response to the point that I made to Mr McBrearty that lawyers think they can understand what documents mean? And

because of professional prejudice, I might come to the-- and if it is an arrogant view, I apologise, that I can interpret what is a proper construction of-- I mean, I think it comes to the table, written in context with the other provisions. Am I entitled to come to my construction of the document?

MR MCKENZIE: So, in my submission, yes, my Lord, but because your Lordship's heard evidence and has competing views on the meaning and so has a range of views on the meaning of it, in the absence of any expert input on it, I would have been making a submission which would have been to the effect that your Lordship should be very slow to reach a view on the interpretation of this piece of design guidance, and that's because it does appear to be open to a range of interpretations.

Indeed, I think from the document that was circulated at lunchtime, Mott MacDonald's responses to the questions that your Lordship had posed, comparing that with the submissions made by Mr Gillespie this morning on behalf of-- sorry, no, Mr Barne on behalf of NHSL, it would appear that there's a difference between those two parties on the interpretation of the neutropenic ward element of the guidance. So that's a good example of where we didn't hear any expert evidence really in relation to that aspect of the

guidance and two parties have come up with two different interpretations of that.

So I would have encouraged your Lordship to be quite slow to reach a view on the meaning, but, of course, in relation to the critical care ventilation, your Lordship does have the benefit of all of the expert evidence heard from Mr Maddocks and others. Also has the benefit of Wallace Whittle's discussion of that evidence and submissions made in support of the view that Mr McKechnie had, and so I accept it is a view on the evidence your Lordship is able to properly reach a view.

THE CHAIR: Would you agree it is a matter of general principle that documents are capable of construction really just on the face of the document? It seems to me a task that lawyers carry out all the time.

MR MCKENZIE: They do, my Lord. I would fall back to the example given by my learned friend, Mr McBrearty, about a court requiring to construe a contract. Sometimes that can be done on the documents. Sometimes it is helpful to hear the matrix of fact that lies in the background. So I would say it is not a one-size-fits-all. It depends.

Thank you, my Lord, I move now to the argument that IHSL and Multiplex should have had in place their own processes for design review and audit.

This was not covered in any detail with any of the witnesses in oral evidence, and the suggestion raises a number of important but unexplored issues, such as the additional cost and the additional time that would be associated with something like that, which in turn would feed into the question of proportionality, and there would also be a question of effectiveness.

If there was a requirement of this nature, it would apply not only in relation to the design of ventilation and critical care, but to the design of the entire hospital. A design review or audit for general compliance with guidance across every facet of a major hospital would be a fairly major undertaking. I think Mr McBrearty made some fairly similar points on the other side of the table when dealing with the question about whether a technical audit at the time of SA1 or the earlier technical agreement on the technical solution would have been necessary, and I think he raised many of the same kind of issues in answering that question in the negative.

So my submission is simply that there is no proper basis for the Inquiry to conclude that IHSL and Multiplex ought to have had in place their own processes for a design review or audit of the nature contended for. So, my Lord, that is all I wish to say on question 6.

THE CHAIR: Thank you.

MR MCKENZIE: Question 7 is not one for Multiplex. Question 8 invites comments in relation to the 2022 interim revision of SHTM. Multiplex is not best placed to comment on these matters. Obviously the 2022 revision of SHTM 03-01 makes a considerable number of changes from the 2014 version, but whether they go far enough, or whether there are any drafting weaknesses or deficiencies which would merit further investigation or further revision, is better left to those with a focused specialism on ventilation design.

Question 9. Core participants are invited to confirm the understanding which is stated there, and so far as Multiplex is concerned, the understanding is correct. Multiplex agrees with all of the potential recommendations suggested by counsel to the Inquiry. Question 10, Multiplex takes no issue with counsel to the Inquiry's assessment of the arrangements put in place by NHS Assure.

Now, my Lord, I am conscious of the time. I am also conscious that there has been a request for core participants to put in writing what they have been saying in their oral submissions.

THE CHAIR: Well, can I just clarify that? It is not a request to put in writing, and one counsel has drawn attention to the fact that they have not put their closing submission in writing, but they will deliver it at an appropriate speed. Now, if I may say so, whereas obviously I would welcome any help, your speed of delivery, Mr McKenzie, is such that I think I have been able to note what you have said. Therefore, do not feel under any obligation to produce a document that you had not previously prepared.

MR MCKENZIE: I am obliged.

THE CHAIR: On the other hand, if you want to give me a previously prepared speaking note, I would be happy to have it.

MR MCKENZIE: I will find some way of providing something which I hope will be of some assistance.

THE CHAIR: Well, I would be happy to have it, but do not feel under any obligation to do so, given your speed of delivery in relation to the topics you have been dealing with.

MR MCKENZIE: I am obliged, my Lord. I was going to come on to the final part of my submissions, which is simply to pick up on a couple of points of fairly minor detail coming out of the closing submissions for the Health Board. Conscious of the time, I can do that in writing alone, if that would be of assistance, or I can endeavour to deal with them now fairly quickly. Or (inaudible)----

THE CHAIR: Well, I think my only

consideration is that what I sometimes forget is that there is a whole organisation here that has been at their desks for considerably longer than I have, and if it suits you, Mr McKenzie, with repeating my apologies to Mr Ross, I think I would invite you conclude tomorrow if that suits.

MR MCKENZIE: Very well.

THE CHAIR: I rather think as if we are looking as we probably will finish tomorrow, but unless anyone wants to draw to my attention any reason not to do so, if you are not going to finish by four or would feel under pressure to finish by four, I think we will adjourn until tomorrow.

MR MCKENZIE: I think, my Lord, I have probably got about 15 minutes to go, so----

THE CHAIR: I think we might just break there, again, if that is suitable. Right, well, thank you very much. I hope to see you all again tomorrow at ten to resume with Mr McKenzie, and then proceed in the previously indicated order. Thank you.

(Session ends)

15.59