SCOTTISH HOSPITALS INQUIRY

Hearings Commencing
9 May 2022

Day 9
Friday 20 May 2022
Richard Cantlay

CONTENTS

11:30

THE CHAIR: Okay. We have Mr Cantlay.

MR MACGREGOR: Lord Brodie, if it's of assistance – it's Mr MacGregor – I've managed to check with Mr Cantlay. We can both hear each other. So those technical issues certainly seem to have been resolved from my perspective and Mr Cantlay's as well, I think.

THE CHAIR: Right. Well, I can hear you very clearly, Mr MacGregor, and I'm not entirely sure how we just check that all the legal representatives can hear. I think we'll proceed on the basis that everyone can hear, and if that's not right, I rather suspect that people will make that evident one way or the other. So, you're ready to begin, Mr MacGregor, and Mr Cantlay similarly is ready to begin. I take it you can hear me, Mr Cantlay?

THE WITNESS: I can, yeah.

THE CHAIR: Yes, and I can now hear you very clearly. Well, in that case, I think I should just hand over to Mr MacGregor. I'm just going to check one detail, because Mr Cantlay has already affirmed and I'd simply remind you, Mr Cantlay, you have affirmed, and therefore, we're in a position to----

UNKNOWN SPEAKER: I can't hear anything at the moment.

THE CHAIR: Right. Now, who is that?

UNKNOWN SPEAKER: Down here.

THE CHAIR: Now, I haven't identified who we heard saying that he couldn't hear.

MR MACGREGOR: I've just asked Mr McPhail if he could investigate who is having sound trouble at the moment, my Lord.

THE CHAIR: Right. Okay. We'll just wait until you, Mr MacGregor, get a report on that.

MR MACGREGOR: I'm obliged, my Lord. (After a pause) Certainly, my Lord, in terms of core participants that are joining from the meeting rooms, we're not aware of anyone that's struggling to hear the sound at the moment.

THE CHAIR: Right. Well, on that basis, I think I would remind people to mute, other than Mr MacGregor and Mr Cantlay, and I will mute, and I will invite Mr MacGregor to begin his questions.

MR MACGREGOR: Thank you, my Lord.

Mr RICHARD CANTLAY

(Affirmed earlier)

Questioned by Mr MACGREGOR

Q Mr Cantlay, can you tell

the Inquiry your full name, please?

A Richard David Macrae Cantlay.

Q Thank you. You've provided a witness statement to the Inquiry dated 28 March 2022. Is that correct?

A Correct, yeah.

Q And just for the benefit of core participants, in my bundles that's available from pages 300 to 324. Mr Cantlay, the content of the statement will form part of your evidence to the Inquiry, but you're also going to be asked some questions today. As you've outlined in your statement, David Stillie and Andrew Scott have provided you with help in addressing issues to assist the Inquiry. Is that correct?

A That's correct.

Q Now, this isn't a criticism, but as I understand it, for some issues in your statement, essentially you only know what Mr Stillie and Mr Scott have told you, as opposed to having direct knowledge of certain issues; is that correct?

A Correct, yeah.

Q And again, it's not a criticism, it's just in fairness to you, if we get to a point where you can't assist the Inquiry, then please do just say.

A Okay. Thank you.

Q And equally, if you do want to refer to your statement at any point, please do just let me know.

A Thank you.

Q If I could begin with your career, Mr Cantlay, am I correct in thinking that you're a civil engineer?

A I am, yeah.

Q That you graduated in 1996 with a degree in Civil Engineering and became a Chartered Civil Engineer in 2001?

A Correct, yeah.

Q And you currently work with Mott MacDonald, having begun working for that firm in 1998?

A Yeah.

Q Could you explain to the Inquiry, what work does Mott MacDonald undertake?

A So Mott MacDonald is a global engineering, management and development consultancy. So the range of work they undertake cuts across those three strands. So we either do engineering design of infrastructure projects, or we provide project and programme management and advisory services on engineering projects, or we provide management consultancy, and, lastly, we deliver aid-funded programmes in low and middle income countries.

Q Okay. So global engineering firm but would also undertake management and development consultancy as well?

A Correct, yeah.

Q Thank you. Now, you tell us within your statement that since 2001, you've worked on public-private partnership projects. Just for the benefit of the Inquiry, could you explain what you mean by public-private partnerships?

A So, effectively, projects that have been procured by the public sector using either PFI or PPP or NPD or other forms of revenue-funded projects.

Q Okay. So, again, just in simple terms, it would be revenue-funded rather than capital-funded, is that correct?

A Yeah.

Q And effectively using private finance that comes in to allow the public sector to complete projects such as infrastructure projects.

A Correct, yeah.

Q Thank you. You explained that the focus of your work became the healthcare sector, and you explained that since 2001 you've been working in that area. Can you just explain approximately how many healthcare projects have you worked on since 2001?

A So I worked on a number in England in a support role, in Leeds and Sheffield and Newcastle, so various projects there. I've then worked on a number in Scotland. I've spent quite a lot of time on the Forth Valley Royal Hospital in Larbert. I've then worked on various other projects in Scotland, including Community Hospital in Clackmannanshire, Kirkcaldy Acute Hospital and various others. So I've probably, you know, worked on something in the region of 15 or 20 hospital projects in various roles.

Q Can I just check, in terms of the work that you undertake, the healthcare public-private partnership work, how specialised is that type of work?

A Well, I guess there's two types of speciality. There is the fact that it is healthcare, which is one area of specific knowledge, and then the fact that the revenue-funded projects tends to be another specific area of knowledge.

Q And within Mott MacDonald, obviously you're specialising in healthcare, but does Mott MacDonald have a healthcare engineering team, or are you part of a general pool of engineers that would

work across a broad range of projects?

A So, the way Mott MacDonald is set up, we do healthcare work across the globe from Australia, Middle East, UK, Canada, and there is engineering teams that work on that in their specific areas of the business.

Q So is it arranged more geographically than in terms of specific areas of work?

A The business is arranged geographically, yes.

Q Thank you. Now, you explain within your statement that you worked on the project for the Royal Hospital for Children and Young People and the Department of Clinical Neuroscience. I'm just going to refer to that as “the project”. So if I refer to the project at any point, that's what I'm referring to. You explain that you had had ten years working on PPP projects as a technical adviser whenever you became involved in the project. Can you just explain, what do you mean by the term “technical adviser”?

A Yeah, sure. So public sector bodies, who are typically delivering PPP revenue-funded projects, employ generally a technical advisory firm, and that comprises a number of disciplines such as healthcare planning, architecture, engineering, facilities management,

quantity surveying, and my role tended to be leading that team and coordinating that team and then making sure that the outputs from the technical fed into the wider project and in particular the commercial and legal components. So my expertise was really about leading and coordinating the technical experts, but also providing the technical inputs into the PPP procurement arena.

Q Okay. Now, you mentioned the term “technical advisor”, that was quite a wide remit, and you mentioned a number of relevant disciplines, including health planning, engineering, etc. So, although Mott MacDonald would be engaged as a technical advisor and you would be providing that role, am I correct in thinking from your answer that it's really a team of people that are involved?

A Absolutely, yeah.

Q And in terms of the team of people when Mott MacDonald comes into a project as a technical advisor, would all of those disciplines be provided in-house by Mott MacDonald, or would some rules be outsourced?

A Depends on the scope of what the client has asked for, but generally speaking, we would normally

have some sub-consultants, yeah, to either provide particular areas that Mott MacDonald don't do or provide more capacity. So, yeah, we would-- In my experience of putting those teams together, it's typically involved a blend of in-house Mott MacDonald people and sub-consultants.

Q So Mott MacDonald would take on the role and then it would undertake some of that work in-house, but equally, as you say, there might be some sub-consultants that are brought in for specific areas on specific projects?

A Yeah.

Q Thank you, and in terms of your own role on the project, you mentioned that it was essentially a management role that you had, in terms of just trying to coordinate the various teams that came in.

A Yeah. So I would probably describe my role two ways: there's the bit you've just explained there, the team coordination and then there is providing the input to the PPP procurement process documentation from a technical perspective and interfacing that with the legal and the financial advisory component.

Q So, again, just so I'm understanding you, managing the technical side of the project, but also providing project management input into the wider project in terms of taking it from a blank sheet of paper through procurement to the final build project.

A Correct, yeah.

Q Now, I think within your statement, if you've got a copy to hand, you provide a helpful chronology at paragraph 2.1.1 in relation to Mott MacDonald's involvement in the project.

A Yeah.

Q So at 2.1.1, you outline that in February 2010, Mott MacDonald were appointed as supervisors.

A Correct.

Q It's just in that chronology, just slightly down, page 302. So, February 2010, appointed as supervisor. I'll refer to that appointment as “the first appointment”, and then you explain that on 22 March 2011, there's then a second appointment, so a different appointment for Mott MacDonald, and then you also mention on 11 July 2011 that there's then a change control order that's issued. Now, if I can just pick things up in terms of the change, really the first appointment's dealing with the project when it's capital-funded, and then the second appointment is dealing with the project

when it's revenue-funded. What was your understanding of who made the decision to change the funding model?

A My understanding was that that change was made as a result of budget at government level and therefore Scottish Government and SFT would've been the organisations who made that decision.

Q So, the Inquiry's heard evidence that really there was an announcement made by the Scottish Government that there wasn't going to be funds available for a capital project, and what was going to happen is it was going to be funded through a revenue-based model, and is that consistent with your understanding, having actually worked on the project?

A Yeah.

Q Thank you. Now, in terms of the first appointment, so this is really when Mott MacDonald first became involved in the project, you explain that Mott MacDonald were appointed as a supervisor on 4 February 2010. Can you just explain to the Inquiry, what was what was that initial instruction? What were Mott MacDonald engaged to do?

A Sure. So, I wasn't actually involved in that particular part of the project, but I am aware of what Mott MacDonald were appointed to do.

So, the supervisor role is a specific role under the NEC form of contract. So there are a number of specific roles and the terms of that role are set out as per the NEC form of contract, and my understanding is that that role is primarily roundabout a technical role to check whether the delivery of the project meets the specific completion criteria and requirements set out within the NEC contract.

Q Thank you. So the Inquiry's heard evidence that at this stage, whenever the project was going to be capital-funded, that a firm called BAM were engaged as a principal supply chain partner. Is that a term that you're familiar with in your industry, a principal supply chain partner?

A Yes, it relates to the Health Facilities Scotland framework. Yeah.

Q And what would a principal supply chain partner be engaged to do?

A My understanding is that the principal supply chain partner would be appointed by an NHS board to really develop a project through the initial stages and then outline business case, final business case and then deliver it as a construction project. So they would typically-- Well, they would

employ a design team and, working through that project development process, develop the design and provide the inputs, the technical inputs to support the business case process, and then end up building that as a capital project and then handing it over to the NHS board.

Q So the principal supply chain partner would have design responsibilities in terms of the contract?

A Yes, that was a design and build form of contract, yeah.

Q And just to be absolutely clear then, the capital fees of the project, as far as you're aware, did Mott MacDonald have any role in design and design of the ventilation system for the proposed hospital in particular?

A No.

Q Now, you mention at paragraph 7 of your statement, which is certainly on page 306 of the bundle of statements that I have-- so, at paragraph 7, I'll just read out a quotation. You say that:

> "MML [so Mott MacDonald] were involved in writing the initial brief for the capital project. It was design/build contract and this initial brief eventually became the basis for the construction output specification for NPD."

Do you see that?

A Yeah.

Q Can you just explain to the inquiry what you mean by the term "initial brief"?

A So this is one of the areas that fed into the witness statement from one of my colleagues. So this bit-- particular paragraph's come from David Stillie. My understanding of what that would mean is that within the NEC form of contract, there is some employer's requirements set out, so David here will be referring to the fact that Mott MacDonald helped write some of those employer's requirements, which would have been obligations such as requirement to comply with Scottish Health design guidance such as SHTMs etc.

Q So providing the brief in terms of what has to happen as opposed to doing the design work itself, is that correct?

A Absolutely, yeah.

Q Thank you. You say that that got taken forward into a construction output specification, which we'll perhaps just come and address later when whenever we look towards the revenue-funded model. Now, still within your statement, at

paragraph 2.1.2 at page 303, at that section, there's a sentence beginning, “During the early design phase…” Do you see that? So you say:

> “During the early design phase, MML undertook additional duties such as supporting the production of the Works and Site information and supporting the development of the Employer's Works Information.”

Is that effectively just another way of phrasing what you've already explained to us in your previous answer, or is that different?

A No, that is the same, yeah.

Q Thank you. If I could move on and ask you about the second appointment. So, this is from paragraph 2.1.3 of your statement onwards. This is whenever the project's moved and it's going to be revenue funded. The Inquiry has heard evidence that a standard form, NEC3 contract couldn't be used for a revenue-funded project. Is that your understanding?

A Yeah.

Q Can you explain to the Inquiry why would that be the case? Why couldn't you just use that standard form NEC3 contract for a revenue-based project?

A Well, the revenue-based contract, the NEC contract, is used under Framework Scotland framework-- sorry, Health Facilities Scotland Framework is about employing a private sector contractor to design and build a facility. Under a revenue funded project, what you're employing a contracting party to do is to design, build, maintain and finance the project; so it's not just about design and construction, it's about the maintenance of the facilities over the term of the contract, and it's about the funding to support the initial capital cost, which is then paid back over the duration of the contract. So it's a totally different form of contract and, because of those two differences, requires, you know, a much wider set of contractual obligations.

Q So again, just so I'm understanding you, in terms of the NEC3 contract, you've effectively got two parties: you've got the party that wants the facility built, and then the party that's going to design and build it. Is that correct?

A Correct, yeah.

Q Then whenever you're dealing with a revenue-based project, you've got the special purpose vehicle that will be set up, and it's going to operate the facility for a certain period

of time, but, again, you've explained in your evidence all the other parties that would be involved in in terms of just getting the private finance into that project. So is it as simple as saying it's a more complicated structure than just the two-party bilateral contract under the NEC3 contract?

A Yeah. So the SPV would typically then enter into two subcontracts, one for the design and construction and one for the maintenance in terms of the technical delivery.

Q Thank you. So, whenever the project switches to being revenue funded, did Mott MacDonald's role in the project change?

A Yes.

Q Can you just explain how Mott MacDonald's role changed?

A Because under an NEC contract, you typically have a number of roles specific to the NEC, supervisor being one; that role is not, you know, recognised in a revenue-funded PPP project, and what the procuring authority and, you know, an NHS board does in that instance is typically appoint advisors. Normally there is a technical advisor, a legal advisor, and a financial advisor. So the supervisor role is not a role under a revenue-funded project.

Q Okay. So the supervisor role's gone, so what role does Mott MacDonald take on then in terms of the other roles that you indicated a moment ago?

A So as technical advisor, the role is typically to help the client develop the project from a technical perspective, and I'd probably put that into two activities, pre-OJEU: so it's about developing the technical components of the contractual documentation and the technical components of the procurement documentation.

Q So assisting with technical input for documentation, including particularly for the procurement documents?

A Correct, yeah.

Q Whenever we're talking about technical input, can you just expand a little more in terms of what you mean by that technical input? Just exactly what types of disciplines Mott MacDonald is engaged in relation to?

A So typically construction-- design and construction related disciplines, so architecture – although that was normally sub-consulted by Mott MacDonald – engineering, quantity surveying, healthcare planning, and then, because it's a maintenance contract as well, facilities

management.

Q So Mott MacDonald take on the role of lead technical advisors, as you say, providing architectural services, engineering, health planning, etc., to produce the various documents that you've addressed the Inquiry on. Did Mott MacDonald undertake all of that work in-house for the project?

A No.

Q So there's a range of entities that you address within your statement. The first I'd like to ask you about is Davis Langdon. How did they become involved in the project?

A So, Davis Langdon-- under the Framework Scotland contract, so the first contract, Davis Langdon were project managers appointed by NHS Lothian, and Mott MacDonald were supervisors, and BAM, as you've already said, were the principal supply chain partner. So, when the revenue funding changed, NHS Lothian required, as part of the technical advisory service, project management support, and so it made sense for us to sub-consult that to Davis Langdon as part of the continuity of the overall project, and maintaining that-- you know, try and maintain as much continuity.

Q So again, just so I'm understanding you, when you say it made sense to bring Davis Langdon in, do you really mean it made sense just from the continuity aspect that they had been involved before as a project manager, so rather than just getting a party in that would be cold, you would just continue using their services on the project?

A Yeah.

Q In terms of their engagement, are Davis Langdon engaged by NHS Lothian or are they engaged as a subcontractor by Mott MacDonald?

A Subcontractor by Mott MacDonald?

Q Thank you. Did Davis Langdon enter into any subcontracts in relation to their project management role?

A They did because there was a requirement to develop a reference design, and therefore, on a similar basis, they then entered into subcontracts with the organisations that I understand were originally working for BAM under the Framework Scotland contract. So they were Nightingale Associates, who are architects; BMJ who are architects; Hulley & Kirkwood, who are building services engineers; and Arup, who are civil structural engineers.

Q In terms of the

engagement of all the entities that you've just addressed there, so Nightingales for the architecture, Hulley & Kirkwood to assist with the engineering, did Mott MacDonald have any direct role in the appointment of those subconsultants by Davis Langdon or is that a decision that's taken by Davis Langdon?

A I can't recall what the particular conversations were, but my understanding would be that there needed to be a reference design team, and on the same basis, as I explained for the appointment of Davis Langdon, which very much was, you know, our decision and in agreement with NHS Lothian, I think it would have been the same rationale. So, you know, in effect, the obligation to manage and deliver the reference design was passed down to Davis Langdon through the subcontract, and they would have contractually made the decision, I guess, yeah.

Q Okay. Again, just to try and understand why that decision was made, you've obviously talked about the continuity, that those entities had been working on the project when it was capital funded as opposed to revenue funded, was it a simple matter of continuity or was there consideration given to whether or not other entities would be better placed to undertake any of those sub-consultancy roles?

A I guess continuity was probably the-- you know, I would imagine the main driver, given these organisations had developed the design up to a certain point over a number of months and perhaps years under the previous contract, and so, you know, at face value that would appear to be a sensible thing to do.

Q Again, just to understand the types of conversations that are taking place at this time, the Inquiry's heard evidence from a number of witnesses who indicated that there was a strong desire to try to retain work that had been done so that there wasn't simply abortive costs in starting again. Were you involved in any such conversations, or have you been advised of any such conversations taking place?

A So I think those conversations-- yeah, I was aware, and I, you know, can't remember specific conversations I was involved in but, you know, I absolutely, you know, was aware of them and probably was involved in some, but you know, I think the-- Sorry, can you repeat the question? I've lost my train of thought.

Q No, certainly. I was just saying that the Inquiry's heard evidence from a number of witnesses who said that there was a strong desire to try to avoid abortive costs, to try to save work that had been done in the capital phase and take it forward to the revenue phase. I was really just asking for your views in terms of whether you were aware of such conversations and, if so, who was involved, and if you were involved in them directly.

A So, yes, very much understand that those discussions were taking place and, you know, there's various correspondence which shows various discussions happening at various points in time, you know, at the tail end of 2010, during 2011, and yeah, I would have been involved in some of those conversations. I can't recall specific meetings, etc.

Q No, I'm not asking you about specific meetings or any specific individuals, but do you recall entities that you were having those types of discussions with? Like I think what I'm really interested in is if there was a party or parties which saw that "Let's not have aborted costs, let's try and take work forward". Do you recall if-- which parties were interested in those issues?

A So NHS Lothian absolutely would have been interested in those-- that because they'd, you know, come through a process of engaging with a wide range of stakeholders and put a lot of effort and, you know, paid for a design to get developed up to a certain point, so they absolutely were involved and keen to see how you could make best use of that investment to date. SFT-- I think there was a-- as NPD evolved, there was a move alongside that launch of the new NPD programme to look at how perhaps there's an opportunity to do a bit more design upfront with the opportunity to perhaps reduce the amount of clinical involvement through the procurement process and, you know, perhaps save some time round about that as well.

Q Whenever you mention SFT, is that the Scottish Futures Trust?

A Correct, yeah.

Q Again, just if you could assist the Inquiry with the role that the Scottish Futures Trust was having at this time. The Inquiry's heard evidence that, effectively, NHS Lothian was the decision maker, but that Scottish Futures Trust was what a number of witnesses have referred to as a "critical friend", effectively trying to

assist NHS Lothian. Do you have any observations on that characterisation of Scottish Future Trust's role?

A No, I'd agree with that, yeah.

Q Thank you. If I could ask you to have in front of you, please, bundle 5 and page 125, which should be an organigram. So do you have in front of you, Mr Cantlay, that document-- top left-hand corner, "RHSC & DCN Project Delivery Structure"?

A Yeah, I can see it.

Q Have you seen this before?

A Yeah.

Q Okay. I'd just really like to make sure that I'm understanding effectively the chain of command and the parties that are involved. So, at the very top, we've got the project management executive, so we've got the project director for the NHS Lothian, Brian Currie. Then below that we've got the commission director, so we've got yourself, Mr Richard Cantlay, and the commission manager, Mr Andrew Scott. Then below that we've got the lead project manager, Davis Langdon. Could you just explain what are we seeing in that box at the top in terms of those relationships?

A So what we're seeing there is obviously NHS Lothian at the top with effectively a direct line to myself and Andrew as the organisation they're contracting with, but also a direct line to the project managers to facilitate, you know, what would seem to be the most efficient way of running that whole team rather than Brian having to always, you know, go through myself and Andrew when it was something that he wanted the project managers to take on.

Q In terms of the change, do we really have NHS Lothian at the very top as the client, then below that with Mott MacDonald, I think as you'd said, as the sort of lead technical advisor, but with Davis Langdon having been engaged as the actual project manager?

A Correct, yeah.

Q Thank you. Then below that, if we could look to the left-hand side, so there's various workstreams that we see: technical deliverables, commercial equipment, clinical business cases. If we could look to the left, there's again a sort of ringfenced box called the "Reference Design Team". What do we see in that box on the left-hand side, the "Reference Design Team"?

A So what we see in that

box is effectively the subconsultants that I referred to that worked under the BAM contract operating as a ringfenced reference design team managed by Tom Brady at Davis Langdon.

Q You use the term ringfenced, and it's a term that you also use in your statement. Again, for those not involved in the industry, what do you mean by saying that the reference design team was ringfenced?

A So in effect, we needed to create a situation where there was a barrier between the team who were involved in a lot of procurement and contract development-type discussions with those doing the reference design. Now, the primary reason for that is that the organisations who were appointed to do the reference design were going to be able to join bidding consortia for the project. So they were not able to be exposed to any conversations that were happening about how to set up and procure the NPD project.

Q So just, again, so I'm understanding this, within Davis Langdon, we see that we had Richard Parks, Naomi Lillie and Helen Caress as part of the project management team; is there effectively a barrier between those individuals within Davis

Langdon and then the reference design team from Davis Langdon? So, Tom Brady, Alan Martin – is that what you're talking about in terms of a barrier?

A Yeah.

Q Thank you. Within the reference design team, I think as you've explained both in your statement and in your evidence today, we see at the top, we've got Davis Langdon, then below that we've got Nightingale Associates as the architect, we've got Hulley & Kirkwood as M&E. Can you just explain, what does M&E mean?

A M&E is mechanical and electrical engineering, often referred to as building services.

Q Thank you. Then we see that there's a project interface from NHS Lothian. What was your recollection of what the project interface from NHS Lothian was there for?

A So that would be somebody from NHS Lothian who was then able to bring access to NHS Lothian of the people needed by the reference design team to develop the design.

Q Thank you. Then below that we have Davis Langdon mentioned as the document

controllers. We've BMJ Architects listed as support architects. What were the different roles between Nightingale Associates and BMJ?

A So, I wasn't involved in the reference design team at all as part of the barrier separation, but my understanding would be that-- and, you know, you often see two architects working on the same project as a team. My understanding is that Nightingales were the concept architects and BMJ were the detailed clinical architects, so very much working together.

Q Okay. So Nightingales effectively doing the concept and then you had referred to BMJ as doing a slightly more granular level of detail. Just, again not in terms of this particular project, but how would the role of what BMJ is doing differ from a concept architect?

A So that's-- normally what you would do is set it up so that it's very clear. If you've got two architectural firms coming together, it would be very-- you would have to set it up and be very clear within each of their appointments who was doing what. The detail of that I wasn't party to so can't comment on it, but, you know, a high-level principal. In effect, the concept architect would be doing

the front end and thinking about the wider parts of the project, whereas the detailed architect would be more doing the internal architecture and specific architecture relating to the building.

Q Thank you. Then we see that Arup are mentioned as having a structural role and then Tribal are mentioned as health planners. What would a health planner do within a project like this?

A Do you mean typically or at this particular stage?

Q I mean typically. I appreciate you can't comment in terms of this particular project, but just-- I think we're clear in terms of what an architect does, clear in terms of what an engineer would do, but why would you need a specific health planner? What do they do?

A So healthcare planners typically work with NHS organisations to help them effectively think about the development of the clinical model, i.e. how services are going to be delivered within the facility and translating that into a schedule of accommodation and a set of clinical output specifications which act as a brief for a design team.

Q So effectively assisting with the clinical aspects of the design and then feeding into other members of the reference design team?

A Correct, yes.

Q Thank you. The next document that I would ask you to have in front of you, please, is within bundle 5 and on page 4. It should be a document in the top left-hand corner "Contract Control Order". Do you see that?

A Yeah.

Q Bundle 5, document 1 at page 4, and we see in the bottom that it's dated 11 July 2011 and 29 July 2011. We'll come on and look at the detail, but can you just explain to the Inquiry what's your understanding of a contract control order? Why would you have one on a project like the one we're discussing?

A A contract control order is to vary the original terms of the contract in terms of scope and associated remuneration.

Q So, if we look at this particular contract control order, it's got Mott MacDonald at the top, it gives the project title of "NPD Project for RHSC/DCN at Royal Infirmary, Edinburgh for NHS Lothian". We then see a description and reason for the control order. Do you see that?

A Yes.

Q And it states:

> "Instruct expenditure from Section C Reference Design (Provisional Sums) in accordance with Clause 34 of the Contract to permit the full appointment of the Reference Design Team consequent upon Contract Control Order No 01. The Reference Design Team will comprise; Nightingale Associates, BMJ Architects, Hulley & Kirkwood and Arup and will be appointed direct to Davis Langdon."

Do you see that?

A Yes.

Q So am I correct in thinking that this is effectively the formal appointment of what you've referred to as the reference design team"?

A Correct, yes.

Q If we then look on to page 5 at the top, we see an introduction, which states:

> "The following document has been prepared to highlight the actions undertaken in association with the appointment of the Reference Design Team members, notably…"

And then it lists all the parties – Nightingale Associates, BMJ Architects, Hulley & Kirkwood as the services engineers, Arup and Tribal. I think I'm correct in saying that you said

if we see terms such as “services engineer” or “building services”, that should be understood as referring to what others might call mechanical and electrical engineering works?

A Yeah.

Q Thank you. If I can ask you to look on to page 7, please. The second bullet point states:

> “The level of design being progressed on the architectural front is actually in excess of Stage C and is more comparable to stage D/D+. Given we are obtaining this enhanced level of design detail for Stage C costs, then VfM is further evidenced.”

Just in terms of how developed the design was, could you assist the Inquiry in terms of what's meant here by stages C and stages D or D+?

A These are stages set out in the RIBA, a description of the development of design through a project. The terminology has actually changed quite a number of years ago. It now uses a numbering system, but prior to that it used a lettering system.

Q Thank you. It continues then just below that bullet point: “The final reference design fee has now been agreed to cover the following documents…”

So it says, “The RHSC+DCN Deliverables for Reference Design v4 June 2011 document”. Secondly, “Reference Design Scoping Documents” and “Reference Design Programme”. You see that?

A I see that, yes.

Q Is that effectively what work was going to be undertaken in terms of this contract control order?

A I would presume so, yes.

Q Thank you. Then if we could look on to page 9, please. It's quite small in terms of the entries, but you see the second entry in that spreadsheet says, “Room Data Sheets”?

A I do, yeah.

Q Then if we look across to the right-hand side, it says:

> “Capital will lead this phase. H&K to develop the environmental information. Capita will identify GP2/3 items with Users and list in component sheets.”

Do you see that?

A Yes.

Q Can you just explain what would be your understanding, having obviously worked within the industry and the project, to the reference “H&K to develop the environmental information”?

A Well, H&K would refer to

Hulley & Kirkwood, and the environmental information would be the population of-- this is all in the context of room data sheets, which has one sheet setting out environmental requirements, so that is effectively saying that Hulley & Kirkwood would populate that data.

Q Thank you. If we could look on, still within the control order, to page 13, please. Do you see in the overview section a paragraph beginning, “The required project outcome”? Do you see that, Mr Cantlay?

A Sorry, which bit am I looking at, sorry?

Q So page 13, and then there's the heading, “Overview”, and a paragraph beginning, “The required project outcome”.

A Yes.

Q

> “The required project outcome is the production of a reference design defined in sufficient preliminary information and expressed in drawings, reports or outline specifications such that the outcome represents a reference design solution that meets the brief, declares its design objectives, establishes the required quality and supports NHS Lothian trust’s healthcare principles and philosophy.”

Do you see that?

A Yes.

Q Now, just that reference to “reference design”, can you just explain to the Inquiry what did you understand a reference design is?

A A reference design is a design that is developed to a certain point, partial design if you like, and then provided to bidders with some of the design components mandated.

Q Now, the Inquiry's also heard the term “exemplar design”. What’s an exemplar design and how does it differ from a reference design?

A So exemplar design was terminology that was probably used since the start of PFI projects to deliver social infrastructure, and an exemplar design would typically be one example of a high-level solution which would often be done and shared with bidders, just to give an indication of something that may be a solution to the brief.

Q If I could just check my understanding, because at paragraph 36 of your statement-- I don't need to take you to it. I'll just read it out for your information, but at paragraph 36, you say:

> “An exemplar design and a reference design represent a

springboard for bidders to develop their own designs."

Can you just elaborate in terms of that, just to try and calibrate the difference between a reference design and an exemplar design, if they're both what you're referring to as a springboard for bidders to develop their own designs?

A Yeah, so my experience of using exemplar designs on projects, as I say, it's one particular high level solution and often it would be provided to bidders as part of a procurement process, and often it would have a commentary to say what was good and what was not good about it, but, for all intents and purposes, should be, you know, bidders can get the benefit of that, so it acts as a springboard, but in effect, the bidder is starting from a blank bit of paper in terms of its design. So that's exemplar. In terms of a reference design, it is more of, "Right, we've done some early design and here are some components that we would like to see represented in the designs, or in the final design."

Q And again, just one issue that I'd be interested in. The Inquiry heard from a Mr Stephen Maddocks of Cundall, so an engineer with experience and expertise in designing hospital ventilation systems, and I'll

paraphrase but, as I understood his evidence to the Inquiry, effectively there's a continuum between an exemplar design and a reference design. So you can have various levels of detail as you move through that continuum that-- I think they're different in the sense that you've explained, but not maybe fundamentally incompatible concepts. Again, I'm just interested in whether these are fixed concepts or whether you can have different levels of detail moving from an exemplar design to a reference design.

A Yes, so, I mean, I don't believe that there's any absolute fixed definition of what an exemplar design is or what a reference design is. It's more terminology used in the context of how to develop or procure a revenue funded project. But an exemplar design, absolutely, in my experience, was more high level and often-- you know, usually components of it may not be represented in the final design. If you want, you could develop the same design in my mind, which is an exemplar design, and you could mandate components and that would probably require a more detailed design because you need to get to the point of knowing that the spatial planning etc. is developed. So an

exemplar, yes, I would agree that it could be a continuum, yes.

Q So again, it might differ project to project in terms of just how specific the requirements were, going from almost a general concept right through to very a specific reference design?

A Could be, yes.

Q Thank you. Still within the contract control order, if I could ask you to look, please, down to page 14. So the bold heading begins on page 13, “Client Liaison”, but if we could look to page 14, please, the fourth bullet point. So you see within this contract control order a reference to:

> “Review and advise the client on the architectural design requirements generated by the ADB room data sheets.
>
> Review and comment on NHSL client technical brief and output specifications and departmental policy documents… [then thereafter]
>
> Participate in a series of structured design review meetings with NHSL User.” What do we take from those types of bullet points?”

What's that dealing with?

A So that is effectively all within the architectural description of the scope. So in effect-- again, I wasn't involved in this, but my reading of that is it is asking the architectural part of the reference design team to review and advise in terms of architectural components of room data sheets and basically review and comment on the technical brief and the output specifications that have been generated. So it's specific tasks relating to the architectural role as part of the reference design team.

Q Thank you. Then if we could look on to page 20, please. Do we see here, “Reference Design Deliverables – M&E Services”? Do you see that, Mr Cantlay?

A Yeah. Sorry, yes.

Q Thank you. If we could look on to page 21, please, to the second and third bullet points at the top of the page. They state:

> “Review and advise the client on the engineering services requirement elements contained within the ADB room data sheets…
>
> Review and comment on NHSL client technical brief and departmental operational policy documents.”

What's this part of the control order referring to?

A Well, in effect it's the

same as, as explained for architectural, but this time it relates to specific inputs from the M&E engineers.

Q Then if we look down just to the penultimate bold heading, do we see “Mechanical design”? So still on page 21 but towards the bottom, “Mechanical design”:

> “Determine the mechanical services systems philosophies (natural/medical gases, cooling, heating, natural ventilation, mixed mode ventilation, mechanical ventilation, pneumatic tube, fire protection and automatic controls installations);”

Do you see that?

A I do, yeah.

Q So is that effectively dealing with mechanical design work that has to be undertaken in terms of the control order?

A It is to the extent of the level of detail which would be considered a philosophy.

Q Thank you. Then if we look on to page 22, please, just the very final bullet point, so in terms of deliverables-- you see the final bullet point that a deliverable is “Sign-off the reference design documentation”?

A Correct, yes.

Q What does that mean in your experience?

A I guess that is talking about confirming the completion.

Q Thank you. If we could then look onto it to page 24, please. It's slightly difficult to read, but in the box at the top, do we see Hulley & Kirkwood?

THE CHAIR: Mr MacGregor, have we lost Mr Cantlay? Or rather is his screen frozen?

MR MACGREGOR: I think Mr Cantlay’s screen may have frozen, my Lord. I think-- Mr Cantlay, I think you froze for a moment there. Can you hear us now?

A I can hear perfectly, yeah.

Q I think it might have been at our end; you’d frozen for a moment.

THE CHAIR: Yes.

A Okay.

Q All right. I'll mute again, Mr MacGregor.

MR MACGREGOR: Obliged, my Lord. I was just saying, Mr Cantlay, on page 24, it’s slightly difficult to read, but in the box at the top, we see Hulley & Kirkwood. Is this the team effectively from Hulley & Kirkwood that were going to work on the project in terms of the contract control order?

A On the basis it's listed there, I would assume so, but having

not been involved in the reference design, I couldn't confirm whether they were or weren't involved.

Q Thank you. So we've seen the contract control order. If I can ask you to look in in your statement, please, to paragraph 2.1.3, which in my copy is on page 304. There's a section where you say, "…MML's sub-consultants did undertake some outline design services in relation to the Reference Design only …"

Just take a minute and see if you can find that paragraph. Do you see that? So it was, "…MML's sub-consultants did undertake some outline design services in relation to the Reference Design only ..."

A I can't see that on the screen. Which paragraph are we in? 2.1.3?

Q 2.1.3.

A Yeah, I've got it on-- I've got it on the screen. It's actually on-- I don't know what page. I'm looking at my Inquiry----

Q Might have slightly different pagination. Really what I wanted to ask you is if you could just explain your understanding of what outline design services were undertaken in relation to the Reference Design?

A So obviously as you go through a project, it goes from no design all the way through to full, detailed design, which allows construction and the reference design would be considered to be outline design services, i.e. you couldn't build a reference design.

Q Okay. So that work's been undertaken by the sub-consultants, but the design work hasn't been completed at this point before the contract notice goes out – am I understanding you correctly?

A Yes. The design as per a reference design is still a long way off being a finished design, yeah.

Q Thank you, and again, I think it's still within paragraph 2.1.3, you state that, "MML did at times carry out a limited review of elements of the design as and when required."

A Yeah.

Q Can you expand on that and explain just exactly what your understanding of what Mott MacDonald were doing in terms of a limited review of elements of the design?

A So that would just have been reviewing the progress of its development.

Q Was any kind of design audit work being undertaken by Mott

MacDonald?

A No.

Q Why not?

A Because that wasn't the way it was set up. That wasn't what the role was of Mott MacDonald. The design was getting done by the reference design team.

Q On a project of this nature, would you expect design audit work to be undertaken?

A So I'm not sure what design audit work-- I don't know what the terminology “audit” means, but in effect, no, I wouldn't be expecting-- If you're referring to is somebody-- is there a party checking in detail what's being done, then no, I wouldn't because effectively what you're doing is preparing an early design to then put as part of a procurement process for somebody, one of the bidders, to take on and then take the design responsibility for. So there wouldn't be any real value in doing a detailed-- of a party doing a detailed second check of something that wasn't going to get built.

Q Thank you, Mr Cantlay, and just to be clear, when I was referring to design audit, I really just meant someone checking, and I should probably have been clearer on that. So again, just so I'm

understanding, you're saying you wouldn't anticipate on a project like this there being any party effectively reviewing the work that was done by the design team?

A No, not at this stage, given it's-- it's not the design that-- You know, the design is going to be transferred to one of the parties under the PPP contract who will have design responsibility.

Q Thank you, Mr Cantlay. The Inquiry heard evidence from Mr Currie, who was the Project Director working for NHS Lothian, and he was asked effectively whether it was unusual to have a reference design given the number of mandatory elements for this project, and his position was that it probably was unusual at the time of the project to have a reference design. Do you have any observations on Mr Currie's comments?

A It depends within which context you look at what is usual and unusual. So my experience of having worked on revenue projects in Scotland to that point was that reference designs hadn't been used, but there were other parts of the UK who had been using reference designs and potentially something more detailed than a reference design. For

example, I was aware of that approach being adopted in Northern Ireland. Not that I had been involved in the project, but I was aware it was adopted there. So, in England, they're doing something different as well. So, if we look at Scotland, if we compare it against what had happened, you know, on all the previous PPP or PFI projects, then yes, it was slightly different. So in that case, yeah, you could say it was slightly unusual, but if you look to take a wider context, then we'd probably say that it wasn't necessarily unusual.

Q Again, just to be clear, when you're talking about the wider context, are you talking about revenue-funded projects in general? Or whenever you're talking about Northern Ireland and England, are you talking about revenue-funded projects specifically in the healthcare sector?

A In England I'm talking about revenue-funded projects in the healthcare sector, but, you know, equally Northern Ireland, as I say, I wasn't involved in and so I don't know the specifics. I was just aware at the time of more design being done pre-procurement, and I think some of that was on healthcare projects, some of that was on other social infrastructure projects.

Q The Inquiry's heard evidence that one of the benefits of using a reference design is that it could potentially shorten the time required for a procurement exercise. What would your views be on that?

A Yeah. So, you know, what the reference design and the purpose it fulfilled was really all around about a terminology – I mean, no doubt you'll have heard – which was operational functionality, which is all round about spatial design and adjacencies of departments and flows and room adjacencies, etc. To get to that point in a design process, you need to work with the clinical user groups, and so if you start from a blank bit of paper and you've got three bidders, in effect, what you've got is three bidders, each engaging with a set of clinical user-- stakeholders to inform their design, which may result in, you know, different proposals being developed. So, because you're starting from a blank bit of paper and having to do that very early concept design work, it's going to take longer than if you've done some of that clinical departmental operational functionality components in advance. It means that you can-- you don't need to do that through the procurement process, which would then logically

suggest that it would shorten the procurement process.

Q Thank you, and were you aware of any other particular benefits associated with using a reference design as opposed to using an exemplar design?

A So, yeah. Well, first of all, is the time spent by the clinical stakeholders. So, you know, they've got day jobs in terms of delivery of frontline services and, you know, using them to develop three designs, two of which won't get built, didn't necessarily seem like our best use of time. So there is definitely that component to think about as well.

Q Just so I'm understanding this correctly, it would reduce the amount of input required from clinical teams and it would also potentially allow you to move quicker through a procurement exercise.

A Correct, yeah.

Q Thank you. Just in terms of the project itself, the decision to adopt the reference design whenever it switches to a revenue-funded model, who do you understand took that decision?

A So I believe it was a decision that was jointly, effectively, made between NHS Lothian and SFT for various reasons. NHS Lothian – I think we've talked about some of these – keen to make sure that they, you know, get some value of the design they'd developed so far, which then aligned with, you know, SFT's desire to perhaps use more reference design as part of trying to improve the delivery of revenue-funded projects in terms of trying to get more efficiency in the procurement process.

Q Again, just you might not be able to assist, but was your understanding that it was a decision ultimately made by NHS Lothian? Or was it a decision jointly made by NHS Lothian and Scottish Futures Trust?

A I've been looking at various correspondence, I think-- you know, and thinking about the governance. You know, I think ultimately it would've sat with NHS Lothian, but, you know, SFT, I'm sure, would've been inputting into the decision in that critical friend role that you referred to earlier.

Q Thank you, Mr Cantlay. If I could ask you to look at a document, please, in bundle 3, volume 2 at page 356. So bundle 3, volume 2, page 356. Is this a document – it's got "draft" over it – but called "Royal Hospital For Sick Children and Department of Clinical Neurosciences Advisory Paper 2: Reference Design

Development" from February 2011 produced by Mott MacDonald? Do you see that?

A Yeah.

Q Have you seen this document before?

A Yeah.

Q Can you just explain in general terms what this paper is and why it was produced?

A So this paper was produced really to help NHS Lothian think about, you know, to what extent we should-- they should develop the reference design and to try and set out, you know, some of the differences between what an exemplar design typically was and what a reference design was. So this was all to facilitate a conversation, to help get an agreed position in terms of what the reference design is and how it could be used, and there was numerous iterations of this paper throughout the development stage.

Q Thank you. So, if we could look to page 359, please. In the "Introduction" section, the second full paragraph. It states:

> "For the NPD procurement process, a Reference Design is required to be developed on behalf of the Board. The work done to date cannot be used in its current state for the Reference Design since (i) it reflects only part of the Project; (ii) it has a strong D&B emphasis; and (iii) may reflect BAM construction preferences. Therefore further development of the design is required. This further development will be carried out in conjunction with the user groups to get their sign off of the revised design. In absence of any formal guidance, the Board need to decide to what extent the Reference Design will be developed and how it will be used."

Do you see that?

A Yeah.

Q So, again, is that really just outlining that, yes, there had been a start in terms of the reference design when it was capital-funded, but there was still quite a lot of work to do?

A So, yeah. So what that paragraph's saying is that actually the board need to decide to-- you know, what they need to do with the reference design or to turn it into the reference design they want to present to bidders, and given that the previous scheme had been developed just for the Children's Hospital, it was talking about, you know, the work needed to

really change-- The point to which BAM had got to under the Framework Scotland arrangement and what needed to be done to it to reflect the new scope of the NPD project and how it was going to be used and presented to the bidders.

Q I won't read it out, but just for the benefit of the Inquiry, we'll see in the bottom left-hand corner that there is an explanation of what an exemplar design is, what a reference design is, and then in the final paragraph, I think it really narrates what you have explained in your statement that, in your view:

> "Both an Exemplar Design and a Reference Design represent a springboard for the bidders to develop their own designs however the level of prescription and fixity in the case of the Reference Design is greater."

And again, that seems to be consistent with what you've told the Inquiry, both in your statement and in your evidence today.

A Yeah.

Q If we look on to page 360, please. In the bottom half of the page, you see a paragraph beginning "In Scotland, a high level approach …"

A Yeah.

Q So it says:

> "In Scotland, a high level approach was typically adopted and this exemplar design was then used for indicative purposes only – i.e. to inform the bidders of one possible solution which met the requirements of the project. Therefore, bidders were encouraged to develop their own ideas and different alternatives in response to the output specification rather than just adopt the exemplar design."

That's really just explaining what you've told us today about what the exemplar design is, and then I'll paraphrase slightly, but it then goes on to discuss experience, I think from England and Northern Ireland, which you've already addressed the Inquiry on today.

A Yeah.

Q If we could look on page 362, please. We see recommendations being made on page 362. So section 4 "Recommendations". So page 363, please. "Recommendations":

"It is recommended that:

- the Board review and comment on the acceptability of the proposals from their

perspective;

- a workshop is held between the Board and its advisers to agree the Reference Design deliverables; and
- the agreed Reference Design Deliverables can be shared with BAM to instruct them on the work to be carried out."

Do you see that?

A Yeah.

Q Could you explain your understanding of what these recommendations are, please?

A So, in effect, it is-- it's recommending that decisions are made round about the extent to which the reference design is developed and the reference to BAM is that this was obviously early in the process before it was clear that BAM wouldn't be involved going forward. But in effect, that's talking about the reference design team.

Q Thank you. If I could ask you, please, to look still within bundle 3, volume 2, but to page 898, please. Do you see a document called "RHC + DCN - Approach to Reference Design", this time dated May 2012 with the Mott MacDonald logo in the bottom right-hand corner?

A Yeah.

Q So what was this document?

A I believe that was the more developed iteration of the last document, and you can see from page 902 that it's been through a number of different variations.

Q So if we look at page 902, as you say, there seems to be a range of revisions with the dates given. Did you personally approve each revision or was it someone else within the Mott MacDonald team?

A No. As per there, I would have approved, my name's on it.

Q Thank you. Then if we could look to page 905, please, we see a paragraph approximately three paragraphs down just above the bullet points that the key benefits-- You see that:

"The key benefits are seen as being:

"Enhanced cost certainty at OBC; Clinical design largely complete – very limited future engagement of scarce clinical resource; Shortens Competitive Dialogue Phase; Utilises available programme time – parallel with Consort Negotiations i.e. no overall delay to strategic

programme…"

Then, finally: "Minimises abortive design cost for unsuccessful bidders". Do you see that?

A Yeah.

Q Again, does that really summarise your views and Mott MacDonald's views in terms of what the benefits of using a reference design approach would be for this project?

A Yeah.

Q If I can ask you to look to page 906, please, in the first full paragraph, four lines up from the bottom of that paragraph, there's a sentence beginning: "The absence of an external Healthcare Planner…" Do you see that?

A Yeah.

Q It states:

"The absence of an external Healthcare Planner on NHSL's advisory team during procurement could be perceived as a risk. Given however the previous healthcare planning input to the project and NHSL's internal resource, this is deemed by NHSL to be a minor and manageable risk."

Can you just explain what decision, if any, is this referring to?

A So this is referring to not retaining an appointed healthcare planner during the procurement process, which was a decision made and-- you know, basically saying that, instead of using a consultant, that healthcare planning input would be provided by the NHS Lothian team.

Q Thank you. If we could then move on to page 907, please, which sets out the purpose of the report. So it states, 1.1:

"The purpose of this report is to:

- Outline the reasons for preparing and the purpose of the Reference Design
- Outline the level of detail required in a Reference Design.
- Outline the distinctions between mandatory and non mandatory elements of the Reference Design
- Application of Reference Design during Competitive Dialogue
- [and finally] Outline the development of the Reference Design

The report builds upon the procurement options and recommendations endorsed by

the Project Board in July 2011."

Can you just explain what's meant by that phrase "endorsed by the Project Board in July 2011"?

A Decided by.

Q So they've effectively made the decision, and this is now the report that's going to try and build upon that decision?

A Yeah.

Q Then just to turn up some further references, just for completeness, if we look to page 909, "Reasons for Preparing a Reference Design". Third paragraph down just above the bullet points, it states, "The benefits offered by the use of Reference Designs in NPD projects in the health sector are as follows…" I won't read them out, but effectively, again, setting out what in Mott MacDonald's view would be the benefits of the reference design. Is that correct?

A Correct.

Q Thank you. Then if we could look on to page 913, please. Do you see, just below the three bullet points, there's a paragraph beginning: "There is absolutely no latitude..."? It states:

> "There is absolutely no latitude for alternative solutions for the departmental layouts on the RHSC + … facility. This is because of the number of fixed points that the design must address, for instance linkages to the existing RIE and the constrained nature of the site."

Can you explain your understanding of what that section means?

A Well, in effect, it is representing the view that we didn't want bidders changing the mandatory elements of the reference design, which were those elements relating to the operational functionality, i.e. the departmental adjacencies, the room adjacencies, etc., and, you know, some of that was driven by the fact-- or of the complications of the site and the need for specific things to be in specific places to allow physical connection with the RIE, and to do with the various other requirements that were built in this building on this site.

Q Thank you. If I could ask you to look on to page 922, please, and to the section at the bottom called "Reference Design Sign-off and Handover". Do you see that states:

> "A feature of the RHSC + DCN as noted above is that the Reference Design Team will not be retained by NHSL during the procurement period. The

Reference Design will therefore have to be handed over to the Technical Advisory team and actions will have to be taken to cover for the fact that the Reference Design team will not be available to address queries during the procurement process."

Do you see that?

A Yep.

Q Can you just explain your understanding of when that decision was taken and who had taken that decision in relation to the reference design team?

A The decision to allow them to leave the project at this stage?

Q Yes.

A So, from memory, this was conversations-- You know, if we go back to that reference design team was originally BAM's design team, then the second contract started. The general feeling-- and we talked about Davis Langdon managed the design team and, you know, their decision, and we wanted, you know, the designers who had worked for BAM to be effectively retained, and to do this ongoing development of the reference design. Those organisations that were firstly part of the of the BAM design team and then became the reference design team, my memory is that they were only willing to do that on the basis that it didn't preclude them from bidding the project further down the line-- is my recollection. Therefore, as part of agreeing to appoint them, then we-- you know, there was an acceptance that they would be then released when the reference design was finished, and hence the need for the ringfencing approach that we talked at the start.

Q There's a reference to then there being a handover from the reference design team to what's referred to as the "Technical Advisory team". What would the technical advisory team comprise?

A So the technical advisory team is referring to the Mott MacDonald-led team.

Q Okay, thank you. If I could ask you to look, still within bundle 3, volume 2 but to page 409, please. Is this a paper called NHS Lothian RHSC + DCN Little France – Procurement Options" from June 2011?

A Yep.

Q Can you just explain what is this paper and why was it produced?

A I just need to----

Q Mr Cantlay, please take a moment to refamiliarise yourself with

the paper if it's not something that you've looked at for a while.

A (After a pause) So it is looking at the different approaches to using a design-- design work done pre-procurement in the procurement process, and really looking at four options as to to what extent you mandate or otherwise any design work.

Q So, if we look, for example, to page 415, in the introduction, so, page 415.

A Yes.

Q It states:

"Since the combined RHSC & DCN project will now be procured under NPD, NHSL has been in discussions with the Scottish Futures Trust (SFT) to determine the shortest possible procurement route."

So again, was that your understanding of what NHS Lothian wanted, the shortest possible procurement route?

A Well, the shortest possible procurement route balanced with delivering the project successfully.

Q Thank you. It continues:

"The procurement process options, and their associated timescales, are directly linked to the approach adopted on the reference design and this paper considers three options around this along with their benefits and drawbacks."

So, effectively is this, "These are the aspects that would be good about this option, these are the aspects that might be not quite so good"?

A Yeah, correct, and it went through, I think, three options-- Well, it actually looked at four options. Option D was the old PPP sort of exemplar design approach. So it was looking at the pros and cons of each, yeah.

Q If we look on to page 419 and to section 5, do you see that there's a heading called "Soft Market Testing"?

A Yeah.

Q So it says that: "A soft market testing exercise was conducted to gauge the markets view on the above proposals." Can you explain what you mean by soft market testing?

A In effect, the soft market testing referred to getting some views from the potential market as to, you know, their thoughts around the structure of the proposals and the options.

Q Again, just so I understand this, this was effectively Mott MacDonald going out to parties

that might be interested in being involved in the project and trying to test what their reaction would be to the various options in terms of procurement and whether a reference design or exemplar design.

A Yeah. So some of the Mott MacDonald team, yeah, whether it was Mott MacDonald staff or otherwise, but, yeah, the Mott MacDonald team absolutely doing what you've just said: a bit of informal feedback from the market, yeah.

Q If we then look at the penultimate paragraph beginning: "Each respondent was advised…" Do you see that?

> "Each respondent was advised of the option A, B & C approach. The consensus was that bidders would prefer the design to be treated as an exemplar to enable them to have the freedom to truly innovate on the project. Whilst option A gives some degree of flexibility, this was considered to be fairly limited."

Again, just so that the Inquiry can understand, the parties that were consulted would have preferred an exemplar design, so why was a reference design considered to be appropriate?

A So the parties-- and I guess this goes back to the early PFI projects where procurement took a very long time. So, the private sector bidders typically like as much non-setting of requirements as possible because they feel they can challenge and, you know, start from blank bits of paper, but that typically led to very long procurement processes. That was part of what the industry I think was trying to reduce moving forward. So, you know, I think the option that this paper set out as option A was seen as a middle ground.

Q Thank you. If we could look on to page 420, please, and you'll see section 6: "AGREED WAY FORWARD".

A Yeah.

Q Now, section 6 states: "At the Working Group meeting on 2 June 2011…" Can you recall what comprised the working group?

A No, I can't recall what the working group was.

Q No, that's fine. So it says:

> "At the Working Group meeting on 2 June 2011, it was agreed to proceed on the basis of Option A since this option adopts the principal of using a reference design (and therefore utilises

some of the work done to date) while bringing the advantages described under option A (namely around risk transfer, innovation, market interest and cost of design) without resulting in an unacceptable programme or overly onerous clinical user involvement requirements through the procurement process."

Do you see that?

A Yeah.

Q So is it fair to say that, by this point in time, there's been a decision made that it's going to be a reference design approach that's utilised?

A Yeah, so it sounds like this-- these options were discussed at a working group, whatever that is, and this paper is capturing that discussion.

Q Okay, thank you. So, again, just if you had your statement in front of you, please, and if we could look to paragraph 18. So you state there: "MML provided some limited advice to NHSL on the NPD/PPE/PFI procurement process as mentioned in paragraphs 10 and 16." Now, just thinking about the papers we've looked at, can you just elaborate slightly on the advice on the procurement process that Mott MacDonald was providing?

A Yeah. So it's basically-- that sentence in my witness statement is referring to the papers that we've talked about. So, you know, PPP procurement advice in its entirety is, you know, a lot of legal, commercial-type discussions. This was, you know, the technical component of that which then fed into the much wider legal, commercial-type discussions.

Q Thank you. If I could ask you to look within bundle 3, volume 2, page 946, please. This is a paper headed up "PROCUREMENT STRATEGY" with Davis Langdon and Mott MacDonald. Then you see the executive summary:

"This paper details the proposed process for the procurement of the RHSC & DCN Little France project in Edinburgh (the Project). The Project will be procured via the Scottish Governments revenue financed Non Profit Distributing (NPD) model. A preferred bidder for the contract will be selected via Competitive Dialogue (CD) as part of the procurement process."

So would this document have formed part of the advice that was being provided by Mott MacDonald in relation to the procurement exercise?

A Yeah. So I think this was

written by Davis Langdon which was the project management part of the Mott MacDonald team, and so really setting out, you know, a joint project proposal which would have included, you know, the technical parts of the procurement process from Mott MacDonald, such as the bits we've seen round about the approach, the reference design, etc., and then the components from legal and financial. So it's talking here about treasury guidance and OJEU notices and things like that, which are very legal in nature.

Q Thank you. The next document I'd ask you to have in front of you, please, Mr Cantlay is in bundle 3, volume 2, at page 488. So bundle 3, volume 2, at page 488. So that should be a document-- in small lettering at the top, it says: "Project Execution Plan September 2011" and then in bolder type "Royal Hospital for Sick Children & Department of Clinical Neurosciences at Little France Project NHS Lothian". Do you see that?

A I do, yes.

Q What was the project execution plan?

A So that is-- effectively, it's an internal document for how we will deliver a service to a client.

Q Okay. So, if we look, for example, on to page 495, paragraph

1.2: "Purpose of the Document"----

A Yeah, in fact this might be-- Sorry, project execution plan is actually a-- was an internal Mott MacDonald terminology for exactly what I just explained but, now I'm looking at it, I think this is a wider document in that it's setting out the project execution plan for the whole project team, i.e. it is covering what the client and the other advisors are doing, I think.

Q Thank you, because if we look to page 495, paragraph 1.2, "Purpose of the Document":

> "This Project Execution Plan (PEP) is intended to impart to all parties involved in the project a clear understanding of how they interact with each other, and sets out the governing strategy, organisation, control procedures and roles and responsibilities for the project. The document provides a concise introduction to the project for new team members in terms of how the project will be delivered."

A Yes. So absolutely it is not our internal management system document. It is a document to set out arrangements for all people employed in the client side of the project.

Q Thank you, and if we

could look on to page 502, so it's paragraph 2.3.2, “Advisory Services Contracted by NHSL”. It says:

> “The form of Contract for the Project Management & Technical Advisory Team during the pre-construction delivery phase is the Standard Model Contract on OGC Buying Solutions Framework Agreement… signed 20th Oct and 2nd Nov 2009 (framework agreement). The Contract is agreed between the following companies:
>
> Employer – NHS Lothian…”

And then we see the project manager and technical adviser is Mott MacDonald Ltd. Do you see that?

A I do, yeah.

Q And again, just for completeness, that's effectively the contract that you were telling us about, whenever we look back towards the organigrams at the start of when you gave your evidence. Is that correct?

A Yeah, this is what we were referred to as the second contract, yeah.

Q Thank you. Then it continues:

> “Mott MacDonald Limited has engaged the following companies in sub-consultancy agreements to comprise the Project Management & Technical Advisory Team...”

And we see various parties listed there, and then below that:

> “The design team will comprise the following companies, who will be entering into a sub-consultancy agreement with Davis Langdon…”

And then we see again the parties that you've already mentioned earlier within your evidence.

A Yes.

Q If we look on to page 505, please, we see the roles being set out in slightly more detail, so at 2.5.1.2, so page 505, paragraph 2.5.1.2, it states:

> “Mott MacDonald Limited has been appointed as the lead consultant and will deliver the following services:
>
> Lead strategic advice; NPD Procurement advice; Facilities Management advice; Design and Construction advice.”

Do you see that?

A I do, yes.

Q And again, was that consistent with your understanding of the activities that Mott MacDonald were undertaking for the project?

A Yeah, in the context of it being a technical advisory commission.

Q Yes, and then, again, it goes on, for example, at 2.5.1.3, to outline Davis Langdon. It says:

> "Davis Langdon has been appointed as a sub-consultant to Mott MacDonald Ltd and will deliver the following services: Project Management services; Reference Design Management and coordination; NPD Procurement support; Facilities management advice."

Do you see that?

A Yeah.

Q And if we look on to page 507, please, it begins just over the page on page 506, 2.6.2, "Reference Design", and it states:

> "The purpose of the Reference Design work-stream relates to the production and management of the Board's 'Reference Design' solution for the RHSC and DCN combined build, which will be released to the market during the competitive dialogue period to demonstrate the Board's anticipated design requirements as a guide to bidding parties…"

Then it says: "The members of the reference design team," so that's now over the page, onto page 507:

> "The members of the Reference Design team are not party to or involved in any commercial project activities or discussions – their activities are managed to ensure their service delivery is 'ring-fenced', both across the project in general and using access permissions with BIW, considering that they may join bidding consortia during the procurement process."

Again, that's consistent with what you've told us earlier about that concept of the reference design team being ringfenced, so it didn't bar them from moving forward and working further in the project. Is that correct?

A That's correct, yes.

Q We see the key responsibilities and duties being set out. So those include, "Preparation of the reference design". It then says, "Production of Room Data Sheets". What does that mean?

A It's the room data sheets which were-- I think we covered them when we were talking about the scope of the different parts of the reference design, but in effect, room data sheet are sheets that cover for each space, architectural and clinical requirements,

equipment, environmental requirements, etc.

Q When you say environmental requirements, would that include technical engineering specifications?

A No, not specifications, I don't believe. It would be the performance requirement.

Q And what do you mean by performance requirements?

A For example, temperature, locks(?) levels, etc.

Q Would it include air changes per hour?

A I believe so, yes.

Q And pressure regimes?

A I believe so, yes.

Q Thank you. Still within page 507, I just looked at the second bullet point which says. “Production of data sheets”. It continues:

> “Input of technical data and information for the Equipment Responsibility Matrix;
> Development of engineering solutions…”

What did you understand by that term, “development of engineering solutions”?

A It would have been very early concept solutions as needed to support the clinical and architectural space planning.

Q Then, just to look to the penultimate bullet point there, do we see, “Responsibility for Hulley & Kirkwood – M&E design”?

A Yes.

Q And again, what does that mean?

A It's basically-- it’s actually being clear about who's doing what in relation to the things above.

Q So it would be-- within the reference design team, it would be Hulley & Kirkwood that’s dealing with mechanical electrical engineering design matters?

A Correct, yeah.

Q In relation to the-- if we could move on and just think about the procurement documents that were going to be produced for the project. Prior to the issuing of the contract notice, what input, if any, did Mott MacDonald have in relation to the procurement documents that would be produced?

A So, effectively, the technical parts of both the procurement documents and the contract documents, and I'm calling them two different things – the contract documents end up being part of the suite of procurement documents, but the procurement documents I'm referring to is things like the OJEU

notice and the pre-QQ, the pre-qualification questionnaire, and the instructions to bidders, which talks about how the tender period is going to be run and what bidders have to provide at each stage and how bids are going to be evaluated. So I'm referring to that as the procurement documents, and then the contract documents, I'm talking about the project agreement and the technical schedule. So it's the technical components of those two suites.

Q Okay. So Mott MacDonald is working on the technical components of documents that will go out whenever the contract notice is issued. Is that correct?

A Yeah.

Q Okay. Can you just assist the Inquiry, in terms of those documents and the input Mott MacDonald is having, are they standard form documents or are they going to be bespoke documents?

A It depends. So, if you take the procure-- sorry, are you talking about the procurement documents or the contract or both?

Q I think if we take them in stages, so if we take the procurement documents first.

A So, from memory, definitely there wasn't standard form

ITPD documents. The OJEU notice, I think from memory is quite a strict template in any event that requires to be filled in. So I think that is probably quite standard by default, and at a point in time there was a standard form pre-qualification developed. I can't remember if it was in Scotland or England, and I can't recall if it was in place at this point in time. So it may have existed for the pre-QQ, but there definitely wasn't, as far as I can recall, there wasn't a standard set of documentation for the ITPD.

Q Can you just explain, what do you mean by the term “ITPD”?

A Invitation to proceed dialogue, so that is the initial set of tender documentation that bidders get following their pre-qualification.

Q Okay, and you'd mentioned separately the contract. Did Mott MacDonald have responsibility for producing the contract or did another entity have responsibility for that?

A So the contract, which, under this former procurement, is referred to as the “Project Agreement”, that would have been standard form, which SFT would have generated, and the way that works is what's known as the front end, i.e. the main clauses tend to be standard form. There is

then a whole series of schedules or part of a schedule. I can't remember how it works in Scotland, but, you know, some of those schedules or parts of a schedule are of a technical nature, some of them are of a legal nature, some of them are of a financial nature. So some of those parts of the schedule or schedules are standard form and others aren't. The technical ones tended not to be.

Q Thank you, and again, just within your statement in relation to the procurement documents in particular, you mention the term "technical component", so Mott MacDonald were assisting with the technical components. Could you just elaborate on what you mean by that?

A Sorry, I just missed the start of the question. This is back to the procurement?

Q Back to the procurement documents. I think you state in your statement that Mott MacDonald were assisting with the technical components of those documents. It's just to be absolutely clear that I understand what you mean by technical components.

A So let's take the "Instructions to Bidder" as an example. So that document sets out what bidders need to provide-- well, it sets

out the dialogue, engagement there will be through the tender process, and that engagement tends to be-- there's technical engagement or technical dialogue, there's legal dialogue, there's financial dialogue. In preparation for that dialogue, bidders have to submit things, so there's technical deliverables have to be submitted through the bid period for review by the client team. There's then evaluation criteria. Some of it relates to price, some of it relates to quality, and, again, the quality tends to get split between technical, legal, financial. So I'm referring to the technical components of the dialogue process, the technical submission requirements, the technical evaluation criteria.

Q Thank you, Mr Cantlay. If I could move on and ask you some questions about what role, if any, Mott MacDonald had in the business cases that were created. So the Inquiry has seen an outline business case that was created for NHS Lothian, which was approved by NHS Lothian's board and then ultimately went on to the Scottish Government for approval. Can you say what role, if any, did Mott MacDonald have in the production of those business cases?

A So the lead author of the

business case was NHS Lothian. We weren't in the business case working group, but were there to be called upon if we needed to provide any input, and that input I think was limited to two areas, which I've described in my witness statement. So some of the work we would have done for other purposes ends up in the business case. For example, we might do a programme showing the programme to get from the start of dialogue through to, you know, a stage in the project, and it might be that the business case either uses that programme in its entirety or might pull some dates out of that program. So that's just a simple example of something that we've done, not necessarily-- it's not drafting a bit of the business case but might end up feeding into the business case. Then there was a change control order referred to in my paragraph 15, which was Change Control Order 8, which specifically asked us to write three discrete sections of the business case relating to risk, project management, and I think setting the contractual diagram or something, I'm not sure, but very small, discrete sections that they just asked us to write.

Q So again, just to understand this, NHS Lothian itself are producing the outline business case,

but Mott MacDonald as advisers perhaps providing some input, but not the lead authors of the outline business case?

A Yes, exactly, and in terms of drafting specific words, which would end up in the business case, it was limited to those three areas as set out in Change Contract Control Order 8.

Q And did Mott MacDonald have any role or instruction to review the content of the outline business case?

A No.

Q Thank you. Lord Brodie, I'm conscious that that's just about one o'clock. I don't think I've got that long to go, but I think I'll be more than 15 to 20 minutes. I'm equally conscious that we lost quite a lot of time this morning due to technical issues. Certainly, obviously, I'm in your Lordship's hands and essentially would defer to your Lordship and core participants, but I would have no difficulty with having a shorter break and reconvening. But I'm very much in your Lordship's hands.

THE CHAIR: No, I appreciate what you say. Mr Cantlay, it had been our hope that we could conclude your evidence within the course of the morning but, as you appreciate, we

had technical problems at our end. What I think we will do, Mr MacGregor, even if we're not going to take up much of the afternoon, I think I'll take the normal lunch break of an hour, so we'll convene again at two with – so giving an indication to Mr Cantlay – with the hope that we might finish by about half past two or not long after that. Does that seem----?

MR MACGREGOR: Hopefully, my Lord, yes. I think I'm right; I don't have many more documents to go to, so I think hopefully we can move reasonably quickly.

THE CHAIR: Right. I mean, as you appreciate, Mr Cantlay, it's difficult to predict these things, but can I ask you to be available again at two o'clock?

THE WITNESS: Yes, certainly.

THE CHAIR: Thank you very much indeed. Right, we'll reconvene at two. Thank you. Thank you

(Luncheon adjournment)

THE CHAIR: So we are at two o'clock. So, Mr MacGregor, if you are ready to resume, and we have Mr Cantlay. I will say good afternoon to everyone who can hear me, and invite you, Mr MacGregor, to continue.

MR MACGREGOR: Thank you, my Lord. Mr Cantlay, if I could ask you to have in front of you, please, bundle 4, and page 102, please. This is a document called "A Policy on Design Quality for NHS Scotland" from 2010. Have you seen this document before?

A I have, yeah.

Q Okay. Could you just explain what's your understanding of the NHS Policy on Design Quality?

A Well, effectively, it's as set out in that document, as came out in, I think it was, 2010 and it sets out various requirements in terms of things that procuring authorities must do and talks about-- I think it talks about a design review process.

Q Thank you. So, if we could just look on, please, firstly, to page 112. In the middle of page 112, you'll see the bold heading "Mandatory Requirements", do you see that?

A Yeah.

Q Then if we could look over the page onto page 113 to paragraph 7, which states:

> "All NHS bodies engaged in the procurement of both new build and refurbishment of healthcare buildings must use and properly utilise the English Department of Health's Activity DataBase (ADB) as an

appropriate tool for briefing, design and commissioning. [If deemed inappropriate for a particular project and an alternative tool or approach is used, the responsibility is placed upon the NHSScotland Body to demonstrate that the alternative is of equal quality and value in its application.]"

Do you see that?

A I do, yeah.

Q Was that your understanding? For any NHS body, that the activity database would have to be used as an appropriate tool for briefing, design and commissioning? So the design would have to use the activity database?

A To the extent it's set out in this note, yeah.

Q Yeah, and if that wasn't going to be used, then it would be incumbent on the NHS body to demonstrate that the alternative they were using was of equal quality and value in its application?

A Yeah.

Q Do you recall any discussions between NHS Lothian and Mott MacDonald in relation to whether there should be any departure from the activity database being used as the tool for briefing, design and commissioning for the Project?

A I'm not aware of any and I wouldn't have been involved in any because had there been any they would have taken place, I'm sure, within the reference design workstream, which I didn't have an involvement. I presume, you know, that any discussion around about that would've probably predated my time in the project in any event, because presumably there was a conversation about it under the BAM contract, and so, in terms of the reference design, no, I'm not aware.

Q Okay. Thank you. I think just related to that, one of the issues the Inquiry is going to have to consider in due course is the detailed design, and in particular the design of the ventilation specification for the hospital. Now, at this stage of the Inquiry, I want to be absolutely clear, I don't want to ask you anything about the specifics of this project. I really just want to ask you a couple of questions at a high level of generality, but the Inquiry has heard evidence in relation to a document or a concept called an "environmental matrix". Have you heard that term before?

A Yes.

Q Now, Mr Maddocks, who again was one of the experts, an

expert engineer with experience in design of healthcare ventilation systems, having worked as an engineer for approximately 40 years, he was asked about that term. So I asked him specifically if he'd ever heard of the term an “environmental matrix”, and he described that as being an Excel spreadsheet-based system. Is that consistent with your understanding of what an environmental matrix is as a concept?

A Yes. I've seen environmental matrices being used on numerous projects and whether it's always Excel, I'm not sure, but, yeah, in effect, it is a spreadsheet which is pulling together all the environmental parameters into a single list against rooms so that they're all in effectively-- in one place.

Q Again, have you been involved in healthcare projects whereby an environmental matrix has been utilised?

A Yeah, I'm pretty sure. I'd need to go back and check the specifics, but I'm almost certain that the environmental matrix has been used in a number of the projects that I've been involved in, yeah.

Q Okay. It's just because I asked Mr Maddocks specifically. I said, “Have you ever been involved in a healthcare ventilation project where an environmental matrix has been adopted?” and he said not that he could recall. I then asked him, “Why not?” and I'll paraphrase the explanation, but certainly my understanding of his explanation was that room datasheets would really be the best practice, and you wouldn't adopt an alternative methodology such as an environmental matrix. Do you have any observations on the evidence that Mr Maddocks gave on that issue?

A My recollection of when environmental matrices started being used, and obviously this is only relating to the projects that I've been involved in, but it was before the project we're talking about now, and so it was in other revenue-funded projects, really. I think the driver for that was to be able to get, as I said, all the environmental parameters in a single place, and because of the fact that the room datasheets are being-- you know, because the design is being developed by a number of bidders and then ultimately one bidder, it's in that context that I have seen an environmental matrix used. I've only seen it on revenue-funded projects.

Q Okay. Thank you. Now, I think you’d mentioned-- we're still

looking at the 2010 design policy. You'd mentioned that your understanding was that there was a review process that had been introduced by the 2010 design policy. Is that possibly the NHS Design Assessment Process, sometimes called NDAP?

A Yeah, that's right. Yeah.

Q Could you explain to the Inquiry, what's your understanding-- I'll just use the acronym, the NDAP, but what's your understanding of what an NDAP is?

A Well, it seems to be a tripartite-- That guidance note effectively sets a tripartite approach, you know, across Scottish Government Health Directorate, HFS and A&DS(?), and it requires a design assessment to be done at three key stages: initial agreement, OBC stage and FPC stage. But obviously it came into force at a certain point in time and I'm sure it was to apply to any projects which were having their IEA submitted for approval after or sometime round about July 2010.

Q The Inquiry heard evidence from Mr Currie, the project director from NHS Lothian, and he said that an NDAP wasn't completed for the project. Now, you've obviously referred to the-- Do you know if an

NDAP was or wasn't concluded for the project?

A Well, from the correspondence I've looked at, I've seen a lot of correspondence over a period of months, some of which I was copied into at the time, trying to establish-- because the IEA for this project preceded the issue and therefore it wasn't necessarily mandatory as per the guidance, there was then a question of, you know, was it needed here or was it not? And I've seen a lot of correspondence and emails about trying to establish whether it was needed or not and I think-- you know, I think I've really set that out in my witness statement in terms of when that seemed to conclude, which seemed to be in an email that David Stillie sent on 2 of May, which seems to summarise a conversation he had with somebody at HFS that said-- I can't remember the actual wording, but it's set out in my witness statement, but in effect, it was saying it didn't seem like it was needed at this stage and there was a likelihood it might not be needed at the next stage either. So that-- As far as I can see in emails I got copied into, that would conclude that it didn't get carried out through pre-OBC.

Q Okay. So if we proceed

on the basis that an NDAP wasn't carried out certainly before the contract notice is issued, in your opinion and drawing on your experience, do you think it would have been beneficial to have carried out an NDAP process in relation to the project?

A I guess it depends on what the scope of an NDAP review would be. As with any review, you know, reviews add value, but it depends on the basis upon what the scope of the review would be.

Q Again, if we just think about some of the environmental information that we've talked about before, things like pressure rates and air changes per hour from Scottish Health technical memoranda, if there were any errors in a technical specification before the contract notice went out, do you think that an NDAP process would've picked up any such errors?

A Impossible to say because, again, it would depend on the scope. If an NDAP review was checking every single detail, then it might do. If an NDAP review is checking the design in generality or doing spot checks of detailed things, I don't know. So it would all depend on the scope of the review and level of

effort.

Q Okay. So would it be fair to say that your position would come to be that possibly it could have, but you wouldn't be able to say with absolute certainty that it would?

A Yeah, I think that's right. Yeah.

Q Thank you. Are you aware of a report that was conducted by Atkins in relation to the project?

A Yeah.

Q If I could ask you to have that report in front of you, please. It's in bundle 3, volume 2 at page 567. So bundle 3, volume 2, page 567. Is this what you were referring to there in our discussions as the “Atkins review”?

A Correct, yeah.

Q Could you just explain to the Inquiry, what's your understanding of why the Atkins report was produced and what was its purpose?

A Well, my understanding is as set out at the start of the report in whatever section, presumably one, which basically summarises the remit. Yeah, 1.1 summarises the remit. So, yeah, broad terms, it was a design review commissioned by Scottish Futures Trust to look at particular things of interest for them.

Q Okay. So if we could look to page 571, please. We see the

"Summary and Recommendations".

So it states:

> "The purpose of this Independent Review was to assess the design brief for the project to replace the Royal Hospital for Sick Children and the Department of Clinical Neurosciences (RHSC/DCN) on the Little France site. The review assessed the capacity of the project to deliver value for money by meeting the strategic aims of the programme; by making best use of space and opportunities for maximising sharing with other assets; and by minimising the whole-life costs."

Do you see that?

A Yeah.

Q So, effectively, is the whole thrust of this report about value for money as opposed to an incredibly detailed technical review of the design?

A Yeah.

Q If I can ask you to look on to page 576, please, and to the section headed "Reference Design".

A Yeah.

Q So it begins by stating:

> "At the point of our review the Reference Design was relatively under-developed considering the stage of the project. There was no clear and settled building diagram. This means that [for example]:-
>
> • The clinical adjacencies are not yet wholly resolved …"

Do you find it surprising that at the point that Atkins conducted their review that the reference design was what they referred to as relatively underdeveloped?

A Yeah, but then I guess it depends on what they were assuming to be a reference design.

Q What do you mean by that?

A Well, it depends what their definition of a reference design is because, as I explained earlier, I don't think there's a set industry definition of what a reference design is, and therefore, I guess to make that statement, they must have had a presumption in their mind and measuring it or comparing it against that presumption, I guess. So-- But this report-- Can I just check the date of this report, sorry?

Q Yes. It's on page 567, if we go back. So it's 12 December 2011.

A Yeah. Okay. So-- Yeah. So I think that's-- and I couldn't-- you know, I couldn't be sure at what

stage the reference design was at that point in time, but quite near the end of the completion of it. So, yeah, it's-- as I say, to me that statement-- I would need to know what they were comparing it against to be able to understand just how out of the ordinary or not that statement might be.

Q Thank you. If I could ask you to look on to page 637, please. So this is a section noting that NHS Lothian undertook an AEDET on 12 August 2011. Can you assist the Inquiry, what's an AEDET assessment?

A It's an AEDET assessment, which is the Department of Health published design assessment tool, which is typically used across healthcare projects to review a number of different aspects.

Q Okay. If we look to the coloured table, do you see letter F that's states “Engineering”?

A Yeah.

Q Then that that scored a zero out of five.

A Yeah.

Q Then if we look to paragraph 7.2.3. It refers to the “Scored and Un-scored Elements”.

A Yeah.

Q Stating:

> “A number of elements are unable to be scored at this stage because the design is insufficiently developed. In particular performance, engineering and construction cannot be scored at this stage.”

Do you find it surprising that engineering couldn't be scored at all at this stage of the project?

A No, not really. Given the focus of the reference design was round about the spatial planning, I would’ve-- that doesn't seem surprising to me.

Q Because the report continues, “However, some elements which have not been scored are surprising …” and then they’re listed. So we understand that you’re not surprised that you weren't able to score engineering because it was under-developed at this stage?

A No. I'm not surprised at that. The basis upon which they decided not to score it, I'm not sure, but I'm not necessarily surprised that it isn't scored at that stage. Thinking about the overall process of doing a reference design and then on a-- bidders do their own design and then the preferred bidder, you know, develops that into the final design to be built.

Q Thank you. If I could ask

you to look on, please, to page 644 and to the section at the very bottom, 7.8, “Building Services and Progress to BREEAM”. Do you see that?

A Yeah.

Q It states:

“The approach to building services design and progress towards a high BREEAM score was not assessed as it anticipated this will form part of the technical monitoring of the project by both the Scottish Government and HFS.”

Do you know what's meant by the term “technical monitoring” and how that was to be implemented?

A I don't know what's meant by those two words to create a phrase, other than I know what both words mean in isolation. I suspect-- Well, I'd be presuming what they mean by this, but I'm assuming they're referring to, as the project progresses, there will be some focus on looking at what level of BREEAM score the project achieves.

Q Thank you. Again, I appreciate that you weren't involved in the detail of the outline business case, but do you know what reports, if any, in relation to the technical aspects of the design were included within the outline business case?

A Which-- Sorry, can you say that again?

Q Yeah. I was just asking if you were aware of what reports, if any, relating to technical design matters were included within the outline business case?

A Not sure. I would need to go back and see if any of them were and, if so, which ones.

Q Thank you. If I could ask you to have your witness statement in front of you, please, and if we could look to paragraph 53.

A Yep. Yeah.

Q So, at paragraph 53, you state: “The reference design team had an obligation to check the reference design against the applicable guidance.” Can I just check, what do you mean by that phrase, “the applicable guidance”?

A The guidance that the construction requirements-- the board’s construction requirements set out, which in effect is the-- refers a lot to the standard Scottish health technical guidance, SHTM’s and the like.

Q So guidance such as Scottish Health Technical Memorandum series?

A Yep, yeah.

Q In terms of the obligation to check the reference design against

that guidance, would you agree that, if the reference design didn't comply with that guidance, then something's gone wrong within the project?

A Yes, and-- Well, there's a-- there's an issue around about the level to which the design is developed at that stage and therefore, you know, to what extent it complies with the guidance, but the requirement was to-- You know, the requirement is ultimately to deliver the project in accordance with the guidance, and this was asking the reference design team, at the point they had taken the design to, whether it was complying with the board's construction requirements. This relates back to the question in the session we had pre-lunch about "Did anybody check reference design?", and-- you know, and I answered that "No" because this part of the team was employed to create the reference design, and this part that we're talking about now was getting confirmation that they believed they had done that in accordance with the required guidance.

Q So, again, just so I can understand things, and we'll take it in stages and come on and look at the emails that you helpfully refer to within your statement, but Mott MacDonald want to make sure that the reference design team are designing the reference design in compliance with guidance including the Scottish Health Technical Memoranda.

A Yeah.

Q So, again, just to go back to that very clear question that I asked: if the reference design didn't comply with Scottish Health Technical Memoranda, something would have gone wrong in the project, is that correct?

A Yes, subject to it's only developed to a certain point in time, and the health guidance that they are designing-- the health guidance sets out the endpoint of what a design must achieve, and they were only at an early stage and therefore there's a gap, you know, that required the ongoing development to be able to ultimately meet a design guidance. You couldn't say, at one part of the journey that the obligations and the design guidance has been met. That wouldn't be possible until you finished the design.

Q Thank you. If I could ask you to look within-- at bundle 5, to page 78, please. You should see an email from Andrew Duncan to Thomas Brady. Could you explain who is Andrew Duncan and who's Thomas Brady?

A Thomas Brady we mentioned earlier when we looked at

the organigram and was the lead design manager. Andy Duncan, again referring to that design, was one of the technical advisory team. Basically, I-- from memory, he was coordinating the development of the BCRs.

Q Okay. This email states:

"There is an action on the Reference Design Team to confirm that the Reference Design complies with NHS Guidance and key legislation. I attach the requirement schedule for each of the Reference Designers to respond to. We require a statement from each designer to confirm that the Reference Design complies with the Requirements Schedule. Should it not fully comply then each designer shall confirm that the Reference Design complies with the Requirements Schedule with a schedule of derogations. We will need the compliance statement from the Reference Designers before they leave the project to work for potential bidders."

So, could you explain your understanding of why that email is being sent?

A Because the reference design team are ring fenced develop developing a design to a set of requirements that's then going to come out of that team and be used in a procurement, and therefore our technical Advisory team sitting – not part of the reference design team to the core technical advisory team – are asking the reference design team to confirm that to the extent possible, they have developed a reference design in accordance with the requirements.

Q Thank you.

A Then if we could look on to, still within bundle 5, to page 104, please, and at the bottom of that page, you should see an email from Thomas Brady to Andrew Duncan. Do you see that?

A Yeah.

Q It states:

"Andy
As I stated at this mornings meeting, the RDT are unlikely to be in a position to confirm compliance, or otherwise, by Monday 5th March.

> Their (sic) is a significant number of documents listed in your request which the designers need to check against before compliance can be confirmed.
>
> I would reconfirm that the reference design is only at Stage C and as such the level of detail produced to date may not be at a level to provide confirmation of compliance."

So, again, just an inference, is that really echoing what you'd said that you-- given the state of development, you might not be able to confirm at this stage whether there's full compliance or not?

A Yes, because you'd only be able to do that when the design was 100 per cent complete, but what we were asking them to do was confirm compliance to the extent they can at the stage that that design was taken to.

Q Now, if we look on to page 113, please, is thee an email there from Thomas Brady to Andrew Duncan saying "Andy, please find attached the coordinated response from the RDT on compliance…" Do you see that?

A Yeah.

Q Now, if we look back up to page 107, have you seen this document before and, if so, could you explain to the Inquiry what we see on page 107?

A It is the document being referred to in Tom's email. So this is a document that was getting asked for by Andy Duncan. Tom had said, "In progress… might not be 5 March" or whatever the date was. This is now a joint document from the design team, so two sets of architects, Hulley & Kirkwood and Arup confirming compliance against those requirements. So there's the documents down the left-hand side, and then the right-hand side have provided comment.

Q Okay. So, if we just start on the top, it says:

> "The following are the comments compiled by Nightingale Associates, BMJ Architects, Hulley & Kirkwood and Arup regarding Mott MacDonald document 'Reference Design Compliance Statement Requirement' dated 28th February 2012 and matters relating to

compliance generally and derogations…"

Then it states:

"1. Generally

As mentioned in NA e-mail dated 29th February, issues relating to compliance shall only be relevant in so far as the proposals have generally been required to be developed to an equivalent level of RIBA Stage C."

Again, I think you'd already explained what RIBA stage C was as opposed to other stages such as RIBA stage D earlier in your evidence.

We then see section 2, "Reference Design Compliance Statement Requirement". So, if we look on the left-hand side, the second entry says: "HAI Scribe: We followed this guidance in tandem with advice from NHS Lothian." Below that: "Health Building Notes. We have followed these where there is no equivalent Scottish guidance." There's then reference to Health Facilities Notes, below that Health Guidance Notes and Scottish Health Guidance Notes. Then we see an entry that says: "Health Technical Memoranda and Scottish Health Technical Memoranda" with the corresponding entry: "We have followed SHTMs and also HTMs where there is no Scottish equivalent." Do you see that?

A Yeah.

Q So, again, just to be clear, at the date this document was produced, was Mott MacDonald's understanding that the reference design fully complied with both Health Technical Memoranda and Scottish Health Technical Memoranda?

A To the extent the design was developed, yeah.

Q Thank you. (After a pause) Just in terms of that schedule, do you know who was responsible for effectively reviewing and accepting the schedule?

A I presume it went back to Andy Duncan, so the answer to the question is "No", but my presumption would be Andy Duncan.

Q Okay, and within this list, we don't really see any derogation relating to issues such as pressurisation or air flow rates, do we?

A Not as far as I can tell, no.

Q If I could just check again, and this is really going back to paragraph 53 of your statement where

you say that the reference design team had an obligation to check the reference design against the applicable guidance, can I just check by reference design team do you mean a team employed by NHS Lothian as opposed to any of the potential bidders?

A I mean the team that we talked about earlier being ringfenced as part of that technical advisory team. Yeah, so when we went through the organigram, the team that was on the left.

MR MACGREGOR: Thank you. If you just bear with me for one moment, Mr Cantlay. Thank you, Mr Cantlay. I don't have any further questions. Lord Brodie may have questions for you or equally there may be potentially applications from core participant but thank you for answering my questions today.

THE WITNESS: Thank you.

THE CHAIR: Mr Cantlay, could you just give me a moment? I want to check on something. Sorry, Mr Cantlay, we're having difficulty finding a particular document. (To an associate) Well, it's a contract control order. Mr Cantlay, maybe you can answer the question without me asking you-- or without me having the document in front of you (sic). You're free to have the document. The document I was looking for----

MR MACGREGOR: Lord Brodie, if it assists, I think the contract control order is in bundle 5, it's document 1 at page 4.

THE CHAIR: Right, I'm----

MR MACGREGOR: Bundle 5, document 1, page 4.

THE CHAIR: Right. It really is a matter of fine detail. At page 9, you refer to this by Mr MacGregor, we see the introduction of Capita, and I perhaps should know the answer to this question, but I haven't-- The question really is, where does Capita come in at this stage of the contract control order which is the initial appointment of the reference design team? Have Capita been previously involved?

A Yeah. So Capita, I think at the BAM stage of the project, used to be called "Tribal"----

Q Well, I was wondering about that. So, whether to do with either change of name or maybe an acquisition of a smaller company by a larger company, what had been Tribal becomes Capita. Is that the explanation?

A Correct, yeah.

THE CHAIR: Right, that was the only point that I wished to raise. Now, if you just give me a moment, Mr

Cantlay, I'll just check with the legal representatives, whether there's anything. Does anything arise out of the questioning of Mr Cantlay that you wish to bring to my attention? Right, I am not getting any indication that there is anything that arises, in which case. Mr Cantlay, thank you very much for your evidence. Again, apologies for the technical problems at the beginning, but thank you for cooperating in effectively solving these problems, which, from at least my perspective, the evidence has been very clear. So thank you very much, Mr Cantlay. We'll say goodbye to you, and perhaps just drop off the call at this stage.

THE WITNESS: Okay, thank you.

THE CHAIR: Thank you.

(The witness withdrew)

THE CHAIR: Now, Mr MacGregor, as I understand it, that brings us to the end of the evidence you propose to lead in this stage of the hearings.

MR MACGREGOR: Yes, my Lord, that's correct. Obviously, the Inquiry hasn't heard evidence from Mr Storrar. So there is still, I think, some issues within what was originally going to be just the May hearings that would still have to be dealt with, but certainly that's all the witnesses that were due to give evidence that now have given evidence apart from Mr Storer.

THE CHAIR: Right. Well, addressing the legal representatives of the core participants, can I say again, thank you for your attendance and participation in this hearing. There will be further hearings both in relation to Edinburgh and Glasgow, as you're well aware, and we will announce and advise you of the arrangements as and when we finalise them. As was explained in the preliminary hearing in respect of these oral hearings, I don't propose to ask for closing statements at this stage. Later, I will ask the deputy counsel to the Inquiry for his closing statement after we've heard more evidence, and there will then be an invitation to core participants to submit their closing statements under reference to counsel for the Inquiry's statement. I think the only other procedural matter I need to mention at this stage is that, as you've seen, we've departed from what we intended to be the means of taking evidence today; however, a transcript of today's evidence will be prepared as usual and in due course will be posted on the Inquiry website. For present, I think

these are the only matters which I would propose to deal with. So thank you again, and no doubt we will see each other at a later stage in the Inquiry – although there will be much work to be done both by the Inquiry team and by the legal representatives of the core participants before then. So thank you again and have a good weekend.

(Session Ends)