Thursday, 24 September 2020

SIR MARTIN MOORE-BICK: Good morning, everyone. Welcome to today's hearing. Today we are going to begin by hearing some evidence from a representative of the M&E subcontractor, Max Fordham, I think.

MS GRANGE: Yes, that's correct.

SIR MARTIN MOORE-BICK: Yes, Ms Grange.

MS GRANGE: Yes, Mr Andrew McQuatt, please.

MR ANDREW McQUATT (affirmed)

SIR MARTIN MOORE-BICK: Thank you very much, Mr McQuatt.

Would you like to sit down and make yourself comfortable.

Yes, Ms Grange.

Questions from COUNSEL TO THE INQUIRY

MS GRANGE: Thank you very much for attending today to give your evidence. We really appreciate that.

If you have any difficulty understanding anything that I'm asking you, please ask me to repeat the question or put it in a different way.

If you need a break at any point, please just let us know.

Also, try to keep your voice up so that the transcriber sitting to your right can take a note of what you are saying.

You have made one statement to the Inquiry dated 21 September 2018. Can we turn that up: {MAX00017292}, and if we can look on page 27 {MAX00017292/27} of that statement, is that your signature there?

A. Yes.

Q. We can see the date. Actually, I think it's 27 September 2018; is that correct? I think I had said the 21st.

A. 27th, yes.

Q. Thank you.

Have you read that recently?

A. Yes, I have.

Q. Are its contents true?

A. Yes.

Q. Great.

Have you discussed your evidence with anyone before coming here today?

A. No.

Q. Great.

Just a few questions in terms of your background.

If we look at paragraph 6 of your statement on page 2 (MAX00017292/2), there we can see you helpfully explain that you graduated from the University of Edinburgh with an MEng mechanical engineering degree, and then you began work at Max Fordham in Edinburgh as a graduate engineer in June 2007. You became a partner in the LLP, in Max Fordham, on 5 May 2011, and you remain working at Max Fordham to this date.

Is it right you're still working at Max Fordham?

A. That's correct, yeah.

Q. In the next paragraph, at paragraph 7, you say: "During my time working at Max Fordham prior to working on Grenfell Tower I have worked in a range of project sectors …" We can see that included housing, individual private dwellings, further education colleges, offices, cultural, schools there.

Had you worked on a high-rise residential project before the Grenfell Tower project?

A. No.

Q. What about high-rise residential projects involving the overcladding of the building?

A. No.

Q. Now, we know that on the Grenfell project Max Fordham was appointed as building services engineers on the project; that's correct, isn't it?

A. Yes, and acousticians, but the acousticians were run from a separate area (?).

Q. And acousticians?

A. Yeah.

Q. Thank you.

Is it right that such building services engineers are sometimes referred to as M&E engineers, standing for mechanical and electrical?

A. That's right, yes.

Q. You were the project engineer on the Grenfell project; is that right?

A. That's right, yeah.

Q. Is it correct that in your role as project engineer, you were responsible for the day-to-day running of the project for Max Fordham?

A. Yes.

Q. We know from your statement that you were involved in the project between 31 May 2012 and 23 May 2013, when your involvement with the project ended and you became involved in other projects for Max Fordham; is that right?

A. Yes.

Q. Thank you.

Now, we're going to focus today, because this is what we're looking at in Module 1, on the exterior of the building and in particular with you at the insulation material being used on the spandrels and the columns.
Q. Is it right that the purpose of adding insulation to a building is to improve its thermal efficiency?

A. Yes, I agree with that.

Q. When people speak of improving thermal efficiency, that means reducing the rate at which heat travels from a hotter element to a colder one; is that correct?

A. Yes. Yes, I think it is the document that we were using.

Q. Now, in relation to the building as a whole, is it right that, when assessing its thermal performance, you need to consider how well or badly each of the elements performs?

A. Yes, yeah.

Q. Is it right that the building element is a part of the building, so for example the walls, the windows the roof; is that correct?

A. Yeah, that’s correct.

Q. Is it right that the thermal resistance of each building element is shown by its U-value?

A. Yes, yeah.

Q. And this is also measured in watts per metre square kelvin as well; is that correct?

A. That’s right. So, yeah, I think watts per metre squared kelvin would be the U-value. The lambda value doesn’t have the metre squared; it’s to do with the linear thickness.

Q. I see, okay.

A. Yes.

Q. -- in terms of thermal efficiency?

A. Thermal efficiency, yes.

Q. Is it correct that generally -- I think you have already confirmed this -- you will need less of a material with a lower lambda value to achieve the desired U-value than you would of a material with a higher lambda value?

A. That’s correct, yes.

Q. Now, in terms of the Building Regulations, do you agree that the U-value of a building element is important because there are rules on how high it can be under the Building Regulations?

A. I do, yes.

Q. Were you aware at the time that the statutory guidance about this is contained in Approved Document L --

A. Yes.

Q. -- which is one of the practical guidance documents issued pursuant to the Building Regulations?

A. Yes.

Q. Is it right that on the Grenfell project you were looking at Approved Document L1B?

A. Yes. Erm ...

Q. Now, let’s go to Approved Document L1B. This is ADL in force at the time you were working on the Grenfell project? We can see it’s the 2010 edition and often it’s -- I always have to look it up to tell me which one.

A. I do, yes.

Q. Did you take Approved Document L into consideration when you were setting the U-value for Grenfell Tower?

A. I personally ... yes, I took it into consideration as far as I checked that the U-values that were proposed were in line with --

Q. Yes.

A. -- part L, yes.

Q. Thank you.

A. Yes. Yes, I think it is the document that we were using.

Q. Thank you.

A. Yes. Yes, I think it is the document that we were using.

Q. If we turn on to page 19 {INQ00011283/19}, we can see in the right-hand column that there’s a heading, “Renovation of thermal elements”, and it makes clear there that:

"For the purposes of this Approved Document,
renovation of a thermal element through:

a. the provision of a new layer means either of the following activities:

i. Cladding or rendering the external surface of the thermal element; or

ii. Dry-lining the internal surface of a thermal element.

Q. Do you see that there?
A. I do, yes.

Q. Was that consistent with your understanding that that’s what renovation of a thermal element meant?
A. Yes.

Q. Thank you.
A. That’s correct, yes.

Q. Q. Now, the next paragraph at paragraph 5.8 explains what renovation of a thermal element meant?
A. Yes.

Q. Thank you.
A. Absolutely, yes.

Q. Now, we’re going to look at table 3 in a moment and see what renovation of a thermal element meant?
A. Yes.

Q. Yes.
A. Yes.

Q. We’re going to look at table 3 in a moment and see what it said in terms of U-values and the guidance it gave, but before we go to table 3, if we just look while we’re in this part of the document over on page 20 of the Grenfell project, that if you couldn’t achieve whatever was the best standard that was technically and functionally feasible or would not achieve a simple payback of 15 years or less, the element should be upgraded to the best standard that is technically and functionally feasible and which can be achieved within a simple payback of no greater than 15 years.

Then there is some guidance on that approach in appendix A. I want to check: did you understand that at the time of the Grenfell project, that if you couldn’t achieve the U-values that were set out in the guidance here, you had to achieve whatever was the best standard that was technically and functionally feasible?
A. Yes, I did.

Q. Yes.
A. I do, yes.

Q. Again, at the time of the Grenfell project, were you aware that Approved Document L made this link back to, for example, Part B, “Fire safety”, Part C (site preparation . . . )? Then other approved documents are also mentioned in that list. Do you see that there?
Now, were you familiar in general with schedule 1 to the project.

Q. Yes.

A. We often have to take a piece of ductwork through a compartment wall, for example.

Q. Yes.

A. So we would refer to part B because part B would give us the rules that we needed to know.

Q. Yes.

A. -- for those elements. So, yes, I was aware of part B in that context.

Q. Yes. Exactly.

Picking up on that, you also might, with those pipework and ductwork locations, have to think about insulation in those areas, mightn't you, as well?

A. The insulation of --

Q. Of pipework and ductwork --

A. -- the pipework, yes.

Q. -- in compartments. You might have to think about insulation around the pipework; is that correct?

A. Yes.

Q. Yes, and that --

A. Not necessarily in relation to part B. I think if I was thinking of insulation around pipework I would be thinking more about part L and energy conservation --

Q. I see.

A. -- and things like that.

Q. Okay.

SIR MARTIN MOORE-BICK: Well, presumably you would be thinking about part B in relation to things like firestopping if you were putting ducts through existing walls, wouldn't you?

A. That's right, yes.

MS GRANGE: I now want to turn to some questions about your understanding of the requirements relating to fire safety at the time you worked on the Grenfell project.

Now, were you familiar in general with schedule 1 to the Building Regulations and the fact that there were functional requirements set out therein?

A. Yes.

Q. Were you aware that there was part B, "Fire safety", within schedule 1 of the Building Regulations?

A. Yes.

Q. Were you familiar with Approved Document B? Had you ever had to look at that in your work as a mechanical and electrical engineer?

A. Yes. I think it's the approved documents that you would go to on a day-to-day basis to ... when you're dealing with the Building Regulations issues, you would go to the approved document part B as your kind of first stop.

Q. In practice, how would you access those approved documents? Did you have them in hard copy in the office or did you look at them electronically?

A. Tend to look at them electronically.

Q. Yes.

A. And you would probably look at the index, do a word search for the types of things that you were thinking about at that particular time.

Q. Yes. So that was a common occurrence as part of your day-to-day job?

A. Yes.

Q. Thank you.

Did you have an awareness of the B4 requirements in relation to external flame spread? Was that something that was on your radar?

A. No.

Q. What was your understanding of the purpose of something like Approved Document B? What did you understand the purpose of it to be?

A. I understood that if you followed the guidance in the approved documents, then you are showing compliance with the functional requirements of the Building Regulations. So if you were operating within the bounds of the approved documents, you were in a safe place --

Q. Yes.

A. -- in terms of compliance.

Q. Yes.

Now, at any stage when you were working on the Grenfell project, did you come to read Approved Document B on fire safety, or any part of it?

A. I think -- I would have accessed Approved Document B probably when we were discussing elements like the dry riser and about moving the inlet valve to the dry riser. I know I would have checked Approved Document B because that would have been my go-to place to check on the rules for that sort of thing. But I certainly didn't read it cover to cover.

Q. No, understood.

A. And I certainly didn't ever look up part B4.

Q. No.

More specifically, then, when you were considering what materials to be used as insulation in the tower and making suggestions about those materials -- and we're going to come on to look at what you did in that regard in a moment -- did you ever come to consider Approved Document B on fire safety?

A. No, I didn't.
Q. Who did you think within the design team would be considering the requirements of Approved Document B relevant to the insulation of the external wall?
A. I would have thought the architect who was designing that element would have been looking at that, and it wouldn't have surprised me if they had sought further guidance from other parties like the fire engineer, but that would have been -- my interface probably on that would have been with the architect.
Q. Yes, thank you.

Now, I appreciate you didn’t come to specifically look at Approved Document B, this is [CLG00000224/93]. This is the beginning of the B4 section which you have already explained you didn’t look at during the project, but I just want to ask you a couple of quick questions about this.

On page 95 [CLG00000224/95], in the right-hand column towards the bottom of that page, we get a statement there in the first paragraph, where it says: “The external envelope of a building should not provide a medium for fire spread if it is likely to be a risk to health or safety. The use of combustible materials in the cladding system and extensive cavities may present such a risk in tall buildings.”

Now, you see that there.

Now, I appreciate you didn’t come to specifically look at this on the project, but were you generally aware at the time of the project that the use of combustible materials in the cladding system and extensive cavities might present such a risk in tall buildings?
A. No, I wasn’t.
Q. Were you aware that there was specific guidance given in Approved Document B about insulation materials and their combustibility?
A. No, I wasn’t.
Q. So if we just look at one more thing in Approved Document B, on page 96 [CLG00000224/96], we get paragraph 12.7, if we can blow that up. There we see it, “Insulation Materials/Products”. So it says: “In a building with a storey 18m or more above ground level any insulation product, filler material (not including gaskets, sealants and similar) etc. used in the external wall construction should be of limited combustibility ...”
Do you see that there?
A. Yes.
Q. Is it right that you weren’t aware at the time that insulation products on buildings above 18 metres should be something called limited combustibility?
A. That’s correct, yeah.
Q. Had you ever heard the term “limited combustibility” being used about the fire performance of materials such as insulation?
A. No.
Q. Had you ever heard of the term “class 0” or “national class 0”, about building materials, including insulation materials?
A. I couldn’t -- I can’t recall with any certainty. There’s been so -- you know, between then and now there has been so much talk of things like this, and it’s really difficult --

A. -- to pin that down, whether I knew about that or not.
Q. Okay.

In your time at Max Fordham, had you ever attended any courses or other training on the Building Regulations and the associated guidance, including in Approved Document B on fire safety?
A. I wouldn’t say we had a -- you know, we never had one particular lecture that could -- with that heading that springs to mind. I guess one of the ways that we worked, as I kind of said before, the approved documents were -- you know, they are a go-to document in terms of the way that we’re trained. We would be shown by our supervisors to look at these documents and to reference them. And then things like -- often when we have CPDs, so people would come into our practice and they would maybe give us a talk on a certain subject -- and that subject would never be, “I’m coming in to do a talk on the Building Regulations”, but it would be very common for a manufacturer to come in and have some slides on the Building Regulations as part of the talk.

So I would say, throughout my career, the topic of Building Regulations and how products might -- you know, if a manufacturer comes in to talk about something, then they might reference the Building Regulations...
Q. Yes.

Now, you were talking about CPD there and I think you mentioned a couple of times that manufacturers would come in and talk to you.

Is it right that a lot of the CPD that was done through Max Fordham was as a result of manufacturers
At the time of the Grenfell project, were you aware of any other industry guidance documents which were relevant to external wall construction or the materials to be used, for example, for an insulation product?

Q. Yes.

A. No.

Q. So if I said that there might have been guidance by something called the Centre for Windows and Cladding Technology, the CWCT, would you have ever come to look at that?

A. No.

Q. No.

Now, just before we get into what happened on the project and your involvement in the insulation issue, I want to just explore briefly Max Fordham’s contractual responsibilities on the project and the scope of work that they were doing. Now, we know that the initial proposal from Max Fordham was a fee proposal put forward by your colleague Bill Watts. Were you aware of that at the time?

A. I can’t honestly remember.

Q. Don’t worry.

A. If --

Q. Let’s just look at that fee proposal, this is [(MAX000000075), and this is the initial fee proposal, I think there was a subsequent one that was very similar, and this one was dated 21 June 2012. Did you ever see any documents like this or any other contractual terms relevant to Max Fordham’s appointment to the Grenfell project?

A. Again, it’s very difficult to say with absolute certainty that I saw this, but all I can say is it’s quite normal, working on a project, to have a look at the fee offer, to check it to make sure you’re doing the right things.

Q. Yeah. So you may well have seen --

A. I may well have done.

Q. -- this at the time? Sorry, carry on.

A. No, I may well have seen this.

Q. Okay.

Just looking at this, we can see in the first part, under the heading "Scope", three paragraphs down, there’s a sentence that begins: “We understand that the priorities of the refurbishment of Grenfell Tower are as follows …” Then there is a list of priorities, and the third one there is: “Improving the thermal efficiency and visual appearance of the façade, possibly complementary to KALC.”

Now, just breaking that down, did you understand that one of Max Fordham’s role was to help improve the thermal efficiency of the façade?

A. Yes.

Q. Were you aware that it was one of the key priorities of the refurbishment of Grenfell Tower?

A. Yes. I recall my very first visit to the tower, getting off at the train station, looking up at the tower with Bill, and Bill talking me through what the job was and what we were going to do, and very clearly, looking at it: overcladding, that was going to happen, that was part of it. So it was very much embedded in my mind that that was going to be part of this job.

Q. Thank you.

Was it also your understanding that visual appearance was a priority for the refurbishment?

A. I can’t see why it wouldn’t have been, you know, you’re making such a huge intervention to this tower, you’re obviously going to change its appearance by insulating it, you’re going to change its appearance in a really major way --

Q. Yes.

A. -- and so, yeah.

Q. Yes.

A. I think we’ve said here, with the KALC project, you know, you have got the new academy and leisure centre next door, so I think they wanted to help tie it all together.

Q. Thank you.

Now, if we look at the bottom of this page for
Q. At the time of the project, did you understand that those were two of the key services that Max Fordham was providing on the job?

A. I believe I would have done. I think those additional services were something that we quite commonly would put into --

Q. Yes.

A. -- one of these, because it’s a place where we can add value to our offers, so that’s quite a common thing, so I believe I would have been aware.

Q. Yes, understood. Those do appear in the final version of the signed ACE agreement between the TMO and Max Fordham. We’ve got that document. Did you understand that Max Fordham was responsible on the project for the provision of consultancy services and advice in relation to energy strategy and

sustainability pursuant to the contract with the TMO?

A. I believe so, yes.

Q. Now, the contract that was subsequently signed in fact incorporated the ACE schedule of services part G(c), not part G(b). Did you have any involvement in that?

A. No, I didn’t.

Q. Fine.

Now, in terms of others that were appointed on the project, when did you become aware that Studio E had been appointed as architect on the project?

A. For me, as soon as I started on the project, they were already the architects, and I was introduced -- so Bill had already laid the groundwork for setting the project up, and so by the time I came on to the project, I was very much being introduced to: this is the team, this is what’s going to happen.

Q. Yes.

A. And run with the -- start on the design work, essentially.

Q. Yes.

Were you also aware that Exova had been engaged by the TMO to provide some fire safety engineering services?

A. Yes, I think I was, yes, because I did ask them some questions on the smoke vent system on the project.

Q. Yes.

A. So, yeah, I knew that they were involved.

Q. If we can look now at an email, this is [SEA00003568], and I want the second email down on that page, sent at 21.20. Now, this is not an email that you were involved in, it’s a chain between Mr Kuszell of Studio E and Mr Sounes at Studio E, but I just want to ask you something about it.

So I want to look in particular at the last paragraph. He says there:

“I feel first I need to acknowledge receipt, ask to meet, then walk the site with him (?) to understand the scope described, probably with Neil.”

Then he says this:

“We are a little green on process and technicality so I propose some rapid [CPD] - MF being my first point of call.”

Then he said:

“I will hold off circulating this until we understand their thinking on consultants.”

Can you see that there?

A. Yes, I can, yes.

Q. Now, this is a very early email that Mr Sounes sends to Mr Kuszell about the prospect of Studio E being involved in the Grenfell project, and when Mr Sounes gave
Evidence, he confirmed that MF there, "MF being my first point of call", was Max Fordham. Yes?

Q. Yes.

A. So, yeah, as we've said, this is a long time before the start of my involvement in the project. All I could add to that would be: I know from looking at our email records that there were other people at Max Fordham who seemed to have conversations, who did -- I think one person did go to site with Bruce, possibly, before I was involved. I was -- I only recently became aware of this.

Q. Yes.

A. When I started on the project, I'd assumed I was the first Max Fordham engineer to be shown around the building, but only recently I discovered that that's not necessarily the case, maybe some other people had done earlier on, perhaps in February time.

Q. Yes.

A. But I couldn't add anything else to what they might have said or ...

Q. Yes, okay.

A. In his evidence, Mr Sounes, when asked about this, said he thought that it involved a consultation which

Q. Yes.

A. It wasn't a consultation with you?

Q. No.

A. Was it your understanding, when you were working on the project and when you were involved, that Studio E were relying heavily on Max Fordham helping them understand how to go about that kind of project?

(Q) .

A. I don't think so. I think -- obviously we'll come on to the emails.

Q. Yes.

A. The emails focus heavily on insulation, but if you don't take the insulation into account just yet, there wasn't a -- there wasn't emails asking us how should do other elements of the cladding system --

Q. Right.

A. -- you know. So, no, I didn't feel like we were being asked really at those early stages to comment on the technicalities of the façade.

Q. In your dealings with Studio E on the project, did those dealings ever suggest to you that they might be inexperienced with regards to technical issues connected with the refurbishment?

A. I knew that the project engineer that I was working with, Adrian, I knew he also hadn't done a high-rise when we were working, because when we were walking round the tower he told me as such. But I just -- it was my experience that people often do -- everyone does something for the first time, and so that didn't really ring alarm bells for me, that was just the architect I was working with, who sat below Bruce, so I wasn't viewing it as a -- I wasn't assessing Studio E as a practice, it was just between the two of us, as two people working on a job, and I knew I felt supported, but I couldn't comment on --

Q. Yes.

A. -- how he felt.

Q. Thank you.

You mentioned Adrian there. Was that Adrian Jess at Studio E?

A. Adrian Jess, yes.

Q. Yes, thank you.

Let's just look at Mr Sounes' witness statement for a moment. This is [SEA00014273/32], and I want to look at paragraph 64. He says this:

"In the internal email I expressed my view that I felt Studio E was a 'little green on process and technicality', because Studio E, as a practice, had not previously been involved in high-rise residential,"

Q. Yes.

A. So I think in terms of what Studio E were leaning on us, it would have been quite rightly in the areas that we were employed to give advice on.

Q. Yes.

A. Like the heating and hot water system.

Q. And in relation specifically to the insulation of the tower and improving the thermal efficiency with the overcladding, did you ever get the impression that Studio E were relying heavily on Max Fordham helping them understand how to go about that kind of project?

(Q) .

A. I don't think so. I think -- obviously we'll come on to the emails.

Q. Yes.
heating renewal nor the overcladding of occupied buildings. I said I would speak to Max Fordham to develop my understanding of the process. I learnt that they had indeed been involved in similar projects before, and despite my initial uncertainty, I was comfortable that Studio E had the experience and expertise to take on the work being discussed at this stage.”

Do you see that there?

A. I do, yes.

Q. Who was it, do you think, at Max Fordham that Mr Sounes might have spoken to about similar projects before?

A. It must -- it certainly wasn’t me. It would have had to have been Bill Watts --

Q. Bill Watts, yes.

A. -- or Mark Palmer, who was actually my line manager.

Q. But probably Bill Watts, because he was setting the project up.

A. Yes.

Now, at this point I just want to look at an email relating to Exova. This is [SEA00005686]. Again, this is not an email you were involved in, but what we see here is in August 2012 Mr Sounes gives Cate Cooney at Exova some contact details, including your contact details. He says, “The contact at Max Fordham (Services Engineers) [is] ...”

My question for you is: did you ever have any communications with Exova in relation to the choice of insulation for the rainscreen cladding system on the tower?

A. No, I didn’t.

Q. Now, prior to putting forward the fee proposal, Max Fordham were present at several early design team meetings, and I just want to look at a few of the minutes of those meetings.

If we can go to [ART00000037], this is a design team meeting on Thursday, 24 May 2012, and this was attended by your colleague, Bill Watts. He is there in the “Present” list. You are not there, either in the “Present” either or in the “Distribution” list for this one.

On page 2 [ART00000037/2] of that document, under “Services”, I just want to look at what the minutes record. So it’s in the middle of the page, and I want to look at the second paragraph down, and it says:

“Design team need environmental design criteria: U-values, ventilation openings etc to progress cladding design. Options discussed: overcladding, internal lining, fixed windows with acoustic [louvres].”

Do you see that there?

A. I do, yes.

Q. Now, with reference to internal lining, can you help us as to what that reference might be referring to?

A. So that would be talking about whether -- well, I assume, because obviously I wasn’t at this meeting --

Q. Yes.

A. -- but I think we might have had a similar conversation at a meeting I was at, just to -- so when we’re talking about internal lining, it would be: let’s not put the insulation on the outside of the building, let’s put it on the inside, on the flat side of the tower.

Q. Were you ever involved in a discussion about that on the project?

A. Only very briefly.

Q. Yes.

A. It was very quickly discounted, as there was far too much disruption. You know, these were people’s homes, and the idea of going into people’s homes and ripping out the entire wall finish was just an unimaginable amount of disruption, so it was very quickly discounted.

Q. Thank you.

Now, if we turn to another set of design team meetings, this time further forward in time on 25 June 2012. This is [ART00000096].

What we see here is that you are not in the “Present” list but you are in the “Distribution as present” list. Do you see that? Three people up from the bottom, can you see your name?

A. Yes.

Q. Does that mean that you would have received the minutes of this design team meeting?

A. Yes.

Q. And any other design team meetings that you were on the project for?

A. Yes, I believe you can see Bill Watts and Matt Smith were both present.

Q. Yes.

A. I think by that point I had started to attend meetings with Matt Smith, and this particular occasion was because I was on holiday, so Bill was basically stepping in for me with Matt in this meeting, and I would have received these.

Q. Thank you, that’s very helpful.

Then if we go to page 2 [ART00000096/2] of this, at the bottom of the page, immediately above the heading “Acoustics”, we see this:

“MF indicate target U-values for walls as 0.15 W/m2K and 0.22 W/m2K for windows, subsequently corrected to 1.6 ...”
I think that's the windows corrected to 1.6; is that right?

A. Yes, I think it was originally 0.16 for the windows in the original minutes, and we had to say that's impossible to achieve. It was just the decimal...

Q. A typo, yes.

Then in brackets we see it says: "(limiting U-values given in Part L1B are 0.30 and 1.8 respectively )."

Do you see that there?

Q. Yes.

But in terms of the first part of that minute, and the initial part, "[Max Fordham] indicate target U-values for walls as 0.15", can you explain to us the rationale behind indicating a target U-value of 0.15 at that time?

A. I can. So what I will say is I didn't -- I'll explain first where that number came from and then maybe --

Q. Yes.

A. -- a bit of rationale behind it.

So, I mean, when I was looking back at this, I knew of my mouth, because you can see the number being written down here for the first time in a meeting that I wasn't actually present at. But looking back at the emails that I received, I see that the very first email that I received from Bill Watts introducing me to the Grenfell Tower project, he had attached a Word document, and in there, one of the things -- one of the paragraphs was about U-values and it said -- I can't remember the exact wording, but it was along the lines of, "We should go for new-build targets"; and it didn't say any more than that.

From that point on, possibly when I met Bill on site and we were looking at the tower, again, I think that, "We should be going for new-build targets here" was repeated, and I think from ... I think it's -- if you were to build a tower from scratch, and you were to build a concrete tower, apply insulation to that concrete frame and apply rainscreen, that didn't seem any different from doing the renovation. It seemed like the perfect place to start, and it was very similar to how you would construct a new-build.

So because it was so similar to how you might construct a new-build, those new-build targets didn't seem crazy. Why -- they seemed like they would be not that difficult to achieve, and so it was just something that was accepted as a good idea. I think as soon as we expressed that at these design team meetings, there was just a general acceptance that it was the good, right thing to be trying to do.

Q. Right thing, why?

A. The right thing because we might come on to -- I know in my -- in the planning statement that we helped to write, I kind of express my feelings in the initial -- in the introduction to that planning statement, and I say -- my words were something like, "You will only get a chance to do a renovation like this once in a building's lifetime ", and we were trying to look to the future and trying to look to making this a building that would still stand up in 30 years' time. And so we wanted to do something now that would, you know, stand up in the future.

And also you have things like the London Plan, which is a planning policy, and it very clearly states a hierarchy of things you should try to do when building a new building or renovating a building, and it very clearly states the top tier of that hierarchy is to reduce energy use by improving the fabric of the building first. So that should always be the first step you take, rather than just slapping on fancy gadgets and gadgets on to a building.

And I think there was -- from other projects I had worked on, I think there was a general feeling in the construction industry that people recognised the importance of improving the fabric of the building as the first step that you should do.

Q. Is it fair to say that environmental considerations, energy efficiency, were at the heart of why that U-value was selected?

A. Absolutely, yeah.

Q. Were you conscious at the time that that was, because it was the target for a new-build, a very ambitious target?

A. I didn't ever think of it as an overly ambitious target, I thought of it as a sensible target. Again, we were working on other projects, other new-build projects in London, which might have had even -- it would be common to come across even lower U-value targets in order to meet the CO2 targets of the London Plan, and the buildings that I could see were building constructed, a lot of them were being constructed of concrete with insulation and rainscreen, and so nothing seemed out of the ordinary in what we were trying to do here.

Q. Now, we know you haven't done a high-rise residential before, an overcladding before. When Max Fordham were proposing that target, were any checks done with anybody within Max Fordham who had been involved in...
Q. Was it any part of your thinking at the time that
you were very much comparing and having in mind
new-build targets when you were selecting it?
A. Yes.
Q. Was it any part of your thinking at the time that
because that figure of 0.15 was significantly below the
guidance in Approved Document L, there was room for
adjustment if that became necessary? Was that any part
of your thinking?
A. I think it was. I think we knew -- and as well, as you
say, I was aware of the clause in part L that basically
says, "Here's the targets, but if you find any of these
things too hard to do, then you can just relax your
target". I was aware of that, and I was -- that would
have been absolutely an acceptable thing to do.
Q. Did you expect when that was proposed that others on the
project might push back and say, "Nah, that's just too
ambitious"? Did you have that expectation when it was
proposed by Max Fordham?
A. I don't think I had an expectation, but the -- it seemed
to just be widely accepted, and widely sort of accepted
by the other members of the design team, so ...
Q. And that wasn't surprising to you?
A. Erm ...

I think I found it quite positive, that here was
an aspirational target being proposed and there were
people who were willing to go with it, because they
believed in it, and I felt that was quite a positive
experience. So if I was surprised, I was only surprised
in a good way, because often targets are reduced because
of money, because, "Let's reduce that target because we
can't afford it". So the fact that the client and
everyone was behind it and willing to pay for it, it was
a positive experience for me, that here we are going to
build a building of really high quality and we're going
to do a really good thing. It sort of backed up that
feeling that I had.

Q. I see.
Was any consideration ever given during your time of
working on the project to making an adjustment to the
U-value and increasing it?
A. The only time I think that it would have sort of come
into our minds is when we were looking at the thickness
and we were trying to work out whether the thickness
could be accommodated within the build-up that the
architect had deemed to be the maximum build-up that
could be accommodated, and so I think as we looked
through those issues, if there had been a point in time
when we'd -- if we couldn't have achieved the 0.15
within the thickness that the architect had drawn, then
I think we would have changed it. But there wasn't a --
we never got to the point where we didn't think there
was a reasonable technical solution to meet what we were
trying to achieve, so we didn't ever have that
push-back.
Q. Does it follow from your answer, therefore, that there
was never any serious discussion about raising the
U-value target?
A. I don't think -- no, there wasn't a serious discussion
about it, no.
Q. And just to be absolutely clear, these minutes suggest
that it was Max Fordham suggesting this target U-value
of 0.15; do you agree with that, that that came from
Max Fordham and not from any other party, the client or
the architect, it came from Max Fordham?
A. I agree with that, yes, it came from Max Fordham.
Q. Now, if we can turn then to an email (SEA00047372/2),
this is an email from your colleague Matt Smith. It's
the third email down at 16.42. It's from Matt Smith to
Bruce Sounes, so it's your colleague to Bruce Sounes,
and this is just before that meeting on 25 June 2012
that we were just looking at. He says:
"Afternoon Bruce"
"Do you have an idea on the likely wall/cladding
build-up yet? What U-value are you targeting? The
early indications from the acoustic survey are that the
acoustic vents may be around 300mm deep so it'd be
useful to know what depth of wall we'll be working
with."
You see that there?
A. (Witness nods).
Q. Now, that suggests that Max Fordham were looking to...
Q. But just to be clear, is it your understanding that it was Max Fordham who actually then came up with the target of 0.15?

A. Yes. I think what we did here we were looking for details from the architect, and really the architect’s designing the whole wall system, and so we were asking them, you know, “Where have you got with this? What U-value do you think you can achieve?” And obviously subsequently we suggest a U-value, and I think it’s not we were trying to push it on without suggesting ourselves, because it’s always better if someone has come up with the target themselves in order that we’re not too heavily involved with it. You know, you see a lot of things where people say, “Your insulation “ or “Your U-value”, and sometimes it can be quite difficult because you are people in a position where people are saying, “This is your target “, but you don’t actually have any power to specify any of the elements they’re talking about. So for us, I was trying to -- and I believe I had a conversation with Matt before he sent this email, and I think the intention of this email was to try and trigger that notion --

Q. Was it your understanding that you were proposing a U-value but that Studio E was ultimately responsible and therefore could overrule that and say, “No, too ambitious, we’re going to go for 0.3”, or something like that?

A. Absolutely, yeah. That is the general life of a building services engineer. You know, you’re there to give advice and to do your best, but the architect is the lead and they will say, “Well, thank you very much for that advice, but it’s not possible in this instance”. That’s a common thing to happen.

Q. Yes.

Just to pick up in your witness statement, you make a similar point. If we can to paragraph 101 of your statement on page 24 (MAX00017292/24), in the first two lines, we see this is where you said it in your statement:

“Nothing was being fixed at this stage, the U-values were no more than targets and were always capable of amendment or change depending on the circumstances, or any input from others responsible for specifying the cladding requirements.”

Now, do you recall ever making clear to others on the project, including the architect, that as far as you were concerned that target could be changed if it was problematic? Was there ever that discussion that went on?

A. I don’t recall having that discussion explicitly, no.

Q. Prior to proposing the target U-value, just to be clear, to your knowledge did you or anyone else within Max Fordham check whether there was anything in Approved Document B on fire safety which might affect whether that U-value could be achieved?

A. I certainly didn’t, and I’m aware of -- I’m not aware of anything.

Q. So there was no check of section 12 of ADB and what it might have said in there about insulation?

A. I don’t think so.

SIR MARTIN MOORE-BICK: Was that a no?

A. No, sorry.

MS GRANGE: If you shake your head, that doesn’t appear on the transcript, thank you.

Q. Whose responsibility did you think it was on the project to check the provisions in ADB on fire safety in respect of insulation products used in the external wall?

A. I don’t think I would have thought of it in that explicit terms, but I think I would have thought the architect’s designing the walls, therefore they’ll take care of compliance.

Q. I see.

Now, if we can turn to {SEA00004973}, this is an email of 5 July 2012 from Mr Sounes to you and Matt Smith and Bill Watts, also at Max Fordham. The subject is “Grenfell Tower”. We want to just pick up on the final paragraph of this email. He is talking about being disappointed that a meeting didn’t happen in the first paragraph, and then he says this in the final paragraph:

“Accordingly, there was no need to put in the amendment requesting a U-value for the cladding, because a U-value was not a target that was agreed to by the architect.”

I’m just wondering if you recollect receiving that email, and if so, whether you in turn requested a meeting from your end about that?

A. That’s perfectly possible, I’m not sure. I’m not sure. I don’t have any recollection of that.
The first thing you would do is look at the U-value, given what he says there about "looks to me a bit aspirational?"

A. When I read this email, I didn't worry too much, because clearly the Rockwool thicknesses were thicker than the architect felt could be accommodated in the build-up, but of course the email says, "We've sent off enquiries to Rockwool and Kingspan".

Q. So when I read that, I didn't worry too much, because I thought -- I knew that a Kingspan solid insulation board would have a better lambda value than the Rockwool, a lower lambda value than the Rockwool, so thicknesses of insulation, and so I didn't feel the need to jump on this email, because I thought: well, we're waiting -- and as the email says "and we await their reply". So at the time I looked at that, I thought: well, okay, it might need to change, but we'll -- overriding, we'll wait for their reply. So I think I just looked at that and I thought: let's see what Kingspan have to say.

Q. So there was no separate discussion within the design team with you and Studio E at this point about changing the U-value?

A. No.

Q. You say that you knew that Kingspan had a solid insulation board that would have a better lambda value.

A. I think probably one of the first jobs I ever did at Max Fordham was to sit down and do a U-value calculation in order to do a heating calculation. So it's kind of a thing you would commonly do, designing a heating system. The first thing you would do is you would look at a wall build-up, and if the architect hasn't provided you with the U-value, which you would need to know to measure the heat loss of the building, you would do a quick calculation yourself just to get yourself in the right ballpark. So I was -- at that point, I was used to seeing buildings coming in, being asked to do a heat loss calculation. I would see the insulation was Kingspan. I would be aware -- of where to go, to get -- what documentation to go to to get the right lambda value to plug into my calculation. So I think there was an awareness there of different insulation types and -- Kingspan that you had in mind at this point?

A. I think the only thing I knew about Kingspan was it was a solid board rather than a mineral wool or a softer kind of insulation. So I think that's really as far as my knowledge went.

Q. Yes.

If we can look at another email on this topic, this is at 'SEA00005818'. So this is an email of 15 August 2012, so a bit later in time, from Mr Sounes to you, copying in Matt Smith, on the Grenfell project. I want to look at the paragraph right at the bottom of this email, after the numbers and the list. He says this:

"We need to discuss U-value/insulation spec."

A. I do, yes.

Q. Just picking up on a few things in this, what was the issue with the insulation around the columns that he is referring to expressly there?

A. Bruce had expressed to me the issue was that the columns were very close to the windows. The diamond-shaped column, you had the kitchen window right next to it. If we started adding thicker and thicker insulation to that, that column expands in size and the edge of that column then starts to move in and encroach on the kitchen window, and so I understood that we didn't want that to happen. So we may have already had a phone call about this, but I had an understanding that the desire was to keep the insulation on the columns thinner than the rest of the --
Q. He says, “Can we discuss?” Did you have a discussion with Mr Sounes around this time about the U-value and whether or not that was achievable, whether it should be amended? Was there any such discussion?

(Pause)

A. I think this…these documents were leading up to the planning report, where we were going to make...we were going to tell planners what the U-value target was, and so we needed to make sure it was buildable, and it was right, and I believe Bruce’s uncertainties were there wasn’t a calculation that covered all the different elements, so the spandrel panels, the window infill panels and the column, there wasn’t an overall average calculation being done at that point, and I think what Bruce was worried about was, when we actually looked at the columns, and it would be a bit thinner, that would impact our ability to meet the overall 0.15, and therefore we shouldn’t be advertising the 0.15, we should be seeing what we can actually achieve, and I think he was looking for help from me to understand that that could be achieved.

Q. Just to be clear, was there any serious discussion at this point about changing the U-value?

A. I don’t recall, but I think it was implied in the...the sections were becoming more firm, you know, the space allowed for insulation was starting to become more and more fixed on the drawings, and so I think from my point of view, by the time we got to this stage, it had become a little bit like: you’ve got 200 millimetres for insulation in this wall and now we’re going to check to see what we get, and we hope it achieves a 0.15. But I think if it didn’t, I think it would have been back to the drawing board on the 0.15 rather than changing the sections at that point, because I think we were balancing so many different aspects, you know, with the window depths, and I think the architect was quite happy with that build-up they had drawn.

So I think at this point it became less about a conversation of: well, the façade can just infinitely change to accommodate the U-value; I think at this point it started to get a little bit like: well, we don’t want to be changing these sections, so...

Q. Yes. Okay.

There are another two emails on this same theme about whether any consideration was given to amending that U-value target. Let’s go to another email. This is [SEA00008181/1]. We can see that eventually this does get forwarded to… I beg your pardon, Duncan Campbell is copied in here to this email chain, including the British Gas email, but you didn’t see it?

A. No.

Q. No?

A. It was long after my involvement ended.

Q. If we go right to the top of the page, page 1 (SEA00014346), we can see that eventually this does get forwarded to… I beg your pardon, Duncan Campbell is copied in here to this email chain, including the British Gas email, but you didn’t see it?

A. No.

Q. No.

Can we look at another Studio E email. This is [SEA00014346], and if we start on page 1, there is an email here from Tomas Rek to Bruce Sounes. So this is an internal email within Studio E, copying in others. He then sets out, we can see at the very bottom of this page, some BREEAM potential scoring assessment comments. Can you help us as to what BREEAM is?

A. It’s the Building Research Establishment Environmental Assessment Method, and it’s a commonly—it’s a way of measuring the kind of sustainability credentials of a project, and often funders will have a minimum requirement that they would say, “Well, we would like you to get a certain score in order for us to give you money towards this project.”

Q. Yes.

A. That’s one of the ways it can be used.
Q. I appreciate this is an internal email within Studio E which you wouldn’t have seen at the time. But if we go on to page 2 (SEA00014346/2), there is a heading “Environmental Impact of Materials”, it’s Mat 01. So third item down it says: “Mat 01 Environmental Impact of Materials.” Do you see that there?
A. I do, yes.
Q. There is some black text in the last paragraph there that says: “It also seems MF went for ‘ott ’ U values to achieve a maximum of 250mm build up to the spandrel zones. The this is their response, below. We have been working on maximum credits available for Thermal Performance Criteria which come to force if Green Guide Rating credits do not manage achieve the top 25 credits available.”

Now, we understand, and this was confirmed by the Studio E witnesses, that “‘ott ’ U values” meant “over the top U-values”, yes, when they refer to “ott ”.

Did anyone ever suggest to you, from Studio E or indeed anyone else on the project, that the U-values were over the top?
A. No. I think it’s -- as I said earlier, I think I felt really comfortable in a positive way that there was a good buy-in for this strategy. So, no, no one was ever … no one ever referred to them in that way.

Q. If we can look next at an email from July 2012. This is [SEA00005276].
A. Sorry, is it worth to point out that the -- this comment couldn’t be right, because, you know, as we’ve seen, the 0.15 was discussed at a very, very early stage of the project.

Q. Yes.
A. And it wasn’t -- the project was running for several months with everyone with that understanding until the BREEAM actually -- we didn’t realise at the start of the project that we needed a BREEAM score, so that came in slightly later. So all the decisions about 0.15s were done before this. So to suggest that the 0.15 was being done to get some credits in a scoring scheme that we didn’t actually know we’d have to comply with, it just couldn’t have been right.

Q. I understand, thank you, that’s helpful.

So if we can go to [SEA00005276], this is an email of 24 July 2012 from Bruce Sounes to you and Matt Smith, and I just want to read the whole of this email with you. He says: “Andrew, Matt, I asked Rockwool about achieving 0.15 U-values and this is their response, below. We have been working on a maximum of 250mm build up to the spandrel zones. The
team meetings there would be lots of discussion about these issues, so I would feel I would have understood a lot of the issues that Bruce was dealing with in terms of the daylight, the thickness of hangers, the scale --
I realised that this number is part of a bigger picture, and so I didn’t push that because I felt I understood that this was the compromise, this was -- the solution that we had honed in on was the best thickness for a whole range of reasons.

Q. Yes.

A. So I think that ... and I’ve completely forgotten my second point.

Q. So I asked you: did you ever discuss with Mr Sounes or anyone else whether to allow for thicker insulation, ie a bigger gap between the concrete and the outer cladding? Did you ever actually have that discussion with Mr Sounes?

A. No, and that was my second point, was from the very earliest emails that we had from Studio E, there was always Rockwool and Kingspan, Rockwool and -- you know, so just embedded in my mind was this thing that Kingspan was okay. There was nothing wrong with using Kingspan. Bruce had suggested it in his first email, he had used it in the online calculator in the email that we looked at previously, he said, "I have given a stab at a U-value calculation" and there was a link in that email.

Q. Yes. Yes.

A. That was Bruce doing his own calculation using Kingspan. And so at this point, there was nothing to suggest to me that it needed to be relaxed in any way. We had something that was going to be acceptable, I thought it worked within the 200-millimetre zone that we were all talking about, so it all just seemed to be slotting into place. So I guess that’s my rationale for saying we weren’t having these conversations, because I thought it was working.

MS GRANGE: Yes.

Mr Chairman, that might be a good moment for a break. I’m about to turn to some more detailed questions about the specific materials.

SIR MARTIN MOORE-BICK: Yes. Seems like a good idea.

Mr McQuatt, we’re going to have a short break now. We will come back and resume at 11.35, please.

I have to ask you, while you’re out of the room, please don’t talk to anyone about your evidence or anything to do with it. All right?

THE WITNESS: Thank you.

SIR MARTIN MOORE-BICK: If you would like to go with the usher, she will now look after you. Thank you.

Q. What he told us he had done is basically extrapolate in...
SIR MARTIN MOORE-BICK: All right, thank you.

MS GRANGE: If he was in fact meaning glass fibre slab, is what you’re saying that that might give you some indication of what thickness a Rockwool would be, because they’re not dissimilar? Is that what you’re saying?

A. They have similar lambda values.

Q. I see.

A. So I think his calculation was reasonable in that respect.

Q. But just to be clear, did anybody actually do a calculation to work out what thickness of Rockwool, of这种厚度 of Rockwool seem a bit high? Are you aware of that?

A. I think we discussed the reply, so I think I have a good idea of what he would have done.

Q. Yes.

A. Like I described initially doing U-value calculations for heating systems is a thing we would commonly do, so I think what Matt did was he did a quick calculation of his own, put in a Rockwool lambda value at that thickness, and he must have played around with the thickness of the insulation.

Q. Yes.

A. He came to 180, which is what he came to, and that’s a lot less than the 450. So I think --

Q. Yes.

A. -- that’s what’s fed into his statement of, “This seems a bit high.”

Q. I see.

A. His own calculation.

Q. He says that 180 --

SIR MARTIN MOORE-BICK: Sorry, could I just ask: this suggests that glass fibre was one potential form of insulant, but nobody seems to have discussed the use of glass fibre. Was there a particular reason for that?

A. I don’t know, and I suspect that we’ve just got slightly confused terminology in the email, rather than meaning a particular --

SIR MARTIN MOORE-BICK: Well, in what respect?

A. Perhaps Matt meant mineral wool. I think he probably just wasn’t being very accurate on that term.

SIR MARTIN MOORE-BICK: All right, thank you.

A. It’s still a flexible insulation type, so it has a similar sort of look to it, and I imagine that’s where the confusion had come from.

SIR MARTIN MOORE-BICK: All right, thank you.

MS GRANGE: If he was in fact meaning glass fibre slab, is what you’re saying that that might give you some indication of what thickness a Rockwool would be, because they’re not dissimilar? Is that what you’re saying?

A. They have similar lambda values.

Q. I see.

A. So I think his calculation was reasonable in that respect.

Q. But just to be clear, did anybody actually do a calculation to work out what thickness of Rockwool, of
Q. I see.

A. That's correct, and I can't comment, maybe we've misinterpreted that at the time, or -- I'm not sure.

Q. Just to be absolutely clear, I think what you're saying is if you used thermally broken brackets that interrupt the thermal transfer through the brackets, that can help you in terms of achieving a lower U-value; is that correct?

A. Yes, that would be part of the calculation.

Q. And Mr Smith is querying whether Mr Sounes, in his calculation, had taken account of that thermal bridging from fastenings, frame, et cetera. Do you agree?

A. Sorry, can you repeat that? Sorry.

Q. What Mr Smith seems to be doing is questioning whether Mr Sounes seems to be doing in its assumptions, therefore coming up with a really thick insulation thickness.

Q. The Rockwool might be pessimistic in its calculations, or Mr Sounes' calculations might look pessimistic if you haven't taken into account thermally broken brackets; is that correct?

A. Yes.

Q. Yes.

Now, let's look at the response we see from Rockwool. This is [SEA0000005276/2], and it's an email from Mr Ian Pritchard to Mr Sounes. We know that you were sent this email on that same day. Again, I'll make good that point in a moment, but just sticking with this email from Mr Pritchard, we can see that his response says:

"Dear Sir, ...

"... apologies for the delay in getting back to you.

"Further to your email, we would normally recommend the use of our Rainscreen Duoslab for these types of construction; however, due to the low specified U-value the thickness needed would be exceptionally high, probably beyond the point of sensible building practice."

Then he says he is unsure of the exact construction for the roof that needs insulating.

So that's what Rockwool say.

Now, can you help us: did anyone ever respond and seek an actual calculation from Rockwool of what thickness would be required? We can see he's saying he thinks it's going to be exceptionally high, but did anyone ever get a specific calculation from Rockwool about what it would be?

A. Not to my knowledge. This was something that Bruce was doing.

Q. Can you help us as to why that wasn't something that Max Fordham ever did?

A. We had set the target and it wasn't necessarily -- if Bruce was designing this element and he was liaising with the specialists, then that was -- that seemed like the right way to be going about it, rather than us trying to get involved. It seemed like a reasonable thing that Bruce was liaising with the manufacturers directly to try and get some calculations done. So I think I would have read that email and taken the -- probably "beyond the point of sensible building practice" to mean all the things that I understood with Bruce in terms of length of brackets and all the other implications that might have on a building.

Q. Did you expect -- we know you were forwarded this email in due course -- that there would be a further follow-up with Rockwool to say, "Well, can we actually understand from you precisely what the thickness needed would be?"

A. I don't think I ever expected that, no.

Q. No.

A. Because in my mind, the Kingspan thicknesses were much closer to what we wanted, and so in my mind, receiving this email, I thought: okay, that's what it is, we won't be using rainscreen Duoslab then, we'll be using Kingspan, and that -- or something like it. That was what I read from this.

Q. To your knowledge, was any effort ever made at any stage of the project to determine precisely what thickness of Rockwool would actually be required to achieve the 0.15 U-value?

A. I don't think it was, no.

Q. Would you agree that Rockwool was effectively discounted as an option on the basis of thickness?

A. Yes.

Q. Can we just look at Mr Hyett's report. He is the Inquiry's expert in architectural matters. This is...
SIR MARTIN MOORE-BICK: All right.

Q. And I'd also caveat by saying the assumption he has made for the bracketry, I have not looked at that number in any way to say that I would -- that would have been accurate in terms of the construction.

SIR MARTIN MOORE-BICK: Okay, thank you, that's helpful.

What about the spandrel calculation?

A. Again, that's the same. His calculation includes for thermal bridging through the bracketry, ours does not.

SIR MARTIN MOORE-BICK: So, again, likely to be slightly more accurate. But these are the sorts of calculations with which you are presumably very familiar, are they?

A. Yes, yeah.

SIR MARTIN MOORE-BICK: I ask you that because I think you said you haven't found anything to criticise in the calculations.

A. (Witness nods).

SIR MARTIN MOORE-BICK: That's very helpful, thank you.

A. Yes.

MS GRANGE: Yes, that's really helpful. That was exactly my next question, whether the difference between --

SIR MARTIN MOORE-BICK: Sorry.

MS GRANGE: No, no, it's good -- whether the difference between Mr Hyett's calculations and anything you had done at the time was because of the use of thermally broken brackets which could make that difference, so I think you've clarified that.

A. You keep saying "thermally broken brackets", and I think my point is we didn't make any assumption for any brackets, thermally broken or not.

Q. I understand.

A. The other thing I would sort of say as well is clearly there is a discrepancy between the 450 that the Rockwool website might suggest and these calculations, and it's quite a big difference, and actually when I probed that myself, I could see that the Rockwool website does make quite a large allowance for heat transfer through the bracketry, but I am in no way -- I don't know the details of those to -- I just know that there is a large difference between the two.

Q. Do you agree that these are relatively straightforward calculations that can be done, the ones Mr Hyett's done?

A. Yes.

Q. Can you help us as to why such calculations weren't ever done on the Grenfell project for mineral wool, Rockwool?

(Pause)

A. I can't, other than the 250-mil -- even with this calculation coming out at 250 millimetres, it was still...
There is a difference between a phenolic foam product and a PIR board. Kingspan is when they would come in to talk to us about pipe insulation, because they make solid pipe insulation as well as building insulation. Kingspan are two manufacturers that had insulation on the spandrels, do you know why the Kingspan product wasn’t pursued any further?

Q. Okay.

A. The Celotex came from. Sorry, you said where the Kingspan came from.

Q. Yes, I thought you said earlier that you could tell us exactly where the Kingspan came from, but maybe you misspoke.

A. No, sorry, I meant to say I could tell you where the Celotex was.

Q. If we could just hold fire on that for a moment and let me keep going.

A. Okay.

Q. At the time of your work on the Grenfell project, did you have any understanding of the fire performance characteristics of these foam boards, including phenolic or PIR insulation?

A. The only exposure we would have had, I think, to Kingspan is when they would come in to talk to us about pipe insulation, because they make solid pipe insulation as well as building insulation.

Q. Okay.

A. And it’s very difficult now to unpick what I’ve heard, and I know Bruce made a lot of comments about this material charring, and it’s very difficult -- I’m trying to -- that could have been something that I had an opinion of, that could have been something that I thought: well, these pipe insulations will sort of char but not go on fire, but I couldn’t say with 100% certainty --

Q. Mr McQuatt, we don’t want you to speculate. I think what we’re interested in is whether you do have a recollection of knowing something about the fire performance of these phenolic or PIR insulation boards at the time of the Grenfell project.

A. I couldn’t say --

Q. No.

A. I did.

Q. We see in this -- and it picks up on the Chairman’s question a moment ago -- that there is a datasheet for a glass fibre product. When we look at that glass fibre product datasheet, it’s got an A1 fire performance.

Do you know whether any further consideration was ever given to the glass fibre product on this project?

A. I don’t think it was. I think -- and the reason for that is it would have twice the thickness. I think it was excluded at that point of this email. I think it was attached for information, but to me, the line about it being twice the thickness was just --

Q. Yes.

A. -- the point to stop.

Q. So you wouldn’t have looked at the datasheet and considered the fire performance of that product at the time?
A. No.

Q. So FR5000, let’s move to that, the Celotex product. If we can go to [SEA00005840], this is an email from you to Mr Sounes dated 16 August 2012, and you say:

“Bruce,

I have done the following calculations to work out how much insulation that we would need to achieve 0.15 overall. The Celotex FR5000 is a solid PIR board, data sheet attached, I think this is the only type of product that will give us the required performance, Kingspan also [do] a version of this. Could you comment on the Spandrel panel?”

As far as we can see, this is the first mention of Celotex’s FR5000 product in this email.

Is it right to say that it was you that introduced that Celotex FR5000 as a potential insulation product for the project?

A. Yes, it was.

Q. What led you to put forward the FR5000 product at this stage?

A. So I was carrying out a calculation -- so some of these emails I think have come slightly out of sequence with how they happened. I had a telephone conversation with Bruce, and we were discussing how he was unsure whether the fact that we couldn’t put as much insulation on the column, the spandrel and the window infill, and I would area-weight them based on the areas of façade they make up and that would give us an average. And that was something at that point that I think hadn’t been done and was kind of worrying Bruce, that that was going to be -- that was going to mean we couldn’t meet the target. So I said, “Well, I’ll perform that calculation.”

So I went off to do that, and I think the spreadsheet was attached, I think, to this email, and I went off and did the calculation, and one of the numbers that I needed for the calculation was the lambda value of the Kingspan board. And I went to the Kingspan website to download a datasheet so that I could get an accurate number for that lambda value, and you needed to log in and fill out and register as a user.

In my head, there was very little difference between Celotex and Kingspan. I knew I had a log-in for Kingspan -- for Celotex, sorry, so I thought: I’ll just speed this up a little bit, go to the Celotex website, I will get a datasheet for a solid insulation board just to make sure that the lambda value that I was putting into my calculation would be accurate and it would be one -- it would be something that you could go and buy, essentially, just basically showing your working is how I felt about it, and so -- and that’s how I ended up going to the Celotex website, clicking through, I think they have a sort of cascading thing, you know, select insulation by application, and I think I would have gone through, you know, walls, and I can’t remember the exact detail, but I went through some sort of process, and it came out with: this would be an insulation.

I downloaded that, I took the lambda value, put them into that calculation, and then because I wanted to let Bruce know where I had got that number, I sent him the datasheet, and I think there, you know, my -- "Kingspan also do a version of this", it kind of shows my thinking that Kingspan and Celotex were very similar.

Q. Did you or to your knowledge Max Fordham have any previous experience of using the FR5000 product?

A. No.

Q. Did you have a relationship with Celotex at this time?

A. Again, it was in details from previously trying to get a lambda value of an insulation type.

Q. Now, Mr Sounes has given us some evidence about this, columns, he didn’t -- he was unsure whether that would mean that the overall U-value wouldn’t be enough. So I told him that, well, I could do an area-weighted calculation, so I would calculate the U-values of the column, the spandrel and the window infill, and I would area-weight them based on the areas of façade they make up and that would give us an average. And that was something at that point that I think hadn’t been done and was kind of worrying Bruce, that that was going to be -- that was going to mean we couldn’t meet the target. So I said, “Well, I’ll perform that calculation.”

So I went off to do that, and I think the spreadsheet was attached, I think, to this email, and I went off and did the calculation, and one of the numbers that I needed for the calculation was the lambda value of the Kingspan board. And I went to the Kingspan website to download a datasheet so that I could get an accurate number for that lambda value, and you needed to log in and fill out and register as a user.

In my head, there was very little difference between Celotex and Kingspan. I knew I had a log-in for Kingspan -- for Celotex, sorry, so I thought: I’ll just speed this up a little bit, go to the Celotex website, I will get a datasheet for a solid insulation board just and I want to show you what he said. If we can go to the transcript, this is on 11 March, [Day12/181:12], and I want to read what he says. I think it’s me asking him:

“Question: During your time on the Grenfell project, can you explain why you thought Celotex FR5000 was suitable to be used within the overcladding system?

“Answer: Why did I think it was?

“Question: Yes.

“Answer: Erm ... it had been put forward by Max Fordham, who I knew had -- who I understood had undertaken this sort of project several times, or many times, and I guess I made an assumption that they had used this before in similar circumstances. So it was based rather on inferring its acceptability from previous experience by Max Fordham.”

Do you see that there?

A. I do, yes.

Q. Now, did you appreciate at the time that, in suggesting this product, Studio E were taking this as a tacit endorsement of its acceptability for use on the building?

A. I didn’t. I didn’t realise that, no.
considerations did you have in mind? Did you have fire
in mind when you made that suggestion?

A. I had the lambda value in mind, and the two things that
I had in mind were the lambda value for the thickness,
and in my mind it was almost interchangeable with the
Kingspan, and the Kingspan had been on the table, put
forward by Studio E in many emails, and so there was
just nothing that sparked any concern that it wasn’t
okay.

Q. Was any consideration given at this stage by you to its
fire performance in any way at all?

A. No.

Q. Can you help us as to why not, why you wouldn’t have
been carrying out even very basic checks to see what its
fire performance was before suggesting it on a project
like this?

A. For one thing, it was ... I wasn’t aware that I was
suggesting something new into the project, for one.
I thought I was -- I thought it was already there and
established in terms of the use of Kingspan.

Q. So you didn’t consider what it was saying about class 0
performance? That didn’t enter your mind at all?

A. Yes.

Q. Is it your evidence that, had you been able to log on to
the Kingspan website when you first tried and been able
to get some lambda calculations for their foam board,
you would have been just as likely to put forward the
Kingspan product at this point?

A. Exactly, yeah.

Q. Yes.

A. If we can look at the datasheet which you attached
to the email, this is at {SEA00005841}, we can see on
the top right-hand side that it’s dated January 2012 and
it’s for Celotex FR5000.

If we look at the first list of bullets halfway down
that page, we can see that it states that FR5000:
“Has Class 0 fire performance throughout the entire
product in accordance with BS 476.”

That’s the fourth bullet down. Can you see that on
that page?

Q. Yes.

A. If that was the case, I would have done this
consideration, but that is what I was after.
That’s what I wanted. That was the number I was after.

Q. Were you aware just in general terms at this time that
this product was a combustible insulation, and that
there might be fire performance questions that needed to
be asked of it in due course?

A. No, it just never -- it sounds so silly to say this now,
with all that’s passed, but it just never occurred to me
in any way that something that I could just go on to
a website and select would be so unsafe or have the
potential to be so unsafe, you know. I thought
I was ... and, you know, if -- you know, and I know
we’ve covered that I didn’t work on high-rise, but it’s
also up until that point, every building that I had
worked on, PIR insulation board on walls -- you know,
I had done a lot of projects, I had seen it again and
again and again. In my mind, it was just a common
material that’s used and had, you know ...

Q. Okay.

We also see in that first bullet point that it says
it has a lower thermal conductivity value, 0.021 watts
per metre squared kelvin, compared with other typical
PIR insulation boards providing enhanced thermal
performance.

To what extent was that 0.021 figure key to you
putting forward this product on the project?

A. It was the only number I was looking at, but I suppose,
as an example, I didn’t find other insulation materials
and sort of think, “No, not good enough, not good
enough, not good enough”, until I came to this one; this
was just the first one I came to and I used this lambda
value, if that helps answer.

Q. Had this product had a lambda value which had been
higher than that, let’s say significantly higher, would you
have considered FR5000 for use on the project?

A. I would say that at this point in the project, the solid
board was always going to have a better lambda value
than the Rockwool, than the alternative. So whether
that was 0.021 or 0.024, as that number gets bigger, so
does this thickness of insulation, and at some point
that thickness of insulation would have come out at
larger than 200.

Q. Yes.

A. If that was the case, I would have done this
calculation, and I would have sent an email back to
Bruce, and then there would have been a decision point
to make: do we relax the U-value or do we change the
build-up? And it just so happened that I took that
lambda value, I did the calculation, and it all fell
within the parameters of this 200 millimetres. So it
Q. Okay.
Can we now look at the Max Fordham sustainability and energy statement that was prepared for the project. This is {MAX00000412}. This was dated 17 August 2012.

Just to be clear, Mr McQuatt, everyone in Max Fordham was clear, weren’t they, that they were dealing with a tall building, a building above 18 metres, on this project?

A. Oh, yes.

Q. If we go to page 6 {MAX00000412/6} on this document, in the left column in the first paragraph under 2.1, it says:

“Improving the insulation levels of the walls, roof and windows is the top priority of this refurbishment.” Do you see that there?

A. Yes.

Q. Did that reflect your understanding of the position, that it was the top priority of the refurbishment?

A. Yes, it reflected my understanding, but also if we think about just the context, I was writing this report -- you know, I may have been using slightly sort of artistic licence to ... this is firmly what I believed.

Q. So at this point, Max Fordham -- this is August 2012 -- are including the Celotex FR5000 in the energy and sustainability statement; yes?

A. Yes.

Q. Now, how would you characterise what Max Fordham are doing here in terms of the insulation product? Are they specifying the use of FR5000 in this statement, or is Max Fordham doing something else? If so, what?

A. I think in this, what I’m trying to do, I’m trying to show my working, I’m trying to show that this thermal conductivity value of 0.021 is based on an actual product.

Q. Is that the bit that you were explaining you drafted earlier, because you go on here and say:

“Insulation improvements may only happen once or twice in a building’s lifetime due to the complexity and disruption caused. For this reason we are going over and above current Building Regulations to make sure the building continues to perform well into the future.”

A. Yes, I wrote that.

Q. You wrote that?

A. Yes.

Q. We can see, just to finish this point, on the bottom of this column, there is a table, 2.1, which tells you the extent to which what was being achieved on this project was an improvement over the Building Regulations, and we can see that it’s a 50% improvement. Do you see that there?

A. I do, yes.

Q. On this page we can see that the document explains that insulation wasn’t appropriate for buildings above 18 metres?

A. That’s correct, yeah.

Q. Then if we go to the final stage C report produced by Max Fordham dated September 2012, {MAX00001683}, can you recall, did you draft this stage C report for Max Fordham?

A. I would have drafted most of it, yes.

Q. Yes.

A. Matt would have done some sections, but I did most of it, I think.

Q. At page 12 {MAX00001683/12}, is it right that what we effectively see here is the same information from that sustainability and energy statement replicated in this stage C report?

A. Yes, I don’t think it changed between the two documents.

Q. Now, how would you characterise what Max Fordham are doing here in terms of the insulation product? Are they specifying the use of FR5000 in this statement, or is Max Fordham doing something else? If so, what?

A. I think in this, what I’m trying to do, I’m trying to show my working, I’m trying to show that this thermal conductivity value of 0.021 is based on an actual product.
Q. Yes.
A. When I look back at this, I think there is no -- there was no need for me to write that in this document. It wasn’t important information for this document whatsoever. In fact, both of those tables you might say are probably too much information for the actual target audience. All they really needed to know was the information in Table 4, which said: we have a target and, you know, we’re achieving it. And I think just because I had done the calculation, I felt that: well, I’ll put it in there, just to show my working.

Q. Yes.
A. By suggesting the use of that product, the FR5000, I’ll put it in there, just to show my working.

Q. Just to be clear absolutely clear, is it right that FR5000 was included in this stage C report solely because it delivered the U-value at the thickness you wanted?
A. Yes. I mean, you could pick up on "you wanted" and say that, you know, it was the team delivering a project rather than just me solely being the owner of the thickness of that wall, and in fact I wasn’t.

Q. I want to put this point to you directly so you have the chance to answer it. I want to put to you that Max Fordham and you, as the project lead on this Max Fordham project, as experienced mechanical and electrical engineers, should have given at least some consideration to fire performance when proposing these types of insulation products for the external wall.
A. I think in hindsight it’s difficult to not have wanted to have reviewed all those things, and clearly over the past couple of years it’s the question you … should I have known information, more information than I knew, and this different sector? And it’s something I go round and round. And I guess in hindsight I would have just stuck to the numbers, I would have done that calculation without a datasheet. I would have just said, “This is the minimum lambda value that is required, carry on with your specification” … But with so many things you trip up when you try to be helpful, and you try to push the project on, you try to muck in, and in hindsight I wouldn’t have suggested Celotex FR -- or any insulation material, because it wasn’t my job, but …

Q. At the point you wrote this, was it your view that a final decision had been taken to use FR5000 on the project?
A. I don’t think I was. I think I was just trying to be very explicit about where I’d got that number.

Q. I see.
A. Because if the project ran on and then someone did say, “Oh, for any reason we can’t use that material,” it might be -- I mean, remember, at this point I have absolutely no idea how much Celotex FR5000 actually costs. It may be ten times the price of its competitor, I don’t know. For some reason, it might have been wrong, and I think I was just trying to show everyone what the assumptions were very clearly at that point.

Q. And yet you don’t recall having any fire safety issues in any of the reports you agreed there’s no references to fire safety?
A. I think the stage C document might include an appendix on the heating options. There’s no main section on fire safety, but there is an options appraisal of how we’re going to replace the heating system, and I know in there we discussed fire stopping around pipework as a potential issue that might have to be managed if we’re, you know -- so I would say that from the point of view of a building services engineer, we were thinking about fire safety issues that impacted on the work that we were specifying, pipework changes, but not in -- this
In the first sentence he says this:

"With regard to the insulation, I refer you back to paragraphs 43.9 and 116.2 where I discuss how the insulation was selected by Max Fordham."

Do you see that there?

A. Yes.

Q. I want to focus on the use of the word "selected".

Do you agree that the insulation was selected by Max Fordham?

(APause)

A. I know I did, I mean... clearly I sent an email. It was selected in terms of the lambda value, and to kind of expand that to me saying, "This is what should be used" is, to me, quite a big jump.

Q. Yes.

A. And so, you know, I don't... if you start... you know, if you take the word "selected", what exactly does it mean? It's difficult. If you said, did Max Fordham specify the insulation, it would be, you know, an unequivocal no.

Q. Yes.

A. But selected, suggested... I mean, I would say "suggested" to me is a more appropriate word.

MS GRANGE: Okay. Thank you.

Mr Chairman, I have come to the end of my questions, but it's customary at this point to take a short break to see if there are any others that have been suggested and check my notes, check I haven't missed anything.

SIR MARTIN MOORE-BICK: Yes, of course.

Well, Mr McQuatt, as you have heard, Ms Grange thinks she has reached the end of the questions she needs to ask you, but she needs to have a little time just to check that, and there are others who are not in this room who may wish to suggest questions as well.

So we're going to have a break. I will say, what, 12.40?

MS GRANGE: I was going to suggest 12.35, but that's a bit ambitious.

SIR MARTIN MOORE-BICK: I think it might be a bit ambitious.

We will have a break until 12.40, and then we will see if there are further questions that we need to ask you. All right?

THE WITNESS: Thank you very much.

SIR MARTIN MOORE-BICK: Of course, don't talk to anyone about your evidence while you're out of the room.

If you would like to go with the usher, she will look after you. Thank you.

(Pause)

12.40, then, please. Thank you.

A short break

(A 12.40 pm)

SIR MARTIN MOORE-BICK: All right, Mr McQuatt, we will see you. All right?

MS GRANGE: Just a couple.

SIR MARTIN MOORE-BICK: Yes, very well.

MS GRANGE: You said to us just this morning that when you went to the Celotex website, you went through a cascading process to get through to the calculations you wanted to find, the U-value calculations.

Do you recall whether you were presented with an option for walls over 18 metres?

A. I don't think I was. I have no recollection of that.

Q. Sticking again with that episode, when you were looking for U-value calculations for... you said initially the Kingspan product and then the Celotex product. Can we just go to something which we think you had earlier, this is [MAX00000104]. It's dated 6 July 2012, and do you remember we looked this morning at Mr Sounes saying he had heard back from Kingspan and it was going to be 200 millimetres, and he attached a Kingspan document to that? That appears to be this. So it was sent to you.

If we look on page 2 [MAX00000104/2] of this, we have Kingspan's U-value calculations, we can see, for...
a K15 product, Kooltherm K15. Do you see that there in
the middle of the table?
A. Yes.
Q. If you had these calculations -- this was 6 July 2012 --
why then on 16 August 2012, when you were looking at
Kingspan and Celotex, did you not just go back to these
calculations that you already had from Kingspan?
A. I must have forgotten that I had received them.
Q. Yes.
A. It would make perfect sense to go back to this. I don't
disagree with that at all. I don't know why I didn't.
MS GRANGE: Yes, okay, that's helpful. Great. Thank you
very much.
Mr Chairman, are those all my questions. Thank you.
SIR MARTIN MOORE-BICK: Well, Mr McQuatt, it just remains
for me to thank you very much for coming to give your
evidence. Those are all the questions we have for you.
It's been very helpful to hear what you have to tell us,
and thank you very much for doing so.
Can I just ask, have you got a long journey to make
back to the north now?
THE WITNESS: I'm not going back until tomorrow, so ...
SIR MARTIN MOORE-BICK: At least we have got through your
evidence quickly enough to enable you to do whatever you
need to do next, anyway.

Thank you very much for coming and you are now free
to go.
THE WITNESS: Thank you very much.
SIR MARTIN MOORE-BICK: Thank you.
(The witness withdrew)
SIR MARTIN MOORE-BICK: Well, Ms Grange, that's probably
a convenient point to break, isn't it?
MS GRANGE: It is.
SIR MARTIN MOORE-BICK: We have another witness coming
waiting in the wings.
MS GRANGE: Yes, that's Mr Jon White, the clerk of works, is
coming this afternoon, and Ms Grogan is going to be
examining him. Could I suggest that we perhaps take the
lunch break now?
SIR MARTIN MOORE-BICK: That's what I was going to suggest.
MS GRANGE: And start at 1.45.
SIR MARTIN MOORE-BICK: Do you know whether Mr White is here
already?
MS GRANGE: He is here, but he needs a bit of time to --
SIR MARTIN MOORE-BICK: No, no, I just wanted to make sure
he wasn't asked for 2 o'clock.
MS GRANGE: Ah, no, he's here.
SIR MARTIN MOORE-BICK: In that case, we will break now,
take the hour for lunch now and resume at 1.45.
MS GRANGE: Thank you.

SIR MARTIN MOORE-BICK: Thank you all very much, 1.45,
please.
Thank you.
(12.45 pm)
(The short adjournment)

MS GROGAN: Yes, Mr Chairman, it's Jon White.
SIR MARTIN MOORE-BICK: Thank you.
Would you ask Mr White to come in, please.
MR JONATHAN WHITE (affirmed)
SIR MARTIN MOORE-BICK: Thank you very much, Mr White.
Would you like to sit down and make yourself
comfortable.
THE WITNESS: Thank you.
SIR MARTIN MOORE-BICK: All right?
THE WITNESS: Yes.
SIR MARTIN MOORE-BICK: Yes, Ms Grogan.
Questions from COUNSEL TO THE INQUIRY
MS GROGAN: Thank you.
Can you please give the Inquiry your full name.
A. My full name is Jonathan White.
Q. Thank you very much for coming to give evidence today
and to assist the Inquiry with its investigations. I'll

be asking you the questions today.
If you have difficulty understanding anything I'm
asking you, please ask me to repeat the question or to
put it a different way, and also please keep your voice
up so that the transcribers can hear you.
You have made one witness statement for the Inquiry.
It's in a folder on your desk.
A. Yes.
Q. It will also appear on the screen in front of you. Can
I please take you to the first page, which is
(JRP00000330), so that we can see it. Then the last
page, page 9 (JRP00000330/9). It's dated there
27 June 2019. Do you see that?
A. Yes.
Q. Is that your signature at the bottom?
A. It is.
Q. Can you confirm that the contents are true?
A. Yes, I can.
Q. Have you discussed your evidence with anyone before
coming here today?
A. Only with my lawyer.
SIR MARTIN MOORE-BICK: And when was that?
A. Before this had all started.
SIR MARTIN MOORE-BICK: Oh, some time ago?
A. No, just recently.
SIR MARTIN MOORE-BICK: All right. Thank you.

MS GROGAN: I'm going to ask you first about your qualifications and experience.

You have set out your experience in your witness statement, going back to page 1 [JRP00000330/1], please, at paragraphs 4 to 12. I'll just summarise it here for you, instead of reading it all out.

After school, you attended a civil engineering college.

A. Yes.

Q. You then undertook a five-year management programme with Mowlem, which is a major construction company, and that included a one-year full-time City & Guilds qualification in concrete and general construction.

A. Yes.

Q. You were with Mowlem for 26 years.

A. 25/26 years, yes.

Q. Moving on now to page 2 [JRP00000330/2] of your statement, that continues your career history.

You left Mowlem in 2000, and you say there you undertook various jobs, including surveying housing stock.

Q. Do we take it you mean there local authority housing?

A. Yes.

Q. You joined John Rowan and Partners in 2009 -- that's at paragraph 10 -- as a clerk of works to be contracted out. Is that right?

A. Yes.

Q. Then during your time at John Rowan and Partners, you spent five years as a full-time clerk of works at a project in Haringey.

A. Correct.

Q. Now, we have a copy of your CV which was included in John Rowan and Partners bid to KCTMO. If we could turn to that now, it's [JRP00000295/4].

Have you seen that in that format before?

A. Yes.

Q. So on this page at the right-hand side, we can see a list of projects that you have been involved with.

The fourth bullet point down, Brunel University project, it refers there to having carried out external works. Did that include any cladding?

A. No, it didn't. It was mainly re-roofing works and internal fitting out, painting, decorating.

Q. Were those buildings high-rise buildings?

A. No.

Q. Next one down, Homes for Haringey project, is that the project where you were a full-time clerk of works for five years?

A. Yes.

Q. It says there works included major refurbishment works, internal kitchen and bathroom works, and complete M&E renewal, new roofs, cladding, windows and decoration.

A. Yes.

Q. Were those works similar in nature and scope to those at Grenfell Tower?

A. No. No rainscreen cladding, apart from one job at Tulloch Court where we had a Rockwool and rendered re-cladding.

Q. You answered my next question. Was that a high-rise building?

A. It was, yes.

Q. And you said there Rockwool and rendered?

A. Yeah.

Q. On that project, did your role include checking for compliance with the Building Regulations?

A. No, we never had a role of checking compliance, but we checked that the Building Control officer was checking, and there was no issues.

Q. Just pausing with your CV for a second, it says on the left-hand side that you joined JRP in 2006. Your statement says 2009. Is that an error in this version of your CV?

A. Yes, it probably is. I did work for a period of time for John Rowan and Partners, not as a full-time -- or working full-time for them, so I think I worked for them for about six months before they asked me to go full-time.

Q. Was that as a freelance contractor-type arrangement?

A. Yeah. When I started, yes.

Q. Aside from those projects listed on your CV, prior to 2014, did you have any experience of the re-cladding of residential high-rise buildings?

A. No.

Q. Have you ever been involved in a building project that used ACM before, aluminium composite material?

A. No.

Q. What about PIR insulation in a rainscreen cladding system?

A. No.

Q. Or phenolic?

A. No.

Q. Was the Homes for Haringey project using the Rockwool and render system the only cladding project you've ever done?

A. Well, cladding could be classified as anything that was on the outside of the building. So, yes, I've done lots of brickwork, some glazing, stonework, and other sort of cladding. But never rainscreen cladding, apart from the...
Q. So Grenfell was your second rainscreen cladding project?
A. Yeah.
Q. Your CV also states that you are MICW and MCIOB.
A. Yeah.
Q. We see that on the left. What does MICW stand for?
A. Member of Institute of Clerk of Works.
Q. And MCIOB is Member of the Chartered Institute of Building: is that right?
A. Yes.
Q. Do either of these memberships require you to carry out CPD?
A. Yes. I’ve actually stopped being a member of MCIOB, but I’m still a MICW, and yes they do, and so does our company. Our company do training, regular training, yeah.
Q. We’ll come to that.
MCIOB, then, when did you stop being a member?
A. Oh, many years ago.
Q. How many hours or points does the MICW require you to do in terms of CPD?
A. I couldn’t tell you offhand how many.
Q. Between 2014 and 2016, were you compliant with your CPD requirements?
A. I would say the number – the training that JRP do is probably normally more than what is required.
Q. Moving on to a new topic now, which is your awareness and knowledge of the Building Regulations.
A. I know if they’re being specified that they were then required.
Q. Were you aware of the requirements of schedule 1, part B, “Fire safety”, of the Building Regulations 2010 in 2014?
A. Yes, I am aware of them, yes.
Q. Were you aware of part B3, “Internal fire spread”?
A. I am aware of them, yes.
Q. B4, which is “External fire spread”?
A. I mean, all the Building Regulations -- I have been in the industry 45 years, so I know -- I’ve got a general knowledge of them, but I wouldn’t say I know everything about them.
Q. Were you aware that there was a requirement in B4(1) that the walls should adequately resist the spread of fire?
A. Not specifically, no.
Q. Were you familiar with the guidance in Approved Document B?
A. Not specifically.
Q. When you say not specifically, do you mean you knew it existed but you didn’t know what it contained?
A. Yes. Yes.
Q. So would you have been aware at the time that there were different routes to compliance with the Building Regulations as set out in Approved Document B?
A. Sorry, could you repeat that question?
Q. Were you aware at the time that there were different routes to compliance with the Building Regulations set out in Approved Document B?
A. Not specifically.
Q. Were you aware that Approved Document B provided that, for buildings of 18 metres or more, insulation used in the external construction should be of limited combustibility?
A. Not specifically.
Q. Again, does not specifically mean not at all?
A. I knew there were regulations regarding tall buildings but not -- I wasn’t actually specifically -- I didn’t know the exact knowledge.
Q. Did you have an understanding of what the term “limited combustibility” meant?
A. I think probably now I do, but maybe at the time I didn’t.
Q. Had you heard of the term “national class 0”?
A. I have heard of it, yes.
Q. Were you aware of what that meant at the time?
A. No.
Q. Were you aware at the time of working on Grenfell Tower of the term “national class 0”?
A. No.

Q. Moving on to a new topic now, which is your awareness and knowledge of the Building Regulations as set out in Approved Document B?
A. I knew there were regulations regarding tall buildings but not -- I wasn’t actually specifically -- I didn’t know the exact knowledge.
Q. Did you have an understanding of what the term “limited combustibility” meant?
A. I think probably now I do, but maybe at the time I didn’t.
Q. Had you heard of the term “national class 0”?
A. I have heard of it, yes.
Q. Were you aware of what that meant at the time?
A. No.
Q. Were you aware at the time of working on Grenfell Tower of the term “national class 0”?
Q. You say in your statement at paragraph 10 of the bid submitted to KCTMO at the time?

A. I would say it doesn't address the fire safety aspect of the construction of a building, rather than site safety?

Q. The only aspect they did was fire risk assessment of the construction of a building, rather than site safety?

A. That's because JRP took in contractors to then hire freelancers?

Q. Aside from formal CPD and training, were you expected to keep up with industry knowledge about materials and products that are used on building projects?

A. Yes, I expect we would always expect to keep up with industry knowledge about materials and products that are used on building projects?

Q. Is that because JRP took in contractors to then hire freelancers?

A. Yes, but that did vary, you know, month by month.

Q. That’s three including you?

A. Yes.

Q. And that’s three including you?

A. Yes.

Q. Were you aware of any previous fires that had been linked to ACM cladding?

A. No.

A. No.

Q. For the transcript, that's CWCT Technical Note 73?

A. No.

Q. That’s again, for the transcript, CWCT00000019.

A. No.

Q. Were you aware of any of the fires that took place in high-rise buildings in the UAE in 2012/2013?

A. No.

Q. Were you aware of the fire at Lakanal House in Southwark?

A. Yes, I do remember it, but I didn’t specifically remember it as a cladding fire. I thought it was a compartment fire.

Q. Were you aware of any of the fires that took place in high-rise buildings in the UAE in 2012/2013?

A. No.

Q. Were you aware of the fire at Knowsley Heights in 1991?

A. No.

Q. And Garnock Court in Irvine in 1999?

A. No. When you say aware, aware at the time, but obviously since then, since the fire, it’s obviously been well documented.

Q. Were you familiar with the CDM Regulations?

A. I was roughly familiar, yes.

Q. In your experience, how do the CDM Regulations apply, if at all, to someone carrying out a clerk of works or site supervisor, site monitoring role?

A. I would say it doesn’t, the clerk of works or site inspector wouldn’t have any CDM responsibility.

Q. I’m now going to ask you about John Rowan and Partners as a company.

A. I wouldn’t have any CDM responsibility.

Q. Were you personally aware of any previous fires that had been linked to ACM cladding?

A. No.

Q. Did you ever attend any industry seminars or CPD on part B of the Building Regulations?

A. Okay.

Q. Did any of the John Rowan and Partners training cover fire risk assessment?

A. No, that would be general site safety.

Q. Did any of the CPD that you undertook more broadly, so safety training?

A. Yes, there were some mandatory ones, like health and safety training.

Q. Would health and safety include fire safety?

A. No, that would be general site safety.

Q. Did any of the John Rowan and Partners training cover fire risk assessment something you ever did as part of your role?

A. No.

Q. We will come back to cavity barriers under a separate topic later.

Q. Were you aware of the fire at Lakanal House in Southwark?

A. No.

Q. Did you ever attend any industry seminars or CPD on part B of the Building Regulations?

A. Okay.

Q. Did any of the CPD that you undertook more broadly, so safety training?

A. Yes, there were some mandatory ones, like health and safety training.

Q. Would health and safety include fire safety?

A. No, that would be general site safety.

Q. Did any of the John Rowan and Partners training cover fire risk assessment something you ever did as part of your role?

A. No.

Q. Aside from formal CPD and training, were you expected to keep up with industry knowledge about materials and products that are used on building projects?

A. Yes, I expect we would always expect to keep up with industry knowledge about materials and products that are used on building projects.

Q. Did any of the CPD that you undertook more broadly, so not just what John Rowan and Partners provided, cover part 4 of the Building Regulations?

A. No.

Q. Up to 2016, did you ever attend any industry seminars or events where high-rise rainscreen cladding was covered?

A. No.

Q. If we go now to John Rowan and Partners’ bid to KCTMO for the Grenfell project, that’s at JRP000000295/16.

While that document is coming up, did you see the bid submitted to KCTMO at the time?
Q. -- KCTMO?
A. No, but he just outlined the job, really.

......

Q. Did you see the invitation to tender from --
A. No.

Q. -- at all?
A. No.

Q. Did you see the invitation to tender from --
A. No.

Q. -- KCTMO?
A. Yes. I believe so.

Q. I'm now going to ask you some questions about JRP's contract with the TMO before the Grenfell refurbishment.

Q. Did you know that John Rowan and Partners won the tender for the Grenfell Tower job at the time?
A. No.

Q. You have said in your statement that you were not involved in the tender process, and you have said now that you weren't aware of the bidding. I think we can take it from that then that you had no input --
A. No.

Q. And had you undertaken them before 2014?
A. Yes. I believe so.

Q. We'll look at some of the specific terms in a second.

Q. Before the summer of 2015, did Mr Virdee ever explain to you what it said?
A. Yes.

Q. Can we go now, then, to the invitation to tender which is at {JRP00000011/1}.

Q. Did you attend an interview with the TMO before Grenfell Tower?
A. No.

Q. Were you aware in 2014 that KCTMO had specifically asked for someone with experience of cladding?
A. No.

Q. What did Mr Zarraoa ever tell you what was in the invitation to tender and what it required of a clerk of works?
A. No, Mr Zarraoa would never -- he was not my direct line boss. That would be somebody else, Luis Zarraoa.

Q. Did Mr Zarraoa ever tell you what it said?
A. No.

Q. -- at all?
A. No.

Q. Did Mr Batty have any input into the tender process?
A. I found out later.

Q. Mr Batty is Tony Batty, who was the other clerk of works employed as a subcontractor to JRP to do M&E work; is that right?
A. Site inspector, yes, yeah.

Q. Can we go now, then, to the invitation to tender which is at {JRP00000011/4}.

Q. Did you attend an interview with the TMO before John Rowan and Partners won the tender?
A. No.

Q. Were you aware that, under the design and build contract with Rydon, the KCTMO did not have an obligation to engage a clerk of works?
A. No.

Q. Were you ever told why KCTMO decided to appoint a clerk of works?
A. No.

Q. Were you aware that John Rowan and Partners won the tender?
A. No.

Q. Were you ever told why KCTMO decided to appoint a clerk of works?
A. No.

Q. Were you aware that KCTMO required an organisation to provide two clerk of works? One clerk of works should have experience in mechanical and electrical installations and the other with building works (ideally with experience of the installation of external cladding). Then it goes on to outline what the anticipated time requirement would be.
A. No.

Q. Did he explain to you the duties it set out that the clerk of works was expected to undertake?
A. No, Mr Virdee would never -- he was not my direct line boss. That would be somebody else, Luis Zarraoa.

Q. Did Mr Zarraoa ever tell you what was in the invitation to tender and what it required of a clerk of works?
A. No, but he just outlined the job, really.

Q. -- at the beginning of the job.
A. Yes, at the beginning of the job.
Q. So in 2014 -- 
A. Sorry, could you say question again, please?
Q. -- did Mr Zarraoa tell you that that was going to be part of your duties?
A. Not specifically, but by checking that the legal requirements were fulfilled by other people, I would say that that’s what I did.
Q. So you considered that to be part of your role, it didn’t need to be said?
A. Yeah, part of my site inspector’s role is always to check whether Building Control had visited site and whether they had any issues and whether they were resolved.
Q. There’s a difference between checking whether Building Control had checked and checking for yourself. Is it your evidence that that duty required you to check that Building Control were checking?
A. Correct.
Q. But not that you had to check for yourself that the work complied with legal requirements?
A. Correct.
Q. What did you understand legal requirements to be?
A. Well, I think my requirements on site was two legal requirements: first it was the health and safety, and the other was the Building Regulations.
Q. So you agree legal requirements would include Building Regulations?
A. Yes.
Q. In the industry, is it a standard requirement for clerk of works to carry out that role, being familiar with legal requirements and checking compliance?
A. I would say no, not for actual checking compliance. We never check or sign off for compliance.

Q. Do you know if KCTMO were ever informed that you had only been involved in one rainscreen cladding project -- one rainscreen cladding project before this job?
A. Yeah, I think you need to -- I mean, the cladding, as I said before, cladding could be anything: it could be brickwork, glazing, stonework. So, you know, I have got lots of experience in cladding.
Q. But do you know if KCTMO were ever informed that you had only been involved in one rainscreen cladding project?
A. I don’t know.
Q. Further down in the box, so further down the page to the next half, we see there that the ITT sets out the duties, and it says:
“The duties of the clerk of works shall comprise, but not be limited to ...”
Second bullet:
“Have access to the drawings and specification, and be familiar with the same; using them as a reference when inspecting the work.”
Do you see that there?
A. Yes, I do, yeah.
Q. Sixth bullet:
“Taking measurements and samples on site to make sure that the work and the materials meet the specifications and quality standards.”
And third bullet from the bottom:
“Being familiar with legal requirements and checking that the work complies with them.”
Do you see that?
A. Yes, I do.
Q. Would you say that description accords with the tasks a clerk of works normally undertakes?
A. Yes.
Q. In relation to being familiar with legal requirements and checking that the work complies with them, is that something you had been told by your line manager in 2014 would be required of you?
A. Sorry, could you say question again, please?
Q. So in 2014 -- 
A. Yeah.
Q. -- that third bullet from the bottom, being familiar with legal requirements --
A. Yeah.
Q. -- did Mr Zarraoa tell you that that was going to be part of your duties?
A. Not specifically, but by checking that the legal requirements were fulfilled by other people, I would say that that’s what I did.
Q. So you considered that to be part of your role, it wasn’t necessary to say in your report, but I never actually checked the details of the compliance. That was done, I think, by Building Control.
Q. Had you familiarised yourself with the requirements of the other Building Regulations?
A. The other was the Building Regulations.
Q. So you agree legal requirements would include Building Regulations?
A. Yes.
Q. In the industry, is it a standard requirement for clerk of works to carry out that role, being familiar with legal requirements and checking compliance?
A. I would say no, not for actual checking compliance. We never check or sign off for compliance.

Q. We’re going to go into some more detail about the scope of your role on the Grenfell project, but at this stage, having seen those duties, would you say they are more consistent with a site supervision role or more consistent with a clerk of works role?
A. This looks like a general clerk of works specification, a role they do.
Q. So in his witness statement to the Inquiry, Tony Batty describes his role, and if we pull that up, that’s (SDA00000238/9). He says there at paragraph 36, which is about two-thirds of the way down, second sentence:
“If there were aspects of the installation which I inspected that appeared not to be in compliance with Building Regulations I would note that in my reports, but it was the standard of installation rather than the design which I was checking.”
Is that what you did too on site?
A. As I walked round, I -- if I saw anything that... like for instance any fire doors or anything that I saw that I felt didn’t comply, then I’d actually bring it up in my report, but I never actually checked the details of the compliance. That was done, I think, by Building Control.
Q. And a site inspector/monitor visits site on an intermittent basis and tends to have a far more limited role.
A. No.
Q. So in terms of being able to note any obvious non-compliances, you wouldn’t have been equipped to do that, would you?
A. No.
Q. Why didn’t you familiarise yourself with the requirements of the Building Regulations?
A. That wasn’t my role.
Q. I’ll move on now to ask you some questions about the scope of your role.
If we go back to your statement at paragraph 13, which is on page 2 {JRP00000330/2}, you say there: “It is important, in my opinion, to explain that there seems to be a misunderstanding in what my role, and by association that of my employers JRP, was on the Grenfell Tower Project. Whereas I have stated, above, that I was a full time [clerk of works] on the Haringey Council project this was due to the fact that I was involved in the whole building project each and every day. In respect of my role on the Grenfell Tower project, a more accurate description of my role and function was one of Site Inspector or Site Monitor of works. This was because our role was far more limited in its scope and our overall involvement.”
A. Yes.
Q. You then go on to explain the difference between a clerk of works and site inspector/monitor in paragraphs 14 and 15. If I can summarise, you say a clerk of works is based full-time on a particular project for the whole project.
A. Yeah.
Q. And a site inspector/monitor visits site on an intermittent basis and tends to have a far more limited role.
A. A site inspector role is purely dedicated by or instructed by the client of what they want, in terms of what we need to inspect, how long our visits were, if they wanted a -- what sort of report. But generally, a site inspector would carry out the snagging at the end of the job or to check all the finishes. So it would be -- the snagging would be consistent, but the actual duration, the type of report, what they want to look for, varies according to different projects and different clients.
Q. What would you say is the difference between a site inspector and a clerk of works?
A. I would say the clerk of works is generally a term used as a person who would be involved with the job from right at the beginning of the job, from design, going through planning, pre-contract meetings, to looking after the actual construction, and then doing all the snagging, and then maybe 12 months after, checking the 12-month defects. So the role would be completely -- from right at the beginning of the job to right at the end, and even after the defects.
SIR MARTIN MOORE-BICK: Can you help me with this: if you were instructed as a classic clerk of the works, so to speak, would you expect to produce regular, as it were, descriptive reports on what was going on?
A. No, because I would be there all the time, and I would be -- I’d be there at all the site meetings, I would have my own office, I’d have all my drawings, so I wouldn’t have to report; I’d be there all the time, so --
SIR MARTIN MOORE-BICK: Would you be recording what was going on?
A. Yes. I would have a -- normally you would have a diary, a daily diary, you would record everything, and you would be involved in all the decisions and all the meetings and, you know, a much fuller role than a site inspector.
SIR MARTIN MOORE-BICK: You would then be, would you, the eyes and ears of the building owner?
A. Correct, of the client, yes.
SIR MARTIN MOORE-BICK: Whereas, if I have understood you correctly, forgive me, if you’re a site inspector, the degree of your interest, shall I say, and reporting is a matter for the client to tell you what he wants you to do?
A. That’s right.
SIR MARTIN MOORE-BICK: That’s helpful. Thank you very much.
MS GROGAN: Thank you, that’s very helpful.
SIR MARTIN MOORE-BICK: Sorry, Ms Grogan.
MS GROGAN: Thank you, that’s very helpful.
SIR MARTIN MOORE-BICK: So, so far as I understand your evidence, in both cases you would be reporting to, as is often described on a construction contract, the employer?
A. Actually, originally, the clerk of works would normally be employed by the architect. But recently it’s normally the client.
Q. Under design and build contracts specifically, what’s the practice?
A. Oh, it’s normally the client.
Q. Thank you.
A. So would a site inspector become familiar with the
drawings and specifications and use those as a reference for checking the work?

A. No, not necessarily totally familiar. You know, if there was issues or when I was doing my site inspection if there was areas where I was unsure of things, then I would then go back to the office and check the drawings or specification then.

Q. Would a site inspector take measurements on site to make sure materials and work meet the specification and quality standards?

A. Not unless I was requested.

Q. Would a site inspector check for compliance with legal requirements?

A. Only check that the compliance team was checking, and they had no issues, and if so, I report them in my report.

Q. So the answer to the first two is no, but the third one is yes, a site inspector would check that Building Control had been on site?

A. Yes. Yes.

Q. Having looked at the invitation to tender with me, do you agree that it was intended that JRP would do all of those things?

A. Erm ... I've seen lots of tenders, and they promise the Earth, and they talk about lots of things, but, you know, as a site inspector, really we would be focusing on speaking to the client and see what they wanted done, and that's what happened at Grenfell.

Q. When you saw the tender then in 2015, were you surprised to see those obligations set out there?

A. No, it's a general clerk of works, site inspection description.

Q. But your evidence is that you were carrying out the site inspection role.

A. Yes.

Q. And that a site inspection role is more limited ---

A. Yes.

Q. --- than a clerk of works role. So why weren't you surprised, then, to see all of the duties for a clerk of works set out?

A. Because often the client puts everything down as a clerk of works. So, you know, the term clerk of works is confusing to a site inspector.

Q. You go on to say at paragraph 16, which is at the bottom of that page that we have up, that: "From experience the role and scope of services of CoW and Site Inspector varies very much from client to client."

Then moving on to the next page [JRP00000330/3], the paragraph continues, and you have already explained this to us today, you say:

"A lot however, depends on what the client considers a Clerk of Works or a Site Inspector's role to be, and what they require out of the role."

A. Yes.

Q. And that can vary from project to project.

On the basis of what you have said there and what you have said to the Inquiry today, would you agree that the written terms of appointment are therefore an important reference point for defining what the clerk of work's role is to be?

A. Yes, people do mix up the two.

Q. Would you agree that the terms are often used interchangeably in the industry?

A. Yes.

Q. Would you agree that it's not the case that a clerk of works has to be on site every day?

A. Depending on the job. If it's a big job, I would say yes, definitely, but even if it's a little job, I would expect the clerk of works to be there right at the beginning, on the conception, the design stage, and being involved with all the site meetings, and then go all the way through and then do the defects. So it's more being involved throughout the length of the job.

Whereas, for instance, Grenfell, I started in -- my first visit was in February 2015, my first official visit, which was some seven/eight months after the job had started.

Q. In his witness statement to the Inquiry -- and we don't need to bring it up, but the reference is (SDA00000238) -- Mr Batty doesn't make the distinction that you make between the role on Grenfell as a site supervisor and a clerk of works.

A. Yeah.

Q. Did you ever discuss the scope of your role with him at the outset of the project?

A. Not specifically, no. No.

Q. So you never sat down together and agreed: well, we're being site inspectors on this job, not clerks of works, and so that affects what we're going to do?

A. I don't think it really made a difference. We discussed that he would be looking after the M&E and I would be looking after the building works.

Q. Staying with your witness statement on page 3 of [JRP00000330/3], if we go down the page to paragraph 20,
We have heard that Mr Virdee is not your line manager, but he was the person leading on the bid to KCTMO, wasn't he?

Q. Did you ever say to her, "I am not a clerk of works, that's what we did."

A. Yeah, we talked about what she wanted us to do, and different roles, a clerk of works role, you would be able to issue instructions, but she specifically said we were not to issue any instructions.

Q. Does this mean that you were not given more detail as to what the nature of your role actually was going to be?

A. Yes.

Q. Were you aware that Mr Virdee had described your role to Claire Williams in that way?

A. I wasn't aware, no, but I can see it now.

Q. Do you accept that that may have caused some confusion as to what the nature of your role actually was going to be?

A. It's the confusion of the clerk of works and site inspector. I mean, I would always clarify that by -- when we had a talk with the client, we would determine what our role was.

Q. Did you clarify that with Claire Williams on 16 September?

A. Yeah, we talked about what she wanted us to do, and that's what we did.

Q. Did you ever say to her, "I am not a clerk of works, I am a site inspector"?

A. No.

Q. Did you ever explain to her what the difference in your mind between those two things was?

A. No, because, you know, everyone gets confused about the term clerk of works and site inspector, so we were anxious just to carry on and do whatever she wanted us to do.

Q. Going now to another chain of emails which is (JRP00000334/2), please, zooming in at the top we see an email from Luis Zarraoa to you and Tony Batty --

A. Yes.

Q. -- containing his notes of the meeting with Claire Williams on 16 September. That’s the meeting we were just talking about.

A. Yeah.

Q. Was it the three of you who attended for JRP?

A. Yes.

Q. And of course, Tony Batty was employed by a separate company, but he was a subcontractor, I should just make that clear.

A. Yes.

Q. From what you said already, it's clear you recall that meeting, don't you?

A. Yes.
A. No, we wouldn’t normally get a copy of that, but we were building on the NBS?

Q. Would that also be specifications of subcontractors that would be -- we would be already involved with everything that’s going on.

A. Yes.

Q. Would that be the NBS specification?

A. Well, specification of the job.

Q. -- read it another time?

A. Yes.

Q. When you went to the site office, would you actually check these documents?

A. No, not unless there was a reason to check them.

Q. So it wouldn’t be that on your first day on the job you would go to the site office and review the NBS specification?

A. No. I mean, when I got my first day of the job, which was in official -- which was in February 2015, you know, the whole site was alive with people, things going on. So I think I really wanted to get out and see what was going on.

Q. So I can take it from that on Grenfell, then, you didn’t look at the NBS on day one.

A. No.

Q. Did you ever look at it?

A. Occasionally, yes.

Q. What sort of things were you checking it for?

A. If there was -- you know, I would walk around the site, and if there was anything I wasn’t sure of, then if I needed to check the specification, I would. I think there was -- there may have been some examples of that. I think on some of the newly built flats, there was no heat detector in the new kitchens, and I thought that was a bit odd. I think he would like to keep a copy of that for each job in the office.

Q. And on what basis was that?

A. Well, the biggest basis was that here we were, we were meeting in September and the job had already started in June. So, you know, if it was a clerk of works role, it would be we would be already involved with everything that’s going on.

Q. I see.

On page 3 of that email {JRP00000334/3}, you will see there is a number of headings there. Under "Items to flag up", it says:

“Building fabric: cladding, windows, internal finishes.”

So you were specifically asked to look at the cladding, the windows and the internal finishes?

A. Yes.

Q. Under the heading, "Info required from KCTMO", which is right at the very bottom, I think we need to scroll down, it says:

“Spec of works and MI manufacturers instructions.”

So were you expecting to have a copy of the specification for the project?

A. I think in an ideal world that would be nice, but in reality it very rarely happens, and what happens, when we go to site, obviously there would be a copy of the specification there and drawings there. I mean, often the case I had maybe five jobs in a week, so I’d one job a week -- so it would be impossible for me to have five lots of drawings and specifications. So I normally use that information when I go to site and I know it’s up to date.

Q. So it’s easier for you to have all that documentation on site rather than to take it away and --

A. Yes.

Q. -- read it another time?

A. Yes.

Q. What did you mean by specification there at that meeting?

A. Well, specification of the job.

Q. Would that be the NBS specification?

A. Yes.

Q. Would that also be specifications of subcontractors that were building on the NBS?

A. No, we wouldn’t normally get a copy of that, but we wouldn’t normally get a copy of the specification. We would normally observe it and look at it when we went to the site office. If there was -- you know, I would walk around the site, and if there was anything I wasn’t sure of, then if I needed to check the specification, I would. I think there was -- there may have been some examples of that. I think on some of the newly built flats, there was no heat detector in the new kitchens, and I thought that was a bit odd. So I checked the specification.

Q. We’ll come back to the NBS later when we talk about the cladding.

Going now, then, to {JRP00000332/2}, which is another set of emails. This is an email from Claire Williams to Luis Zarraoa. Did you see this at the time?

A. Yes. I think I got a copy of that.

Q. So in the first full paragraph there, about halfway
1. There is a link there.

2. Q. Did you ever click on that link, did you access it?
   3. A. Yes.

4. Q. Did you try to, but we could never achieve the full
   5. information, and there was lots of emails and phone
   6. calls about that, and eventually what we could obtain
   7. was only a very limited part of the specification, which
   8. was quite a period after we started. But, again, as far
   9. as Tony and I was concerned, we could check the
   10. specification when we needed on the site.

11. Q. Which part of the specification did you manage to obtain
   12. in the end?
   13. A. It was Tony, actually, that actually managed to get in.
   14. I think there was only heating or rainwater pipes or
   15. something like that. It was a very limited part of the
   16. specification. I think it’s all recorded in the emails,
   17. if you go through all the emails.

18. Q. Under item 3 there, “AOB”, it says:
   19. “Further to some of Jon’s comments, I confirm:
   20. “A Windows-I have asked Rydon to send [through]
   21. sill section drawings earliest …”
   22. Did that ever happen?
   23. A. No, I never actually got the drawings. I mean, my
   24. observation there was in my experience we’ve had a lot
   25. of problems with pigeons, and to tell her that maybe she
   26. needed to think about pigeon protection to the cills.

27. A. Yes.

28. Q. Did that ever change?
   29. A. I would say it equalled out further on down the line.

30. Q. When would that have been?
   31. A. Yes, one of their priorities, yes.

32. Q. So when we officially started, which was when
   33. I officially started in February, and that was only
   34. actually twice on that month, but maybe in March, when
   35. we were both visiting regularly then, every week,
   36. according to requirements.

37. Q. So under item 1 there, we see KPI. She is asking you to
   38. report on quality, workmanship, health and safety and
   39. progress.

40. A. Yes.

41. Q. Did you get the impression that progress and keeping to
   42. programme was a priority for the TMO?

43. A. Yes, one of their priorities, yes.

44. Q. Moving down the page, then, to item 2, which is just on
   45. the second half of the page, you see there the heading
   46. “Specification”.

47. A. Yes.

48. Q. She says:
   49. “The other thing I said I would get to you is
   50. specification information - which is all on line. I
   51. have no hard copies.”
   52. There is a link there.
A. No, I mean, I was there a very limited time, you know, just to have a look and then to speak to a couple of people.

Q. Did you discuss the scope of your role with Rydon personnel at that meeting?

A. Yes.

Q. Did you discuss the scope of your role with Rydon and for me to collect it, what do you think?

A. Tony Batty there seems to want the hard-copy drawings.

Q. And we can find that in paragraph 25 of your witness statement [JRP00000330/4].

A. Yes.

Q. But that’s not something you felt you needed?

A. No.

Q. Do you know if that ever happened, if he got hard copies provided for him?

A. Yes.

Q. He mentions in that email as well that he had his site induction on 1 October. Your induction was 15 October, wasn’t it?

A. Yes, I believe so.

Q. And we can find that in paragraph 25 of your witness statement [JRP00000330/4].

A. Yes.

Q. What did the induction cover?

A. Basically general site rules, safety rules, fire egress, and that was it, really. And then we got a Rydons jacket at the end of it.

Q. So it was more about rules for being on site rather than the nature of the works?

A. Yes.

Q. Did you discuss the scope of your role with Rydon personnel at that meeting?

A. No.

Q. Did you explain to them that you were just there for site inspection, not clerk of works?

A. No, just said we’re there as a site inspector and we would be coming regularly when the time -- when we were instructed.

Q. Did you explain that you were not checking for compliance with Building Regulations?

A. No.

Q. Did you discuss the cladding at all?

A. No.

Q. Were you shown any drawings?

A. No, I mean, I was there a very limited time, you know, it was a quick in and out job, really, you know. It was very quick. I did however do a mock report as well. So

I wasn’t there for very long talking to them at all.

Q. Yes, we’re coming on to your mock report now.

A. Yes.

Q. We don’t need to look at the report itself, but you send it to Claire Williams, and the reference is [JRP00000338/3]. There is an email from you, 17 October:

"Hi Claire,

Please find enclosed our first site inspection report._"

If we go back a page now to page 2 [JRP00000338/2], at the bottom we have an email from Claire Williams of 20 October 2014:

"Jon

I have not agreed a start date for you yet, and only found out last week that you had had an induction. I need to monitor the works and your hours -- which are not yet agreed."

Then she asks Luis to ring her.

She refers to not having agreed a basis for your service. What did you understand that to mean?

A. I think she was -- she didn’t want us to start yet, or me to start yet, so it was just a question of start date.

Q. Did you get the impression from TMO that cost was a concern?

A. Only that -- only what she said, was that, you know, she was obviously checking the hours.

Q. We’ve already noted that you and Tony Batty were to spend 80 days on site split between you.

A. Yeah.

Q. Having done your job now and knowing what you know about the project, did you consider that to be sufficient?

A. I can’t remember. I mean, you would be able to work out, or someone would be able to work out, how many hours we did, how many, because we did -- at the end of 2015 we did more than one day a week. But I think initially that was sufficient to what she wanted us to do.

But, however, when so much works was going on at the same time, especially when the snagging was going on, then I asked her, you know, "We need more time to do that work", which we eventually got at the end of 2015, I think. For a small period we had -- we were working there two days a week.

Q. So to sum that up in a nutshell, at the time you never felt, "I don’t have enough time to do this job properly"?

A. No, not for what she wanted, yes.

Q. Were you aware of what others on the project thought was
MS GROGAN: Yes, Mr Chairman, I will keep a clear distinction between what is the role of the TMO and what is the role of the contractor. We don’t need to go to the statement. The reference is TMO00847337/8, paragraph 37. He says your job was to report independently on the compliance of the construction work as it proceeded. Do you agree or disagree with that statement?

A. Yes.

Q. As part of your role on Grenfell you met him?

A. Yes.

SIR MARTIN MOORE-BICK: Right.

A. Yes.

Q. Peter Maddison of the TMO has also described your role. Have you heard of or met Peter Maddison from the TMO?

A. Yes.

SIR MARTIN MOORE-BICK: Well, when we talk about compliance, we need to know with what it is he is supposed to be checking compliance.

MS GROGAN: Yes, Mr Chairman, I will keep a clear distinction between with the Building Regulations and with the drawings going forward.

Mr Gibson also describes your role as checking for compliance, but he doesn’t say with what.

SIR MARTIN MOORE-BICK: I think if we’re going to ask about compliance, we need to know with what it is he is supposed to be checking compliance.

A. Yes.

Q. Were you aware that were some at the TMO thought that your role involved compliance-type checking, so either with Building Regulations or drawings?

A. No.

Q. Did anyone at Rydon ever ask you what the scope of your role was?

A. No.
Q. The Rydon witnesses in their evidence to this Inquiry, in their oral evidence, have also described your role.

Mr Hughes has said that your role was to check that work was in accordance with specifications and drawings.

It sounds like you wouldn’t agree with that.

A. No.

Q. Mr Martin said that he understood you would be inspecting in relation to the Building Regulations and relevant guidance.

A. No.

Q. Were you aware of either Mr Hughes or Mr Martin’s views of your role at the time?

A. No.

Q. Did you ever get the impression that different people at Rydon would have different views about the scope of your role?

A. No.

Q. What about other professionals on the project, such as Studio E, Arteria, Harley?

A. No.

Q. So you thought everyone knew what you were there for and what the limits of your job were?

A. Yes.

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1 Q. But I think you have said that using materials different to those specified, even if they compromised fire safety, would not have fallen within your remit?

2 A. No. Unless I spotted it, if I did spot it, but I don’t think I ever did. Whatever I spotted, I highlighted.

3 Q. So if you had spotted something that didn’t match a drawing, and it was a fire safety issue, that’s something you would have reported?

4 A. If I saw it, and if I -- you know, if I saw it, that it wasn’t right, I would let her know.

5 Q. That would depend on you knowing what was in the drawing?

6 A. Yes.

7 Q. --- and it hadn’t been, is that something you would have raised?

8 A. Yes.

9 Q. Now, moving on to a new topic, which is about access to drawings, I think we can take this quite quickly because we’ve already discussed it.

10 Q. If we just go to your statement on page 7 ([JRP00000330/7], paragraph 51, you say there: “We were never supplied with any drawings and had very limited specifications. If there was a need to look at any drawings, then Rydon provided them on site.”)

11 A. Yes.

12 Q. Based on what you have already said, drawings were available for you to check on site; is that right?

13 A. Yes. Yes.

14 Q. You were in fact emailed drawings from time to time from Rydon personnel, weren’t you?

15 A. No, I never got any emails, emailed drawings at all.

16 Q. You were in fact emailed drawings from time to time from Rydon personnel, weren’t you?

17 A. No.

18 Q. You were in fact emailed drawings from time to time from Rydon personnel, weren’t you?

19 A. No.

20 Q. You were in fact emailed drawings from time to time from Rydon personnel, weren’t you?

21 A. No.

22 Q. You were in fact emailed drawings from time to time from Rydon personnel, weren’t you?

23 A. No.

24 Q. You were in fact emailed drawings from time to time from Rydon personnel, weren’t you?

25 A. No.
A. This I think was a request I asked for, I think, and he couldn’t find it at the time when I was on site.

Q. Go to [MAX00005878/2], and zoom in. Again, David Hughes, and you are there on the circulation list, your email address is there. Do you see that?

A. Yes.

Q. It’s the fourth line down: “Dear All

“Please see following drawings attached as mentioned in design team minutes.”

That includes the fire strategy.

So, again, Mr Hughes is sending you drawings there in that email.

A. Some drawings, yes. Yes. I mean, I didn’t get -- I wasn’t a part of an issue, a drawing issue. He may have sent me the odd drawing here and there.

Q. So from time to time Rydon sent you drawings, either for your information or on request?

A. Yes.

Q. Okay.

Was there ever an occasion where you asked to see a drawing and were not provided with it, either then or later by email?

A. Not that I can recall, no.

Q. Do you recall seeing drawings of the cladding?

A. I did see some drawings, yes.

Q. Do you recall seeing drawings showing the location of cavity barriers within the cladding?

A. Not specifically, no.

Q. Is that something that you would have been interested in, where the cavity barriers were located?

A. Not specifically, no.

Q. And is that because you didn’t see yourself as having a role in design?

A. We didn’t have any role in design, no.

Q. Do you recall seeing design drawings of the windows?

A. No.

Q. Did you feel at the time that you had sufficient access to drawings?

A. I knew that all the drawings would be in the site office, yes.

Q. Just checking on specifications, you have said to us that you had seen the NBS specification on site.

A. Yes.

Q. If I could just take you to a particular part of it, it’s [SEA00000169/63], So that’s the section, “Rainscreen cladding”. If we go over the page [SEA00000169/64], we see it starts there, H92.

Did you look at that at the time?

A. No.

Q. So you didn’t think to check what had been specified in respect of the cladding?

A. No.

Q. So you --

A. I was only there one day a week so, you know, I had limited time, and my role was not to check all the drawings or any of the specifications. So, no, I didn’t read all the specifications, no.

Q. If we go to [HAR00009735], that’s Harley’s specification for the cladding. Did you ever see that?

A. No.

Q. And did you ever ask to see it?

A. No.

Q. Did you know at the time what materials were being used in the façade for the cladding panels above the fourth floor?

A. No.

Q. So you didn’t know it was ACM?

A. No.

Q. Did you know what the insulation was being used in the cladding system?

A. No.

Q. Did you know broadly what type it was, so not the brand but that it was PIR?

A. Not specifically, no.

Q. Did you know which cavity barriers were being used?

A. No, not specifically, but I saw them being installed.

Q. Did you know what materials were being used in the white window infill panels, above the large ones and the small ones housing the kitchen extract fans?

A. No.

Q. And you never asked?

A. No.

Q. Were you ever provided with manufacturers’ instructions for these products?

A. No.

Q. Did you know which cavity barriers were being used?

A. No, not specifically, but I saw them being installed.

Q. Did you know what the white window infill panels were, above the large ones and the small ones housing the kitchen extract fans?

A. No.

Q. And did you ever ask to see those?

A. No.

Q. So you didn’t consider it your role to check whether any of those products were installed in compliance with the manufacturers’ instructions?

A. No, I didn’t think it was my role, no.

Q. If we go now back to Mr Batty’s evidence, it’s a different form of statement, it’s one he has given to the police, it’s [MET00023699/10]. At the very bottom he starts the last sentence: “My role was...”

Then on to page 11 [MET00023699/11]: “... that once they had started the installation, to go and check that it was a good standard and a good..."
Q. Did you think that the client, Claire Williams, would understand what you meant by that?
A. I don’t know, you’ll have to ask her.

Q. Who told you that it had fireproofing, or was it just something you observed?
A. Well, I could see the barriers being installed.

Q. In his witness statement to the Inquiry, Mr Hughes of Rydon says that he told you what kind of insulation was being installed on the tower. If we go to that, to see the words he uses, it’s [RYD00094213/10], paragraph 55. So he says there:

“In December 2015 or January 2016 I discussed with Ben Bailey and agreed the use of Kingspan, as Barleys had difficulty obtaining Celotex from their supplier.”

Then at the last line, the last sentence, he says:

“Told Steve Blake and the Clerk of Works, Jon White, of this use of Kingspan insulation material.”

Do you recall that conversation?
A. No, I don’t. Definitely not. I would have definitely put it in my report if that was the case.

Q. When you looked at the insulation being installed on the face of the tower, did you note any markings on it?
A. Not specifically, no.

Q. If we could go to [RYD00055130], and if we zoom in, it’s about two-thirds of the way up, we can see, sort of four floors up from the bottom of that picture, some markings.

Q. Are you familiar with Kingspan insulation material?
A. No.

Q. Do you recall seeing a protective film over the cladding panels with the name Reynobond on it?
A. No. The only film I remember seeing was the protection to the panels themselves, that was just protecting the panels.

Q. -- the film protecting the panels. Did you see it had branding on it?
A. Oh.

Q. -- the film protecting the panels. Did you see it had branding on it?
A. No, not that I recall, I just remember seeing the film on it.

Q. So did you know that the design of the cladding system did not provide for any cavity barriers around the windows?
A. No, we were not -- we’re not involved with any design issues at all. We started, as I said, in February, so a lot of the design had been done.

Q. But when you were on site looking at the installation,
Q. He asked you a second part of the question, which was:

do all works comply with the employer's requirements.

A. No, because I just refer to the snagging. I mean,

You didn’t answer that question in this email, did you?

A. No. Initially I went on the climbers, and I had to

I didn’t sign off compliance; therefore, you know, I was

So could you just describe for me then how you went

just concentrating on the snagging.

about inspecting the cladding and at what stages?

Q. Do you think it's possible that it was taken from your

A. Yes. Initially I went on the climbers, and I had to

email that you had confirmed that everything complied?

rely on obviously them to come down and I couldn't drive

A. Yes. Initially I went on the climbers, and I had to

it myself, but generally I would get them to collect me

Q. He asked you a second part of the question, which was:

and then I’d go on the climber and I would just check

A. Yes. Initially I went on the climbers, and I had to

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what they were doing, which I did, and where they're actually working, I would be in the area where they were working, just checking that, you know, all the everything looked properly fitted, there's no loose materials or any damage, and that's what I'd do before -- a few times before the snagging started.

So when the snagging started, I was asked to inspect the areas that I was told were ready for snagging, that it was complete and all finished, and I remember the first time they arranged and I arranged to meet, I went up on the climber, mast climber, and I think we'd always generally start -- the mast climber was -- there was two mast climbers of that elevation, and I would go up on the top -- to the top of the -- one of the elevations on the mast climber, and initially would start the inspections of the cladding for the snagging.

I remember the first inspection I did, there was lots of scratches and the finished product wasn't very good, and so I rejected it, I said, "I'm not inspecting it until you look at it yourself and make sure that it's a presentable finish."

Q. I see.

A. So I then came back at a later time, maybe a week later, I can't remember, and that's when I started doing the snagging, and I had -- I always had normally Ben with me, the cladder. I sometimes had a member of Rydon's staff with me. But we would start -- normally an elevation would be ready for me, so I would start on a climber that would be right at the top and I would work my way down the whole width of the climber, which would be normally half an elevation.

So we would go from top to bottom, all the way down, every -- checking every single floor. We wouldn't do two floors; that would be impractical. We would do every single floor all the way down to the third floor, because that was where a lot of the works had been finished. Three floors below, they were part of the lower floor works and they weren't ready.

So we go from top to bottom down to the third floor, and then we would go across to the next climber, go all the way up and start again, going all the way down.

So I would be recording with my iPad all the snags, and then I would make that list as a snagging list, and then I would issue that to Rydons, who would issue it to the cladding contractor.

Q. I see.

A. Yeah.

Q. Did you ever inspect the cladding before the cladding panels had been installed?

A. Not specifically. I mean, my general inspections I did, but I was never asked to inspect anything specifically before the cladding panels went on, no.

Q. So did you ever go up the mast climbers to look at insulation and cavity barriers?

A. Yes, when I did my normal site inspections, I did, yes.

Q. You have said in your statement that you compiled 35 reports, I think.

A. Yes.

Q. Of those 35 inspection visits, how many times did you go up the mast climbers?

A. I would say probably, including snagging and de-snagging, I can only estimate, it was probably between 10 and 12 times, maybe.

Q. So before the snagging inspections --

A. Yeah.

Q. -- and at the time you were observing insulation and cavity barriers, what were you looking for?

A. Generally that the work was neat and tidy, it wasn't damaged, that everything seemed to be the same, you know, it was all fitted with the same detail, there was no damage, and the insulation was -- there was no holes in the insulation, the fixings were not loose.

Generally I was just checking that there was nothing that stood out.

Q. You say there it was all fitted with the same detail, so you were looking for consistency?

A. Yes.

Q. Not checking against any drawings --

A. Yes.

Q. -- to see --

A. Yes.

Q. -- if it matched?

A. Yes.

Q. I see.

What value do you think you were adding to the client by doing that?

A. I think if it was a job where it was very untidy or it didn't appear to be fitted properly or there was problems, I would notify that to her, and I think because Building Control were regularly visiting and they were checking for compliance, if they had any issues then I would have looked at the cladding more. I mean, I think when I started in January, I think it was only a couple of months after that that Building Control -- I got a notification that Building Control had passed three floors of all the windows, snagging -- sorry, windows, the cladding, the firebreaks, and had approved it all.

So my immediate reaction that, you know, everything
Q. I see. So because you were aware that Building Control had been and Building Control, you were told, had said the cladding was compliant --

A. Yes.

Q. -- you felt you didn’t need to focus too much on it?

A. Yes. I mean, I basically did what -- going back to before, I did what was required by the client. At this point of period also, I must say that Claire Williams wanted me to really focus on the residents, you know. You remember I had 120 flats that were being operated on and worked on, and her focus was to make sure the residents -- to me, she kept on telling me -- I mean, I was in close conversation with Claire Williams, you know, many days, and she often asked me specifically to go to flat such-and-such to see that resident. So a lot of my focus was really on what she wanted me to do, and that was to focus on the residents.

Q. Did any residents ever raise any concerns with you about the cladding?

A. Not with me. I think when I first -- I mean, remember, it’s not only the cladding; it’s everything else going on. I think I counted 18 items of work that went on in each flat. So 18 items of work plus times 120, you can imagine what work was going on.

But when I first joined in February, when I first -- there was a concern not that -- that was highlighted to me via Claire Williams that there was a rattling going on with some cladding outside, that a resident complained of, and that was an example of Claire Williams wanting me to check it, which I did, and what that was, there was a bracket that was fixed that was being fitted and, you know, it hadn’t been fitted tight enough during the evening and then it was rattling in the night, so then I went up and checked.

Q. If we could now go to {JRP00000147}. So that’s another of your site visit reports, this time 12 November 2015, and again page 2 ({JRP00000147/2}) into the Building Control box.

Now, just as a general question, whether you were filling in this Building Control box, how did you get the information to populate that?

A. Mostly from asking the site staff from Rydons.

Q. So it was Rydons telling you what Building Control had said and telling you when they’d visited?

A. Yes, mostly, but I did get also -- there was also Building Control information on KCTMO newsletters, and there was also building inspection control information on Rydon’s newsletters as well, and site progress meetings and reports. So there was other -- lots of information regarding Building Control.

Q. But by and large it was second-hand?

A. Yes. Yes.

Q. Yes.

So in that Building Control box, then, on page 2, it refers to Building Control inspecting two elevations of the cladding. Did you attend that inspection with Building Control on 12 November?

A. No, I didn’t, no.

Q. But you did carry out an inspection on 11 November; is that right? You went up the cladding?

A. Sorry, where does it say that?

Q. We have that from -- Mr Hughes gave evidence to the Inquiry on {Day27/95:25}.

(Pause)

I’m sorry, that’s a reference to what John Hoban would have seen in his inspection. I’ll ask my question in a different way.

In around November 2015, did you ever attend an inspection and go up the mast climbers with John Hoban?

A. No, not that I can remember.

Q. Did you ever carry out an inspection with John Hoban there at the same time as you?

A. Not that I can remember.

Q. Did you ever speak directly to John Hoban?

A. Yes, I did meet him on site, yes.

Q. Were you ever party to a conversation where John Hoban was told that the cladding system had been fitted to many buildings throughout England and Wales to buildings of a similar height and construction?

A. No, no.

Q. Were you ever party to a conversation where John Hoban was told that the cladding would comply with the standards set out in Approved Document B?

A. No.

Q. Did you hear or were you party to discussions where John Hoban was told that cladding panels were class 0 or above?

A. No, I was never involved in any meetings with Building Control, as I said, either. There was some meetings on site, I wasn’t invited to that, and I only had a brief discussion with him.

Q. I’m now going to move on and ask you some questions about cavity barriers.

So in your general inspections of the cladding, when you were looking at cavity barriers, what defects and issues were you looking to pick up?

A. Just to make sure they were fitted securely, there was no damage, they were consistent, and really, again, make
Dr Lane has identified in her report -- and I’ve not taken you to all of them -- he was shocked, and if he had seen those issues on site, he would have instructed them to be corrected. The reference for the transcript for that is [HAR00010060/10], paragraph 32.

Would you have been similarly shocked?

A. Yes, I mean, it doesn’t look right and I would have -- I would have taken a photograph and I would have put it in my report.

Q. But as you said earlier, you didn’t see any examples such as that?

A. No, I was only there at a moment -- a snapshot of time.

You know, when I went up, I was only there one day a week, so -- and I didn’t go up the mast climbers every time, so, you know, I only saw a small amount of the works going up them really, apart from when I was doing the snagging.

Q. What was your overall impression of the quality of the cladding installation?

A. My impression -- it looked very neat, and when I first went up the mast climbers, I just observed what was going on, see if they were doing everything safely, and I spoke briefly to the men, they seemed very experienced, they’d done previous jobs with Rydons, rainscreen, this type of cladding, and they seemed very experienced, and what I noticed, what I saw -- normally if a job looks neat and tidy, normally it’s a good way of thinking whether it’s been done properly.

Q. Moving on now to the window installation, we know you inspected flats internally. Did this include inspection of the windows before they were sort of covered up, decorated and finished?

A. No.

Q. So you wouldn’t have seen, then, what was being installed in any gaps around the windows in terms of insulation?

A. No. Again, I inspected all the works when I did the snagging.

Q. Okay. So we can take it from that you weren’t aware of the kind of insulation that was being installed --

A. No.

Q. -- in that location?

Mr Martin of Rydon says that you would have seen...
Q. We have already discussed Building Control in a little bit as we have gone through your questions this afternoon. My next topic covers that as well.

A. I was with Mr Martin doing all the snagging, and when I was doing all the snagging, all the works were finished, so I wouldn’t be able to see the insulation.

Q. We have already discussed Building Control in a little bit as we have gone through your questions this afternoon. My next topic covers that as well.

A. Yeah, I think that was in relation to the KCTMO newsletter which had information on the Building Control.

Q. If we go back to your statement on page 7 [JRP00000330/7], paragraph 53, you say:

“We understood that as [Building Control] were inspecting and signing off the building that it complied, this responsibility lay with them.”

Do you accept that just because Building Control has an obligation to check for compliance that doesn’t necessarily mean others on a project don’t have their own obligations to check as well? And when I talk about compliance here, I mean with the Building Regulations.

A. I mean, I would say the big responsibility lay with Rydons, the main contractor, and the people fitting it. Was that information there obtained from a direct discussion in the meeting with Claire Williams. She never asked us to check for compliance, and on the ITT it never said check for compliance.

Q. Well, the full service was a clerk of works role, and we weren’t there as a clerk of works, we were there as a site inspector, and our role was defined by what was discussed in the meeting with Claire Williams. She never asked us to check for compliance, and on the ITT it never said check for compliance.

A. A. Sorry, what number are we talking about?

A. No, but she obviously -- she sent me an email with the information about Building Control?

Q. Then the email we looked at on page 1 is you asking Rydon to ensure each item is ticked off.

A. 3. Nursery ...

A. We understood that as [Building Control] were inspecting and signing off the building that it complied, this responsibility lay with them.

Q. If we go back to your statement, page 4 [JRP00000330/4], paragraph 31, you refer to updates reporting what Building Control had said coming from Claire Williams.

A. Sorry, what number are we talking about?

Q. Sorry, paragraph 31 says:

“We were also sent updates via email by Claire Williams which would sometimes be the source of information in the reports (e.g. visits from Building Control).”

A. Yeah, I think that was in relation to the KCTMO newsletter which had information about Building Control.

Q. I see. So Claire Williams wouldn’t send you specific emails detailing discussions with Building Control or information about Building Control?

A. No, but she obviously -- she sent me an email with the newsletter on which mentioned Building Control.

Q. Could we now go to [JRP00000208/2]. This is an email chain. It’s an email there from John Allen dated 24 March 2016, and his email says:


2. Ensure thermal insulation completely fills ...”

A. Hang on a second, sorry.

(Pause)

We might need to come back to that. I don’t think that’s quite the email I wanted to take you to.

If we go further up back to page 1 [JRP00000208/1], we see an email from you which says:

“What further checks did you undertake to ensure each item had been checked off?”

A. 3. Nursery ...

A. Sorry, what’s this in relation to? I can only see a bit of the email trail.

Q. Yes, sorry, I probably went a little too fast there. If we go back to page 2 [JRP00000208/2], we will see a list of things from John Allen. That’s a much better quality than what I had seen previously. The thing I wanted to ask you about was item 2. It says:

“Ensure thermal insulation completely fills voids.”

A. Not specifically, but I would have thought that there was gaps in some of the insulation.

Q. Then the email we looked at on page 1 is you asking Rydon to ensure each item is ticked off.

A. Did I get that email?

Q. You did, yes. So if you look at 24 March 2016 -- I’m
A. Only a very brief discussion. I think I did say, "What of 2015, I think."

Q. What did you discuss in that face-to-face conversation?

A. I think it was sort of -- it may have been the end part middle, end?"

Q. How long through the project was it, at the beginning, middle, or end?

A. I think it was sort of -- it may have been the end part of 2015, I think.

Q. What did you discuss in that face-to-face conversation?

A. Only a very brief discussion. I think I did say, "What do you think of the cladding?" And I think he said it was a good, tidy install, so there was no concerns, and he -- I remember specifically him mentioning he was very busy doing lots of basements in Kensington.

Q. Moving on to a different topic, were you ever asked to check the O&M manual for the project?

A. Not specifically, no. I remember the O&M manual being produced, but not -- no, I didn’t -- I was never asked to specifically look at it or I can’t recall looking at it, but I remember it being done.

Q. If we could go to [JRP00000155]. This is your site inspection report of 3 February 2016, and if we go to page 2 [JRP00000155/2], and if we could zoom in there on "Risk items (e.g., health & safety, etc)" at the bottom, it says: "Rydons are to submit revised Construction H&S plan to Claire of the KCTM0 as a matter of urgency."

Are you just reporting there what others had said or is that something that was on your list of things to worry about?

A. Yeah, I was probably just reporting that that was something that Rydons had got to provide to Claire, because I think they were being very slow in doing it.

Q. Did you check that it was done?

A. It was an ongoing -- ongoing all the time. I mean, it was being updated every week. So, yes, I mean, I was monitoring it, and I knew that Claire wanted it. (Pause) I think also we discussed -- at that time, we went to a lot of the site meetings, so at that time that was discussed a lot at the site meetings.

Q. I’m going to ask you now about your relationship with Rydon.

If we could go to [JRP00000035], this is an email from Simon Lawrence to Claire Williams, and you are copied in to it. It’s dated 19 February 2015. He says there in the second paragraph: "One item I’d like to clarify is that reading a report in isolation doesn’t always give a fair reflect of the overall works and what the end result will achieve."

He is talking there about the clerk of works reports.

A. Yes.

Q. He says: "So in this case whilst the report is helpful in identifying areas of concern it is only a snap shot of the works on the day ... It would be more beneficial for my site team to co-orderate with Tony/John so [clerk of works] inspections follow our own inspections ... Otherwise it will end up causing concern ..."
Do you recall receiving that email at the time?

A. Yes, I do remember this email and I do remember the incident. I think it was Tony Batty who had an M&E query regarding the -- one of the new partitions, and he put it on his report, and later on we found out -- Tony found out that the -- it was regarding a detail of the fire partition, and we found out that it wasn't a firewall, so therefore he reported something that wasn't a problem. So we agreed amongst all of us that for future reports, if there was anything -- any problems we had, any concerns, we would check the drawings before we put it on our reports. So -- and that's what we did.

Q. If there was any issues, we used to go back down to the office and check the drawings.

A. Yes.

Q. Were you aware that at times Rydon thought that your presence was unhelpful?

A. Yes, I do remember this email and I do remember the fire?

Q. If we could go now to [ART00006688]. The documents show that on 12 January 2016 you attended a meeting with Mr Hughes, Tony Batty, Andrew Malcolm of Artelia and Matt Smith of Max Fordham, and it was intended to be a clerk of works reports review. Do you recall that happening?

A. Yes, I do.

Q. In that meeting you sat down, went through all of your reports and noted all the outstanding items; is that right?

A. Yes.

Q. So if we go to page 5 [ART00006688/5] of those meeting minutes, please, we will see there, it starts on the previous page, but that's a list of "Jon White - Issues", so these are issues you had identified. Do you recognise those?

A. Yes.

Q. Four from the bottom it says: "Fire proofing - all around the site ... needs to be done as per the Fire Strategy."

A. Yes.

Q. That reporting an issue picked up by somebody else?

A. I think it's something that I felt needed to be checked, and I was just ensuring that Rydons were complying.

Q. What fireproofing were you referring to?

A. Fire strategy, that is. So I think there was some -- I can't be specific, but there was some fire strategy discussion with Building Control and Rydons that I was no party of but I overheard, so I thought there's maybe a fire issue there that just needs to be resolved.

Q. So you couldn't tell us specifically --

A. No.

Q. -- what it was about?

A. I think it was -- it's certainly internal. I think it was -- could have been fire dampers in the boxing club, I seem to remember, but it was definitely internal.

Q. I see.

Following the fire, did you have any discussions with other people from JRP about JRP's involvement with the Grenfell refurbishment?

A. What, you mean staff of JRP?

Q. Yes.

A. Yes, just my close colleagues, yes.

Q. When did you have those discussions?

A. Certainly a few weeks after the fire.

Q. In his statement to the Inquiry, Mr Virdee has also said

MS GROGAN: Mr Chairman, I've reached the end of my questions.

SIR MARTIN MOORE-BICK: Right.

SIR MARTIN MOORE-BICK: In the usual way. All right. Do you think ten minutes is enough?

MS GROGAN: Yes, I think that's fine, Mr Chairman.

SIR MARTIN MOORE-BICK: Well, Mr White, Ms Grogan has got to the end of the questions she has prepared, but she needs an opportunity just to check that there aren't any things she has overlooked, and there may be questions from others that we may need to ask you.

THE WITNESS: Okay.

SIR MARTIN MOORE-BICK: We will stop now and come back at 4.20, and then we'll see if there are any more questions for you at that stage. All right?

THE WITNESS: Okay, thank you very much.
SIR MARTIN MOORE-BICK: Again, please don't talk to anyone
about your evidence while you're out of the room.

THE WITNESS: Okay. Thank you very much.

SIR MARTIN MOORE-BICK: Would you like to go with the usher,
please. Thank you very much.

(Pause)

All right, 4.20. If you need more time, just let us
know.

MS GROGAN: Will do.

(4.09 pm)

(A short break)

SIR MARTIN MOORE-BICK: Right, Mr White, we will see if
there are any more questions for you.

Ms Grogan, have you found any questions?

MS GROGAN: I have found just the one and possibly
a follow-up.

So, Mr White, earlier this afternoon I asked you
whether the ITT from KCTMO said that you needed to
familiarise yourself with legal requirements, and you
agreed that it did, but you said, "But it didn't
actually say check for compliance".

If you could go back to [JRP00000011/4], you will see
there again in the third bullet point from the bottom it
does say:

"Being familiar with legal requirements and checking
that the work complies with them."

SIR MARTIN MOORE-BICK: Can you remember when that was?

THE WITNESS: Thank you.

SIR MARTIN MOORE-BICK: Yes.

Ms Grogan, have you found any questions?

THE WITNESS: Yes.

SIR MARTIN MOORE-BICK: Can you remember a particular
conversation with Claire Williams where the scope of
your work came up?

MS GROGAN: Yes.

SIR MARTIN MOORE-BICK: Can you remember when that was?

THE WITNESS: No, she never asked us not to.

SIR MARTIN MOORE-BICK: Can you remember a particular
conversation discussing your role, what did you
understand your role to be? What did you understand her
to be asking you to do?

THE WITNESS: Okay. Thank you very much.
everything, and you had a builder to build.
Now it’s all mixed up, and a builder is good at
building, but a builder is not good at designing. So
I think -- I wish we could go back to what it was when
I started.
Sir Martin Moore-Bick: Well, you may not be alone in that,
but that’s as may be.
Anyway, thank you very much for your observation.
The witness withdrew.
Sir Martin Moore-Bick: Thank you very much, Ms Grogan.
That must be it for the day, I think.
Ms Grogan: It is for the day, and then on Monday it’s me
again with Mr Virdee.
Sir Martin Moore-Bick: Right. Well, we will look forward
to hearing you again on Monday.
We will now break until 10 o’clock on Monday
morning.
Ms Grogan: Thank you.
Sir Martin Moore-Bick: Thank you very much.
(4.27 pm)
(The hearing adjourned until 10 am
on Monday, 28 September 2020)