Scottish Hospitals Inquiry
Glasgow 4 Part 3
Witness Statement of
Robert Calderwood

1. My name is Robert Calderwood. I was Chief Executive of NHS Greater Glasgow and Clyde (NHS GGC) from 2009 to 2017. I have been asked to provide this statement to the Scottish Hospitals Inquiry. I joined the Health Service in August 1971 and retired 45 and a half years later from my role as chief executive of NHS Greater Glasgow and Clyde. Throughout my working life I've been in health service administration, as it was, health service general management, as it became in the late 80s. I've held positions, as it transpires, only within what transpired to be Greater Glasgow and Clyde. It was originally Argyll and Clyde Health Board and Greater Glasgow Health Board. I worked for the two Health Boards after I came off what was called, "The Regional Training Scheme" back in 1974.

2. Professionally, through the training programme, you studied for your higher national diploma in business studies, then your professional qualification, which in those days was through the Institute of Healthcare Management, which was a UK professional body. You did a diploma in healthcare management. Then I personally went on and did a certificate in health economics at Aberdeen University as a distance learning course, and the rest of the time has really been just in my career. The individual roles and responsibilities which I held are set out in my CV which is appended to this statement (**Appendix C**).

3. I worked for Greater Glasgow and Clyde Health Board as Chief Operating Officer from 2005 onwards up until I became Chief Executive in 2009. As Chief Operating Officer I was responsible to the Board and the executive for the management of the acute hospital services within Greater Glasgow, and it was in 2005 only, Greater Glasgow. We didn't merge with the former Argyll and Clyde Health Board until April 2006.

4. So, my responsibility was to oversee the day-to-day running of all of the hospitals, as I say, reporting through to the Executive Board. Back in 2005, that would have been a budget of about 1.1, 1.2 billion, and it would have something like 19,000 staff across about a dozen locations at that time. The other operational aspects of the Board were split into other directorates, mainly what was called Community Health Partnerships at that time. These were geographical entities linked to the boundaries of local authorities. So, within Greater Glasgow Health Board, at that time, there were four at that time.

5. There was a small part of West Dunbartonshire, which eventually became the whole of West Dunbartonshire after we took over Clyde, East Renfrewshire, East Dunbartonshire, Glasgow City. Eventually, it became six when we took over Renfrewshire and Inverclyde.

6. In my role as Chief Operating Officer, I reported to the chief executive and through the chief executive to the Health Board Committees. The management structure changed on a couple of occasions between taking on the job in October 2005 to leaving it in March 2009. But basically, there were about seven operational directors, so, for example, the director of Surgical Services, that was all the Surgical Services within the Greater Glasgow hospitals. They reported through a director and that director reported to me, and then they had their management team below them. On top of that, there would be the Facilities and Estates director who reported in relation to all the Facilities and Estates issues.

7. In 2009 I moved on to become Chief Executive. The Chief Executive is charged with discharging all of the responsibilities that the Scottish Government place on Health Boards, and those tasks are delivered through a scheme of delegation through a series of, again, operational chief officers and directors. There are certain responsibilities of the Board which are discharged directly by a named individual, particularly the director of public health, where the Board's responsibilities in relation to public health came from the government through the Board to the director of public health, the director of public health then through local authorities. But with the exception of these specified responsibilities, everything that came to the Board was discharged through the chief executive through a scheme of delegation. At that time, in April 2009, there were 18 direct reports in the structure that I inherited.

8. I have been shown **Bundle 43, Volume 2, Document 23, Page 327** which demonstrates the governance structure of the Acute Services Committee in 2010. For example, with respect of the Performance Review Group everything would be directed to it which would then be reported to the Board. Ninety-five per cent plus of the business would be discussed through the Performance Review Group before it would go to the Health Board. Just to explain that the Board met publicly as Greater Glasgow Health Board, Greater Glasgow and Clyde Health Board at that point. However, all its subcommittees met in private, and that was how the Board had set about to do its business, so that they could be, the Board members, the non-executives in particular, briefed in detail about all the issues that were ongoing. So, the Performance Review Group was the major sub-committee of the Board.

9. The minutes of these Committees would be shared. The agenda of the minutes would be shared and, again, in relation to the scheme of delegation, the Board delegated certain functions to subcommittees. In other words, if the subcommittee took a decision that was within the scheme of delegation, the full Board couldn't challenge that.

10. The rules at the time were that once a Board decision had been taken, it could not be revisited for six months, as part of the rules and regulations of establishing Health Boards. So, the Performance Review Group had a scheme of delegation which the full Board signed off on. Within that, they would have specific responsibilities to take decisions, but in many instances, they would make a recommendation to the full Board on issues that were not within the scheme of delegation. Then the Board would take the decision. So, the Board either noted the decision that the committee had taken, or the Board received a report from the committee asking it to approve a course of action. I really couldn't say which decisions were taken by the Committees and which were made by the board, going back to 2009, I have no detailed recollection of what the scheme of delegation would be. But it would be recorded by the Board secretary at that time to guide the chair of the Performance Review Group.

11. For example, all the clinical changes in the city that require to be consulted on, that would be the full Board that would have to take that decision after the end of the prescribed consultation process. The day-to-day performance, in the sense of the acute division or an individual operational part of the Board was overspending, then the Performance Review Group would probably agree the remedial action to be taken to stay within the approved budget or the approved outcomes of the Board, and they would report that to the Board.

12. So, the full Board wouldn't, I'm being overly simplistic, but the full Board wouldn't debate the ins and outs of the money. But if we wanted to change a clinical service, then there was a prescribed approach set out by the government, and then that changed as the government changed, as to what was involved in that. Therefore, that would be undertaken, the Board would see the recommendation, the Board would approve it or not, and then the Board would make a recommendation to the cabinet secretary.

13. In terms of a final say, that would come back to the Board as an approval to go ahead, or in many cases a rejection and a determination to retain the status quo.

14. I have been asked about procurement for the new hospital and which committees had input into these decisions and what the Board's involvement would have been. The procurement took two forms. There were two major phases in the procurement. The first phase was after the Acute Services Strategy was approved. This has been the only Acute Services Strategy in the United Kingdom that actually resulted in a parliamentary vote. Everything else was just done day to day, but such was the political impact of Glasgow's changes, it actually ended up in a political vote in the parliament.

15. So, after it was approved in its final format, because it evolved over a five-year period, we were then invited to proceed to implement the Acute Services Strategy. Now, the Acute Services Strategy had, in its detail, in essence, about four phases of procurement. The Acute Services Strategy, rationalised acute hospitals in Glasgow to two major receiving units, but politically we had to provide a way of maintaining the majority of clinical services locally. The Board came up, along with the clinical staff, with a strategy, which was very prevalent in Europe and America at the time, of ambulatory care.

16. So, in essence, what an acute hospital does, about 85 per cent of it is done in the same day. We used to, at public meetings, call it a hospital that you come to without your pyjamas because you're going home. So, we agreed with the government that in relation to the three major hospitals we were closing, namely Stobhill, the Victoria Infirmary and the Western Infirmary, we would create three ambulatory care units, two of which, Stobhill and the Victoria, were to be built adjacent to the existing. In the context of Stobhill, within the grounds of the existing hospital, and in relation to Victoria, adjacent to the Victoria Infirmary.

17. That was the first phase of the acute strategy, to build those two replacement facilities to demonstrate to the public that, at the end of it, we were not taking services away before we were creating locally accessible services. So, the two ambulatory care hospitals were the first phase of the implementation, and that was a 220 million, roughly, private finance initiative procurement. That started back in, I think, about 2005. It may have been late 2004.

18. Now, the PFI initiative, at that time, under the Labour government was a prescribed procurement strategy in the UK. So, after we had completed phase one, i.e., we had signed the contracts to build the two Ambulatory Care Hospitals, we proceeded to the procurement of phase two and at that time, it was going to be private finance because that was the Labour party's procurement strategy for the public sector.

19. However, we had an election in 2007 and the SNP came to power, and we were immediately advised by the new Cabinet Secretary for Health and Social Care that she disagreed violently with our Acute Services Strategy and indeed had voted against it in Parliament, but they as a party were opposed to PFI and that we had to proceed with looking at a Business Case that would be supported by treasury capital funding.

20. Now, in financial terms, that made the procurement strategy easier in the short term because PFI has a huge premium on private sector money, particularly the kind of 5-10 per cent of it that's equity. Plus, it has lifetime maintenance in it, which if you take the 40 years Business Case, you get your money back in 40 years because of all the maintenance work that will be done.

21. Capital treasury funded is cheaper on day one but it has no continual guarantee of backlog maintenance funding throughout the life of the building. So, over a forty year period, you have to assume whether or not, and this is in the Business Case, whether or not there will be capital investment under maintenance.

22. So, at that point, the Board had a team in place through the procurement of the Ambulatory Care Hospitals, which was led by Ernst & Young (EY), Shepherd and Wedderburn, the Scottish Government Capital Planning Unit, and an organisation called Partnerships UK. Partnerships UK (P UK) were the treasury's public finance unit and they advised public bodies on major infrastructure procurement under PFI.

23. The Scottish Government Health Department had a contract that allowed them so many hours a year from P UK. The chief executive of P UK, James Stewart, joined the Board's procurement team and they advised the Board on that, so what was undertaken was a market analysis. Ernst & Young went out to the market, spoke to all the major construction companies about their interest in such a construction project and the terms and conditions under which they would be prepared to bid. Bid costs for something the size of the Queen Elizabeth and Royal Hospital were millions of pounds, and in order to get a minimum of three contractors, we were obviously trying to make sure that what we took to the market was (a) marketable, (b) that we had enough information in place that would allow them to consider investing the time and effort to bid.

24. At the end of this process, the government and all the advisors, including our own Project team, came back and said that the most attractive way that we could get competition was going to the marketplace in this way, and that we should go and look at using NEC3 contract terms. Now, these were national contractual terms, but they were slightly different because they were designed to create better competition, to create a sort of incentive to the construction company, during the design, that any innovation in the design, they would benefit from. So that was the basis we then went to the marketplace. So as far as the Board was concerned, they would receive a paper outlining what we were going to do and why.

25. Now, whether that would have been the Performance Review Group or the full Board, I can't remember. I suspect, given the nature of it, it probably would have been the full Board, but it was also something that would have been in the scheme of delegation because it was a contractual proposal.

26. I have been asked how the Board and the committees manage the operation of the water and ventilation systems of the hospital, and how the reporting structures worked and who would be responsible for decision making for these systems. The Board, as a body corporate, would not have had a significant role in relation to the detailed design considerations of any aspect of the hospital. Their involvement would be around approving the original scheme, i.e., what clinical services were transferring, what was the scale of the departments that we were going to fill. There was much debate then and throughout the period on the "Bed model".

27. The Board commissioned external healthcare planners to look at bed modelling for clinical services. The Scottish Government Health Department also had planning assumptions about bed modelling, and they were all factored in to arrive at the number of beds we ultimately sought to have in the building. To clarify, the Board, going all the way back to 2006, considered bed modelling which looks at, in essence, three things: your demand model, which is driven by your population statistics. Greater Glasgow, in the late 2000s, you know, 8, 9, 10 was declining as a population in the forward projections. Lothian is, I think, still expected to exceed Greater Glasgow by the mid-2030s. So, population number was driven by statistics that you were given. The demand was driven by your current demand plus the projection of the ageing of your population. So, there was a formulaic approach to the demand side.

28. You then had the efficiency model, which was what were your targets, what was your length of stay, what was your average occupancy turnover, and what was best in class. That set you an efficiency gain target and in Glasgow, in some specialties, that was quite high. We were maybe having six- or seven-day length of stay in orthopaedics, when the Scottish average was five and a half. So, you had to look into why was there a difference. Sometimes that was

driven by complexity because Glasgow handles the more complex cases for the west of Scotland. Some of it was just driven by clinical practice and the need to modernise, how quickly you can move to same day care because same day care was quite low in Glasgow compared to the UK. Compared to Europe and America, it was off scale behind, so all of that drove a fact that we were closing, for argument sake, I can't remember the numbers exactly, say, 1400 beds but, we were only going to be opening about 1150, because it's not just about the beds that were in the Queen Elizabeth, it was the beds that we were opening in the Royal Infirmary and the beds that we were opening in Gartnavel.

29. The bed model covered the totality of the institutions, that created a trail where, in medicine, we were going from 250 to 220, with 200 of them at the Queen Elizabeth and 20 at the Royal. So, you had an audit trail of where efficiency gain was coming from, and so the Board would see all of that and approve the aims of that and then saying, "Yes, it's reasonable to aim to go from where we are to there by the time we open the new hospital."

30. After that, the detailed design, including the technical design, was delegated to the Project team and to the working groups. I mean, in its heyday in 2008/'9, there were something like 90 working groups advising every aspect of the final schedule requirements and then, thereafter, they were going over all of the detailed things that were being proposed by the contractors to sign them off before that was then embedded in the final design.

31. I have been asked once the hospital opened in 2015, what was the Board's involvement and Committee involvement in the operation of the water system and the ventilation systems at that point and where responsibilities sat? If we take the water, then the water would go through the scheme of delegation that existed for discharge of the Board's responsibilities for Legionella and other water management, and so that would be through the operational director and through the estate and then principal responsibility aligns through the Estate's director.

32. I was unable to download the documents you recently sent me, (**Bundle 15**), but which you showed me today, Wednesday 9th April 2025. In answer to your question, about my understanding of the duties placed on the Board and on the chief executive as duty holder under L8, which is the legionella scheme, and SHTM 04-01 Part B, (**Bundle 15, Document 3, Page 188, and Bundle 15, Document 5, Page 381**).

33. Firstly, I have never seen that document. In answer to your question, about being able to provide more information on what my understanding was in terms of the duties that were placed on the Board and me as chief executive in relation to legionella? Not specifically, no. I mean, the Board received guidance and/or mandatory instruction in relation to various aspects of the estate, and when they were received, they were passed to the appropriate duty holders to enact. Some required either six-monthly or annually reports to be submitted externally and internally within the organisation. Those duties, as I say, were delegated, and they would be varied across the board. If the estate was in the Community Healthcare Partnerships, it would be through the chief officer of the partnership. If it was the acute centre, it would be through the chief operating officer. But, as I say, the principal responsible holder was the Director of Estates.

34. I don't recall the specifics of what was 6 month and annual testing, I spent 45 years starting from the bottom working up, so, at one point in my career, I was responsible for doing it, when I was a hospital secretary, back in the 1990's and that was a hundred years before I became chief executive.

35. Regarding the SHTM guidance, 04-01 Part B, which is a Scottish Health technical memorandum, (**Bundle 15, Document 5, Page 381**), in relation to water safety for healthcare premises and the operational management, which you showed me today, I have never seen this document before. I do not believe that I was under any requirement under this document but would expect it would be delegated through the various executive lines of responsibility. I do not know where that delegation would be set out.

36. However, you have to differentiate between maintenance and mandatory checks. In other words, in June 2015, the day-to-day responsibility for the maintenance of the water systems sat with the director of estates, discharged by him through his hospital directorate. The design of the water system and its approval sat with the Project team throughout the dialogue of the design, and then in that Project team, Capita, who were appointed by the Board as our assurance arm, it was their responsibility to confirm that the design, which had been approved, was what was actually constructed.

37. If we look at a building, the water pipes are all behind the wall, so by the time we walk in and see the plastered wall, we have no idea what's behind it. So, basically, Capita's job was to go on site and look at the plumbing and say, "That's fine." This would be the validation process.

38. You have shown me, today, **Bundle 13, Volume 3, Page 1075, referring to SHTM 03-01** in respect of ventilation and design and validation, referring me to paragraph 8.64, where it states that:

"A full report detailing the findings of commissioning validation should be produced and should be lodged with the user department, Infection Control and Estate Facilities."

39. I have no recollection of any such report being produced or distributed to any of the project groups. In respect of the Queen Elizabeth University Hospital campus, that responsibility would sit between the Project team and the Estates and Facilities directorate in relation to the commissioning. It is they whom I would have expected to have been aware of this or to have had the responsibility that such a report was produced.

40. At the time, 2015, the project director was David Louden, and he was also the Estates and Facilities director designate. As one role came to an end, as a senior executive of the Board, he was moving on to another role and he was supported with a team.

41. There was a number of acting appointments at that time, so the deputy director of Estates was acting up for the other elements of the Estates. But, in relation to Queen Elizabeth in itself, David Louden, as the project director and the Estates and facilities director designate, therefore it was his role to ensure that the team carried out their functions and he reported that up, and, in this particular instance, he would essentially be reporting it to himself. I mean, he'd be telling the Estates director what to do, anyway, when he takes over the hospital in a few weeks.

42. Albeit the Children's Hospital would also sit with David Louden in the sense of the project, the reality of it is, you've got the operational director, so you've got Kevin Hill, who's director of Children's and Women Services. He's in an important role in relation to the children's hospital, and you had Anne Harkness as director of the Queen Elizabeth, obviously taking on an important responsibility for the Queen Elizabeth when it's handed over, and both of those two directors reported to the chief operating officer within the structure.

43. In terms of the user groups and Infection Control, and Estates and Facilities, I don't think I've managed to get it across to you, but there was not a significant amount of reporting up to the Board. There is a disconnect between the Board and the project, and only exceptional reports went up.

44. The ventilation system, again, is exactly the same process from June 2015, maintaining it, cleaning the filters, cleaning the ducting, dealing with kind of breakdowns, etc. That was maintenance. The design of that was all done, again, through the project, and that was influenced at many stages by different decisions that were taken, and they were taken by the various people involved in the project. So, one of the early decisions taken which impacted on the design of the ventilation system was the decision to make it a sealed building. Now, that decision was taken I think in about 2008 or '9, and that immediately created an environment in which you then would go down a different road for your ventilation scheme design.

45. I have been asked if the decision to make the hospital a sealed building was related to its proximity to Sheildhall. Officially, I don't know what the reasons recorded were. Unofficially, there were a number of people, particularly in Infection Control, who hated that we were building on the Southern General and went out of their way to make the proximity of the Scottish Water Complex an issue. To understand, the Scottish Water Complex is not a sewage works, it's a pumping station. It is only in use as a holding point if the main pipes crossing Glasgow are closed for any reason, like a breakage or maintenance, in which case the Shieldhall complex houses the sewage. Scottish Water had given us assurances about the work that they were undertaking to improve this environmentally. However, yes, privately, there was a strong sense that you couldn't have open windows next to it.

46. In 2001 when the site appraisal for a new hospital was being carried out there was a public engagement process in reviewing site options and in respect of the Southern General Hospital site, the proximity of sewage works was raised by members of the public. Many people wanted us to choose another site. Once the site appraisals were completed, the site was chosen and then approved by Scottish Government. In the later stages of the development (2009) there were two issues that had to be addressed with Scottish Water when the contract was being awarded. One, was we sought to buy land from Scottish Water to enlarge campus, which we did to allow us to create a main access road, to create fast link through Braehead. The Project Team bought the land for this from Scottish Water as part of the site preparation, and during discussions we checked with Scottish Water that Sheildhall was no longer going to be sewage works was going to be a pumping site. Secondly, we were aware that when used a pumping station odour was emitted when hosing down and spraying the tanks, this is an issue which mainly impacts the north side. These discussions with Scottish Water were not formal, it was more 'right what you are doing?' as in what are you doing to mitigate, and from that these informal assurances arose between Scottish Government and Scottish Water. There was very public process for choosing site. I have been asked what official and unofficial reasons there were for the decision to

choose to make the hospital a sealed building. Beyond what I have already told the Inquiry I do not know what this means.

47. I am aware that you have discussed Shieldhall with Scottish Water, but as I understand, since about 2010 or so, it was a part of a redesigned sewage system from the south side of Glasgow, and there's a pipe running from Clydebank to Dalmuir, and Dalmuir is the big treatment centre. Shieldhall, which was a wastewater treatment facility because it used to, if you recall-- well, you wouldn't recall because of your young age, but the ships used to take all the waste from the Clydeside down off Arran and dump it. There were three-- there were two ships, I think, Glasgow City Council owned, etc. So, it changed, as I understood it. We were in contact with Scottish Water at different times and that was my understanding. If it's not that, if it never changed or if it's changed back, I have no idea.

48. I don't know where you could now get those Scottish Water assurances, but, the point I was making was that when the sewage is stored in the open tanks, they're then jet washed clean when the pipes reopen again and, at that point, there's a lot of odour in the air and, well, fortunately, the prevailing wind is north, so it tends to be in Jordanhill that most people complain about it. But it obviously had an odour in the air and I had, through the Project team, approached them about what they were going to do about it going forward. There was talk, as I recall, of them sealing the tanks. The tanks are open and they were talking about putting, what I would call the equivalent of a swimming pool cover, over them, which they believed would minimise the emission of odour.

49. I'm not aware that they ever did that, I had no further communication with them, period. What I'm saying is that through the Project team, representations were made, and that was my understanding of feedback.

50. Continuing with ventilation, the next decision was obviously in respect of the environment, the internal environment in the context of heat gain, etc. Again, the Estates department had an issue because we were operating, at that point, the two Ambulatory Care Hospitals which had just been built and opened in 2008/'9. They were some of the first sort of mainly steel and glass constructions with big open atriums, big modern buildings, and we were experiencing a lot of heat gain and, therefore, it was decided that the internal environment we wanted, needed to sit within a certain temperature range. This then drives the ventilation design again. So, you basically get a number of decisions taken for operational reasons based on experience and/or evidence that is then fed into the Design team. The Design team was obviously employed by the contractor, but we had our own Project team with, on paper, matching skills. Maybe some of the evidence has suggested that some of them didn't have, but at the time Wallace Whittle, the boards consulting mechanical and electrical engineers, would comment to us on the acceptability of the ventilation solution being put forward by Brookfield, or Multiplex as they are now. These decisions would not be made by the Board but rather by the Project team. I have been asked if these decisions would be reported to the Board? No, they would not directly be reported to the Board.

51. The Project team did have authority to make decisions on temperature ranges. Referring you to **Bundle 16, Document 5, Page 482**, which says "draft", you asked me "Why would this not have been followed, where it states that the maximum temperature was 28 and not 26 degrees?"

52. I'm coming at this from a different angle. As I explained the last time, the internal temperature being allowed to rise to 28 degrees would make for a very unpleasant environment for both the patients and the members of staff. By bringing it down to 26 – i.e. bringing it down by putting in more plant to make sure that the internal temperature can't rise – you create a better environment for the patient and that's what the project teams took from their meetings with the clinical teams, that we would make the building better. It would have been cheaper for us to let it go to 28.

53. I suspect very few patients would have survived the experience.

54. We keep having this debate between guidance, which is, “Don’t let the building be more than 28,” but what is wrong with it being less? There’s not, you haven’t breached anything.

55. You asked me to clarify if the clinical team were involved in this decision. The Operational Team, yes, the Chief Operating Officer and their staff, yes. But I can’t comment on the clinical team. I confirm I had no level of involvement and only became aware of this when I started reading all this documentation for the purpose of coming to talk to you.

56. I have been asked would committees receive reports on decisions which were being made by the Project Team? Groups of staff, clinicians, Project team and the acute services would receive updates on the go. The programme board, which was chaired by the chief operating officer, would, I suspect, be aware of all of these things, but these reports on decisions wouldn’t come to me. I was aware of a number of these things from conversations, but they were never for decisions. They were reported to me as, “This is what we are doing, and they comply with all of the appropriate regulations. It wasn’t a report that said, “Will the Board approve this?”

57. In response to your follow up question, “Did you ask, or were you told that these actions also met applicable recommendations, guidance and good practice? Or were you only interested in meeting regulations?” I was interested with the project being compliant and being the best-quality environment for the clinical services that we were seeking to provide.

58. To answer your question about following good practice and guidance to ensure the best environment for the patient? Well, that would be up to the people looking at the individual issues and coming to a conclusion.

59. Regarding your question, about being “more focused on meeting regulations, but does the good practice guidance not also come into play?”

60. My answer is, I don't know. I wasn't part of the teams that had any such debate.

61. As Chief Executive and wanting the hospital, at that point, to be following good practice as well as being compliant with all the relevant regulations, I wasn't aware that it didn't nor wasn't. So, I can't comment on your question whether in hindsight I think that it should have met all the guidance, good practice.

62. In respect of Employer's Requirements you previously asked about, which I am not too familiar with, or "getting reports about the proposal not complying with the guidance, which was inserted into the Employer's Requirements", or about "my understanding that Employer's Requirements were obligatory and yet what was being proposed wasn't in compliance with the Employer's Requirements that were agreed", I have no knowledge of that. Nothing regarding this was ever explained to me, not even by legal team when signing the contract. I was not aware of there being a distinction in the Employers Requirements regarding compulsory and recommended compliance with guidance. The Project team would have been aware of this. I do not recall having discussions about guidance and the Employer's Requirements regarding ventilation.

63. The Employer's Requirements were created by the Project Team through engagement with a clinical network of working groups and appointed technical advisers. I had no involvement at all. The issues of whether or not there was compliance with the Employer's Requirements did not come up in the groups I attended. The only process I was ever aware of was the design of the wards and the mock up units set up in Govern; Multiplex mocked up the wards so the nurses could see what they would look like.

64. I don't know if changes were made to the ventilation strategy, as opposed to the ventilation strategy being influenced by decisions we took; "we" being the Project team and the Board. For example, if you decide it's a sealed building, if you decide that the temperature control you want has to be within this parameter and you give that to the engineers, they then drive a solution based on the architect's desire to build a particular building. That then comes to our

Project team and our technical individuals review it and conclude that that would satisfactorily meet (a) the regulations, and (b) the preferences that we have specified in our design.

65. In terms of delegations to the Project team, you asked me "were they only required to deliver a hospital compliant with all the appropriate regulations, as opposed to recommendations, guidance and good practice, if so, why and was it set out in the relevant scheme of delegation?"

66. I don't know there was ever an instruction to the Project team to only do something. I mean, the expectation was that we were seeking to build and develop the best hospital possible and that they would be expected to consider all of the guidance – obviously the statutory recommendations – and incorporate where appropriate.

67. I mean, the answer to the question is that it comes down to what we're talking about, right? So, reducing the temperature of the building from 28 degrees to 26 degrees is a very good thing, right? So not complying with what you call as "guidance" is actually a very good thing, so you've created a better environment, right? There will be other examples where they have looked at guidance and decided not to follow it, the reasons for which I don't know because I don't know what those examples would be.

68. In my view, the decision with the maximum temperature variant was a very good decision, yes. And, no, I've no idea of who's compiled national guidance to keep the temperature at 28.

69. In terms of the scheme of delegation to the Project team, they had the decision-making power in terms of whether to comply with good practice, recommendations, guidance. It sat with the senior directors who were involved in the project and each director would have their own areas of autonomy and responsibility, and collectively through the chief operating officer and initially the project director, when it was Helen Byrne, who was a board director. There was significant delegation. In terms of who was who, Alan Seabourne was the

project manager. Helen Byrne was the project director. So, when Helen left, Alan became the project director. David Louden didn't come on the scene until 2013.

70. There were no formal mechanisms for reporting decisions by the Project team to the Board. There was no formal report. The chairman of the Board at the time appointed one of the non-executive directors, Ken Winters, to sit on the Project team. Ken was a former managing director of Balfour Beatty in Scotland, so he was technically competent, he would informally update Board members just on high-level issues. What went to the Board was progress reports and financial reports in the sense that the project was within budget, on time, etc.

71. I have been asked whether I think that there should have been more formalised reporting on these decisions that were being made by the Project team? I don't believe the Board, as a Body Corporate, had any technical expertise to allow them to add any value to the debate. I mean, the Board members' backgrounds and experiences, my own background and experience, had no competence in these areas, so I don't genuinely believe, if it was reported, I would be able to say, "Hang on, that's not right."

72. The Board didn't receive a report about the project team proposal to depart from national and UK guidance and standards.

73. It would be very difficult to comment on that departure because I'm obviously not aware of the range of areas where it's believed there was "non-compliance" and what the reasons would be for each of those decisions. I can't think of any of them. In my experience, it has not been customary practice for Health Boards, themselves, to be involved in major capital procurement and delivery projects. They tend to be delegated to executive teams and executive teams make exception reports, as well as routine progress reports, to the Board.

74. Without specific examples of the guidance that you think that they deviated from, and without access to the minutes of the meetings of the Project team and all of the clinical people who were present who would have explained the reasons why they wanted what they wanted, I can't comment on what you're asking.

75. As I have said before, I think the maximum temperature variant was a positive thing. Regarding the decision about the departure from guidance in respect of the chilled beams, well, that was made by the team and they documented, as I understand it, the reasons for that. It wasn't reported to the Board and it wasn't mentioned to me until much later, when it was mentioned not in a way as it being or not being an "acceptable" outcome?

76. As I understand it, a number of hospital projects since we built this one, have got less than six air changes. In fact, I think you might struggle to find a hospital in Scotland that's got six air changes.

77. I believe the reason there's such a focus on the ventilation is because of the nature of specialist units that are housed in the Queen Elizabeth, but we discussed this in the last meeting. When the hospital was designed, when the decisions on the ventilation were taken, you originally asked me this in the next question, the only area that was going to house immunosuppressed patients for which there was specific design guidance, was the Schiehallion Ward in the children's hospital. There were to be no immunosuppressed patients in the adult hospital. So, from my perspective, with the benefit of hindsight, the children's hospital had an issue. The adult hospital, as originally procured and built, had to be in relation to the clinical specialties that were to be over there. Bone marrow transplant, cancer patients, adults, were not going to be in the hospital and therefore the whole debate about them only started in 2013. And you then have this debate about, "Was the built environment suitable for them? Yes, or no?" At my time, the answer was no, right? The current situation today is, you know, the Board must've agreed a series of mitigation workarounds that came up within an acceptable environment.

78. So, the constant going back to, “When it was built it was wrong”. You know, the whole issue about whether it was right or wrong starts after we’d made the decision in 2013 to include adult bone marrow transplant. Schiehallion, in my humble opinion, is an entirely different debate.

79. I didn’t know anything was going wrong with Schiehallion, I only found out it was wrong since I got involved in this process. I was not aware of this in 2015.

80. I have been asked whether I was aware that the ventilation systems in the hospitals were never validated? This is not something I was aware of. My understanding of what should happen is that in the handover of the building from the contractor to the Board, there’s a whole series of validation steps to be taken, a simple one being you have to get a certificate of occupation from the council. You have to get the water verified by various agencies, and again it varies by department: for example, your renal dialysis unit has to have very specialist water certification. Your MRI and CT scanners need to be signed off by engineers that they are technically installed correctly and there’s no radiation risk to the patients and/or the staff. So, by department, there’s a series of steps that you need to take, so the expectation is that when the project director presented to the Board that we were ready to take the building from the contractor, these approvals, these certifications were in place.

81. I was not aware of the requirement for an LAP occupational risk assessment and validation of the ventilation system.

82. In our previous conversation about Water Systems Policy, albeit I was recorded as the duty holder that was the extent of my personal involvement. The Board delegated those responsibilities through the two executives to various senior executives. I never saw any schemes of delegation in relation to water.

83. You can get certain certification or validation in place and certain things that you’ve got recorded as still ongoing, but as long as they’re captured in the schedule it is ok. There are fundamental steps that need to take place, so I

would expect there to be-- I know you don't use paper these days and even then, we didn't use paper, but in my day, I would've expected in old-fashioned terms for there to be a big log book, and in it would be all the various paper copies of these certifications, so electronically I would expect the same thing for this. Secondly, the contractor was obliged under the terms of the contract to hand over a whole series of information to the project team so that they were available for the ongoing operation of the hospital. The responsibility to have the ventilation validated would have sat with the Project team, through the project director

84. So, again, in terms of the ventilation validation the responsibility to have a ventilation validator sat with the Project team through the project director. There wasn't a written scheme of delegation for any, you know, specific project. You know, so, the Queen Elizabeth campus didn't have a unique scheme of delegation. The individual directors had their own scheme of delegation within the authority that they were given. As far as I was concerned, the project director at that time would be responsible for ensuring all the actions required to take the building over from Multiplex and then subsequently to occupy it, that all of those steps should be taken and complied with.

85. There was no specific written scheme of delegation in relation to the Queen Elizabeth.

86. The project director would know what the decision-making responsibilities were that sat with them, those that sat with the Board, from their own individual job description and the parameters that are asserted within that, which is, in essence, part of the scheme of delegation. If your job description says what you can and can't do and then the rest of it is over the many years of custom and practice.

87. There had never been a specific scheme of delegation for any major capital procurement in my time and the Queen Elizabeth was not the first major capital build as part of the Acute Services Strategy. There was a new cancer centre at Gartnavel in 2009. There was the New Victoria Hospital and the New

Stobhill Hospital. Those three-- two-- well, it was three buildings, were all part of the Acute Services Strategy and they in themselves cost well over 350 million.

88. The Board took all of the strategy decisions, all of the policy decisions and all of the financial decisions. Then the delivery sat with the delivery teams.

89. If you were to request job descriptions, for example, for the project director and the Project team, I'm not sure you would be able to see a description of what their role was and where their authority sat in terms of which decisions they could make and so on. I wouldn't think it would be articulated in that specific way.

90. I think in relation to the Queen Elizabeth site, the way that we operated was focusing on the delivery of the new hospital, what was in it, you know, how many rooms, how many beds, how many theatres; that was all delegated down to the Acute Services Division to deliver. They were then resourced with the Project team and the project director to make all of that happen. The Board then received progress reports.

91. To distinguish between the decisions that went to the Board and those that the Project team were able to make themselves, basically, the only decisions that would go to the Board would be the clinical content of the building, in other words, what we publicly consulted on. So from, as I said at our last meeting, from 2000 to 2006, the Board had conducted a series of clinical reviews, which, when aggregated together, became what was called our Acute Services Delivery Strategy. That evolved through looking at cancer services, laboratories, maternity services, adult services, children's services, all of which were influenced by a number of external factors. I mentioned the last time, in our previous meeting, the Cabinet Secretary and the children's hospital, because the children's hospital was not originally in the scheme, right?

92. So, all of that evolved. The Board was the total driving force behind all that, conducting all the public meetings, dealing with all of the parliamentary processes and all of the Scottish Government guidance and regulation. When you get to 2007 and that is all signed off, the project then moved to the delivery stage. At that stage, the Board role was to get the approval for the procurement, to get the funds for the procurement, and once the procurement was approved and once the funds were achieved, that was all then handed over to the delivery of the project. So, at that point, both I and the Board's day-to-day involvement became minimal. so, there wasn't a scheme of delegation specifically for the project.

93. I have been asked about the Board and sub committees' involvement in ensuring patient safety, managing and reducing risks to patient safety.

94. The Board received a monthly report both at the full board meeting and at the principal subcommittee, which by then would be the Quality Performance committee, from the medical director and the nursing director to cover all aspects of infection control. The Board was also obliged to submit regular returns to Health Improvement Scotland, then Health Protection Scotland, in a prescribed format set out by the Health Directorate. Those reports would go straight to the Board. They were seen by the Clinical Governance Committee at their meetings and, dove down into by the non-executives and their interests in that, but they would be publicly presented to the Board every month. They were from the medical team and could not be audited by or commented on by anybody else. They would go straight to the Board. They were not papers that would come to me for approval to go to the Board. I attended the Quality Performance Committee and was a regular attendee. I didn't have a role on the committee as I was a Board member. I was always there as the chief executive, but most papers going to committees went in the name of the authors, whether it was the chief operating officer, or the appropriate corporate directors. A few papers would go in my name, and then I would speak to them, but if the paper was not in my name, then I would ask questions along with the other board members, and I would participate in the decision-making process.

95. The papers went from the professional officers to the Board. Depending on what the report was saying, I might have to get involved in remediation if there was a major incident but 99 times out of 100, it would be a report to the Board, and the remediation would be ongoing at the local operational level, be it the ward in the Royal Infirmary or be it the department in the Queen Elizabeth.

96. In the context of discharging executive responsibilities, ultimately infection control responsibilities went through the medical director to the Board. But because nurses were involved, infection control nurses, the Board's director of nursing had an ability to comment on whether the views of the nurses were being properly taken account of in the reports to the Board. This is because the structure of infection control evolved over the period during the construction of the hospital and then evolved again because once you closed the old hospitals, you were creating new departments, new staff, new responsibilities for the new hospital. The Royal Infirmary went under change as well at that time because it took services from Stobhill and it took staff from the old Western Infirmary. All of these things were going on in the background, so it evolved, but by the time the hospital was operational, the established format was all infection control reports were prepared by the medical director and taken to the Board.

97. I have been asked whether the expectation would be that the medical director would have a more specialist knowledge, than those on the Board who were not medical professionals, in respect of the content of the reports provided to the Board? The Board medical director has their own clinical background. In Glasgow, in my time, the medical director was Brian Cowan, who was a consultant anaesthetist with intensive care responsibilities, then Jennifer Armstrong who was a public health doctor. So, their background and their experience was only relevant to their applications to be medical director. Clearly, in advising the Board, they were much stronger within areas of their own professional background, but the medical director would arrange for the medical expertise to be or the nursing expertise to be available to the Board to answer any detailed questions.

98. I have been asked about the process for authorisation of improvement works to remedy deficiencies in the water and ventilation systems, how these decisions have been made and who would have been involved in these decisions. On a day-to-day basis, if you wanted to improve the water supply to a ward at Glasgow Royal Infirmary, the Hospital Management team would deal with that, and it would be included in their budget. If it wasn't affordable within their budget, they would make an application to the Board for what we call a backlog maintenance allocation. That would go through the Board's Capital Planning team, who had backlog maintenance funds.

99. The Board would see the approved annual spend plan, so in other words if you made an application to, and I'm picking the Royal simply because the Queen Elizabeth is slightly different, but at the Royal, if you were ripping out the plumbing in an old Nightingale ward to replace it, that would be a major backlog maintenance scheme, so you would make a capital application. The Board would approve it. It'd be in the Board's capital plan, so the money would go to the hospital director and the Estates director to do that job, and the Board would get a report on the capital plan to say, "The job's been done. It's 20,000 overspent," or "It's 10,000 under spent."

100. At the Queen Elizabeth, in the period up to June 2015, any changes that we wanted to make would be debated in the context of whether they were a client-instructed change, and that was the issue in relation to the Adult bone marrow transplant, or it was captured through the Project team, which would involve drawing the attention of Multiplex, that a certain area had not been completed properly and they needed to go back in and fix it at their expense. After June '15, you had a two-year maintenance defects liability period. So, the issue would then be debated: is this a defect? In which case we can go back to Multiplex and oblige them to fix it. There was about £9 million in that defects' liability fund. Or again, was it a client-instructed change, or was it the routine six-monthly Legionella inspection which we are obliged to do, which is routine maintenance. You've got to put the issue you're looking at into these boxes. With a new building, there's an iteration between jointly working on it, to

ultimately, it's only the Board's responsibility.

101. You asked me if I ever told David Louden that one of the reasons the Estates' budget was inadequate was that it was thought Multiplex would maintain the hospital for two years. I have never heard of such a statement.

102. As far as I am aware, there was no assumption that Multiplex would have a maintenance role at the hospital.

103. You asked about my views on the Estates budget or if staff struggled with resources and if, initially, after handover, there wasn't enough people to do various roles and keep the maintenance of the hospital, at that initial stage, ongoing? I haven't heard that said. I mean, the way the Board sets a budget is that the Board receives an annual allocation from the Scottish Government. It's then allocated over the various operational entities of the Board. Some of the funds come ring fenced from the government. In other words, they can only be spent in certain activities, the Board then takes a decision as to what each entity gets, so the Board actually takes that initial decision. So, the Acute Services Division might get-- back at that time, they might get something like 1.5 billion, so the Board approves the 1.5 billion.

104. I have been advised by the Inquiry that the Inquiry has heard evidence of overworked and overstretched teams working excessive hours. I have also been told by the Inquiry that it has heard of attempts to get more budget and of people coming to me and my response being that no more cash was available. I have been asked whether I have any recollection of such discussions? I do not. Once the budget is allocated the Board does not hold any additional resource. For a budget variation to come to the Board or me, the Director of Estates would need to examine how other Estates budgets had been set across the Board Estates. This process would require paperwork to evidence this. It would need a paper to the COO explaining why they could not find money etc.

105. In respect of the 2015/2016 period which I have specifically been asked about, the QEUH at that time did not have a definitive budget as this was constantly evolving. Secondly, all equipment was new and was free to estates and for the first year could be charged for breakage back to Multiplex and capital scheme which was awash with money.

106. The chief operating officer then allocates the 1.5 billion over the six or seven clinical directorates, or in 2015/16, the hospital complexes. So, they would decide what went to the Royal Infirmary, what went to Queen Elizabeth, what went to Gartnavel. That would be dealt out of that 1.5. The Estates director would get his allocations based on what comes out of the acute debate, what comes out of the community health debate, then the director of Estates would allocate that as to how much money he was giving to the Royal Infirmary maintenance team, how much money he was giving to Gartnavel, how much money he was giving to the New Victoria or Stobhill or the Queen Elizabeth maintenance teams. That's just how the budget would be set, so if there was an argument or a debate between the Operational team of the Queen Elizabeth and the Estates director about the adequacy of their funding, that would be the level it would be at.

107. Time would dictate the end point for jointly working on the project. Client-instructed change would be a Board only responsibility from, more or less, day one. So, if you say, as we did, "We want to put a different type of patient into the room, therefore, we want to modify the rooms," that's a client-instructed change. There is no issue with Multiplex in terms of the room not being suitable at day one because it would be suitable for the original patient group.

108. I have been asked about concerns raised by infections prevention control staff during my tenure at NHS GGC. I understand that whistle blows were made after I had left in 2017.The Board had a whistle blowing policy with a designated non- executive director and a designated team that worked with that non-executive director. So, in a normal working situation, I would never hear about a whistleblowing complaint until it had reached the non-executive

director. The non-executive director then, via the chairman, would come to me, if it involved me, to say, “We’ve had this complaint from Member Staff A. We’ve looked into it. There’s an issue and we think Manager C isn’t doing everything they can to resolve it.” Then that, depending on what it is, goes down various routes – HR, individuals, personal development, or spending money. However, the executive line was eliminated from whistleblowing because that was the whole point, to not allow us to cap it by just saying, “Thank you, management know”.

109. The Board would not always hear about concerns before they reached the whistleblowing stage. I do not recall any discussions at Board level regarding concerns being raised by infection prevention control staff in respect of the risk posed by the ventilation system or water system. I can’t fully answer this question however as I got involved as Chief Executive in some discussions about ventilation after the operational handover. To the extent that any of those discussions were in a Board meeting, I can’t recall. My sense is they would only be reported to the Board through the monthly infection control report if the professionals have deemed that appropriate. The major ventilation issue that I was aware of was the adult bone marrow transplant unit which was an operational issue. The Infection Control team then raised queries, and ongoing questions, about operational issues, and the Board made the decision to move the service.

110. I have been asked if it was common for concerns raised outwith the whistleblowing process to be discussed at Board level. I would say, not unless it was linked to a particular operational issue that impacted on the Board’s decision to do something.

111. I have been asked about what formal and informal meetings took place outwith the official NHS GGC structure, which would include the Board and various committees and groups. I would say I was involved in hundreds of such meetings. There were formal management group meetings, so I had a quarterly performance review meeting with each of the operational directors, you would meet them with their management team quarterly, and that was a

prescribed agenda. The chief officer of the CHP would take me and the other executive directors of the Board who came as part of my team through a series of presentations on their performance, their challenges, and next steps. There was a similar performance meeting between me and the chief operating officer in relation to acute services. I met the six local authority chief executives bi-monthly, which were not minuted meetings, but they were regular planned meetings. The Scottish Health Department had a monthly meeting with chief executives. They had more frequent informal meetings where you were summoned, but you had a formal monthly meeting in Edinburgh with the director general, chief executive and his team.

112. Then you would be involved in numerous other formal committees. So, for my sins, I was chair of the Scottish Health Service Terms Conditions of Service Group, and through that, as a member of the National Staff Council in London. I then chaired a number of national working groups which meant that for a period of time, you had a series of scheduled meetings and then occasionally informal visits. So, my week would be fairly full of meetings both internal within the organisation and external, and then on top of that, there would be the normal kind of approach where one of the directors would chap on the door and come in and say, you know, “Can I get your opinion on this,” or “We have a problem.”

113. With the procurement there was a specified process that it had to go through. At each stage, they would go through those meetings and then I would be either invited to sign off on the decisions they’d taken or they would go to the Board. So, for example, the business case to build the hospital went through the Board, the decision to appoint Multiplex as the contractor went through the Board, but before it went through the Board, it went through a three-stage validation process which was prescribed by the government, in the Capital Procurement Manual. The clinical strategy as it evolved went through numerous phases, I mean, I think we had maybe five or six attempts at the clinical services strategy over the period 2001 to 2006. They had a formal structure within the Project team and within the acute division, and then they

had a reporting structure, which was, initially to the Performance Review Group, and then the Board.

114. I had no involvement in the scoring system used for selecting the preferred bidder. I was part of the team that received the report and the presentation from the Project team, writing up the three bidders. I was aware there was a scoring system because I met the three contractors in the months before they submitted tenders, at a kind of high director level, because they wanted reassurance that the Board was actually going to buy something. They were spending sums of money and, at that point, the scoring matrix was presented to them so that they understood how their bid would be scored and evaluated. The key thing I remember from those discussions was the question about why price wasn't going to be the overriding final decision. So, I think the scoring, from memory, it was 35 to 40 per cent, was the allocation against price and it was explained that all of these other factors had to be taken into account.

115. I have no idea about the scoring allocated to compliance. I believe it was the project team and technical advisers who designed the scoring system.

116. So, I would be involved in various stages, the Project team would brief me that they wanted to pick Multiplex and they would set out why they have arrived at that decision, and I would say, "That's fine, take that to the Board, and explain it to them the way you've explained it to me" and then the Board received it and they approved it. However, in those particular instances, the Board's role isn't necessarily always to accept the recommendation and it was not to pick another one. In the case of procurement the Board could say, "No, you have not made the case to appoint Multiplex." The Board could not have said, "However, we want to appoint X". They pass it back to the Project team if they want to reject it who then have to make another proposal.

117. In relation to the water at the hospital, I wasn't involved in anything to do with it and I wasn't aware of the Water Safety Group; these were meetings I wasn't involved in.

118. You have shown me the Water System Safety Policy, **Bundle 27, Volume 2, Document 5, Page 20**. I have never seen this document before. You mentioned page3 where is says;

"The chief executive… has ultimate responsibility / accountability for the water system safety…"

then it goes on to list the responsibilities for the chief executive.

119. As I've explained before about the chief executive as duty holder, I acknowledge that is in the document. It was not a task that I performed on a day-to-day basis.

120. I only first became aware of the responsibility for the duty holder, in the way that you're presenting it, in this Inquiry. I've never been aware that the duties were as onerous as you're suggesting.

121. I was involved in the decision to relocate the adult BMT unit from the Beatson to the new hospital and then involved when it was relocated back to the Beatson. In terms of my ongoing involvement with meetings and patient safety concerns this was not something I was generally involved in. On a day-to-day basis, the everyday operations of the hospital in respect of the patients, would be dealt with by the Operational team in the first instance, the clinical director, the clinical head of nursing, and the Hospital Director team. Issues not resolved there or of significant importance would also be reported up and would involve the infection control or the Clinical team and then reported to the Board, particularly if they had to be reported to Health Protection Scotland. The monthly report to Health Protection Scotland had to be seen by the Board members because if you have to make an external report, say something is out with the parameters, then you had a whole series of diagrams and charts that went to the Board that were designed by the medical director, in this instance mainly Brian Cowan, to show trend analysis.

122. Major untoward issues went to the Board, the most obvious example I can think of at the moment was when I was Chief Operating Officer, we had two major clinical issues. We had breast cancer services in Clyde which were found to be questionable, i.e. the surgeons in Inverclyde Royal were operating a protocol that was out with the Board's and the government's approved standard. So, that resulted in the chief executive at the time establishing an incident team and we had to investigate about 250 patients to see whether they'd come to any harm. So, those issues were seen by the Board and reports went to the Board to show how we were rectifying it. Likewise with the infection outbreak at the Vale of Leven in 2007/2008, that was reported to the Board because it resulted in a major incident that had to be rectified.

123. The Board would get follow-up reports. If you reported to the Board an issue and you set out what the course of action was you were planning to take and the Board approved that, you would be obliged to report back to the Board on a regular basis how you were progressing to the resolution.

124. I have been asked what level of scrutiny the Board had if they weren't satisfied with the progress being made in resolving issues? The Board had a high level of scrutiny, if the Board took the view that the chief executive was not taking appropriate action to resolve an issue with proper actions and was being kind of laissez faire about it, the Board could then replace the chief executive. Theoretically, the Board could replace anybody, but you have to then go through a process. So, if you were the director of surgical services and the Board felt that you were not taking the issue seriously, then the Board, through the chairman, would ask me to deal with you and I would involve the director of HR and it would then be a learning issue for you or a training development issue or a resources issue and if, at the end of the day, you were just incompetent, then we would invite you to move on.

125. It is my view that throughout my tenure at NHS GGC the Board gave sufficient scrutiny to the issues that were brought to its attention.

126. I have been directed to the witness statement of Dr Redding at page 122, where she states:

> "The SMT and Clinical Governance Committee take decisions on what information is discussed at meetings of the full Board" ,

127. I have been asked if this is correct. I would say it is, in part, correct. The Senior Management team would discuss the Board agenda. The Clinical Governance Committee, which, as I've explained, is independent of the likes of me, would discuss its agenda and what it wanted to report to the Board. However, there was a whole series of prescribed reports that had to go to the Board, that couldn't not go to the Board. So, the statement's factually correct, that the SMT and the clinical governance committee agree their agendas on what goes to the Board, but there are prescribed reports that have to go to the Board. For example, the monthly infection control report has to go to the Board. It cannot not go to the Board, and it has to contain a suite of information that the Board is obliged to publish. What Dr Redding is talking about here, I suspect, is a whole series of gut instincts of infection control doctors that were not necessarily shared by others not going to the Board. But I am saying that now, looking back; I was not aware of that at the time.

128. I personally was not involved in the Clinical Governance Committee. Formally I would just be seeing these issues when they were discussed at the Board. Informally, the medical director might tell me something that she was working on or might seek my view on something, but that was not formally part of the executive responsibility.

129. I have been referred to the Audit Scotland reports from 2016/2017 where it's noted here that there has been a change in the governance structure within NHS GGC and there has been the establishment of new committees and a requirement of the chair to update to the Board on discussions and decisions made at the retrospective committee. This is correct. This was as a result of the Scottish Government. On 1 April 2016, Health and Social Care Partnerships were formally established with legal status and schemes of

delegation, which transferred responsibility from the host bodies – namely the Health Board and the local authority – to the Health and Social Care Committee. The Health and Social Care Committee therefore, under their scheme of delegation and under the prescribed rules set out by the government, got to take decisions. So, the Health Board no longer took decisions for community mental health services. The Health and Social Care Partnership did. There were six of these committees, every board member was in one but only four in any one. So, the only way that the Board, collectively, could get to know what was being discussed in all of these was for the chair to give a verbal report to the Board about what had happened. The chair of the individual Health Care Partnership was either a local authority councillor or a board member and they rotated, which was prescribed in the regulations. So, if the Health Board's nominee was vice chair this year, they would rotate to chair next year. So, the vice chair, or chair, who was the Board member, would give a verbal report to the Board about what had happened. This was a prescribed change which changed the whole dynamic of the Board. In essence, 45 per cent of the Board's responsibility was taken away.

130. This change left the Board technically accountable for everything. For example, if you overspent as the Chief Officer of Greater Glasgow Health and Social Care Partnership, I still got held responsible if the Board didn't break even. It was a very difficult time. It was a time of great change where the regulations that the government had put into place were not, in my opinion, fully formed and had to be worked through over subsequent years. So, that changed. The board chairman changed in November 2015, and the new chairman had views about governance. In fact, he had very strong views about governance. That was John Brown. He regarded governance as his forte. So, he sat down with the board secretary to restructure the Board committees to reflect what he thought he wanted to do. So, the main change that the auditors, I think, were referring to was a structural change imposed by the government in April 2016 and any other subtle internal changes were really just nuances of the Board evolving, hence the Quality and Performance Committee, which looked board-wide, was disbanded and the Acute Services Committee was

established.

131. I have been asked whether, in my view, these changes strengthened and enhanced the governance of the Health Board? This is something I would rather not comment on and was one of the factors leading up to my decision to move on.

132. I was a member of the Acute Services Strategy Board. In 2000, the Health Board undertook what was then the third Acute Services Strategy Review for the clinical services within Glasgow. At that time, the legal structure of the health service in Scotland had the Health Board as a commissioner of services, the awarding of contracts, and your NHS trusts as the providers. So, the Board could consult on clinical services and decide on its own not to award you a contract. In reality, what the Health Board did was they set up an Acute Services Strategy Board, which had the Board chief executive and the two trust chief executives, of which I was one, on it, and that then brought the ability to create structures with all of the clinical involvement. The aim being to come up with a new strategy for clinical services in Glasgow and, hopefully, access to the capital funds to build new buildings because Glasgow had fallen well behind in the context of modern healthcare facilities. That was the Board that came up with the clinical strategy to have two major acute receiving sites supported by three ambulatory care units. The concept of ambulatory care units was lifted, in large part, from what was happening abroad, but had also started in the English health service.

133. The clinical strategy then went to public consultation and that consultation went on through 2001 and resulted in the Board, under much criticism from the public and from some clinicians, to take a decision in, I think it was October 2001, that the clinical services strategy should have been adopted. That then went to the government, to the Health Secretary, and then it went through a parliamentary process, which resulted in a vote, which then came back to the Board approved.

134. The strategy then evolved because there were sub-strands of that. So, we had a laboratory services strategy, in which Dr Redding alludes to and has disagreement with, which looked at how to modernise laboratory services and that arrived at a laboratory services strategy. So, that underpinned the Acute Services Strategy. We then had a maternity services strategy. So, all of this was going on through 2002/3, that resulted in the fact that the risk to maternal health of giving birth in a standalone maternity unit was too great to continue, but that created a major outcry in Glasgow because the Queen Mother's was in the grounds of York Hill which was deemed not to be an adult hospital.

135. So, the Board took a decision in 2004 to close the Queen Mother's and to move maternity services to the Royal Infirmary and to Southern General as it was then. That resulted in another parliamentary debate, and Malcolm Chisholm, who was the Health Secretary at the time, then concluded that the only way he could get it through was to promise to move the children's hospital to the new hospital, which was not part of the Board's clinical service strategy. So, he agreed to provide £110 million to build a new children's hospital alongside what was going to be a PFI new adult hospital to create what they called the "gold standard" of adult paediatric intensive care facilities and maternal services on the one site.

136. In answer to your question, "How was the scope of the new hospital defined? Was there ever a recognition that it was built to comply with not only statutory regulations but also their applicable regulations, guidance and good practice?" and your reference to "gold standard". The reference to gold standard here is clinical adjacencies. It's having highly compromised paediatric patients next to a fully functioning maternity hospital fully connected to an adult ITU. That was what was called, clinically, the gold standard, right? But that wasn't reference to the physical environment; that was the adjacencies.

137. In answer to your question "At that time, was there the assumption that the hospital would be built to good practice guidelines? Do you recall anything like that?", my answer is no

138. At the same time, we had a cancer services strategy. It was driven more by a medical rebellion than by a board desire to modernise cancer services, but the doctors decided to leave Glasgow for jobs elsewhere in the UK, which meant the service almost collapsed. So, of course, we had to put a recovery team in to understand what was going on, and it was driven like all clinical services reviews. The world was changing and we were getting left behind.

139. One of the big drivers for the Acute Services Strategy was, in the early 90s, when I was in more senior roles, the way the health service was provided was that the GP would send you to the hospital to see a surgeon or a physician. They would see you, put you through a few tests and offer an opinion as to what was wrong with you, and in the smaller hospitals, they would then undertake the procedure to help you improve. Specialisms were growing and surgeons were no longer surgeons. They either saw themselves as a vascular surgeon or a breast surgeon, colorectal surgeon. So, if you were a colorectal surgeon, you'd have no interest in seeing the women with breast issues.

140. They wanted to evolve into clinical teams where the GP acted as a stronger gatekeeper so if they knew your issue was with breasts, they would send you to the breast service. So, that meant you had to bring clinical teams together and they couldn't operate a small standalone unit. So, that was one of the big drivers. In the early 2000s, cancer went the same way. The oncologists no longer wanted to see every cancer patient. They wanted to be specialists in certain tumour types. So, that drove a need for a cancer strategy, so, all of these things flowed out of the Acute Services Strategy Board and then the Board evolved from the strategy side in 2005, into the procurement side. My role evolved in the sense that I was asked to take on the development role, the project director in the context of the director responsible over the trust and the Board for procurement on behalf of my colleagues. Trusts were done away with in April 2004 and Glasgow took until October 2005 to put a new structure in place, which was a single-system structure.

141. I have been asked about the Acute Services Strategy Board and its involvement in the new hospital in terms of procurement and funding. This whole process was managed by the Project team under Helen Byrne, who was director of acute services implementation, which was a new post we created in 2006, and she reported to the Board chief executive. It was her job to lead the team.

142. The Acute Services Strategy Board was now morphing into the implementation phase. There was no longer "strategy". Over here you had the ACAD procurement, which ran until 2008, and then over here you had the procurement for the new hospital, and that is a multifaceted process about what was going to be in the hospital, such as the bed model, what clinical services were moving, which were staying where they were, what was moving to where. So, that group coordinated all those activities, and as chief operating officer at the time, I would attend a number of those meetings to input my operational view into these debates.

143. Choice of contract model, funding changing and preferred bidders were discussed at the Acute Services Strategy Board, but the day-to-day work underpinning them was led by Helen's team. Decisions such as deciding to use chilled beams and the ventilation systems would sit with Helen's team. The Project Team would take these operational and technical decisions, and they would be formally reported to the Board, where necessary.

144. I have been asked to confirm where we might find material showing when it was necessary for the Project Team to formally report these operational and technical decisions to the Board. These matters were not written down. It is not as loose as individual decision making. If you take the stages involved, the Board seeks Scottish Government approval to make certain changes; the Board firstly seeks the approval of Scottish Government to finance changes. Once that approval is given then Board would then approve the procurement strategy. At the end of the procurement strategy the Board then appoint the successful contractor. You then move on to the 1/200/ 1/50 drawing stage when the Project Team, along with clinical teams, then engage with contractor

to come up with the final design (the contractor does the final design). Only where there was going to be a major change to the original specification would this be reported to the Board, for example if the contractor could not deliver 1100 beds the Project Team could not agree to accept 100 beds, this would be a significant decision reported to the Board. I think after 12 to 15 months the design was finalised, at the end of this stage the report comes back to the Board, now the Board has a final cost and content, at this point the Board has to say cost for content is reasonable and report to Scottish Government and then Scottish Government say that the project can proceed. Between technical input of Helen Byrne's team and the clinical input lead by Jane Grant's working team of 90 working groups I cannot think of an example where Helen reported to the Board that would have been about anything other than progress reports. I cannot think of an example of a change in the period between early 2009 and end 2009/2010, if there was one you would find it in the Boards agendas. Nothing went to the Board without being on agenda, which had to be circulated seven working days circulation prior. There also would have to be a paper setting out the position regarding the proposed change. This would be reflected in the Board minutes for the PRG.

145. The Board was required to make submissions to Health Protection Scotland in respect of various aspects of infection control on a regular basis. There were two types of reports, from my recollection a statutory monthly report and, secondly, if there was an incident, a clinical incident or an infection outbreak that reached the categorisations that they had set out in their guidance, they needed to be notified on the same day that you became aware of the issue. Depending on the issues, Health Protect Scotland would work with the designated director on the resolution of the issue. On major issues system-wide, then they would report back to the Board in a formal report, which the Board would receive along with the executive team's actions and/or comments.

146. There was a formal performance management team in the Scottish Government that were allocated to individual health boards, and you made monthly reports to them. They were linked to finance, to patient performance that was linked to targets for service delivery and, obviously, you liaise with them in all aspects of media issues that came to the attention of the Cabinet Secretary. There was a formal, monthly meeting between chief executives and the director general of NHS Scotland, and then there was a six-monthly meeting with the Board and the performance management team to review the Board's performance against targets, which the Cabinet Secretary may or may not sit in on, and then, finally, there was an annual public accountability review meeting which was held annually to receive the Board's annual accounts and report on performance, which was chaired by the Cabinet Secretary and the Board chairman.

147. When issues arose in these reports, depending on the issue, there would either be an agreed rectification plan which you would report against the agreed milestones as to whether you were hitting the improved performance or service rectification that was at issue and, depending on the issue, there would be quite a bit of informal contact.

148. I have been asked if I remember any occasion where I had to report to the Scottish Government regarding issues with the water and ventilation systems at the hospital? I do not.

149. I have been asked if I am aware from other colleagues, if such issues in respect of water and ventilation systems were ever raised with the Scottish Government? I am not aware of any concerns being raised by colleagues.

150. I have been asked when I first become aware of issues with the water and ventilation services. I would say I've never been aware of issues with water. I became aware when I was interviewed by the Inquiry team of Drs Montgomery and Fraser. They told me about the water reports but up until then I'd never heard of them.

151. I have been asked about my knowledge of issues with the ventilation system at the hospital. The only debate that I was ever involved in about ventilation was because we tried to change the patient mix. There were two issues that came out of that; one was the bone marrow transplant and the second was infectious diseases. Both of these were raised as being inappropriate environments after the services moved in or, in the case of bone marrow transplant, as the services were moving in.

152. To be clear, there wasn't any debate in relation to the bone marrow, only to infectious diseases. The heated debate was, quite simply, between me Anne Harkness and Grant Archibald, Chief Operating Officer, because (a) they had taken the decision and not reported it, and it should have been because it was a clinical chain. Two, operationally, it was reducing the bed complement, and we were having operational problems delivering the services in 2014/2015 with the beds we had, so ending up with 20 less did not please me. And they explained how it had all come about and what were the driving factors from their point of view, which were overwhelmingly clinical and medical staffing, so I had to accept that their conclusions and the actions that they took were appropriate. You should gather that lots of decisions got taken without my involvement. But in relation to that one, it was in the run-up to the commissioning, because the Brownlee unit, as it was called, at Gartnavel, was suddenly being decommissioned and that came to my attention. This decision had been taken without my knowledge and involvement.

153. To clarify my understanding in terms of the standards relating to the assessment of the adult bone marrow transplant and the infectious diseases units being appropriate environments; at the beginning, I didn't know what standards they were being compared against to determine if they were appropriate or inappropriate. The Infection Control team, when carrying out tests as part of the commissioning process, deemed that the, I can't actually remember the test, but, in terms of, basically, the air quality in the area or the adjacent areas, was unacceptable to them. At that point,

a question was posed to the Project team, “What is the specification? “What was the environment in 4B and what was the environment in Gartnavel from where they were coming?” At that point, they were different. The environment in Gartnavel was, what would be the right phrase? More appropriate for the patient. It had a stronger specification; 4B didn’t. So, at that point, money was made available, because you referred to it later regarding the base change noticed. Money was made available to the Project team and the operational directors to bring across the environment in Gartnavel into 4B.

154. So, these changes were made, instructed by us, paid for by us, carried out by Brookfield. The infection control doctors then continued to disagree with the environment being appropriate. And, at that point, as I said the last time, I got involved because there was an impasse between the operational team and the Infection Control team. The cancer clinicians and the hospital management and the infection control doctors couldn’t agree, so I got involved through the medical director, or along with the medical director, and, at that point, I’d asked for, “What were the background tests that we were doing at Gartnavel, and what were they telling us about the environment at Gartnavel, and what are the tests we’re doing at Queen Elizabeth?” and therefore compare them.

155. So, I was expecting to get back that Test A at Gartnavel said we had 0.0003, and Test A at the Queen Elizabeth says we’ve got 0.0010. You know, in other words, the infection control doctors were right, it’s higher. Or, ideally, it would come back and say, “It’s 0001. It’s actually less than it was.” I was told that the Infection Control team had introduced a whole new range of tests, so there was no historical comparison as to whether that environment in the Gartnavel would have achieved the same results as the Queen Elizabeth because these were new tests, right? So, at that point, as again I explained at the last meeting, the Board’s role, because you’re then talking about a balance of risk, the Board was confronted with cancer doctors having a view and the Infection Control team having a view. I have no evidential basis for saying this, this is what was said to me, it would have likely been through Jennifer Armstrong

but I cannot recall exact name, possibly one of operational directors.

156. I have been asked what the evidential basis was for my comment that '*At that time, they were also not carrying out the suite of tests that the infection control doctors at Queen Elizabeth wanted to do.'* I was sending people away to get information to allow people to report to the Board to either override ICD advice or send people back to Beatson. It was an attempt to get everything back into the public domain and decision making process.

157. I have been asked if it possible that my understanding is incorrect and that no new tests were introduced - the same air sampling methodology and reporting was utilised? I cannot disagree if this is in fact correct, it was not what I understood.

158. We then got access to the English hospital system because we went to the adult cancer centres in England and said, "Right, what's your testing regime and what's your results?" At that time, they were also not carrying out the suite of tests that the infection control doctors at Queen Elizabeth wanted to do. So, there was no UK baseline, but we did eventually find, as I said at the last meeting, direct guidance for category 1, you know, adult bone marrow transplant patients, and that gave a specific technical certification. And, at that point, the Project team and Multiplex agreed that we couldn't retrofit 4B to that standard.

159. I have been asked was there any significant difference between the standards for ventilation in hospitals in the Scottish Hospital Technical Memoranda and the Hospital Technical Memoranda used in England and Wales? At the time Scotland had not issued SHTM for this type of patients but England had. There is no reason to believe Scottish was not equal to or better than English guidance.

160. I have been referred to **page 178 of Bundle 27 vol 7**, in the table, - and told by the Inquiry that several centres confirmed that they were doing environmental monitoring, and asked whether my understanding is incorrect. Whether you do 3 or 33 tests it is still called environmental monitoring. My understanding at the time was that our IC doctors were ultra cautious, trying to get a complete understanding of the environment. If we were carrying out a more extensive range of tests, I would want to know the relevance of why we were doing more and how this influenced their opinion. We were looking at a situation where the patient environment was deemed inappropriate in both locations by the different groups of clinicians across varying factors and therefore there is no conceivable piece of information that you don't seek to identify.

161. So, at that point, because we couldn't resolve the impasse between the two sets of doctors and because we now had found guidance to what best practice would be. And, of course, everything's got to be done, as I said the last time, everything's got to be done in the timeframe you're doing it. So, in other words, in 2015 when we were doing this, we had to comply with 2015 standards. You couldn't say, because we built the hospital in 2010, we can hide behind the 2010 standards. So, at that point, I don't want that, so that's why I went back to Gartnavel, and the view of the doctors was they were moving from one environment to another that they didn't think was better. Indeed, they thought it was poor, but we couldn't resolve the infection control impasse.

162. I have been asked what did I consider the value in comparing results from these two different wards on different sites? My position is that you had two groups of clinicians coming at issues from different points of view. If you were carrying out BMT treatment every day in a room and then moved to identical room you might have the Infection Control Doctor from this room saying that was fine, but one for the new room saying it was not. If you had a cancer doctor saying that it was a risk to manage the patient at the Beatson based on risk to life or death and the situation in the QUEH was a risk identified by the IC doctors based on a statistical risk this would have to be addressed by the Board as neither opinion is black or white. The Board would require a formal

process, gathering information, recording how it arrived at a decision. Clinician's opinions are personal, you might be confronted by a situation where a cancer doctors is saying the room is acceptable and as good as Gartnaval, you would balance the risks say 1/10,000 but all benefits are doing it here, you then get closure as you get an ICD getting closure and a clinician getting what they want. The Board need to see a very details process of how you get into the problem to get conclusion, you always hope both agree, but with Ward 4B we never got that. Air sampling was part of process to arrive at recommendations to make to the Board, and the result was the Board made the decision to move back the adult BMT to the Beatson. I then had to go back to the Board to advised that this has not worked out and had to be able to say why it had not worked out, setting out why I was asking to undo a decision and explaining that ICD was putting it is writing disagreeing, and that the Medical Director and me had done the work to come to this conclusion.

163. The ventilation specification in Ward 4B was set out by the Board when it was to be occupied by different patient group, there was then additional work in 2013 to enhance the requirements to recognise more the complex needs of the now intended patients. ICD were not commenting on ventilation specification, they were commenting on the environment in the room which they were doing air sampling in. It was when we got sight of the English specification for BMT patients that it was apparent that the ventilation strategy for Ward 4B was deficient.

164. The ventilation specification was allegedly the same standard as the Beatson if not marginally better, that is what I was told. The ICD in the Beatson did not have any issues, where as the ICD in the QEUH did have issues. When we found guidance which says that the ventilation standard should be X, we approached Multiplex to ascertain how we could re-engineer the QEUH accommodation but were advised we could not achieve this standard.

165. So, in terms of my reference to inappropriate environments, that referred to what I was told by infection control.

166. I have been referred to **Bundle 6, Document 29, Page 122**, which is the L8 Risk Assessment for the hospital in 2015 undertaken by DMA Canyon. I have not seen this report before. I have been referred to page 340 of the bundle, where it notes the management structure, and the statutory duty holder next to which it states, "To be confirmed by NHSGGC."

167. I have been asked if I am aware of who the statutory duty holder should be for the management of the water system at the hospital. The Legionella control is delegated through the Estates director to the individual site maintenance managers and then reported back; i.e., the confirmation that the actions required by the Board are being discharged and is reported back by the Estates director. So, in the context of the titles there, I'm not sure how they would have filled them in.

168. I have been referred to **page 349 of Bundle 6**, where it discusses the management structure and then it speaks about a written scheme and I have been asked if I am aware of the written scheme. I'm aware that there would have been one, but I couldn't tell you the detail of it. The purpose of the written scheme is to discharge the Board's responsibilities in relation to Legionella and other waterborne risks.

169. I have been referred to **page 350 of Bundle 6**, which shows the written scheme hierarchy, and, at the top, it states the duty holder is the chief executive and asked if this is something I was aware of at the time, that is, the responsibilities for duty holder sat with myself. As I have said, all of the Board's responsibilities are discharged through the chief executive. The chief executive as an individual with no technical expertise and no appropriate qualifications, does not actually do anything themselves. They are obliged to ensure that a scheme of delegation exists where individuals are tasked to carry out those functions and that there is an annual monitoring that these roles are being performed.

170. I have asked if I recall, in terms of discharging these duties to others or allocating people to carry them out. I don't recall this as when I became chief executive, it existed. I didn't change it. These duties had already been delegated to the appropriate people when I came into my role. The scheme already existed when I became chief executive in April 2009. This was not something I revisited during my time as chief executive. I was therefore working on the basis that an appropriate scheme of delegation was in place.

171. I have been asked to clarify whether it was incumbent on the Chief Executive to take positive steps to ensure that there is a scheme of delegation in place. The answer I gave in paragraph 162 was specifically in relation to a question regarding the water regulation. The delegation schemes would change continually to reflect Scottish Government advice or issues, changes that were required as result of an internal audit or National Audit Scotland report and changes to the management structure. When you establish a new post, or de-establish a post you have to allocate the functions in the post or take away from some people to give to the new post holder.

172. In terms of ensuring that there was a scheme of delegation in place, there was no such a thing as a published scheme of delegation of Board responsibilities, these were set out by reference to the Boards standing orders, standing financial instructions and job descriptions would set out the individuals' responsibilities. Certain job descriptions would be tasked with a series of functions, and these would describe who the role was to report up to. The whole annual performance management scheme mandated by Scottish Government applied to all managerial organisations. The Board would set objectives annual which would be cascaded down, and these objectives would become part of performance management plan, which was subject to6 monthly reviews. I would look at those who reported to me, and would look at their performance against the targets and milestones set, I would then look at and assess against the criteria laid down by the Board and then I would report

on that. In practice, the Chairman reports me, I report my direct report to the Board and those below me report to me, all the paper work is sent to Scottish Government, who then send it to an independent review panel who assess and score the matters reported on. You would then be allocated either incomplete or satisfactory. Only when you are graded as completed satisfactory would you get access to annual pay rise.

My role in respect of ensuring what issues were being reported to the Board that would require Board decisions would be dependent on the issues, with reference to the Boards Standing Orders and Financial instruction. The direct reports were managing multi million pound budgets and were tasked with ensuring the delivery of the Boards/Scottish Governments objectives. There were roughly 18 performance targets which had to be reported to Scottish Government monthly. Within the scheme of delegation the post holders had the authority to take action to achieve these performance targets, they then provided monthly reports back to the Board. If the A&E performance was not 95% on weekly basis at end of each month the chief operating officer would then have to set out what was required to achieve the required performance. Most actions being proposed would be set out in the monthly report, but they would not be necessarily asking for permission. If the matters was financial or structural recommendations would be made to the Board. Big decisions would have to be made by the Board. My role in the was the performance review role. This was a two-step process of Scottish Government issuing instructions to the Board and then Board would expect me to ensure that within the tasks required were included in the relevant job roles, and that new tasks were allocated to the right people and that the job roles and reporting reflected all of this.

173. I have been asked, whether given the changes triggered by the move to the QEUH, was it not incumbent on the CE to check whether the existing scheme would require to be amended etc. The answer to that is yes. The statutory guidance, Audit Scotland and annual reports to the Board regarding the Board financial controls would have to be reviewed and then standing financial instructions would set out the roles and the limits of the roles. Most obvious

levels of authority to spend would incrementally come up. Specific examples include structural change, in April 2015 the Board was requested to change its management structure from clinical speciality Board wide management to specific individual site directors. The Government decided that this was the best way, by having a single individual to manage the totality of the resources per single site. Anne Harkness was appointed as the site director for the QUEH. Each site director was responsible to and reported to Chief Operating Officer (COO), who was Grant Archibald at that time.

174. I didn't check for any scheme of delegation because they are embedded in standing financial instructions, operating orders. You know, it's a kind of whole rack of documents that convey your role and responsibilities.

175. I absolutely agree with the premise that delegation still requires the person delegating to undertake some level of supervision over those to whom responsibilities have been delegated, which includes, as a bare minimum, ensuring that the delegated tasks are being performed. This would be managed through the performance review process. To follow single example from beginning to end, the instruction would be given to Board, who would then action by either a change in the structure, or creating an individual new job role, if you go down that latter line this would go through an HR process, reporting back to the Board goes through the formal performance management system. The Board gets monthly performance management reports, meaning that there was combination of monitoring project management and the Board being obliged to report to Scottish Government in real time.

176. I have been asked about my involvement in the Gateway Review, which at the point I was appointed, Gateway Reviews 1 and 2 had already been approved and the Gateway 3 process was underway. I remember participating in the Gateway Reviews. I think there were six Gateway Reviews and this was the first project in Scotland that had ever gone through the Gateway Review so there was an element of learning in both the Gateway Review team and the

Board in how to deal with it. The principal areas that I was involved in with the Gateway Reviews was the realisation of the benefits that we had set out in the original business case, so that was employment opportunities through the construction contract, particularly in Glasgow and more particularly in the Greater Govan area, the identification of an establishment of apprenticeships, the work to ensure that a significant amount of the supply chain in the west of Scotland secured contracts to employ and to maximise the public spend in the local economy.

177. You have referred me to Gateway 2 the Acute Services Review Program Board of 20 March 2009, which state that I reported the gateway review to report to the Board, but I recall nothing about this meeting.

178. As to what I recall of Gateway 2, I participated in it and, clearly, as chief operating officer at the time, I took the Gateway Review to the Board in its completed form. As you'll have read, it gives a glowing testimonial to the Board about our procurement strategy, our choice of contractors, our choice of X, Y and Z, and it lists a series of actions that the Board should be considering to take in order to move forward, to remove risk, because Gateway Reviews are all about ensuring the government that their money is not at risk and that the project will be delivered. And if you then go on to Gateway Review 3, it starts off by praising how all the actions they asked for in Gateway 2 have been done.

179. As I said previously, I was interviewed for every Gateway Review. each person was interviewed in relation to a specific topic. My role in the Gateway Reviews changed from being chief operating officer, to being interviewed in relation to clinical aspects of the project, then to being chief executive, in which case it was being interviewed about the benefits of realisation that were in the original business case, which was supplier chain management, apprenticeships, a whole range of downstream benefits that should flow from the government investing 800 million in the community.

180. Regarding Gateway Review 3 where I am noted to be senior responsible officer and in response to your question about the role responsibilities as senior responsible officer for the Gateway Review; I can't remember specifically. They would have been set out in the Gateway Review documentation, but principally I consider my responsibility was to make sure that the actions that were contained within the Gateway Review recommendations were actioned, were undertaken.

181. I do not recall which documents were provided to the reviewer or the reviewers, or the types of documents they would request. The Gateway Review team liaised with the Project team about (a) what information they wanted, (b) what individuals they wanted to meet and, through the Project team, they set up the diary of meetings so that, from memory, the week that they were on site, 20, 30 people would be programmed into a diary to accommodate their attendance, and I would go along and do my bit.

182. Then, moving from that, there was a series of operational benefits, creating clinical teams of mass and sustainability, the moving of the services and the engagement with the public and then, finally, the financial benefits. The financial benefits that had been set out in 2009, obviously, changed every year as you went forward because you realise some of those benefits during the construction period, and then some of the later benefits, such as staffing, were never achieved because the government introduced new staffing levels, a new nurse workload model. So, the nurse workload model we had used, in 2009, in the business case was replaced in 2014 with a new nurse staffing model which required more nurses. So, my involvement with them was to be interviewed on the benefits realisation, public engagement and those aspects.

183. I have been asked whether, through my work with the Gateway Review, I had been involved in discussions in respect of the business case. The business case and the Gateway Review were two different things, although the business case may have been discussed through the Gateway Review, I only ever recall discussing it in respect of the benefits realisation. The Gateway Review team interviewed, I would say, a few dozen people at each stage. The

interviews would most likely involve the chief operating officer; it involved directly at that time the existing director of Estates; it would have involved Helen Byrne; it would have involved the project team; and any others that they sought to bring into question on whatever aspect of the programme they were interested in at that stage.

184. Currie & Brown were originally appointed as cost accountants, going all the way back to when we were doing PFI. They came on board to help discussions around affordability and cost. They then were involved in helping, as part of the business case, to come up with an exemplar design, and out of that exemplar design, a cost allowance. There's a great big book, that you open as a cost surveyor, and if you're pouring X million cubic metres of concrete, it gives you a price, and if you're doing X metres of steel; and out of that, a big book that they create, and that book is updated every quarter by the various professional bodies. They created the cost profile for the exemplar design, so that when we went to the market, we had a top price, i.e. the exemplar design, that we wouldn't pay more than that because that would mean we weren't getting value for money and they then acted throughout. They became permanent members of the project team as we went through the procurement.

185. At one stage, Currie & Brown had a quality involvement, and then that changed to Capita because the resources needed were significantly greater. The Capita contract was a seven-figure number. So, Capita was brought on board and, therefore, the Currie & Brown remit evolved, but I wasn't directly involved in any of that. I just knew that through discussion.

186. Wallace Whittle was appointed as M&E engineers because, again, the project team had to have technical capabilities to comment. The original procurement was a partial design. So, basically, the three bidders had to come up with their design construct; they all had to provide models, 3D models of what they were going to build to show it on the site that we had identified; But they had to produce a series of one to one hundred and one to two hundred drawings of the whole building but only 1:50 scale drawings of departments we'd specified that they had to take to that level of design. Then once the successful bidder

was appointed, they worked with the clinical teams to take the 1:100 and 1:200 designs down to 1 to 50 drawings for every department, in the buildings, and that included making the mock-up wards that we put into a shed in Govan, so that all the nursing staff could go and score the various layouts, or the potential layouts of the wards.

187. In respect of the Acute Services Review Programme Board, I chaired this. It merged with the South Glasgow Hospitals and Laboratory Project Executive Board after Helen Bryne left to become bi-monthly Acute Services Strategy Board (**Bundle 30, Document 6, Page 36**).I recall the groups and various arrangements and that is the successor to previous group set up just as Helen Byrne was leaving, – it sought to exercise the authority of the Board to take forward these actions. I can recall attending a number of these meetings.

188. I have been asked what control the Acute Services Review Programme Board had over changes to the project specification. It did and it didn't, it had responsibility to use the funding / contingency funding to move the price. The Projector Director could not agree to change the price uniformly, this would have to be set out in a paper and take to this group. Alan Seabourne would do this if he wanted to do something. This group controlled the money, the money could not be varied without this approval. This only applied to money within parameters of the scheme; you could not spend money on something that was out-with the scheme. For example, in 2011 a paper came in to the project about the Children's Hospital multi-storey carpark, in the original design the multi-storey was not included. A paper came to extend and for Multiplex to build first multi-storey, there was ahigh tension power input to the site, and the car park was to built on top of this site, the paper said if used another contactor was to carry out the work it would invalidate warranty by Multiplex, the paper explained that we said should go with Multiplex in order to retain the warranty. The multi-storey was in the scheme and within the remit of the scheme, but not within the Multiplex contract. In this case the Project Team negotiated these matters, they recommended to the group the Multiplex's price was competitive, the group then accepted the proposal**,** it

then went the Board. I recall that £10million was budged for this. The first 3 phases were done within original phase 1. Car parks 2 and 3 not by Multiplex. Another example was the helipad, where again Multiplex introduced a charity to the Board, the charity was keen to support air ambulance and would make grants, as a consequence £500,000 was allowed to proceed with helipad proposals.

189. The reason these matters would come to the group was that it was not for the Project Team to give Multiplex additional work, these matters had to come to the group. Major changes would have to come this group, but if it was a service change this would have to go to the Board. Look at 2013 and the Adult BMT as example, this would have had to go all the way to the Board.

190. I remember meetings that I attended for this group, matters discussed were mainly financial, the group as well as Scottish Government had responsibilities. There was a big cash management element as well. We had to agree every year with Scottish Government what the cashflow would be, we would have to deliver the amount that was agreed. If there was variation this group would have to agree and get authority.

191. I recall one situation when nurses came in and looked at final design for a ward, Multiplex had installed bed hoists, but the nurses decided that there far too many and that they would cause clutter and would harbour dust and create risk of falls. This led to a change in specification from having hoists in say 5 rooms to a lower number which resulted in a £550,000 rebate which was negotiated by the Project Team, this was reported to the group. I do not recall a anything about a ventilation derogation ever coming to the group.

192. I have been asked about Chief Executive Letters which, when I started in the health service, were called circulars, and then they became chief executive letters. They contained guidance and/or mandatory instruction from the government on how aspects of the various parts of the business were to be taken forward. The guidance ones could be on anything. They could just be

general, you know, “We’ve learned this and that,” So they would be issued, you could have 50/60 a year coming out on all sorts of topics. So, the Chief Executive Letter which accompanied the business case was relating to the guidance in the Capital Investment Manual. Given there were so many of them I cannot recall any specific details of their content.

193. The chief executive letters were signed by the director general for the Health Department. The director general for Health and Social Care, was the chief executive of the NHS in Scotland until they changed the title in 2011. When Kevin Woods left and Derek Feeley became the director general, the title of chief executive dropped. The director general was the chief executive of the NHS in Scotland, so circular letters, as we used to call them, came out as chief executive letters. They were Scottish Office guidance. Some of it was mandatory so you did need to read them. Some of it was, “You will get off your arse and do something.” They weren’t the chief executive of the NHS in Scotland writing to me specifically. There was a huge distribution list on chief executive letters.

194. The letter to the Board on behalf of the Scottish Government approving the project was signed by the director general. The actual business case went in through the Capital Investment Board. That was part of the finance function. So it went to Alex Smith, who was the director of finance at the Scottish Government at the time. His team then had to crawl all over it and offer their comments to the government, and the cabinet secretary, Nicola Sturgeon. They had to go around all the Scottish Government departments stealing capital to pay for it.

195. I have been asked about the New South Glasgow Hospitals and Laboratory Project Executive Board (NSGHLPEB) of which I was a voting member**.** I have been referred to **Bundle 34, page 152**. This document sets out the Terms of Reference and Membership of the group which states “The NSGHLPEB will be accountable for the planning and delivery of all procurement financial and technical measures required to deliver the identified

investment and services that fall within the scope of the whole project." I have been asked whether this made Executive Board responsible for ensuring that the technical changes pre contract (including the removal of the Maximum Temperature Variant in June 2009 and the agreement of the Agreed Ventilation Derogation) were properly assessed on a technical basis. The committee only existed only for 12 to 15 months and its principal task was the procurement strategy, recommendations of tender and principal contractor. This group then ceased to exist, the Scottish Government appointed a new non-executive director and this group morphed into a new group which took the project to stage of identify multiplex as the approved contractor, getting Scottish Government approval, and the next stage of outline design and outline costs. I should explain that all contractors submitted an outline design proposal and cost; the Board had an exemplar design and schedule of accommodation, the three projects scored Multiplex, with Multiplex being significantly below exemplar price. Balfour Beattie and Laing O'Rouke were also below, I recall that Balfour Beattie was £1 million below.

196. Having appointed Multiplex the Project Team set up clinical and technical working groups to deal with design issues. My understanding is that the Ventilation strategy was influenced by decisions taken during evolution of the design; the decision of working groups to have the building sealed, the decision to remove the maximum temperature variant. The same steps were taken in other hospitals. The solution for the design of the ventilation as submitted Multiplex was then considered by Project Team and deemed to be satisfactory.

197. As The Inquiry has pointed out NSGHLPEB was set up by the Performance Review Group on 19 May 2009 (**Bundle 34, Document 21**, **Page 145 at page 153**). The Inquiry told me that their understanding is that the NSGHLPEB had delegated authority to conduct and conclude negotiations at project critical moments and was required to "oversee the management of change control processes" so that "any change which impacted on the project must be authorised by [it] before it can be implemented (I was referred to the remit at

Bundle 34, page 152). The Inquiry has explained that they have heard evidence from Mr Seabourne and Ms Byrne suggesting that no such change control system existed. I was asked to review the minutes of the meeting of the NSGHLPEB on 7 December 2009, shortly before the contract was concluded on 18 December 2009, (**Bundle 42, Volume 2, Document 18, Page 86**). The Inquiry have said to me that suggests the NSGHLPEB did not "conduct and conclude negotiations" but rather this was left to the Project Team and that this was also Mr Seabourne's evidence. Following this explanation I have been asked why was there no change control process in place for the Stage 1 of the new SGH project?

198. At Stage 2 it was the Project Team not the NSGHLPEB running negotiations not the NSGHLPEB.

199. This would have been approved by the Board, which followed upon the recommendation to do so from Helen Byrne. Helen chaired the NSGHLPEB group. The NSGHLPEB group would look at and agree or not with recommendations made by the project director, it was not their role to individually participate in negotiations. When we got to beginning 2010 we moved on to the detailed design stage and a new set of roles and responsibilities were established. As Helen Byrne moved on her job was not replaced as we had moved beyond the Acute Strategy Implementation phase. Helens responsibilities were split over four people, Alan Seabourne had more responsibilities, Jane Grant had more responsibilities in respect of the clinical input to team, the director of estates and facilities had some of the responsibilities and other aspects went to capital projects team. This lead to the 'on the move' working groups, all these working groups fed in to Alan Seabourne as Project Director, and that and fed in to Multiplex, and whether the proposals were acceptable/ unacceptable. We (NHS GGC) did not design, Multiplex were responsible for the design, Multiplex had to come up with the answer to problems. In respect of the NSGHLPEB group, this would not have existed beyond Helen Byrne leaving in 2010.

200. I have been asked did the Board record votes on decisions. I only recall there being two votes recorded which were not related to the QUEH. It was not a democracy, there was a choice to accept or reject a proposal, you didn't normally write another option there and then.

201. I have been asked what my understanding is in relation to employers' requirements. I am not sure I have heard this term before. If I think about it, it would be the specification of the actual facilities we want. Do we want 22 theatres, or do we want 20? Do we want 1,109 beds or 1,332 beds? And that, as I said, was made up by a whole series of clinical working groups reporting in through the project board, and that finished document was presented to the Board and accepted, because clearly the level of detail in it was not capable of being questioned by the Board in the sense of their knowledge. The responsibility for all of this would have sat with Helen Byrne at the time.

202. You have referred me to the PowerPoint presentation by Mr Seabourne, **Bundle 17, page 2651**, that's the minute from the meeting of 13 November, where the presentation was delivered, where it says,

203. "It was reported that Brookfield's bid was considered to fully meet the Board's exemplar requirements and was to be compliant with employers' requirements."

204. But to confirm, my understanding of employers' requirements remains as I said before; I'm not sure where I had heard this term before, but think it was about the specification of the facilities, bed numbers, the schedule of accommodation, plus associated, you know, technical.

205. I have been asked about the relevant guidance that would have been in place for the specification of wards and ventilation. There was guidance in Scotland at that time through Scottish Health Technical Memoranda, some of which were mandatory and some of which were purely for guidance and, therefore, to be considered in the light of the individual scheme. The responsibility to ensure these were all complied with was with the Project team.

206. I have been asked about the sustainability and energy targets in respect of the Project and how these were achieved. All Scottish procurement at that time was obliged to strive for BREEAM Excellence. The Scottish Government had a policy that all public procurement must seek to attain BREEAM Excellence. This would all have been dealt with by the project team rather than the Board, because you've got to remember when the business case was approved and the procurement process was approved to appoint Multiplex, the design was not finalised, and the work on site started about 15 months later because the design had to be made up. So, all of this discussion would occur during that 15-month period, whereby, all the individual drawings and technical specifications would be submitted by the contractor to the project team, passed on to the appropriate sub-committees –in the heyday there were about 90-odd of them – and they would be approved, or modified and then approved. I'm not saying they were automatically signed off in one go. They went through, I'm sure, an iteration, but at the end of the day the drawing would go back to Multiplex, signed by the project team as being an acceptable outcome for the theatre suite, for example.

207. I have been asked about ward design and how these were signed off and compliance with the relevant technical requirements was met. There were two aspects to the wards. Firstly, the cabinet secretary prescribed that there should be single rooms. I don't know how you would describe it however, when a cabinet secretary tells you something, you just have to get on with it, so it was agreed that we would go for single rooms.

208. At that time, the English health service had built a couple of what they called exemplar ward layouts in hospitals. One was in Hillingdon and the other one was in Wrexham, I think. We sent clinical teams to see them, and this is going to sound silly, but the actual debate about single rooms was inward or outward toilets. If you go for an outward toilet, i.e. the toilet is on the outside wall, you increase the visual look into the area for the nursing staff. If you go for an inward toilet, i.e. the toilet is against the internal partition, the nursing observation area through the glass into the ward cubicle is reduced.

209. So, the wards were mocked up in the warehouse in Govan that Multiplex rented, and hundreds of nursing staff went along and scored it and commented on it, which resulted in all sorts of subtle changes. I personally never actually got along to see them. I did see the one in Hillingdon, in London, on a visit down there. So that was all scored off and then the design for the Queen Elizabeth ward layout was signed off, and then that's when it resulted in the construction.

210. The project team would have signed off the final ward layout after the nurses and after Multiplex had taken on board whatever their individual comments were. Everything was changing, because one of the big changes in the wards was the idea of moving away from a traditional nurse's station to what you called touchdown pads because the whole place was to have a new IT system. So, the nurse would have the computer on the medicines trolley and would discharge it to you in your room and do all of the core things in your room, as opposed to constantly going back to the nurse's station to type in what they've done.

211. All of these work practices were all discussed, and alterations were made to the windows; alterations were made to what they called touchdown stations. These were basically just shelves that were put outside the various ward areas so that the nurses could work there while dealing with you; and patient hoists; the layout of the toilets; the side of the bed where you put all the medical gas services, all these things are discussed with nurses. So, it's an iterative process but the idea that it was all single rooms was, ultimately, a request of the government.

212. In terms of the systems that were put in place for the technical requirements for the wards, these were just worked through as the hospital design evolved. The Project team were responsible and were ensuring technical requirements were met.

213. I have been asked about the guidance specifically regarding immunosuppressed patients. It is my view that this was not relevant as there were no immunosuppressed patients at the design stage who were to be accommodated within the adult hospital.

214. The haemato-oncology patients initially due to go into Ward 4B were not of the category of risk of patients as those at Beatson. The specification for the for two was different. The initial specification for Ward 4B was different to the specification for the rest of the hospital, it was for a different patient group and designed for a specific use. Ward 4B though was never designed for immune suppressed patients, hence it failed test in 2015 despite us spending £1 million. The original design was not enough, and it was not following our expenditure; it was never designed to take immune suppressed patients. I do not consider the haemto oncology patients initially intended for Ward 4B to be immunocompromised; they were primarily community patients getting follow up treatment closer to home, exactly the same as at Monklands.

215. With reference, then, to the Schiehallion unit, which is in the Children's Hospital, this did have immunocompromised patients. The decision to move the Schiehallion unit to the new hospital was in 2004, when Malcolm Chisholm decided that the children's hospital was moving and to be included in the procurement project. Yorkhill, as an entity, was being transferred across and then the Schiehallion cancer service was in Yorkhill.

216. In answer to your assertion that the Schiehallion unit still didn't reflect the guidance in place for the immunocompromised patients at the time. Well, if that was the fact, then that's clearly a mistake. The Schiehallion unit was front and centre as part of the redesign of the new children's hospital. And through the design project, which was initially led by Dr Morgan Jamieson, who retired, who was the medical director for the children's hospital, through Kevin Hill, through the chief operating officer, through the project director, all of those groups were established to input into the schedule of accommodation, input into the employers' requirements in the context of technical specification. So Schiehallion was front and centre. It should have been-- and, as I have said

in my last statement, I was advised that it had been designed involving all of the appropriate clinical people and was to a significantly higher standard than Yorkhill, right?

217. At the time the paediatric (2010) BMT service was the Scottish national centre, which was the only facility in Scotland, so that is what was meant by front and centre. I was assured by the Project Team and Kevin Hill that a competent clinical engagement strategy had taken place and the design input was lead by Morgan Jamieson (Cardiac surgeon) who had delayed his retirement to deal with this. Multiplex brought forward the design proposals and these teams commented on those proposals through the project team. The technical comments on the design proposals would come through the Project Team and their technical advisors.

218. Now, with better hindsight, and obviously what's been shown to me, that has proven to be inaccurate, that what was designed and built may actually have been different. What was asked for and what was delivered was maybe not the same thing. But, in addition, that what was asked for probably could have been better, but that's all with the benefit of hindsight. I have been asked to look at an email at **Bundle 27, Volume 8, Document 23, Pages 95 and 96**. My initial evidence is that I was not aware of this matter, it did not ring any bells, but upon being shown this by the Inquiry I accept that I was initially mistaken. I do not however recall that email but I am not disputing it is there and that alleged meeting took place. I was not conscious of that when I last gave a statement. I can recall talking to Jennifer Armstrong about the issues she was dealing with, but not in detail. Basically my recollection is that there was another disagreement between IPC and the clinicians about acceptability of isolation rooms in Scheihallion which caused BMT service to be suspended. Going back over papers now makes sense to pervious papers with Professor Craig William saying it was for Multiplex to fix as it related to the Scheihallion. I can now connect the dots between the two conversations. Jennifer Armstrong was the Medical Director in charge of resolving the issue; a paper never came back to the Board to say issue not resolved. The BMT service stated up again assurances having been given. This definitely refers to the

Scheihallion and not Ward 4B. Jennifer Armstrong was resolving the matters with clinicians and this was in respect of the Scheihallion and not Ward 4B. This infers to me that this was resolved. Unlike Ward 4B where I had to attend as parties could not agree, I did not have to attend this meeting. I may have offered a view but I was not involved and I recall that Jennifer (Armstrong) did not come back to the Board.

219. I have been referred to **Bundle 23, Document 77, Page 773** being a report dated 25 February 2016 and asked whether I still maintain that I was unaware of the concerns with the Scheihallion unit. I have no recollection of this at all.

220. I have been asked who would be responsible for resolving issues between Multiplex and the Project Team, I think this would have been the Project Director. There was a two year warranty. The Project Director would look at the paperwork to see whether there had been a non-compliance, if there had been a non-compliance they would have to issue instructions to Multiplex to make it right. If Multiplex rejected the non-compliance at that stage the contractual arbitration clause would be triggered. Then a paper would come back from the Project Director to the Board to say that we were in dispute with Multiplex, setting out what the dispute was, seeking approval to appoint lawyers to act in arbitration. This did not happen, I think I would have remembered.

221. I am surprised to hear that it wasn't compliant, that it had been designed without the patient cohort in mind. It had been designed with the patient cohort in mind and, therefore, should have been compliant. Not only should it have been compliant, it should have been state of the art in the context of Scotland. That said, I cannot comment on how, with all this input from the clinical team and all the relevant people, on how this came about.

222. This was before the decision was taken to move the adult BMT from the Beatson to the new hospital, so, originally, the hospital was designed without any requirements for specific requirements for wards. In the period up to the

start of construction, the Adult Bone Marrow Transplant was not going to the new hospital. The Board had taken that decision in 2008 that it wasn't going and that the Infectious Diseases wasn't going, again this was decided in 2008.

223. What was going into 4B, which seems to be getting mixed up, was what they call district general haemato-oncology. District general haemato-oncology was what you call low-grade oncology, that is low-grade drugs administered to patients by a combination of either overnight stay or short stay. These units existed in Clyde, they existed in Lanarkshire, they existed in Ayrshire – they still do – and they existed in Forth Valley, but they were all part of the west of Scotland network of cancer services.

224. The idea was patients would not travel unnecessarily to the Beatson for low-level, in clinical terms, no risk chemo. In South Glasgow, we had the Glasgow outreach clinic for oncology because the Beatson was in North Glasgow. That service existed in the Southern General Hospital, and it was being replicated in Ward 4B. It was being delivered in a Nightingale ward with 10 beds at the end of a corridor, with 14 others at the other end of the corridor with sick patients. So, what the ventilation in 4B was for, was for very low-level oncology-type patients – haemato-oncology, it was called – delivered not by cancer specialists but by haematologists under the direction of oncologists. It was very low. So, 4B was never meant to be technically superior to the rest of the hospital. It was marginally different, but it was not a major technical specification.

225. Ward 4B and all of the ventilation issues that flowed from the concerns of the Infection Control doctors about 4B and the change of the patient mix are very legitimate and fact, but they were nothing to do with the design or Multiplex. They were never in the design for Multiplex.

226. The Children's hospital is completely different. The Schiehallion unit at Yorkhill was the national Pediatric bone marrow transplant service, and was always in the specification, and was always going to 2B, and that design should have been state-of-the-art for those patients.

227. I have been asked where the responsibility sat within the Infection Prevention Control team to confirm the acceptability of filtration, the HEPA requirements, the air change rates of the new wards in the hospital. The project team had its own full-time Infection control nurse who was Annette Rankin. Secondly, the project team was given money to buy Infection Control doctor time. Infection Control doctors don't work full time in Infection Control. They are laboratory consultants first and foremost and very few of them are prepared to give up their clinical practice to do infection control. They do a mixed contract. So, Craig Williams, who was the head of Infection Control during our iteration in developing Infection Control, had sessions in his contract to advise the project team, but Annette Rankin was the principal source of taking decisions or recommendations of the project team to the infection control community, be it nurses and/or doctors, and Craig Williams was the liaison doctor with the other doctors, because the services and the Infection Control responsibilities sat in all the other hospitals. So, the Infection Control doctors for the Queen Elizabeth were not appointed until 2015. They existed in the Western or the Royal or the Victoria or the Southern, or Gartnavel.

228. In answer to your question about who was responsible for Infection Control after Annette Rankin left in 2009, her role was filled when she left and another infection control nurse was appointed full-time to the Project team. I believe her name was Janet Stewart, but I couldn't swear to that. I believe she worked from 2009 all the way through to handover.

229. I cannot point the Inquiry to any material to support his comment. I understood, Dr Williams was the used by Project Director for provision of advice in the later stages of the project. The ICN post was permanently funded and funds made available to obtain ICD advice between 2009 and 2015. I am sure that the individuals changed, however, I understood that Dr Williams was in the latter part of the project. The only place you would get definitive confirmation would be correspondence between Dr Williams and the Project Director.

230. Any decisions which were being taken by Annette Rankin in respect of infection prevention control issues were not reported to the Board. I was not formally aware of them. I have been asked if I was informally aware of them. Things might have been mentioned in the passing. I visited the site on several occasions to meet the project team to see parts of the hospital, topping out ceremony, taking the cabinet secretary on numerous visits to the site. Things would come up in conversation, but they were more conversation on, you know, “We’re doing this, and it’s been signed off, and it complies.” I never had any concerns nor do I remember any specific details of these conversations. I am not aware if HAI- SCRIBE assessments or other risk assessments were ever undertaken in respect of any part of the new hospital in the design, build or post build period.

231. I have now been referred to **Bundle 17, Document 26, Page 1063** and asked if I had any involvement, or if I was aware of the decision to remove the maximum temperature variant. No, I did not have any involvement nor was I aware of the decision to remove the maximum temperature variant. I do know this decision was taken to avoid overheating and sustainability. As I said, one of the remits put to the project team was to maximise the BREEAM categorization of the final design, whether that was "one of the considerations given." I know, from the director of Estates, that they passed on their advice about temperature based on the experiences we were having in the ambulatory care hospitals. BREEAM, was not from the Board's perspective, a major driving factor for this project. However, from the project team's perspective, the government request was to strive to achieve it and, therefore, that remit was given to the project team to strive to achieve it.

232. However, to say "it was not a major driving factor to the Board" is misleading in the sense it infers that the Board had that discussion or took a decision about it. The point I am trying to convey was that striving for BREEAM excellence and compromising any other standard was not the Board's number one priority. It was discussed with the Project team in the context of the Scottish Government's requirement that design decisions are taken with BREEAM excellence in consideration. I would believe that the Project Team was aware that the Board's position was that BREEAM wasn't a driving factor in terms of compromising anything else. There was no formal discussion between the Board and the Project team about this. It was just what we were saying in our interaction with them.

233. I have been referred to **Bundle 26, Document 3, Page 247**, where it states at paragraph 3.20.2, "removal of maximum temperature variant." It goes on, "on, or around, 28 May 2009, a document called "NSGH Project Issue, 01, Maximum Temperature Variant was produced by or for NHSGGC. The first page is reproduced, as it appears to be relied up on as a reason for the ZBP ventilation strategy document in 2009." I have no awareness of the ventilation strategy referred to or of any discussions with the Board.

234. I don't know when I first became aware of the removal of the maximum temperature variant. I don't remember a specific conversation or time where it came up and, to be honest, having read all the papers and seeing it all referred to, it's difficult to know now what I knew then.

235. The decision in terms of removing the maximum temperature variant and the ventilation strategy would have sat with the project team, through the subgroups of where it would be discussed. I think it's important to say that reducing the maximum temperature variance to 26 was to make it a better environment for the patients.

236. It was about improving the environment because at 28, in a sealed environment, in a building that's all glass would have been poor conditions if you were lying in a bed for 24 hours a day for an extended period of time. So, making sure that the ventilation in the system could keep the internal temperature down was seen as being an improvement for the patient experience.

237. In terms of appointing Brookfield as the main contractor, I was one of the members of the panel to which the project team made their presentations, setting out how they had arrived at their recommendation to appoint Brookfield and I accepted and wholeheartedly agreed with their conclusion, and that conclusion then went to the Board and was approved by vote. I can't remember who else sat on the team. I was there; the chairman was there; there were a couple of other non-executive directors there, one of whom was Ken Winter; there'd probably be another two or three people there, but whether it was the Board's director of finance, I really can't remember. Then it went to the full Board, where, as a Board member, I had a vote on that and voted to accept that recommendation at the full Board.

238. I have been referred to the Ventilation Strategy Paper in **Bundle 16, Document 21, Page 1657**. I haven't seen this document before. It references, "Mechanical Ventilation," that is, based on the modelling carried out, the recommendation was that the maximum temperature variant should be no more than 26 degrees, otherwise the air change rates required would be less than those within the SHTM manuals. This is something that I wasn't aware of at the time that the decision was taken, but I was briefed on it later. I think it would have been probably 2014 that I was briefed on it, in the run up to the handover. It was not deemed as a major issue.

239. We've already debated the difference between guidance at 28 and improvement at 26, so, therefore, I regarded it as an improvement. So, following the guidance to make it 28 was not a major issue. I wasn't consulted on them taking the decision. In response to your question about it being a major issue, I said I don't deem it a major issue.

240. SHTM 03 was guidance; it wasn't mandatory. So, at no point had the statutory guidance not been achieved and three air changes plus chilled beam was intimated as being acceptable for the environment that we were after, bearing in mind that none of these immunosuppressed or compromised patients were going to be in that building. For the client group that was in the building, the system as designed was deemed to be acceptable and compliant because SHTM 03 was, as I understand it, or at least was told, is guidance.

241. In response to your question about who decided it was deemed to be acceptable from an IPC perspective? I don't know.

242. The infection control inputs the Project team would have taken would have, in my opinion, been expected to have an input, an understanding of that decision. I don't know the date in which that particular decision was taken and, therefore, who would have been the substantive infection control nurse and who, at that time, had the infection control medical sessions. My view is that there would have been an IPC input into the decision that this is acceptable.

243. In reference to the email chain involving Dr Inkster, 26th May 2016, (**Bundle 20, Document 6 to 8, Page 1495**) copying in Mr Loudon, Mr Harkness and Mr Walsh, about air changes in reference to Level 7 Respiratory at Queen Elizabeth Hospital. She's also referring to Ward 5C, Level 4 Renal Transplant and the Royal Hospital for Children. In her response, Mr Powery states:
"I confirm that a typical single room with en-suite is supplied with airs at a rate of 40 litres a second and an extractorised, via the en-suite 45 litres per second. The move away from the requirement of SHTM 03-01 for six air changes was agreed by the Board prior to formal contract award. The justification for the proposed variation to that specified and its acceptance is provided in the following attached document. As seen from the clarification above, the Board accepts this proposal with a caveat that negative pressure be created in the design solution.

244. I have never seen this email before; nobody ever raised or discussed it with me.

245. You advise me that in that email, Dr Inkster is asking people from the Project team for clarification on the air change rates and they're coming back to her and, as you can see in the email, they're saying that this was agreed by the Board prior to the formal contract award, and they talk about how the clarification log has to have been signed off and accepted by the Board. As I say, I was never contacted by anyone about this.

246. There was never a decision taken to reduce the air changes. There was a ventilation strategy signed off as part of the procurement process, which involved the Project team and the appropriate people. The fact that Dr Inkster- and I'm only looking at one email - the fact that Dr Inkster is suggesting that six air changes is needed in every part of the adult hospital is clearly not the opinion that was formed by the people who took the decision.

247. To clarify, I never looked at SHTM 03-01 guidance, nor did I ask any questions in respect of the decision not to follow the requirements in the guidance. The project Team would have been responsible for taking into consideration employers' requirements.

248. I have been asked if the air rate changes were revisited at the time when the decision was taken to bring the adult BMT unit from the Beatson to the hospital. They were revisited, certainly, when I got involved in 2015. Part of the issue here is that the Board were told in 2013 when the paper came to the Board recommending that the adult BMT move – which was a clinical paper brought by the medical director – that the clinicians had been on site, had seen the environment, and had deemed it to be acceptable. At that point, neither I nor the Board members knew anything about different and more complex environmental factors.

249. Regarding all your various questions in respect of BMT, the air change rates, whether they were revisited in 2015 and you then linking that to Gateway Review, Gateway Review had nothing to do with Bone Marrow Transplant. Obviously, I'm not explaining myself particularly well. The decision for three air changes plus chilled beam was taken early on in the design process for a building that was to host a certain type of patients for which it was deemed an acceptable outcome. So, during the iteration between the Multiplex design process and our clinical specification, the team took the decision that that solution, three air changes plus chilled beam, was acceptable to us and whether that adjusted, how they had put forward their employer schedule, I don't know, but that was the step we took.

250. The Gateway Review throughout that whole process would know if it was the air changes plus chilled beam, and at no time did they ever comment that that was an unacceptable decision and an unacceptable outcome. The Infection Control team that worked with the project never raised three air changes or chilled beam at any time during their involvement with the project up to handover. The change that the Board sought to make after accepting the clinical change to move adult bone marrow transplant all started from 2013. The air change ventilation strategy is irrelevant until you get to 2013. In 2013, the Clinical team, led by Jonathan Best and the clinical director for cancer services, sat down with the Project team and said, "This is the ward we're

going into. What is the specification? What is the specification we need?" And they, for whatever reason, signed off whatever they signed off. When the Infection Control team changed in 2015, they did not find the environment acceptable, and I've taken you through what happened after that.

251. To the extent that, then, when the patients were preparing to move, that the infection control doctors carried out tests which concluded that the air quality was not acceptable, that then raised all of the issues about, "Is there specific guidance and/or instruction about the clinical environment for these patients?" The first pass at that said there wasn't, in Scotland, guidance. So, the environment in the Beatson was visited and compared to the environment that was going to be in the Queen Elizabeth and found to be deficient, i.e., you were moving from one standard to a lesser standard. And that then resulted in the instruction to Multiplex to work with the clinicians and the Infection Control team and the doctors to see what improvements could be made to 4B.

252. It was 2015 that I first became involved with the ventilation and became aware of the guidance regarding adult bone marrow transplant. I was not working with the project team in 2009. My lead responsibility along with colleagues was in the period from 2000 to 2006 to (a) devise a clinical strategy, get it approved, and to then come up with an implementation strategy, and then to get the government to approve the procurement strategy to implement the implementation strategy. At that point my hands-on leadership role stopped and the responsibility for the actual procurement, the actual design, the actual schedule of accommodation and the employer requirements all passed down to chief operating officer and the director of the project, Helen Byrne, at that initial point. And my involvement thereafter was purely on the basis of issues being reported up or points noted to me when I visited the site or talked to individual as part of the normal performance management regime.

253. So, I never knew what was in the building, never asked in detail what was in the building because, as I've explained, the building specification was all made up by the individual clinical team saying what they needed, what they wanted. And the bed model I explained at the last meeting in detail was a document

that was a living document; it was revised every year to 18 months. And I would see bed model because the bed model would be reported to the Board saying, “This is the target.” But, no, I couldn’t have told you what was the building, but then again, I couldn’t have told you in anything that we’d built what was the building. I mean, whether you’d talk to me about the Beatson when I built that or you’d talk to me about the two ACAD’s when I built them, it wasn’t my job to second guess the people that did it for a living.

254. I do recall getting advice from NSS and HFS, but I didn’t see it. As I explained, no other centre had the particular challenge we had in front of us about it not being acceptable to infection control but being acceptable to the clinicians.

255. In answer to your question about the view which NSS, HFS and Scottish Government took on this, I don’t recall. I don’t know if the Scottish Government would’ve been involved. I don’t know, but, no, I couldn’t tell you what their individual input was. The Project team were instructed to get the guidance, you know, from other people or practical experience or definitive instruction, and that they did.

256. A series of improvements were signed off by the doctors – not Infection Control, but by the doctors – as being improvements that would make the environment acceptable, and then we issued a contract to Multiplex to the tune of about 900,000 to go in and retrofit 4B to the enhanced standards. That, when it was finished, didn’t meet the standards that the Infection Control doctors were seeking.

257. So, at that point, I instructed more work to be done, because what we were trying to get at that point was the balance between the clinical risk that the doctors were saying existed if you stayed at the Beatson with the theoretical risk that the Infection Control doctors were saying that a once in a “question mark” thousand event could occur. I then sought to get a baseline. What was the environment at the Beatson, and what was the testing at the Beatson? And what was the environment and the testing at other adult bone marrow transplant units in the UK?

258. What came back was that what the Infection Control doctors at the Queen Elizabeth were testing for, they didn't test for at the Beatson. So, the Beatson had no idea whether or not they ever had these microorganisms in the system, because they didn't test for it, but Queen Elizabeth they were testing for it. The other UK centers couldn't give me a baseline because they didn't test for it either, but it existed.

259. Eventually, we found guidance that was issued by the English Health Service, which set out the standards that should be achieved for these highly compromised patients and, at that point, Multiplex and the project team came back and said, "You cannot achieve that in 4B." So, I instructed that the patients move back to the Beatson, because I was now confronted with a fact as opposed to an opinion. While it was an opinion, you could take the side of one opinion, i.e. the doctors saying, "You will definitely die if I don't move you to the Queen Elizabeth," versus the Infection Control doctors saying, "You might, on a bad Monday, get an infection." It was there, in black and white, in England, still not in Scotland, and, therefore, said, "No, we can't overcome this," so they went back to the Beatson.

260. Referring to the HTM (**Bundle 2, Document 9, Page 698**), I think I recall this, but it was an English document. And it was David Hall, the project architect, that sourced it and brought it to the meeting and highlighted the difference in the environment we had achieved versus the recommendations for these highly compromised patients.

261. I am not aware how this document is substantially different from the Scottish guidance, the SHTM. There wasn't, as I understood it, guidance for adult bone marrow transplant units in Scotland at that time. I couldn't tell you technically how different they are.

262. I recall this was all happening at the point where patients had moved into the ward in 2015. It was raised by the new Infection Control team. It was never raised by the cancer doctors. The new Infection Control team was appointed as part of the transfer in of the clinical teams from the Western, the Victoria,

the Southern, and Gartnavel to the complex, and therefore all the new departmental heads and roles and responsibilities were aligned.

263. It was the consultants who were desperate to move to Queen Elizabeth. The environment that they said was acceptable wasn't. Maybe they believed that if they got there, we would spend the money to fix it; then finding out that it wasn't a money issue. It was just far too late in the process to have asked for this change; simplistically put, you'd have to put another floor on the hospital to take the plant that would be needed to get the environmental standards that were being recommended. So, they moved back to the Beatson. Which was not without its risk, I have to say, as far as clinicians were concerned, that the patients were being put under at Gartnavel. So, from a Health Board perspective, it was a rock and a hard place.

264. In answer to your follow up question about the 4B remedial work, how it still didn't meet standards once completed, who was it that signed this all off; no, I don't. There are two issues here. The improvement to 4B that was carried out was part of an attempt to create the correct environment. The issue that I became aware of was, in an operational environment, that the then hospital infection control doctor, Theresa Inkster, said the environment following her testing was unacceptable. She was not involved with the project prior to that. Well, the infection control doctor the team at that time was Craig Williams in 2014. So, if there was an infection control input, which you would expect, then it would have been through Craig Williams and his role.

265. You also referred me to an SBAR prepared by HPS (SBAR from December 2015, **Bundle 3, Document 4, Page 36**), which I haven't seen before. In answer to your questions about whether I have a view on the recommendations contained in the SBAR, if it might have influenced my decisions had I been in post, I really can't comment on it because it will depend on all the information that was presented to the Board, the chief executive, the senior clinical people. There would have been a raft of information provided to them that resulted in them coming to a decision. I have no idea (a) what that decision was, in the sense of, you know, what did they do to 4B or what were the patient mitigation

risks. They would all have been set out, I assume, in the documentation. I had a clear black and white decision, which was the environment couldn't be made to the standard that was required, and, until we could achieve that, it was deemed by me that the patients needed to stay where they were.

266. I have been asked what steps were then taken to try and bring the Queen Elizabeth ward back up to the standards required for the BMT Unit. No steps were taken. It was finished. In the period I was involved, we spent about 900,000, maybe slightly more, doing certain things. In an environment where you're trying to create either positive or negative ventilation, the tiles need to be sealed. So, the ceiling grid was brought out, and a new one put in. HEPA filter units were put into the corridors, so that any microorganism escaping from the room would be trapped, etc., and it still failed the test that the then infection control doctors were doing. As far as the doctors were concerned, they were prepared to record that if we did all of this they would agree that this was acceptable and then, lo and behold, the architect produced an English manual that gave definitive guidance for what would be considered the ultimate adult bone marrow transplant unit for highly compromised ill patients, and we were light years away from that.

267. I have been referred to a clarification log at **Bundle 16, Document 23, Page 1664**, which lists all the clarifications regarding ventilation. It says here, "Ward air changes to 6AC/HR, currently shown as 2.5 which is not in compliance with SHTM 03-01," and then it says: "Brookfield proposal is outlined with the bid submission is to incorporate chilled beams as a low energy solution. All accommodation is single room and therefore the need for dilution of airborne microbiological contamination should be reduced."

268. In the next column, this is then agreed. When it states here that this was agreed by the Board, they mean the project team, none of this stuff would go to the Board.

269. I wasn't aware of any ventilation derogations being agreed. I was never aware of a change to the ventilation derogation in the sense that my understanding was that it was always agreed at three air changes, plus chilled beams.

270. I mean, a derogation would be that we took it out; my understanding is it was never in. My understanding was it was always at three air changes and chilled beams. This level of detail would not be in the reports to the Board, at least not that I recall.

271. The derogation was never reported to me and the only briefing I ever got on the extent to which the Brookfield bid met the Board's requirements was only in the context of the reports made to the Board to get their approval. That is to say, through the reports made to the Board that resulted in the appointment of Multiplex, whatever information was contained within there was the detail that was made available.

272. My understanding was that it would have been the project team and the appropriate operational people who would have been aware of this. I am not aware of whether any risk assessments were carried out in respect of the ventilation derogation.

273. In reply to your question about being the Senior Responsible Officer for all this, I was the chief executive at the time Brookfield was appointed. So, during the whole design process, which was, from memory, in late 2009 through to 2010, I was the chief executive. The senior responsible officer at that time would have been the programme director, Helen Byrne.

274. I was not involved with the Multiplex negotiations, the week before the contract closed and in terms of any form of delegated authority, again, the negotiations to conclude the design sat with the Project team and the chief operating officer. I mean, the paragraph above is quite detailed on, you know, why the design solution was deemed acceptable. (a) The building was all single rooms, and at that point in Scotland no other building had single rooms, so therefore that impacted, and it's quite well set out there why they arrived at their decision.

275. In answer to your specific question, “just confirming regarding the delegation”, asking if this was recorded anywhere but is this going back to what we previously discussed regarding it being outside their remit of the job description? My answer is yes.

276. I have been asked whether this was recorded in the full business case that went to the Capital Investment Group (CIG) at the Scottish Government. The business case went and was approved and we then moved on to delivery. It was Mike Baxter from the Scottish Government health directorate who sat on the project board. The performance management team for the West Region, as they called it, had representatives on the project board and got all the board papers, not all the technical papers. Barry White who was the chief executive of the Scottish Futures Trust was the Scottish Government’s nominated expert non-executive director, as they referred to it. He replaced James Stewart who had sat in that role. So, papers and conversations may have taken place with these groups but, equally, I couldn’t say that they were in the room and participating in any decision-making, because I don’t have the papers.

277. I can’t recall the detail of the Full Business Case. The Full Business Case is a document that’s specified by the Scottish Government, the Health Directorate, as to what’s to be contained within it. The three air changes and chilled beams, being the design solution, came up after the appointment of Multiplex which was several years later.

278. I have been referred to **Bundle 12, Document 105, Page 816**. This contains an email chain discussing the air change rate, three air changes rather than six and the compliance with SHTM 03-01. At page 816 it states:

“Robert Calderwood instructed me to establish why there is an agreed variation to recommended air changes for a single room in the ward. Our six air changes are now as per SHTM 03-01 and from a government perspective the process to sign off the specification as delivered.”

279. I don't recall asking David Loudon to undertake a review of this. The only time I can recall being involved in ventilation issues was in the isolation rooms, when an infectious disease patient had gone through the hospital with Ebola and the arrangements that had been put in place were challenged.

280. My recollection would be that the Infectious Disease's patients and the suitability or otherwise of the single isolation rooms, which were the single isolation rooms in Critical Care, which of course had not been designed with Infectious Disease's patients in mind, but Critical Care contagious patients, came up as part of the ongoing debate on a regular basis between Dr Inkster and the hospital team about the suitability of all environments. However, my recollection is that at the time that it came up, two of the rooms within the Critical Care area, which were designated as usable isolation rooms for infectious disease patients, were deficient, which I understand was maintenance rather than design. They weren't working at higher air changes, but I believe they were designed to have the higher air changes.

281. What I was asking David was, "Why?" and my recollection of what came back was that there was a fault, which, as I understood, was something that was able to be fixed.

282. There were never just conversations between David Loudon and I. There would've been other people involved. You know, for it to get to me, it would have been mentioned by, well, at least the hospital director, Anne Harkness, because obviously, it wouldn't get to me unless somebody referred it, and because it was an infection control issue, the medical director, I would have assumed, would have been involved because she was responsible for infection control, Dr Armstrong.

283. So I would expect there would've been two or three other people involved in the discussion, but again, my recollection was it came to me because it was part of this continued challenge on, "Is the built environment acceptable for the patients you're now putting through?" and, of course, in the second incident,

it again highlighted that we put in a different patient group again and you know, but in this particular instance, unlike the adult bone marrow transplant, you know, it was found that the environment was acceptable.

284. I can't recall exactly when I had the conversations, but the memo's dated January 2016, so I doubt I was talking to him more than before Christmas. Most people responded fairly quickly after we had the meetings.

285. I remember being involved in two conversations - two streams of conversations, one in the bone marrow transplant unit and then, latterly, the single rooms in-- they were in the ITU and HTU unit, and they were used for infectious diseases patients. Again, these were patients that were not originally to be in the hospital, they were to stay at Gartnavel General, but again the doctors, made a clinical case that they had to be moved, and I can recall there being a challenge about that, but that was a handful of rooms in a specialist area.

286. As to remembering when these conversations took place, no, not particularly. I mean, I think the adult bone marrow transplant started, probably, June '15. You know, in other words, from the kind of day that Dr Inkster took over responsibility and started reporting on the environment, she highlighted the unsuitability of that, which, as you can see, went through a very formalised chain and a decision was taken-- an action was taken. Infectious diseases was different. It came up as part of her ongoing delivery of our infection control duties where she was testing all the different environments for the patients. So infectious diseases came up, as I say, from looking at the dates of the memos, it would be around about December 2015. So, it would be after we had resolved the adult bone marrow, well, "resolved" is the wrong word. After we had, you know, taken the decision we'd taken in adult bone marrow transplant, then infectious disease came up.

287. In terms the infectious diseases and if any external agencies were involved, no, I don't think so because I think it was one of those discussions that the environment that was tested didn't have the air change that was necessary. When we investigated it, it wasn't because we had built it to a lower specification, it was because it wasn't working and needed maintenance.

288. I'm just wondering if the email chain refers to that, in which case, I can then understand the logic of it, but if it's just somebody challenged me that every bedroom should be six, I don't believe I would have got excited, because the answer would have been the answer.

289. You asked me; "In hindsight, how do you think you would have reacted if before contract closed you were asked if it was ok to drop the air change rates in the single rooms to less than half set out in the Scottish Health Technical Memorandum and guidance elsewhere in the UK? What do you think would have been a reasonable response by a Health Board Chief Executive at this stage?"

290. I can't comment on that, because it would depend on the information that was made available in the paper, you know, making the recommendation. And in terms of your question about the discussion I had about the SHTM and the English HTM guidance and the distinction between the two of them? We're jumping about again. That specific guidance was in relation to adult bone marrow transplant.

291. You're asking me about the generality of building, the hospital, with only three air changes and chilled beams. In 2010, when that decision was taken, if that had been presented to me in 2010 with a list of the reasons why, that theywere proposing to not accept six but accept three plus chilled beams, and all the reasons were set out, would I or would I not have accepted that at the time in the knowledge of the patients who were going into the building in 2010? I can't comment on that because I would have to have seen the arguments. However, in the answer to the previous paragraph, where you quoted the document that exists in the contract about the reasoning for Multiplex's proposal and the

reasoning why it was acceptable to the Project team, that, if that had been expanded in a board paper, would probably have been accepted at that time.

292. I was told that we accepted a design solution on three, plus chilled beam, which was deemed clinically acceptable for the patients going in and, therefore, we were not in non-compliance with anything, bearing in mind that the guidance was guidance. At no time were we mandatorily obliged to achieve six air changes; we were obliged to record what we achieved and why, as I understand it.

293. I was not involved in any of the technical discussions that arrived at a ventilation solution that was this.

294. I can't remember who or when I was specifically informed of this.

295. All communication between Brookfield Multiplex during the final design and the start of the construction was coordinated by the project team, supported by the chief operating officer's team, and there were what was called "on the go" or "on the move" working groups.

296. In answer to your question about how I dealt with the reduction in the amount of information you were receiving regarding the project, given your change in role; as I explained earlier, my role and day-to-day input had been in strategy, government approvals, obtaining authority to proceed. I never had, in the chief operating officer role, a hands-on role in the design, content, specification of the hospital. So as chief executive, I had no doubt about stepping back from something I never had.

297. Plus, there was never enough hours in the day to do the job I was paid to do, as opposed to trying to do somebody else's job as well.

298. I signed the contract on 18th December with what was then Brookfield Europe. There were only three signatories, three people designated within the Board to sign contracts above a certain value. The director of finance and another corporate director. Shepherd and Wedderburn and EY took me through the framework, the structure, at a very high level in the hour before the contract documents were produced. There were maybe four or five sets of lawyers in the room who were each vetting every document, because we were signing a contract with Multiplex. Multiplex were signing back-to-back contracts with five or six other major suppliers in the supply chain, and the lawyers were coming and going.

299. Whether I ever asked if the contract delivered the same hospital which was being proposed in the Outline Business Case, probably not in those words, but yes, I did ask the project director to confirm that we were getting everything that we had specified for the money and in the contract, yes.

300. I don't believe that the Board's lawyers give any advice about complying to the Board's Employers Requirements that'd been set. They may have made any comment on it, but I'm not necessarily certain that Shepherd and Wedderburn role would have led into that level of detail.

301. Rhona Harper of Shepherd and Wedderburn, who was my lawyer, was advising me and Michael, whose second name I forget, director of EY, that these documents committed the Board to X, and didn't commit the Board to Y. I had no concerns at the time of signing because nobody raised any concerns with me. I personally didn't study the contracts and relied on the lawyers' advice.

302. The technical advisors were from Currie and Brown, there was Wallace Whittle-- I think there was a third company. I can't remember their name. They had representatives present along with the Project team in the lawyers office at the time of signing, and I didn't ask them individually one after the other, but they collectively agreed when the Project team said that the contract that we were signing was procuring the building that we required.

303. I have asked if I was aware of the decision in 2013 to remove carbon filters from the ventilation system. I was not and I am not aware of what carbon filters are.

304. I have been asked about the Schiehallion Unit and the extent before handover to which I anticipated the ventilation system in Ward 2A would be of equivalent, standard or better than that at Yorkhill. I was assured that Ward 2A had been designed with clinical involvement led by Dr Brenda Gibson as the senior clinician and that it was a significant improvement on the standards at the Schiehallion Unit at Yorkhill. The Project Director advised me of this by way of conversation, not formally, when I was on site and would ask questions whilst walking about. There were other clinicians involved, but it was the architects and the Project team from Brookfield that designed the hospital.

305. I couldn't tell you whether it was Mr Seabourne or Mr Loudon, or indeed, it could have been Kevin Hill, as the director for Women's & Children's, or it could have been Jane Grant, as the chief operating officer at the time, that would have mentioned it in passing.

306. In terms of your question about when I was provided with these assurances, was this at the point of opening, at handover? I'm not sure I'd call them assurances. They were comments that were made about the significant improvement that we were making to the patient environment for the patients travelling across from the Schiehallion to the new children's hospital.

307. I first learned that there were problems with the ventilation system within Ward 2A on the Thursday before the final week of commissioning of the children's hospital. I think there are two different things to mention. The absence of the HEPA filters was a major oversight by Multiplex and was a gross dereliction of responsibility of Capita. Multiplex accepted that they were mea culpa. They sourced the HEPA filter units in Ireland, they flew them into Glasgow, and they paid for the engineering team to work 24 hours non-stop for 72 hours to then present the ward to us on Tuesday with the HEPA filters fitted.

308. The HEPA filters being missing was a major faux pas. The ward has subsequently been criticised even with the HEPA filters for not being acceptable. The design, I was told, was compliant and personally overseen by the senior clinician. The absence of HEPA filters was a major technical error. Somebody had screwed on the ceiling caps, but above it was empty space. The six HEPA filters were acquired, ceiling came down, put up and then opened.

309. Basically, the HEPA filter is up there in the ceiling and what had happened is they'd put the ceiling up, they put the vents up, they'd put the ducting up and then there was a gap where the HEPA filter should be, right? So that was a major fault on Multiplex as a contractor and it was a major fault on Capita for walking into the room and saying, "Absolutely everything's in this room as it should be," right? It was spotted during the commissioning and it was rectified, and apologies were made profusely by Multiplex for their error. I don't know that Capita ever apologised for buggering it up, but, what else was I to do? What you're now talking about is that even with the HEPA filters in, the environment was potentially inappropriate. Why would you talk to anybody outside the building, outside the actual Project team and the contractor, about something like the HEPA filter?

310. Neither Capita nor Multiplex explained why they had missed this, they just apologised. I didn't seek advice from NSS of HFS, because what would I get advice on? This was months before the building was occupied.

311. You have mentioned that this is just one of the many things that came to light, it wasn't just about the HEPA filters further down the line. I can't comment on that because, as I say, I don't know anything about what they're doing. During the commissioning period, the HEPA filters, which are one chunk of plant at the end of the ventilation system, hadn't been installed. They'd been missed, right? To the extent that I can crank a screwed up the ceiling panel and didn't notice there wasn't a HEPA filter above it, to the extent that you come in as a Capita engineer, looked up, saw a hole in the roof where there should be a HEPA filter, and say, "That's okay, screw the ceiling tile up." I can't comment on why individuals like that didn't do their jobs, right? But during our commissioning period, we found they weren't there, i.e. the Commissioning team found they weren't there. Multiplex came in and said, "Mea culpa, big mistake, shouldn't have happened. We will fix it." Fine. So, the handover of the building had an error in it. That was rectified during the commissioning and when the patients went in, they went into the environment that we understood had been built to our specification.

312. I don't know anything about the air change rate being at 3 ac/hr. rather than 6ach/hr. My only involvement was when the HEPA filter incident was drawn to my attention with a view to delaying the transfer of Yorkhill. The planning was being drawn up with the clinicians and with the Scottish Ambulance Service to move the hospital, the following weekend and it was reported to me that, until this was resolved, we would need to delay that.

313. The project team would be responsible for signing off that the area was to the specification that we'd specified. The fact that they did that and that the HEPA filters weren't there, then they clearly didn't do the job. To the extent that now with the HEPA filters in, it's still unacceptable or, "was" an unacceptable design solution, I didn't know about. I have no understanding of the specification that was specified.

314. When I say it should've been signed off to the specification we specified, then that takes you all the way back to your Employer's Specification or your schedule of contents, etc., yes. But I don't have an understanding in terms of what that specification was.

315. Given the very specialist nature of the unit, ventilation is the critical part of it, so, I would have expected that the clinicians would have commented on what was proposed. They wouldn't have personally designed it, but they would comment on what was being proposed.

316. To clarify, I was not involved with the Schiehallion unit issues. I was never aware of problems in Schiehallion, right? The HEPA filter issue was back here in the commissioning, right? When the hospital opened in June 2015, until I retired the issue was adult bone marrow transplantation, not the Schiehallion, the Children's Cancer unit.

317. It was the project director, David Loudon who reported the issue with the HEPA filters to me and not the clinicians or Dr Gibson. I don't think I've ever actually met Dr Brenda Gibson.

318. I can't recall if these issues ever went to the Board by way of a note in a formal paper. Certainly, I advised the chairman that there was a risk that we would be postponing the transfer of the children's hospital.

319. I had no input at any stage of the design or discussions regarding the technical requirements for the neutropenic wards. I was assured and shown all of the groups that had been established with clinical leadership and the fact that each and every area had to be signed off through these working groups. I was quite removed from the day-to-day operational issues of the clinical services. I was content that we had a structure in place that had all the right people through technical projects, support, infection control, clinical experts to ensure guidelines were followed.

320. You have asked me again about SHTM Guidance. We've been round in circles on this guidelines issue. The children's hospital Ward 2B is an issue, as I've explained, that I know nothing about, right? As far as the rest the hospital was concerned, it was fine. It complied with what we accepted for the patient group that we expected. The reasons for the deviation, as you call it, from SHTM 13-01, or whatever, for the ventilation, right, from up to six air changes an hour as opposed to the design solution that we accepted of three, plus chilled beams, that's all been set out, the reasoning for that and why the team took it. Right, so it's all there. The reasons for the variations were explained and that means that the guidance was complied with.

321. To answer your specific question about which wards did I consider to be the neutropenic wards? I was never aware of problems in Schiehallion. The HEPA filter issue was back here in the commissioning. When the hospital opened in June 2015, until I retired the issue was adult bone marrow transplantation, not the Schiehallion, the Children's Cancer unit.

322. I have no understanding of the term "neutropenic" and first came across it when I was reading the papers and preparing for this interview.

323. I have been asked why handover was accepted without the HEPA filters being in place and other outstanding issues and who signed off on this. The whole complex was signed off for handover on the recommendation of David Loudon as the project director. Again, the assumption was that all of the necessary

external regulations, certificates, approvals had been completed. However, there were a number of areas where there was an agreed list of outstanding work to be completed that went on throughout the 100-day commissioning, i.e., what we would call the physical commissioning, the cleaning, the equipping, the orientation of staff, etc.

324. The assumption that they'd all been completed was mine in the sense that I just made that statement to you. I assumed. The responsibility was the project director's.

325. So the 100-day programme had been drafted within a manual that involved quite a few bits of the hospital that required outstanding work. For example, with the energy center, the chlorifiers and everything, they still had to get certification. I don't know where Schiehallion sat within that, whether it was in the schedules of outstanding works that were deemed reasonable to be outstanding and would be completed within 100 days. I don't know if it was specifically highlighted. It wasn't drawn to my attention as being something that's not ready and, therefore, should delay the handover of the whole complex. Every project comes with its own kind of issues. The two-year extended defect liability period gave confidence that Multiplex were involved in the project for a material period of time. The bottom line was that the building was presented by Brookfield to the Board, and the project director advised the Board that we could accept the handover.

326. Did the Project Director specifically provide a written report to me or the Board advising that the Board could accept the hospital? I cannot comment on whether there was an actual paper that went to the Board in January or February of 2015 to confirm the handover and whatever else. I don't know if there was an actual paper.

327. Almost every building is accepted with defects. I understand it's a standard thing that, as long as they're listed, and as long as they're not considered to be material it is acceptable. The key is to get the external accreditation certificates in order to get the certificate of occupation. If the council come in and say, "No, no, you can't occupy this building because half the ceiling's down. I don't care that you're going to fix it next week, it's not here today." You can't accept a handover, for example if the water quality and the renal unit hadn't been signed off.

328. I would accept it is possible for a building to meet the standards set by building control but not necessarily meet the standards needed for a national specialist hospital. They are clearly separate things.

329. There's so many critical departments and areas that needed external certification. You needed to have it before you would present to the Board that you think it is reasonable for Multiplex to hand over. The fact that you've got 40 pages of rectifications where the signage in corridor 32 needs to be changed, the linoleum tiles in the such-and-such corridor need to be replaced, you get them in every building scheme, you get them in your own house, and they are deemed reasonable.

330. I was not aware that the design of the positive pressure ventilation lobby rooms in Ward 2A was not suitable for neutropenic patients. This was never brought to my attention during my time as Chief Executive. I have since become aware of this through media coverage.

331. I have now been referred to the options appraisal for returning the adult BMT unit from the Beatson to the QEUH **(Bundle 27, Volume 7, Document 6, Page 158**) The actual paper from Gary Jenkins says March 2017, but quite a number of the appendices talk about April 2017, so I don't know when it went to the Board. I have no recollection of seeing the final paper. I was aware of our ongoing issues with the cancer clinicians whereby we found ourselves between a rock and hard place.

332. In 2008, the Board medical director, Brian Cowan, had done a review of cancer services in the UK and concluded that cancer services can and did exist as stand-alone hospitals: The Marsden in London, The Christie in Manchester were examples. So, the Board took the view in 2008 not to include cancer services in the new hospital because we had just built a brand new cancer hospital that had only been opened by the First Minister in 2008.

333. However, shortly thereafter the cancer clinicians wished the Board to revisit that option. Eventually, the medical director set up a process to debate with the cancer clinicians why the decision taken in 2008 was not relevant or wasn't as appropriate in 2012/13. What came out of this was the clinical world had moved on and standalone cancer hospitals had plans to migrate and integrate into major acute hospital campuses because the complexity of chemotherapy treatment, was we were handling more and more acutely ill patients who had other health care needs, and best clinical practice said that these most compromised patients should be handled in a hospital with immediate access to ITU and to other appropriate acute clinicians, non-cancer doctors. So, the Board in 2013, when it received the paper, accepted that the world had moved on since 2008 and instructed that we should work with the cancer clinicians to achieve the integration into the Queen Elizabeth.

334. We've already discussed the options that then occurred from that decision through to them moving for a very short period in 2015 with regard to getting an acceptable environment which met the needs of the infection control concerns, and also, ultimately, the needs of the patients in relation to best practice in the form of design guidance, which we couldn't, and therefore they moved back to the Beatson.

335. But the cancer doctors never gave up on that. Their view was that the Board had to do something, so a process, a working group was established in 2016 to work with the cancer clinicians with a view to looking at other options about how they might get onto a major adult site, which at that time, in Glasgow, only consisted of Glasgow Royal Infirmary or the Queen Elizabeth University Hospital.

336. That work hadn't, as I understood it, reached a conclusion to bring a final paper to the Board at the time of my retirement, but the dates on the paper you've showed me are confusing because, the front page talks about March 2017, in which case I should have seen it, but the appendices that are part of the paper are dated April 2017, which would be after I retired, which would be consistent with why I don't recall having seen the paper. I have to be honest; I find the conclusion reached in the paper interesting, bearing in mind how far short we were of the recommended standards for the environment.

337. At the point of my retirement, I cannot recall what my understanding was of where the process of returning the BMT to the QEUH was. In the last two months that I was working, February and March, I was working really at only three days a week because I had to use up all my annual leave before I retired.

338. I have been asked why I found the conclusions of the options appraisal interesting. I was surprised by the decision to return the BMT to the QEUH as published guidance that I had seen in 2015 was so black and white that to have achieved a series of mitigations that was sufficient to say that the Board would accept something other than the recommendation, albeit it was not a Scottish recommendation, was quite clinically surprising. But, again, as I've stressed, the cancer clinicians were desperate to move, and it's clear from the scoring that they put a lot more emphasis on patient safety and acute connections than they did infection control concerns.

339. The project directorate teams and individual clinical working groups were responsible for determining the number, location and specification of the isolation rooms for the new hospital. I'm not sure who would have been involved in determining the final specification for the isolation rooms, but it certainly would have involved the Chief Operating Officer and the Project Director, Helen Byrne.

340. Prior to handover, I had no concerns regarding the specifications or designs of any of the wards or rooms.

341. I have been asked if I was aware of the change order from July 2013 concerning the decision to move the BMT services to the QEUH, which was signed by Jonathan Best. I did not see this order, but Jonathan as the Director of Regional Services would be the Board director responsible to enact the Board decision to move the cancer services.

342. In terms of what should have happened, in respect of risk assessments, there should have been a process that involved the clinicians. I think the problem with hindsight is that the clinicians signed off a specification for 4B in the expectation of going, which was subsequently challenged by Infection Control. To the extent that Infection Control were involved in 2013 after the decision was taken to be involved in the approval of the specification, I don't know. I don't know to what extent they were involved, or if they were involved.

343. In terms of the specification for Ward 4B, my understanding at the time was the specification for the Beatson at Gartnavel, which was deemed by Infection Control at the Beatson to be acceptable, would have been the starting model that you would have placed into 4B. What that was, I don't know.

344. It would have been the joint responsibility, in my opinion, of the Director of Regional Services, that would have been Jonathan Best in 2013, and the lead clinician for the cancer service to ensure that the model within Ward 4B replicated that within the Beatson.

345. The project team would have had a technical input to help the clinicians and Jonathan set out what parts of the building and the plan had to change.

346. I never attended any of the design review meetings held in respect of the requirements or the transfer of the Adult BMT, the progress of the Beatson or the move of the Adult BMT to the Queen Elizabeth.

347. I have been asked if I was involved in any discussions with Multiplex regarding the proposed change and how this might affect air change rates or the ventilation requirements with the new hospital. I was not initially involved however, latterly, after the Infection Control team did not accept the environment in 2015, I became involved in two or three meetings with the aim to try and resolve that issue, and a representative of a Multiplex was present at least one of those meetings.

348. The meetings I attended were with the medical director and the project team technical specialists. The aim being for me to understand what we had provided in 4B versus what standard was recommended or mandated for the service. This was only two or three meetings over a few weeks until we got to the bottom of what we could.

349. In terms of the outcome of these meetings, I was satisfied that we had enacted the transfer of service back because we couldn't meet what was considered to be the minimum standards we should and that, we hadn't been able to provide a mitigation strategy to work around it. The cancer service was still an outstanding issue to be addressed, hence we put the review process in place which resulted, sometime in 2017, in a paper coming back to the Board because the cancer clinicians were persistent in wanting the BMT Unit based at the new hospital.

350. I have no idea to what the extent of the involvement of the Infection Prevention Control Team was in respect of the decision to move the BMT from the Beatson.

351. The project team would have been involved with Multiplex in taking the specified environment and overlaying it onto the existing environment and agreeing a scheme of works to move towards specification, to the extent, in the end, the works could not be taken to the final stage that was deemed appropriate. Between the board taking the decision in 2013 and concerns being raised by Infection Control I had never been involved in discussions about it.

352. I have been referred to **Bundle 13, Document 33, Page 258**, which is in relation to a comment Professor Williams made at a BICC meeting on 27 July 2015, where he stated, “The unit was not built to the correct specification and Brookfield have agreed to fund the rebuild for this area, and the timeframe for this is 12 weeks.” I have no idea what he’s talking about. Multiplex had no involvement, in the context of liability for 4B. They had a liability to provide 4B as per our original specification, then they had a liability to provide the modification that we paid for to our specification. The modification to our specification did not make the unit compliant. So, I don’t know what he’s referring to.

353. The instruction by us in 2013 to retrofit 4B and the contract to do that was separately negotiated with Multiplex and paid for. So, whatever Craig Williams was referring to, he may well have been referring to the fact that Multiplex had not completed the work on 4B to the specification we’d sent and therefore it was still at their expense to finish it, but not the way you-- it was referred to at the minute.

354. Initially when asked by the Inquiry I was unclear on what is minuted to have been said by Professor Williams at a BICC meeting on 27 July 2015 in relation to the new build project (**Bundle 13, Document 33, Page 258**). The Inquiry has been advised that that discussion reflected a document prepared for Jennifer Armstrong by Professor Williams which can be found at **Bundle 20, Document 2, Page 13**. Having consider this I now think these comments are in relation to the Scheihallion which I had not previously recalled. The Schiehallion was indeed Multiplex’s responsibility.

355. Looking at **Bundle 20, Document 2,** this is an infection control report sent from Criag Williams to Jennifer Armstrong. I have no knowledge of this correspondence.

356. At the time in 2013 we considered how to improve the environment in Ward 4B to meet needs of patients with higher dependences. A series of actions were taken, for example, solid ceilings not grid, that work was done, then in May 2015 the Infection Control Doctor said was not good enough. Nothing came to me until I became involved to resolve the issue. My understanding was that the specification for Ward 4B in 2015 was to be of the same standard as that of the Beatson.

357. To my knowledge Brookfield, now Multiplex, did not agree to rebuild the area within a 12-week period. I don't recall this and I'm struggling to remember Professor Williams' timeline in this context because he left us in 2015 at some stage. Also, the conference room at the Southern General was demolished in the summer of 2015. Although I do appreciate these minutes have been recovered from NHS GGC.

358. The minutes of the Board Infection Control Committee (BICC) would go in the Infection Control Report from the medical director to the Board but, to what extent the minutes were annexed or referred to, I couldn't comment. I don't believe that set of minutes went to the Board because I would have certainly, had I been present, raised a question This is in respect of the Scheihallion.

359. In respect of the Infectious Disease Unit, I have been referred to an SBAR in **Bundle 4, Document 8, Page 20**. This was another late decision to add the Infectious Disease Unit to the hospital. I was not involved in this decision. I only found out about it during the final stages of commissioning in approximately April 2015. Anne Harkness, the hospital director, who was also responsible for the infectious diseases service at Gartnavel told me it was moving.

360. We had a long and heated discussion about it, but I subsequently didn't call for any further papers. It was another one of these issues where the doctors decided that they couldn't possibly stay at Gartnavel. Their reasoning was again linked to patient dependencies to other specialties. They had a particular

problem with junior doctors because they relied on the junior doctors from general medicine, who were not going to be at Gartnavel, and, as I understood at the time, the post-graduate medical dean had intimated that he would not support the rotation of junior doctors from the Queen Elizabeth to the Infectious Diseases Unit as a stand-alone part of their general medical training. They rotated on a weekly basis from general medicine in Gartnavel, so they'd be doing a six-month attachment, and they would maybe spend a week or two weeks, learning about infectious diseases by helping out in the wards and the clinics and, at night, the on-call service was provided by the hospital's general medical on-call. That wasn't going to exist when they went from Gartnavel to Queen Elizabeth. Therefore, when the Dean, as I recall, said, "No, you can't take them to Gartnavel on their own because they're not getting the proper, you know, exposure to the full gamut of general medicine," and then the junior doctors themselves said they would not provide an on-call rota just for Infectious Diseases at Gartnavel, it became operationally very challenging to leave it where it was.

361. The discussion was "heated" because it was something I wasn't aware of and it impacted on the bed modelling and I was concerned at that time of operational efficiency and had concerns that the loss of beds would impact on the ongoing efficiency.

362. That was never in the original planning, nobody ever came up with the fact that this would be a problem. So, with hindsight, we probably should have done more work, in the early planning in 2010/11, when the specification of requirements was being made. We should have done more work to understand that the Infectious Diseases Unit was an issue. We didn't. Then it came out of the woodwork, and the "operational team" resolved it to their satisfaction and to the doctors' satisfaction, but not the infection control doctors' satisfaction.

363. I understand that Multiplex were also unaware of the intention to move the Infectious Disease Unit to the new hospital. It would never be communicated to them. They had no idea or had no interest who was using the 1,109 beds.

364. I have been asked about the ventilation requirements for the Infectious Disease Unit. The doctors agreed with the operational directors that there wasn't a requirement for the ventilation. Throughout this, everybody in the project team and the operational directors knew it was 3 air changes an hour plus chilled beam. So, the assumption is that, when you bring a group of visiting doctors over from Gartnavel to say, "Here's the rooms we're going to put you in," and they ask, "What is the ventilation system?", and you tell them, and they say, "Oh, fine by me." Bearing in mind they're coming from Gartnavel, where they had next to nothing. They all, with hindsight, got swept up in how "good" the accommodation was, from what they were leaving, and so they never seemed to challenge it.

365. They then went to the isolation rooms within ITU because they knew that, on occasion, they would have to use those isolation rooms, and they had, to my understanding, a different specification, which they said was acceptable. The SBAR, was the Infection Control team, making a serious issue about the Infectious Diseases Unit using these rooms because, in their opinion, they weren't to the standard that you should have for infectious diseases patients.

I have been referred to an email from Alan Seabourne of 23 June 2016 **(Bundle 12, Document 104, Page 813**). It has been suggested that this appears to show that you were aware of issues at this time. I have looked at this email which is specific to Isolation Rooms and intensive care. Alan Seabourne came back as personal favour as he was involved in the intensive care unit. From recollection it transpired that 2/6 rooms had deficient ventilation plant which had to be replaced. I think 2/6 were remedied. Alan pointed us in the direction of the paperwork. It was dealt with by Anne Harkness, Hospital Director. I do not know the details of the resolution, I doubt it would be in writing it was just an everyday thing.

366. I have been asked how patient safety was considered particularly with infectious diseases. In this respect, management faces a debate between one group of clinicians who say it is acceptable and another group of clinicians, for different reasons, say it's not acceptable. Management, on these very rare occasions get caught in the middle, where they have to ultimately adjudicate, unless one or the other has a piece of guidance that is mandatory on the Board to meet, in which case it's a no contest. The Board can't decide on probability. The Board must go with the mandatory guidance. So, in these two issues, bone marrow transplant and infectious disease, Scotland did not have at that time, mandatory guidance for these patient types, and we got caught.

367. Looking at the worst type of infectious disease you could get is Ebola; these patients went to The Queen Elizabeth and were put in the isolation room and they recovered. The Ebola did not get into the rest of the hospital. The infectious diseases doctors' view of ventilation proved to be right versus the infection control doctors' view that it would fail. I mention this not because that's justification but as hindsight.

368. In respect of the core point of Multiplex's responsibility versus the Board's specification, Multiplex were obliged to provide isolation rooms to a standard. I can't comment what the standard was, but they were standard. The infectious diseases doctors said that standard was acceptable to them, and they moved, for operational reasons. The Board wasn't a part of that. The Board became aware of it after it happened, and here we are many years later and it's working.

369. I have been asked who were the key people that were aware of the decision to move the Infectious Disease Unit to the new hospital. I believe these to be the infectious disease doctors, the lead clinician and Anne Harkness. Those two were the leads. I expect the chief operating officer would have known, would have been told, or may have been party to the decision too. As far as everybody else was concerned, I don't know who they would tell because there would be no real need to tell anybody else because the doctors wanted to go. The doctors said the accommodation was fine. They had reallocated the beds to fit them in.

370. The junior doctors were happy; the consultants were happy; the post-graduate dean was happy; and Grant Archibald, who was the chief operating officer, gets one problem off his long list of problems sorted. Infection Control may or may not have been told in May 2015, but they became aware, after we utilised the accommodation for the type of patients it was needed for, that we were doing that, and they weren't happy.

371. I have been asked whether Infection Prevention and Control had any input into the ventilation system and the commissioning validation and handover of the new hospital including of signing off ventilation. This would have had or should have had been agreed between the Infection Control nurse, the Infection Control doctor and the project director.

372. There are two phases to this in 2010 during the detailed design where Multiplex were responding to and sending design proposals to Project Team. There should be paper trail showing who from the Project Team sought to comment on Multiplex design. I would have thought it would be the technical team and clinical team, and I would have though ICN would have been involved in user groups. I thought that the ICN would be conduit to get ICD input.

373. During commission from February 2015 to saying building safe to open in May 2015 Infection Control should have been involved with the commissioning process.

374. Clinical input to ventilation would have been aligned to various patient groups. The main comment on the strategy was 3ach and CBU, that would be more of a technical comment rather than a clinical comment. Main issues would come back to design team. Multiplex would then propose how they would seek to address constrains this and this would be discussed with the technical team primarily. The whole concept was designed around the principal of single rooms.

375. In answer to your question, “To what extent would you accept that as Chief Executive you should have ensured that Infection Prevention Control had input into the ventilation system and the commissioning, validation and handover of the new hospital, including signing off ventilation. What would sit with me is the responsibility to make sure that the Project team was properly resourced with the technical specialists they needed which is why, as I said before, it was the first capital project scheme in Scotland to have a full-time Infection Control nurse on the team and resources were made available to buy/ acquire clinical medical input. So, in my opinion, we had provided the technical expertise to the Project team to do all of this. Therefore, these individuals should have been consulted at all the appropriate steps.

376. I was not personally involved, but in 2013 when the decision was taken to move BMT to QEUH I would have expected Dr Armstrong would have ICD input into saying that that was practical, and I would expect Dr Armstrong and Jonathan Best, regional director at time to have been involved in designing the upgrade to Ward 4B, and I would have expected ICD involvement at the time. I would suggest that the Inquiry look at Board papers from 2013.

377. I have been asked if I was satisfied in respect of the commissioning and validation of the water and ventilation systems, whether this had been carried out and if I was provided with assurances that this had been carried out. I was assured that the handover and during the 100-day commissioning that all the necessary procedures were in place to allow us to consider moving the first hospital in, which was the Southern General Hospital. So, there was a group established to receive all of the information regarding where we were with the commissioning/where we were with the equipment/where we were with the systems, so that they could take a decision which was communicated to the Board as to when the go-live day was of moving patients in. I was assured all of that was in place, and all of that got the green light so we could get a fleet of ambulances to shuttle the patients from the old hospital into the new one. We had to arrange with the nursing staff and all the other staff that there were two full teams of staff on duty that weekend because the move had a whole series of checks and fail-stops on it. So, at any point during the Saturday/Sunday moves, something could have happened that would have stopped the move, in which case we'd have needed two teams to be physically available at both sites because patients would have been left in one site and patients would have been in the other site.

378. So, the Board was advised when the team in the commissioning and operational teams had signed off everything that everything was in place, that it was safe.

379. I have been asked who provided me and the Board with these assurances. Each weekend we moved a different hospital, it was a different director because whoever was picked to be the director of the day, in effect, would be working 24 hours a day for that weekend. So, the first move, Anne Harkness was the director that took the decision to move the Southern General. I can't remember the directors who took the decisions to move the Western Infirmary and the Victoria Infirmary. Then the last one was Kevin Hill, who was the director for Children's Services, took the decision that we were ready to move the children.

380. The responsibilities during the validation stage would be shared by a number of substantive directors. So, the Facilities and Estates director, the director of nursing for the hospital, chief nurse for the hospital, the associate medical director, the clinical director would all be involved in the team. So, the team that would take these decisions based on discussions with the project director and their team and the operational directors who, the day after they moved in, took over the responsibility for running the hospital. I was assured by the project director that everything was in place for the hospital to open.

381. In a significant part, the various parties relied on assurances from the Project Director. But during the commissioning period, then the individual departmental staff, ward staff, would be checking the systems and, you know, from the mundane of stocking the cupboards and making sure that the automated pharmacy dispensers dispensed in their wards, etc., and that all the lights went on and off. So, they would have a hands-on role during the commissioning period. In the more technical areas, we had MRI, CT scanners, the Theatres etc., then the clinical teams utilising these areas would be checking that everything worked. I mean, if they found that something wasn't working, we would get back to the Project team who, in turn, would get back to Multiplex to get it fixed

382. There was a phased handover of the Energy Centre, the physical Energy Centre had been up and running for some time because obviously it was serving power to the construction site and the building, and it was serving the laboratory building which had been open for a number of years. The actual sign off and certification of the boiler plant, which is when an external agent has got to come in and certify that all of the plan is working or is capable of working to design specification, that was ongoing because I recall there was an issue in April, I think, of that year whereby the external agents involved were not minded to certify some of the boiler plan because they thought the pipework was incorrect. Multiplex came back on site and worked with the external agents to (a) confirm how everything worked and (b) to make any changes that they wanted, and then the certification was given.

383. I was not involved in the decision of NHS GGC to forgo the requirement to have an independent commissioning engineer. This decision at the time would have been taken through the project director and project team. What little I understand of it since, as I was not involved at the time, is that the individual was, in fact, the senior engineer involved in building the Energy Centre who was staying behind for two years as part of Multiplex's responsibilities and that he was deemed to be beyond exceptional in his abilities and role, but there was also something in the notes I read that the independent commissioning engineer still reports to Multiplex. It's not, that somebody is appointed to the role, but that they work with the contractor; they don't work with the Board.

384. I was not aware that no validation had taken place in respect of the ventilation system within the hospital. The project director, in my opinion, should have ensured that the ventilation system had been tested and was compliant with our specification throughout the building. So, to the extent that it didn't deliver three air changes, to the extent it didn't deliver what we had specified in the isolation rooms, to the extent it didn't deliver in the Schiehallion should all have been found out during a rolling programme of validation. How the project director would commission whomsoever to do that, I don't know.

385. I have been asked at handover, how satisfied I was that all areas of the hospital accepted were designed to the intended specification and suitable for the intended patient cohort and that it met all the relevant guidance requirements. At the point of handover, I was personally very pleased with the physical layout and appearance of the areas that I visited. The issues about the relevant guidance for the patient profiles that were in the original specification was assured to me by the project director and that they were designed to the intended specification for the intended patient cohort as existed in June 2015; with hindsight, they clearly were not.

386. This was not something I was aware of in June 2015, to the extent that we took the Queen to the Schiehallion Unit when she opened it, and Brenda Gibson and all the staff stood there gleaming, you know, clearly nobody was telling us at that point that we had not got what we had paid for.

387. I've been referred to **Bundle 12, Document 3, Page 23**, the sectional completion certificate. This would not have been seen by myself or the Board or any committees, but rather the project director

388. The Board had a 100-day physical commissioning programme. The assumption was that, during those 100 days, or significantly less in some cases, the defects would all be addressed and signed off as complete so that, by the time we brought the first patients in, there would be few, if any, defects outstanding. So, it wouldn't be to say that there couldn't be any of a minor nature, particularly if it was in areas of the building that we were not opening that first month, because we didn't open the children's hospital, you know, for a month after the 100-day commissioning period. But in order to press the green light to go ahead and close the Southern General and move the services into the new hospital, all of the defects, liability defects, that were on the list that were in critical areas, which was more or less the whole adult hospital, needed to be signed off and completed.

389. The project director was the person from within NHSGGC who oversaw contractual compliance and was responsible for all the paperwork confirming this.

390. the delegation of authority to the Project Director would be set out in written form. It would be contained in a number of documents, yes. It would be the Board scheme of the delegation in the context of financial standing orders, it would be the administrative standing orders. There would be specific responsibilities, you know, laid out in other schemes, as I said before, like the Director of Public Health has responsibilities. There were other specific responsibilities that were in jobs, etc., and then there was the custom and practice of how people carry

out their job and how they (a) reported and (b) were performance managed.

391. Prior to 2018, when you state that you have obtained government documents, “organograms” which show actual schemes of delegation, the organigrams in my time – which I’d say changed probably every 18 months/two years for structural reasons and other changes – they didn’t contain a narrative under the job title. Clearly, after 2016, which I can understand in 2018, the introduction of community health and care partnerships and the transfer of responsibilities from the Board to these integrated joint Board-- they would require you to publish a completely new scheme of delegation because, in essence, you know, 45 per cent of the Board’s statutory responsibilities were being discharged by this integrated joint Board, which, in itself, was a legal entity.

392. So, you would have to have had that clarity and, going forward, that wasn’t the position up to 2016 where the Board was predominantly the Board, and, in my last year, 2016-17, the integrated joint Board was just established but they didn’t have their own fully delegated functions and their independence. I mean, now- you know, today in 2025, they are spectacularly independent of the Board. I mean, they take decisions in their own right and they kind of-- well, they are legal entities in their own right, so I can understand why in 2018 there would have been an attempt to explain the Board chief executive’s responsibility versus the chief operating officer of Glasgow City, and no doubt the chief executive’s job description would alter to reflect all of that so-- but, before that, no. I mean, when I became chief executive in 2009, we had the operating systems in place and they continued, so you know, when I became chief executive and replaced Tom Divers, Jane Grant replaced me and so she just sat in the chair and took the responsibilities that I had, and she worked to me in the same way that I worked to Tom Divers.

393. There’s not a single document that would list the 600 things I could do versus the 450 things that you could do.

394. I have been asked whether this would all be produced in the reports that went to the Board to keep them updated, and whether this would have been discussed with me. I would say no, not to the extent that it now transpires it wasn't done.

395. I have been asked where responsibilities sat for asset tagging. I am not sure what responsibilities Multiplex had in relation to asset tagging. I would assume they would have some responsibility in relation to the fixed assets, but the majority of asset tagging was us moving in equipment and systems for maintenance and all the IT equipment. So, there would have been, an element of shared responsibility for asset tagging.

396. I have been asked whether I was aware of the decision to proceed to use Horne taps within the hospital following neonate deaths at a hospital in Northern Ireland. I have been advised there was a meeting held in June 2014 with Horne representatives in HPS and HFS and others to discuss this. No, I wasn't aware of it at the time. I believe I was subsequently briefed at a project meeting that the issue had been highlighted and the meetings had been held and a resolution agreed.

397. I have been referred to the minute of the meeting where it states at 5.3:

> "It was unanimously agreed that, as the taps installed within the new build development had complied with guidance current at the time of specification and briefing that the hospital was in the process of being commissioned, it should be regarded as being in the 'retrospective' category not 'new build'. There was no need to apply additional flow control facilities or remove flow control straighteners, and any residual perceived or potential risk would form part of the routine management process."

398. This was mentioned to me when I had a meeting with the project director.

399. It states that any residual or perceived or potential risk would form part of the routine management process. In terms of whose responsibility this would have been, if you look at the attendance list, it would have been Ian Powrie, as the site maintenance manager. It would be the director of facilities' responsibility to ensure that the task was delegated and specified, but in the context of people that attended the meeting, came to that conclusion and then left the room then the person that left the room, having been party to taking that decision, who needs to make sure that the maintenance programme was done, is Ian Powrie.

400. I have been asked if I was aware that a maintenance plan was not put in place. From reading the media, it would appear that lots of things were not done that are a surprise to me. There were two stages. The project director advised me at one of our monthly meetings that this issue of the taps had come up where he had facilitated the meeting, hence why you had Health Facilities Scotland, Health Protection Scotland, all these people external to the organisation present. He mentioned the conclusion of this meeting to me on passing. Now, I have no technical knowledge that would say, "Well, I disagree with all of that." I was assured that having had the problem drawn to our attention, we had taken the right steps to address it.

401. The project was awash with money. Nothing financial was ever an issue. Had David Loudon came to me and said, "Alan Seabourne and the team took this decision back in 2011," which was right in 2011 and in 2014 Health Protection Scotland and Health Facilities Scotland say, "No, it's wrong, it's going to cost us a million quid to rip out all these taps to put new taps in," it would have been a million quid and on we would go. I cannot comment on the reason why the decision to keep the taps was taken, you would need to ask the people that were present at the meeting. According to the minute, they were quite happy at the conclusion they came to.

402. You have asked me if I was ever told people were grossly overworked with problems at the opening why did you not provide more budget? Why did you then insist the overworked staff should have their numbers cut further?

403. I was never told people were grossly overworked and I have no understanding what they mean by “opening budget” because everything up until May 2015 was provided by the Board as a budget over and above the operational director’s running costs. So, if you were running the Southern General, you had your Southern General budget; nothing that happened at Queen Elizabeth cost you any money. The Board paid for that separately.

404. So, during the commissioning period, as I explained at the last meeting, the Board provided something like – I think, off the top of my head – about £14 million for double-running costs, so there was a team of 300 porters and domestics in the Queen Elizabeth cleaning it, while 300 porters and domestics worked in the Victoria, the Queen Elizabeth-- sorry, the Southern General and the Western. So, right up until the day the hospital opened, it was what we call double-running costs, right.

405. So, you in your day-to-day job couldn’t be overworked because you weren’t doing anything over here at the Queen Elizabeth and, if your job was in the Queen Elizabeth, you’re only doing anything over there, right? So, if you felt you were being overworked because, in a hundred days, you’d all these tasks to do in this huge, big building, then you may have expressed that to your direct supervisor, but it never came back to me as, “The 14 million needs to be 16 million.”

406. When the hospital opened in the first full year, 2015-16, it had a budget, but that budget was constantly altered in an upward direction because the hospital failed to hit the performance targets that the government set it. Now, we had asked for six months to run the new hospital in and we’d asked the Scottish Government Health Director to be taken off the national statistical monitoring, i.e. the 95 per cent of patients treated within appropriate times at A&E, right? So that the clinical teams could get to know the new environment, get to know each other, because “You used to work at the Western and didn’t know him, he worked at Southern General,” right? The government declined that because we were in an election period, and therefore, suddenly taking the biggest hospital in Scotland and not publicly demonstrating the figures every four

weeks was deemed not acceptable.

407. So, from July 2015 onwards the hospital failed to hit targets, which we had predicted we would, and therefore we had support teams from our colleagues from the Scottish Government making helpful suggestions on a daily basis, you know, like, so, if one of the excuses was the pneumatic tube system from the A&E to the labs broke down and, as a consequence of that, your specimen took six hours to turn around instead of two, that was used as a reason as to why you breached the four hours. So, we were then instructed to put a porter on to stand by in case the pneumatic system broke down so they could run your specimen to the laboratory. That sounds ridiculous looking back but, I can assure you, on a nightly basis, that's the kind of conversation we had. So, we had to redesign the porting services, so people were ported in.

408. The first thing the Infection Control team did was they rubbished the infection control protocols for the single rooms so, when the hospital opened, it had adopted a model same as all the existing hospitals at the time. Domestics came in at 7.30 in the morning and they worked until 11, and they would clean all the areas and then they would go away and they would come back at 4, and then they would work until 8 or 9 and clean all the areas again after the daytime. And in between that time, right, so about eleven o'clock in the morning/four o'clock in the afternoon if there was a spillage in a ward, if a patient who had been sick, the nurses would just clean it up and, if we discharged you from the bed and put another patient in, the nurses would wipe down the bed. In fact, if you go to any other hospital other than Queen Elizabeth, that's what happens. You're discharged, nurses come in and they clean the bedframe, clean the bed, and then the next patient's admitted, and that was the protocol for the Queen Elizabeth.

409. But the Infection Control team, the new team, took over and said, “No, because these are all single rooms, you have to treat the whole area as contaminated between patients, therefore, like a hotel room, the WC, the shower, the floors, the windows, all surfaces had to be cleaned.” Needless to say, nurses said, “Well, we don’t do that,” so the hospital then had to put in a full-time Domestic team. So, the domestic budget was increased.

410. The Government brought out a new nurse staffing tool. We originally had a nurse staffing tool that had been given to us by the chief nursing officer for Scotland based on presumption of single rooms, and that was the number of all grades of nursing you had to have per ward, and that number increased when they redid what they call the patient acuity tool – you know, the patient dependency – tool in 2015. So, we had to put more nurses in so the budget for nursing went up. The junior doctors got a new deal where they did less hours on shifts, so we had to redesign the doctor shifts. You ended up with a few more doctors and various things.

411. So, throughout 2015-16, the hospital didn’t have an absolute set and concrete budget, we had to keep reacting to these external things, so I have no idea where that comment would come from in that period.

412. Regarding your question about cutting staff numbers; from where? Staff were coming in from four other hospitals.so there was never a number in the Queen Elizabeth to cut and, as I’ve just explained, at least four departments had the numbers increased so we actually recruited more people than we had in 2014-15 in 2015-16.

413. I have been asked who would have ultimate responsibility for making the decision to keep the taps and whether it was a decision made at this meeting, or whether it would have had to have been made by the Board. From reading the minute, it says it was made at that meeting. Had the decision been to rip them out that would have been reported up through the project team to the Board because I would have had to justify to the Board why I was spending a million pounds, out with the project and why it wasn’t Multiplex’s responsibility, why it was ours. If they had come to the conclusion that the status quo was

not right it would've been escalated because that group could not spend the million pounds of the Board's money.

414. However, they came to the conclusion that "We've flagged a problem. We've talked about it. The building's not actually covered by these regulations. Therefore, it's no different to every other building in Scotland, so get on with it, but remember these taps need planned maintenance; make sure you factor that into your maintenance programme and your maintenance budget." They left with the responsibility to have a maintenance plan going forward. It shouldn't have been an issue. If they had said, "we don't want that as a maintenance problem, that would have been reported to David Loudon. David Loudon can't spend the money, so he would come to me, I would go to the Board and we would have spent the money.

415. Most decisions of a very technical nature were devolved to the technical experts, and very little of it required reporting to the Board as a body corporate as opposed to individual directors and individual senior managers. So probably on average I got a verbal briefing, you know, maybe every six weeks from the project team. I would visit the offices, and they would show me drawings of where they were up to. They would say, "Oh, by the way, this come up" or "That come up," and we would have a chat about it over a cup of coffee, and if at the end of that meeting there were things that had to get approved, then I would agree that the project director write to me with a recommendation for the changes, and that would then go in front of the committee, because the 'Project Board's' responsibility was for financial management, strategic change and the timeline. Not the detail of individual departments or rooms.

416. The way we did things was to receive verbal briefings from the Project Team. As I said at the last meeting, depending on what the issue was, it would result-- if it was something that required external approval, it would require the individual that I was speaking to prepare a paper with all of the arguments for and against what it is we were proposing. So, I think, again, we used that example when we were talking about the taps in the theatre suites where, if it had been a decision taken to do X, then, depending on the scale of X, it would

have started at different levels, and if it had required to come to my level, it would have been the subject of a paper which would then have gone in front of the Board. This was the case with everything that required to be actioned.

417. The responsibility sat with the project team and the operational directors. As I say, there were hundreds of people involved in all of these discussions. From reading some of the stuff in the papers, quite a lot of people have got selective memories now as to what they actually did and didn't do, but the bottom line was they were all there. The Board will be able to produce all the minutes of all the meetings these people attended that they now say they don't remember, but they're there. The Board have them, so if you sit at a meeting and you say, "That's good for me," and the project director then writes to Brookfield and says, "That's good for us" that's their job. Nobody outside that chain can actually come in and say, "Well, hang on, I know better than you lot that that's not fine," and that's why the technical people supporting the project director, say, "Hang on, David, or Alan, you can't accept that from the clinician because that's contradictory to this or that." So, there are meant to be checks and balances in the system. You know, "Multiplex can't design that because that's rubbish. It doesn't even comply with these regulations" They're all there and they all cross over and it should mean that you design the right thing and you get the right thing.

418. I have been asked what role the Board's Water Safety Group would have played in relation to taps. In the context of minutes that I read, because it's not a meeting I attended, I believe they should have been seeking annual reports from the kind of people who are accountable, they should have been seeking an annual report in 2016, for example, that the annual Legionella checks in relation to these taps, had been done, but the bottom line is it requires the technical people to bring these reports to them. They won't necessarily have a checklist of the 101 things that maintenance should be doing with what frequency and when. Things have been coming out of the woodwork in the context of maintenance that has been quite clearly appalling. I can't apportion responsibility as to why it's appalling, but these are things which would've been deemed by me when I was working to be what I employ you to do, and if you don't do them, then I don't employ you. You know, I shouldn't need to tell you, because you're supposed to be telling me.

419. I was aware of the list of things that the project team needed to do between occupation of the building, as a physical entity, and it becoming a clinical environment, and water certification was part of that and that breaks down, in my previous experience, into the kind of "mundane," which is the Legionella and systems, and then the more technical, which is the water purification into the renal dialysis units or the MRI machines, which all need a certain purity of water.

420. The fact that they brought in an external company in the April, to me, looks like what you would do before you get patients in. They got the report from DMA Canyon before we put patients in. The report raised a series of housekeeping issues and a series of issues, I understand, now, reading it later, and three quarters of it should just have been handed over to Multiplex to put right, and that should have been done before the patients were in.

421. To not personalise this, for the Estates Department to get the report, to commission it, pay for it and get it, was good. That was good practice. To then tell the project director in the context of opening the hospital, “Feel free to bring patients in next week because everything’s hunky dory” when the report says, “None of these are red flags, [i.e. you can move the patients in] but you should as a matter of urgency move to tidy these things up.” I can’t understand it. I cannot fathom people who were deemed by us organisationally to be competent, not doing it but I also can’t think of a check even put into the system that would have stopped it.

422. I didn’t know the L8 Risk Assessment had been commissioned from DMA Canyon, and I didn’t know when they’d commissioned it. I had been assured that it had been done and that we could put patients into the building.

423. In respect of the DMA Canyon Report of 2017, I think that report was dated after I left. I think it was commissioned in 2016 and part of me would think as a manager, that to commission a follow-up report is good business. I can’t understand how the same person can actually take the two decisions, which is, “Here’s the report. I’m doing nothing about it but let me have another one to confirm that I’ve done everything about it.”

424. The person that commissioned the second report was the person that owned the first report and all I’m saying is, given that the individual was a competent person, with the right qualifications and appointed, why these two things are a disconnect in your mind? If I commissioned a second report, I think I might have remembered, “Hang on, what did I do with the first report? I better get that out and just confirm that I’ve done something.”

425. I was not aware that the reports were not widely shared with everyone until 2018.

426. I have been referred to **Bundle 14, Volume 1, Document 41, Page 464**, which is a report done by Dr Stewart in 2015 regarding issues raised by the Infection Control doctors. This report was instructed by Dr Armstrong following the attempt by the Infection Control doctors to resign from their sessions. I was not directly aware of these resignations however I think Dr Armstrong may have mentioned it to me, that she was looking into these resignations. I was not provided with any details of these resignations or these concerns. I was told there was an issue with staff concerns about a colleague and a concern about how the health board was dealing with that complaint against a colleague.

427. It has been put to me that from looking at the report, it states issues are mainly restricted to medical management, whereas there were a wide range of issues ongoing including concerns about the hospital environment as well. The issue that I was advised, that came out in the context of more public discussion was that when the hospital opened and the new Infection Control doctors were appointed to cover the needs of the new hospital, they sought to question every decision that had been taken during the construction seeking paperwork verification, audit trails because they were not convinced that the decisions that had been reached were fine. That audit trail was Annette Rankin and Craig Williams. Craig Williams was their boss at the time, and the issue therefore was described to me as being quite messy between "I don't like him and I don't like what he's agreed to" and "I don't like what you've built."

428. Annette Rankin left in 2009, but was replaced, so regarding your question about whether anyone outside of her replacement, or Craig Williams was involved in the audit trail, as an Infection Control nurse, you reported to the Infection Control manager – that's Tom Walsh – so you had a professional line of reporting, right? So, if you were concerned about something or you didn't think you had the knowledge for, then you would raise it through Tom. Well, I'm saying through Tom Walsh, you might go direct to a colleague who you thought knew the information, but your line would be to say to Tom Walsh, "Look, this has come up. I need some support," you know, "I need some other people to give me input," and Craig Williams would have been expected to do the same

thing. He would have been expected to speak to one of his colleagues who was more of an expert in that area, whatever the area was that was under discussion.

429. At that stage, there's not a lot you can do about it, in the context of there needed to be a professional resolution of what was right from an Infection Control point of view, what was acceptable and what was unacceptable, and that was being handled by the medical director.

430. I was not directly involved in these issues however, I became involved, as I've said, with the bone marrow transplant issue because that, as far as I was concerned, they were more in the right than wrong in the sense that they were raising issues that we couldn't, the operational team couldn't rebut. I didn't know their other concerns in detail. I, as I've said, personally only was ever briefed and asked to listen in to concerns on bone marrow transplant and infectious diseases re the isolation rooms.

431. These were the two issues I was invited to participate in the discussion because, ultimately, I was going to be responsible for the outcome, if it was right or wrong. The other issues were not briefed to me in detail. Some would have been mentioned informally, but others, I never got the detail of, but fundamentally, going back to the starting point, people saying they wanted six air changes an hour in 2015 and 2016, when the board had accepted in 2011 that it was going to have three plus chilled beams, was not an issue that the board was going to be addressing because, technically it can't be addressed, plus it wasn't wrong. The guidance said up to six. The board had accepted a technical specification, approved by its technical advisors, that was acceptable, but, that bit, which is, "Every room is always wrong until you get six," was a debate that wasn't going to go anywhere because the board wasn't wrong.

432. The reference to the board means the board is a corporate body, it doesn't mean all 32 members of the board sitting down in a room and taking a decision. the signing of the contract to Multiplex was a paper to the Board, right? The physical signing of the contract was me, the Project Director, and an array of legal, financial and technical experts who had been in Shepherd and Wedderburn's offices for about a week, putting all the contract documents together to result in the "contract signing".

433. Some of my language refers to the Board meaning the Body Corporate rather than the Board members sitting down, taking decisions because I'm signing the contract on behalf of the Board. The Board is the contractor. What the Board members would get is a paper on that we are signing.

434. Bone marrow transplant and infectious diseases were different. If the Infection Control doctors said, "This room is not compliant," and produced a standard that we can't comply with, then they're right, we're wrong. We've got to react to that. We've got to change it. So, the arguments broke down into two. Then the two that I became involved in were ones where, quite clearly, the Infection Control doctors could have been right, and we had to understand why, if they were right, had we not dealt with it and, more importantly, what we were going to do with it now?

435. I have been referred to Dr Redding's statement at paragraph 94 where she advises she sought to raise her concerns in respect of ventilation with me and that I told her not to expect to reach a "gold standard" with everything. I would say I don't recall meeting with Dr Redding in February or March 2017. I'm not saying I didn't. I've known Dr Redding since 1997. We have rarely agreed on many things over the years, but I know her, so if she had approached me, I would not have declined her a meeting, but I don't remember having one. The reference to the "gold standard", that would depend on the context that came up. If she was talking to me about, "You have to get back to six air changes," then I could well have said, "We're not going to get back there. You can't get the gold standard. You've got what you've got,", but not in the context that we were not seeking to make sure that the environment was safe for patients.

Secondly, in respect of the comments she says I made regarding Dr Peters, "that Peters woman is creating problems," I do not know Dr Peters, I have never met her and I do not believe I would have used that language in discussing another consultant with Dr Redding.

436. I was not aware of any of concerns, Dr Peters was not a name that I came across. The original debate, as I understood it, back at the beginning was Dr Inkster, who had replaced Craig Williams. It was her that was wanting all of the drawings and all of the specifications going back to day one because she wanted to rewrite the Infection Control input into every one of these areas. I'm saying every one of these; that's maybe exaggerating but significantly looking into things that were decided. They couldn't be revisited. I think the attempt was trying to get her to focus on the here and now and not the past. So, Dr Inkster I knew about by name. Dr Peters was not a name I came into contact with, not to say that the medical director didn't mention her in passing with the other doctors, but it wasn't a name that stuck with me.

437. There has never been a dispute about Dr Inkster's approach, which is the one you read out to me, that we saw earlier. There's never been a dispute about that because we moved the patients. Dr Inkster said, "Environment: unacceptable; outcome: months later," maybe, in her opinion, too long, but "Outcome: patients moved," tick. Dr Inkster was right to raise her concerns. The external validation and the production in a Scottish context of a technical specification that you should achieve, which we didn't, was obviously validation of her point.

438. In reply to how do you resolve clinical issues, the way I see it is that you cannot go back; the job is if you uncover a problem to find a solution. You cannot say 'this is all wrong put it back the way that it was'. That is not the real world, the real world is that if we have a problem have to say where we are and focus on resolving the problem. Going back to 2009 in my humble opinion is of no help to anyone, if the here and now is not clinically safe we have to see how you do go forwards.

439. In my role I offered comment on views, I did not have discussions with Infection Control Doctors, my discussions were with Jennifer Armstrong etc. I never met any Infection Control Doctors but I did know Dr Redding, going back some 20 odd years.

440. I believe, I did take steps to encourage staff to raise concerns, highlight issues, use the whistleblowing policy and processes. However, other people will be the judge of that.

441. I was aware of the whistleblowing policy. In communication with the staff, we sought to publicise the existence of the whistleblowing structures. If you look at the organisational structures, they show how, for professional issues, you can come out of the managerial chain and go straight up the professional chain. So, if you're a nurse manager at any level and you feel your concerns are not being taken account of, you can go to the director of nursing. That's laid out in the professional structures.

442. Obviously, you're hoping that whistleblowing never occurs because your managers on the ground are open and involving everybody in everything, and therefore, in an ideal organisation, you shouldn't have many instances of the need for whistleblowing because, whistleblowing, it's first and foremost an admission of failure that your structures and the individuals you've got in these key posts are not delivering.

443. I had left NHS GGC before the whistleblowing took place; however, I believe I was open to staff to raise concerns and use the policy. I think some of the gifts I received when I retired would suggest that the staff organisations thought that.

444. I have been asked about Duty of Candour and Professor White's evidence to the Inquiry that he, "discovered that the NHS GGC policy and statutory duty of candour has been written to impose a number of hurdles as a requisite to its operation above and beyond what is required by the statutory provision." I haven't been able to think of the duty of candour policy to which he refers. In

my view, the duty of candour is to be open and transparent in your dealings with the staff and with the public and, in the main, the government. It was as an organisation or as individuals. I believe we were always open and transparent.

445. I can advise at the point I left in 2017; I had no understanding in respect of the risk of microbial contamination of the domestic water system or the management of this. I didn't know anything about it. On the basis that there was a risk in 2017, I would have expected Estates to have been responsible for this.

446. In terms of the ventilation system and its compliance with SHTM 03-01, I was of the opinion, having been advised by the team, that the ventilation system in the hospital was compliant with the regulations and was right for the patient mix that we had at that time. This would have been by Helen Byrne then it was Alan Seabourne and then it was David Loudon.

447. When I retired in March 2017, the hospital was operating-- the Infection Control reports to the board were saying that it was below the Scottish average for infection; that indeed, in some aspects, it was the highest performing hospital against the standards that the government demanded that we publish; that we were reaching, in the context of the most compromised patients, so, for example, we were doing more kidney transplants in that hospital than we'd ever done in Greater Glasgow & Clyde because of the facilities and the environment we provided. The hospital was dealing with some of the most acutely unwell people in the West of Scotland, and it ticked the boxes in all of these reports to the board. The ventilation system, as designed, was never revisited after the debate about the Beatson and the infectious diseases.

448. At the time I left, I had no understanding of the issues concerning Ward 2A that have since come to light.

449. Jane Grant, made a public statement to the BBC at the start of December 2019. She said that she 'inherited a difficult set of circumstances. I was her immediate predecessor but I have no idea what she means. It was not great when I left NHSGGC. When I retired in March 2017, in my opinion, there were two major outstanding items of challenge. The first was adult cancer services and the failure to resolve clinicians desire to go to QEUH, against the perception that it was not up to standard. The second challenge faced by the the Board was the significant financial challenges. The Board received annual allocation uplifts but these did not always meet the underlying rate of inflation for business as usual. The Scottish Government would provide an uplift of say 2% but if the underlying inflation was 4% the gap was classed as CRES – money did not leave Board but the Board had to do everything better to stand still. Sometimes CRES is easily achieved, laundry for example, being able to do the same thing but cheaper. Another way would be through redesign, using day-care and not in patient care, this would save money. I recall when I retired , the Board faced significant financial challenges setting a balanced budget for 2017/18; approximately half the budge was allocated to health and social care partnerships and the remaining allocation focused mainly on acute services. At time the pressure was significant and targets were not being achieved. Those were my big challenges.

450. The Jane Grant interview that you have shown me was all to do with how the Board were dealing with patients, their relatives and the general public in respect of patients who had experienced infections while in patients at the QUEH. The dates of these incidents were after my retirement.

Declaration

I believe that the facts stated in this witness statement are true. I understand that proceedings for contempt of court may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.

The witness was provided the following Scottish Hospital Inquiry documents for reference when they completed their questionnaire statement.

Appendix A

A37459504 - Bundle 2 - Health Technical Memoranda

A43273121 - Bundle 3 - NHS National Services Scotland: SBAR Documentation

A43299519 - Bundle 4 - NHS Greater Glasgow and Clyde: SBAR Documentation

A43293438 – Bundle 6 - Miscellaneous documents

A47390519 - Bundle 11 - Water Safety Group

A47069198 - Bundle 12 - Estates Communications

A48890718 - Bundle 13 - Additional Minutes Bundle (AICC/BICC etc)

A49525252 - Bundle 14 - Further Communications - Volume 1

A47664054 - Bundle 15 - Water PPP

A47851278 - Bundle 16 - Ventilation PPP

A49342285 - Bundle 17 - Procurement History and Building Contract PPP

A48235836 - Bundle 18 - Documents referred to in the expert report of Dr J.T. Walker - Volume 1 (of 2)

A48946859 - Bundle 20 - Documents referred to in the Expert Reports by Andrew Poplett and Allan Bennett

A49615172 - Bundle 26 - Provisional Position Papers

A49676055 - Bundle 27 - Miscellaneous Documents - Volume 2

A50002331 - Bundle 27 - Miscellaneous Documents - Volume 7

A51308927 - Bundle 28 - Documents referred to in Impact and Infection Risk of QEUH and RHC site choice expert report by Allan Bennett

A51483446 – Bundle 29 – NHS Greater Glasgow and Clyde Audit Reports

A51598597 – Bundle 30 - Acute Services Review Papers

A51785179 – Bundle 34 – Performance Review Group and Quality and Performance Committee Minutes and Relevant Papers

A52498034 – Bundle 42 – Volume 2 – Previously omitted miscellaneous meeting minutes

A52523997 – Bundle 43 - Volume 2 – Procurement, Contract, Design and Construction, Miscellaneous Documents

A50581587 - Hearing Commencing 19 August 2024 - Day 29 – 4 October 2024 - Transcript - Professor Thomas Steele & Dr Anne Cruickshank

A50766285 - Hearing Commencing 19 August 2024 - Day 35 - 24 October 2024 – Transcript - Professor Craig White

A49847577 - Witness Bundle - Week Commencing 2 September 2024 - Volume 3

A52240258 - Glasgow 3 - Counsel to Inquiry Closing statement - 20 December 2024

The witness provided the following documents to the Scottish Hospital Inquiry for reference when they completed their questionnaire statement.

Appendix B

A52255780 – Bundle 43 – Volume 2 - Procurement, Contract, Design and Construction, Miscellaneous Documents

A52255779 – Bundle 52 - Volume 2 – Miscellaneous Documents

Appendix C

Robert Calderwood CV

CURRICULUM VITAE - ROBERT CALDERWOOD

PERSONAL DETAILS

Name:	Robert Calderwood
Date of Birth:	[redacted]
Status:	[redacted]
Home Address:	[redacted]
Home Telephone No:	[redacted]
Mobile No:	[redacted]
Email address:	[redacted]
Secondary Education:	Camphill Senior Secondary School, Paisley - 1967 to 1971
Educational Qualifications:	6 'O' Grades and 3 'H' Grades
Further Education:	- Scottish Higher National Diploma in Business Studies, Glasgow College of Technology - Diploma of the Institute of Health Service Managers - Certificate of Health Economics, Aberdeen University
Honorary Awards:	- Honorary Professorship, Adam Smith Business School, University of Glasgow – 2013 - 2018 (AUGUST) - Honorary Degree of Doctor of ~~Science~~, University of Glasgow – 2017 JUNE
Membership of Professional Bodies:	- Member of Institute of Healthcare Management - Awarded Companionship in 2009 - Chair Scottish Division IHM – February 2012 – April 2016

POSTS HELD

1 April 2009 – 31st March 2017	Chief Executive - NHS Greater Glasgow and Clyde
1 October 2005 - 31 March 2009	Chief Operating Officer - NHS Greater Glasgow and Clyde Acute Services Division
1 April 1999 - 30 September 2005	Chief Executive - South Glasgow University Hospitals NHS Trust
1 December 1997 - 31 March 1999	Chief Executive - Victoria Infirmary NHS Trust
1 April 1993 - 31 March 1999	Chief Executive - Southern General Hospital NHS Trust

POSTS HELD

1 January 1991 - 31 March 1993	Unit General Manager - Southern General Hospital Unit
1 March 1988 - 31 December 1990	Director of Property and Strategic Planning - Greater Glasgow Health Board
13 May 1985 - 28 February 1988	Unit Administrator - Western/Gartnavel Unit, Greater Glasgow Health Board
1 April 1981 - 12 May 1985	Administrator - Acute Services - Inverclyde District then Renfrew District, Argyll and Clyde Health Board
April 1974 - 31 March 1981	Various administration posts in HR, District Administration and Hospital Administration, Argyll and Clyde Health Board
17 August 1971 - April 1974	Administrative Trainee, Western Regional Hospital Board

NON-EXECUTIVE DIRECTORSHIPS

- Skills for Health and Justice Board – September 2012 – ~~present~~ SEPT 2020 (National Skills Council)
- NHS National Services Scotland – June 2013 – February 2017
- DIRECTOR PPLSH - ~~2017~~ SEPTEMBER 2017
- NON EXEC ADVISOR - OGILVIE DEVELOPMENTS - JUNE 2017 - JAN 2020