THE SCOTTISH HOSPITALS INQUIRY

Closing Statement

on behalf of

Multiplex Construction (Europe) Limited ("Multiplex")

relative to the Royal Hospital for Children and Young People and Department of Clinical Neurosciences in Edinburgh

1. Introduction

1.1 This closing statement follows on from, and is to be read with, the Interim Written Submissions dated 23 June 2023 lodged by Multiplex following the April/May 2023 hearing diet.

1.2 This closing statement also supplements Multiplex's responses to the Inquiry's Provisional Position Papers 6, 7 (including the PPP7 Supplementary Note) and 8 (the response to PPP8 being in two parts). Those responses are referred to and their terms incorporated herein for the sake of brevity. On that basis, this closing statement does not generally seek to address general matters of background and chronology. Instead, it seeks (i) to focus on particular matters canvased in the [2024] hearings before the inquiry, and (ii) to address the specific matters mentioned in paragraphs 3.4.1 3.4.5 of the Chair's Direction 6.

1.3 These submissions are presented in the following five chapters:

- Executive Summary
- Discussion of the evidence on certain particular matters occurring after Financial Close
- The matters mentioned in Paragraphs 3.4.1 3.4.5 of Direction 6

- Other matters
- Conclusions

1.4 In accordance with instructions from the Inquiry (email dated 14 May 2024), references to documents contained in the bundles created for the February/March 2024 hearings are in the following format: (Bundle [x], Volume [y], Page [z]. Where reference is to made to a document contained in a bundle created for either the first (May 2022) or second (April/May 2023) hearings it is referenced as follows: [2022 or 2023], Bundle [x], Volume [y], Page [2].

1.5 References to the transcripts of the evidence are given in the following format: TD1,C45,p.25 = Transcript Day 1, Column 45, pdf page 25. All such references are to the transcripts of the hearings commencing on 26 February 2024 unless expressly stated otherwise.

1.6 In this Closing Statement, 4AC means 4 air changes per hour, 10AC means 10 air changes per hour and so on.

2. **Executive Summary**

2.1 At the heart of this Inquiry is the fact that NHSL's brief for the project did not reflect what it is now understood that NHSL actually wanted.

2.2 Those best placed to identify that the EM did not reflect what NHSL actually wanted were NHSL and their advisers, Mott MacDonald. Several opportunities for this to be identified arose, both before Financial Close and after, but these opportunities were missed.

2.3 The basic problem was compounded by the fact that SHTM-03-01 is guidance and was open to differing interpretations. Mr McKechnie's interpretation of SHTM-03-01 was such that he did not perceive there to be any inconsistency between the EM and SHTM-03-01 in respect of the multi-bed and single rooms within the critical care department. If Mr McKechnie had had a different interpretation of

SHTM-03-01 it is possible that the disconnect between the EM and SHTM-03-01 might have been identified earlier than it was.

2.4 The EM and the underlying design documents for the ventilation system were the subject of detailed scrutiny by NHSL and Mott MacDonald through the RDD process. This included comments specifically in relation to air change rates in some bedrooms within the Critical Care department. Ventilation for the multi-bed rooms, including four multi-bed rooms in the Critical Care department, was given particular scrutiny and even became the subject of a dispute which was eventually resolved, from a contractual perspective, by SA1 (the technical solution having been agreed and implemented many months earlier). The ventilation system was designed and constructed in accordance with the agreed technical solution. This was confirmed by the Independent Tester certifying that the Actual Completion Date of the Works and the Actual Commissioning End Date of the Works were achieved on 22 February 2019 (see Bundle 4, pages 222 and 223).

2.5 After the decisions not to open the hospital, and to undertake works to design and install a ventilation system that provided positive pressure and 10AC in Critical Care, had been taken, the revised specification for the ventilation system was set out in High Value Change Notice HVC 107 and SA2. This is inconsistent with any understanding that the Project Agreement always required a ventilation system that provided positive pressure and 10AC in Critical Care, regardless of the terms of the EM. If that was the case, no High Value Change Notice would have been necessary.

2.6 The proposed recommendations made by Counsel to the Inquiry in their Closing Statement are agreed as being appropriate.

3. <u>Discussion of the evidence on certain particular matters occurring after Financial Close</u>

3.1 At paragraphs 3.2 3.5 of its Interim Written Submissions of 30 June 2023, Multiplex identified six matters upon which it was anticipated that the Inquiry may wish to hear further evidence. Those were:

- Ken Hall and Graeme Greer corresponded by email on 26 May, 15 June and 22 July 2015 in terms indicating that both parties (through Multiplex and Mott MacDonald) were proceeding on the understanding that the EM was only RDD to the extent of NHSL's 7 comments from the meeting of 11 November 2014, which were subsequently included in section 5 of Schedule Part 6 to the Project Agreement [2023] Bundle 6, pdf page 80).

- The design of the ventilation system (including not only the number of AC but also the ductwork, air handling units and plant space necessary to supply the number of AC) was reviewed by NHSL and Mott MacDonald, including (i) during the RDD process, where NHSL's requirement for 4AC in Critical Care bedrooms was confirmed; (ii) during discussions in relation to the pressure regime for the multi bed wards, where in an email of 18 April 2018 NHSL stated that they were "seeking a design for 4AC for all 14 rooms"- which included the multi-bed wards in Critical Care, and (iii) in the Settlement Agreement between NHSL and IHSL dated 22 February 2019.

- After the agreed approach to the number of air changes per hour in Critical Care (HDUs) was questioned by IOM in IOM's first issues log, circulated by email by Brian Currie on 25 June 2019, NHSL approached IHSL to undertake additional work to achieve 10AC in Critical Care on the basis that this would be a Change in accordance with Schedule Part 16 (Change Protocol) to the Project Agreement.

- Multiplex did not undertake the additional works mentioned above, but understands that they were undertaken by IHSL and were the subject of Supplemental Agreement 2 dated 5 August 2020, the purpose of which appears to have been to amend and supplement the original Project Agreement: reference is made to paragraphs 95-109 of the Inquiry's PPP4.

- Stewart McKechnie of TUV-SUD/Wallace Whittle referred in his evidence to having clarified that the rooms treated with 10AC and 10 pascals of

pressure was a correct interpretation, albeit this was a "wee bit away" from the Inquiry's timeline [2023 Hearings] TD7,C33, pdf p. 19).

- It is also anticipated that the Inquiry may wish to hear evidence relating to the post Financial Close documents which Mott MacDonald sought (unsuccessfully) to be allowed to put to witnesses at the hearings in May 2023.

3.2 In this section of this Closing Statement, Multiplex makes brief submissions on the evidence on each of these matters which was heard in the February/March 2024 hearings.

3.3 Ken Hall and Graeme Greer corresponded by email on 26 May, 15 June and 22 July 2015 in terms indicating that both parties (through Multiplex and Mott MacDonald) were proceeding on the understanding that the EM was only RDD to the extent of NHSL's 7 comments from the meeting of 11 November 2014, which were subsequently included in section 5 of Schedule Part 6 to the Project Agreement ([2023] Bundle 6, pdf page 80).

3.3.1 This exchange of correspondence was spoken to by Ken Hall at paragraphs [5]-[9] of his witness statement, Witness Statement Bundle, Volume 2, pages 42-43.

3.3.2 It is apparent on the face of the final exchange of emails on 22 July 2015 that only the 7 comments from the meeting of 11 November 2014 are being worked on, in the context of updating and formally issuing the EM (see Bundle 13, Volume 2, pages 48-49). There is no indication that any further or other changes to the EM are anticipated by either party.

3.3.3 On that basis, it is clear that the understanding of both parties (NHSL/Mott MacDonald on the one hand and IHSL/Multiplex/Wallace Whittle on the other) were of the understanding that the EM was only RDD to the extent of the 7 comments.

3.4 The design of the ventilation system (including not only the number of AC but also the ductwork, air handling units and plant space necessary to supply the number of AC) was reviewed by NHSL and Mott MacDonald, including (i) during the RDD process, where NHSL's requirement for 4AC in Critical Care bedrooms was confirmed; (ii) during discussions in relation to the pressure regime for the multi bed wards, where in an email of 18 April 2018 NHSL stated that they were "seeking a design for 4AC for all 14 rooms"- which included the multi-bed wards in Critical Care, and (iii) in the Settlement Agreement between NHSL and IHSL dated 22 February 2019.

3.4.1 In order to avoid extensive repetition, reference is made to section 4.5 below in relation to these matters.

3.5 After the agreed approach to the number of air changes per hour in Critical Care (HDUs) was questioned by IOM in IOM's first issues log, circulated by email by Brian Currie on 25 June 2019, NHSL approached IHSL to undertake additional work to achieve 10AC in Critical Care on the basis that this would be a Change in accordance with Schedule Part 16 (Change Protocol) to the Project Agreement.

3.5.1 This was spoken to by Darren Pike at paragraphs [103] to [115] and [121]-[122] of his witness statement (Witness Statement Bundle, Volume 3, Pages 80-83.

3.5.2 Mr Pike's evidence was that on 3 July 2019 NHSL issued an instruction for IHSL/Multiplex to provide 7AC in all single bedrooms (with the exception of room 1-B1-037) and 5AC in all four bedded rooms (with the exception of room 1-B1-063) (See Bundle 13, Volume 1, page 836).

3.5.3 Later, on 26 July 2019, IHSL forward to Mr Pike NHSL's draft High Value Change Notice (Bundle 13, Volume 1, page 846 at 849), asking IHSL to design, supply and install a ventilation system capable of delivering 10AC per hour and 10PA of pressure in Critical Care rooms.

3.5.4 The proposed use of a High Value Change Notice is inconsistent with any understanding of the requirements of the Project Agreement. If the Project Agreement demanded compliance with SHTM-03-01 regardless of the terms of the EM, a High Value Change Notice would not have been necessary.

3.6 Multiplex did not undertake the additional works mentioned above, but understands that they were undertaken by IHSL and were the subject of Supplemental Agreement 2 dated 5 August 2020, the purpose of which appears to have been to amend and supplement the original Project Agreement: reference is made to paragraphs 95-109 of the Inquiry's PPP4.

3.6.1 As is noted at paragraphs 281, 392, 393 and 394 of Counsel to the Inquiry's Closing Statement, Imtech and Hoare Lea were engaged to design and install a ventilation system that provided positive pressure and 10 air changes per hour. The revised specification for the ventilation system is set out in High Value Change Notice HVC 107 (Bundle 3, page 1146) and Settlement Agreement 2 (Bundle 3, page 1204). In accordance with Clause 33 of the Project Agreement and Schedule Part 16 of the Project Agreement, NHSL issued IHSL with a Board Change Notice in respect of the required works.

3.6.2 As above, the use of a High Value Change Notice is inconsistent with NHSL's stated understanding of the contractual requirements of the Project Agreement. If the Project Agreement demanded compliance with SHTM-03-01 regardless of the terms of the EM, a High Value Change Notice would not have been necessary.

3.7 Stewart McKechnie of TUV-SUD/Wallace Whittle referred in his evidence to having clarified that the rooms treated with 10AC and 10 pascals of pressure was a correct interpretation, albeit this was a "wee bit away" from the Inquiry's timeline [2023 Hearings] TD7,C33, pdf p. 19).

3.7.1 This was spoken to by Mr McKechnie in his evidence (Transcript day 4, pages 16-25). He maintained that an exchange of email correspondence in September 2015 involving Mott MacDonald (Bundle 13, Volume 2, page 55 and

following), concerning the proper treatment of isolation rooms within the Critical Care department, added extra support to Wallace Whittle's change to Guidance Note 15 of the EM in November 2015 by the addition of the words "for isolation cubicles".

3.7.2 Regardless of that explanation, Wallace Whittle's failure to highlight the change to Guidance Note 15 in red text, as they did with other changes to the EM, is a missed opportunity to have identified a discrepancy between (the original terms of Guidance Note 15) and the body of the EM in respect of critical care rooms.

3.8 <u>It is also anticipated that the Inquiry may wish to hear evidence relating to the post Financial Close documents which Mott MacDonald sought (unsuccessfully) to be allowed to put to witnesses at the hearings in May 2023.</u>

3.8.1 This refers to the correspondence in early 2019 which is discussed at paragraphs 141 146 of the Closing Statement of Counsel to the Inquiry. Namely the letter(s) written by Darren Pike of Multiplex to IHSL dated 31 January 2019 confirming *inter alia* that all ventilation systems at the RHCYP/DCN had been designed, installed and commissioned in line with SHTM-03-01 "*as required*".

3.8.2 The phrase "as required" used by Mr Pike in each of these letters is both accurate and unobjectionable.

3.8.3 Mr Pike confirmed in his evidence that in part, he intended the words "as required" to mean "except to the extent that the Board had stated a different requirement" (Transcript, page 67). He was also influenced by the fact that the primary focus of the initial letter from the Scottish Government was on maintenance (Transcript, pages 68-69). Mr Pike was clear that in drafting the letter, in order to answer the question posed, he had in mind that Multiplex required to comply with the construction contract (Transcript, page 74).

3.8.4 At paragraph 154 of the Closing Statement of Counsel to the Inquiry, it is noted, correctly, that IHSL's corresponding letter to NHSL of 31 January 2019 was written not as a formal element in project governance, but in response to a Scottish Government letter to all health boards based on their emerging concerns about ventilation at the QEUH. The letter does not appear to have been relied upon by NHSL in deciding to execute SA1 (Goldsmith, Transcript, page 70).

3.8.5 Further, at the time, NHSL's project team were aware of departures from the requirements of SHTM-03-01, for example in relation to the Lochranza neutropenic ward, where it was known that there were 4AC as opposed to the 10AC which SHTM-03-01 recommended. They could not, therefore, properly have taken "*as required*" to mean that there was full compliance with SHTM-03-01, because they knew that not to be the case.

3.8.6 It is submitted that paragraphs 154 and 155 of the Closing Statement of Counsel to the Inquiry go too far in suggesting that IHSL's letter "*confirmed compliance with SHTM-03-01 in the design, installation and commissioning of the ventilation systems*" and "*confirmed compliance with published guidance*". Considered objectively, the confirmation offered in the letter was qualified, and qualified appropriately.

4. The matters mentioned in Paragraphs 3.4.1 – 3.4.5 of Direction 6

4.1 <u>In so far as they differ with Counsel to the Inquiry, what themes they submit have emerged from the evidence which are relevant to the Terms of Reference of the Inquiry.</u>

4.1.1 Subject to what follows, Multiplex is in agreement with Counsel to the Inquiry's identification of the themes which emerged from the evidence which are relevant to the Terms of Reference, as set out in Section Two (Key Themes) of the Closing Statement of Counsel to the Inquiry.

4.1.2 The key area of difference is that Multiplex does not accept that there was any lack of a clear brief set by NHSL, at least at bid stage.

4.1.3 For the reasons set out in Multiplex's Interim Written Submissions, it is submitted that NHSL's brief, at bid stage, was perfectly clear: the Reference Design Environmental Matrix was NHSL's briefing document in respect of room environmental criteria. Bidders were required to comply with it, but could propose changes to it on an exception basis.

4.1.4 It is however accepted that there was a lack of clarity in the relationship between the Board's Construction Requirements and the Environmental Matrix in the Project Agreement.

4.1.5 Reference is made to section 4.5 below.

4.2 <u>Whether they accept or not Counsel's proposed explanations of and, where framed as questions, proposed answers to, each of the topics listed in the List of Topics; and, in the event that they do not accept Counsel's proposed explanations and answers, their reasons for not doing so, their alternative explanations and answers, and reference to the evidence upon which they rely as supporting their positions.</u>

4.2.1 Subject to what follows, Multiplex accepts Counsel's proposed explanations of, or answers to, each of the topics listed in the List of Topics.

4.2.2 At paragraph 108 of Counsel to the Inquiry's Closing Statement it is stated that the debate over the multi-bed room pressure issue did not concern the number of air changes in the critical care rooms. That issue, it is said, formed no part of the parties' dispute.

4.2.3 Multiplex does not agree with that characterisation of matters. Pressure and air change rates are intrinsically linked, because air change rates are used to achieve pressure. See, for example, the initial discussions around lowering the AC rates when looking to achieve balanced pressure (discussed at paragraph

135 of Counsel's Closing Statement). As noted there, air change rates were specifically discussed. Furthermore, in the Technical Schedule to SA1 at Item 7 (4 bed ventilation) the description of the dispute includes the following "*In addition, the Board believe the intake air change rate and the extract air change rate are non-compliant.*" (This can be found at Bundle 1, page 2083.)

4.2.4 At paragraph 127 it is suggested that the pressure proposal for the multi-bed rooms was developed at length and in depth without any of the parties involved realising that some of the rooms were in the Critical Care department.

4.2.5 That is contrary to the evidence. Key personnel were well aware that some of the multi-bed rooms were in the Critical Care department (see e.g. Ronald Henderson, Transcript Day 1, page 89, pages 97-103, page 107; Graham Greer, Transcript Day 2, page 127-12; page 146. What was not realised by anyone, including NHSL and its advisers, was that NHSL wanted these rooms dealt with differently from what was shown in the EM, and from what had been confirmed in the specific discussions over the multi-bed rooms.

4.2.6 Against that background, Multiplex agrees that Mr Henderson's request for confirmation that 4AC would be used as "the brief" for multi-bed rooms was not intended as a change by NHSL to their brief. But it was confirmation of the brief which was given in circumstances where, if that was not the intention, it ought to have been highlighted (cf paragraphs 137 and 138 of Counsel to the Inquiry's Closing Statement). There can however be no doubt that NHSL knowingly stated a requirement for 4AC in all of the multi-bed rooms under consideration, including those in Critical Care. Indeed, NHSL accept as much in their response to PPP8 at paragraph 3.11 (see Bundle 12, Volume 1, page 80).

4.2.7 Multiplex therefore does not agree with the characterisation of the position in paragraph 156 of the Closing Statement by Counsel to the Inquiry. The true characterisation of the position is, it is submitted, that the technical solutions for ventilation were agreed without any party considering, or realising, that there was a disconnect between the brief of 4AC for rooms in Critical Care and

what NHSL actually wanted. From the perspective of Multiplex, however, the critical point is that, in the circumstances, only NHSL were in a position to recognise that 4AC was not what they really wanted in the Critical Care multi-bed rooms. The foregoing comments apply also to paragraph 257 of the Closing Statement where it is said that [NHSL] did not knowingly agree to [a derogation from SHTM-03-01]. NHSL did know it was agreeing to 4AC in multi-bed rooms, and knew that some of those rooms were located within the Critical Care department, but did not consider or realise that they wanted those rooms to comply with the recommendations in SHTM-03-01.

4.2.8 At paragraph 161 of their Closing Statement, Counsel correctly acknowledge that whether or not the approach taken in the technical schedule to SA1 was successful in treating the agreed solutions as part of IHSL's design solution for which IHSL bears the whole design risk is a matter of contractual interpretation. As such, it is not a matter the Chair will require to determine. It is however submitted that an approach to construction which relies solely on the terms of the technical schedules, ignoring the terms of the Release in clause 3 as well as other terms of the agreement, is unsound. In any event, Multiplex agrees with Counsel to the Inquiry where they say, in paragraph 161, that there is an air of unreality about treating the ventilation solutions in that way. Multiplex also agrees with the submission in paragraph 161 that the process leading up to SA1 involved clarification by NHSL of their ventilation brief.

4.3 <u>Whether they accept or not Counsel's proposed answers to the questions which are posed in Terms of Reference 1 to 12; and, in the event that they do not accept Counsel's proposed answers, their reasons for not doing so, their alternative answers, and reference to the evidence upon which they rely as supporting their positions.</u>

4.3.1 Subject to what follows, Multiplex accepts Counsel to the Inquiry's proposed answers to the questions which are posed in Terms of Reference 1 to 12.

4.3.2 At paragraph 333 of the Closing Statement by Counsel to the Inquiry, Counsel suggest that the ventilation system for Critical Care "was not adequate": if that is intended to mean no more than that the ventilation system for Critical Care did not comply with SHTM-03-01 then it is unobjectionable. If, however, it is intended to mean that the ventilation system for Critical Care did not meet the requirements of the Project Agreement then that is not accepted, for all the reasons set out in Multiplex's Interim Written Submissions and herein. At paragraph 458 of the Closing Statement by Counsel to the Inquiry it is submitted (i) that the evidence indicates that the system as installed would have had unacceptable risk, and (ii) that therefore, the decision not to open the hospital until there was full compliance with SHTM-03-01 was justifiable. There is however a tension here. At paragraph 335 of the Closing Statement it is identified that the available evidence indicates that achieving 4AC when 10 are recommended creates an unacceptable level of risk to safety **unless other sufficient control measures are introduced**. At paragraph 334 Counsel recognise that the evidence also indicates that other factors could be introduced to make a space that did not have ventilation compliant with SHTM-03-01 sufficiently safe that patients could be treated there, giving the example of the old Sick Kids hospital at Sciennes. At paragraph 460 Counsel to the Inquiry identify that there is a lack of clear, research-based evidence in relation to the healthcare built environment, including the link between specific air changes per hour and infection risk. At paragraph 458, it is acknowledged that when the decision was taken not to open the RHCYP/DCN, no risk assessment was undertaken to determine if the ventilation system (as installed) was unsafe. The position, then, is that the expert evidence before the Inquiry, which was not available to the Scottish Government at the time, is being used to support the conclusion that the decision not to open the hospital, until there was full compliance with SHTM-03-01, was justified. The absence of a risk assessment makes that somewhat difficult to understand. As Counsel rightly go on to acknowledge in the final part of paragraph 458, mere non-compliance with recommendations/guidance will not always, automatically, equate to an unsafe environment. Multiplex therefore agrees that in future, an individual

risk assessment should be undertaken to ensure that appropriate decisions are taken, and that expensive remedial work is not instructed unnecessarily.

4.4 <u>Whether or not they agree as appropriate Counsel's proposed recommendations and, if not, why not; and what alternative and/or additional recommendations they propose, identifying any lessons learnt to ensure that any past mistakes are not repeated in any future NHS infrastructure projects, all as specified in Term of Reference 13.</u>

4.4.1 Multiplex agrees that Counsel's proposed recommendations are appropriate.

4.5 <u>Whether they accept or do not accept Counsel's proposed material findings of fact; and in the event that they do not accept Counsel's proposed findings, what alternative and/or additional findings they propose, and reference to the evidence upon which they rely as supporting their position.</u>

4.5.1 Counsel to the Inquiry invite the Chair to make findings in fact based on the analysis in sections 3 and 4 of their Closing Statement; in order to avoid duplication they do not include a separate section on findings in fact (see paragraph 3 of the Closing Statement).

4.5.2 Subject to the following points, Multiplex accepts the analysis set out in sections 3 and 4 of the Closing Statement of Counsel to the Inquiry.

<u>The period up to submission of final tenders</u>

4.5.3 For the reasons set out in its Interim Written Submissions dated 30 June 2023, in particular at paragraphs 6.1 6.34, and on the basis of the evidence referenced therein, Multiplex submits there was no ambiguity about the status of the Reference Design Environmental Matrix at bid stage. The Chair is invited to find that the Reference Design Environmental Matrix was intended by NHSL to be - and was - NHSL's briefing document in respect of room environmental criteria; and that it was understood by IHSL and Multiplex to be such.

Multiplex's submissions on this point are reinforced by the evidence of Mr Maddocks in his report for the February 2024 hearings at paragraph 2.1.5 (WS Bundle 1, pdf page 13), and in his oral evidence (2024 TD11,C32-33, pp.18-19), that there would be "no point" in issuing such a document unless it contained a client specific project brief, and no point providing a 'draft' environmental matrix that could not be relied on. Any suggestion that NHSL intended that the Reference Design Environmental Matrix was a document that could not be relied upon by tenderers (cf paragraph 425 of Counsel to the Inquiry's Closing Statement) should be rejected as improbable.

4.5.4 The Chair is also invited to find that bidders were required to comply with the Reference Design Environmental Matrix, but could propose changes on an exception basis. Notably, however, Bidder C's proposed changes to the Reference Design EM inexplicably did not ring any alarm bells with Mott MacDonald, despite the fact that Mott MacDonald were proceeding on the understanding that the Reference Design EM complied with SHTM-03-01. Reference is made in particular to paragraphs 7.1 7.9 and 11.3 of Multiplex's Interim Written Submissions.

<u>Preferred Bidder Stage</u>

4.5.5 The critical points about what occurred during the Preferred Bidder stage are (i) that NHSL and IHSL were still in a period of negotiation and were not yet subject to the contractual obligations of the Project Agreement, and (ii) changes to the EM during this period were instigated by NHSL/Mott MacDonald, not by IHSL/Multiplex/Wallace Whittle's development of the design. Reference is made to paragraphs 8.1 8.18 of Multiplex's Interim Written Submissions.

4.5.6 It was however during this period that the seeds of subsequent confusion were sown. The output of a meeting on 11 November 2014 between NHSL and its advisers to discuss the EM was a list of 7 bullet points, which were eventually included in Section 5 of Schedule Part 6 of the Project Agreement. At Financial

Close, those 7 points were the only elements of the EM that were subject to the RDD process according to the Project Agreement: the EM was not to be subject to RDD in its entirety. None of those 7 points was in respect of air changes per hour (whether in Critical Care areas or elsewhere).

4.5.7 Under the Project Agreement, the EM formed part of the Room Data Sheets (as defined) and IHSL was obliged to provide Facilities that met all the requirements specified in the Room Data Sheets. The Completion Criteria of the Project Agreement required commissioning to demonstrate compliance with the EM. Reference is made to 9.6 9.16 of Multiplex's Interim Written Submissions. The Project Agreement was clear on the status of the Environmental Matrix.

Post-Financial Close: RDD

4.5.8 The fact that the 7 points set out in Section 5 of Schedule Part 6 of the Project Agreement were subject to RDD may have led to the misconception that the EM in its entirety was subject to RDD. Contractually it was not, as explained above.

4.5.9 Once the 7 points were addressed, an updated version of the EM, namely Revision 2 dated 26 November 2015 (Bundle 13, Vol 5, pdf page 959), was submitted through the RDD process, which showed how the EM had been amended in line with NHSL's comments in relation to the 7 points in question. See the witness statement of Ken Hall at paragraph [22], WS Bundle Vol 2, pdf pages 43-46 and the 26 November 2015 EM at Bundle 13, Volume 2, page 99 at page 100.

4.5.10 NHSL returned Revision 2 of the EM through the RDD process on 9 February 2016 at Level C. It was accompanied by a second batch of 50 comments from NHSL/Mott MacDonald. None of those raised any questions over the air change rate or pressurisation in the singe or multi-bed wards in Critical Care. Notably, however, item 7 of this batch of 50 comments did however specifically mention in relation to room 1-B1-063 (which was a multi-bed room in Critical

Care): "Stated as supply air 4ac/h, extract via en-suite, this room does not have en-suite facilities" showing that specific consideration had been given to the entries in the body of the EM for at least one Critical Care room (see Bundle 13, Volume(2), pdf page 142).

4.5.11 By proceeding in this manner, the entire EM effectively became subsumed into the RDD process. As Mr Hall indicates (WS Bundle Vol 2, pdf pages 46, paragraph [23]) he was surprised to see the extent of the comments, given that a review had been carried out by NHSL prior to Financial Close which had resulted in only 7 points being included in the RDD process at Financial Close. One would normally expect to see a narrowing down of outstanding points as comments are addressed through RDD, not a widening out. NHSL was effectively doing a further review post Financial Close (see witness statement of Darren Pike, WS Bundle, Volume 3, at page 63, paragraph [19]; Transcript page 22 onwards). This led to a situation where Wallace Whittle created a table of comments for inclusion at the beginning of the EM, which sought to track those comments which were pre-Financial Close and those which were post Financial Close and therefore something which might give rise to a contractual change at the instance of NHSL (see e.g. Bundle 13, Volume 2, page 1116 and Ken Hall, Transcript Day 3, pages 135-136).

4.5.12 The second batch of 50 comments was addressed, and Revision 5 of the EM was then submitted through the RDD procedure on 18 March 2016. Revision 5 was returned by NHSL/Mott MacDonald marked as Level B on 15 April 2016, which contractually entitled (and indeed obliged) IHSL/Multiplex to proceed with procurement and construction. See the witness statement of Ken Hall at paragraphs [23]-[56], WS Bundle Vol 2, pdf pages 46-54.

4.5.13 Revision 7 of the EM was prepared, which addressed further comments by NHSL, and was issued through the RDD process on 19 September 2016. On 17 October 2016 NHSL returned Revision 7 of the EM, but downgraded it to Level C. The downgrade was reversed on 7 November 2016 when the EM was

upgraded back to Level B. See the witness statement of Ken Hall at paragraphs [57]-[67], WS Bundle Vol 2, pdf pages 54-56.

4.5.14 Later versions of the EM went through the RDD process, including revisions 9, 10 and 11. Updated comments on revision 9 were provided by Mott MacDonald on behalf of NHSL on 28 August 2017 (Bundle 13, Volume 2, pdf page 867 and following). Specific cells are highlighted in red (indicating inconsistencies) in relation to air change rates for two multi-bed rooms in Critical Care, namely 1-B1-063 and 1-B1-065 see page 884. The highlighted cells are those for “Extract ac/hr”. The “Extract ac/hr” cell for room 1-B1-063 shows 0.5 ac/hr and the same cell for room 1-B1-065 shows 1.9 ac/hr. The cells for the “Supply ac/hr” for both rooms are not highlighted at all: they both indicate that 4ac/h is to be supplied. The printed copy of this version of revision 9 in the EM which is included in the Inquiry bundle does not however show certain features which are visible on the native Excel version of the spreadsheet (project document AXN EDN000075338). The native Excel version was provided to the Inquiry by Messrs Brodies by email dated 16 February 2024. The native Excel version shows that there are electronic yellow ‘stickies’ linked to both of the “Extract ac/hr” cells for 1-B1-063 and 1-B1-065 authored by Ross Southwell (of Mott MacDonald) which read “Please update to be in line with agreed design”. The relevant cells were then updated in revision 10 of the EM (Bundle 13, Volume 2, page 867 at page 941), to be 3ac/hr in the case of room 1-B1-063 and 4ac/hr in the case of room 1-B1-065. Subsequently, in NHSL’s response to revision 11 of the EM, attention was again drawn by Ross Southwell to the air change rates for room 1-B1-063 by the use of an electronic yellow “sticky” saying “Please confirm ventilation rates” (Bundle 13, Volume 2, page 1172 at 1188). Revision 11 of the EM was given Level B status (witness statement of Ken Hall, WS Bundle, Volume 2, page 62, paragraph 94)). Ultimately, an extract of the EM was produced and issued to NHSL on 5 July 2018 at the end of specific discussions on the multi-bed wards, which included four rooms in the Critical Care department, showing balanced pressure and 4AC for each of them (Bundle 13, Volume 2, page 1337 at 1340;

witness statement of Ken Hall, WS Bundle, Volume 2, paragraphs 95-102, pdf pages 62-63).

4.5.15 The point of all of this is that it illustrates that, regardless of the contractual significance of RDD documents gaining approval at Level B or above through the RDD process being restricted to Operational Functionality, NHSL/Mott MacDonald were in fact undertaking very detailed scrutiny of the EM and making comments on it, including down to the level of individual air change rates in certain Critical Care rooms. The RDD process therefore represents a missed opportunity for NHSL/Mott MacDonald to identify any "disconnect" (cf paragraph [7] of Counsel to the Inquiry's Closing Statement) between what NHSL wanted and what was contained in the brief. Instead, through the RDD process, as illustrated above, NHSL confirmed its requirement for 4AC and balanced pressure, at least in certain Critical Care rooms.

5. Other matters

5.1 In the Executive Summary of Counsel to the Inquiry's Closing Statement at paragraph 8, it is said that the Environmental Matrix was included in the Project Agreement as a schedule and the Board's Construction Requirements *prima facie* required compliance with it. It is then said that "*An express derogation in the contract excused that compliance because the matrix was known to feature anomalies.*"

5.2 The point was not covered in the oral evidence to the Inquiry.

5.3 The same point was discussed in Multiplex's Interim Written Submissions at paragraph 10.6

5.4 It is understood that the derogation, which is to be found at April 2023, Bundle 5, Paper Apart, pdf page 3861) was drafted precisely because the EM was NHSL's brief, but NHSL had outstanding comments (the comments from the 11 November 2014 meeting) which were RDD and, from a contractual perspective, required to be dealt with in the context of the obligation to comply with the EM. In other

words, a way had to be found to excuse compliance with the EM to the extent of the 7 points which were to be included in Section 5 of Part 6 of the Project Agreement as RDD.

5.5 The underlying premise in relation to the derogation, whatever its scope, is plainly that IHSL was obliged to comply with the EM. Otherwise there would have been no need for any derogation.

5.6 If the derogation had released IHSL from the obligation to comply with the EM entirely, that would have been a hugely significant change to the risk profile of the project from both parties' perspectives. There is no evidence before the Inquiry that that is what was intended, or what was brought about. Such an interpretation would be inconsistent with the parties' decision to include and reference the EM in the Project Agreement and BCRs at Financial Close. The EM is defined in the Project Agreement BCRs (see 2023 Bundle 5, pdf page 194 at page 199) as:

"*Means the Environmental Matrix, which details the room environmental condition requirements of the Board required within each department/unit/space/area as set out in Section 6 (Room Data Sheets) of Schedule Part 6 (Construction Matters) (as varied, amended or supplemented from time to time in accordance with the Project Agreement).*" (See further paragraphs 9.7 9.16 of Multiplex's Interim Written Submissions).

5.7 On a separate matter, at paragraphs 15 and 149 of the Closing Statement of Counsel to the Inquiry the point is made that a major commercial reason for the parties entering into SA1 was to alleviate financial pressures which had built up on IHSL. That is not disputed. However, for context, the evidence showed that the negotiations leading up to SA1 took place over a prolonged period from around Spring 2018 to February 2019 and both parties were represented by technical experts and legal teams. SA1 was not a knee-jerk reaction to a crisis which had suddenly emerged from nowhere.

6. Conclusions

6.1 Save to the fairly limited extent identified herein, Multiplex is in agreement with the approach taken by Counsel to the Inquiry to the questions posed in the Terms of Reference and in their proposed potential recommendations.

6.2 Counsel's suggestion of a symposium or round table meeting to discuss potential recommendations with stakeholders is welcomed by Multiplex. Multiplex agrees that this may best be done after the Chair has heard evidence in relation to the QEUH.

Alasdair McKenzie KC, Senior Counsel for Multiplex

28 May 2024