

Provisional Position Paper 15

Governance Structure within the project to construct the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow

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1. Introduction

- 1 Between 1998 and 2001 NHS Greater Glasgow undertook an Acute Services Review. The review was intended to develop a strategy to address challenges facing the delivery of acute services in Glasgow. The Acute Services Review culminated in the Acute Services Strategy being approved by the Scottish Government in June 2002.
- 2 The second phase of the Acute Services Strategy involved the development of the new South Glasgow Hospital Campus (later known as the Queen Elizabeth University Hospital) “which not only sees the single biggest phase of modernisation and rationalisation of [NHS GGC’s] adult clinical services but incorporates the creation of a new Children’s Hospital for the Greater Glasgow and West of Scotland populations and the completion of the modernisation of Glasgow’s Maternity Services”¹.
- 3 A 1109 bedded adult new build acute hospital was planned to provide A&E services, acute specialist in-patient care, a small volume of medical day cases and out-patient clinics serving the local population. The proposed new 240 bedded children’s hospital would provide A&E services and a comprehensive range of inpatient and day case specialist medical and surgical paediatric services on a local, regional and national basis. The proposed New Laboratory build would provide biochemistry, haematology blood transfusion and mortuary services. The expected benefits of the project were many, ranging from the provision of high-quality services to “Modern, fit for purpose facilities which meet the needs of patients, visitors and staff”.² At this point the proposed new hospital did not have a name but appears to have been called the New South Glasgow and New Children’s Hospitals or sometimes the new SGH. This paper will refer to it as the new SGH.
- 4 This PPP focuses on the governance structures and certain decisions made within those structures from soon after inception of the project, in approximately September 2000, through to contract signature on 18 December 2009. This PPP also considers

¹ A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1087.

² A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1089.

the form and substance of the Full Business Case (“FBC”) in 2010.

- 5 In this paper governance is broadly intended to refer to the arrangements by which the QEUH project, from its inception until its continuing operation, has been authorised, controlled or held to account within NHS GGC and by Scottish Government. The focus in this paper does not extend to how contractors may have regulated their internal processes during the project.
- 6 In the Glasgow 4, Part 1 hearing the Inquiry has heard evidence from many of the members of the NHS GGC Project Team and the contractors and consultants engaged in the procurement, design and construction of the QEUH/RHC, but it should be noted that there remain important participants within that procurement process who have yet to give evidence to the Inquiry, and their evidence is intended to be heard in the Glasgow 4, Part 3 hearing in September and October 2025. Accordingly, the conclusions of this Provisional Position Paper are intended to be read as, and it is written as, no more than a preliminary analysis of evidence that has been received and heard.

Procedure to be adopted.

- 7 This PPP is based upon the Inquiry’s investigations across its various workstreams and evidence in the Glasgow 2, 3 and 4, Part 1 hearings.
- 8 It should be emphasised that Section 2 of the Inquiries Act 2005 provides that an inquiry is not to rule on, and has no power to determine, any person’s civil or criminal liability. Accordingly, in the context of the Inquiry’s investigations into the matters falling within its remit in relation to QEUH/RHC, the issue of any liability arising under the Building Contract, or other contractual arrangements including those appointing professional consultants, is not a question for the Inquiry to rule on or determine.
- 9 The Inquiry understands that the issue of whether there was non-compliance with the Building Contract or other contracts, and the consequences of any non-compliance, are controversial. While nothing in this paper should be taken as seeking to determine what the respective civil liabilities of the parties were or may be, it is clearly impossible for the Inquiry to fulfil its Terms of Reference without having regard to the development of the Building Contract and the related appointments. This PPP’s

examination of the design and construction phases of the project should therefore not be read as offering a view or otherwise commenting on the respective legal rights and obligations of the parties involved; its purpose is to enable the Inquiry to fulfil its Terms of Reference.

- 10 In due course, the Chair is likely to be invited by the Inquiry Team to make findings in fact based on the content of this paper. It is open to any Core Participant (CP) or indeed any other person holding relevant information, to seek to correct and/or contradict it by way of response to this paper. In considering those responses, and in taking forward its investigations, it is therefore possible that the Inquiry's understanding of matters set out in the paper may change, and so the position set out in this paper at this point remains provisional. If it is the case that the Inquiry's understanding does change significantly, a revised edition of this paper may be issued in due course.
- 11 While it is possible that the matters covered in this paper will be touched upon to a greater or lesser extent at a subsequent hearing held by the Inquiry – something that may also change the Inquiry's understanding of matters – this is not guaranteed, and if parties wish to address the issues dealt with in this paper, they are invited to do so now. If they do not do so, as noted above, the Chair is likely to be invited by the Inquiry Team to make findings in fact based on the content of this paper.
- 12 Those responding to this paper should be aware that it is likely that the responses received will be published on the Inquiry's website, or otherwise made publicly available, after the deadline for responses has passed.

2. The structure within which NHS GGC operates

- 13 This section builds on Chapter 9 of PPP 9 with a focus on the relationship between NHS area boards and the rest of the Scottish NHS, with only minor modifications, as that document provides a useful context for the operation of NHS Boards whether in Lothian or Greater Glasgow and Clyde.
- 14 The National Health Service in Scotland is established and operates under a complex legislative framework with an interlinking network of statutory duties and obligations conferred upon various bodies. The purpose of this section is not to give a detailed or comprehensive analysis of that framework, but rather to sketch out its main features in order to provide the reader with some context for the specific matters dealt with in subsequent parts of this paper and those which may arise in the Glasgow 4, Part 3 hearing.
- 15 Accordingly, parts of the National Health Service in Scotland, such as Joint Integrated Boards, that fall outwith the Inquiry's Remit and Terms of Reference, are not described here.
- 16 The NHS in Scotland was established in 1948. Services in Scotland are administratively separate from the health services provided in England and Wales. The Secretary of State for Scotland held ministerial responsibility.
- 17 The National Health Service (Scotland) Act 1978 consolidated certain enactments relating to the NHS in Scotland and as regards the provision of hospital-based healthcare within Scotland, it remains the primary statute conferring powers upon government ministers.
- 18 In 1999 responsibility for the NHS in Scotland became a devolved matter. The Scottish Parliament can legislate in matters of devolved competence, which includes many health policy matters and the NHS. For practical purposes, references to "Secretary of State" in pre-devolution legislation in matters related to health including the 1978 Act should be read as a reference to "the Scottish Ministers".
- 19 Accordingly, statutory responsibility for the NHS in Scotland lies primarily with the

Scottish Ministers. At present the Cabinet Secretary for NHS Recovery, Health and Social Care has ministerial responsibility in the Scottish Cabinet for the NHS in Scotland, which includes provision of hospital-based healthcare (sometimes referred to as secondary care).

- 20 The Scottish Ministers are accountable to the Scottish Parliament for exercise of their statutory functions in matters of devolved competence.
- 21 The Scottish Ministers have a broad statutory duty in terms of section 1 of the 1978 Act to promote in Scotland a comprehensive and integrated health service designed to secure:
 - the improvement in the physical and mental health of the people of Scotland
 - the prevention, diagnosis and treatment of illness.
- 22 Further, the Scottish Ministers are obliged to either provide or secure the effective provision of services in accordance with the provisions of the 1978 Act. Services are free of charge except where legislative provision is made for the making and recovery of charges.
- 23 In addition to that wide-ranging duty, the Scottish Ministers have a broad discretion conferred by section 1A of the 1978 Act. Section 1A provides the Scottish Ministers with a duty to promote the improvement of the physical and mental health of the people of Scotland. In discharging their duty, the Scottish Ministers “may do anything which they consider is likely to assist discharging that duty” including provision of financial assistance to any person, entering into arrangements or agreements with any person, co-operating with or facilitating or co-ordinating the activities of any person.
- 24 To assist in the discharge of their statutory duties, the Scottish Ministers have powers to establish health boards, special health boards and a Common Services Agency. The Scottish Ministers may confer functions on each of these bodies.
- 25 The 1978 Act also confers a range of specific duties upon the Scottish Ministers in relation to other services and facilities. Notably, with reference to matters of interest

of the Inquiry, they are under a duty to provide throughout Scotland to the extent that they consider necessary to meet all reasonable requirements, hospital accommodation and medical, nursing and other services.

- 26 In addition, the Scottish Ministers have a statutory obligation to publish a Charter of Patient Rights and Responsibilities, which summarises the existing rights and responsibilities of people who use NHS services and receive NHS care in Scotland.
- 27 The Scottish Ministers are required to constitute health boards for the purpose of exercising such of their statutory functions as they may determine, and for the purpose of making arrangements on their behalf for the provision of primary medical, dental and pharmaceutical services under the 1978 Act. NHS GGC is one of those health boards.
- 28 The NHS in Scotland defines a Scottish health board as “a regional authority in Scotland with responsibility for the delivery of health services”. Each health board is responsible for protecting and improving the health of the population, and for delivering frontline healthcare services in its geographic area.
- 29 A health board is a body corporate. The Scottish Ministers appoint the health board members who consist of a chair, other members and local councillor members. Secondary legislation regulates health board membership, and the procedures associated with appointment.
- 30 Health boards are non-departmental public bodies and are accountable to the Scottish Ministers, specifically to the Cabinet Secretary for Health. Health boards have legal personality and are entitled to enforce any rights acquired and are liable in respect of any liabilities in the exercise of those functions as if acting as a principal. All proceedings are to be brought by or against the board in its own name. NHS GGC is one of fourteen health boards.
- 31 Other functions can be conferred (or withdrawn) by orders made by the Scottish Ministers under the 1978 Act.
- 32 In exercising their functions, health boards are obliged to “act subject to, and in accordance with, such regulations as may be made, and such directions as may be

given, by the [Scottish Ministers]; and such regulations and directions may be made or given generally or to meet the circumstances of a particular area or matter.”

- 33 Every health board is obliged to keep accounts of all money received and paid out by them. Furthermore, health boards must send their accounts to the Scottish Ministers as directed. The Scottish Ministers sends the accounts to the Auditor General for Scotland for auditing.
- 34 The Scottish Ministers have the discretion to establish special health boards for the purpose of exercising such of the functions of the Scottish Ministers relating to the health services as they may determine. In addition to functions that may be conferred upon them by the Scottish Ministers, the 1978 Act confers on special health boards, once established, a number of specific statutory functions. All special health boards have a duty to promote the improvement of the physical and mental health of the people of Scotland. They have a broad discretion and “may do anything which they consider is likely to assist discharging that duty” including provision of financial assistance to any person, entering into arrangements or agreements with any person, co-operating with or facilitating or co-ordinating the activities of any person. This provision mirrors that relating to the Scottish Ministers by section 1A of the 1978 Act.
- 35 There are currently seven special health boards and each was established with a specific purpose. Each of the special health boards support the regional Health Boards by providing a range of specialist and national services.
- 36 The special health boards are as follows:
- NHS Healthcare Improvement Services: NHS Quality Improvement Scotland (QIS) was established as a special health board in 2003, then Healthcare Improvement Scotland was established by the Public Services Reform (Scotland) Act 2010, taking over the regulatory functions of the QIS.
 - Scottish Ambulance Service
 - State Hospitals Board for Scotland
 - NHS Education for Scotland

- NHS 24
 - National Waiting Times Centre Board
 - Public Health Scotland: Public Health Scotland succeeded NHS Health Scotland which was a Special Health Board established in 2003 and dissolved in 2020
- 37 The National Health Service (Scotland) Act 1978 provides the current statutory basis for the Common Services Agency for the Scottish Health Service (the Agency) which is commonly known as the National Services Scotland (NHS NSS). A detailed narrative of the functions and role of NHS NSS and how its various elements work can be found in sections 9.9 to 9.12 of PPP 9.
- 38 Scottish Ministers have a range of specific powers under the 1978 Act. Section 76 provides that the Scottish Ministers may cause an inquiry to be held in any case where they consider it is advisable to do so in connection with any matter arising under the 1978 Act.
- 39 If after holding an inquiry the Scottish Ministers are of the opinion that a health board, an NHS Trust, the Dental Estimates Board or Healthcare Improvement Scotland (HIS), has failed to carry out its statutory functions, or in carrying them out has failed to comply with relevant regulations, schemes, proposals or directions, they may declare the body to be in default. In these circumstances they may make a default order in terms of section 77.
- 40 Where a default order is made, the members of the board or other body must vacate their office. The order must provide for their replacement and may contain interim provisions pending the new appointments or, as the case may be, the election of new members. These powers are also available to the Scottish Ministers in relation to matters arising under the Patient Rights (Scotland) Act 2011.
- 41 It is to be noted that the powers under section 77 can only result in an order that removes all the members of a Health Board and not, for example, only a subclass of the members, such as the executive Board members.
- 42 Section 78 provides that when the Scottish Ministers are of the opinion that an

emergency exists, and it is considered necessary to secure the effective continuance of any service under the 1978 Act, they have powers to direct that any function conferred by or under the Act on any person or body is to be performed by some other specified body or person. This direction will be in place for the duration of the emergency.

- 43 The Scottish Ministers have powers of intervention in the case of a failure by a body or a person to provide to an acceptable standard a service which the body or person is under a duty to provide. In terms of this section a “body” is defined as: a health board, a special health board, the Agency or HIS. A “person” is defined as: an employee of a health board, special health board, the Agency or HIS; a member of staff of the Scottish Administration, or an employee of a local authority.
- 44 The Scottish Ministers also have an NHS Board Performance Escalation Framework. This is sometimes described as “special measures,” however, that term is specific to arrangements in England. There are five stages within the NHS Board Performance Escalation Framework in Scotland, numbered 1 to 5 with 5 being the most serious. The stage that each health board is assessed at provides a description of performance and any response that is required from the Scottish Ministers. Decisions to escalate to Stage 5 are taken by the Cabinet Secretary and it is at this level where the ministerial powers of intervention are exercised.

3. Scottish Government involvement in procurement

- 45 PPP 9 sought, in part, to understand how the Scottish Government governance structures were applied to the approval of the project to construct the RHCYP/DCN. This section considers the Scottish Government procurement policies and governance structures that applied to the new SGH project.
- 46 There are differences of timing between the new SGH and the RHCYP/DCN that impacted on what Scottish Government policies and practices applied to these approvals. Initially the two projects ran in parallel, with the Edinburgh Gateway Review 1 being approved in July 2008³ only a matter of months after the Glasgow Gateway Review 1 was approved in January of the same year⁴. The Glasgow Outline Business Case (OBC) was approved in April 2008⁵ and the Edinburgh OBC was approved in August 2008.⁶ Thereafter the two projects moved at different paces.
- 47 The Glasgow Gateway Review 2 was approved in January 2009⁷ with major decisions being made over the following 12 months, but the Gateway Review 2 of what became the RHCYP/DCN took until September 2011⁸. The Glasgow Full Business Case (FBC) was approved in November 2010⁹, but the Edinburgh FBC was not approved until August 2015¹⁰.
- 48 This chapter presents the understanding (at date of publication) of the Inquiry Team

³ A46416909 - Provisional Position Paper 9 - The Governance Structure within the project to construct the Royal Hospital for Children and Young People and Department for Clinical Neurosciences, Bundle for Oral hearing commencing 26 February 2024, Bundle 11, Document 4, Page 299.

⁴ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Document 3, Pages 230-231.

⁵ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Document 3, Page 232.

⁶ A46416909 - Provisional Position Paper 9 - The Governance Structure within the project to construct the Royal Hospital for Children and Young People and Department for Clinical Neurosciences, Bundle for Oral hearing commencing 26 February 2024, Bundle 11, Document 4, Page 292.

⁷ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Document 3, Page 244.

⁸ A46416909 - Provisional Position Paper 9 - The Governance Structure within the project to construct the Royal Hospital for Children and Young People and Department for Clinical Neurosciences, Bundle for Oral hearing commencing 26 February 2024, Bundle 11, Document 4, Page 331.

⁹ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Document 3, Pages 261-262.

¹⁰ A46416909 - Provisional Position Paper 9 - The Governance Structure within the project to construct the Royal Hospital for Children and Young People and Department for Clinical Neurosciences, Bundle for Oral hearing commencing 26 February 2024, Bundle 11, Document 4, Page 337.

in respect of the effect of the Scottish Capital Investment Manual ('SCIM'), the Gateway Review system, the work of the Scottish Capital Investment Group (the 'CIG'), the 'Policy on Design Quality for NHS Scotland', SHFN 30, SHTM 00-00 and SHTM 03-01.

NHS Hospital Construction Project Stages

- 49 The NHS Scotland Scottish Capital Investment Manual (SCIM) discusses project stages in terms of strategic, economic and management aspects, and is complemented by the NHS Scotland Design Assessment Process (NDAP) which focusses on the development and review of design and technical criteria.
- 50 Within the suite of NHS guidance documents, there is SHTM 00-00 "Best practice guidance for healthcare engineering: policies and principles", which provide stages of a construction process as in Figure 1:

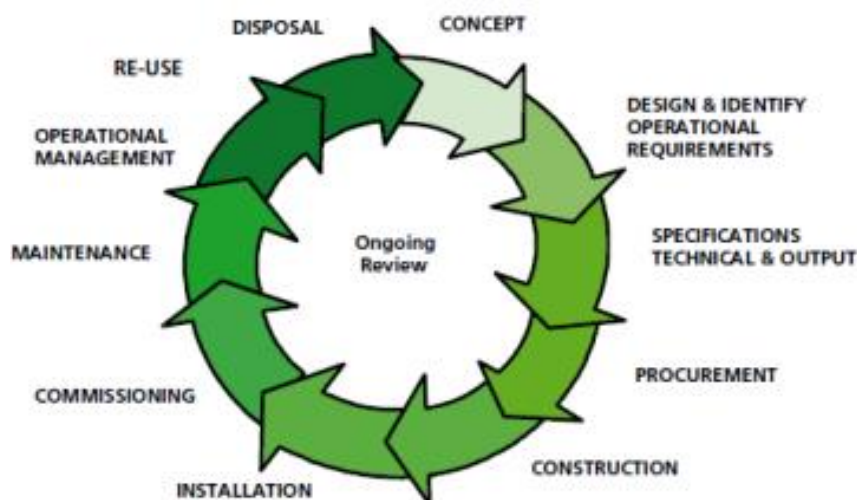


Figure 1 Construction process as presented within SHTM 00-00

The Gateway Review Process

- 51 Gateway Reviews are an Office of Government Commerce tool adopted by the Scottish Government for major projects involving significant public monies. They are a short, focused review of a programme or project. They are conducted on behalf of the Project's Senior Responsible Owner (SRO). The reviews occur at key decision points in the project's lifecycle and are carried out by a team of experienced

practitioners, independent of the programme or Project ¹¹

- 52 They are applied to all programmes and projects that have a budget of £5 million or over that are delivered by organisations which fall within the Scottish Public Finance Manual.
- 53 These Gateway Reviews are managed by the Scottish Government's Programme and Project Management Centre of Expertise and are designed to support the Scottish Government Infrastructure Investment Board's remit of ensuring that project delivery is appropriately monitored and supported.
- 54 The Gateway Review process is said to allow projects to be more effective in delivery of benefits, together with more predictable costs and outcomes¹². These include:
- Identifying if adequate skills, business resources and experience were deployed;
 - Ascertaining if all the stakeholders fully understood the programme or project;
 - Identifying any problems early;
 - Identifying if the risks were being managed;
 - Indicating if the programme or project could progress to the next stage of development or implementation;
 - Identifying if more realistic time and cost targets could be achieved;
 - Identifying if a governance structure was in place and whether all those involved were clear about their roles and responsibilities; and
 - Improving knowledge, management and delivery skills among staff through participation in Review Teams.

¹¹ A36878607 - Gateway Review Guidance - August 2000, Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 1, Document 1, Page 5.

¹² A36878607 - Gateway Review Guidance - August 2000, Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 1, Document 1, Page 5.

- 55 Gateway Reviews are carried out in advance of the key decision points within a programme or project's lifecycle. Each Review is a snapshot of the project as at the point the review takes place. In relation to projects, these are¹³:
- Gateway 1 (Business Justification): This first project review comes after the Strategic Business Case has been prepared. It focuses on the project's business justification prior to the key decision on approval for development proposal.
 - Gateway 2 (Delivery Strategy): This review investigates the OBC and the delivery strategy before any formal approaches are made to prospective suppliers or delivery partners. The review may be repeated in long or complex procurement situations.
 - Gateway 3 (Investment Decision): This review investigates the FBC and the governance arrangements for the investment decision. The review takes place before a work order is in place with a supplier and funding and resources has been committed.
 - Gateway 4 (Readiness for Service): This review focuses on the readiness of the organisation to go live with the necessary business changes, and the arrangements for management of the operational services.
 - Gateway 5 (Operations Review and Benefits Realisation): This review confirms that the desired benefits of the project are being achieved, and the business changes are operating smoothly. The review is repeated at regular intervals during the lifetime of the new service/facility.
- 56 The recommendations from a review are based on the evidence presented and on the interviews that take place. The report is provided to the SRO, the Health Board and the Director General at the Scottish Government. The report is part of the CIG's consideration of the project.

¹³ A36878607 - Gateway Review Guidance - August 2000, Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 1, Document 1, Page 6.

The Scottish Capital Investment Manual

- 57 The Scottish Capital Investment Manual (SCIM) gives a framework for the delivery of capital schemes and outlines technical, financial and managerial considerations.
- 58 On 6 May 2009¹⁴ Mike Baxter, Deputy Director, Capital Planning and Asset Management, issued a new SCIM for NHS Scotland to, amongst others, the Chief Executives of NHS Boards including the Chief Executive of NHS GGC. The 2009 SCIM replaced the 1996 SCIM and a series of Health Department Letters ('HDL') that had until then applied. Mr Baxter's letter explained that projects for which a case was scheduled for submission at the July 2009 CIG meeting or beyond must follow the revised SCIM. By this point the OBC had been approved but the FBC was not due to be approved until the following year. The 2009 SCIM therefore applied to the FBC process for the new SGH.
- 59 The SCIM, as is detailed in CEL 19 (2009), was solely an electronic document and subsequently previous versions would be overridden. Consequently, an as-published version of the Final 2009 SCIM that would have applied to Stage 1 of the new SGH is no longer available from the Scottish Government or NHS GGC. The Inquiry Team have checked for web archive captures of the SCIM website, but it does not appear that this has occurred. No copy of the Final 2009 SCIM has been retained in the National Library of Scotland.
- 60 The Inquiry Team proceeds on the basis that the 2005 edition of ***SHFN 30 - Infection Control in the Built Environment: Design and Planning (Version 2)***¹⁵ contains at section 3.3 a useful summary of the organisational requirements of the SCIM that then applied. It reads in full:

3.3 The Scottish Executive Health Department's, Scottish Capital Investment Manual (SCIM) sets out the organisational structure of the Project within NHS Scotland, a summary of which can be described as follows:

¹⁴A32341678 - Scottish Government - Health Finance Directorate - CEL 19 - 06 May 2009, Bundle of Documents for Oral hearings commencing from 16 September 2025, Bundle 48, Document 1, Page 4.

¹⁵A33662203 – SHFN 30 – Infection Control in the Built Environment: Design and Planning – August 2005, Bundle of Documents for Oral hearings commencing from 16 September 2025, Bundle 48 Document 2, Page 6.

NHS Board internal organisation

- i. **NHS Board** - monitor cost and progress of all capital investment projects at regular meetings. If problems are identified, it needs to be satisfied that appropriate steps are being taken;
- ii. **Chief Executive Officer** – accountable to NHS Board. May be only person with total responsibility for project and any other related activities. Responsible for management of all major capital schemes at all stages of the process from inception to post project evaluation;
- iii. **Project Board** - comprising senior staff within the NHS Board who have an interest in the project and whose activities will be affected by the project, e.g. staff from clinical areas such as infection control;
- iv. **Project Director** - responsible for overall project management. Managing the NHS Boards interest in the Project. Evaluating competence of and appointing Consultants and Contractors who will undertake design and construction activity and act as point of contract in dealings with Contractors;
- v. **Professional Adviser** - experienced in construction and design, especially of healthcare facilities;
- vi. **User Panel** - representatives of each of the relevant service departments, in each case authorised to define their department's needs and to review and agree how those needs are to be met.

External resources:

- i. **Project Manager** – NHS Boards rarely have capacity in-house to develop and manage all aspects of the project, therefore it is usually necessary to appoint external Advisors and Consultants. The Project Manager's role is to provide a single point of responsibility for the project brief and design. They also oversee the day-to-day progress of the project;
- ii. **Other Consultants** – this includes Design Consultants, M & E Engineers and Architects. They are managed by the Project Manager, appointed by the Project Director. However, their responsibility will be to, and their contracts with, the NHS Board.

- 61 The following section of SHFN 30 is entitled "Importance of experience and understanding of prevention and control of infection in the Project Team". It is to be noted that this version of SHFN 30 (a) contemplates the use of an external project manager for projects in contrast with the approach taken for the new SGH project after the end of Stage 1 and (b) contemplates the inclusion within the NHS Board's internal organisation of a user panel made up of representatives of each of the relevant service departments, in each case authorised to define their department's needs and to review and agree how those needs are to be met.

62 The SCIM from 2011¹⁶ identifies five stages in a project (these also appear in the 2004 Draft Guidance¹⁷). These are:

- **Strategic Assessment (SA):** The Strategic Assessment stage seeks to understand the present and future healthcare needs of the community the new facility will serve, as well as selecting and assessing the site. It proposes the perceived benefits of the new facility; the Scottish Government considers the submitted assessment against potential competing proposals and approves progression to the Initial Agreement stage.
- **Initial Agreement (IA):** This stage establishes the project benefits; design statement and aspiration; and commitments to sustainability, project quality, equality. It should also list the NHS design guidance and technical standards to be followed and include schedules of accommodation for the new hospital.
- **Outline Business Case (OBC):** The purpose of the OBC is to present the initial proposal for a design that will meet the aspirations outlined in the Initial Agreement. During the OBC stage the concept design is developed, including information on architectural elements, M&E, fire, and landscaping. The OBC outlines the project management requirements to carry out the project successfully, in preparation for the procurement and tender process.
- **Full Business Case (FBC):** During the FBC the design, technical, and project management details are finalised. Procurement and tendering processes occur within the FBC stage: depending on the procurement and tender method, design details may be finalised through discourse with bidders, reaching agreement on aspects prior to the contract being awarded. Final design proposals are submitted to the local planning department by the successful contractor, on behalf of the health board.

¹⁶ A35187236 - Scottish Capital Investment Manual – 2011, Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 2, Document 33, Page 120.

¹⁷ A36056794 - Scottish Capital Investment Manual - Business Case Guide - Draft - July 2004, Bundle of Documents for Oral hearings commencing from 16 September 2025, Bundle 48, Document 3, Page 136.

- **Project Monitoring and Evaluation (PME):** The SCIM next provides guidance for the handover and occupation stages. It supports NHS boards in processes for successful commissioning, operational management and maintenance, and design evaluation including energy performance.

Scottish Government Capital Investment Group

- 63 According to its terms of reference, the Scottish Government's Capital Investment Group's (CIG)¹⁸ role was then to oversee the approval process for business cases across NHS Scotland where the value of the capital project was greater than the Board's delegated limit, which certainly extended to cover the proposed SGH¹⁹.
- 64 The role of the CIG was to allocate and approve capital resources for investment, it oversaw business cases and the approval process, monitored delivery and provided guidance in relation to capital investment projects. However, CIG did not have the delegated authority to approve projects or expenditure. The CIG made recommendations to officials with the appropriate delegated authorities, usually the Director General for Health and Social Care, who would then make the final decision.
- 65 CIG provided the necessary assurances to both Scottish Ministers and Scottish Government Health and Social Care Management Board that proposals were robust, affordable and deliverable, and that they are in line with wider NHS policy.
- 66 The goal of CIG in accordance with the 2015 terms of reference was to act as a catalyst for the development, promotion and distribution of best practice and guidance within capital planning and development. A particular focus of this was the review of project evaluation and ensuring lessons learned and best practice were being widely shared across NHS Scotland.
- 67 According to the 2015 terms of reference, CIG membership then comprised of representatives from various Scottish Government divisions and directorates:

¹⁸ A35304270 - Capital Investment Group - Terms of Reference - 03 November 2015 – CIG Terms of Reference 1 December 2015 Bundle of Documents for Oral hearings commencing from 16 September 2025, Bundle 48, Document 4, Page 289.

¹⁹ A37215540 - DL (2019) 5 - Letter from Chief Finance Officer NHS Scotland, and Director of Health Finance, Corporate Governance and Value to Chief Executives dated 12 September 2019, "Delegated Limits – Capital Investment Projects", Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 3, Document 79, Page 1312.

- Health Finance and Infrastructure,
- Performance and Delivery,
- Healthcare Quality and Strategy,
- Chief Medical Officer Directorate,
- Chief Nursing Officer Directorate,
- Population Health Improvement,
- Analytical Services,
- Primary Care Division,
- Joint Improvement Team,
- Health Finance,
- eHealth and
- Chief Dental Officer
- A representative from the Scottish Futures Trust.

68 The Deputy Director of Capital and Facilities chaired CIG meetings, which took place every three weeks and were planned in sufficient time to allow for NHS Scotland Boards to plan for the submission of documentation. The role of Deputy Director (Capital Planning and Asset Management), and therefore Chair of CIG, was held by Mike Baxter from February 2009 to December 2014.

69 The Inquiry understands that the CIG procedures involved a relatively formal fixed timetable for receipt and consideration of business cases which involved:

- Business Cases being received by the SGHSCD a minimum of 4 weeks prior to the relevant CIG meeting.
- Once CIG members received papers, they had a hard deadline to respond with

questions and queries for the sponsoring board.

- All such all comments required to be fully closed out by the CIG meeting.
- Individual CIG members appear to have had some responsibility for considering the aspect of the project that relates to their area of expertise.
- The CIG members, acting as a group, would then decide whether or not to recommend approval of the project, and if endorsed, make the appropriate recommendation to the Director of Finance, eHealth and Analytics or Director General of Health and Social Care, or seek the appropriate clarification from the NHSS body on issues to be resolved prior to a recommendation for approval.

Scottish Government Policy and Activity Database

- 70 The Activity Data Base (ADB) system is a standardised hospital design tool used by the NHS in the UK. It is a digital database of hospital design information including detailed requirements for clinical spaces in hospitals. A key feature of the ADB is that it is based on the guidance relevant to the design of hospitals in England including Health Building Notes (HBNs) and Health Technical Memoranda (HTMs)²⁰.
- 71 The contents of the room data sheets and room layouts should automatically comply with that guidance. The database does not automatically comply with Scottish-specific guidance but there is a large degree of overlap between Scottish and English guidance. The Scottish Government's policy warns Scottish NHS bodies to take extreme care to ensure compliance with Scottish-specific guidance when using the database²¹.
- 72 The ADB will provide a starting point for the design of a particular type of room; the layout, what is contained within the room, and how the room should perform. Room types are identified by one of a number of "ADB codes", although there may not always be an ADB code to match the requirements for a particular room – an example would be the lack of any code for immuno-compromised patients.

²⁰ Closing Submissions by Counsel to the Inquiry (Edinburgh) dated 7 June 2023 ("CSCIE"), Edinburgh Hearings, Paragraph 65.

²¹ Closing Submissions by Counsel to the Inquiry (Edinburgh) dated 7 June 2023 ("CSCIE"), Edinburgh Hearings, Paragraph 67.

- 73 The 2006 ‘Policy on Design Quality for NHS Scotland’²² makes specific reference to SHTM and ADB as follows (at page 17):

“In 2005, the Scottish Executive Health Department, in association with the NHS Scotland Property and Environment Forum (now Health Facilities Scotland) launched an initiative to support NHS Boards in the implementation of ADB throughout NHS Scotland by way of a national agreement in which SEHD would fund the first year’s licence subscription to ADB and Health Facilities Scotland would provide ongoing training and user-network support.

This is now in place and NHS Boards, having recognised the merits and cost-effectiveness of the system, are expected to continue to subscribe annually on their own behalf. Spaces designed using ADB data automatically comply with English planning guidance (such as Health Building Notes (HBNs) and Health Technical memoranda (HTMs) as ADB forms an integral part of the English guidance publication process. Whilst Scottish users can create their own project-specific briefs and designs using ADB’s extensive library of integrated graphics and text which includes room data sheets, room layouts and departmental room schedules, extreme care should be taken to ensure that such data generated by the package are consistent and compliant with Scottish-specific guidance such as Scottish Health Planning Notes, Scottish Hospital Planning Notes (SHPNs) and Scottish Health Technical Memoranda (SHTMs) as published by Health Facilities Scotland.”

Involvement of SG Civil Servants in the Project outside the CIG

- 74 Some SG CIG civil servants attended meetings of the key NHS GGC Governance bodies that are described in the next chapter of this PPP. These include:
- The New South Glasgow Hospitals and Laboratory Project Executive Board;
 - The Procurement and Finance Group;
 - The Acute Services Strategy Board.

²² A37215538 - HDL (2006) 58 – Letter from the Interim Director of Finance, Finance Directorate to Chief Executives dated 23 October 2006, “A Policy on Design Quality for NHSSCOTLAND”, Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 1, Document 4, Page 133.

4. Governance and the new SGH project

- 75 This section of the PPP considers the key boards, committees, groups and teams of NHS GGC that were involved in events of interest in the procurement of the new SGH. This was a complex and evolving project that took more than a decade to run and the governance structures within NHS GGC evolved during the life of the project.

The NHS GGC Board

- 76 Since its formation in April 2006 from the merger of NHS Argyll and Clyde and NHS Greater Glasgow, NHS GGC has been governed by its Board. The predecessor health board – NHS Greater Glasgow – was also governed by its Board. In this PPP the board of NHS GGC and its predecessor health boards is referred to as “the NHS GGC Board”.
- 77 Board members are appointed by Scottish Ministers, with the criteria used for selection depending upon position or expertise. As at 31 March 2021 the Board comprised the chair, twenty-six non-executive members, of whom six are nominated by their respective councils, plus five executive Board members. The balance between a small number of executive directors and a large number of non-executive directors does not appear to have changed over the period of interest to the Inquiry.
- 78 The principal subcommittee of the Board with involvement in the new SGH prior to FBC approval was the **Performance Review Group (PRG)**. Its membership was made up of members of the Board and it was often chaired by the Chair of the NHS GGC Board. In effect the PRG was the decision-making part of the NHS GGC Board for many, if not most, of the decisions discussed in this PPP, as matters were reported to it for decision.²³

Key Events of Interest

- 79 The Inquiry Team has identified eleven Key Events of Interest arising in the course of

²³ Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Page 33, Column 62.

the new SGH project between its initial inception and the approval of Full Business Case. These are:

- 1) Between 1999 and 2002: the selection of the site at Shieldhall on the site of the Southern General Hospital ("SGH").
- 2) The 2008 decision to change the procurement strategy from a PPP/PFI strategy to a more conventional funding approach.
- 3) The approval of the Outline Business Case
- 4) The 2008 decision to appoint Currie & Brown as principal consultants with a team of technical advisors behind them
- 5) The approval of the Employer's Requirements in April/May 2009
- 6) The removal of the Maximum Temperature Variant in June 2009,
- 7) The 26 October 2009 appointment of Brookfield Construction (UK) Ltd ("Brookfield") as the main contractor and
- 8) The events of 12-18 December 2009 which included the agreement of what PPP 13 describes as the Agreed Ventilation Derogation²⁴ and the signing of contract.
- 9) The Gateway 2 Review.
- 10) The decision not to include any reference to the Agreed Ventilation Derogation or non-compliance with SHTM in the FBC.
- 11) The approval of the FBC.

80 The balance of this PPP is structured as a Narrative of Key Events from 2000 onwards that seeks to:

- a) Identify, year-by-year, the key boards, committees, groups and teams which were in place within NHS GGC to make decisions about the new SGH Project and to

²⁴ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Document 3, Page 251.

be accountable for those decisions, and

- b) to place the Key Events of Interest into that structure, according to when they arose, and then to examine what is known to the Inquiry about how each was addressed.

81 Accordingly, the overall structure is to consider the NHS GGC governance structure year by year. It is accepted that there may be events which span a number of years or periods, and so this structure is not to be understood too rigidly.

5. Governance and key events prior to 2008

82 Before 2006 the areas now covered by NHS GGC were distributed across the four NHS Trusts existing in Greater Glasgow, and NHS Argyll and Clyde. The Greater Glasgow Health Board had at that time the responsibility for providing healthcare services in Greater Glasgow. In the period 2004-2006 the landward part of NHS Argyll and Clyde was merged with the Greater Glasgow NHS Trusts, and the entity responsible for the area covered by the five trusts became known as NHS GGC.

Site Selection

83 The Inquiry holds an analysis of options for Glasgow South from 1 March 2000²⁵ and documents from the March 2000 consultation 'Modernising Glasgow's Acute Hospital Services'²⁶ which was approved by the NHS GGC Board on 21 March 2000²⁷ and considered by further Board meetings on 18 April 2000²⁸, and 20 June 2000²⁹. The report of the consultation meeting at Yorkhill on 16 May 2000 raised the issue of both the sewage smell and fears about whether it would be a 'state of the art' hospital.³⁰

84 The NHS GGC Board received reports on the results of the first phase of the consultation³¹ at its meeting on 19 September 2000³². A second phase followed³³ in which the aspiration was to achieve "Modern facilities for a better patient experience", which was reported to the Board at its 16 January 2001 meeting.³⁴ Further updates

²⁵ A50975198 - Analysis of Options for Glasgow South - 1 March 2000, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 12, Page 72.

²⁶ Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Documents 13 to 15, 17, 19, 20.

²⁷ A50975928 - Board Meeting Paper - Modernising Glasgow's Acute Hospital Services Consultation - 21 March 2000, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 16, Page 123.

²⁸ A50975618 - Board Meeting Paper - Modernising Glasgow's Acute Hospital Services Update - 18 April 2000, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 18, Page 134.

²⁹ A50975920 - Board Meeting Paper - 20 June 2000, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 21, Page 145.

³⁰ A50979866 - Yorkhill consultation meeting - Feedback from public meetings - 16 May 2000, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 20, Page 144.

³¹ Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Documents 22, 23, 24.

³² A50976658 - Board Meeting Minutes - 19 September 2000, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 25, Page 268.

³³ A50978539 - Full Phase 2 Consultation Report - 1 November 2000, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 26, Page 304.

³⁴ A50974917 - Acute Services Reconfiguration - Update on Implementation of Next Steps - 16 January 2001, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 28, Page 328.

were received by the Board on 19 June 2001³⁵.

- 85 On 14 March 2001 the Scottish Executive (as it then was) approved the development of an Outline Business Case³⁶ for a single acute southside hospital on the existing Southern General Hospital site, further to a full site selection appraisal.
- 86 Suggestions have subsequently been made that the selection of the site at the Southern General Hospital Site had a bearing on issues relating to infection control and the decision to design the hospital with sealed windows and a mechanical ventilation system. In December 2024 a report was obtained into ‘Impact and Infection Risk of QEUH and RHC site choice by Allan Bennett’³⁷. This has been provided to CPs and their comments sought under the Rule 9 process.
- 87 As discussed in PPP 13 at section 3.2, the Independent Review has also considered this issue and at paragraph 3.7 “Conclusions” said that:

“We conclude that the site selection for the hospital was properly considered at the time of the Acute Hospitals Review when it completed in 2001, taking public health matters into account. Site management of waste water facilities adjacent to the site complies with regulatory requirements and the site appears well maintained on direct inspection; no new knowledge or information has come to light that challenges the assumptions and assurances on which the decision was founded; public concern has been expressed to us as part of this Review but generally recorded nuisance and relevant data remain at a low level, and not appreciably different to other areas in the city on routine monitoring”.³⁸

- 88 The current view of the Inquiry Team is that based on the evidence of IPC clinicians who worked on the SGH³⁹ and the expert evidence of Mr Bennett, there is no reason to think that the proximity of the new SGH site to the Shieldhall waste treatment site has had a direct impact on rates of infection in the QEUH/RHC, but that there is an issue about the extent to which the smell from that waste treatment site influenced

³⁵ A50975943 - Board Paper - Acute Services Progress Report on Development of Outline Business Cases - 19 June 2001, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 32, Page 348.

³⁶ A50979843 - Reconfiguration of Acute Hospital Services 15 - March 2001, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 34, Page 358.

³⁷ A51308483 - Impact and Infection Risk of QEUH and RHC site choice by Allan Bennett, Bundle for Oral hearings commencing 13 May 2025, Bundle 39, Document 1, Page 3.

³⁸ A32385767 - Independent Review Report - June 2020, Bundle for Oral hearing commencing 19 August 2024, Bundle 27, Volume 9, Document 11, Page 145.

³⁹ See Closing Statement by Counsel to the Inquiry following the Glasgow 3 hearing Chapter 9, paras 37-50, pages 764-767.

decisions around the ventilation system both before the detailed design and after.

Initial governance structures for the new SGH project

- 89 The new SGH was one part of the Acute Services Review which resulted in an Acute Services Strategy⁴⁰ that was approved by the Health Minister in June 2002. This strategy involved reductions of main hospital sites from six to three, and maternity units from three to two, with two Ambulatory Care Hospitals and five minor injuries units across the city.
- 90 A **Project Executive Group** was established in December 2002 to oversee the new Adult and Children's Hospitals strand of the Acute Services Review,
- 91 In 2004 agreement was reached that the Southern General site was the best location for the second maternity delivery unit, that being the only place where triple co-location (of maternity, obstetrics and paediatrics) could be secured. Triple co-location was considered an imperative aim. The Scottish Executive approved £100m funding for the new children's hospital in 2004.
- 92 In 2005 the **Performance Review Group**, approved £1.932m for Technical Advisers to assist in the development of a new South Glasgow Hospital project.
- 93 In January 2006 Helen Byrne joined the project as **Director of Acute Services Strategy, Implementation and Planning**⁴¹. She reported to the Chief Executive. In May 2006, following the creation of NHS GGC, a core **Project Team** was established, led by a **Project Director**⁴². Work began on the Outline Business Case for the new South Glasgow Hospital project, with updates shared with the **Performance Review Group** and the **NHS GGC Board**.
- 94 At this time several new groups were established. The **New Children's Hospital Steering Group** was designed to bring the Outline Business Case for the children's

⁴⁰ A32551720 - Greater Glasgow Health Board - Board Meeting - Concluding the Decisions on Greater Glasgow's Acute Services Review - 29 January 2002, Bundle of Documents for Oral hearings commencing from 16 September 2025, Bundle 48, Document 5, Page 297.

⁴¹ A51191433 - Helen Byrne - Final Statement – Glasgow 4 hearings – 03 April 2025, Bundle for Oral hearings commencing 13 May 2025, Witness Statement Bundle, Volume 3, Document 7, Page 203.

⁴² A48841151 - Alan Seabourne - Final Statement Glasgow 4 Hearings – 06 May 2025, Bundle for Oral hearings commencing 13 May 2025, Witness Statement Bundle, Volume 3, Document 5, Page 117.

hospital into line with the adult timeframe. This group was also tasked with overseeing non-clinical aspects of the children's hospital. For clinical aspects a **New Children's Hospital Clinical Advisory Group** was established along with associated subgroups for **Clinical Planning**, **Community Engagement** and **Clinical** matters. When this group ceased in May 2008, it was replaced by the **Clinical Planning Group**.

Clinical Output Specifications and ADB Codes

- 95 In August 2006, the Schedules of Accommodation (“SoAs”) had been agreed for the QEUH⁴³.
- 96 In February 2007, the Design Brief was being developed by GGC’s Project Team and its technical advisors⁴⁴. Alan Seabourne described the function of the Project Team as being “to support the construction and design people in order that they could fulfil their contract to the Health Board”⁴⁵. In March 2007, the User Groups were in the process of engaging with the Project Team and the Clinical Advisory Board to validate and complete the next stages in the emerging design of the QEUH/RHC. The proposed next steps at this stage were to complete the Outline Business Case (“OBC”), the Public Sector Comparator (“PSC”) and then move on to producing the Clinical Output Specifications (“COSs”) in advance of the Invitation To Participate (“ITP”) which would inform the bidders of the GGC’s requirements⁴⁶.
- 97 Mr Seabourne’s evidence was of the COSs in respect of the various departments of the hospitals being prepared through a User Group process led by Heather Griffin and Mairi Macleod, together with ‘health planner’ Iain Buchan. The COSs were the only information provided to a contractor to describe the particular service to be provided, and his expectation had been that a designer should revert on any points where they did not have an understanding of what might be required⁴⁷.

⁴³ A35423204 - Project Executive Group Meeting - 30 August 2006, Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 6, Document 18, Page 412.

⁴⁴ A35423300 - Project Executive Group Meeting - Enclosure 5 - Progress with Stage 1 Design Work - 14 February 2007, Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 6, Document 17, Page 419.

⁴⁵ A53053542 - Hearing Commencing 13 May 2025, 29 May 2025 – Transcript – Alan Seabourne - Column 3.

⁴⁶ A35423336 - Project Executive Group Meeting - 14 March 2007, Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 6, Document 18, Page 422.

⁴⁷ A53053542 - Hearing Commencing 13 May 2025, 29 May 2025 – Transcript – Alan Seabourne - Columns 36-38.

- 98 On 31 May 2007, the User Group for Haemato-oncology considered the SoA to be acceptable, with information obtained from the User Group going to be used to develop a COS to be used by bidders to inform their design⁴⁸. Subsequently in August 2008, Dr Hood commented that the adult haemato-oncology ward would need the following features to accommodate B7 Beatson patients: no opening windows, no chilled beams, space sealed and ventilated, positive pressure to rest of hospital, highly filtered air (probably best HEPA) and adequate numbers of positive pressured, HEPA filtered, sealed side rooms for neutropenic patients⁴⁹.
- 99 In 2008 the User Groups were meeting with the NHS GGC Project Team to advance the design specifications for specific clinical and other areas. In September 2008, the User Groups began to focus their attention on the ERs with support from the NHS GGC Project Team and technical advisors. It was expected that the COSs would be finalised by the NHS GGC Project Team at the end of October 2008⁵⁰.

Project Initiation

- 100 In May 2007 a Project Initiation Document is understood to have been agreed by the **Project Executive Group**.⁵¹ A minute of a 2006 joint meeting⁵² of the **Acute Services Review Programme Board** and the **Acute Services Review Project Executive Group** contains a short and clear report from Ms Byrne on the status of the project at that time and the identity of key team members,
- 101 Also in May, an Official Journal of the European Union notice was placed inviting bids for project management of the new SGH project, to include technical and design aspects of the project. This tender was issued on the basis of the project being PFI-

⁴⁸ A51667197 - Haemato-Oncology Group Meeting Notes - 31 May 2007, Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 1, Document 2, Page 12.

⁴⁹ A51666715 - Email chain - Myra Campbell and John Hood - Ventilation - Haemato-onc ward new South Glasgow Hospital - 15 to 22 August 2008, Bundle for Oral hearings Commencing 13 May 2025, Bundle 43, Volume 1, Document 4, Page 15.

⁵⁰ A51650419 - Project Team Meeting - 20 October 2008, Bundle for Oral hearings Commencing 13 May 2025, Bundle 43, Volume 6, Document 21, Page 432; A51650834 - Email from Alan Seabourne to Peter Moir, Heather Griffin and others - Approved Procurement Model - 21 October 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 6, Document 22, Page 436.

⁵¹ A35423198 - Project Executive Group Meeting - Project Initiation Document - December 2006, Bundle for Oral hearings Commencing 13 May 2025, Bundle 43, Volume 2, Document 1, Page 7.

⁵² A35423164 - ASR Programme/Project Executive Group Meeting - 26 July 2006, Bundle for Oral hearings commencing 13 May 2025, Bundle 42, Volume 2, Document 1, Page 5.

funded, with construction expected to start autumn 2009, with completion by end 2013.⁵³

⁵³ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Document 3, Page 226.

6. Governance and key events in 2008

- 102 In January 2008 the QEUH project underwent the Scottish Government Centre of Expertise Commissioned Programme and Project Management Gateway Review 01 (Business Justification).⁵⁴ Members of the Gateway 1 review team included Professor Steele and Mr Leiper.
- 103 In response to recommendations from the Gateway 1 review team on 18 March 2008 the **Performance Review Group** agreed⁵⁵ to recommendations that the **New Southside Hospitals Programme Board** would report to the **Acute Services Review Programme Board**; the Chief Operating Officer (then Mr Calderwood) was to chair **groups on Procurement and Finance** and on **Systems and Redesign**. A **Site Development Group** was to be established for the Southern General site. The new governance arrangements were submitted to the **Acute Services Review Programme Board** on 26 March 2008 and then to the Performance Review Group for approval⁵⁶.
- 104 The **New Children's Hospital Steering Group** ended with the intention to be replaced by a stakeholder group. The **New Children's Hospital Clinical Advisory Group** became the **Clinical Planning Group**, as noted above.
- 105 The OBC was approved internally by the NHS GGC Board on 19 February 2008⁵⁷ but was not approved by the Scottish Government's **Capital Investment Group (CIG)** and by the **Cabinet** until April 2008 as discussed below.

The change to the procurement model

- 106 Broadly speaking, in 2008 two procurement models were available to the Scottish Government when seeking to procure a major piece of infrastructure:

⁵⁴ A35423122 - Procurement and Finance Group - Gateway 2 - 12 December 2008, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 1, Page 5.

⁵⁵ A34866482 - Performance Review Group - Meeting Minutes - 18 March 2008, Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 11, Page 84.

⁵⁶ A34866478 - Performance Review Group - Meeting Minutes - 20 May 2008 - Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 12, Page 92.

⁵⁷ A34866470 - NHS Greater Glasgow and Clyde Board - Meeting Minutes - 19 February 2008 - Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 31, Page 402.

- 1) PPP/PFI: a cooperative arrangement with the private sector whereby, typically, the Government would contract out the design, build and maintenance/operation of a public facility to a private project delivery company, with costs repaid over a 25-to-30-year concession period. Typically, the contractor assumes liability for the design. This way most of the up-front finance is provided by the private sector, enabling the Government to increase national infrastructure investment without increasing public debt, at the cost of higher maintenance costs.
- 2) Standard procurement or Conventionally Procured Asset Model ("CPAM") A contractor designs and/or builds the project, with the public sector taking ownership and maintenance upon completion. "Design and Build" is where generally the employer sets out its requirements and the contractor submits a design for all or part of the works. In Design and Build the design risk is generally on the contractor, although the allocation depends on the contract.⁵⁸

107 Before 2007 PFI had been identified as the procurement method, the allocation of risk being a key feature of the purpose of a PFI contract. On 21 November 2006 the **Performance Review Group** received a paper that asked them to endorse as the preferred procurement option the procurement of the New South Glasgow and New Children's Hospitals as a single integrated PFI building.⁵⁹

108 In March 2007 NHS GGC were committed to that model, to the extent that when seeking means of enabling in-house service providers to participate in the procurement of the QEUH, such envisaged participation was restricted to the delivery of 'soft' facilities management services:

"In procuring the new Children's & Acute Hospital PFI Project, NHS Greater Glasgow & Clyde wants its existing in-house service providers to have an opportunity to participate in the process whenever possible. As discussed above, this can only be in the area of Soft FM Services as Hard FM must be undertaken by the private sector service provider to deliver the risk transfer which forms a core element of a PFI contract"⁶⁰

⁵⁸ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Document 3, Page 264.

⁵⁹ A36022954 - Performance Review Group - Procurement Strategy - 21 November 2006, Bundle for Oral hearings commencing 13 May 2025, Bundle 42, Volume 2, Document 2, Page 13.

⁶⁰ A35423343 - NHS GGC - Children's Hospital & Acute Hospital PFI Project - Soft Facilities Management - In-house Bidding Process & Support - March 2007, Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 2, Document 2, Page 24.

- 109 'Hard FM' services, i.e. those outside the scope of in-house service provision, were then defined as: "Grounds Maintenance, Estates Maintenance, Estates MC Works, Energy Management, Boiler house, Estates Workshop".⁶¹
- 110 At a **Project Executive Group Meeting** on 8 August 2007⁶² the question of funding model was discussed, in the context of a discussion of a letter from Mike Baxter (who was then Head of the SG Private Finance and Capital Unit) dealing with the new SGH project.
- "Colleagues from NHSGGC have been in discussion with the Scottish Executive around affordability in relation to the new hospitals. Douglas [Griffin] presented to the Board, three possible options (pure PPP, a hybrid model with PPP and Treasury funding and a pure Treasury model). A series of meetings were held with the SEHD, and a written response was received in early July. Tony Cocozza has developed an action plan to address the actions required. ...
- There would be £40m additional capital if single room provision is raised to 100% and considerable revenue implications."
- At section 11 it was recorded that "[Alan] Seabourne and the Team, together with Douglas Griffin and Peter Gallagher, are currently working to address the issues raised in Mike Baxter's letter".
- 111 A **Project Executive Meeting** was held on 24 October 2007 at which it was resolved to address funding models within the Outline Business Case: "*Undertake financial modelling of a number of procurement methods including various mixtures of public and private finance.*"⁶³
- 112 In January 2008 the Gateway Review 1 (Business Justification) made reference to alternative funding models being back on the table:

"The Outline Business Case (OBC) is currently being finalised – a paper which will reference the OBC is due to be submitted to the January 15th 2008 GGC Health Board

⁶¹ A35423343 - NHS GGC - Children's Hospital & Acute Hospital PFI Project - Soft Facilities Management - In-house Bidding Process & Support - March 2007, Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 2, Document 2, Page 25.

⁶² A35423375 - Project Executive Group – Meeting Minutes - 08 August 2007, Bundle for Oral hearings commencing 13 May 2025, Bundle 42, Volume 2, Document 3, Page 20.

⁶³ A35423425 - Project Executive Group – Meeting Minutes - 24 October 2007, Bundle for Oral hearings commencing 13 May 2025, Bundle 42, Volume 2, Document 4, Page 24-25.

meeting [sic]. Options appraisal work has been completed. Work is underway on funding considerations, which may lead to some limited re-scoping of the project.”⁶⁴

- 113 Section 5.2 of that document also recorded that a revision to the Outline Business Case would contain a reassessment of the procurement method:

“One major challenge to the project is the impact of the chosen procurement route. Early drafts of the OBC were predicated on a PFI procurement route, however, because of issues about affordability and a change of emphasis on alternative procurement options by the new government, a wider selection of procurement possibilities has been considered. The OBC will set out the implications of three different procurement routes for the project: PFI, PFI (non-profit distribution model) and traditional (design and build). The project team are confident that the financial implications of these options are manageable. However, the additional complexity, impact on timetable, and form of contracts are less clear although the project team will be seeking advice from the Board’s legal, financial and technical advisors.

It is likely that such a large project will be attractive to the market, and early resolution of the procurement model will help maintain interest.”⁶⁵

- 114 In February 2008 a workshop took place involving a wide range of key personnel including Mr Seabourne, Mr Calderwood, Ms Byrne, Mr Moir, Ms MacLeod, Ms Griffin, NHS GGC’s solicitors, Currie & Brown, the technical team behind the Exemplar Design, and Mike Baxter from Scottish Government.⁶⁶
- 115 By the time of finalisation of the Outline Business Case in February 2008, that position had hardened into an assessment that Design & Build was now the only realistic option for the project, the funding models being considered at that point together with questions of choice of site and of use of existing buildings. As the OBC put it:

“9.1.2 Background

Three options have been considered by the Board for implementing the projects. These are:

1. Greenfield Option – A new build whole site solution for all facilities currently provided at the Southern General site, together with a new Adult Acute and Children’s Hospitals, plus related facilities. Land for a Greenfield site would be required under this option.

⁶⁴ A33998293 - New South Glasgow Hospital Project - Gateway Review 1 (Business Justification) - January 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 42, Volume 2, Document 3, Page 37.

⁶⁵ A33998293 - New South Glasgow Hospital Project - Gateway Review 1 (Business Justification) - January 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 42, Volume 2, Document 3, Page 40-41.

⁶⁶ A35068196 – Email chain – P Moir and G Roy – Procurement Workshop 19 February 2008 – Attached briefing documents – 15 to 19 February 2008, Bundle for Oral hearings commencing 19 August 2024, Bundle 17, Document 34, Page 1805-1087.

2. “Option 1” – This option represents an entire new build solution on the current Southern General site for the Adult Acute and Children’s Hospitals, plus new build Laboratories, and other related services.

3. “Option 1A” – A new build provision on the Southern General site for the Adult Acute and Children’s Hospitals, plus the refurbishment of some existing facilities on the Southern General site to provide Laboratories and other related services.

For Options 1 and 1A, two scenarios have been considered. These are: 1) base case with single room provision at 57% within the Adult Hospital and; 2) alternative case with a 100% single room provision within the Adult Hospital.

In carrying out its [Value for Money] evaluation, the Board has considered three potential procurement routes:

1. Traditional Procurement – also referred to as the Conventionally Procured Asset Model (“CPAM”)

2. Private Finance Initiative (“PFI”)

3. Not for Profit Distribution Model (“NPD”). This model provides for the redistribution to the Board of any excess profit which may arise, in the form of “charitable surplus”.

9.1.3. Overview of results of Value for Money Assessment

For both the “base case” and “100% single rooms” scenarios, Option 1A represented the preferred option, when compared to the Greenfield site and Option 1, in terms of risk adjusted net present value. On this basis, a full value for money appraisal was carried out on Option 1A, examining the relative costs of each alternative procurement route. When assessed in risk adjusted net present value terms the three procurement routes produced very similar results, the variation *between the options being only 1.1%. In terms of ranking the NPD model ranked first, followed by CPAM then PFI.*

The PFI and NPD options are based on a senior bank debt funding solution. For a project of this scale, it might be that funders would examine the use of a funding solution based on *bond finance as this approach may offer the possibility of lower cost funding. We have tested this sensitivity and the results indicate that this approach could potentially lower the risk adjusted cost for both the PFI and NPD by 2.2% to 2.5%. However at this time there are a number of difficulties in securing this form of funding, notably the state of international credit markets together with the fact that no NPD project has to date actually used this form of funding.*⁶⁷

116 The conclusion reached was in favour of “CPAM”:

“NHS Greater Glasgow & Clyde (NHSGG&C) has an established record of sound financial management and has consistently achieved its targets. The Board’s financial

⁶⁷ A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1162.

plan forecasts that total expenditure will be contained within its overall funding envelope thereby enabling it to secure achievement of its revenue financial target by managing within its “revenue resource limit” (RRL).

The financial plan incorporates provisions for the latest forecast of additional funding required to support implementation of the Acute Services Review (e.g. Beatson Cancer Centre, and Stobhill and Victoria new hospitals).

The baseline assumption is that the new South Glasgow and new Children’s Hospitals and new Laboratory facility are revenue neutral.

Given the above, the CPAM procurement route is considered the *only deliverable option*.⁶⁸

- 117 In Glasgow 4 Part 1, Mr Seabourne spoke to being ‘on the periphery’ of discussions about resourcing, which included issues brought about by changes to single rooms and cleaning costs. When it came to maintenance costs, however, he focused upon risk management and attempts to mitigate costs by seeking an extended liability period of seven years where the contractor would take on building structure and building services risks. In the event only two years was achievable, and that did not amount to an agreement for Multiplex to take on maintenance obligations for the building⁶⁹. Ms Byrne explained that Alex McIntyre, then Director of Estates, and Alan McCubbin, head of finance for capital, alongside the Acute Director of Finance Douglas Griffin, would have been involved in the financial discussions.⁷⁰

Decision to Adopt a Design and Build Approach

- 118 At meeting of the **Procurement and Finance Group** on 30 June 2008 an update on procurement process included details of companies that were considering bidding, the budget for technical advisors and other support for the project, the potential role for Partnerships UK and discussions with Scottish Government CIG about the project.⁷¹
- 119 On 16 September 2008 the **Performance Review Group** was presented with a

⁶⁸ A32552230 - NHS GGC Outline Business Case – Section 9.2 - February 2008, Section 9.2, Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 2, Document 4, Page 46.

⁶⁹ A53053542 - Hearing Commencing 13 May 2025, 29 May 2025 – Transcript – Alan Seabourne - Columns 24-27.

⁷⁰ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 – Transcript – Robert O’Donovan and Helen Byrne - Columns 79-80.

⁷¹ A35423098 – Procurement and Finance Group – Meeting Minutes – 30 June 2008, Bundle for Oral Hearings commencing 13 May 2025, Bundle 42, Volume 2, Document 5, Page 27.

paper⁷² summarising an attached report from Ernst & Young whereby the most recent work on procurement method had been considered and summarised, with further discussion with technical advisers to follow. Among the points summarised is that Design & Build is recognised as the most appropriate approach:

“The outcome of the procurement analysis therefore proposes that the most appropriate procurement method to achieve the Board’s objectives is a two stage Design and Build process with rapid selection to a single preferred bidder at stage one using the competitive dialogue procedure. At stage two the preferred bidder develops the detailed design in conjunction with the Board.”⁷³

- 120 The paper does not elaborate on the analysis leading to that particular conclusion, but the 2 September 2008 draft Market Sounding Report from Ernst & Young reached the conclusion that the procurement should use target price, competitive dialogue and NEC 3 to procure the new hospital. This paper also sets out that:

The key objectives of the Board are to identify a procurement process which:

- Allows for a significant degree of design development discussions to occur prior to the appointment of a single contractor.
- Offers the possibility of market innovation in the design development process.
- Provides for competition up to the point when the Guaranteed Minimum Price is largely established.
- Meets the delivery timescales.⁷⁴

- 121 The report to the 16 September 2008 **Performance Review Group** sets out an intention that the proposed procurement method was to be discussed and tested with the newly appointed Technical Advisers and Partnerships UK (PUK) and then be subject to Board approval at the Board meeting on 21 October 2008. The choice of procurement method was discussed in detail at a **Procurement and Finance Group** meeting on 1 October 2008.⁷⁵ The procurement model was reported to the **NHS**

⁷² A35422662 - NHS GGC Performance Review Group - Report on Procurement Strategy - 16 September 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 35, Page 1811.

⁷³ A35422662 - NHS GGC Performance Review Group - Report on Procurement Strategy - 16 September 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 35, Page 1811.

⁷⁴ Final version included as A51650360 - Ernst & Young - NHS Greater Glasgow & Clyde - Market Testing in Relation to the New Southern General - 02 September 2008, Bundle for Oral Hearings commencing 13 May 2025, Bundle 43, Volume 3, Document 6, Page 440.

⁷⁵ A35423152 - Procurement and Finance Group – Meeting Minutes - 01 October 2008 – Bundle for Oral hearings commencing 13 May 2025, Bundle 42, Volume 2, Document 6, Page 30.

GGC Board on 21 October 2008 supported by a four-page report from the Chief Operating Officer and Director of Acute Services Strategy, Implementation and Planning “Procurement Model for the Construction of the New Development on the Southern General Hospital Site⁷⁶. The decision was:

“That the Procurement Model, as recommended by the New South Glasgow Executive Board and supported by the Board’s advisers, of the two-stage Design and Build process with rapid selection of a single preferred bidder at stage one using the competitive dialogue procedure, be approved.”⁷⁷

- 122 Despite the recommendation of the use of NEC 3 by Ernst & Young by December 2008, Shepherd & Wedderburn (the solicitors for NHS GGC) and Currie & Brown prepared a 'Procurement Paper' for NHS GGC⁷⁸ which proceeded on the basis that a decision had been made to proceed with the project by means of Design & Build, and then considered both the Joint Contracts Tribunal (“JCT”) and the New Engineering Contract (“NEC”) as options. The paper recommended that procurement be by the competitive dialogue procurement procedure and using NEC3 as the preferred form of contract “due to the importance of time and cost drivers to the Board as well as the cultural fit with the collaborative approach and Target Price outlook of the procurement process and the avoidance of significant bespoke drafting that would be required if JCT were utilised.”
- 123 NHS GGC accepted the advice from Ernst & Young, its solicitors, Currie & Brown and others and decided to deliver the project via a two-stage design and build route using public capital funding, a Target Cost, Competitive Dialogue, and the NEC3 form of contract.

The Scope of the project in the Outline Business Case

- 124 Inquiry TOR 2 requires the Inquiry to “examine the arrangements for strategic

⁷⁶ A34866463 – Board Paper – Procurement Model for the Construction of the New Development on the Southern General Hospital Site – 21 October 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 37, Document 35, Page 473.

⁷⁷ A34866476 – NHS Greater Glasgow and Clyde Board – Meeting Minutes – 21 October 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 37, Document 34, Page 457.

⁷⁸ A35423137 - New South Glasgow Hospitals Procurement Paper - prepared by Shepherd & Wedderburn and Currie & Brown Ltd - December 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 2, Document 8, Page 86.

definition, preparation and brief, and concept design". These are the first three stages of the RIBA Plan of Work 2020⁷⁹ and whilst this particular formulation of the stages of building design dates only from 2020, the extent to which by the time the OBC had been approved the project to build the new SGH had been defined and understood is an essential question for the Inquiry.

- 125 As Counsel to the Inquiry have recognised during the Glasgow 4, Part 1 hearing, the focus of the Inquiry is on the water and ventilation systems of the new SGH and therefore a key question to ask is the extent to which the potentially deficient features of the water and ventilation systems of the QUEH might have their roots in a lack of strategic definition, preparation and brief and any gaps in the concept design.
- 126 In that context it is notable that neither the OBC⁸⁰ nor its appendices⁸¹ make specific reference to "ventilation", "SHTM" or "temperature". It is however stated that the new hospitals would provide "the highest quality and safety standards".⁸²
- 127 The section of the main document that deals with the case for the proposed RHC, "4.5.1 Clinical Effectiveness and Patient Safety" contains the statements that:

"Healthcare acquired infections remain a major source of morbidity and prolonged hospital stay. The new hospital will be designed in accordance with best practice in terms of infection control principles and should thereby minimise the occurrence of HAI and the allied risks.

...

Finally, although difficult to quantify, there is evidence that the construction and environment of a hospital can have a direct impact on patient well-being and recovery times. The use of modern design principles, enhanced by other influences (e.g. artwork) that improve the built environment, should have a positive influence on patients."⁸³

⁷⁹ <https://www.architecture.com/knowledge-and-resources/resources-landing-page/riba-plan-of-work>

⁸⁰ A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1077.

⁸¹ A35289470 - NHS GGC Outline Business Case Appendices (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024 Bundle 17, Document 29, Page 1230.

⁸² A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1085.

⁸³ A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1118.

128 The section of the main document that deals with the case for the proposed adult hospital, “5.7 Project Objectives” of the OBC, contains as a key objective:

“Provision of modernised accommodation and improved facilities which meet the needs of patients, visitors and staff and are appropriate to the provision of modern health services, promoting a healing environment and improved patient access;”⁸⁴

129 There is also reference to how “The facilities must be readily adaptable to changing clinical practice as the future unfolds”⁸⁵

130 Section 6.7 Design Quality of the OBC makes specific reference to HDL 58 ‘A Policy on Design Quality for NHS Scotland’⁸⁶ as follows:

“There has been concern that many design solutions for public buildings were previously not of a sufficient high quality to meet hospital and public aspirations. Much work has been undertaken on design visioning, such that quality aspirations can be successfully built into the output specifications and objectively assessed when bids are being compared.

In line with HDL 58 ‘A Policy on Design Quality for NHS Scotland’ published in 2006 the Board appointed two Design Champions and approved a Design Action Plan in October 2007. The Design Action Plan reinforces the Board’s commitment to achieving high quality design which promotes good well-being environment within the New Children, Adult hospitals and new labs build. This aspiration applies to both the internal and external environment of the buildings through the use of good design, light, colour, building materials and landscaping with user needs a priority. User needs have been identified through a programme of meetings with clinical sub-groups for each hospital overseen by a Clinical Advisory Board and a series of focus groups held with patient and carer groups representatives (for more detail see section 17).

It is the Board’s wish to deliver an iconic development that will contribute positively to the local context and be viewed with pride by the people of Glasgow.”

131 Section 6.9.4 addresses ‘Energy Targets and Use’ sets a high standard:

“The design priority is to invest in the highest quality building fabric and envelope design to reduce the demand for energy to the lowest economically possible level as these have, in general, the lowest technical risk associated with them and are often the

⁸⁴ A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1140.

⁸⁵ A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1140.

⁸⁶ A37215538 - HDL (2006) 58 – Letter from the Interim Director of Finance, Finance Directorate to Chief Executives dated 23 October 2006, “A Policy on Design Quality for NHSSCOTLAND”, Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 1, Document 4, Page 126.

least easy to substantially change over the building life. The energy systems within the buildings have a much shorter life, are easier to adapt and will be regularly replaced and upgraded over time based on their own life cycle and the changing technical, economic, regulatory and social pressures at the time of replacement. The building infra- structure is to be arranged to facilitate as far as possible the likely changes that will be made.”

- 132 In the appendices⁸⁷, Appendix 13 sets out the Project Management Risks and contains at ‘4’:⁸⁸

Risk	Description	Consequence of Occurrence	Risk Management Policy
4. Failure to design to brief	Failure of design team to translate the requirements of NHSGG&C into the design	Failure to design to specification would result in changes and delays to the build	There will be on-going involvement of users in the design and evaluation of bidders and close monitoring of the design process by the Project Team

- 133 There does not appear to be a recognition that one response to a failure to design to the brief could be that the Project Team could simply accept the non- compliant design, or that lack of strategic definition, preparation or brief might result in a non-compliant design that the Project Team might still accept.
- 134 Appendix 18 identifies “Compliance with Building Requirements” as a benefit⁸⁹, but makes no specific reference to ventilation.
- 135 The OBC referenced the involvement of technical advisors on the project⁹⁰ ‘A Policy on Design Quality for NHS Scotland’ included⁹¹:

⁸⁷ A35289470 - NHS GCC Outline Business Case Appendices (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 29, Page 1230.

⁸⁸ 35289470 - NHS GCC Outline Business Case Appendices (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 29, Page 1289.

⁸⁹ A35289470 - NHS GCC Outline Business Case Appendices (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 29, Page 1299.

⁹⁰ A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1147.

⁹¹ A37215538 - HDL (2006) 58 – Letter from the Interim Director of Finance, Finance Directorate to Chief Executives dated 23 October 2006, “A Policy on Design Quality for NHSSCOTLAND”, Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 1, Document 4, Page 127.

“The Client’s Design Advisers must be retained throughout the construction process in order to monitor the quality of design and finishes.”

- 136 It is also noted that the OBC appendices mentioned a Procurement & Finance Group whose responsibilities included: “attending to all technical requirements” arising during procurement and hence overseeing and approving the technical output specs as well as “all changes to contract/design/specification”.⁹² The extent to which the Procurement & Finance Group and its successor did attend to all technical requirements, approved the technical output specifications and was aware of “all changes to contract/design/specification” is addressed below.
- 137 It is the Inquiry Team’s provisional submission that a reader of the OBC would assume that SHTM 03-01 was being complied with. The OBC stated the hospital would provide “the highest quality and safety standards”⁹³ and be designed with “best practice in terms of infection control principles”⁹⁴. The OBC also referenced compliance with ‘A Policy on Design Quality for NHS Scotland’⁹⁵. That policy included a requirement for health boards to use ADB⁹⁶; extreme care was recommended for Scottish users to ensure ADB was compliant with SHTMs⁹⁷. The policy also stressed the need to follow SHFN 30⁹⁸.

Approval of the OBC

- 138 The OBC was approved internally by the **NHS GGC Board** on 19 February 2008⁹⁹ following consideration of a detailed paper prepared by Helen Byrne, Director of

⁹² 35289470 - NHS GCC Outline Business Case Appendices (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 29, Page 1304 & 1310.

⁹³ A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1085.

⁹⁴ A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1118.

⁹⁵ A35289377 - NHS GGC Outline Business Case (public version) - February 2008, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 28, Page 1153.

⁹⁶ A37215538 - HDL (2006) 58 – Letter from the Interim Director of Finance, Finance Directorate to Chief Executives dated 23 October 2006, “A Policy on Design Quality for NHSSCOTLAND”, Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 1, Document 4, Page 125.

⁹⁷ A37215538 - HDL (2006) 58 – Letter from the Interim Director of Finance, Finance Directorate to Chief Executives dated 23 October 2006, “A Policy on Design Quality for NHSSCOTLAND”, Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 1, Document 4, Page 133.

⁹⁸ A37215538 - HDL (2006) 58 – Letter from the Interim Director of Finance, Finance Directorate to Chief Executives dated 23 October 2006, “A Policy on Design Quality for NHSSCOTLAND”, Bundle for Oral hearing commencing 9 May 2022, Bundle 3, Volume 1, Document 4, Page 132.

⁹⁹ A34866470 - NHS GGC Board – Meeting Minutes - 19 February 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 37, Document 31, Page 404.

Acute Services, Strategy, Implementation and Planning¹⁰⁰. It was received by the **CIG** on 18 February 2008 subject to board approval the following day, considered by the CIG on 26 February 2008 and approved in April 2008. CIG members appear to have only been given seven days to consider the OBC and make comments.¹⁰¹

- 139 The Inquiry does not have the exact date of approval of the OBC by **Cabinet**, but it was provisionally scheduled to be discussed at Cabinet on 8 April 2008, and as discussed above the Inquiry holds a pre-cabinet paper by Shona Robison MSP, the then Minister for Public Health which discusses the funding choice within the OBC.¹⁰² NHS GGC were informed of the decision to approve by letter on 21 May 2008.¹⁰³ The Inquiry does not hold minutes of the meeting of the CIG that approved the OBC.

The appointment of Currie & Brown as Technical Advisors

- 140 As discussed above, in May 2007 NHS GGC had sought tenders for project management of the new SGH project, to include technical and design aspects of the project. In 16 September 2008 the **Performance Review Group** received and noted¹⁰⁴ a paper¹⁰⁵ from Helen Byrne, the **Director of Acute Services Strategy, Implementation and Planning**, requesting that PRG note that the process to appoint a new Technical Adviser team for the procurement of the new SGH was complete and that the successful team was led by Currie & Brown Ltd. Currie and Brown were formally appointed on 2nd September 2008¹⁰⁶. That letter stated that:

¹⁰⁰ A34866484 – Board Paper – New Southside Hospital – Approval of the Outline Business Case – 19 February 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 37, Document 32, Page 413.

¹⁰¹ A35068126 - Email chain from G Roy to P Martin, J Connaghan, P Rhodes, C Brennan and others - Outline Business Case circulation to other recipients - 18 to 21 February 2008, Bundle of Documents for Oral hearings commencing from 16 September 2025, Bundle 48, Document 6, Page 307.

¹⁰² A35289380 - Scottish Cabinet - New Southern and Children's Hospital Project, Glasgow – Draft Paper by The Minister for Public Health - April 2008, Bundle of Documents for Oral hearings commencing from 16 September 2025, Bundle 48, Document 7, Page 308.

¹⁰³ A35100837 - Letter from K Woods to T Drivers - New South Glasgow Hospitals - Outline Business Case - 21 May 2008, Bundle of Documents for Oral hearings commencing from 16 September 2025, Bundle 48, Document 8, Page 329.

¹⁰⁴ A34866479 – Performance Review Group – Meeting Minutes – 16 September 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 34, Document 15, Page 117.

¹⁰⁵ A51258861 – Performance Review Group Paper – Appointment of Technical Advisors for the New South Glasgow Hospitals Project – 16 September 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 34, Document 16, Page 120.

¹⁰⁶ A32372008 – Letter from NHS GGC to Currie & Brown – 02 September 2008, Bundle for Oral hearings commencing 19 August 2024, Bundle 17, Document 38, Page 1902.

“The appointment is initially for Stage 1A – Preparation of Employers Requirements Documentation, with appointment to successive stages subject to approval from the Board, all as set out in ITT documentation.

- 141 When, in September 2009, Brookfield Multiplex provided comments on the proposed contractual terms between them and NHS GGC the proposed project manager was identified as being Currie & Brown¹⁰⁷.
- 142 The Currie & Brown team included M&E design engineers - Wallace Whitte, Healthcare Planner – Buchan Associates and Architect Advisor, HLM Architects and remained fully appointed throughout the whole of Stage 1 until the scope of their work was reduced by letter from Mr Moir to Mr Ross of Currie & Brown on 18 January 2010¹⁰⁸.
- 143 The reason for such a reduction in scope of the role of Currie & Brown and the impact on the existence of a team of ‘technical consultants’ falls outwith the scope of this PPP, but in evidence Ms Byrne accepted that, given that the appointment of Currie & Brown had been reported to the Performance Review Group, the decision to restrict their role should have been reported to the **Performance Review Group**¹⁰⁹.

Advice from Partnerships UK

- 144 By an exchange of letters in July 2008, Partnerships UK (PUK) were commissioned by NHS GGC to work with the Project Team on the new SGH project to provide additional support to the Board.¹¹⁰ In due course the Chief Executive PUK, James Stewart, would become a voting member of the **New South Glasgow Hospitals and Laboratory Project Executive Board** (‘NSGHLPEB’).

- 145 On 15 December 2008, Clare Phillips of Partnerships UK gave Mr Seabourne advice

¹⁰⁷ A51651834 - Brookfield - Contract Conditions - 10 September 2009, Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 6, Document 29, Page 498.

¹⁰⁸ A32660883 – Letter from NHS GGC to Currie & Brown – 18 January 2010, Bundle for Oral hearings commencing 19 August 2024, Bundle 17, Document 74, Page 2870 and A32421344 – Letter from Currie & Brown to NHS GGC – 26 February 2010, Bundle for Oral hearings commencing 19 August 2024, Bundle 17, Document 39, Page 1903.

¹⁰⁹ A53111713 - Hearings Commencing 13 May 2025, 30 May 2025 – Transcript – Robert O’Donovan and Helen Byrne, Column 85.

¹¹⁰ A35422702 – Acute Services Division – Memorandum from Robert Calderwood – 24 July 2008, Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 3, Document 5, Page 433.

about positive steps that could be taken to meet the objective that the M&E system of the QEUH/RHC was fit for purpose, reliable and functional. The recommended steps were: careful specification, enhanced site supervision, handover criteria, enhanced handover and commissioning procedures, creation of a joint building management team (contractor and GGC), and independent certification. She also suggested more commercial steps which were: performance bonds which over-run completion, deferred milestone payments, extended retention periods (of 3 years post-handover), 5 year extended compliance warranty post-handover, and performance payments¹¹¹.

¹¹¹ A51650503 - Email chain - Claire Phillips and Alan Seabourne - Extended Compliance - 15 December 2008 to 05 January 2009, Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 6, Document 23, Page 439.

7. Governance and key events in 2009

Gateway Review 2

- 146 Gateway Review 2¹¹² was carried out between 27 and 29 January 2009 and issued to the then Senior Responsible Owner, Helen Byrne, on 29 January 2009. The result of Gateway Review 2 was reported to the Acute Services Review Programme Board on 20 March 2009 by Mr Calderwood, then NHS GGC Chief Operating Officer.¹¹³
- 147 The review report makes the following references that appear relevant to standards to be applied to the ventilation systems for the proposed new SGH:
- Within the project aims a reference is made to the hospital being “state of the art in all aspects of its design, construction and operation”
- 148 The authors of the report describe, at Appendix A, the purpose of a Gateway Review 2 as including “For construction projects, confirm compliance with health and safety and sustainability requirements”.
- 149 Ms Byrne explained in her evidence that one of the recommendations of Gateway Review 2 was to reverse the governance changes made by Gateway Review 1 and in due course the **New South Glasgow Hospital Executive Board** and the **Procurement and Finances Group** were merged to create the **New South Glasgow Hospitals and Laboratory Project Executive Board** (‘NSGHLPEB’).¹¹⁴

Procurement Process Commences

- 150 The formal procurement process began in February, when a fresh advert for construction of the new SGH was placed in the Official Journal of the European Union. Five bidders expressed interest, with expressions of interest subsequently being reduced in May to the three bidders who then commenced the Competitive Dialogue

¹¹² A34872853 - New South Glasgow Hospital Project - Gateway Review 2 (Delivery Strategy) - February 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 2, Document 9, Page 108.

¹¹³ A37216946 - ASR Programme Board Meeting - 20 March 2009 – Bundle for Oral hearing commencing 13 May 2025, Bundle 42, Volume 2, Document 8, Page 39.

¹¹⁴ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Page 34, Column 64.

process on 12 May 2009, with proposals presented on 11 September 2009 and formal submission and evaluation thereafter.¹¹⁵

- 151 These developments were also reported to the **Acute Service Review Programme Board** on 8 June 2009.¹¹⁶ It is not immediately obvious whether the Acute Service Review Programme Board was making decisions at this stage.

Choice of three bidders for the Competitive Dialogue

- 152 The reduction to the three bidders who would commence the Competitive Dialogue Process was decided by a joint meeting of the **New South Glasgow Hospital Executive Board** and the **Procurement and Finances Group** on 8 April 2009, which considered a report on the Prequalification Questionnaire (PQQ) process.¹¹⁷ Those three bidders were Brookfield Europe, Laing O'Rourke Construction Ltd and Balfour Beatty Group Ltd.
- 153 The Brookfield Pre-Qualification Questionnaire ("PQQ") Evaluation scored a total of 371.1 points. However, GGC's legal advisors, Shepherd & Wedderburn ("S&W"), Susan Logan and Mark McAllister awarded very low points in relation to technical ability. No financial scoring was awarded¹¹⁸. On 20 March 2009, the PQQs were returned by all bidders having been issued earlier on 10 February 2009. The PQQ were evaluated by the following individuals on the Evaluation Panel: Alan Seabourne, Hugh McDerment, Alan McCubbin, Tony Cocozza, Simon Fraser (S&W), Michael McVeigh (Ernst & Young), and Jim Hackett (Currie & Brown). The PQQ scores were weighted more on technical ability (46%) and to a lesser extent financial standing (26%) than bidder details and information on advisers. On 1 April 2009, an overall score was agreed and a draft report issued. The Evaluation Panel recommended three bidders proceed to the ITPD stage: Balfour Beatty Group Limited, Brookfield

¹¹⁵ A35560076 - NHS GGC ASR Programme Board Meeting Minute - 8 June 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 3, Page 26.

¹¹⁶ A35560076 - NHS GGC ASR Programme Board Meeting Minute - 8 June 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 3, Page 26.

¹¹⁷ A51651448 – Joint Procurement & Finance Group/New South Glasgow Executive Board – Meeting Minutes – 08 April 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 42, Volume 2, Document 9, Page 49.

¹¹⁸ A51651444 - NSGH PQQ Evaluation Model - Brookfield - Undated, Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 6, Document 65, Page 1121.

Europe LP, and Laing O'Rourke Construction Limited ("LOR")¹¹⁹. On 30 April 2009, the ITPD Volume 3 documentation was updated and a new inclusion made by Currie & Brown was "7.0 HTM/SHTM Compliance Statement"¹²⁰.

Approval of the Employer's Requirements

154 On 7 April 2009, RDSs for Generic Rooms were prepared:

- The RDS for 'isolation single room; Critical care' has 6 ACH and balanced pressure relative to the adjoining space and it is specifically stated in the notes section that it is to provide protective isolation¹²¹. This air change rate is clearly not in accordance with SHTM 03-01 (2009) Appendix 1 – Table A1¹²². However, the ceiling is recorded as being smooth, imperforate and jointless which is in accordance with the Haemato-oncology COS¹²³.
- The RDS for single room isolation in the RHC has no specified ACH and is balanced pressure to the adjoining space. In the notes section there is reference to HBN text but not SHTM 03-01¹²⁴. The ceiling was not required to be smooth and jointless.

155 That same joint meeting of the **New South Glasgow Hospital Executive Board** and the **Procurement and Finances Group** on 8 April 2009 also extended the Stage 1A process for the production of the Employers' Requirements which had the effect of extending the bid return date to 11 September 2009¹²⁵.

156 A further joint meeting of the **New South Glasgow Hospital Executive Board** and

¹¹⁹ A35422584 - GGC NSGH Project Pre-Qualification Questionnaire Report - 17 February 2009, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 2, Page 22.

¹²⁰ A51652388 - NSGH - ITPD Vol3 - draft 3 - current rv3 - Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 6, Document 25.1, Page 461.

¹²¹ A51909742 - ADB - Room Environmental Data - Generic Rooms - 07 to 23 April 2009 - Extract pages 17, 18 and 27, Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 6, Document 24, Page 443.

¹²² A33010802 - Draft for Consultation SHTM 03-01 Part A Design and Validation, March 2009 - Bundle for Oral hearing commencing 19 August 2024, Bundle 16, Document 5, Page 483.

¹²³ A51909742 - ADB - Room Environmental Data - Generic Rooms - 07 to 23 April 2009 - Extract pages 17, 18 and 27 – Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 6, Document 24, Page 444.

¹²⁴ A51909742 - ADB - Room Environmental Data - Generic Rooms - 07 to 23 April 2009 - Extract pages 17, 18 and 27 – Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 6, Document 24, Page 445.

¹²⁵ A51651448 – Joint Procurement & Finance Group/New South Glasgow Executive Board – Meeting Minutes – 08 April 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 42, Volume 2, Document 9, Page 49.

the **Procurement and Finances Group** was held on 24 April 2009¹²⁶. The joint meeting considered reports on the Evaluation Methodology and the Review of the Invitation to Participate in Dialogue by WS Atkins. Despite no update on the Stage 1A process for the production of the Employers' Requirements the joint group gave approval to proceed to tender. The meeting was chaired by Ms Byrne and she has explained that she had not read the Employers' Requirements but had relied on the Project Team and the Board's Technical Advisors to carry out a process to develop them.

157 These events were reported by Helen Byrne to **the Performance Review Group** on 19 May 2009¹²⁷ at what she described as "high level"¹²⁸. The paper by Ms Byrne¹²⁹ also included reference to the governance changes discussed below.¹³⁰

158 The Employers Requirements had been produced with the assistance of the Currie & Brown technical team and took the form set out in Volume 2/1 of the Invitation to Participate in Competitive Dialogue (ITPD)¹³¹. It was Helen Byrne's evidence that the Employers Requirements were finalised in May 2009, but no further meetings of the **New South Glasgow Hospital Executive Board** and the **Procurement and Finances Group** took place before the new single **New South Glasgow Hospitals and Laboratory Project Board** ('NSGHLPEB') met for the first time on 1 June 2009. Ms Byrne stated in her oral evidence that the approval of the Employer's Requirements went to the PRG in May 2009¹³².

159 The Employer's Requirements¹³³ did require compliance with a range of NHS

¹²⁶ A52747139 - Joint New South Glasgow Executive Board/Procurement and Finance Group - Meeting Minutes - 24 April 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 7, Document 6, Page 15.

¹²⁷ A51258946 - Performance Review Group - Meeting Minutes - 19 May 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 20, Page 134.

¹²⁸ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Page 31, Column 57.

¹²⁹ A51258908 - Performance Review Group Paper - Update on the New South Glasgow Hospital's and New Laboratory Project - 19 May 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 21, Page 145.

¹³⁰ A51258908 - Performance Review Group Paper - Update on the New South Glasgow Hospital's and New Laboratory Project - 19 May 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 21 at Item 2, Page 147.

¹³¹ A35761303 - New South Glasgow Hospitals (NSGH) Project Invitation to Participate in Competitive Dialogue: Volume 2/1 Employer's Requirements (Hospitals) - Bundle for Oral hearing commencing 13 May 2025, Bundle 46, Volume 3, Document 1, Pages 5 – 239.

¹³² A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Page 31, Column 57.

¹³³ A35761303 - New South Glasgow Hospitals (NSGH) Project Invitation to Participate in Competitive Dialogue: Volume

Guidance, including the Draft for Consultation SHTM 03-01 Part A and Part B¹³⁴ and mandated that air changes should be “in accordance with CIBSE guides, SHTMs, HTMs and Building Regulations”¹³⁵ but left open options as between natural and mechanical ventilation, chilled beams and all air ventilation, and issues around energy requirements. The Employer’s Requirements did not specify environmental requirements for particular rooms/wards intended for immuno-compromised patients other than by reference to the Clinical Output Specifications.¹³⁶ According to the Employer’s Requirements accommodation was either to be in a single bedroom or a PPVL room compliant with SHPN 04.

- 160 On 1 May 2009, the ITPD documentation was sent out to the three selected bidders. The deliverables required from bidders were in three areas: project scope and commercial, works information/Employer’s Requirements, and Bid Deliverables & Evaluation¹³⁷.
- 161 Mr Seabourne explained that during the period for Competitive Dialogue it was Currie & Brown who were organising meetings. His impression was of a process which was light on design and information, and in which GGC would require that guidance be met but would not take an active role in explaining how that should be done and would leave the question of derogations or ‘alternative solutions’ up to Currie & Brown¹³⁸.
- 162 Mr Baird of Currie & Brown described their work as “the glue in the middle”¹³⁹. The purpose of the Employer’s Requirements was a specification to inform the bid:

2/1 Employer’s Requirements (Hospitals) - Bundle for Oral hearing commencing 13 May 2025, Bundle 46, Volume 3, Document 1, Pages 5 – 239.

¹³⁴ See: A35761303 - New South Glasgow Hospitals (NSGH) Project Invitation to Participate in Competitive Dialogue: Volume 2/1 Employer’s Requirements (Hospitals) - Bundle for Oral hearing commencing 13 May 2025, Bundle 46, Volume 3, Document 1, Pages 29 and 31.

¹³⁵ A35761303 - New South Glasgow Hospitals (NSGH) Project Invitation to Participate in Competitive Dialogue: Volume 2/1 Employer’s Requirements (Hospitals) - Bundle for Oral hearing commencing 13 May 2025, Bundle 46, Volume 3, Document 1, Page 169, Section 8.2.11.8.

¹³⁶ A35761303 - New South Glasgow Hospitals (NSGH) Project Invitation to Participate in Competitive Dialogue: Volume 2/1 Employer’s Requirements (Hospitals) - Bundle for Oral hearing commencing 13 May 2025, Bundle 46, Volume 3, Document 1, Page 177, Section 8.2.14.6.

¹³⁷ A51258908 - Performance Review Group Paper - Update on the New South Glasgow Hospital’s and New Laboratory Project - 19 May 2009- Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 21, Page 146.

¹³⁸ A53053542 - Hearing Commencing 13 May 2025, 29 May 2025 – Transcript – Alan Seabourne, Columns 29 – 32.

¹³⁹ A53087578 - Hearing Commencing 13 May 2025, 28 May 2025 – Transcript – Mark Baird and John Redmond, Column 14.

“the Employer’s Requirements form a portion of the invitation to participate in competitive dialogue. So, from a context point of view, they’re a constituent part of that suite that will be issued to the market for bidders. So the Employer’s Requirements therefore

capture what the employer, so the NHS in this context, want to buy, effectively. So, it’s laying out what we want, the minimum standards, etc., that are required, the minimum requirements in a variety of areas, and that’s articulated in written and drawn information”¹⁴⁰

- 163 It was Mr Baird’s view the NHS GGC Project Team would have been well aware of the prospect that the contents of the Employer’s Requirements might change at any time up to conclusion of negotiations¹⁴¹. The final version would come about from Currie & Brown saying, “Here’s what we consider the final version to be from working through the process.”, followed by Board approval. He would not himself see Board approval; that was the step which he assumed followed after presentation to Mr Seabourne of what Currie & Brown considered to be the final version¹⁴².

IPC Specification of Ventilation Requirements

- 164 Whilst the joint meetings of the **New South Glasgow Hospital Executive Board** and the **Procurement and Finances Group** in April 2009 addressed to some degree the Employers Requirements and these were then approved for the start of the Competitive Dialogue Process, it was not until a meeting on 18 May 2009 at the Hillington project office that decisions were made on the Infection Control input into the ventilation system of the adult hospital.
- 165 The Minute¹⁴³ recorded that the meeting agreed “a final infection control position with regard to the New South Glasgow Adult Hospital”, that extended to the ventilation of the adult Haemato-oncology Ward and the choice of the type of isolation rooms. In respect of the adult Haemato-oncology Ward the ventilation requirements defined in this minute contain less detail than the August 2008 requirements set out by Dr Hood

¹⁴⁰ A53087578 - Hearing Commencing 13 May 2025, 28 May 2025 – Transcript – Mark Baird and John Redmond – Column 12.

¹⁴¹ A53087578 - Hearing Commencing 13 May 2025, 28 May 2025 – Transcript – Mark Baird and John Redmond - Columns 4-7.

¹⁴² A53087578 - Hearing Commencing 13 May 2025, 28 May 2025 – Transcript – Mark Baird and John Redmond - Columns 15-17.

¹⁴³ A38360510 - Various emails between 12 June 2009 and 07 September 2015 - Bundle for Oral hearing commencing 19 August 2024, Bundle 14, Volume 1, Document 3, Page 75.

set out above and in respect of the isolation rooms the requirements differ significantly from those set out in section 8.2.14 of the Employers Requirements¹⁴⁴ which define the hospital isolation rooms by reference to SHPN 4 to be Positive Pressure Ventilated Lobby Rooms. The 18 May 2009 Minute sought, for the adult hospital, a mix of Negative Pressure Rooms without Anterooms and Positive Pressure Rooms with Negatively Pressured Anterooms.

Changes to Governance Structures in 2009

- 166 In Spring 2009 the Procurement and Finance Group and Project Executive Group were combined to form a single **New South Glasgow Hospitals and Laboratory Project Executive Board** ('NSGHLPEB').
- 167 This change was reported to the ASR Programme Board as a matter arising on 8 June 2009¹⁴⁵ having been approved by the **Performance Review Group** on 19 May 2009 which considered a paper prepared by Helen Byrne, the Director of Acute Services Strategy Implementation and Planning¹⁴⁶, which included, as an Appendix, Terms of Reference ¹⁴⁷~~OBJ~~ which set out the group's role and remit as including:

"The NSGHLPEB will have appropriate delegated authority to take forward necessary negotiations to ensure objectives are achieved, progress is maintained and business is concluded especially where programme and financial matters are at a critical stage.

The NSGHLPEB will report and advise the Acute Services Review Board (ASRPB) on all aspects of the implementation of ASR2.

The NSGHLPEB will monitor all aspects of performance of the implementation of ASR2.

The NSGHLPEB will have delegated authority to conduct and conclude negotiations at project critical moments.

¹⁴⁴ A35761303 - New South Glasgow Hospitals (NSGH) Project Invitation to Participate in Competitive Dialogue: Volume 2/1 Employer's Requirements (Hospitals) - Bundle for Oral hearing commencing 13 May 2025, Bundle 46, Volume 3, Document 1, Page 177.

¹⁴⁵ A35560076 - NHS GGC ASR Programme Board Meeting Minute - 8 June 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 3, Page 24.

¹⁴⁶ A51258946 - Performance Review Group - Meeting Minutes - 19 May 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 20, Page 133-134, Item 32 and A51258908 - Performance Review Group Paper - Update on the New South Glasgow Hospital's and New Laboratory Project - 19 May 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 21, Page 145.

¹⁴⁷ A51258908 - Performance Review Group Paper - Update on the New South Glasgow Hospital's and New Laboratory Project - 19 May 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 21, Pages 152-153.

The NSGHLPEB will oversee the management of change control procedures in that any change which impacts upon the project must be authorised by this Board before it can be implemented.”

...

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. This will ensure there is appropriate progress on:

...

Technical

- Technical Output Specs
- Bid Evaluation Process
- Test technical viability of solutions”

168 The Terms of Reference for the NSGHLPEB, provided for eleven voting members of that board including James Stewart (then Chief Executive of Partnerships UK) and Mike Baxter (then newly appointed Deputy Director (Capital Planning and Asset Management) within the Health and Social Care Directorates of the Scottish Government.

169 These new Terms of Reference for the NSGHLPEB were reported to the NSGHLPEB on 1 June 2009¹⁴⁸. Ms Byrne understood that Alan Seabourne would have been conducting negotiations with Brookfield Europe in the period between them being chosen as preferred bidder and Mr Calderwood signing on 18 December 2009¹⁴⁹.

170 The Inquiry has heard evidence about the Terms of Reference of the NSGHLPEB from both Mr Seabourne and Ms Byrne. Mr Seabourne agreed that they granted this body delegated authority to make executive decisions on critical points in the project programme which included negotiation, although he emphasised that in general, when it came to change control, that meant cost and change in programme rather

¹⁴⁸ A51853162 - New South Glasgow Hospitals and Laboratory Project Executive Board - Meeting Minutes - 01 June 2009 – Bundle for Oral hearing commencing 13 May 2025, Bundle 42, Volume 2, Document 10, Page 54, Item 4.

¹⁴⁹ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Column 68.

than to technical issues¹⁵⁰.

171 Ms Byrne described it as more of a strategic body than a management body, and that, although it might appear clear in 2025 that a decision such as changing the maximum temperature of the building requires to be part of a change control procedure that involves the executive board, that was not so clear back in 2009¹⁵¹. The evidence heard so far and the records of the papers and minutes of the NSGHLPEB, suggest that no change control procedures were set up to report to the NSGHLPEB during its existence from June 2009 to the departure of Ms Byrne and further governance changes in February 2010.

172 If it is the case that no change control procedures were set up to report to the NSGHLPEB this would make it difficult for the NSGHLPEB to be aware of changes to the project that impacted on the compliance of the design with Scottish Government Guidance.

The Laboratories

173 Within the wider New South Glasgow Hospitals and Laboratory Project there was a smaller project for the laboratory block that was delivered before the main part of the hospital. On 22 October 2009 the **Programme Board** was reported to have made a positive recommendation to the Board that the Full Business Case for the Laboratories be approved and this was reported to Ministers.¹⁵² On 3 November 2009 the **Performance Review Group** approved the Full Business Case for the Laboratories.¹⁵³ There was no mention of this approval in the full **NHS GGC Board** minutes for December 2009 (it appears that there was no November meeting from previous minutes approved at that meeting).

¹⁵⁰ A53053542 - Hearing Commencing 13 May 2025, 29 May 2025 – Transcript – Alan Seabourne – Columns 146-149.

¹⁵¹ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Columns 69-75.

¹⁵² A51650418 - Email chain - Mike Baxter, Helen Byrne, Alan Seabourne, Robert Calderwood - New South Glasgow Programme Board Meeting 26th October - 23 to 26 October 2009 – Bundle for oral hearing commencing 13 May 2025, Bundle 43, Volume 2, Document 15, Page 252.

¹⁵³ A34871046 - Performance Review Group Minutes - 03 November 2009 – Bundle for Oral hearing commencing 19 August 2024 - Bundle 17 - Procurement History and Building Contract PPP, Document 64, Page 2651.

Removal of the Maximum Temperature Variant

174 PPP 13 discussed¹⁵⁴ the 28 May 2009 document 'NSGH Project Issue 1 Maximum Temperature Variant'¹⁵⁵ and its possible connection to the December 2009 ZBP Ventilation Strategy Document¹⁵⁶. The 28 May 2009 proposal was then issued on 8 June 2009 by NHS GGC as a revision to the contract entitled 'NSGACL Removal of Maximum Temperature Variant_iss1_rev',¹⁵⁷ which contained the following:

"Removal of Mandatory Maximum Temperature Variant.

The maximum temperature variant has been removed from the bid requirements, the bidders shall put forward schemes to ensure thermal comfort and avoid overheating.

Sustainability has a major input into the project and all solutions must seek to minimize CO2 and energy usage, however this must not be at the expense of thermal comfort and avoidance of over heating.

For design purposes the level of thermal comfort shall be:

Room temperatures should not go below 18oC in winter for longer than 2 hours at a time, or higher than 26oC in summer for more than 50 hours in total, but not on successive days.

Feasibility studies are to be carried out into the potential use of low and zero carbon technologies to reduce carbon emissions associated with the operation of the building.

The bidders' attention is drawn to the Employer's Requirements and in particular the following sections..."

175 The bidders' attention was then drawn to various extracts from Appendix M&E3 of the Employer's Requirements.¹⁵⁸

176 There is nothing in the Minutes of the New South Glasgow Hospitals and Laboratory

¹⁵⁴ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract – Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Provisional Position Papers, Document 3, Page 247.

¹⁵⁵ A33010775 - Removal of Mandatory Maximum Temperature Variant - June 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 26, Page 1063.

¹⁵⁶ A32993814 - Email chain - R Ballingall and M Baird - Attaching "NSGH Ward Ventilation Design Strategy" 15 December 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 70, Page 2855 and A48746401 - NSGH Ward Ventilation Design Strategy paper - as submitted by GGC to Inquiry - December 2009 - Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 71, Page 2859.

¹⁵⁷ A33010775 - Removal of Mandatory Maximum Temperature Variant - June 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 26, Page 1063.

¹⁵⁸ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Document 3, Pages 215-216.

Project Board ('NSGHLPEB') of 1 June 2009¹⁵⁹ or 3 August 2009¹⁶⁰ to indicate that this change was reported to the NSGHLPEB' and Mr Seabourne's evidence was of the change being decided at a lower level, by the Director of Facilities in discussion with Currie & Brown¹⁶¹. There is no mention of this change in the Minutes of the Performance Review Group on 7 July 2009¹⁶². Ms Byrne accepted that the maximum temperature change should have been part of the change control procedure that involves the Executive Board, but in 2009 there was a lack of clarity that those sorts of changes should come to the Board¹⁶³. From her experience in NHS England, Ms Byrne acknowledged that this type of change should have come to the Board¹⁶⁴. However, Mr Seabourne and his technical advisors were involved in the details so the proposed changes would need to have been escalated by them to be considered by the PRG or Executive Board¹⁶⁵.

- 177 Later, and after contract close, in November 2010 ZBP identified SHTM 03-01 as the source of the parameters used for temperatures within QEUH.¹⁶⁶ With respect to winter temperatures, ZBP identified that the 18°C figure [the lower limit in SHTM 03-01 para 9.230] appeared low for patient areas, and that 21°C had generally been used instead. For staff-only areas 20°C is used. ZBP identified that local room controls would allow for adjustment, and that variation from this standard had been used in specialist areas (only isolation rooms were given as an example). With respect to summer temperatures, ZBP identified that the upper temperature limit generally derived from SHTM 03-01 Appendix 1.¹⁶⁷ ZBP noted that, however, the ERs limit to 26°C not 28°C, and that HTM Clause 2.11 had been applied for hours of

¹⁵⁹ A51853162 - New South Glasgow Hospitals and Laboratory Project Executive Board - Meeting Minutes - 01 June 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 42, Volume 2, Document 10, Page 54.

¹⁶⁰ A51853166 - New South Glasgow Hospitals and Laboratory Project Executive Board - Meeting Minutes - 03 August 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 42, Volume 2, Document 11, Page 57.

¹⁶¹ A53053542 - Hearing Commencing 13 May 2025, 29 May 2025 - Transcript - Alan Seabourne - Column 41.

¹⁶² A34871048 - Performance Review Group - Meeting Minutes - 7 July 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 22, Page 156, Item 45(b).

¹⁶³ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Column 74

¹⁶⁴ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Column 75

¹⁶⁵ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Column 76

¹⁶⁶ A52701634 - NSGH Environmental Matrix - Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 5, Document 96 Pages 785-787.

¹⁶⁷ A33010802 - Draft for Consultation SHTM 03-01 Part A Design and Validation, March 2009 - Bundle for Oral hearing commencing 19 August 2024, Bundle 16, Document 5, Page 483.

exceedance. In addition, ZBP noted that the diagnostic rooms had been generally limited to 25°C, and that the Aseptic Suite was currently shown as 23°C and not as 22°C per the SHTM.

- 178 The reason for the decision to impose a lower maximum temperature of 26 degrees rather than the 28 degrees contained in Table 1 of the SHTM 03-01 (2009) Appendix is of interest to the Inquiry Team. It might be thought to be more difficult (and to require great investment in plant and the use of chilled beams) to achieve a lower maximum temperature than required by SHTM 03-01 in a building with large windows and mechanical ventilation although Ms White explained it could be done by an all-air system and this did, seem to be recognised by Volume 3 (“Design Narratives”) of the Brookfield tender (discussed below) and the Laing O’Rourke response to feedback from their unsuccessful bid as it relates to the air change system.¹⁶⁸

The Brookfield Tender and its ventilation strategy

- 179 Understanding subsequent decisions requires understanding of the tender submission by Brookfield dated 11 September 2009. Volume 3 (“Design Narratives”) of the Brookfield tender contains within it a “Ventilation and Air Treatment Design Strategy.”¹⁶⁹ After noting its view that “the main benefit of employing a natural ventilation strategy in the hospital building is the reduction in energy consumption,” Brookfield set out its analysis of the ventilation strategy which is said to be “based on an amendment to the ITCD documents which stated that the overheating threshold was to be set at ‘50 hours per year above 26°C’.” Brookfield states that it carried out simulations using different design criteria and options to be able to reach a final solution on ventilation. The simulations appeared to show that there would be overheating on 60% of elevations on the mid floor wards and on 100% of top floor wards where mechanical ventilation was at 15 litres per second. The specification noted that “There is no natural ventilation provided on the top floor wards to avoid nuisance from helicopter noise and downdraft.”

¹⁶⁸ A51652786 - Laing O’Rourke / DSSR Questions for NSGH Post Bid Feedback Session with NHS GG&C - 10th November 2009 - Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 1, Document 13, Page 42.

¹⁶⁹ A32758374 - Brookfield, ‘Design Strategies for the New South Glasgow Hospitals. SECTION 3.1: ARCHITECTURAL DESIGN STRATEGY 3.1 2009’ - Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 8, Page 311.

180 As to the issue with the problem of odours from the adjacent sewage works, the analysis set out that in association with the design of the mechanical ventilation the issue “has been addressed with the provision of carbon filters on the fresh air side of the air handling units.” The design analysis concluded that

“Both sets of results show that in the wards a mixed mode, natural and mechanical ventilation combination, together with optimising the glazing area and type does not provide the solution to meeting the overheating criteria in the majority of the rooms. It is proposed that all ward rooms be provided with a means of mechanical cooling in the form of an active chilled beam as pictured below. The active chilled beams operate most effectively with the windows sealed as this reduces the likely hood [sic] of condensation.

...

With the overheating design target set at ‘50 hours per year above 26°C’ and the summer external design temperature also 26°C the target is an onerous one to achieve with natural ventilation. In progressing the ventilation design strategy, a number of calculations have been carried using ‘50 hours per year above 28°C’ (in accordance with the guidance in SHTM 03-01) as the target and it has been found that the mixed mode method is a feasible solution in the majority of the ward rooms.”

181 Volume 4 of the Brookfield tender contains a section “Specification for Ventilating Systems”¹⁷⁰ which states that

“The mechanical ventilation and air conditioning systems will comply with the relevant clauses of the NHS Model Engineering Specification Parts C04, C82, addendums to Part C, HVAC DW144, 154, TR19, SHTM 03-1, HTM 05-1, BS 5726 (updated), and descriptions and requirements set out below.”

“Wherever possible, natural ventilation via openable windows will be provided in perimeter rooms.”

“The Hospital will be mechanically ventilated throughout all internal rooms with no access to natural ventilation, perimeter areas where mechanical ventilation is required for clinical and operational and environmental control reasons and deep plan perimeter areas where necessary to assist the natural ventilation. [...]”

...

“Active chilled beams and fan coil units will also be provided for comfort cooling in areas where there is a need for separation or where high heat gains make these a more appropriate choice of systems. [...]”

¹⁷⁰ A33015497 - Contractor Submission Volume 4 Specification 4.5-4.57 - 11 September 2009 - Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 10, Page 455.

“[...] Consideration will be given to installing HEPA filters on plants serving vulnerable patients to afford additional protection against air-borne contamination, e.g. Aspergillus.”

“Air pressure regimes for theatre suites will be designed in accordance with the guidance provided in SHTM 03-1 employing wall mounted pressure control valves.

Air volumes will be established by consideration of heat gains or losses and also the air change rate necessary for comfort and safety as appropriate for the activity carried out in each area. Relative air pressures

182 The following ¹⁷¹page states that:

Isolation Rooms

Each isolation room will be provided with its own ventilation in line with SHBN 04

183 It is not immediately clear what was intended by the reference to “SHBN 04”. There is a HBN 04¹⁷² and there is an SHPN 04-01¹⁷³, but there is no SHBN 04. SHPN 04 is specifically referenced in the Employer’s Requirements¹⁷⁴. Since ultimately the isolation rooms in the hospital were built as PPVL rooms the Inquiry Team suggest that it is a reasonable inference that the Brookfield bid proposed just that because that it had been set out in section 8.2.14 of the Employer’s Requirements.

184 Volume 7 of the Brookfield tender addresses ‘NHS Mandatory Documentation’¹⁷⁵ and the section dealing with SHTM 03-01 Part A notes a group of amendments that do not include reducing the air change rate for ‘General ward[s]’ below 6 ¹⁷⁶

185 It would therefore appear that notwithstanding a declaration of intention to comply with SHTM 03-01 Part A, the Brookfield bid proposed mechanical ventilation for large parts of the hospital using chilled beams, the result of which was that the air change rates set out in Appendix 1 – Table A1 of SHTM 03-01 could not be achieved, and,

¹⁷¹ A33015497 - Contractor Submission Volume 4 Specification 4.5-4.57 - 11 September 2009 - Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 10, Page 456.

¹⁷² A37329297 - Health Building Note 04-01 Supplement 1 - Isolation facilities for infectious patients in acute settings - Department of Health - Bundle for Oral Hearing Commencing 9 May 2022, Bundle 2, Document 11, Page 868.

¹⁷³ A40165237 - SHPN 04 Supp 1 v1 2008 - Hearing Commencing 19 August 2024, Bundle 23, Document 94, Page 945.


¹⁷⁴ A35761303 - New South Glasgow Hospitals (NSGH) Project Invitation to Participate in Competitive Dialogue: Volume 2/1 Employer’s Requirements (Hospitals) - Bundle for Oral Hearing Commencing 13 May 2025, Bundle 46, Volume 3, Document 1, Page 177.

¹⁷⁵ A33015508 - Contractor Submission Volume 7 SHTM Compliance - 11 September 2009 - Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 11, Page 589.

¹⁷⁶ A33015508 - Contractor Submission Volume 7 SHTM Compliance - 11 September 2009 - Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 11, Page 595.

further, that, consistent with the Employers Requirements, the isolation rooms should be PPVL rooms.

The appointment of Brookfield as the preferred bidder

- 186 As identified in PPP13, following the competitive dialogue process between May and August 2009¹⁷⁷ in October 2009, a five-week evaluation process was undertaken, in which NHS GGC and its advisers evaluated and scored the proposals. Further details of the process can be found in the Minutes of the **Acute Services Review Programme Board** on 14 September 2009 ^{178.} 
- 187 On 21 September 2009, the three bidders were invited to give presentations to NHS GGC's evaluation board groups at the Glynhill Hotel, Paisley. The evaluation period was between 11 September and 16 October 2009¹⁷⁹.
- 188 In a Bid Submission Clarification document from 7 October 2009, the rate of Air Changes per Hour ("ACH") for bedrooms in the tower of QEUH was clarified to be 2.5 ACH¹⁸⁰.
- 189 On 16 October 2009, NHS GGC commented on Brookfield Multiplex's bid in respect of ACH in the QEUH. NHS GGC stated that: "Bedroom air change rate not in compliance with SHTM 03-01. Board to include in commercial review include cost for 1) opening window option which bidder wished to discuss at next stage. Or 2) cost for all plant ductwork, sub zone terminal batteries, louvres etc required to provide 6 ACH".
- 190 In NHS GGC's Bid Return Section for Brookfield Multiplex entitled 'SHTM Compliance' there is in fact no reference to SHTM 03-01 or SHTM 04-01 within the

¹⁷⁷ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 26, Document 3, Page 245.

¹⁷⁸ A35560112 - NHS GGC ASR Programme Board Meeting Minute - 14 September 2009 - Bundle for Oral Hearing Commencing 13 May 2025, Bundle 30, Document 4, Page 27.

¹⁷⁹ A51652797 - Evaluation Process Workshop Presentation - 25 August 2009 – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 43, Volume 2, Document 10, Page 135.

¹⁸⁰ A51652918 - Backup of Bidder 1 (Brookfield) Technical_Clarification 4 (07Oct09) – final – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 43, Volume 2, Document 11.3, Page 197; see also A48744495 - Bid Clarification Log (Board to Brookfield) - rev 3 - 17 December 2009 – Bundle for Hearing Commencing 19 August 2024, Bundle 17, Document 69, Page 2848.

section which instead makes reference to other NHS guidance¹⁸¹ (whereas the GGC Bid Return for LOR makes specific reference to SHTM 03-01 and SHTM 04-01¹⁸²).

- 191 This process was reported to Ministers by Mr Baxter of the Scottish Government Health Directorate on 23 October 2009 in the following terms¹⁸³:

“This note is to advise the Cabinet Secretary that the Executive Programme Board for the New South Glasgow Hospitals Project met yesterday to consider the outcome of the tender evaluation process and to agree a recommendation to the NHS Greater Glasgow and Clyde Policy and Resources Group (who have the authority to approve the recommendation) on 3rd November 2009. That recommendation is in two parts. Firstly for the appointment of the preferred bidder for the project and secondly for the approval of the Full Business Case for the Labs component of the project (£57m) which is the first phase of construction of the project and the cost for which is included within the pricing (and affordability envelope) for the whole project.

A confidential briefing will be brought forward early next week with details of the bidders, costs etc. At this stage I can confirm however that the qualitative scores for the preferred bid were above the benchmark established, that design quality is very good and that both the target price and maximum price within the bid are within the affordability envelope established for the project. NHS Greater Glasgow communications will be in contact with communications Health with regard to handling options for the announcement over the next few days.”

- 192 At the **New South Glasgow Hospitals and Laboratory Project Executive Board** on 26 October 2009¹⁸⁴ Ms Byrne provided an update on the Executive Board Seminar which had taken place on 22 October 2009. We have the draft Agenda for the 22 October 2009 seminar¹⁸⁵, but no minute. From the context of the email from Mr Baxter of 23 October 2009¹⁸⁶ Scottish Ministers were represented at that seminar.

¹⁸¹ A51652839 - Brookfield Composite - 16 October 2009 – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 43, Volume 2, Document 13, Pages 235 and 238.

¹⁸² A51652842 - New South Glasgow Hospitals Project - Lang O'Rourke - 16 October 2009 – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 43, Volume 6, Document 30, Pages 555-556.

¹⁸³ A51650418 - Email chain - Mike Baxter, Helen Byrne, Alan Seabourne, Robert Calderwood - New South Glasgow Programme Board Meeting 26th October - 23 to 26 October 2009 – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 43, Volume 2, Document 15, Page 252.

¹⁸⁴ A51853175 - New South Glasgow Hospitals and Laboratory Project Executive Board - Meeting Minutes - 26 October 2009 – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 42, Volume 2, Document 15, Page 78.

¹⁸⁵ A51853163 - New South Glasgow Hospitals and Laboratory Project Executive Board - Draft Agenda - 22 October 2009 – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 42, Volume 2, Document 14, Page 77.

¹⁸⁶ A51650418 - Email chain - Mike Baxter, Helen Byrne, Alan Seabourne, Robert Calderwood - New South Glasgow Programme Board Meeting 26th October - 23 to 26 October 2009 – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 43, Volume 2, Document 15, Page 252.

The presentation is produced¹⁸⁷. The presentation reports that following receipt of the tenders for the works on 11 September 2009, the evaluation groups commenced the initial evaluation process and the whole evaluation process took approximately 5 weeks and concluded on 19 October 2009. The presentation reported that for the Brookfield bid the outcomes were (see page 981):

“An Iconic design satisfying the Employer’s Requirements in the vast majority of areas achieving maximum efficiency in programme and construction (Removed Transfer floor)

Reduced uncertainty and risk through developing the design to detailed level (i.e. 1:200 for whole development)

- 193 Score results were reported (page 983) and no reference was made to non-conformity with SHTM 03-01 (2009) in respect of air change rates in the hospital.
- 194 The substance of the seminar was reported by Ms Byrne to the 26 October 2009 Executive Board meeting¹⁸⁸. In discussing what was to be reported to the decision-making Performance Review Group meeting on 3 November 2009 Mr Calderwood explained that “it was important to ensure that there was a balance in providing the Board Members with appropriate information to allow them to justify the decision whereas the accompanying presentation should amplify the paper.” Mr Hall of Currie & Brown reported on the presentation planned for the Performance Review Group meeting that “the report would provide only the MEAT score with the presentation covering how the MEAT Score was calculated”. The minute reports:

“R Calderwood reiterated that the presentation should provide the background information not already included in the paper i.e. the critique and the 3 prices. The Board members needed to be provided with a brief explanation of why one design met the criteria and the other 2 did not meet the criteria. The paper would not include a finance section due to commercial sensitivity and this information would be presented at the meeting”

These contemporary records suggest that the non-conformity with SHTM 03-01 (2009) in respect of air change rates in the hospital that was inherent in the proposed

¹⁸⁷ A51259144 - New South Glasgow Hospitals & Labs Project Executive Board - Tender Submission Workshop Presentation - 22 October 2009 – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 43, Volume 3, Document 14, Page 882.

¹⁸⁸ A51853175 - New South Glasgow Hospitals and Laboratory Project Executive Board - Meeting Minutes - 26 October 2009 – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 42, Volume 2, Document 15, Page 78.

Brookfield ventilation system was not reported to the seminar on 22 October 2009 or to the **New South Glasgow Hospitals and Laboratory Project Executive Board** on 26 October 2009.

- 195 As a consequence of the fact that the **New South Glasgow Hospitals and Laboratory Project Executive Board** does not appear to have been told of the removal of the maximum temperature variant, the importance of the 26 degree maximum temperature or the Brookfield solution that was not compliant with SHTM 03-01, NSGLPEB could not tell the Performance Review Group of the non-conformity with SHTM 03-01 (2009) in respect of air change rates in the hospital.
- 196 Brookfield were identified as the Most Economically Advantageous bidder, and in a paper produced by the Director of Acute Services Strategy, Implementation and Planning on 3 November 2009 the **Performance Review Group** were asked to approve their appointment as preferred bidder.¹⁸⁹ There is no substantive discussion recorded in that paper of ventilation or building temperature, but attached to the paper is an Appendix which again records that the bidders had, at tender stage, been asked to “Confirm compliance with required SHTM’s and other standards noted in the ERs ... and state how compliance is being achieved”.
- 197 It is understood that Mr Seabourne made a PowerPoint presentation¹⁹⁰ to the Performance Review Group in which he reported that Brookfield’s bid was considered to “Fully [meet] the Board’s Exemplar requirements”¹⁹¹ and to be “Compliant with Employer’s Requirements”¹⁹². The Performance Review Group approved that Brookfield Europe LP would be appointed preferred contractor¹⁹³.
- 198 The Minutes of the **Performance Review Group** on 3 November 2009 recorded that:

¹⁸⁹ A35382437 - Performance Review Group Final Paper - 03 November 2009, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 65, Page 2660.

¹⁹⁰ A35561501 - Performance Review Group PowerPoint Presentation - 03 November 2009, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 66, Page 2715.

¹⁹¹ A35561501 - Performance Review Group PowerPoint Presentation - 03 November 2009, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 66, Page 2724.

¹⁹² A35561501 - Performance Review Group PowerPoint Presentation - 03 November 2009, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 66, Page 2725.

¹⁹³ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 26, Document 3, Pages 83-84.

The conclusions of the Evaluation Group were presented to the New **South Glasgow Hospitals and Laboratory Project Executive Board** on 22 October 2009¹⁹⁴. This included the attendance and involvement of the NHS Board Chair, Vice Chair and a Non-Executive Member of the Board. Consequently, on 26 October 2009, the Project Executive Board considered the comments from the 22 October meeting and formally endorsed the outcome and recommended that the preferred bidder be submitted. The NHS Board Chair had been unable to be present at today's meeting: however, had submitted a paper which had been provided to Members on his assessment of the outcome and conclusions of the process¹⁹⁵.

199 The members of the Board's Evaluation team who attended the Performance Review Group meeting on 3 November 2009 were¹⁹⁶

- Alan Seabourne, Project Director – New South Glasgow Hospitals & Labs, NHS GGC
- David Hall, Divisional Director, Currie & Brown
- Douglas Ross, Director, Currie & Brown
- Jim Crombie, Director of Surgery and Anaesthetics, NHS GGC
- Michael McVeigh, Assistant Director - Infrastructure Advisory, Ernst & Young
- Peter Gallagher, Finance Director, NHS GGC,
- Rhona Harper, Partner Projects, Shepherd & Wedderburn

200 The Minute¹⁹⁷ records that the Performance Review Group approved the appointment of Brookfield as preferred contractor for Stages 1 to 3a of the project "Noting that at the end of Stage 2 (when the Full Business Case for the new Hospitals would be considered for approval by the NHS Board) there would be a break point in the

¹⁹⁴ A51853175 - New South Glasgow Hospitals and Laboratory Project Executive Board - Meeting Minutes - 26 October 2009, Bundle for Oral Hearing Commencing 13 May 2025 - Bundle 42 - Volume 2, Document 15, Page 78 and A51853186 - New South Glasgow Hospitals and Laboratory Project Executive Board - Enc 3, Items for consideration for Performance Review Group Paper and Presentation - 26 October 2009, Bundle 42, Volume 2, Document 17, Page 85.

¹⁹⁵ A35382437 - Performance Review Group Final Paper - 03 November 2009 - Hearing Commencing 19 August 2024, Bundle 17, Document 65, Page 2712.

¹⁹⁶ A34871046 - Performance Review Group Minutes - 03 November 2009, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 64, Page 2651.

¹⁹⁷ A34871046 - Performance Review Group Minutes - 03 November 2009, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 64, Page 2655.

contract.” The Minute allocates the action to the Director of Acute Services Strategy, Implementation and Planning. There is no reference in the minutes to ventilation, building temperature or compliance with SHTM.

- 201 On 10 November 2009, one of the unsuccessful bidders informed NHS GGC that a chilled beams system could not be easily integrated with the enhanced ACH stated in the new draft SHTM documents, based on their experience of designing multiple hospitals throughout the UK¹⁹⁸. Further clarifications were also provided by Brookfield Multiplex that NHS GGC’s requirement for 26°C meant that the use of natural air would be limited and a sealed building with chilled beams would be the only way to maintain the required conditions¹⁹⁹.
- 202 The state of knowledge at this point of the Project Team, members of the Board’s Evaluation team and those decision-makers to whom they reported (including those who attended the South Glasgow Hospitals and Laboratory Project Executive Board on 22 October 2009 and the Performance Review Group on 3 November 2009) is of interest to the Inquiry Team. It seems that Mr Seabourne knew about these issues and Ms Byrne has given evidence that she did not²⁰⁰. Who else knew cannot be finally determined until the Inquiry has heard evidence from, among others, Mr Calderwood, Ms Grant and Mr Baxter.

The signing of the contract on 18 December 2009

- 203 The period between Brookfield being appointed preferred bidder (in early November 2009) and the Building Contract being signed (18 December 2009) contained only six working weeks. There were many meetings between Currie & Brown, NHS GGC and Brookfield in this period. Mr Hall and Mr Baird of Currie & Brown explained in their evidence that the Clarification Logs and M&E Logs and the entries in them were the records of these meetings.

¹⁹⁸ A51652786 - Laing O’Rourke / DSSR Questions for NSGH Post Bid Feedback Session with NHS GG&C - 10th November 2009, Bundle for Oral Hearing Commencing 13 May 2025, Bundle 43, Volume 1, Document 13, Page 42.

¹⁹⁹ A33010809 - Sustainability Log -2009, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 18, Pages 935-936.

²⁰⁰ A51191433 – Witness Statement of Helen Byrne, Pages 13 – 15, Statement Questions 7(d), 7(f) and 7(g).

204 The Minutes of the **Acute Services Review Programme Board** from 11 November 2009²⁰¹ report at Item 4 that:

“Since the successful bidder was announced there have been meetings with Brookfield in the pre-contract phase which included resolving issues that arose during the evaluation process. These are being resolved to the Board’s satisfaction.

Briefing meetings have been held this week with key members of the Board’s team in the run up to the signing of contracts next week. HB reported that there was a planned further briefing meeting held early next week just before the contracts are signed. Once the contract is signed there are numerous workstreams to be carried out to take the project onto the design phase including meetings with facilities staff, relocation of waste services and the set up of meetings with the user groups and taking forward the Laboratory and Masterplan design.”

205 The PRG had delegated responsibility, but some decisions went to the NHS GGC Board²⁰². No decisions about the signing of the Building Contract were made at the full meeting of the **NHS GGC Board** on 15 December 2009²⁰³ or at the **Performance Review Group** on 3 November 2009²⁰⁴.

206 How the governance arrangements worked were addressed in evidence with Ms Byrne, who spoke of whether there were any issues recorded at Board level such as would prevent signature of the contract²⁰⁵, and as discussed above the authority to “to conduct and conclude negotiations at project critical moments” had been delegated to the NSGHLEB by the Performance Review Group on 19 May 2009²⁰⁶.

207 Ms Byrne could not explain why there was no record of a decision by the PRG or the Executive Board to authorise Mr Calderwood to sign the contract on 18 December 2009. She commented that she could not recall any major decisions being recorded

²⁰¹ A35560081 - NHS GGC ASR Programme Board Meeting Minute - 11 December 2009, Bundle for Oral Hearing Commencing 13 May 2025, Bundle 30, Document 5, Page 34.

²⁰² A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Column 62

²⁰³ A51259159 - NHS Greater Glasgow and Clyde Board - Meeting Minutes- 15 December 2009 – Bundle for Oral Hearing Commencing 13 May 2025, Bundle 37, Document 40, Page 526.

²⁰⁴ A34871046 - Performance Review Group Minutes - 03 November 2009, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 64, Page 2651, Item 66.

²⁰⁵ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Column 71.

²⁰⁶ A51258908 – Performance Review Group Paper – Undated on the New South Glasgow Hospital's and New laboratory Project – 19 May 2009 - Bundle for Oral Hearing Commencing 13 May 2025, Bundle 34, Document 21, Page 152.

in the minutes that would prevent Mr Calderwood from signing the contract²⁰⁷. Ms Byrne understood that Mr Seabourne had been delegated with the authority to conduct and conclude negotiations with Brookfield, but if negotiations stalled then it would have been escalated²⁰⁸.

The M&E Design Summary Log. 4 December 2009

208 On 4 December 2009 Mr Hall sent Mr Ballingall a M&E Design Summary Log²⁰⁹. In his email Mr Hall explains that:

“M&E Design Summary log ... is not adding anything to the ER's, but rather identifying areas where clarity is required on the bid in relation to it's compliance with the ER's”

209 The M&E Design Summary log states in its last entry for “Ventilation”²¹⁰ that:

“Ward Air change to be 6AC/HR, currently shown as 2.5AC/HR which is not in compliance with SHTM 03-01.”

210 It must therefore be that by 4 December 2009 at the latest the inconsistency between the air change rate which was being proposed and SHTM 03-01 was clear to all who received that email. In its response to PPP 13²¹¹ NHS GGC explain that the words “currently shown” in this clarification log refers back to a bid clarification document submitted by Brookfield on 12 October 2009 – i.e. before their appointment of Brookfield as preferred bidder.

NSGH – Contract Preparation Design Summary. 9 December 2009

211 Attached to an email dated 9 December 2009 from John Bushfield of Wallace Whittle to Mr Hall and Mr Baird is an attachment “20091204designsummary-

²⁰⁷ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Column 71.

²⁰⁸ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Column 69.

²⁰⁹ A48746242 – Email from D Hall to R Ballingall and others – RFI Log and M&E Design Summary – 04 December 2009 - Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 67, Page 2772 and attachment Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 67, Page 2774.

²¹⁰ A48746242 - 20091204Design Summary - Mechanical and Electrical, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 67.1, Page 2775.

²¹¹ A51139494 - Response to PPP 13 from Greater Glasgow Health Board, Bundle for Oral hearing commencing 19 August 2024, Bundle 22, Volume 3, Document 4, Page 28.

*mechanical and electrical-brookfield response 071209.docx*²¹²

which at page 5 states in respect of the proposed change:

“Ward Air change to be 6AC/HR, currently shown as 2.5AC/HR which is not in compliance with SHTM 03-01”

212 The ‘Brookfield Comment’ is recorded as:

“Brookfield proposal as outlined within the bid submission is to incorporate chilled beams as a low energy solution to control the environment which do not rely on large volumes of treated air or variable natural ventilation. All accommodation is single bed-rooms and therefore the need for dilution of airborne microbiological contamination should be reduced (rooms could also be at slightly negative pressure to corridor)”.

213 The response appears to this was recorded as:

“This derogation to the SHTM is not accepted. Any variation would require Board clinical infection control review.”

214 The document has track changes turned on and records that the response text was added by Mr Bushfield on 9 December 2009 at 1:52pm.²¹³

215 It must therefore be that by 9 December 2009 this inconsistency between the air change rate which was being proposed and SHTM 03-01 was still outstanding and not agreed.

The ZBP Ventilation Strategy Document

216 The ZBP Ventilation Strategy Document²¹⁴ acknowledges that the ward ventilation strategy designed by Brookfield and their subconsultants would not be compliant with NHS guidance. It was produced by Steve Pardy of ZBP who understood that the proposal in his paper would apply to the wards with single bedrooms²¹⁵ but not

²¹² A48743262 – NSGH – Contract Preparation Design Summary Brookfield Response – 09 December 2009 – Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 2, Document 21, Page 311.

²¹³ A48743262 – NSGH – Contract Preparation Design Summary Brookfield Response – 09 December 2009 – Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 2, Document 21, Page 311.

²¹⁴ A32993814 – NHSG Ventilation Strategy (December 2009) – Bundle for Oral Hearing commencing 19 August 2024, Bundle 16, Document 21, Page 1657.

²¹⁵ A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 20.

specialist areas such as Critical Care or the intensive care area²¹⁶.

He believed that the physical separation of single rooms helped so the single rooms would not have to be purged even though the air change rate was less. He considered this was a factor pointed out to Wallace Whittle when discussing the ventilation strategy paper²¹⁷. A further factor was that the proposed chilled beams could not produce the 6 ACH required by the SHTM 03-01²¹⁸. He explained that he did not think 6 ACH was necessary for general rooms to maintain temperature control of the space²¹⁹. He supported his position by reference to the Building Regulations and CIBSE codes²²⁰. Mr Pardy's view was that guidance as to air change rates is partly connected to temperature control and partly connected to air movement²²¹. He conceded that air movement was required to avoid contamination and dilution of anaesthetic gases²²².

217 The ZBP Ventilation Strategy Paper states:

**NSGH
WARD VENTILATION DESIGN STRATEGY**

Board Requirement

The design requirements for the NSGH states that the summertime temperature limit is 'not to exceed 26°C'.

This exceeds the guidance provided within the draft SHTM 03-01 on the design of ventilation in healthcare premises, limiting the summertime temperature to 'not exceed 28°C for more than 50 hours per year'.

Natural Ventilation

²¹⁶ A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 21.

²¹⁷ A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 23 – 24.

²¹⁸ A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 25.

²¹⁹ A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 30.

²²⁰ A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 33.

²²¹ A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 36.

²²² A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 37.

The SHTM allows for the natural ventilation of areas including general wards. In clause 2.3 it states that 'as the motivating influences of natural ventilation are variable, it is almost impossible to maintain consistent flow rates and ensure that minimum ventilation rates will be achieved at all times. This variability is normally acceptable for general wards'.

Through the use of thermal modelling during the bid stage the use of natural ventilation using openable windows was investigated and results showed that the Board's requirement for temperature control could not be achieved. Furthermore, adding additional

background cooled mechanical ventilation, at a quantity to balance the ensuite extract rate, still did not achieve the requirement. Other concerns with natural ventilation included patient comfort due to uncontrolled wind driven ventilation and air quality, particularly in winter when windows would be closed.

Therefore, the sole use of mechanical ventilation was explored, again using thermal modelling.

Mechanical Ventilation

The recommended air change rate for single rooms in SHTM 03-01 Appendix 1 Table A1 for single rooms is 6 air changes per hour (ac/h). Modelling was carried out based on this recommendation, but it was found that the requirement of 26oC could not be met. To try to achieve this, the ventilation rate was further increased but became excessive and likely to cause draughts to the occupants, poor temperature control and increased energy consumption.

Consideration was then given to a terminal cooling solution, using active chilled beams which provide cooling, heating and fresh air via the primary air supply system. The performance of chilled beams is related to their physical size and thus the amount of primary air supplied from the central air handling plant. The primary air volume will also provide make up for the extract from the ensuite toilets to achieve a negative inflow of air into the bedroom from the corridor as required by SHTM 03-01 Appendix 1 Table A1.

Using active chilled beams delivers the temperature control requirement, provides individual room control and fresh air, albeit less than the recommendation of SHTM 03-01.

Chilled beams are also an energy efficient solution and save some 9kg/m² of CO₂ over that of an all air system delivering 6ac/h, equivalent to about 10% of the hospitals' total emissions.

Conclusion

If natural ventilation could be employed then the air change rates within the bedrooms would be variable dependant on window opening and external conditions, and is rarely likely to achieve 6ac/h.

The recommended air change rate of 6ac/h in the SHTM is considered to relate to the ability to achieve an acceptable internal environment, i.e 50 hours exceedance above 28oC. This could be achieved with 6ac/h of cooled air.

However, the Board's requirement for a reduced temperature makes this solution impractical and the use of chilled beams is the only viable solution, using a reduced quantity of primary air.

Whilst the air change rate is less than the SHTM, at a supply air volume of 30 litres per second it is in compliance with Scottish Building Regulations and also CIBSE codes, giving sufficient fresh air for a continuous occupation of three people at 10-12 litres per second each."

- 218 First thing in the morning of Tuesday 15 December 2009 an email was sent from Ross Ballingall of Brookfield to David Hall and Mark Baird of Currie & Brown attaching the ZBP Ventilation Strategy Document²²³. The substance of the email is:

"Attached latest update of M&E Log. There are a couple of bits that I still need to get an answer on but thought I would issue anyway I have also attached a paper by ZBP on the Wards Ventilation Strategy. They have discussed this with Stuart at WW who seems to support it."

- 219 Mr Pardy understood the purpose of the paper was to help the process of actually getting sign-off and the content of the paper would have been discussed with Wallace Whittle²²⁴. He clarified that NHS GGC were relying on their technical adviser team and not ZBP²²⁵.
- 220 This email and its attachments were immediately forwarded to Karen Connelly of the NHS GGC Project Team, who believed she would have received it only to allow it to be printed out as she had no involvement in ventilation.²²⁶ In their response to PPP 13, Currie & Brown explain that Mr Baird forwarded Mr Ballingall's email to Karen Connelly to enable the ZBP Ventilation Strategy Document and the latest update of the M&E Clarification log to be discussed at a meeting planned to be held with the NHS GGC Project Team in at their Hillington office on or around 16 December 2009.²²⁷ Mr Baird explained that he did so in order to have copies printed out: "we would quite often get something that we wanted people to look through printed, and

²²³ A32993814 - Email chain - R Ballingall and M Baird - Attaching "NSGH Ward Ventilation Design Strategy" - 15 December 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 70, Page 2855 and A48746401 - NSGH Ward Ventilation Design Strategy paper - as submitted by GGC to Inquiry - December 2009, Bundle for Oral hearing commencing 19 August 2024, Document 71, Page 2859.

²²⁴ A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 38.

²²⁵ A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 40.

²²⁶ A49522063 - Karen Connelly - Witness Statement - Final, Bundle for Oral hearing commencing 19 August 2024, Witness Bundle, Week Commencing 26 August 2024, Volume 2, Document 8, Page 329 and A49879579 - Hearing Commencing 19 August 2024, 30 August 2024 - Transcript - Karen Connelly and Pamela Joannidis, Pages 9-10.

²²⁷ A51129109 - Response to PPP 13 from Currie & Brown UK Limited, Bundle 22, Volume 3, Page 19.

I believe that's the case"²²⁸.

I believe that's the case"²²⁸.

- 221 The email thread continues as on 15 December 2009 at 08:41²²⁹ when from Mr Baird forwarded Mr Ballingall's earlier email and attachments to Stewart McKechnie of Wallace Whittle. Mr Baird emailed:

"Stewart, If you can review and advise re ventilation + option choice on flow pipes (pros +cons of options and recommendation)".

- 222 Mr McKechnie responded an hour and twenty minutes later²³⁰ observing that:

"“Mark, on ventilation we see this as a sensible, practical solution and Energy efficient although it doesn't strictly comply with the SHTM, only further provision is that room should be kept at a neutral or slightly negative pressure as per the SHTM which needs to be incorporated in extract system sizing.”

- 223 This advice from Mr McKechnie was responded to by Mr Baird the next morning (Wednesday 16 December 2009) at 08:51²³¹ with questions that include:

"“Air changes – WW to take Board through this + specific query = do we think SHTM 03-01 is driven by temperature or HAI for stated nr of air changes”

- 224 Mr McKechnie responds:

"OK see you at 10.30 hillington"

- 225 In their response to PPP 13, Currie & Brown confirm that there was a meeting that Mr Baird and Mr McKechnie attended with NHS GGC and Brookfield at NHS GGC's Project Team office in Hillington to discuss the M&E Clarifications Log and the proposed Ventilation Derogation and that Mr McKechnie was to attend that meeting to take those members of staff of NHS GGC who were present "through the air change rates issue".²³² It seems clear from an email from Mr Baird to Mr McKechnie at 6:44pm on Wednesday 16 December 2009²³³, which must be after the meeting,

²²⁸ A53087578 - Hearing Commencing 13 May 2025, 28 May 2025 - Transcript – Mark Baird and John Redmond Columns 59-60.

²²⁹ A48705259 - Email chain - R Ballingall, M Baird and S McKechnie - Ward Ventilation Design Strategy - Airchanges - 15 to 16 December 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 72, Page 2863.

²³⁰ A48705259 - Email chain - R Ballingall, M Baird and S McKechnie - Ward Ventilation Design Strategy - Airchanges - 15 to 16 December 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 72, Page 2863.

²³¹ A48705259 - Email chain - R Ballingall, M Baird and S McKechnie - Ward Ventilation Design Strategy - Airchanges - 15 to 16 December 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 72, Page 2861.

²³² A51129109 - Response to PPP 13 from Currie & Brown UK Limited, Bundle for Oral hearing commencing 19 August 2024, Bundle 22, Volume 3, Page 20.

²³³ A48745734 - Email from M Baird to S McKechnie - NSHG air changes - 16 December 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 73, Page 2869.

that steps were agreed, as the email states:
that steps were agreed, as the email states:

“Think we have a way forward on this one, need a calculation carried out however tomorrow morning to prove our resolution. This involves litres per second, air changes etc and therefore requires your technical input and illustration. Can we have support for half hour/hour in the morning please ...”

226 In its response to PPP 13, NHS GGC at 4.19²³⁴ states that “NHSGGC is unable to confirm who would have received the ZBP Ventilation Strategy Document. NHSGGC has no documentation to evidence that the document was shared with NHSGGC.” This is consistent with the evidence of Professor Steele in Glasgow 3²³⁵.

227 There is no Minute of the Meeting at Hillington on 16 December 2009.

Table of Bid Submission Clarifications.

228 As discussed in section 3.23.2 of PPP 13 the Inquiry has a second version of a table of Bid Submission Clarifications. That appears to be dated 15 December 2009 as the date is not stated but it is profiled as 151209 rev 2.²³⁶ The Inquiry Team does not know when and how this document was circulated on 15 December 2009.

229 Item 10 within “Technical Clarification 4’ deals with ‘M&E Services”²³⁷ contains in the ‘Board Clarification’ column:

“Please confirm mechanical air change rate for the ward tower”

230 The ‘Bidder Response’ column contains:

“A typical ward in the tower has the following air change rates to either meet the ADB requirements or achieve the environment conditions:

- Bedrooms 2.5 ACH (related to ensuite extract rate and air volume for chilled beam unit loadings)
- Ensuites 10 ACH
- Clean Utility 6ACH

²³⁴ A51139494 - Response to PPP 13 from Greater Glasgow Health Board, Bundle for Oral hearing commencing 19 August 2024, Bundle 22, Volume 3, Document 4, Page 32.

²³⁵ A51312578 - Glasgow 3 - Counsel Closing statement - FINAL - 20 December 2024, Page 272.

²³⁶ A48744521 - Bid Clarification Log (Brookfield to Board) - rev 2 - 15 December 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 68, Page 2819.

²³⁷ A48744521 - Bid Clarification Log (Brookfield to Board) - rev 2 - 15 December 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 68, Page 2830.

- Disposal Hold 10 ACH
- Pantry 6 ACH
- Dirty Utility 10 ACH
- Equipment store
- Cleaner 5 ACH
- Nurse base Up to 12 ACH to balance extract from utility spaces, etc
- Office/meeting 4 ACH”

231 This item is recorded in the righthand “Board Comment” column as being
“Agreed although still to be finalised”.

232 By reference to Table 1 of the SHTM 03-01 (2009) Appendix 1²³⁸ not only is the air change rate for single bedrooms noted in the Bidder Response column different from guidance but the rates for other spaces are also different. For example, whilst the rate for Clean Utility set out in this Bid Submission Clarification is, at 6 ACH, the same as recommended in Table 1 of SHTM 03-01, the rate proposed for Dirty Utility is much higher than set out in the guidance. Similarly, the ensuites are proposed to be 10 ACH when Table 1 of SHTM 03-01 only requires 3ACH for a single room WC.

233 This response is repeated in the third version of the document²³⁹ which appears to be dated 17 December (the day before the Building Contract is signed). A new comment is added to the “Board Comment” column: “Refer to M&E Clarification Log”.

234 A final version of the ‘Clarification Log - Final Agreed for Contract – 2010’ contains at Page 12 a final version of the “Board Comments” column which reads:

Refer to the M&E Clarification Log in Contract Data Part 2 for typical single bed ward.

M&E Clarification Log and Clarification Log

235 GGC and Brookfield agreed on the Building Contract as signed by them on 18 December 2009. Among the contractual documents was the “M&E Clarification Log”

²³⁸ A33010802 - Draft for Consultation SHTM 03-01 Part A Design and Validation, March 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 16, Document 5, Page 483.

²³⁹ A48744495 - Bid Clarification Log (Board to Brookfield) - rev 3 - 17 December 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 69, Page 2848.

in terms of which it was agreed that Brookfield would design and deliver a ventilation

system for the hospital which, as is explained more fully in PPP13, has an “Agreed Ventilation Derogation” which appears to have been known to, and accepted by, both parties as being (a) not compliant with SHTM 03-01; and/or (b) a derogation from the Employer’s Requirements.²⁴⁰ In that Log Brookfield stated among their comments that “Providing 6 air changes is energy intensive and not necessary”.

- 236 Beyond the logs, the ZBP Ventilation Strategy and Mr McKechnie’s email to Mark Baird on 15 December 2009 at 10:04²⁴¹ the Inquiry holds no written documentation from within NHS GGC or authorised by its consultants explaining why this decision was reached and NHS GGC advise that no such material exists. Professor Steele gave evidence that no documentation other than the M&E clarification log itself exists to explain why the Health Board agreed to the derogation.²⁴²
- 237 There is no report to the NHS GGC Board, the Performance Review Group or the New South Glasgow Hospitals and Laboratory Project Executive Board of the terms upon which Mr Calderwood signed the contract with Brookfield Europe on 18 December 2009.
- 238 In evidence both Mr Hall²⁴³ and Mr Seabourne²⁴⁴ characterised this decision as having a provisional quality. A change could be made to the contract later during the design process which would lead to a Compensation Event (positive or negative). There is however no contemporaneous record to that effect and Mr Seabourne accepted that thought had not been given at the time to changing what had been agreed.

²⁴⁰ A35761409 – The M&E Clarification Log (2010 ItP) – (FINAL) – Bundle for Oral hearing commencing 19 August 2024, Bundle 16, Document 23, Page 1664.

²⁴¹ A48705259 - Email chain - R Ballingall, M Baird and S McKechnie - Ward Ventilation Design Strategy - Airchanges - 15 to 16 December 2009, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 72, Page 2863.

²⁴² A50581587 – Hearing Commencing 19 August 2024, 4 October 2024 – Transcript – Professor Tom Steele and Dr Anne Cruickshank, Column 36.

²⁴³ A52998941 – Hearing Commencing 13 May 2025, 22 May 2025 – Transcript - David Hall, Columns 68-89.

²⁴⁴ A53053542 - Hearings Commencing 13 May 2025, 29 May 2025 – Transcript – Alan Seabourne, Columns 69-71.

8. Governance Arrangements in 2010

239 Ms Byrne was due to leave NHS GGC as Director of Acute Services Strategy, Implementation and Planning and her final day was 20 February 2010.²⁴⁵ She chaired her final meeting of New South Glasgow Hospitals and Laboratory Project Executive Board on 16 February 2010²⁴⁶ where the focus was looking forward to Stage 2 and how the reporting back of changes and potential costs was to be managed. There was a paper from Mr Seabourne²⁴⁷, but there was no look back to the contract that had been signed with Brookfield that was to build a hospital that was (a) not compliant with SHTM 03-01; and/or (b) a derogation from the Employer's Requirements.

240 At its meeting of 19 February 2010, the Acute Services Review Programme Board received a paper asking for approval of new governance arrangements for the Acute Services Review Implementation.²⁴⁸ The proposed changes to the structure were:

- That the **Acute Services Review Programme Board** and the **South Glasgow Hospitals and Laboratory Project Executive Board** be amalgamated into a bi-monthly **Acute Services Strategy Board**;
- That a weekly **Acute Services Strategy Board Executive Sub-Group** be created;
- That construction management arrangements be introduced to support effective joint working between the Board and Brookfield;
- That the **Acute Services Redesign Group** take forward the process of developing clinical service models and implementing a clinical service

²⁴⁵ A53111713 - Hearing Commencing 13 May 2025, 30 May 2025 - Transcript - Robert O'Donovan and Helen Byrne, Column 114.

²⁴⁶ A51853177 – New South Glasgow Hospital and Laboratory Project Executive Board – Meeting Minutes – 16 February 2010 – Bundle for Oral Hearing commencing 13 May 2025, Bundle 42, Volume 2, Document 21, Page 92.

²⁴⁷ A51853184 – New South Glasgow Hospitals and Laboratory Project Executive Board – Enc 2, Update on progress paper – 16 February 2010 - Bundle for Oral Hearing commencing 13 May 2025, Bundle 42, Volume 2, Document 22, Page 96.

²⁴⁸ A35560136 - ASR Programme Board - Proposed Governance Arrangements - 19 February 2010, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 6, Page 36.

transformation programme.

- 241 These governance arrangements for the Acute Services Review Implementation from February 2010 set out the remits and responsibilities of a range of groups and committees and contain a table setting out the membership and remits of the ten management groups that were intended to run the project.²⁴⁹ These should be treated as the ‘scheme of delegation’ for the New South Glasgow Hospitals and Laboratory Project from February 2010.
- 242 The changes were approved by the Acute Services Review Programme Board²⁵⁰ and then by the Performance Review Group on 16 March 2010²⁵¹ As a result 19 February 2010 was the last meeting of the **Acute Services Review Programme Board**.
- 243 The same meeting on 19 February 2010 of the Acute Services Review Programme Board also received an update on progress²⁵²
- 244 In March PWC undertook a review of the governance arrangements²⁵³. The authors of the PWC review do not appear to have learned that the contract signed between NHS GGC and Brookfield Europe approved the construction of a hospital with ventilation that was not in accordance with Scottish Government guidance, and do not appear to have addressed the lack of a change control process to enable the New South Glasgow Hospital and Laboratories Project Executive Board to understand any changes from the Employer’s Requirements that were being negotiated with Brookfield Europe by the Project Team.
- 245 In June 2010, within the **Construction Management Group**, the **Technical Design**

²⁴⁹ A35560136 – ASR Programme Board – Proposed Governance Arrangements – 19 February 2010 – Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 6, Page 50.

²⁵⁰ A35560084 - NHS GGC ASR Programme Board Meeting Minute - 19 February 2010, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 11, Page 69.

²⁵¹ A34871328 – Performance Review Group – Meeting Minutes – 16 March 2010 – Bundle for Oral hearings commencing 13 May 2025, Bundle 34, Document 27, Page 185 and A35382460 – Performance Review Group Paper – New South Glasgow Hospital & Laboratory Project Acute Services Review Proposed New Governance Arrangements – 16 March 2010 - Bundle for Oral hearing commencing 13 May 2025, Bundle 34, Document 28, Page 196.

²⁵² A35560110 - ASR Programme Board - Update on Progress - 19 February 2010, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 7, Page 51.

²⁵³ A35382460 – Performance Review Group Paper – New South Glasgow Hospital & Laboratory Project Acute Services Review Proposed New Governance Arrangements – 16 March 2010 - Bundle for Oral Hearing commencing 13 May 2025, Bundle 34, Document 28, Page 196. The Review itself is Bundle 34, Document 28 from pages 207 to 217.

Group²⁵⁴ and **Medical Planning Groups** merged. At the end of the year this became the **Hospitals and Labs Lead Design Group** (with a Hospitals' Design subgroup).

246 Also in June 2010 a **Project Supervisors' Group** and a **Hospitals' Design subgroup** were established.

247 In July 2011 the **Performance Review Group** was replaced as a Board standing committee by the **Quality and Performance Committee**.

Gateway Review 3

248 The Gateway Review 3²⁵⁵ was carried out between 4 and 6 October 2010. Those to whom the review team spoke are listed in Appendix 3

249 The aims of the project had not changed from Gateway 2 Review. Gateway 3 Review contains this conclusion:

3.1 Delivery Confidence Assessment. The Review Team finds that the New South Glasgow Hospitals project has carried out a first-class procurement using competitive dialogue and is very well placed to gain approval for the Final Business Case (FBC) in the next two months. The project team continues to plan effectively for each phase of delivery and is able to build both capability and capacity into the team as and when required. The relationship with the contractor (Brookfield) is strong, and the move of the project team into a shared office suite on site is providing additional benefits. There are many lessons to be learnt from this project and efforts to capture and share them will deliver real value to many other projects in the health and wider public sectors. Overall delivery confidence is **Green**.

250 The detailed review text is positive in all respects and contains no acknowledgment or indication that what Inquiry Team have called the "Agreed Ventilation Derogation"²⁵⁶ had taken place or that the maximum temperature variant had been altered. Section 4.4.1 and its discussion of the short competitive dialogue period contains this recommendation:

²⁵⁴ A52281466 – Miscellaneous Minutes from Design and Construction Phase - Bundle of documents for Oral hearings commencing 13 May 2025, Bundle 40, Documents 123 to 129, Pages 375 to 432.

²⁵⁵ A33998289 - Gateway Review 3 (Investment Decision) - October 2010 – Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 2, Document 33, Page 348.

²⁵⁶ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Document 3, Page 251.

“If time allows, the project should capture the key points of the procurement in a case study and seek to share as widely as possible across the public sector. The review

team is aware of significant interest in the project from UK health sector, and of the willingness of the project to share experience²⁵⁷.”

251 The Inquiry Team is, as yet, unaware of whether the project did develop a case study of the procurement approach.

252 In light of the evidence of Mr Powrie and others in Glasgow III about the resources of the Estates Team at the QUEH/RHC after handover the information at para 4.5.3 is of interest:

4.5.3 The project team is exploring the potential for the contractor to recruit and train the M&E team who will transfer to the client on practical completion. This approach is designed to ensure that the client has a sound technical knowledge of the buildings from day one

9. Full Business Case

253 The Full Business Case²⁵⁸ and its appendices²⁵⁹ were approved internally by NHS GGC at its board meeting on 26 October 2010²⁶⁰ and then submitted to the Scottish Government in October 2010.

254 The contents of the FBC included:

“CHAPTER 1 - EXECUTIVE SUMMARY

...

The purpose of this Full Business Case is twofold: ...To confirm the proposals set out in this document are fully in line with the phased construction contract signed between NHS Greater Glasgow and Clyde and Brookfield Construction UK Limited in December 2009.” (pg8)

...

²⁵⁷ A33998289 - Gateway Review 3 (Investment Decision) - October 2010 – Bundle for Oral Hearings commencing 13 May 2025, Bundle 43, Volume 2, Document 33, Page 355.

²⁵⁸ A351008756 – NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ – October 2010 – Bundle for Oral Hearings commencing 19 August 2024, Bundle 18, Volume 1, Document 10, at Page 629.

²⁵⁹ A32691394 - NHS GGC Full Business Case Appendices - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Page 1357.

²⁶⁰ A34871326 - NHS Greater Glasgow and Clyde Board - Meeting Minutes - 26 October 2010 – Bundle for Oral Hearing commencing 13 May 2025, Bundle 37, Document 41, Page 544.

“Commercial Case

As an outcome of the tender competition and procurement administered by the Board, all key commercial aspects of the project are clearly defined and have been agreed between the Board and the Contractor. These include scope and coverage of the specification requirement for the hospitals (from both a clinical and technical perspective)” ²⁶¹

“2E. CHILDREN’S HOSPITAL (THE STRATEGIC CASE)

...

Infection control and efficient use of beds

...the new hospital has been designed in accordance with best practice for infection control to minimise hospital acquired infections and the associated risks.” ²⁶²

“2F. ADULT HOSPITAL (THE STRATEGIC CASE)

...

Emergency Care

...It is essential for patients with a high risk of being a source of infection to others to be managed “separately” to avoid the risk of infecting other patients. This will include; Influenza, Norovirus, Gastroenteritis, SARS, MRSA etc. This will require isolation facilities. The Infection Control Team have been fully involved in the planning of hospital to address and reduce the risk of spread infection through the design of the facilities.”²⁶³

“2H. BENEFITS CRITERIA AND REALISATION

...

The following table outlines the benefits along with how and when success will be measured.

...

²⁶¹ A35100876 - NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Page 643.

²⁶² A35100876 - NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Page 665.

²⁶³ A35100876 - NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Page 685.

i Physical Environment (Compliance, Adjacencies and Links)	Modern 21st century fit for purpose facilities. More patient and staff amenities for example, cafeteria, shops, changing facilities. Good levels of natural light and ventilation	Through delivery of the Employer's Requirements with interlinked equipment strategy and healing arts strategy. Compliance with NHS guidance and statutory regulation.
--	--	---

264

“2I. STRATEGIC RISKS

...

...Headline examples of this essential activity to mitigate and manage strategic risks includes:

...

Control of change - There is a robust change management control mechanism in place. Requests for change need to be supported by the respective Director, and a case presented to the Acute Services Strategy Board Executive Sub Group for consideration and approval. Due to the extensive user consultation undertaken prior to tender there have been very few requests for change from users during the development of the 1:200 and 1:50 design.” ²⁶⁵

“2E. CHILDREN’S HOSPITAL (THE STRATEGIC CASE)

...

Infection control and efficient use of beds

...the new hospital has been designed in accordance with best practice for infection control to minimise hospital acquired infections and the associated risks.” ²⁶⁶

“2F. ADULT HOSPITAL (THE STRATEGIC CASE)

...

Emergency Care

...It is essential for patients with a high risk of being a source of infection to others to be managed “separately” to avoid the risk of infecting other patients. This will include;

²⁶⁴ A35100876 - NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Page 696.

²⁶⁵ A35100876 - NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Page 705.

²⁶⁶ A35100876 - NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Page 665.

Influenza, Norovirus, Gastroenteritis, SARS, MRSA etc. This will require isolation facilities. The Infection Control Team have been fully involved in the planning of hospital to address and reduce the risk of spread infection through the design of the facilities.”²⁶⁷

- 255 The table at 2H “Benefits Criteria and Realisation” that describes as an identified benefit “Good levels of natural light and ventilation” might be contrasted with the terms of the “ZBP Ventilation Strategy Document” and its acknowledgment that the proposed air change rate “is less than the SHTM”.
- 256 Section 4A.2 of the FBC²⁶⁸ contains specific assurances around the compliance with the Employer’s Requirements (‘ERs’)²⁶⁹.

“4A. AGREED SCOPE & SERVICES

...

4A.2 Agreed Output Specifications

The accommodation requirements noted above are included in the Employers Requirements (ERs) documentation. The ERs are the output-based specification documentation agreed between the Board and the contractor that identify the specific requirements and standards to be achieved in the construction of the new facilities.

The ERs include specific outputs to be met for all aspects of the construction and design, including reference to and application of NHS (e.g. Scottish Health Technical Memorandum) and other standards, commissioning and handover requirements, sustainability targets, treatment of arts, community engagement and benefits, plus other technical requirements, together forming a comprehensive set of requirements to be met by the contractor.”²⁷⁰

- 257 Section 4A.3 on Design Development²⁷¹ focused on changes and design development after contract signature in the Stage 2 of the procurement before FBC. There is no mention of the standing down of the technical advisors after 2010.

4A.3 Design Development

The requirement to develop the design post-contract and pre-FBC (Stage 2 of the contract) is an integral element of the procurement strategy and a managed process

²⁶⁷ A35100876 - NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Page 685.

²⁶⁸ A35100876 - NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Page 736.

²⁶⁹ A49286669 - Provisional Position Paper 13 - Procurement History and Building Contract, Bundle for Oral hearing commencing 19 August 2024, Bundle 26, Document 3, Page 251.

²⁷⁰ A35100876 - NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Page 736.

²⁷¹ A35100876 - NHS GGC, ‘New South Glasgow Hospitals, Full Business Case’ - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Page 737.

involving the Board and the contractor that is tracked and reported to the Project Management Group. A collaborative approach involves interaction with Users in specific workstreams/areas of design development, including, for example the review and sign-off of the departmental plans.

Additionally, the established technical workgroups have been reviewing the wider design development, with inputs from the Project Team (including, for example, the infection control representative), Board technical advisers and other specialists where necessary. This activity is in order to ensure that the level of detail provided is commensurate with the stage of the process and the that requirements of the Board are being demonstrated and developed as well as allowing cost checks and procurement plans to be progressed by the contractor. As with any design process, the evolving design is 'moving' as it is influenced by internal and external factors and requirements – including, for example, planning and roads department inputs, fire strategy consultations and the like.

The requirement for information submissions during the pre-FBC (Stage 2) design development, and tracking of due dates and status is controlled and captured through the "Appendix K" tracker. The tracker is a 'live' document that is discussed between all parties, controlled and updated by the contractor in order that progress in design development can be monitored.

The design process will continue to develop into the next stage (Stage 3) of the process (post-FBC), with both further development of design and construction activity taking place. At FBC the extensive interaction with the User groups and technical review and activity has resulted in 1:500 and 1:200 floor plans for all levels and all departments signed off by the Board, with the 1:50 review process well developed such that each individual room type has been reviewed and agreed as representative of the Boards requirements in terms of size, equipment content and generic layout. Additionally, an extensive programme of workshops and reviews of technical data is in place and being progressed – this considering and addressing, for example, mechanical and electrical systems, access controls, acoustics, fire strategy, finishes, equipment, wayfinding, arts and other technical and related project data.

This level of sign-off has been facilitated by the engagement with over 70 separate User groups, each consulted on rounds of 1:200 and 1:50 reviews to provide the current position. The process was managed by the Board Project Team who co-ordinated and supported the User input and interface with the designers and contractor. A sample tracker for the 1:200 'Design User Group Meetings' (DUGM), is attached at Appendix F for information.

258 Section 6A.5.1 provides re-assurance about the role of the seconded ICN which can be read alongside the October 2014 report listing items approved by that ICN²⁷²

²⁷² A49401486 - NHS Greater Glasgow & Clyde Board Infection Control Committee Update on Infection Control Input to the New South Glasgow Hospital Project - 01 October 2014 - Bundle for Oral hearing commencing 19 August 2024, Bundle 27, Volume 8, Document 3, Page 41.

(which if Ms Rankin left the Project Team before the final stage of evaluation of the Brookfield bid does not extend to the Agreed Ventilation Derogation) and evidence about the arrival of Ms Stewart in April 2010²⁷³. It reads:

“6A.5.1 Stakeholder User Groups

...

It should be noted that infection control have been fully involved in the design with a senior infection control nurse being a full-time member of the Project Team and therefore part of the team liaising with the bidders, undertaking bid evaluation and working with the User Groups to develop the schedules and design. Between 2007 and 2009, in preparation for the tender period, the User Groups were instrumental in identifying critical co-locations and developing the Schedules of Accommodation and Clinical Briefs. Since then, the Users have been involved in developing the 1:200 and 1:50 layouts

“6.A.5.2 Technical & Facilities

Specific workshops and consultations were arranged during the development of the ERs to ensure that the numerous specialist technical aspects of the requirements were discussed and agreed with the relevant individual(s) and groups in the Board (and out with where necessary). This included mechanical & electrical workshop sessions with Senior Board Facilities Managers in order that the proposed output specifications were reviewed, adjusted where necessary, and agreed topic by topic as well as to support the setting of specific requirements for protection against critical failures (e.g. plant room floods and resilience to failures) which were embedded in the ERs. Similar such consultations included:

- ... • infection control review of technical documents and outputs in relation to surface finishes and other aspects of the requirements;
- HFS in relation to draft SHTM standards and the updating of standards”²⁷⁴

259 Section 6B “PROJECT MANAGEMENT”²⁷⁵ is silent about the decision to dispense with the technical advisors recruited by Currie & Brown. The Technical Design Group is further discussed in the FBC Appendices by inclusion of the Governance paper

²⁷³ A52553862 – Jackie Barmanroy - Witness Statement – Final Glasgow 4 Hearings – 04 April 2025, Bundle for Oral hearing commencing 13 May 2025, Witness Bundle, Week Commencing 12 May 2025, Volume 1, Document 4, Page 350, Question 2 and A52931190 - Hearing Commencing 13 May 2025, 15 May 2025 – Transcript – Fiona McCluskey and Jackie Barmanroy, Column 103

²⁷⁴ A35100876 - NHS GGC, 'New South Glasgow Hospitals, Full Business Case' - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Pages 786-787.

²⁷⁵ A35100876 - NHS GGC, 'New South Glasgow Hospitals, Full Business Case' - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 18, Volume 1, Document 10, Pages 796.

approved by the 19 February 2010 meeting of the Acute Services Review Programme Board.²⁷⁶

260 The FBC Appendices²⁷⁷ contain relevant statements at “**Appendix D Benefits Expected from the Project:**

1.1 Clinical Quality

...

1.1.3 Reduction in Hospital Acquired Infection (HAI)

...

The infection control team have been closely involved throughout the design process. Design of the hospital is following the Department of Health Primary Guidance, Infection Control in the Built Environment (2002) to ensure a robust and consistent approach to HAI prevention and to demonstrate commitment to improving patient safety.” (p19)

...

“1.4 Physical Environment

...

1.4.2 A Healing Environment

The new facilities will provide a modern environment with good levels of natural light and ventilation²⁷⁸ .”

“Appendix D Benefits Expected from the Project

...

1.1 Clinical Quality

...

1.1.3 Reduction in Hospital Acquired Infection (HAI)

...

The infection control team have been closely involved throughout the design process. Design of the hospital is following the Department of Health Primary Guidance, Infection Control in the Built Environment (2002) to ensure a robust and consistent approach to HAI prevention and to demonstrate commitment to improving patient safety.” (p19)

...

“1.4 Physical Environment

...

1.4.2 A Healing Environment

The new facilities will provide a modern environment with good levels of natural light

²⁷⁶ A35560136 - ASR Programme Board - Proposed Governance Arrangements - 19 February 2010, Bundle for Oral hearing commencing 13 May 2025, Bundle 30, Document 6, Page 36.

²⁷⁷ A32691394 - NHS GGC Full Business Case Appendices - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 30, Page 1357.

²⁷⁸ A32691394 - NHS GGC Full Business Case Appendices - October 2010, Bundle for Oral hearing commencing 19 August 2024, Bundle 17, Document 30, Page 1379.

and ventilation.” (p23)

“Appendix G Risk Registers

NSGH
Board Risk Register

Date Last Reviewed - 14th September 2010

No	CATEGORY	Issue / requirement	Risk	Primary Owner	Programme	Cost	MITIGATION	Post Control				Stages applicable	Probability	Frequency	Post Control Risk Value per stage £'s			Owner/ Leader	Action By Date	COMMENTS (incl. notes on basis of quantification and valuation of risk provision)
								1. Establish requirement to implement change	2. If change required, review with main contractor to determine most economic and effective means of implementation.	3. Optimism Bias as appropriate	4. Possible cost impact				Max	Aug	Min			
7	Character/ Innovation	Impact of change in Employers Requirements (space and design standards)	If the Board amend the Employers Requirements forming part of the ITPB then potential for: 1. Re-design of affected elements 2. Re-work (if already constructed) 3. Possible adverse impact on programme 4. Possible cost impact	Yes			1. Establish requirement to implement change 2. If change required, review with main contractor to determine most economic and effective means of implementation. 3. Optimism Bias as appropriate													

(p35)

14	Construction	The impact of "Compensation Events" to the Contractor (variations)	Compensation Events issued changing the Employers Requirements will require to be funded by the Board Potential for delay and additional costs	Yes			1. Minimise potential impact of CE by effective dialogue 2. Ensure change is minimised via robust GG&C internal control process 3. Robust and timely change control process													

(p36)

“Appendix N: Project Execution Plan

...

1. Introduction

...NHS Greater Glasgow & Clyde... have appointed Currie & Brown to provide Technical Advisor Services for the Development to deliver the new facilities covering:

...

- Mechanical & Electrical Engineering Design Review” (p257)

...

“8 Design Development and Change Control Management

...

8.7 Change Control Procedure

A Change Control Procedure has been established and is managed via the online Sypro system. The procedure must be completed, and formal instruction must be issued before the contractor commences any associated works. This procedure is relevant at any stage of the Project’s lifecycle.” (p281)

“The requirement for information submissions during the pre-FBC (Stage 2) design development... is controlled and captured through the “Appendix K” tracker. The tracker is a ‘live’ document...

261 FBC Appendix N stated that Currie & Brown had been appointed to provide technical advisor services that included M&E design review, and that work in the next stages

of the programme included M&E design development.²⁷⁹ But there was no mention that Currie & Brown's role had changed; the Technical Design Group meetings are noted as having commenced without any suggestion of an alteration to Currie & Brown's role.²⁸⁰

262 The only suggestion from the whole FBC that Currie & Brown's role had changed is a reference in Appendix O. A project RACI for Stage 1 refers to Currie & Brown as technical advisor but the Stage 2 RACI on the next page refers to Currie & Brown as cost advisor.²⁸¹

263 It was not made clear in the FBC that:

- The contract derogated from SHTM 03-01 in respect of the ventilation of either the single rooms or the general wards. This is what the Inquiry has referred to as the "Agreed Ventilation Derogation"
- Following the instructions of the Project Team, Currie & Brown had stood down their technical team, including Wallace Whittle, in early 2010 and thus their M&E ventilation specialist advisor who would otherwise have been available to NHS GGC during Stage 2 and Stage 3 of the procurement.

Approval of the FBC by Scottish Government

264 Despite not being approved internally by NHS GGC until its board meeting on 26 October 2010²⁸² the FBC was received by the CIG on 22 October 2010²⁸³ and considered by the CIG on 9 November 2010 despite being received after the normal deadline for the CIG on that date²⁸⁴. It appears that few members of the CIG responded in the very short timescales allowed and an extension was granted to them

²⁷⁹ A32691394 - NHS GGC Full Business Case Appendices - October 2010, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 30, Page 1613-1614.

²⁸⁰ A32691394 - NHS GGC Full Business Case Appendices - October 2010, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 30, Page 1624.

²⁸¹ A32691394 - NHS GGC Full Business Case Appendices - October 2010, Bundle for Oral Hearing Commencing 19 August 2024, Bundle 17, Document 30, Page 1662-1665.

²⁸² A34871326 - NHS Greater Glasgow and Clyde Board - Meeting Minutes - 26 October 2010 - Bundle for Oral hearings commencing 13 May 2025, Bundle 37, Document 41, Page 544.

²⁸³ A35072360 - Email from G Roy to Mike Baxter, B Sizeland, N Kinnear and others - Attaching Full Business Case - 22 October 2010, Bundle for Oral Hearing Commencing 16 September 2025, Bundle 48, Document 9, Page 330.

²⁸⁴ A35178847 - Capital Invest Group minute - 09 November 2010, Bundle for Oral Hearing Commencing 16 September 2025, Bundle 48, Document 10, Page 332.

to do so²⁸⁵ The minute of the CIG meeting of 9 November 2010 records that:

“Given the size of the project, [a member of the CIG] requested that she check the revenue affordability of the project before she agrees to sign off the business case.

On the basis of the information provided and with the agreement of the Group, Mr Baxter recommended that the project be considered via expedited procedures once outstanding issues have been resolved.”

265 As a result, the CIG’s FBC process was not concluded until 2 December 2010 when a report was sent to the Minister for Public Health on 9 December 2010 recommending approval of the FBC.²⁸⁶ The FBC was considered and supported by Cabinet and the Chief Executive of NHS GGC was informed of that approval by letter on 10 December 2010.²⁸⁷

10. Changes to Governance arrangements in 2011

266 At the end of this year the responsibilities of the Hospitals and Laboratories Lead Design Group transferred to the **Adult and Children's Hospitals' Design Group** and Project Management Group.²⁸⁸

11. Changes to Governance arrangements in 2012

267 In May 2012 the Acute Services Redesign Group became the **On the Move Programme** ²⁸⁹

12. Changes to Governance arrangements in 2013

268 As far as the Inquiry Team can see there were no changes noted to governance structure in 2013.

²⁸⁵ A35100857 - Email chain from G Roy - Full Business Case – 22 October to 15 November 2010 – Bundle for Oral Hearing Commencing 13 May 2024, Bundle 43, Volume 6, Document 38, Page 688.

²⁸⁶ A35072360 - Email from G Roy to Mike Baxter, B Sizeland, N Kinnear and others - Attaching Full Business Case - 22 October 2010, Bundle for Oral Hearing Commencing 16 September 2025, Bundle 48, Document 9, Page 330.

²⁸⁷ A35100870 - Letter - DF to Robert Calderwood - NHS Greater Glasgow and Clyde - New South Glasgow Hospitals - Full Business Case - 10 December 2010, Bundle for Oral Hearing Commencing 16 September 2025, Bundle 48, Document 12, Page 341.

A32612503 – Hospitals and Labs Lead Design Group – 14 December 2011 – Bundle for Oral hearings commencing 13 May 2025, Bundle 40, Document 140, Page 516

²⁸⁹ A35421945 - Acute Services Strategy Board - Meeting Minute - 8 March 2012, Bundle for Oral Hearing Commencing 16 September 2025, Bundle 48, Document 13, Page 342 and A35421716 – Acute Service Strategy Board – On the Move – Redesign Programme – February 2012, Bundle for Oral Hearing Commencing 16 September 2025, Bundle 48, Document 14, Page 347.

13. Changes to Governance arrangements in 2014

269 At the end of 2014 the **Acute Services Strategy Board** ceased, with its tasks being taken over by the **Migration Programme Steering Group** (supported by the Clinical Migration Planning Team as established in September 2013).

14. Gateway Review 4

270 Gateway Review 04 took place at between 31 March and 2 April 2015²⁹⁰ The Senior Responsible Owner was now Mr Loudon. The conclusion of the review was in these terms:

4.1.1 The project achieved approval for its Final Business Case in October 2010, and this document has provided a firm foundation for the procurement, construction and operational phases of the project. This review has taken place in the final three weeks before migration to the new hospitals and interviewees described a picture of detailed planning, rehearsal and communication.

4.1.2 The project team is to be commended on achieving handover of the building from the contractor five weeks early and on budget in January 2015.

4.1.3 The level of clinical engagement from design development through to Migration planning has been significant. The review team was impressed by the structure and process of engagement, which included the designation of Service Transfer Owners (STO) covering 128 Service Areas and over 70 user groups. The STO's have worked with the project team to develop detailed migration workbooks over a two-year period, and these are being used as guides for each Service Area.

The project has enjoyed a significant level of continuity in a number of roles, in the project team, Board management structure and in the stakeholder community. We see this has having a major impact on successful delivery.

4.1.4 Interviewees reflected that the highly inclusive process of design development has led to the construction of facilities that will meet the clinical and legislative requirements of a modern hospital. The review team experienced a real level of enthusiasm for transferring to the new facilities and for adopting new ways of working.

4.1.5 The Board's capital financial management approach has been able to manage the scale of the project effectively in addition to the other capital projects being run by the Board. The size of the project represents a large proportion of the national health

²⁹⁰ A33998288 - New South Glasgow Hospital Project - Gateway Review 4 (Readiness for Service) - April 2015 – Bundle for Oral hearings commencing 13 May 2025, Bundle 43, Volume 2, Document 37, Page 371.

capital spend, which has led to an understandable increase in the level of scrutiny from the Scottish Government Health Department.