



Review of the WA Government's decision to proceed with construction of the new Women and Babies Hospital within the Fiona Stanley Hospital precinct



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[IWA Review: New Women and Babies Hospital](#)

Decision Review Report

1. Purpose

Infrastructure WA (IWA) provides this advice in response to the Premier's request dated 4 July 2023 for IWA to review the WA Government's decision to proceed with constructing the new Women and Babies Hospital (new WBH) within the Fiona Stanley Hospital (FSH) precinct instead of to the north of G Block at the Queen Elizabeth II Medical Centre (QEII MC) site. The request notes that the review should:

- consider the risks outlined in the Business Case/Project Definition Plan (BC/PDP) for the new WBH option at the QEII MC, including the:
 - increased construction timeframe
 - associated risk of disruption to service delivery at QEII MC
 - accessibility for patients and staff
 - local and regional transport connections
 - limited opportunities to provide a parking solution.
- evaluate the decision to select the FSH Precinct as the preferred location to build the new hospital.
- be completed by Monday 31 July 2023.

This advice is provided in line with IWA's functions which under Section 8 of the *Infrastructure WA Act 2019* includes providing advice to the Premier on any matter relating to infrastructure.

1.1 Key considerations

IWA's review has focused on the new WBH project construction and deliverability related risks. Clinical services and operational planning are not within IWA's remit or expertise and related risks have therefore been excluded from this review. Based on advice received in the letter from the Department of Health (DoH), IWA understands that the DoH commenced engagement with clinicians and other relevant key stakeholders in late May 2023 (refer to Appendix 1). This work, which is focussed on resolution of key clinical services and operational matters following the decision to relocate the new WBH to the FSH precinct, is ongoing. DoH plans to further expand the process to include targeted engagement with consumers, families and carers later in 2023. Options analysis undertaken prior to and during development of the BC/PDP has also not been reviewed.

IWA has used best endeavours to conduct its review within the timeframe based on:

- review of available documentation, including:
 - publicly available health system planning reports such as:
 - Report of the Health Reform Committee (Reid Report, 2004)
 - Sustainable Health Review Final Report (2019)
 - QEII MC Masterplan (2019).
 - New WBH project documentation including:
 - Women and Newborn Service Relocation Project Application for Concept Approval Version 1 dated 22 October 2020
 - BC/PDP Version 0.5 Gold Final Draft Revision 1 dated 3 March 2023
 - Cabinet minute, decision sheet and attachments dated 3 April 2023, including additional advice on the FSH precinct¹.

¹ Note: To maintain the confidentiality of Cabinet-In-Confidence (CiC) material information contained within the Cabinet minute, decision sheet and attachments is not directly quoted in IWA's report. CiC information was also not provided to the IWA Board.

- Letter from the DoH dated 25 July 2023 outlining the rationale behind the decision to proceed with the new WBH at the FSH precinct and ongoing work with clinical staff and other stakeholders on clinical service and operational matters, included in Appendix 1.
 - King Edward Memorial Hospital Asset Audit Report dated 16 February 2018
 - Murdoch Activity Centre Transport Planning Issues Summary – July 2023
- peer review commissioned by IWA of the project master program included in the BC/PDP by a suitably qualified construction time scheduling consultant.
- targeted discussions with key government agencies involved in the new WBH project planning and decision-making process, as follows:
 - DoH
 - North Metropolitan Health Service (NMHS)
 - South Metropolitan Health Service (SMHS)
 - Department of Finance (DoF)
 - Department of Treasury (Treasury)
 - Department of Transport (DoT)
- inspections of the relevant sites:
 - QEII MC
 - FSH
 - King Edward Memorial Hospital (KEMH)

In undertaking its review IWA has sought to take into account:

- the different maturity levels of available information to ascertain construction and deliverability risks for the QEII MC site compared to the FSH precinct, and whether the information was sufficient to support Government's decision. It is noted from a health system planning perspective that along with the QEII MC site the FSH precinct is the only other site within the Perth metropolitan area with the relevant adult tertiary services with which to co-locate and integrate a new WBH. IWA understands that the DoH has commenced further due diligence investigations, building on work already completed for the QEII MC option, to define and scope a new WBH within the FSH precinct and supporting changes at other health sites including Osborne Park Hospital (OPH) and Perth Children's Hospital (PCH), in line with the Strategic Asset Management Framework. Some of this work is noted within the letter from DoH at Appendix 1.
- urgency around replacement of the existing KEMH, given significant risks associated with the ageing buildings and costs to keep them operational until the new WBH is completed. Following a detailed audit undertaken in February 2018 it was determined that the hospital was *"considered to be in average to poor overall condition with significant upgrades required to bring the facility into compliance with current requirements"*. Substantial sunken costs are currently being invested to maintain key buildings and assets to an acceptable standard to allow KEMH to continue operating until services are relocated to the new WBH. Additional investment required to maintain KEMH over a longer construction timeframe, particularly due to delays, would be better spent on the new WBH or avoided altogether.
- construction and deliverability risks in the context of other development that will need to occur within the QEII MC. Relocation of the new WBH cannot be viewed in isolation from other major redevelopments that will be required due to ageing buildings across the health system. The challenges of constructing the new WBH on the complex

brownfield site at QEIMC will similarly apply to other projects, notably redevelopment of the ageing G Block / Sir Charles Gairdner Hospital (SCGH). Although a business case has not yet been developed there is a reasonable potential that redevelopment of SCGH would need to occur back-to-back or within a short timeframe following completion of a new WBH at QEIMC, nominally around the mid to late 2030's. This would potentially increase overall construction timeframes and cumulative impacts to service disruption at the site to 20 years or more.

IWA's State Infrastructure Strategy recommended the development of a roadmap for the planning of and future investment in SCGH due to the potential scale and complexity of the redevelopment involved at QEIMC. IWA made this recommendation in the context of the recent construction of PCH and issues that arose during that project, and the planning underway for the new WBH that was already pointing to the complexity and disruption that the project would likely cause. Following this review it is evident that such work, informed by learnings from investigations into the new WBH, remains critically important.

2. IWA Key Findings

Based on its review **IWA considers** that construction and deliverability risks at the QEIMC site were sufficiently material to justify the decision to consider alternative site options for construction of the new WBH, particularly in light of the urgency to relocate the ageing KEMH. In particular:

1. The detailed due diligence provided in the BC/PDP illustrates significant and unavoidable risks that even with mitigation would likely further impact construction timeframes (beyond 2034) and cost, and cause ongoing service disruption at the QEIMC. These include:
 - Multiple factors which cannot be reasonably mitigated at this stage, such as unforeseen ground condition issues associated with the brownfields nature of the site, and ongoing revisions to the construction methodology and schedule to avoid unforeseen impacts on health services.
 - Impacts such as noise, vibration and dust from demolition and construction works to physically integrate the new WBH with existing buildings. This would most likely pose risks to sensitive clinical activities and equipment, particularly within SCGH given the level of design interface between the new WBH and existing G Block.
 - The central location of demolition and construction activity within the busy QEIMC site which will exacerbate challenges in managing and maintaining staff and patient accessibility for extended periods during construction.

Even if the level of physical integration between the new WBH and SCGH were reduced, the residual risks associated with the central location would be sufficient to justify reconsideration of the preferred option.

2. Based on available information and IWA's on-site observations it is evident that the FSH precinct is a less constrained, generally greenfield site that presents a more straight forward delivery option. The current configuration of buildings and services on site and location of adjacent construction activities for a new WBH is less likely to cause significant service disruption and accessibility issues. However it is noted that further detailed due diligence, such as the work IWA understands the DoH and DoF have now

commenced, will be required to ensure delivery and construction risks are well understood and mitigated. Key features informing IWA's observations include:

- The FSH precinct option proposes a stand-alone building connected by a link bridge compared to the physically integrated building proposed at QEIMC.
 - Alternative vehicle access arrangements available at the FSH precinct are likely to allow for greater separation of construction traffic from patient and staff/visitor traffic compared to the QEIMC site.
3. Although none of the QEIMC transport and accessibility related risks are considered to be a critical flaw, the FSH option is likely to provide less constraints and a greater level of flexibility to implement suitable transport solutions, particularly given the proximity of significant transport infrastructure including the Kwinana Freeway, major arterial road network and Mandurah Rail Line/Murdoch Station, which is currently serviced by a well-established bus network that supports both FSH and the wider Murdoch Activity Centre (MAC).

However, IWA notes that the MAC does have some transport and accessibility constraints. Further project planning and development for the new WBH will need to consider the transport needs and demand resulting from its development at FSH and confirm any necessary transport interventions. Based on advice received by IWA it is understood the Transport Portfolio is already actively working with the DoH and key stakeholders to help progress this work and has been tasked by Government with supporting delivery of any required new infrastructure and services, including proposed multi-deck car parking. It is also understood the Portfolio is supportive of the decision to relocate the new WBH to FSH from a transport and accessibility perspective.

3. Project Context

3.1 WBH project background

QEIMC option

The BC/PDP for the new WBH project encompasses the relocation of the Women and Newborn Health Service (WNHS) to a new WBH at QEIMC, to be co-located with children's services provided at Perth Children's Hospital (PCH) and adult tertiary services provided at SCGH. The WNHS provides obstetrics and gynaecology services governed by the NMHS, and neonatal services governed by the Child and Adolescent Health Service (CAHS).

The estimated cost to deliver the preferred option for the new WBH on the QEIMC site is \$2.015 billion, with \$334 million of the costs related to decanting and rebuilding of areas on QEIMC to accommodate the new WBH. The estimated cost is approximately \$229 million over the approved budget of \$1.787 billion. Delivery of the extensive enabling and main works is proposed to commence in May 2024 and be completed in 2033 to enable the new WBH to go-live by 2034.

IWA understands that the selection of the QEIMC site for the new WBH was based on long-held clinical planning aspirations in relation to best practice health benefits of co-locating women, newborn, children and adult tertiary services, and the future proposed layout of the QEIMC, as outlined in the planning and decision timeline below. It is noted that based on available information none of the planning prior to the ACA appears to have assessed potential challenges around constructability and staging.

FSH Precinct option

Desktop feasibility and options analysis to relocate the WNHS to the FSH precinct was conducted and identified two locations and developed four potential options, informed by the original FSH masterplan. The current options under consideration are located on a site occupied by an at-grade car park and childcare centre south of Robin Warren Drive, opposite the FSH Emergency Department and east of Moitch Park.

The following scope has been identified as part of the package of works necessary to relocate the new WBH to the FSH precinct:

- construct the new WBH based on a similar scope to the QEIMC site BC/PDP with supporting site infrastructure, including two new multistorey car parks to provide an additional 1,400 bays and expansion of the existing central energy plant
- increase obstetric and neonatal capacity at FSH, OPH and PCH
- establish a Family Birth Centre at OPH.

Based on the high-level work undertaken the options under consideration are estimated to have a design, construction and commissioning timeframe that, subject to approvals and other activities, could be achieved sooner than the QEIMC option.

The DoH and DoF have commenced detailed site and design due diligence to inform the preferred option for the new WBH at the FSH precinct. As outlined in Appendix 1 the DoH is also working with clinicians and other stakeholders to identify how clinical services would be reconfigured across the public health system.

3.2 Key planning and decision timeline

In 2004 the Reid Report recommended that KEMH and Princess Margaret Hospital (PMH) be rebuilt and co-located with an adult tertiary hospital, noting that KEMH was in more urgent need of capital reinvestment and should occur first. In July 2008 the then WA Government announced that PCH would instead be built first at the QEIMC to replace PMH and following that a new women's hospital would be built on the site to replace KEMH. In 2019 the SHR recommended that co-location and integration of the new WBH at the QEIMC be progressed as a priority.

Masterplans to guide future development of the QEIMC were released in 2010 and 2019, with both identifying physical integration of buildings. Neither masterplan considered constructability and staging in any detail.

The new WBH Application for Concept Approval prepared in 2020 examined options to relocate the WNHS, and subsequently recommended the option to integrate the new WBH with SCGH G Block. The BD/PDP, which was finalised in March 2023, explores options to integrate the new WBH north or south of G Block with consideration of related risks, and recommends the north option on the site of the existing E Block.

In March 2023 consultants commissioned to undertake a desktop feasibility and options analysis to relocate the new WBH to the FSH precinct identified four potential options, noting further detailed investigations will be required.

In April 2023 Cabinet considered the risks associated with the QEIMC site and FSH precinct feasibility and options analysis. On 11 April 2023 the WA Government announced the new WBH will be located at the FSH Precinct.

4. Further Commentary on Review Findings

4.1 Increased construction timeframe

IWA concurs that there is a material risk of an increased construction timeframe.

The BC/PDP provides a comprehensive master program informed by specialist consultants, which identifies an estimated go-live date for the new WBH of February 2034. To inform its review IWA commissioned an independent consultant to peer review the master program. Feedback received outlined that the master program is sound, based on available information, however identified potential risks of an extended program duration, particularly in relation to the new Ambulatory Care Building.

The BC/PDP identifies a number of risks with constructing the new WBH at the QEII MC site which are difficult to mitigate, and if realised could result in additional delays to the program. Works are required across the QEII MC with the majority of it located centrally within SCGH, adjacent to specialised and sensitive clinical services that need to be maintained with minimal disturbance, while at the same time catering for ongoing staff and public access.

Delays during construction could occur if impacts on sensitive clinical services are unacceptable and a revised construction methodology is required. Delays due to the discovery of latent conditions during construction must also be anticipated, for example within buildings to be demolished or renovated, under buildings where ground conditions are unable to be reliably tested prior to demolition, or where infrastructure services have been inaccurately mapped (likely given the age of the site/buildings and the ad hoc history of development).

Delays could also occur prior to construction when the new WBH project reaches pre-market testing stage when potential contractors have the opportunity to provide feedback on whether the master program is feasible. At this stage the master program is only an estimate of the expected project duration, albeit an informed one, and cannot be confirmed until such time as a contractor and their delivery program has been accepted.

The BC/PDP also identifies the risk that the selected contractor does not accept the State's contractual terms and/or that negotiations with contractor(s) take place in a non-competitive environment, which could cause delay. The current limited pool of suitable contractors operating in WA further reduces the confidence that there are contractors able and available to achieve the master program for a project as complex as the new WBH. Whether these risks eventuate will not be known until the procurement process is concluded.

4.2 Associated risk of disruption to service delivery at QEII MC

IWA concurs that there is a material risk of disruption to service delivery at QEII MC.

The BC/PDP identifies that *“there is a risk that ongoing services and operations at SCGH will be materially and adversely disrupted by construction activities”*. While controls are also identified in the BC/PDP, lessons learnt from other recent developments at the QEII MC such as PCH, Harry Perkins Institute and Radiopharmaceutical Laboratories / Cyclotron indicate it is difficult to mitigate this risk. Given the level of service and physical integration proposed, the likelihood of unavoidable disruption to service delivery is high.

Significant work and engagement have been undertaken as part of the BC/PDP to develop preferred staging plans and work programs to minimise this disruption. However it is clear through IWA's review that delays to the proposed construction program should be considered likely and that those delays would also likely have a consequential impact on service delivery.

This risk is exacerbated by the noise, vibration and dust generated by demolition and level of works to physically integrate the new WBH and G Block, including in close proximity to operating theatres, inpatient beds and highly sensitive medical equipment, all of which are required to remain in operation during construction. While IWA is not in a position to quantify the impacts of further service disruption, given the sensitive and specialised nature of activities on the site it is intuitively considered that these impacts could be significant.

4.3 Accessibility for patients and staff

IWA concurs that there is a material risk to accessibility for patients and staff.

Major redevelopment projects by their nature are disruptive as access must be managed to allow construction to occur within/around required ongoing movement of people and goods, while maintaining workplace health and safety. However, the uniqueness of the QEII MC is acknowledged, with demolition and construction activity required to occur within and around highly critical and sensitive health services occurring across the site.

The BC/PDP identifies the risk of impacts on health service delivery, hospital infrastructure and visitor and staff experiences for the duration of the works. Substantial work was undertaken as part of preparing the BC/PDP to identify measures to mitigate these risks, such as a staged approach to delivery and protection of the main patient, staff and emergency access routes including Hospital Avenue and Watling Walk. However, detail of how patients and staff would be able to move through the QEII MC during construction can only be fully developed as part of construction management plans, which would be prepared after selection of the contractor.

4.4 Local and regional transport connections, and limited opportunities to provide a parking solution

Transport and accessibility challenges (parking, access and traffic circulation) were identified in the BC/PDP and assessed as a significant risk. However, this work did not identify these risks as a critical flaw. Based on available information IWA concurs with this assessment but notes that they do present significant challenges to successful completion of the new WBH project at this site.

Neither the BC/PDP or further work have identified regional transport connections as a project risk, or as considerations for the preferred site location. This includes connections to regional WA, and within the regional metropolitan planning context.

IWA understands that due diligence on transport and accessibility requirements to support a new WBH within the FSH precinct has commenced with support from the Transport Portfolio. While this work is at its early stages, the advice received by IWA indicates that at a strategic level the MAC is already well connected by significant transport infrastructure and services, including a major passenger train line/station, freeway and arterial roads, and an established bus network. This provides accessibility and resilience from a regional transport network perspective, with the Transport Portfolio indicating it is supportive of the decision to construct the new WBH at FSH.

IWA notes that as the State controls or influences more of the land and transport links around the FSH precinct it will presumably have greater control over implementation of potential transport solutions than at the QEII MC, where a greater focus on coordinating stakeholders and local government partners is required to design, prioritise and deliver transport system improvements. IWA also understands some previous work has been undertaken to scope potential transport network and system upgrades to cater to future forecast travel demands to

and through the MAC, supported by detailed data and analysis. It is anticipated that some of these initiatives may be appropriate to support development of the new WBH.

Like QEIMC, the MAC is subject to transport constraints such as parking capacity and increasing congestion on surrounding arterial roads. Strategic planning has also identified the need for a future rapid/mid-tier transit connection to ensure the MAC continues to operate optimally in the medium to long term. The transport solution for the new WBH, including proposed provision of significant additional multi-storey car parking, will need to be considered in the context of broader transport planning for the wider precinct and transport networks. IWA understands that the Transport Portfolio has been tasked to co-ordinate the review and delivery of all transport related infrastructure (including parking solutions), and notes that provision of additional parking at FSH and the new WBH in the short term is likely to be less complex than at QEIMC due to reduced commercial complexities and availability of suitable sites with limited constraints for multi-storey car parking.

4.5 Selection of the FSH precinct as the preferred location to build the new hospital

Based on the information available, discussions with key stakeholders, site inspections and IWA's own experience, it appears that the FSH precinct is comparatively less constrained than the QEIMC from a deliverability aspect. As such IWA considers it is reasonable to assume the site will not be subject to the same level of risk, including disruption of services or accessibility for patients and staff, due to construction activities for the new WBH.

While IWA considers that the consultants engaged to prepare the FSH precinct feasibility and options analysis are suitably qualified and experienced, only an initial desktop analysis has been conducted at this stage. Given the inherent risks associated with any infrastructure project of this nature, significant detailed further investigations and analysis will be required to sufficiently scope and de-risk a final option, including the complementary works required at other sites to facilitate appropriate clinical and service delivery outcomes.

On face value it would be expected that several factors would reduce the overall project costs. Based on the limited information available, a shorter duration would be expected to construct the new WBH at the FSH precinct than at QEIMC. No major demolition is anticipated and there are likely to be less interface conflicts as the new building is largely stand-alone with limited physical integration with other buildings. There is also no obvious need to decant services or construct additional buildings to support the new WBH.

While the time and cost differential between the FSH and QEIMC options cannot be estimated more accurately until further analysis is completed, IWA has sought advice from an independent time scheduler who undertook a peer review of the high-level work completed to date. This review identified that the assumptions for planning, stakeholder engagement, design and construction stage durations estimated for the FSH precinct options appear to be sufficient. However, it was recommended that further time allocation be considered for the procurement and client commissioning stages.

It is also acknowledged that further engagement with clinical staff will be required to gain acceptance of the new arrangements, especially in regard to determining suitable clinical solutions to managing time-critical medical and surgical neonatal services. IWA understands engagement with appropriate clinical staff is underway, as noted above and in Appendix 1.

IWA also understands preparation of site and design due diligence investigations is now underway to support preparation of a PDP, which will inform detailed consideration of the proposal. IWA supports further due diligence work being undertaken before a final investment decision is made.



Government of **Western Australia**
Department of **Health**

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Dear Mr Helberg

NEW WOMEN AND BABIES HOSPITAL (NWBH) PROJECT

As requested in our meeting on 6 July 2023, please find this letter and attachments regarding the NWBH Project.

The final draft Business Case/Project Definition Plan (BC/PDP) for the new Women and Babies Hospital (NWBH) on the QEII MC site was considered by the Project Control Group on 3 March 2023, followed by the Steering Committee on 13 March 2023, however its early findings were being raised as early as late January to February 2023.

The development of the BC/PDP highlighted that progressing with the new hospital at the QEII MC site presents substantial risk, would cause significant disruption to patients and their families, as well as staff accessing Sir Charles Gairdner Hospital (SCGH) and Perth Children's Hospital (PCH), and other non-Government tenants occupying the broader site. This includes the impact on clinical services delivery, continued lack of parking, significant construction work, higher construction costs, and the hospital opening much later than planned due to the complex nature of the build. These risks were significantly greater than initially envisaged and have been identified through the detailed BC/PDP process.

In light of these risks, the Women and Newborn Service Relocation Project Steering Committee (WNSRP Steering Committee) was unable to recommend the preferred option presented in the Business Case to Government. Government asked the Department of Health to instead explore whether an alternative proposal to utilise greenfield space at Fiona Stanley Hospital would be viable, specifically from a buildability, site operations and timeframe perspective.

As noted in our initial discussion, for nearly two decades, the QEII MC has been earmarked as the proposed site for the new Women and Babies Hospital, with the intent of co-locating services with SCGH and the PCH. This concept was initially put forward in the 2004 Report of the Health Reform Implementation Taskforce, *A Healthy Future for Western Australians* (known as the Reid Review or Reid Report). The Reid Report recognised that there were strong clinical benefits to be gained from co-locating King Edward Memorial Hospital (KEMH) with an adult tertiary hospital.

It is well understood that significant capital investment is required for maintenance and remedial work to KEMH's facilities. It should be recognised that KEMH remains the only stand-alone tertiary women's and neonatal service in Australia, and the challenges of delivering contemporary care, in an ageing building with a layout that is no longer fit for purpose are significant. KEMH has faced significant challenges in safely meeting increasingly complex needs of birthing women, specifically the increasing complexity of patient needs, including higher rates of comorbidity¹. As you are aware, the 2018 asset audit (Philip Chun) noted the facility was in '*average to poor overall condition with significant upgrades required to bring the facility into compliance with current requirements*'.

As the Reid Report recognised the ageing KEMH was in more urgent need of capital reinvestment, it was recommended that the relocation of KEMH should occur first and be relocated within the medium term, with the relocation of Princess Margaret Hospital (PMH) as a second phase of development.

In a 2008 media statement issued by the then Minister for Health, the Government stated it had '*accepted the recommendations of the Reid Review with the exception that Princess Margaret Hospital will be retained in its current location*'. Following that statement, Government announced that a new children's hospital would be built to replace PMH, and that '*following the development of the new children's hospital, a new women's hospital would also be built on the site, replacing the existing King Edward Memorial Hospital*'. Construction of the children's hospital began in 2012, with the PCH at QEII MC opening in 2018.

In 2020, an Application for Concept Approval (ACA) for the NWBH was prepared by the Department of Health and North Metropolitan Health Service (NMHS). An initial high-level analysis of potential strategic responses was completed. Following this, a detailed site selection process was undertaken to identify the location of the new hospital on the QEII MC. It was identified in this process, that in order to achieve this preferred location (to the north side of G Block), a number of SCGH's operational services would need to be relocated in a two-stage process ('double decant') to ensure the main hospital build could commence. Further information regarding the issues identified in relation to costs, time and relocation of impacted clinical services. The proposed site selection, north of SCGH's G block, was endorsed by the Steering Committee in November 2021 and was submitted for Cabinet's consideration in December 2021.

1. Women and Newborn Service Redevelopment Project, Business Case / Project Definition Plan Final Gold v0.5, p.15

Following the endorsement of the preferred site location, the development of the initial master program was progressed. The initial master program, developed as part of the BC/PDP this year, indicated completion of main construction works and operational commissioning (Go-Live) by February 2034. This Go-Live date identified through the initial master program relies on the completion of all construction activities as programmed, without any material delays. Program mitigation options to achieve the earliest opening date were evaluated by the project team and considered by the Steering Committee; however, none of the options were considered to sufficiently balance the control of project risk with the achievement of project objectives. These risks are summarised in four broad categories: time; cost; project delivery and 'buildability'; and impact on existing clinical services. An overview of the risks considered by the Steering Committee is provided at Attachment 1.

It should also be noted that clinical commissioning of the new facility, decanting of impacted operational services at SCGH, and finally, the transfer of services from KEMH will only be achieved in line with high level timeframes (i.e. early 2034) on the basis that there are no material delays extending beyond the current contingency assumed for construction or infrastructure commissioning activities in the current master program. As has been shown through complex commissioning health infrastructure projects such as Fiona Stanley Hospital (FSH) and PCH, risks that are unknown at the time of BC/PDP emerge and usually cause further delay to the timeline – hence 2034 is highly ambitious.

Notwithstanding these concerns, ensuring services are maintained throughout the construction and commissioning of the facility is also a significant concern. The preferred location of the NWBH as proposed in the BC/PDP, is closely located to the Emergency Departments (Eds) of both SCGH and PCH. Ambulances accessing both Eds utilise Hospital Avenue, constrained in its location between both hospital facilities with limited options for alternate access, a concern in the case of construction works.

Further to this, the preferred option as noted in the BC/PDP is predicated on the completion of significant scope to achieve the necessary connections between the NWBH and SCGH. This would have included the relocation of a range of critical clinical services. This includes works within the SCGH to demolish and relocate elements of the hospital's existing Emergency Department, Intensive Care Unit and Mental Health Observation Area, among others. Relocation and expansion into the NWBH was also planned for key services of SCGH, such as Medical Imaging and Pharmacy and other front of house facilities, along with the construction of new link bridge connections.

It should be noted the BC/PDP also puts forward a proposal for a New Ambulatory Care Building (NACB), essential not only to support the necessary 'decanting' of existing services, but also to accommodate new services for ambulatory care and other outpatient related services as well as some KEMH services such as Genetic Services of WA and the Western Australian Register of Developmental Anomalies. The NACB was also planned to support an expanded and consolidated loading dock and associated logistics services, additional engineering plant and the replacement of the SCGH E Block electrical substation.

Collectively the works described above, even without the construction of a NWBH and NACB alongside, would represent a significant program of works, with complex sequencing considerations for a hospital that provides 24/7 tertiary care.

Therefore, in response to these significant cumulative and interdependent risks, in early March 2023, on the request of Government, the Department of Health sought independent external advice to confirm the feasibility of constructing a NWBH on the FSH site. The advice has produced four indicative feasible options, all located to the south-eastern area of the site, identified from the assumptions within the current BC/PDP. It was noted that while these options may be viable, they are subject to a further detailed planning. Site-based investigation is currently underway and includes precinct and planning approvals; traffic and access; as well as heritage and environmental considerations. This additional work is now being progressed under the guidance of the Steering Committee and is expected to be completed by the end of 2023.

The decision to change the location of the NWBH to the FSH precinct has highlighted some new issues to be addressed and opportunities to explore, which need to be worked through with the various stakeholders including clinicians and other staff at all affected sites including KEMH, PCH, Osborne Park Hospital (OPH) and FSH. FSH is a vibrant tertiary hub within the south metropolitan area and operates the same suite of adult tertiary services as SCGH through comprehensive acute, general and specialist medical and surgical services, as well as its own maternity, paediatric and neonatal services. It is acknowledged that genuine and meaningful engagement and collaboration with the clinicians who run each of the services impacted will be critical to work through the issues and opportunities arising from the change.

At the initial stage of the clinical consultation process, immediately after the change in location decision, the NMHS, in collaboration with the Child and Adolescent Health Service (CAHS) and the Department of Health (DoH), engaged the services of a suitably qualified consultancy group to design, facilitate and document a range of clinical consultation workshops. The broad aim of these workshops is to identify potential innovative solutions and service models for the clinical service delivery issues raised, pathways to solve these issues, and outlining next steps. The workshops are intended to focus on examining matters raised since the announcement of the change in NWBH location (particularly in relation to time-critical medical and surgical neonatal services) with a view to mitigating concerns and finding appropriate solutions around obstetric and gynaecological, neonatal and paediatric clinical service delivery across FSH, OPH and PCH. To date, two stages of the clinical consultation process have been conducted through late May to the end of June 2023, summarised in Attachment 2.

Furthermore, targeted engagement sessions with consumers, families, and their carers will be planned as an important next step later in 2023. This work will build upon the earlier 'patient pathways' focus groups carried out in late 2022 and will provide critical perspectives on the solutions being explored. A number of significant operational considerations such as the delineation of clinical services, management of highly specialised services over multiple locations, as well as maintaining a highly specialised workforce, have been highlighted through the consultation so far. These genuine issues need to be worked through, and the solutions being explored will continue to guide and inform not only the development of the updated PDP, but also the overall project over the coming months and years.

In closing, the combined PDP/BC outlined significant QEIMC site clinical and operational risks, in addition to the concurrent program risks associated with construction - time, cost and 'buildability'. While individually, the consequences of each of these risks may be regarded as reasonable with mitigations, it remains the case that mitigating each of these complex risks to a satisfactory level, was too significant for the WNSRP Steering Committee to support.

Consideration of these clinical and operational risks was significantly heightened, due to the continuing need to replace the ageing KEMH. Further still, considering the implications of managing the complex delivery of the program across a construction and commissioning program spanning the next decade was also a considerable concern. The QEIMC campus accommodates one of the State's busiest tertiary hospitals (SCGH) and Western Australia's sole tertiary paediatric hospital. Co-locating the NWBH with SCGH and PCH while also ensuring continuity of those services in a 24/7 environment represented an extraordinarily difficult proposition that could not be achieved in a timely or safe way for the health system at this time.

The process of engaging with clinicians across the sector is ongoing. It is vital we continue to engage and find appropriate solutions to issues raised. We will continue to work through the clinical and operational matters identified, so that issues that raised across all sites and services (FSH, PCH and OPH) are addressed to ensure the continued delivery of safe, high-quality care.

Yours sincerely



Dr D J Russell Weisz PSM
DIRECTOR GENERAL

25 July 2023

Att:

1. Overview of Key Risks Associated with the Preferred Option (QEIMC North of G Block)
2. Clinical Consultation Process

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G O V E R N M E N T O F W E S T E R N A U S T R A L I A

Attachment 1: Overview of Key Risks Associated with the Preferred Option (QEIMC North of G Block)

The construction, operations and strategic risks have been escalated to Government since reporting on this Government commitment commenced in 2021. Notwithstanding this, the risks and their impacts have now been further developed and understood, following the development of the BC/PDP, with the quantum of risks being briefed formally to Government in early 2023.

The presentation of the final BC/PDP to the Steering Committee has highlighted a significant number of risks associated with the preferred option. Overall, the WNSRP has a high risk profile and the BC/PDP identifies significant additional project risks. These are summarised in four broad categories

1. Impact on existing clinical services

- There is limited overflow capacity in the WA health system to enable clinical services affected by the project to redirect or transfer patients. This means that decanting strategies and ongoing mitigations to address potential service risks must be carefully sequenced, as there is limited, if any, redundancy to accommodate slippage.
- There are a number of extreme risks related to the operations of the QEIMC site that should be considered alongside the time and cost risks. These significant risks to existing services will require ongoing management and mitigation to ensure impacts are minimised. For example, the risk that:
 - Current clinical services and operations at SCGH, which performs complex surgeries and care, will be materially and adversely disrupted by construction activities. This could result in procedures being delayed or needing to be performed elsewhere, or impact on existing services such as the Emergency Department that must maintain services throughout construction.
 - Proposed decanting solutions, both temporary and permanent, for services at QEIMC are not acceptable for service provision. This could result in delay to the construction program and leading to interruptions to patient follow and disruption to services, along with a range of other consequences for staff.
 - Existing parking, access and traffic circulation issues are further exacerbated, both during and following construction activities. This could impact patient and visitor experience and potentially delay appointments, as well as negatively impact access for staff.
- There are significant time and cost considerations to ensure that safe and high-quality services continue to be provided in the ageing and stand-alone King Edward Memorial Hospital facility.
- KEMH is an ageing, inefficient facility and there are significant time and cost considerations to ensure that safe and high-quality services continue to be provided in the stand-alone facility. Significant capital investment is required for maintenance and remedial work to the facilities, however this would not address the broader challenges of delivering contemporary care in an ageing building with a layout that is no longer fit for purpose. A 2018 asset audit noted the facility was in *'average to poor overall condition with significant upgrades required to bring the facility into compliance with current requirements'*.
- There are also stakeholder and change management risks related to staff and key partners that are currently rated high. These should be highlighted as significant areas requiring ongoing focus and active management to ensure that they do not impact the success of the program.

2. Project Delivery and 'Buildability'

- The QEIIIMC site faces pre-existing access, space and usage constraints that already create issues for both patients, staff and the wider community (for example tenants within the QEIIIMC, including the University of Western Australia and private research facilities).
- Some of the shared service connections between PCH, SCGH and a new facility) on the QEIIIMC site will be unachievable due to the current position of the Telethon Kids Institute (TKI) (located at the centre of the site) and the ward clinical areas within PCH (located towards the southern eastern end of the site).
- The risk of latent or undetected conditions associated with construction on a brownfield site is significant and was highlighted as a major area of unknown risk that may only be identified after demolition and site works commence, due to the age of the infrastructure and works occurring over a number of decades. Issues identified within water supply at PCH as it was being commissioned, is a key example demonstrating how a latent condition could result in significant adverse impacts on both construction and commissioning programs, in terms of time and cost, impacting on service delivery.

3. Time

- The initial master program prepared for the final BC/PDP indicates completion of main construction works and operational commissioning (Go-Live) by February 2034. While a range of program mitigation options to achieve the earliest opening date, developed by the master programmers and evaluated by the project team, none of the options were considered to sufficiently balance the control of project risk with the achievement of project objectives, nor gave any material benefit to timeframes.
- For this project, the program relies on the achievement of all construction timeframes, the decant of patients from existing services within SCGH, commissioning of the new facility, through to the transfer of services from KEMH being completed without delay. The risk associated with these assumptions cannot be understated, given that they rely on significant staging of activities, within an extraordinarily busy site, involving
- All of these program areas must proceed with no delays extending beyond the contingency included in the current master program.

4. Cost

- Through the development of the BC/PDP, the project costs have been further developed in line with more robust scope definition and the Master Program aligned to the preferred option.
- The BC/PDP provides an initial estimate of gross project total cost of \$2.015 billion, which is approximately \$229 million over the approved budget of **\$1.787** billion.
- The project cost identified for the WNSRP program of works, comprises four elements, further information on these four elements is described in the BC/PDP and summarised below:
 - The estimated cost increase can be attributed to a variety of factors including the current heated construction market, a projected longer delivery program which impacts escalation and changed scope of the WNSRP as set out below.

- Additional enabling works (works necessary to relocate services impacted by the site selection) as the ACA only included the fit out and refurbishment works to accommodate tenants requiring relocation from existing buildings relevant to the selected site and did not include new builds, replacement of demolished facilities, dependency relocations and interim solutions. With limited free and available areas for accommodation options on the QEIIIMC, the proposed options consist of a mix of new and refurbished solutions for final service relocations as well as reduced scope of services requiring interim solutions until the NACB and the NWNH are complete and operational.
- Increased main works as essential connections and associated refurbishments to G Block are required and have been added to enable linkages and adequate interface for SCGH G Block services expanding into the NWNH.
- Additional forward works comprising demolition of two existing buildings, E and D Blocks, are required to make way for the NWNH and NACB.
- New offsite works comprising relocation of the Family Birth Centre (FBC) and Parent Accommodation to a new build offsite.
- The due diligence undertaken as part of the BC/PDP identified the above complex issues related to the complexity of constructing the NWNH on a brownfield site, including the enabling works strategy for impacted services which need to be relocated. Consequently, time, costs, as well as footprint contingency were included in the program and project costs.
- It should be noted that the scope and budget exclude, as is the case with all major health infrastructure projects, Information and Communications Technology (ICT) costs and transformation/clinical commissioning costs. The construction of a multi-deck car park(s) or any changes to existing road or transport infrastructure at the QEIIIMC, structural upgrade to A block link on level 3, Child Care Centre and Automated Guided Vehicles are also not included.
- Recognising the significant time and cost risks highlighted in the BC/PDP, further analysis was commissioned in March 2023 in relation to the QEIIIMC preferred location (as an addendum to the BC/PDP) to revalidate the recommendations incorporated within the BC/PDP Preferred Option.
- This analysis did not indicate significant changes to cost or time, and even predicted a longer time to commission and increased costs.

Att 2: Clinical Consultation Process

Stage 1

Between 29 May and 9 June 2023, twenty (20) targeted stakeholder meetings were held with forty (40) key clinical and site-based staff nominated by the relevant HSP executive. The key stakeholders consisted of Executive Directors, Co-Directors, Heads of Department, and senior medical, nursing, midwifery and allied health staff from the relevant clinical areas: obstetrics, gynaecology, neonatology and mental health across a range of organisations:

- Women and Newborn Health Service (WNHS);
- Sir Charles Gairdner Osborne Park Health Care Group (SCGOPHCG);
- NMHS;
- CAHS; and
- South Metropolitan Health Service (SMHS).

The primary focus of these meetings was to explore the clinical service delivery issues raised to date with the change in site to subsequently define, confirm and prioritise the clinical service delivery issues for discussion at the planned workshops.

Stage 2

Between 12-26 June 2023, six clinical focus group workshops were conducted to build on the clinical service delivery and overall site issues defined during small-group meetings and workshops, with the aim to generate mitigations and solutions and explore potential opportunities that can be leveraged.

- Workshop 1: Obstetrics and gynaecology;
- Workshop 2: Mental health;
- Workshop 3: Neonates and paediatrics;
- Workshop 4: PCH site;
- Workshop 5: FSH site; and
- Workshop 6: OPH site.

Relevant staff were nominated to attend the workshops by their HSP executive. The workshops aimed to build on the clinical service delivery issues defined above through the small-group meetings, with the aim to generate mitigations and solutions and explore potential opportunities that can be leveraged. The workshops have been well attended by approximately 138 clinical staff across all the relevant HSPs.