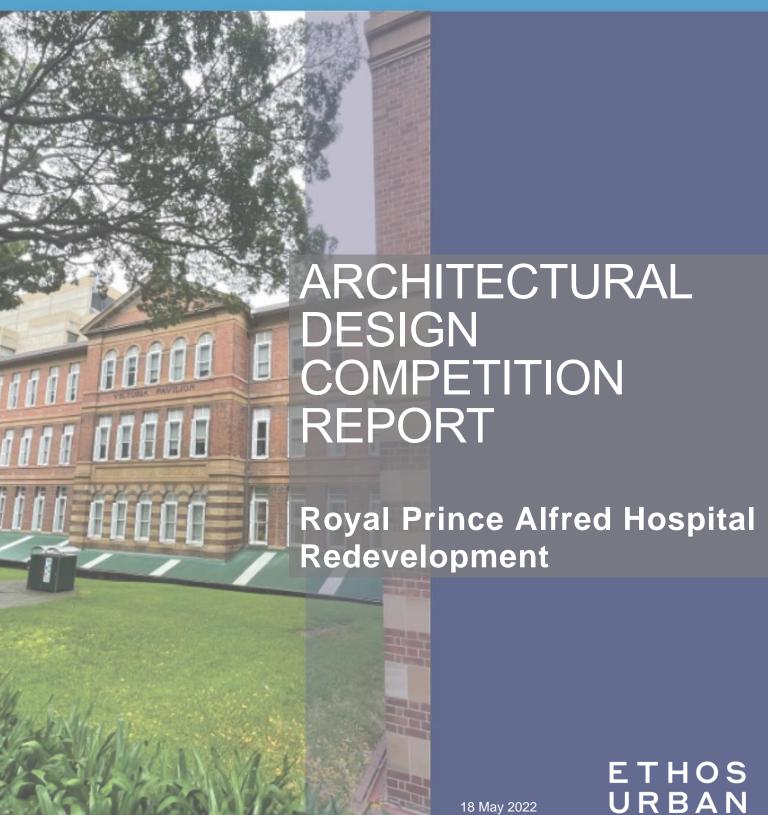


ROYAL PRINCE ALFRED

HOSPITAL REDEVELOPMENT



18 May 2022

This Architectural Design Competition Report has been reviewed and endorsed by the Competition Jury, which comprises:

Ms Abbie Galvin (Jury

Dr Teresa Anderson AM

Chair) Date: 20 May 2022

Date: 18 May 2022

Mr Graham Jahn AM

Date: 3 May 2022

Ms Rebecca Wark

Date: 6 May 2022

Mr Alan Croker

Date: 3 May 2022

Mr Ernest Girardi

Date: 3 May 2022

Acknowledgement of Country

It is acknowledged that we are living and working on Aboriginal land. We recognise the strength, resilience and capacity of Aboriginal people on this land. We would like to acknowledge all of the traditional owners of the land and pay respect to Aboriginal Elders past and present.

CONTACT

Brendan Hoskins Associate Director bhoskins@ethosurban.com (02) 9956 6962

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This document has been prepared by:

This document has been reviewed by:

Patricia Eltakchi Senior Urbanist Brendan Hoskins Associate Director

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List of Abbreviations

RPA Hospital	Royal Prince Alfred Hospital	
GANSW	Government Architect NSW	
DPE	Department of Planning and Environment	
the City	City of Sydney Council	
SLHD	Sydney Local Health District	
HI	Health Infrastructure NSW	
ED Emergency Department		
IPU	Inpatient Unit	
ICU	Intensive Care Unit	
NICU	Neonatal Intensive Care Unit	
CHERP	Camperdown Health and Education Research Precinct	

1.0 Introduction

This Architectural Design Competition Report has been prepared by Ethos Urban on behalf of Health Infrastructure NSW (the Proponent) for the Invited Architectural Design Competition (Design Competition) undertaken for the Royal Prince Alfred (RPA) Hospital Redevelopment. This Report has been prepared in accordance with the draft *Government Architect's Design Excellence Competition Guidelines* (GANSW Guidelines) and the City of Sydney Council (the City) policy for architectural design competition reports and summarises:

- the competition process;
- · the architectural submissions; and
- the Jury's deliberations, decision and recommendations.

This Report should be read with the Architectural Design Competition Brief (the Brief) which is provided at **Appendix A.** The Competition was conducted in accordance with the Brief, which was endorsed by the Office of the NSW Government Architect (GANSW). The Proponent also consulted with the City and Department of Planning and Environment (DPE) throughout the development of the Brief.

The main objective of the Design Competition was to select a design concept which has the potential of achieving design excellence in accordance with the requirements of clause 6.21C (2) of the *Sydney Local Environmental Plan 2012* (Sydney LEP 2012).

The purpose of the Design Competition was to select a design collaborator who presented the highest quality architectural, landscape and urban design proposal for the RPA Hospital Redevelopment. The selected design collaborator will work with the existing project team, including Jacobs, to develop the detailed design for the RPA Hospital Redevelopment.

1.1 Bespoke Invited Design Competition Process

The GANSW Guidelines acknowledge 'special scenarios' where a bespoke design competition, tailored to the needs of the project, may be required for large or complex projects.

As such, a **bespoke Invited Architectural Design Competition** process was adopted in recognition of the project program and extent of preparatory work already completed, as well as the design complexities associated with navigating the balance between meeting the clinical and functional requirements of a hospital while delivering a world class, integrated built environment and urban and public realm commensurate with a public facility of RPA's significance.

1.2 Design Excellence Strategy

This bespoke Invited Architectural Design Competition was undertaken in accordance with the endorsed Design Excellence Strategy, dated September 2021. The Design Excellence Strategy was prepared to define the location and extent of the Design Competition, the type of design competition, and the key elements of the competition process, including the ongoing design integrity requirements.

The Design Excellence Strategy was prepared in order to achieve the following key objectives:

- Establish a methodology for the proponent to implement a competitive design process for the redevelopment of the RPA Hospital East Campus, in accordance with the GANSW Guidelines.
- Ensure that the competitive design process works within the framework of an endorsed Design Excellence Strategy.
- Ensure that the competitive design process addresses site planning and public domain design, including addressing key matters raised by the State Design Review Panel in preliminary reviews of the project.

- Confirm the number of architectural practices to participate in the competitive process and how these firms are selected. This was limited to three (3) competitors with a strong track record of completed projects, including large scale and master planning projects.
- Establish the process for the selection of a competition Jury, and explain the role of the Jury in the design integrity phase.
- Outline the approach for establishing a Competition Brief.
- Ensure that design integrity is continued in the subsequent detailed development proposal through construction
 phase to completion of the project.
- Establish a timeframe for the competition program.

1.3 Competitors

The architectural firms invited to participate were selected due to their demonstrated design excellence track record and recognised skills and experience in public work across a range of scales, including buildings within sensitive heritage contexts. The three (3) selected Australian architectural practices were (in alphabetical order):

- Architectus, in collaboration with Durbach Block Jaggers, BLP, Aspect Studios, CAB Consulting and Yerrabingin;
- Bates Smart, in collaboration with Neeson Murcutt + Neille, Turf Design Studio, Cox Inall Ridgeway, and Atelier
 10: and
- Fitzpatrick + Partners, in collaboration with Tokin Zulaikha Greer (TZG).

While these team structures are acknowledged, for simplicity throughout this Report the teams are referred to by only the lead architect.

1.4 Competition Jury

The Competition Jury was formed with consideration of Section 3.4 of the GANSW Guidelines and the RPA Hospital Design Excellence Strategy. The Jury comprised a total of six (6) members, with three nominated by GANSW, each of whom have no pecuniary interest in the development or involvement in the development approval process, and three nominated by the Proponent.

The Jury comprised the following members:

- Three nominated by GANSW:
 - Abbie Galvin (Chair) NSW Government Architect GANSW;
 - Graham Jahn AM Director of City Planning, Development & Transport City of Sydney; and
 - Alan Croker Director and Principal Architect Design 5.
- Three nominated by the Proponent:
 - Dr Teresa Anderson AM Chief Executive Sydney Local Health District;
 - Rebecca Wark Chief Executive Health Infrastructure NSW; and
 - Ernest Girardi Managing Director Silver Thomas Hanley.

The substantial breadth and depth of experience across the Jury ensured there was considerable debate and rigour applied during the deliberation and selection process.

1.5 Technical Advisors

Technical Advisors were selected by the Proponent to assist in the Competition given the complexity of the Project and Competition Site. The Proponent made available the following Technical Advisors to provide technical assistance to all Competitors and the Jury:

- Clinical Services / Health Planning (Jacobs/TSA/SLHD).
- Cost Planning (Genus Advisory).
- Buildability (TSA).
- Structural Engineering (Taylor Thomas Whiting).
- Heritage (Heritage 21).
- Aviation (AviPro).
- Arboriculture (Martin Peacock Tree Care).
- Mechanical, Electrical and Hydraulic Engineering (Arup).
- Fire Engineering (Warren Smith and Partners).

Competitors were permitted to also appoint their own Technical Advisors as required.

1.6 Observers

GANSW, DPE, and the City appointed impartial observers to oversee the Competition. Representatives from these observers were invited to the:

- Briefing Session(s) for Competitors and Jury;
- Interactive workshops; and
- Presentations by Competitors.

The following staff were present as observers at some, or all, of the above-listed stages of the Competition:

- Rory Toomey Principal Design Excellence GANSW;
- Nathan Stringer Principal Planning Officer DPE;
- Anita Morandini Design Excellence Manager, City Planning Development & Transport the City;
- Silvia Correia Design Excellence Coordinator the City;
- Andrew Rees Area Planning Manager, Planning Assessments the City;
- Marie Burge Senior Planner, Planning Assessments the City; and
- Georgia Nicol Design Excellence Planner the City.

The attendance of representatives from Health Infrastructure NSW was permitted.

1.7 Competition Manager

Ethos Urban (Brendan Hoskins) was engaged by the Proponent to act as Competition Manager.

2.0 Competition Program Outline

An outline of the key events in the Competition is provided in **Table 1**.

Table 1 Key Events in the Competition

Date	Event	Description
25 October 2021	Commencement of competition	Competition Brief issued to invited Competitors.
26 October 2021	Competitor briefing session	Briefing session conducted via Microsoft Teams attended by Competitors and observers.
27 October 2021	Competitor site visit	Site visit attended by Competitors and observers.
12 November 2021	Interactive Workshop 1	Competitors attended a mandatory interactive workshop following submission of work-in-progress material for review by Technical Advisors. Advice given at this session was strictly limited to technical matters.
1 December 2021	Interactive Workshop 2	Competitors attended a mandatory interactive workshop following submission of work-in-progress material for review by Technical Advisors. Advice given at this session was strictly limited to technical matters.
10 December 2021	Jury briefing session	In-person site visit followed by a briefing session conducted via Microsoft Teams attended by all Jury members.
17 December 2021	Final submission lodgement	Competitors submitted electronic copies of the Final Submissions via the Design Competition Manager (DCM) online platform to the Competition Manager for distribution to the Jury.
4 February 2022	Technical advisor reports issued to Jury members and observers	Competition Manager circulated reports by Technical Advisors to the Jury and observers.
4 February 2022	Presentation material lodgement	Presentations submitted via the DCM to the Competition Manager for compliance review.
7 February 2022	Cost Estimate by Proponent's Quantity Surveyor	Quantity surveyors report issued to Competitors, the Jury and observers.
9 February 2022	Technical Review Presentations	Technical Advisors presented their assessment of each Competitor's submission to the Jury.
10	Final presentations and Jury deliberations	Competitors presented their Final Submissions to the Jury.
February 2022		The Jury met and deliberated, concluding that all Competitors should advance to a second round and address matters for refinement and clarifications.
15 February 2022	Second round letters issued to Competitors	The Competition Manager issued second round invitation letters to all Competitors.
4 March 2022	Second round submission lodgement	Competitors submitted addendum Submissions responding to the matters for refinement and clarification via the DCM.
16 March 2022	Second round presentation material lodgement	Second round presentations were submitted via the DCM to the Competition Manager for compliance review.
18 March 2022	Second round final presentations and deliberations	Competitors presented their second round Submissions in person to the Jury.
		The Jury met and deliberated the second round submissions and presentations to make a decision.
23 March 2022	Notification to Competitors of decision	Notification of the winner was issued to the Competitors via email.

3.0 Submission Summary and Assessment - Round One

A total of three (3) detailed and comprehensive schemes were considered by the Jury in the first round of the Competition. Each design scheme was distinct in its response and unique in respect to its interpretation of the Competition Brief. Each Competitor presented a high-quality written submission and presentation, seeking to address the complexities of achieving clinical planning and offering solutions and strategies to address the design and place making objectives of the Brief. A summary of the schemes and accompanying Jury's assessment is provided in the following section.

3.1 Architectus Team

Summary of Submission

The Architectus scheme proposed refurbishment of existing clinical space and the construction of new structures, with the concept driven by the introduction of several key elements including:

- **Crown**: The Crown Building was proposed as a circular form reaching seven storeys in height, to the north of Building 89. The building accommodated women's services including a new entry for delivery/birthing suite, new maternity In-Patient Unit (IPU) on the upper levels, and women's ambulatory care.
- Longhouse: The 'Longhouse' comprised a two storey addition to Building 89 at Levels 9 and 10. The Longhouse incorporated a crested silhouette to relate to the new Crown and Wing buildings and the existing heritage buildings. This addition would house Intensive Care Unit (ICU) space over two levels.
- Wing Building: The Wing Building was proposed as an 11 storey new building, sited adjacent to the eastern boundary of the RPA Hospital Campus. The 'wings' provided larger floor plates for ICU on Levels 9 and 10. The Wing building accommodated Neonatal Intensive Care Unit (NICU) and Delivery expansion and IPU.

The Architectus scheme delivered 846 beds, which exceeded the *Clinical Services Plan* (CSP) target to 2026 by 56 beds.

New pedestrian links were facilitated to improve east-west connections from Missenden Road to the proposed Level 5 Garden Podium. North-south connections introduced across Levels 3 to 5 also sought to improve internal wayfinding through the hospital.

The proposal incorporated strong reference to Connecting with Country themes which informed the design of various spaces including the ground level arrival area, inner courtyards and rooftop gardens.

Heritage listed buildings on the Competition Site, including the Tissue Pathology and Diagnostic Oncology Building, the RPA Chapel and the Rear Gardens were proposed for demolition to accommodate the Wing Building. Architectus proposed the reinterpretation of both the Pathology and Chapel buildings in the courtyard landscaping through reuse of salvaged materials.

Photomontages and key diagrams of the Architectus scheme are provided at Figure 1.

Jury Assessment

The design intent of creating memorable and joyful edge buildings that were defined by their form and character was supported by the Jury. The distinctive urban response was considered to minimise the 'institutional' feeling of the hospital. The fluidity and scale of the built form was also seen to promote a positive relationship between the existing heritage buildings. Architectus' meaningful approach to Connecting with Country themes was praised by the Jury, including the strong presentation. It was apparent to the Jury that designing for place and Country established the foundation for Architectus' design scheme which facilitated a dignified approach to the Competition Site.

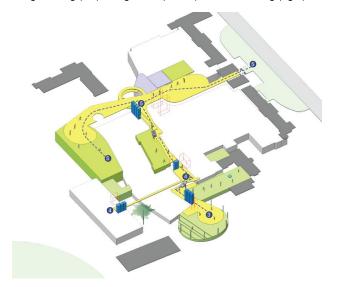
While the clinical planning required further improvement, the Jury commended the Architectus team for their clinical approach and saw strong potential for this team to address the clinical solutions for the project. The scheme's relationship to light and air demonstrated Architectus had prioritised the patient and staff experience, with particular note made to the separation of public and clinical flows and the extent of natural light to ICU beds.

The Jury raised concerns regarding the circular form of the Crown building which was considered to be not well suited for the clinical needs and functional operation of a hospital. In particular, the form reduced lines of sight and wayfinding which could compromise clinical care in the IPUs.

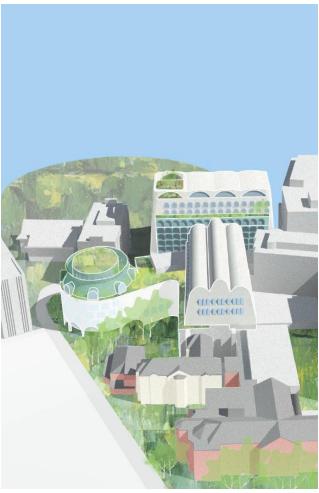
Following technical advice, the Jury also raised concern that the height of the Longhouse protruded into the helicopter landing and departure path. The Jury also saw scope to reduce the number of beds to allow the scheme to realise the project budget.



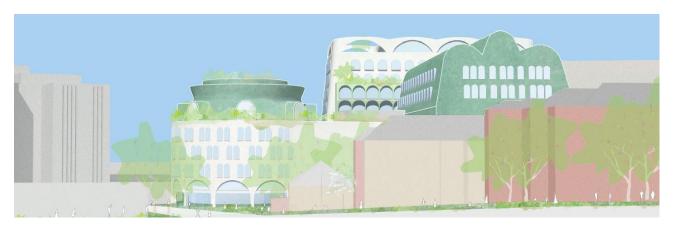
Wing building (left); Longhouse (centre); Crown building (right)



Wayfinding (east-west and north-south connections)



Illustrative view (aerial)



Illustrative view from Missenden Road

Figure 1 Architectus First Round submission

3.2 Bates Smart Team

Summary of Submission

The Bates Smart scheme sought to deliver improved wayfinding, heritage retention, enhanced landscape character, and deliver a health-promoting campus. Refurbished internal spaces and new building additions were proposed to deliver on the clinical requirements of the Brief.

Bates Smart's proposal aligned closely to the Reference Scheme accommodation schedule, and delivered 805 beds, exceeding the 2026 target by 15 beds.

Bates Smart sought to introduce clarity to the public circulation across the RPA Hospital Campus through improving connections to landscape and allowing for a clearly identifiable route through the hospital. Wayfinding through the Campus was anchored by a multi-storey landscaped atrium, known as the Forest Spine. The Forest Spine redefined the internal public circulation and sought to provide an uplifting public realm which allowed for intuitive wayfinding and an improved pedestrian experience. The Forest Spine was to offer a heart to the Campus and serve as the key mechanism to improve wayfinding connections from the northern entry to southern entries. A design approach of a highly glazed façade and saw-tooth rooftop was proposed at the Forest Spine to allow for high levels of natural daylight.

The Eastern Wing was proposed as an 11 storey courtyard building, adopting an 'L'-shape and incorporating women's health ambulatory care, neonatal and delivery expansion, radiology expansion, maternity IPU, and general IPU. The geometry of the built form was driven by the retention of the heritage Pathology Building by building the tower structure over the existing building, retention of significant trees in the rear gardens, and an attempt to soften the built form edge to the University of Sydney campus. The building design also sought to optimise outlook with views over the University of Sydney campus.

A key principle of the design of the Eastern Wing and the Bates Smart scheme was the retention of the heritage listed Pathology Building in situ, incorporating this building as a showcase entry space at the ground plane. While the RPA Chapel and rear gardens were to be demolished, the retention of the Pathology Building was highlighted in the scheme as a balanced heritage approach.

A six storey North Extension to Building 89 was also proposed, occupied by women's health ambulatory care, IPU shell and ICU.

Jury Assessment

The Jury commended Bates Smart on the Forest Spine as a strong placemaking opportunity which clarified wayfinding and offered significant public amenity. The Forest Spine was seen as a unifying device that strengthened the ground plane, created a heart for the hospital, and introduced a mixed modal space with strong sustainable design principles. The consideration by the Bates Smart team on how staff and visitors can interpret settings through internal spaces, and the strong north-south linkage was a fundamental positive of the scheme. From an architectural perspective, the Jury believed the built form would deliver a sophisticated outcome and quality façade that respected the surrounding Campus.

The Jury were concerned with the clinical planning outcome in the Eastern Wing, namely the location of the support and vertical transportation connections in the centre of the built form and the impact this would have on the clinical operations of the new building. The Jury commended the intent of retention of the Pathology Building, however was not convinced of the proposed solution which encased the heritage item and disrupted its setting, diminishing the benefits of retention.

While applauded as a significant contribution to the redevelopment, the Jury raised concern that the Forest Spine was generating a substantial departure from the project budget. As a fundamental component of Bates Smart's scheme, the Jury was comfortable that the Forest Spine could be refined through further design development.

Following technical advice, it was revealed that Forest Spine protruded into the helicopter landing and departure path by 3.5m. In addition to a review of the Eastern Wing, the Jury identified an opportunity for the Bates Smart team to focus further on the refurbishment of existing areas as opposed to new building floor space to meet the budget.

Forest Spine (internal)



Forest Spine (internal)





Northern Extension and Forest Spine (external)

Eastern Wing



Retention of the Pathology Building

Figure 2 Bates Smart First Round submission

3.3 Fitzpatrick + Partners Team

Summary of Submission

The Fitzpatrick + Partners scheme aimed to achieve clinical efficiency through consolidation of new floor space in a tower form (the Northern Wing), allowing for the retention of the existing heritage buildings and rear gardens. The Northern Wing was proposed as a 14 storey tower to the north of Building 89, containing two primary wings connected through a support services link and core. The Fitzpatrick + Partners scheme delivered 787 beds, which was a shortfall of the CSP target to 2026 by 3 beds.

The Fitzpatrick + Partners masterplan, excluded from the proposed scope of this stage of the RPA redevelopment, was underpinned by four key future moves discussed below.

Missenden Road reconfiguration

The Missenden Road frontage was sought to be enhanced through a staged reduction in vehicle access. A design intent of limiting vehicular access within the hospital forecourt was proposed and the design sought to strengthen the landscaped setting to reinforce the heritage and civic values of the Missenden Road frontage.

New pedestrian promenade and drop-off, new ambulance bays

The Fitzpatrick + Partners scheme relied on Jacaranda Way within the adjoining St John's site for an alternative vehicular entry sequence to the Northern Wing and facilitate the partial pedestrianisation of John Hopkins Drive. Ambulance bays were proposed to be relocated to the rear of the Prince Alfred Building, from its existing location visible from Missenden Road.

The Green Walk

The Green Walk was proposed as a north-south green spine to provide clarity of circulation through the existing hospital buildings. The spine utilised existing and new courtyards to create a series of internal landscaped spaces and anchor the main Level 5 public spaces of the existing hospital buildings.

New park and connected green space

The future demolition of the Centenary Institute Building was leveraged by Fitzpatrick + Partners to create significant open space adjacent the retained Mortuary and RPA Chapel buildings and rear gardens.

Jury Assessment

The Jury commended Fitzpatrick + Partners on delivering a scheme that retained the existing heritage items and rear gardens adjacent to the eastern boundary of the Campus. The Jury saw merit in a tower form as it enabled retention of the heritage buildings, achievement of a garden setting, retention of significant trees, and an opportunity to offer a feeling of openness to the rear of the Campus. The Northern Wing was considered to improve buildability, allowing for the continuous use of the helipad during construction, and enhanced the staging and decanting strategy to allow for early cost savings. Notwithstanding these benefits, the bulk and scale of the tower was concerning to the Jury, particularly the heritage interface of the tower to the west of the Nurses Courtyard, and the broader heritage setting of the Campus.

The Jury had fundamental concerns regarding the clinical relationships and connections, including inefficiencies in planning of the IPU floors and key clinical planning and flows. It was noted by the Jury that multiple functional relationships required two-staged transfers which presented significant risk to the clinical operations. In addition, the Jury did not support the reliance on the St John's site to provide vehicle connections to the RPA, nor the proposed one-way traffic on John Hopkins Drive.



Northern entry precinct



Open space + retention of Pathology Building



Pedestrian promenade & ambulance bays



Illustrative view of tower form

Figure 3 Fitzpatrick + Partners First Round submission

3.4 Overall Assessment

The Jury commended and appreciated the significant skill, effort and resources that were evident in all three submissions, particularly in light of the constrained site, complex clinical requirements and demanding Brief. The Jury were impressed with the quality of materials submitted and the presentations delivered by all Competitors.

At the conclusion of their initial deliberations, and before a decision could be made, the Jury recommended that further refinements be made to all three schemes. All Competitors were invited to a second round and were formally requested to provide further resolution on key design issues associated with their respective schemes as submitted.

3.5 Second Round Matters for Consideration

The Jury determined that all teams should address the matters for consideration outlined below as part of their second round submission. Competitors were provided two and a half weeks and an additional fee to address the matters for consideration.

The Jury requested each of the respected teams address the following concerns.

Architectus Team

The design intent of creating memorable and joyful edge buildings that are defined by their form and character was understood and supported by the Jury. However, the circular form of the 'Crown' building creates clinical planning challenges particularly regarding future flexibility, sightlines (down corridors) and wayfinding in the IPUs. Further consideration of the planning of this building was requested in order to provide a more conventional form suitable to support the desired clinical outcomes, whilst retaining the design intent.

A technical review of the 'Longhouse' identified concerns in relation to the proposed height, including that the proposal exceeded the structural capacity of the existing building to support the number of additional levels and the height exceeds the ability to achieve a safe approach and departure to the helipad. Technical advice suggested that the Longhouse must be reduced in height by at least six metres to meet the aviation requirements. Further consideration of the height and number of levels of this building was requested, including a review of the roof form which was considered challenging to implement.

Any refinements made to the proposal were requested to respect the project budget specified in the Competition Brief, noting the exceedance already identified in the initial submission.

Bates Smart Team

The design intent of retaining a heritage item, retaining a significant tree and shaping the building to achieve an optimum outlook was understood as driving factors to the resultant 'L' shape of the built form. However, the proposed central location of the core in the IPU 'L' footprint creates clinical planning and operational challenges. Further consideration of the core design and location to enable a more efficient control and access point into the IPU, and to maximise the flexibility of the space in the centre of the IPU is requested. It was noted that the approach to the retention of the heritage item may be reviewed as part of this process.

Fitzpatrick + Partners Team

The proposition of consolidating the required accommodation into a new northern tower which allows the retention of the heritage buildings and heritage gardens at the rear of the Campus was understood as a defining concept. However, there were concerns about the scale, particularly in relation to the heritage interface at the west, inefficiencies in planning of the IPU floors and some key clinical planning and clinical flow items. Review of the following matters was requested:

- Reduction in height of the western-most wing of the tower to at least Level 6, to align with the existing Clinical Services Building.
- Explore an increase to the height of the eastern-most wing, up to a maximum of two additional storeys. It is acknowledged that an increase in height would penetrate the Obstacle Limitation Surface, and this is accepted as a moderate risk.
- Explore the expansion of the eastern-most wing to the south over the existing Clinical Services Building, acknowledging structural transfers, such that is proposed at the north, is likely to be required.

 Provide a more efficient IPU layout for the eastern-most wing, to support clinical efficiency, footprint efficiency and operational outcomes. This also offers the opportunity for a more resolved and supportable tower scale and form.

Significant clinical challenges arose in the planning of northern tower, including multiple two-staged clinical transfers (such as Operating Theatres to ICU and Operating Theatres to Birthing) which were unacceptable. Replanning was required in the context of the above changes to resolve these challenges.

The reliance on the neighbouring St John's site to provide vehicle connections was not an option available to RPA. In addition, the requirement for patients to navigate the entire Campus due to the proposed one-way traffic on John Hopkins Drive was unacceptable. Further consideration of the access approach, including better resolution of the drop-off to the new northern tower should be investigated without any reliance on the St John's site.

The Jury also sought clarification on the treatment of the existing eastern façade of the Clinical Services Building, and whether any change was proposed to this existing façade.

4.0 Submission Summary and Assessment – Round Two

In the second round, Competitors responded positively and directly to the Jury comments and request for clarifications. A brief description of the Design Report Addenda submitted in response to the second round requests and the Jury's Assessment is provided below.

4.1 Architectus Team

Summary of Submission

In response to the Jury's concerns regarding the circular form of the Crown building, Architectus adjusted the design to a rectilinear shape to suit a conventional form suitable to clinical outcomes. The 'racetrack' plan allowed for clear sightlines, improved wayfinding and flexibility in the IPUs. Architectus demonstrated that the design intent was maintained as the distinct edge and softened corners assist with reading the building as a round form. A low scale wall height on John Hopkins Drive was maintained in the design refinements.

The Jury's concerns regarding the building height of the Longhouse and associated conflict with the helicopter flight path had been considered. To address to the Jury's comments, Architectus reduced the height of the Longhouse to preserve the aviation requirements. A reduction in height displaced clinical accommodation which prompted revision to clinical stacking and plant location in the revised scheme.

Consideration was given to the project budget throughout the refinements as requested by the Jury. Architectus made reductions to the floor area, adjustments to the building footprint, review of clinical stacking, and reduction in public spaces to support meeting the project budget.

Jury Assessment

Positives of the Scheme

- The Jury commended the Architectus team on modifying the form of the Crown Building which resulted in improved clinical planning and relationships. Despite clinical challenges remaining, the Jury saw strong potential for the Architectus team to address the clinical solutions for the project. The refined conventional form of the Crown Building was deemed more appropriate for flexibility, sightlines and wayfinding in the IPUs in particular.
- The design intent of the joyful and contemporary built form was maintained as a defining feature of the Architectus scheme.
- The reduction in building height of the Longhouse resolved aviation requirements regarding initial protrusion into the helicopter landing and departure path.
- The separation of public and clinical flows was a clever resolution of a complex planning issue and the extent of natural light to ICU beds was commended.
- Connecting with Country themes continued to be strong and evident throughout the design scheme.

Drawbacks of the Scheme

- The Jury was not convinced that the architectural expression could be maintained through design development
 given the clinical challenges and the budgetary pressures. The buildings' architectural style was also questioned
 by some Jury members in the context of the diverse range of architecture represented by other buildings within
 the Eastern Campus.
- The relationship of the Crown Building with John Hopkins Drive was noted as unresolved and it was anticipated
 that building structures would likely conflict with this road, leading to a redesign which would further impact the
 resolution of clinical challenges.
- While broadly clinical planning would need to be revisited and resolved, it was noted that the layout of the IPU, including egress and distances, would require development.

Reasons for Non-selection

Based on the Jury's overall assessment, the reasons for non-selection were defined as follows:

- The sculptural quality of the architecture and the focus on landscape was appreciated as an effort to reduce the institutional feeling, however the Jury was not convinced the essence could be retained through design development.
- Some Jury members were concerned that the nature of the architectural expression was not integrating with its context.



Illustrative view of the Crown Building



Illustrative aerial view

Figure 4 Architectus Second Round submission

4.2 Bates Smart Team

Summary of Submission

Bates Smart responded to the Jury's requests by focusing on the design of the Eastern Wing. This included exploration of adjusted lift positions to support better clinical planning, a functional and distinctive women's health hub, and a strategy for heritage and landscape. Extensive analysis was provided on the clinical planning approach to the Eastern Wing, evaluating the two options against the Reference Scheme. Bates Smart Second Round submission included two options, Option 3: Bent Scheme; and Option 4: L Shaped Scheme, with Bates Smart confirming Option 3 was the preferred design.

Option 3: Bent Form presented a curved building to mirror the shape of Building 89, which was a major adjustment in the built form from the 'L' shape form in the initial submission. The lift core was relocated to the building perimeter as opposed to the centre, supporting improved visual connections between the staff station and bedrooms while promoting planning flexibility of clinical support spaces and controlled access. Retention of the portico of the Pathology Building as a remnant in situ feature was also proposed in Option 3.

Jury Assessment

The Jury agreed that Option 3: Bent Form was the preferred design and therefore focused their assessment and deliberations on Option 3.

Positives of the Scheme

- The Jury appreciated the two options presented by Bates Smart and the detailed analysis which accompanied these options.
- The Jury commended the response to the shift in building form and repositioning of the lift core which supported clinical planning and operational requirements.
- The gentle form of the Eastern Wing improved the interface between the RPA Hospital and University of Sydney campuses and allowed for views to be maximised.
- The Jury maintained the view that the Forest Spine was a major strength to the scheme and placemaking
 opportunity. The significant and centralised public space created through the Forest Spine was acknowledged as
 a much needed heart for the RPA Hospital.
- The Forest Spine's connection to natural light and nature was commended for its potential to improve patient wellbeing.
- Redesigning the Eastern Wing was noted by the Jury to improve sightlines and significantly improved NICU planning to address issues surrounding patient amenity and access to natural light.

Drawbacks of the Scheme

- The effort to sensitively design the Eastern Wing and resolve the heritage solution was understood by the Jury, however, the heritage retention of the portico of the Pathology Building was not supported by the Jury and was identified as an element required further amendment. The Jury noted efforts to sensitively interpret the Pathology Building will need to be considered as the design develops.
- The Jury conceded that further review would be required to realign the Forest Spine with the project budget. The
 Jury acknowledged a reduction in scale to the Forest Spine is likely, but believed that the intention and benefits of
 this feature could be retained through design development.
- The Jury raised concern for visual privacy between IPU and the Clinical Services Building, access to natural light
 for ICU beds and clinical flows, again noting that these elements could be resolved through further analysis.
 While broader clinical planning concerns were raised in the scheme, the Jury agreed that the complexities of the
 Project would require ongoing collaboration and development of these solutions.



Illustrative view from University of Sydney Oval



Illustrative view from CHERP spine route



Illustrative view from Susan Wakil

Figure 5 Bates Smart Second Round submission

4.3 Fitzpatrick + Partners Team

Summary of Submission

In response to the Jury's queries regarding the scale of the Northern Wing, Fitzpatrick + Partners modified the Northern Wing to produce a series of elements stepping up in height from the western edge, with an increased height to accommodate a more slender tower form at the upper levels.

The tower varied in height from 7 storeys to 14 storeys, noting the height of each element was strategically aligned to match the height of existing building heights and proposed extensions. The revised Northern Extension floorplate provided a more efficient and compacted IPU layout on the upper floors from level 11 and above to support clinical efficiency, footprint efficiency and operational outcomes, however the lower IPU levels did not incorporate this improvement.

Fitzpatrick + Partners revised the ground plane and arrival sequence to be completely contained within the RPA Hospital campus, which eliminated reliance on the neighbouring St John's site. John Hopkins Drive was proposed to remain as a two-way road, providing access to the new Northern Wing and basement parking. Improvements to the pedestrian walkway were also proposed to create safer connections from the Kerry Packer Education Centre, nurses courtyard and new Northern Wing.

The Second Round submission confirmed that some façade integration works were proposed to the Clinical Services Building.

Jury Assessment

Positives of the Scheme

- The Fitzpatrick + Partner's scheme was considered bold and a positive contrast against the Reference Scheme, with the Jury applauding the alternative design approach.
- The Jury highly commended the retention strategy of the heritage buildings and the rear gardens, ensuring these features were conserved and the passive recreational opportunities of the rear gardens and open space were retained for staff, visitors and patients.
- The Jury commended Fitzpatrick + Partners for the Northern Wing's revised interface with the heritage to the
 west through the provision of a terraced tower form. This design feature mitigated to an extent the bulk and scale
 of development when viewed from the Nurses Courtyard, which was noted as an improvement to the original
 submission.
- The Jury believed the design intent was retained as the tower form continued to promote a strong architectural
 presence and the theme of consolidation of new floor space to promote the retention of the heritage buildings and
 rear gardens.
- Fitzpatrick + Partners' scheme was demonstrated to be cost effective and the tower form provide positive buildability results.

Drawbacks of the Scheme

- The siting and design of the tower remained a concern to the Jury, particularly its impact on overlooking and overshadowing on external areas and courtyards, such as the Nurses Courtyard.
- The compressed scale of the entrance to the Northern Wing at the undercroft made this building feel overbearing
 and cluttered with structures (noting the constraints of the site) with potential of conflicts with the nearby
 basement ingress/egress and pick-up/drop-off areas. The low height did not achieve a comfortable proportion
 between built form above and public drop off below, nor enable a relatable human scale.
- While the revised scheme improved some clinical requirements, the Second Round submission continued to
 have fundamental clinical planning issues. Two-stage transfers for IPU remained an issue above Level 10, and a
 large number of patient rooms in the ICU lacked access to natural light. The improved IPU layout on levels 11 –
 13 was unable to be achieved on the lower-level IPUs.

Reasons for Non-selection

Based on the Jury's overall assessment, the reasons for non-selection were defined as follows:

- While a positive strategy for heritage retention of buildings and gardens, the scale of the Northern Wing would have adverse impacts on the amenity of surrounding external spaces, in particular overshadowing.
- The urban response at the Northern Wing was unresolved at the ground plane and resolution of this challenge may have flow-on impacts.
- Clinical planning was a fundamental challenge and presented a resolution risk in the scheme. While the Jury
 appreciated the reduced floor plate of the Northern Wing, the floor plate continued to compromise the layout of
 IPUs and the ICU on the lower levels and the Jury was concerned that this may not be resolvable while
 maintaining the core design principles of the scheme.



Illustrative aerial view, facing south



Illustrative view from Nurses Courtyard

Figure 6 Fitzpatrick + Partners Second Round submission

5.0 Jury Decision

The Jury acknowledged and appreciated the effort and commitment shown by all Competitors, particularly in the Second Round of the Competition. All Competitors were commended on their response to the matters for further refinement, and the Jury appreciated the clear and direct information which was provided to support each refined proposal, as well as the further presentations which provided additional context and understanding.

Following the Second Round deliberations, the Jury selected by majority vote the Bates Smart scheme as the winner.

In consideration of both urban and clinical responses, and the objectives of the Competition Brief, the Bates Smart scheme was more realisable in comparison to the Architectus scheme and of a more appropriate scale and clinically advanced in comparison to Fitzpatrick + Partners' scheme.

The Jury identified elements of the scheme which were key features in its selection of Bates Smart, including:

- The urban approach to the navigation through the buildings of the hospital campus, including the responsiveness of the scheme to the existing heritage buildings and landscape, place and wayfinding needs.
- The delivery of a new public space in the form of the Forest Spine which introduces an intuitive wayfinding
 opportunity through the existing Campus, acting as a strong and unifying device. The overall wayfinding strategy
 was a key benefit of the scheme which allows north-south and east-west connections through the existing
 buildings across numerous level changes.
- The location and approach to the Eastern Wing which has a gentle bend that maximises views, seeks to retain significant trees where viable and accommodates clinical operations.
- The contextually appropriate scale of new built form amongst the existing buildings at the RPA Hospital Campus, particularly the heritage-listed buildings that form part of the broader University of Sydney HCA, as identified in Schedule 5 of the Sydney LEP 2012.
- The quality of façade design and materiality of the Eastern Wing, Northern Extension and the Forest Spine, all directly responding to their immediate context.
- The sense of openness achieved in the Northern Place which presents as an obvious secondary entrance into the Hospital.
- The alignment of open space and respite areas with clinical activities across the site.

The Jury believes that the Bates Smart scheme exhibits the potential of achieving design excellence following the retention of the above matters, and including but not limited to resolution of the matters outlined below.

5.1 Further Refinements to the Selected Scheme

As outlined earlier in this Report, the Competition was conducted in accordance with the GANSW Guidelines, City of Sydney Competitive Design Policy and endorsed Design Excellence Strategy. In acknowledging the limited competition working time to deliver solutions for the complex clinical planning requirements, there is a recognition that refinements and further design development will be ongoing, particularly through collaboration with the existing clinical project architects, Jacobs.

The Jury identified a range of matters that require resolution during the design development phase of the project to ensure the design continues to respond to all technical aspects of the Competition Brief (including the project budget), maintains the key design intent and principles, and ensures the scheme is capable of achieving design excellence. These matters are outlined below:

- The approach to the partial retention of the heritage-listed Pathology Building is not supported as it compromises the heritage items and setting. Consideration is to be given to interpretation of these heritage items in a different manner.
- Further investigation and technical review are required to rationalise the Forest Spine (to align with the project budget) while maintaining the intuitive wayfinding benefits of this design move.
- A reduction in planned area is required to meet both the clinical planning requirements and ensure the project budget is achieved.
- The Missenden Road forecourt must not be extended or re-graded as this will impact the heritage significance of this frontage and impact daylight penetration to the existing hospital buildings.
- The proposed Southern Place design is not supported as these works are considered unnecessary and not significant in their contribution to place.
- Consideration of a reduction in scale of the northern entry form to achieve a suitable scale adjacent Nurses Courtyard
- Visual privacy conflicts between the Eastern Wing and the Clinical Services Building must be carefully considered and resolved in the detailed planning of the Eastern Wing.
- The medical/surgical bed shortfall of 20 beds must be delivered, noting this shortfall arose due to proposed public and staff corridors impacting existing beds through to the Eastern Wing.
- Ongoing improvements should occur to the amenity provided to clinical areas, such as the further refinement of the ICU and NICU layouts to promote natural daylight.
- Broadly, ongoing refinement is required to achieve the clinical requirements, flows and functional relationships to the best ability of the design and constraints of the budget while maintaining the core principles of the design.

6.0 Conclusion

6.1 Achieving Design Excellence

As per Section 8.11.1 of the Competition Brief, the Jury will have an ongoing review role as a Design Integrity Panel (DIP), and will be reconvened at key milestones to provide input/direction to the project design in relation to the achievement of design excellence. Advice on achieving a balance between clinical and non-clinical design objectives will be a core function of the DIP, post competition.

Terms of Reference for the DIP are currently being prepared and will separately be agreed to guide the ongoing design development of the winning scheme and overall Project.

6.2 Concluding Comments

The invited Architectural Design Competition has been carried out in a professional and transparent manner in accordance with the Competition Brief and the relevant guidelines and the endorsed Design Excellence Strategy.

This Architectural Design Competition Jury Report documents the Competition and the Jury's decision by majority vote in selecting the Bates Smart team as the winner.

The Jury consider that the selected scheme by Bates Smart demonstrates a superior response to the design, clinical, and planning objectives of the Competition Brief, and subject to the resolution of the matters outlined in this report, the scheme is capable of achieving design excellence as per the statutory requirements.

The decision of the Jury will not fetter the discretion of the consent authority in its determination of any subsequent State Significant Development Application associated with the site that is the subject of the Competition.

Overall, the significant efforts made by all Competitors are recognised, and the Jury and Proponent wish to thank Architectus, Bates Smart and Fitzpatrick + Partners and their respective teams for their participation in this significant architectural exercise.

The Jury confirms that this Report is an accurate record of the Invited Architectural Design Competition and endorses the assessment and recommendations.