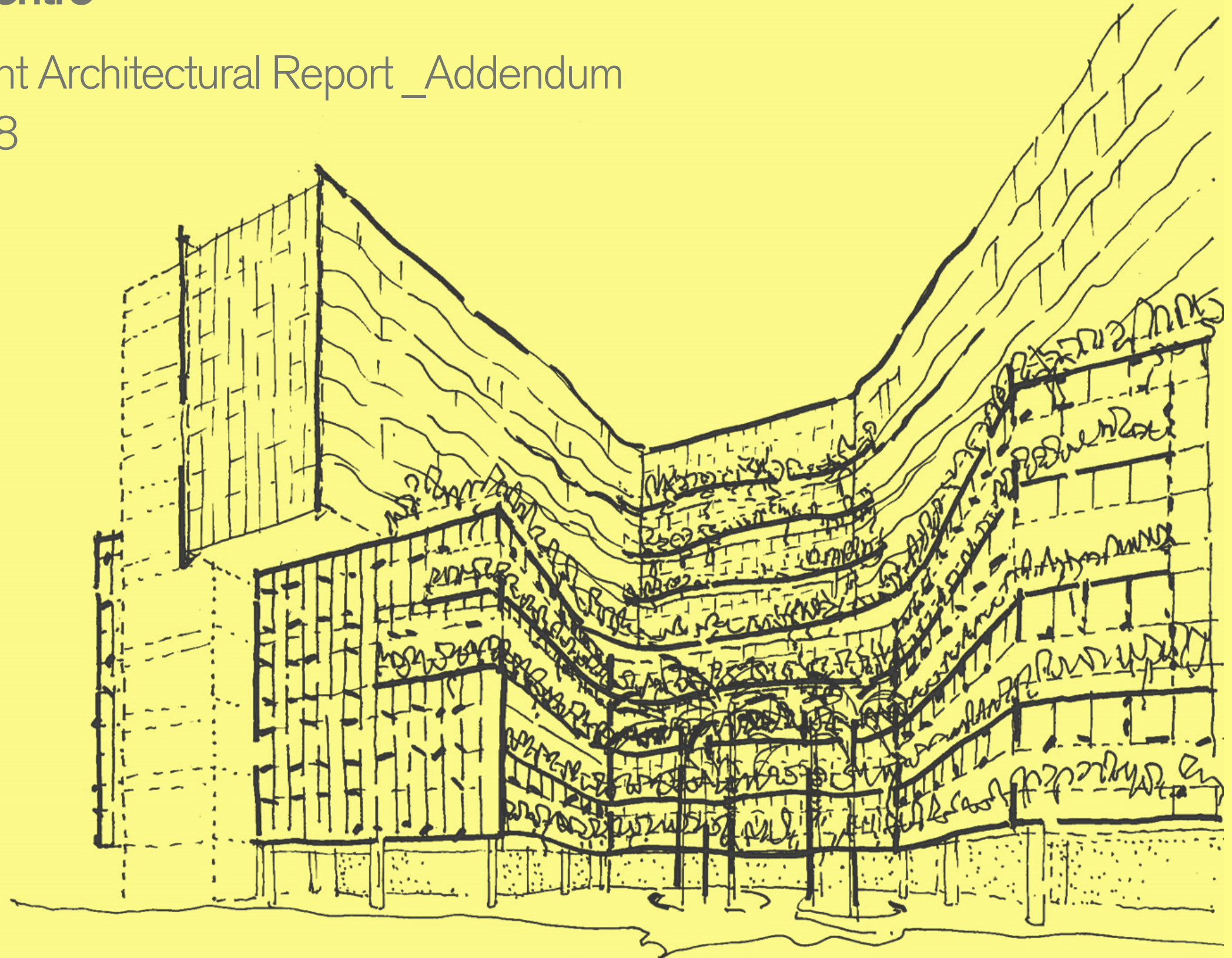


Sydney Children's Hospital Stage 1 and Children's Comprehensive Cancer Centre

State Significant Development Architectural Report _Addendum
SSD Application - 10831778

SCH-AR-RT-DA058A[A]

September 2021



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1.0 INTRODUCTION

This report is an Addendum to the State Significant Development Architectural Report SCH-AR-RT-DA058, dated April 2021 submitted with the original proposal for the Sydney Children's Hospital Stage 1 and Children's Comprehensive Cancer Centre, Randwick. The proposed building as exhibited, has evolved. Some of these changes are due to design development and some are in direct response to comments received from government agencies and members of the public in submissions.

The key design refinements since the exhibition are summarised as follows:

- Simplification of the façade and form - to reinforce the design concepts; breakdown the building scale; and maximise the play of light and shade.
- Rationalisation of façade colour palette - to reinforce the design concepts; to enhance public engagement; and form part of the art integration.
- Sunshade refinement - to maximise internal environmental conditions; integration with the façade treatment; and colour palette strategy.
- Enhancement of publicly accessible green spaces across the building and refinement of façade treatment at these areas.
- Integration of architectural elements with the ground plane – inclusive of a common design and arts integration approach to the treatment of canopies, bridge links and soffits.
- Ground level ceiling heights - increase in perception of internal volume to mitigate lower ceiling heights.
- Refinement of Emergency Department Entry Level, with additional supporting information provided for clarification.

This addendum is structured as follows:

- Section 1 : Introduction (this Section)
- Section 2 : Response to Submissions – Architectural
- Section 3 : Amendments to Proposal
- Section 4 : Amendment to Section 3.0 Architectural Design Statement
- Section 5 : Amendments to Section 4.3 Public Domain and Landscaping (refer to Public Domain Report_ Addendum, prepared by Aspect Studios, (August 2021)
- Section 6 : Amendments to Section 5.0 Architectural Design Concepts (including overview of the amendments to the proposal)
- Section 7 : Response to comments from the Government Architect NSW.

It is considered these amendments provide an improved architectural and urban design response when compared to the original proposal. This addendum should be read in conjunction with the revised architectural drawings prepared by Billard Leece Partnership, dated September 2021 and the revised landscape plans and report prepared by Aspect Studios, dated September 2021.

2.0

Response to Submissions – Architectural

SUBMISSION COMMENT/ AGENCY	RESPONSE
DPIE	
Design Excellence and Façade Design	
The Department notes the advice of the State Design Review Panel (SDRP) in relation to the proposed façade design, that the multiple colours, façade and blade patterning is overly complex, and that further development of the façade materiality is also required in order to achieve the desired character referencing sand dunes and seacliffs. The current design is therefore not considered to reflect design excellence. The Department recommends a detailed review of the façade design having regard to comments from SDRP (Session 5).	<p>BLP have reviewed the recent advice provided at SDRP (Session 5) and have undertaken further design refinements to the facade colours and patterning.</p> <p>Refer to Sections 3,4,6 and Appendix A for amendments that form part of this of addendum to the SSDA Architectural Report.</p> <p>Refer to Section 7 of this report, for specific responses to GANSW SDRP Session 5 commentary, inclusive of supporting material.</p> <p>Refer to updated architectural drawings.</p>
Provide consideration and response to other GANSW comments from SDRP (Session 5).	As per above
Provide further consideration of the design of sun shading devices having regard to façade orientation - refer to SDRP (Session 5) and Council advice.	As per above
Botany Street Drop-off	
Give further consideration to the design of the emergency department drop-off area to ensure clear, direct and intuitive access to the emergency department reception. Provide further details, including plans and elevations, detailing treatment of the area and images to demonstrate the amenity of the space.	<p>Functional adjacencies have required the Emergency Department to be located on Level B1. BLP have provided updated additional renders demonstrating clear access and amenity to the Emergency Department reception. Refer to page 33 and 34 of this report.</p> <p>Detailed Wayfinding and Signage will be undertaken as part of future work package and will be developed to ensure clear, direct, and intuitive access.</p>
Canopy Cover and Landscape Plans	
Consideration should be given to improving tree canopy cover, noting the proposal falls short of minimum 25 per cent recommended within the NSW Government Architect’s Draft Greener Places Design Guide. Any comparisons against the ‘existing’ canopy coverage to justify the proposed canopy cover should be based on an assessment of the canopy cover of the previous residential use of the site, prior to clearing of the site. Consideration should be given to opportunities to providing more or larger trees at the ground plane through improved soil depth and volumes for on-structure plantings and through more detailed consideration of opportunities and limitations of plantings above and around the stormwater culvert.	Refer to Public Domain Report- Addendum, prepared by Aspect Studios, (September 2021)
Visualisations indicate landscaping to upper levels terraces and utilisation of podium roof areas for landscaping but no details are provided on the landscape plans. Landscape plans should be updated to include these areas and demonstrate provision of high quality outdoor spaces for occupants of the building and to assist with offsetting any shortfall in tree canopy cover.	As per above

SUBMISSION COMMENT/ AGENCY	RESPONSE
Consideration should be given to the design and layout of the landscaped area to the south of the building to create a more legible and direct east-west pedestrian connection between Hospital Road and Botany Street having regard to the alignment of the connection on the HTH site	As per above
Update the planting schedule on the landscape plans to provide the mature height and width of each proposed tree, as well as the number of each of the proposed trees to be planted.	As per above
Provide sections clearly demonstrating soil depth and volume for all plantings on structures and plantings over the stormwater culvert.	As per above
Amenity of Children's Play Area	
The Department is concerned the children's play area will be heavily overshadowed and visually enclosed by surrounding built forms. The provision of an attractive outdoor space for patients of the Children's Hospital is considered an important aspect of the amenity of the building. Therefore, provide further details, visualisations and hourly solar access studies (incorporating shadowing from the proposed HTH) to demonstrate how a high level of amenity would be achieved to the proposed space. If a high level of amenity is not achieved, consideration should be given to supplementing this play space with additional attractive and safe open space for patients such as utilising the podium roof to create additional open space for patients.	<p>Opportunities for children's play both formal and informal settings are provided across the ground plane. Also numerous play areas are provided across building levels.</p> <p>Refer to architectural drawings SCH1-AR-DG-SDD040, SCH1-AR-DG-SDD041, SCH1-AR-DG-SDD042 and SCH1-AR-DG-SDD043</p> <p>Refer to Public Domain Report- Addendum, prepared by Aspect Studios, (September 2021)</p>
Randwick City Council	
Pedestrian Connectivity - East West Pedestrian Link	
The proposed plans provide a constrained, confusing, and poorly articulated podium-level east-west route from the Botany Street footpath via the UNSW HTH building south podium to the Hospital Road shared path. It is recommended that the generous width connection proposed along the south edge of the UNSW HTH building is continued to ensure a direct and seamless connection to deliver a coordinated pedestrian route from Botany Street through to Hospital Road, and in the future, continuing east through the RHC.	Refer to Public Domain Report- Addendum, prepared by Aspect Studios, (September 2021)
Pedestrian Connectivity - High Street Footpath	
The proposed pedestrian footpath along High Street is approximately 2.5m wide with a nature strip of approximately 1-1.2m. Council requires a minimum footpath width of 4.5 metres to provide for the increased density of new development and to cater for projected increased pedestrian movement along High Street, including movements generated by patronage. It is understood that flooding constraints have informed the design of the footpath and landscaping along High Street, however widening of the footpath width in this location should be further investigated.	As per above

SUBMISSION COMMENT/ AGENCY	RESPONSE
Emergency Department - Vehicle Access and drop-off/pickup	
<p>The proposed Botany Street drop off to the emergency department is characterised by blank walls, significant hard paved areas and narrow paved footpaths and waiting areas. Further, it is unclear how visitors and patients arriving by car can easily and intuitively understand the direction to take to the reception, triage and waiting area. Council questions why the IASB Satellite Imaging facility is located at the emergency drop off.</p>	<p>Functional adjacencies have required the Emergency Department to be located on Level B1. Competing requirements for access to not only the Emergency Department, but also the IASB and the HTH have all been considered in the design of this shared vehicular entry and drop off point.</p> <p>The design of the Emergency Department itself is based on required functional adjacencies and workflows and ensures a clear arrival point and clear and direct access to Triage as a key functional priority. Refer to drawing SCH1-AR-DG-SSD011.</p> <p>BLP have provided updated additional renders demonstrating clear access and amenity to the Emergency Department reception. Refer to page 34 of this report.</p> <p>Detailed Wayfinding and Signage will be undertaken as part of future work package and will be developed to ensure clear, direct, and intuitive access.</p>
<p>A further concern is the significant overshadowing of this arrival area throughout the year and particularly in winter. This contrasts with the current sunny north facing High Street entry. Additional information and detailing is required to demonstrate how this waiting space will be treated to provide a warm and inviting arrival experience and safe waiting area for parents and children, given the constraints outlined above.</p>	<p>Functional adjacencies have required the Emergency Department to be located on Level B1, with access provided via the Botany Street entry.</p> <p>Competing requirements for access to not only the Emergency Department, but also the IASB and the HTH have all been considered in the design of this shared vehicular entry and drop off point.</p> <p>The design of the Emergency Department itself is based on required functional adjacencies and workflows and ensures a clear arrival point and clear and direct access to Triage as a key functional priority.</p> <p>BLP have provided updated additional renders demonstrating clear access and amenity to the Emergency Department reception. Refer to Appendix A of this report</p> <p>Internally, opportunities for integration of public art will be investigated.</p> <p>Refer to architectural drawings, for additional internal detail of Emergency Department.</p> <p>Refer to architectural drawings SCH1-AR-DG-SDD040, SCH1-AR-DG-SDD041, SCH1-AR-DG-SDD042 and SCH1-AR-DG-SDD043.</p>
Emergency Department - ED Location	
<p>Council questions the location of the children's emergency department underground in a location with no real outlook and only token access to natural light and sunshine.</p>	<p>Functional adjacencies have required the Emergency Department to be located on Level B1, with access provided via the Botany Street entry.</p> <p>Competing requirements for access to not only the Emergency Department, but also the IASB and the HTH have all been considered in the design of this shared vehicular entry and drop off point.</p> <p>The design of the Emergency Department itself is based on required functional adjacencies and workflows and ensures a clear arrival point and clear and direct access to Triage as a key functional priority.</p> <p>BLP have provided updated additional renders demonstrating clear access and amenity to the Emergency Department reception. Refer to Appendix A of this report</p> <p>Refer to architectural drawings, for additional internal detail of Emergency Department</p>

SUBMISSION COMMENT/ AGENCY		RESPONSE
Landscaping and deep soil provision		
The north facing ground level plaza and the overall landscape and planting themes are generally supported. However the location of the proposed deep soil zones above a stormwater culvert along High Street and in the leftover areas around vehicular ramps to the south of the HTH building are unsatisfactory outcomes and do not satisfy the intent of deep soil provisions, which are to provide consolidated landscaped areas that people can enjoy that allow large trees to prosper. Further, areas with structures underneath, including culverts are not considered to be deep soil zones.		Refer to Public Domain Report- Addendum, prepared by Aspect Studios, (September 2021)
Significant benefit would be realised if deep soil areas were provided in the plaza. This would permit larger trees to be planted to provide shade and contribute to tree canopy requirements. It is also noted that one of the larger trees proposed in the child play area would not be possible due to the low clearance of the pedestrian bridge that crosses over the play area.		As per above
Further landscape detail is required for the proposed roof level and upper level terraces as the building form steps back. The podium roof areas should be utilised to provide outdoor landscaped terraces areas for patients, visitors and workers where possible.		As per above
A 6m wide stormwater culvert easement of 6m applies along the north, High Street boundary. Concern is raised regarding the ability to plant trees above this service. Proposed landscaping should be reviewed to ensure adequate soil mass and depth is provided over the culvert structure.		As per above
The small curved planter bed at the southeast corner of the building within the gathering space garden lacks gravitas and appears too weak to establish a true and enduring sense of place.		As per above
The indicative street trees and pavement level planting along the Botany Street and High Street frontages within Councils road reserve currently have a formal generic character. In contrast, the landscaping for the SCH1 and CCCC site is inspired by the coastal dune system. A coordinated landscape outcome that picks up some of the sand dune planting themes along this section of the High Street streetscape would be beneficial. Council recommends coordination between Randwick City Council's Public Domain team and the proposals Landscape Architect moving forward.		As per above
Building Height		
The building is technically 11 storeys (not 9 storeys as described) when including portion of the basement that are above ground and the top floor plant level. Council questions why the footprint of the plant room level is so large as it contributes to the overall bulk and scale of the building. It is recommended that alternative locations for the roof top plant be investigated, such as a basement plant room.		Plant has been sized according to the needs of a heavily serviced hospital and research laboratory building. Hospital buildings typically include an interstitial approach to plant location due to the need to minimise duct runs sizes and to maximise clinical and support spaces. Site constraints did not support the use of floor based plantrooms, nor incorporation of additional basement plant due to requirements for access to fresh air.

SUBMISSION COMMENT/ AGENCY		RESPONSE
High Street Frontage Street Wall Datum		
<p>The SCH1/CCCC building is expressed as a 6 storey building with 9 storey building setback approximately 8.4m, with level 10 setback a further 3m all around. This generates an interesting dynamic to the High Street frontage within the context of the streetscape. Notwithstanding, the north east overhanging architectural corner requires further development. The submitted perspectives raise concerns regarding the architectural resolution of the overhanging corner element in terms of the expression of the windows, detailing and materiality of this feature. The VIA Photomontage View 2 within the Visual Impact Assessment illustrates the importance and prominence of the northeast corner of the building when viewed west along High Street</p>		<p>Further design work has been undertaken to refine the north-east overhang, including soffit treatment, geometry, and window treatments. The overhanging element is in context with other buildings located within the adjoining UNSW precinct, namely the Lowy building.</p> <p>Refer to Sections 3,4 and 6 for amendments that form part of this of addendum to the SSDA Architectural Report. Refer to updated architectural drawings.</p>
Architectural Themes		
<p>The strict symmetrical plans and 3D building form appears to be at odds with the allusion to sea cliffs and sand dunes which inspired the building design that are inherently free form and irregular. The building expression and shaping should respond to the urban context which varies on the north, south, east, and west sides of the building. Further, the architectural language and expression of the windows and sun shading devices should respond to the uses of each building level, rather than a just providing a random patterning.</p>		<p>Further design work has been undertaken to refine the north east overhang, including soffit treatment, geometry, and window treatments. The building design is considered an appropriate response to its surrounding context on all elevations. Further modelling work has been undertaken to help determine the location of sunshading, which is appropriate to the building uses within.</p> <p>Refer to Sections 3,4 and 6 for amendments that form part of this of addendum to the SSDA Architectural Report. Refer to updated architectural drawings.</p>
<p>The blockish building shaping and white facade panels lacks the warmth and interest of sandstone cliffs. Additional under croft height and transparency of the ground and first floor levels at the High Street entry would help to create a lighter and more inviting entry experience. The upper level northeast overhanging corner feature is awkward in its current expression and requires further development and refinement.</p>		<p>The building mass is primarily driven by clinical requirements. The background colour of the folded panels are a sandstone hue. The sunshading element colours are a mix of golds and bronzes reminiscent of the colours found in weathered seacliffs.</p> <p>Refined soffit treatments are proposed to the High Street entry. The ground floor is highly transparent with the generous use of glazing. The location of the ICU department at Level 1 prevents high transparency into all of this level. Further design work has been undertaken to refine the north east overhang, including soffit treatment, geometry, and window treatments.</p> <p>The ground floor is highly transparent with the generous use of glazing. The location of the ICU department at Level 1 prevents high transparency into all of this level. Further design work has been undertaken to refine the north east overhang, including soffit treatment, geometry, and window treatments.</p>
Sun Shading Devices		
<p>The building sun shading devices should respond to the solar conditions that vary according to the building's orientation. Windows that face north are generally best shaded with horizontal overhangs (or blades), south facing windows may not need any shading, west and east facing windows generally are best shaded, as illustrated, with vertical blades that protect windows when the sun is low in the sky. This overlay of variety across the various building elevations would help to mitigate repetitive expression of panels and windows</p>		<p>Further modelling work has been undertaken to help determine the location of sunshading, which is appropriate to the building uses within. Sunshading elements have been removed from the southern façade. Sunshading elements to the northern façade incorporate horizontal elements.</p> <p>Refer to Sections 3,4 and 6 for amendments that form part of this of addendum to the SSDA Architectural Report. Refer to updated architectural drawings.</p>

SUBMISSION COMMENT/ AGENCY		RESPONSE
Overshadowing of Outdoor Spaces		
The proposed building will significantly overshadow the proposed children's play area through most of the year and particularly during the winter months, resulting in an inappropriate location for a children's play area. A location that receives sunshine, with a northern aspect would be preferable. Locating the play area to the north of the building, within sight of the proposed cafe, would provide a safer and more welcoming location. Alternatively, a north facing play area on an upper level terrace or roof of the building could be considered.		Opportunities for children's play will be provided throughout the ground floor podium, not solely in the southern podium. Opportunities for informal play and discovery are provided in both the central courtyard area, as well as along the eastern podium. There are no opportunities to incorporate north facing play areas on upper level terraces.
The north leg of the building, as proposed, blocks mid-morning sunshine from reaching the plaza. Reshaping and or increasing the height of the under croft of the north west corner of the building should be explored to improve solar access to the plaza in the mid-morning.		The building has been designed to accommodate all the required programs within a constrained site. Reshaping of the north west corner is not possible due to the constraints noted above
Shadow studies should be provided at hourly intervals for the winter solstice to assess solar access to the key public domain areas such as the plaza and children's play area.		Refer to updated solar access - Architectural drawings SCH1-AR-DG-SDD040, SCH1-AR-DG-SDD041,SCH1-AR-DG-SDD042 and SCH1-AR-DG-SDD043.
Pedestrian Bridges		
The southern Integrated Acute Services Building (IASB) link bridge is two storeys high and crosses over the children's play area. The bridge is low to the ground and is somewhat heavy in appearance. It is recommended that the bridge is redesigned and refined to maximising the visual openness beneath the bridge and the transparency of the bridge to deliver a thinner profile and fineness of detailing and expression. Rather than repeating the vertical cladding of the main building on the bridge element, a contrasting light steel and glass architectural expression would provide a more successful outcome. A similar approach should be taken for the eastern Children's Hospital link bridge.		Further refinement of the link bridge designs has been undertaken so as to provide a more 'lightweight' and visually open response. Required functional adjacencies to the IASB building prevent the bridge height being increased. Clinical requirements prevent this bridge being transparent. Some transparent elements have been incorporated to the eastern hospital link bridge.
Council questions the reason for providing a central open-air section with glazed airlocks at each end of the bridge. A continuous glass enclosure may provide better weather protection for people crossing the bridge and remove the need for two airlocks.		No glazed airlocks are proposed to any of the bridge links.
Sustainability		
It is noted that the proposal includes a 15.5 percent site canopy cover. This canopy target is well below the minimum 25 percent tree canopy cover outlined in the Urban Tree Canopy Guide within the NSW Government Architect's Draft Greener Places Design Guide. The Draft Design Guide is recommended for use by State and Local Governments and industry to increase tree canopy across Greater Sydney. The proposed site canopy cover should be increased.		Refer to Public Domain Report- Addendum, prepared by Aspect Studios, (September 2021)

SUBMISSION COMMENT/ AGENCY	RESPONSE
Council supports the use of passive irrigation of garden beds through grading and wicking beds and is interested to see the location of the proposed wicking garden beds as these could be utilised on a rooftop landscaped area.	As per above
Consideration should be given to the provision of joint sustainability initiatives between the hospital and UNSW to deliver sustainability initiatives such as localised trigeneration or a centralised stormwater rainwater harvesting system	Refer to Urbis Submissions Report.

3.0

Amendments to proposal

The table below summarises the design amendments which have been implemented since the original planning submission. They are listed under 8 categories: simplification of form; simplification of façade treatment; rationalisation of colour strategy; integration of sunshading devices; integration of green throughout the building; integration of the ground plane, ground level ceiling heights; and B1 Level Emergency Department

Public domain and landscape amendments have been captured in the Public Domain Report_ Addendum, prepared by Aspect Studios.

For specific responses to SDRP Session 5 commentary and supporting documents, refer to Section 7 of this addendum.

AMENDED ASPECT	REASON/ DETAILS/ DRIVER	REFER TO
Simplification of form	<p>Design Development and SDRP (Session 5 commentary) :</p> <ul style="list-style-type: none"> North-East and South-East corners of the building form (Level 6, 7 and 8) have been refined; all levels have access to a green area of respite at the ends of corridors. A façade panelisation strategy which reinforces and simplifies the architectural form, with repetitive folded panels to create a 'ripple like' effect across the lower rectilinear form and a change in panel scale and fold direction at the upper sculptured form. Western Facade- refined to maximise openness at external areas off public amenity. Western Fire Stairs – introduction of a continuous vertical glazed zone to maximise connection to the outside by building users. Common language for architectural elements that traverse the ground plane – a common form and material treatment has been developed for the treatment of canopy structures; simplified form and common façade treatment, with the opportunity to incorporate public art, to the IASB and SCH bridge links. 	<ul style="list-style-type: none"> Refer to Sections 6 and Appendix A Refer to Section 7 for specific responses to GANSW SDRP Session 5 commentary, inclusive of supporting material. Refer to updated architectural drawings.
Simplification of façade treatment	<p>Design Development and SDRP (Session 5 commentary) :</p> <p>The façade has been further developed to reinforce the overall architectural design narrative of wetlands, sand dunes and seacliffs:</p> <ul style="list-style-type: none"> A façade panelisation strategy which reinforces and simplifies the architectural form, with repetitive folded panels to create a 'ripple like' effect across the lower rectilinear form and a change in panel scale and fold direction at the upper sculptured form. The movement in panel folds refined to maximise the play of light and shade across the façade, as the sun moves across the façades throughout the day. The change in panel scale aims to breakdown the overall scale of the building form 	<ul style="list-style-type: none"> Refer to Sections 6 and Appendix A Refer to Section 7 for specific responses to GANSW SDRP Session 5 commentary, inclusive of supporting material. Refer to updated architectural drawings
Rationalisation of colour strategy	<p>Design Development and SDRP (Session 5 commentary) :</p> <ul style="list-style-type: none"> The façade has been further developed to reinforce the overall architectural design narrative of wetlands, sand dunes and seacliffs: The intensity of colour has been limited to levels 0-1 and the facades to levels 6-8 which wrap around the western courtyard. The colour selection will reinforce the wetland characteristics of a lush undergrowth and the upper tree canopies. Intensity of colour is located where people will have a greater engagement with the built form – at the lower levels where the public will interact with the building up close and in the round; and to the upper courtyard levels where they move up and through the building. The colour strategy is used to connect to the local endemic landscape, as well as provide a playful paediatric overlay – a strategy that flows into the treatment of internal spaces. The warmer golden hues are extracted from the overall colour palette and applied to the sunshades located on the folded metal panelled areas. This further reinforces the sand dune/ seacliff narrative. The process of final colour selections also provides an opportunity for connection to Country. This process will be guided by Yerrabingin in consultation with the local community. 	<ul style="list-style-type: none"> Refer to Sections 6 and Appendix A Refer to Section 7 for specific responses to GANSW SDRP Session 5 commentary, inclusive of supporting material. Refer to updated architectural drawings.

AMENDED ASPECT	REASON/ DETAILS/ DRIVER	REFER TO
Integration of sunshading devices	<p>Design Development, ESD Modelling and SDRP (Session 5 commentary) :</p> <ul style="list-style-type: none"> As part of design development, additional sunshade modelling has been undertaken, by ESD Consultants Steensen Varming, to ensure that their location, orientation and design maximise the thermal comfort levels of internal spaces. The sunshading devices' profiling has been refined to integrate with the façade on which they are located - sunshades located along the folded metal façade have an angular profile, designed to appear to fold out from the rippling façade; the flat colourback glass façades have simpler rectilinear profiled sunshades. Colour to the sunshades is strategically employed: The metal façade sunshades have colour applied to the surface facing the opening and to the front edge; the colourback glass façade sunshades have colour to all surrounds to align with the façade colouration. The sunshade colour and profiling strategy allows for an integrated approach to the overall façade treatment. It also allows for subtle changes in the building's appearance throughout the day and how one will experience it as they move around its full perimeter. 	<ul style="list-style-type: none"> Refer to Sections 6 and Appendix A Refer to Section 7 for specific responses to GANSW SDRP Session 5 commentary, inclusive of supporting material. Refer to updated architectural drawings
Integration of green throughout the building	<p>Design Development and SDRP (Session 5 commentary) :</p> <ul style="list-style-type: none"> The design has been developed to enhance the public's accessibility to green spaces throughout the building. The façade has also been refined in these locations - to open up these spaces. North-East and South-East upper corners (level 6-8) have green outlook at the corridor ends at all levels. Western Façade (inner courtyard, levels 6-8) has been modified to be more open with a reduced and tapered soffit, and the introduction of clear glass balustrades and planting to the perimeter. These terraces come directly off communal areas. Southern terrace (level 6) has the addition of an external landscaped terrace; with provision made that this can be expanded in the future. All external roof areas have the provision to be able to be landscaped in the future. Green walls on ground level at both northern and southern entry points. 	<ul style="list-style-type: none"> Refer to Sections 6 and Appendix A Refer to Section 7 for specific responses to GANSW SDRP Session 5 commentary, inclusive of supporting material. Refer to updated architectural drawings. Refer to Public Domain Report- Addendum, prepared by Aspect Studios, (September 2021) Refer to Landscape Drawings
Integration of the ground plane	<p>Design Development and SDRP (Session 5 commentary) :</p> <ul style="list-style-type: none"> The design has been developed to create an integrated approach to the treatment of architectural elements which dot the ground plane - inclusive of canopies, bridge links and soffits. Canopies High Street (Not part of this SSD Application) and ED. Both share a similar structural expression and material treatment. The bridge links (IASB and existing SCH) are a simple form with a shared façade and soffit strategy of incorporating public art (common to both). The IASB bridge link which has a higher level of privacy requirements will have a custom perforated panelled façade and the existing SCH, public link will have a custom frit on glass. This ties into a common precinct approach established by the bridge link currently under construction as part of the IASB, where public art is being integrated as part of its façade treatment. The UNSW and Health Infrastructure teams have agreed to develop a cantilevered, neutral and uniform design for the link on both the HTH and SCH1/CCCC sites, thus the links will be read as a singular neutral entity in between the two buildings and distinct from each of the buildings. The teams will continue to develop and document the design of the links in collaboration with each other to ensure a uniform aesthetic is delivered. All soffits (inclusive of the roof plant area and canopies) will have a common language, of aluminium profiled panels with a timber look finish. This will add a softness to the underside of the building forms. Soffits at ground level and upper levels to external terraces taper to meet façade edge, to increase the perceived height and openness of these areas 	<ul style="list-style-type: none"> Refer to Sections 6 and Appendix A Refer to Section 7 for specific responses to GANSW SDRP Session 5 commentary, inclusive of supporting material. Refer to updated architectural drawings.

AMENDED ASPECT	REASON/ DETAILS/ DRIVER	REFER TO
Ground level ceiling heights	<p>Design Development and SDRP (Session 5 commentary) :</p> <ul style="list-style-type: none"> – The design has been further developed to mitigate the effects of the ground level ceiling heights - to increase the perception of space. – Two triple height internal voids occur at the ground level. – The main north- south circulation corridor has a sloped ceiling to maximise height and sense of space. – Similar timber-look treatment of internal ceiling and external soffits to create a seamless blending of internal and external spaces 	<ul style="list-style-type: none"> – Refer to Sections 6 and Appendix A – Refer to Section 7 for specific responses to GANSW SDRP Session 5 commentary, inclusive of supporting material. – Refer to updated architectural drawings.
Emergency Department (Level B1)	<p>Design Development, DPIE and RCC Comments :</p> <ul style="list-style-type: none"> – The design of the Emergency Department has been based on required functional adjacencies and workflows and ensures a clear arrival point and clear and direct access to Triage as a key functional priority. – Detailed Wayfinding and Signage will continue to be undertaken as part of future work package and will be developed to ensure clear, direct and intuitive access. – The design of the entry canopy shares a similar structural expression and material treatment to that of the High Street entry canopy thus providing clear definition as an additional entry point of the Hospital. – The entry to the Emergency Department is characterised by colour back glass panels to provide interest and warmth to the façade in this location. 	<ul style="list-style-type: none"> – Refer to updated architectural drawings

4.0

Amendment to section 3.0 Architectural Design Statement

The SCH1/ CCCC project represents a unique opportunity to develop an exceptional health and research environment to support efficient and harmonious delivery of leading paediatric clinical care, research and education activities while contributing positively to its surroundings.

The design response has been guided by the overarching design principles and drivers initially developed during the Masterplan Phase. Taking into account these guiding design principles, the design objective has been to facilitate a design that will culminate in the provision of a world class health and research facility, which is, not only aligned with the objective to meet the clinical service and research priorities required but will also become a civic focus for the community and people of the greater Randwick area.

An activated and permeable ground plane responds to specific site conditions and project aspirations. This includes the creation of:

- a continuous ground plane that is civic in nature; an extension of the public domain; and provides inclusive spaces, accessible for children, families, patients, researchers, visitors and the local community.
- a shared plaza between SCH1/ CCCC and HTH providing places for people to engage both actively and passively; provides opportunities for people to connect with nature; and supports health and wellbeing.
- active edges at street level, with retail and active social uses, to enhance the amenity of the precinct's public realm, active streetscapes, pedestrian pathways and outdoor spaces.
- a connected and permeable public domain, with multiple building entry points that respond to pedestrian traffic and adjacent (current and future) developments.

- ‘a whole of campus approach to connectivity, with bridge connections provided above ground which link to the IASB, SCH (existing and future stages), HTH and through to UNSW medical facilities.
- The new SCH1/ CCCC is a twelve-storey building when including all proposed levels from Level B2 to Level 09. The floor levels have been designed to align with key levels established by the IASB – namely at Levels B1, Level 00 and Level 01 to address key clinical adjacency requirements. The height of the SCH1/ CCCC shares an overall building height datum with IASB and a podium datum with HTH.

The location of the SCH1/ CCCC, nestled between existing hospital buildings to the east, the IASB (currently under construction) to the south and the proposed HTH, to the west, responds in bulk and scale to the surrounding buildings. Both the height and mass have been modulated to diminish impacts on surrounding buildings. In order to minimise the impact of height and mass on the low level, residential areas north of High Street, the building form has been broken down in scale into three horizontal parts – ground plane, midstorey and upperstorey.

The built expression celebrates and references the site's unique ecology - its positioning between two dunes and where saltwater meets freshwater. Drawing from the loci, three overarching design principles were established to inform all design moves – wetlands, sand dunes and sea cliffs.

The SCH1/ CCCC built form, façade treatments and materiality are breakdown into three key horizontal moves – the ground plane; midstorey and the upperstorey.

The materiality of the ground plane and level one, references the site's unique wetland ecology and is designed to merge with the surrounding endemic landscape design. Proposed is a series of ‘pod’ like forms that sit seamlessly within in the surrounding landscape. As the building is designed to be accessible via multiple public entry points approaches, this colorful and playful façade wrapping around the building perimeter aims to draw people in.

The midstorey, (L02- 05), is comprised of a simple, rectilinear form. Sitting above the midstorey is the sculptured form of the upperstorey (L06-09). To emphasis the building's unique form, a common façade approach has been adopted to the north, east, south and partially to the west. The materiality draws inspiration from the horizontal movement and shifting sand dunes and the horizontal striation of sea cliffs, characteristic of the immediate environ.

The façade, on these levels, will employ a series of shimmering light metallic finished aluminium panels folded to bounce light and create shadow play across the façade surfaces. The façade panelisation strategy reinforces and simplifies the built form, with repetitive folded panels used to create a ‘ripple like’ effect across the lower rectilinear form and a change in the panel scale and fold direction employed at the upper sculptured form. The movement in panel folds creates a shifting shadow play as the sun moves across the surface, throughout the day. Also, a monochrome colour palette is employed, referencing the sand dunes and sandstone sea cliffs, as well as allowing the new SCH1/ CCCC to sit contextually within the surrounding building context. A secondary layer of sun

shading to glazing elements, for environmental control, have an angular profile, designed to appear to fold out from the rippling façade. The warmer golden hues are extracted from the overall colour palette and applied to the surface facing the opening and to the front edge of the sunshades, to further reinforce the sand dune/ seacliff narrative. It also allows for subtle, playful changes in the building's appearance throughout the day and how one will experience the building as they move around its full perimeter.

The form of the building opens onto the main landscaped central courtyard. The angled upperstorey façades that embrace this courtyard, burst in their intensity of colour – mimicking the feel of walking through the heavily paperbark groves of the wetlands. This will also incorporate a series of cascading green terraces. This will create a ‘greened’ surround to this focal centre of the entire built form. It will also allow internal users at each level access to visual and physical green as the move up and through the building.

The overall building colour strategy aligns with the design narrative. The intensity of colour is located at levels B01, 0-1 and the facades to levels 6 to 8 which wrap around the western courtyard. The colour palette references the endemic local wetland characteristics of a lush undergrowth and the upper tree canopies. The intensity of colour is therefore located where people will have a greater engagement with the built form – at the lower levels where the public will interact with the building up close and in the round; and to the upper courtyard levels where they move up and through the building. The colour strategy is also used to not only connect the building to the local endemic landscape, but also provide a playful paediatric

overlay – a strategy that flows into the treatment of internal spaces. The landscape strategy for the public domain also responds to the long and layered history of the place and references the unique, endemic landscape types of Randwick, from protected swamp gullies to plateau banksia and eroded sandstones (shaped by the wind and water). The landscape design provides the following:

- green outlook and landscape spaces that are healing, engaging and transformative for patients, carers and staff;
- legible and welcoming entrances with pedestrian through-site connections that are clear, open and intuitive; and
- create places that are welcoming for children of all ages, ability and meet the needs of families.

Landscape responses will be expressed through the design of the ground plane, including planting, furniture, play elements and paving selections. A landscape palette of robust and durable materials has been selected for the public domain that relates to the sand dune nature of the site. A combination of precast concrete, painted metal and timber will combine to create a soft neutral base to allow the diverse planting types to be highlighted.

5.0

Amendments to Section 4.3 Public Domain and Landscaping

Refer to Public Domain Report and Addendum to the Report, prepared by Aspect Studios, dated September 2021

6.0

Amendments to Section 5.0 Architectural Design Concepts

Conceptual Framework

The SCH1/ CCCC site sits between the natural surrounds of what was once the Lachlan Swamp (now Centennial Park) and the sea and sandstone cliffs of Coogee Bay - the intermediary point of where the freshwater wetland meets the saltwater sea cliffs. The Concept references the Site's unique positioning between the land and the sea – the mixing of fresh and salt water – the wetland, the dunes and the sea cliffs.

It celebrates the Eastern Harbour City and connects both the Indigenous and European historical landscapes.

The Concept Vision themes inform:

- Building massing
- Material selection
- Interior palette
- Wayfinding stories
- Landscaping themes

6.1 Amendments to Section 5.1 Built Form Massing and Heights

The SCH1/ CCCC redevelopment has been guided by the following built form principles:

- Modulation of its built form to mitigate impact of both mass and height
- Integration with adjacent development, both existing and future
- Presentation of a good civic façade

Both the building mass and height have been modulated to diminish impacts on surrounding buildings and create an articulated and appropriately scaled building. The height of the building shares its datum with the IASB building to the south and a podium datum with HTH to the west.

In order to diminish the impact of height on the residential areas to the north, the building mass is organised into three parts – ground plane, midstorey and the upperstorey. Articulation of these elements is provided so as to avoid a “high wall” being presented on any side.

The built form too, celebrates and references the site's unique ecology; its positioning between two sand dunes; and where saltwater meets freshwater. From its loci, three overarching design principles were established to inform all design moves including the built form and its materiality – wetlands, sand dunes and sea cliffs.

The built form can be distilled into the following three formal elements that reference in their response these principles – the ground plane, midstorey and upperstorey. This allows for the overall built form to sit comfortably within its urban surrounds, express the building uses and provide different experiences and materiality as one moves through and engages with the building.

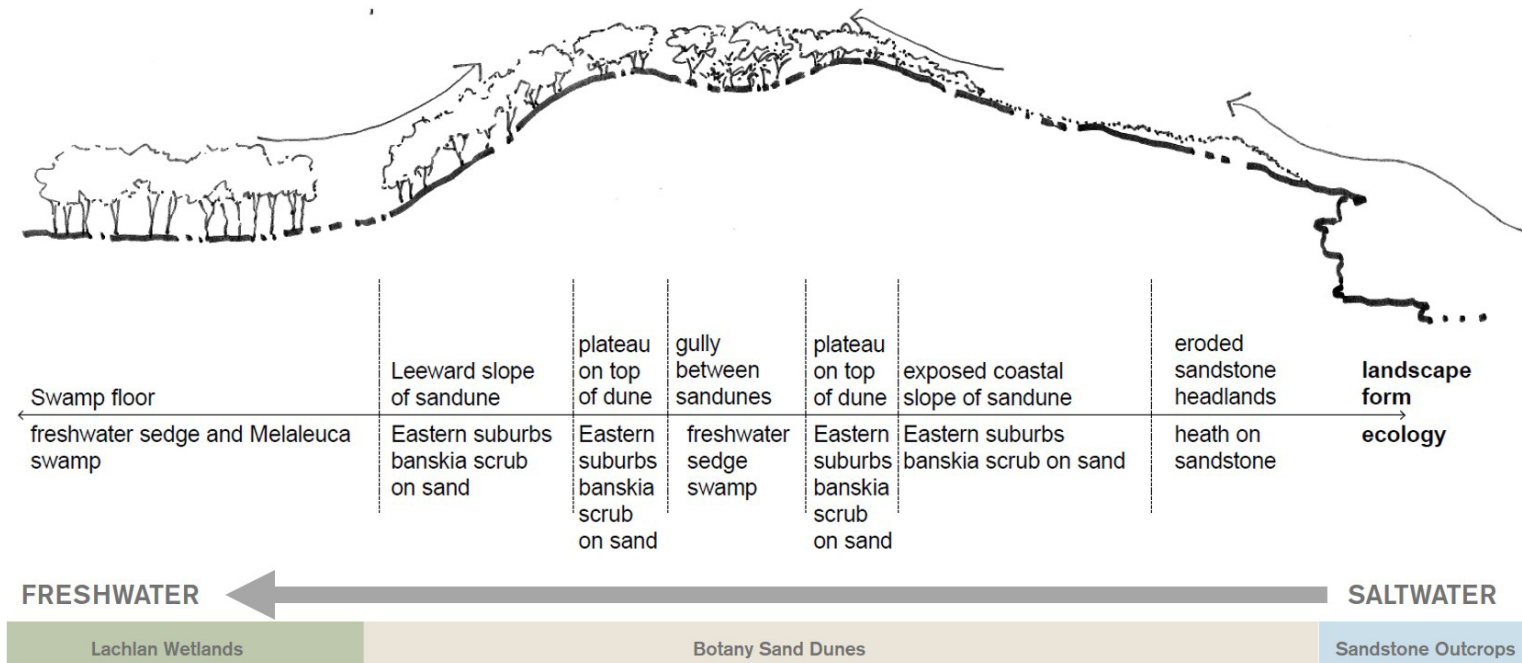


Figure 1 Concept Section

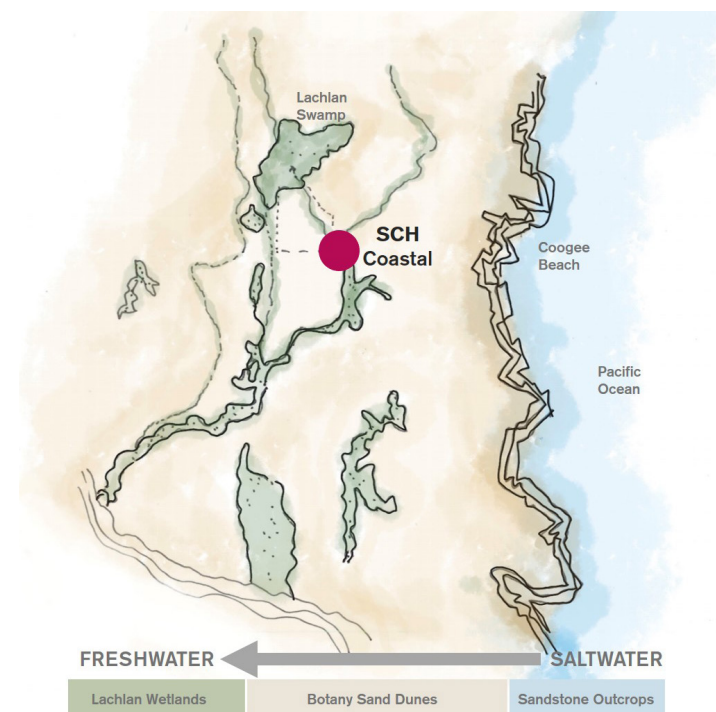


Figure 2 Concept Context Plan



The Ground and Level 01

The ground plane is treated as an extension of the greater Hospital and Education campuses - a place for patients, visitors, clinicians, researchers, and students. The ground plane is open, transparent and permeable to the north, south, east and west. Active uses animate these frontages. The northern frontage addresses the Randwick precinct, and the southern frontage addresses the IASB. The eastern frontage largely contains service “backbone” areas to the building, as well as, connecting to the services of the existing SCH, such as the George Gregan Playground and the Fairy Garden. To the west, the building responds to the HTH and its open plaza. An active central courtyard, - opens up to the shared landscaped plaza between HTH and the new SCH1/ CCCC building. This forms the redevelopment’s main public focal point. The ground plane also provides connection to the lower level Emergency Department, revealing this “basement” through both a generous pedestrian staircase and lift. A series of ‘pod’ like forms arranged along the ground plane sit within the external landscaped area- merging the inside and outside. These pods and Level 1 facades have similar façade treatments - to break down the overall building mass and create a human scale treatment to the perimeter where, people will engage up close with the building.

Midstorey

The midstorey, Levels 2 to 5, include both clinical and research functions and the key connections to surrounding buildings – the existing SCH, the IASB and the HTH. It has its own expression of a simple rectilinear form to the boundaries.

Upperstorey

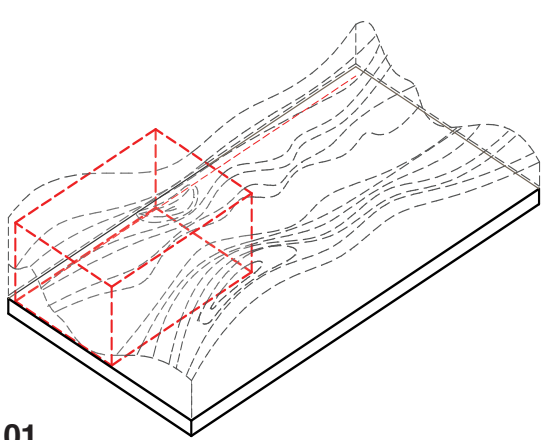
Sitting above the midstorey is the sculptured form of the upperstorey, Levels 6 to 8. The form differs from the more rectilinear form below and responds to the internal program of inpatient units.

Central Courtyard

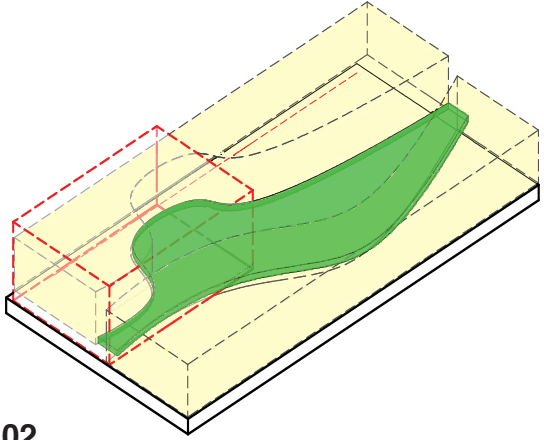
The form of the building opens up onto the central courtyard and the shared HTH Pedestrian Plaza. The midstorey rectilinear form is maintained but the upperstorey angled form opens up to create an inviting, embrace to this main public outdoor space. It also incorporates a series of cascading green terraces, to create a ‘greened’ surround visible to all users as they move up and through the building.

Pockets of Green

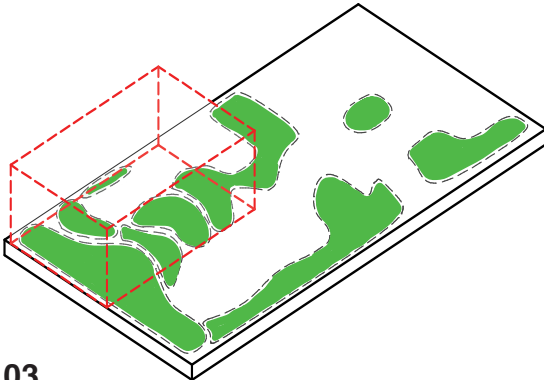
The form is dotted with ‘pockets of green’. These are placed to allow visual or physical access to green throughout the building.



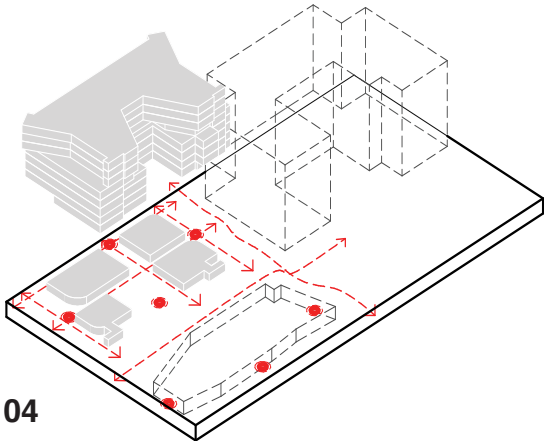
01
Site Between the Dunes



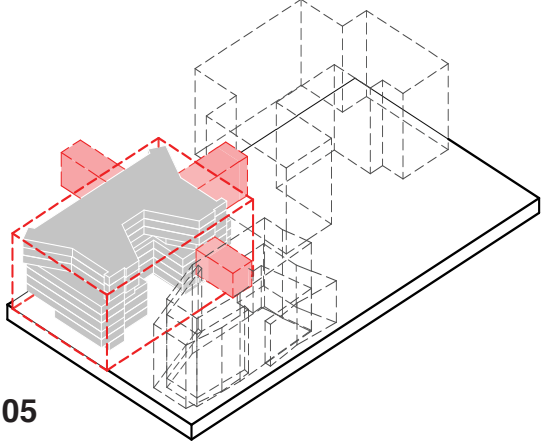
02
Siting of Built Form –
Response to the landscape



03
Precinct Ground Plane –
Integrated Dunallandscape

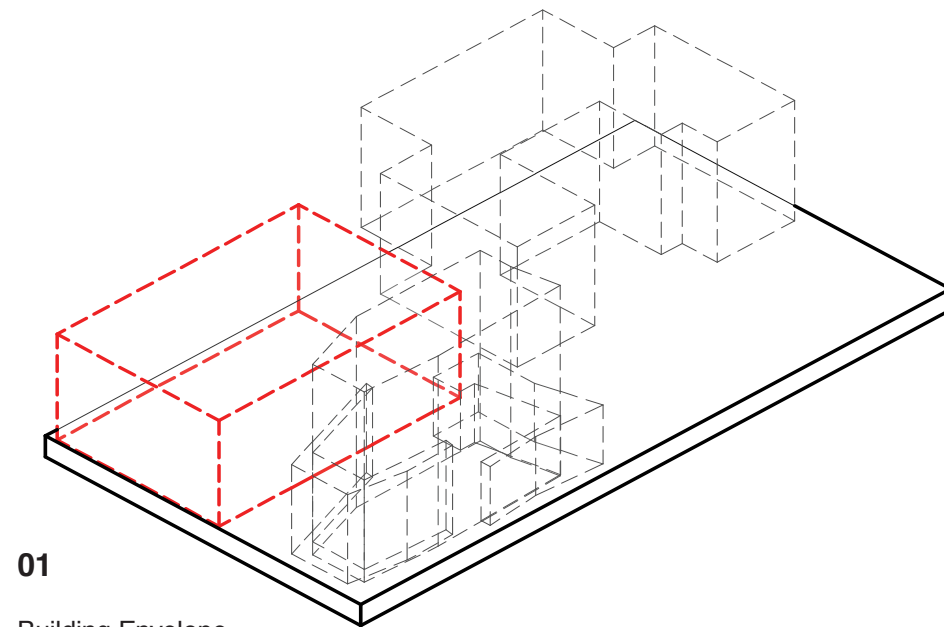


04
Precinct Connectivity –
Connected Ground Plane

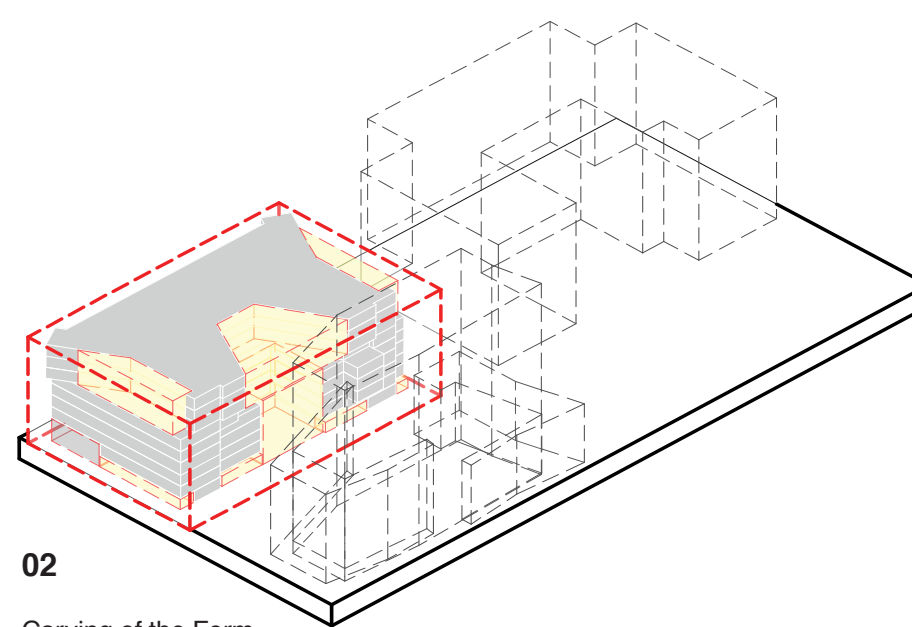


05
Precinct Connectivity –
Connected Buildings

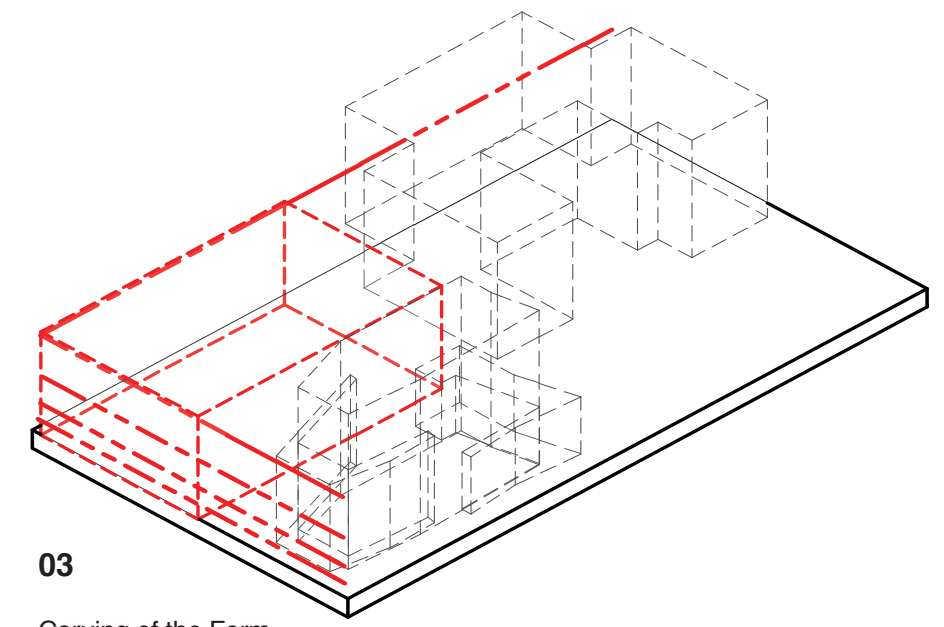
Figure 4 Design Intent: Integrated Precinct



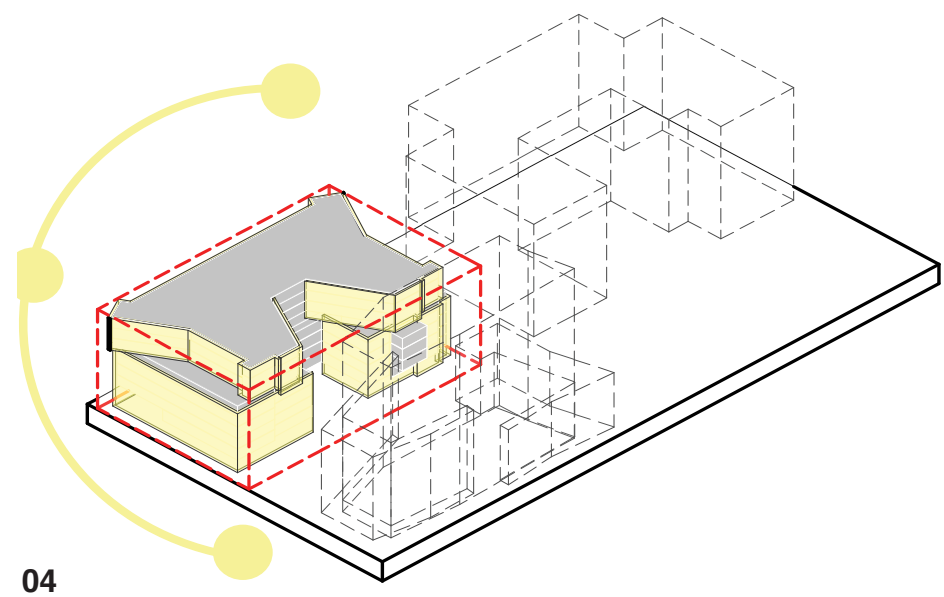
01
Building Envelope



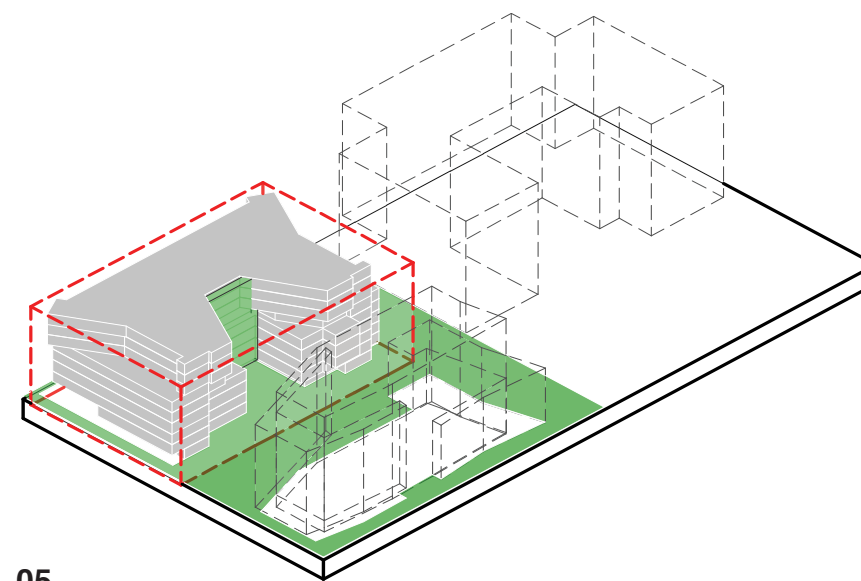
02
Carving of the Form



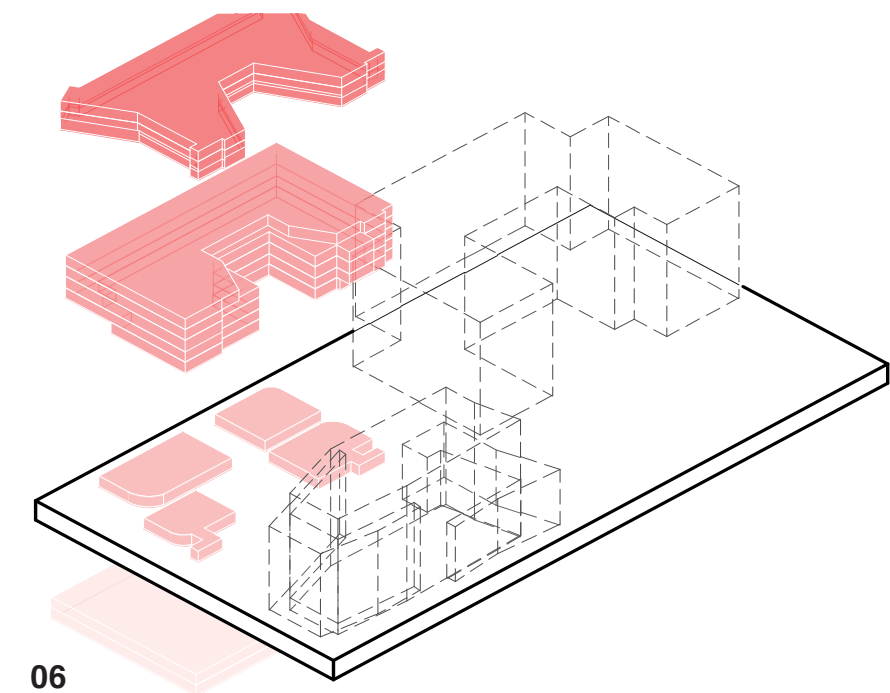
03
Carving of the Form –
Response to surrounding Building Datums -Context



04
Carving of the Form –
Maximising envelope for daylight amenity and views -Biophilic



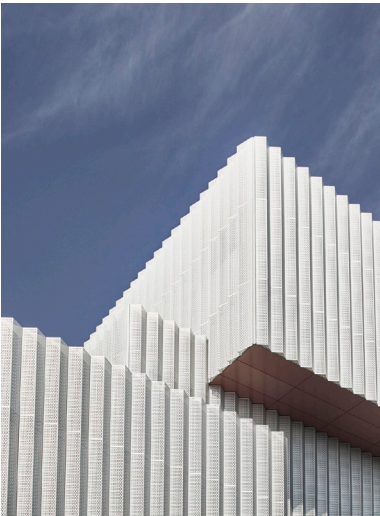
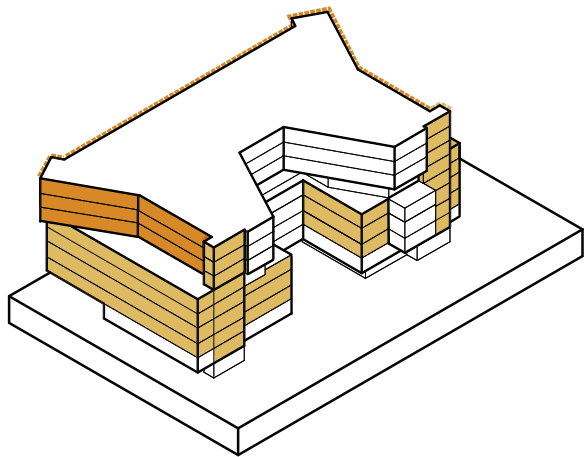
05
Carving of the Form –
Central Courtyard Connectivity to shared Precinct Green -Biophilic



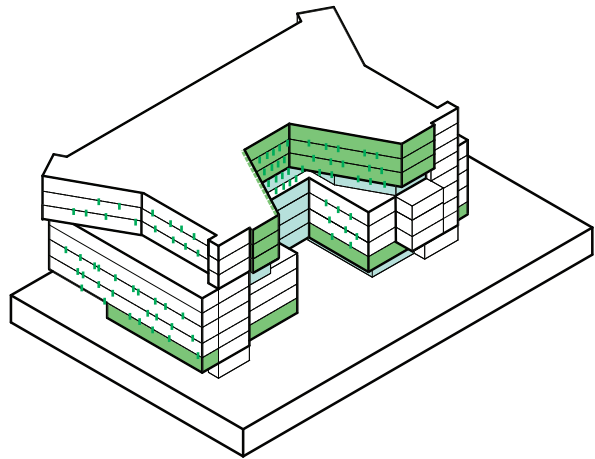
06
Carving of the Form –Response to Program and Users

Figure 5 Design Intent: Built Form and Mass

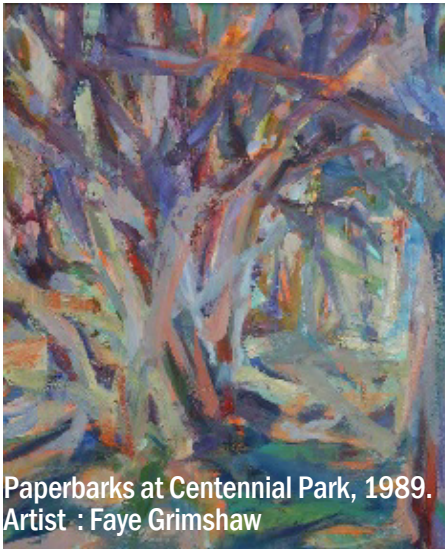
Seacliffs and Sand Dunes



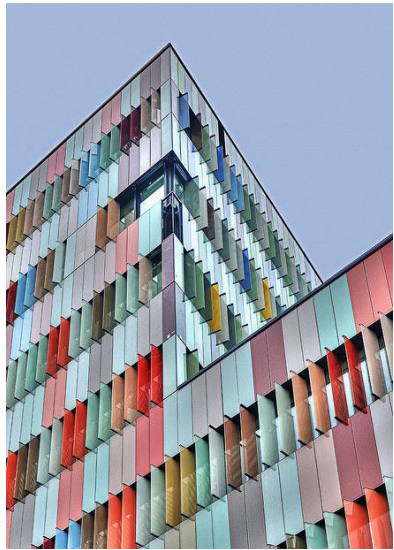
Wetlands : Ground Cover levels G and 01
Tree Canopy level 06,07,08



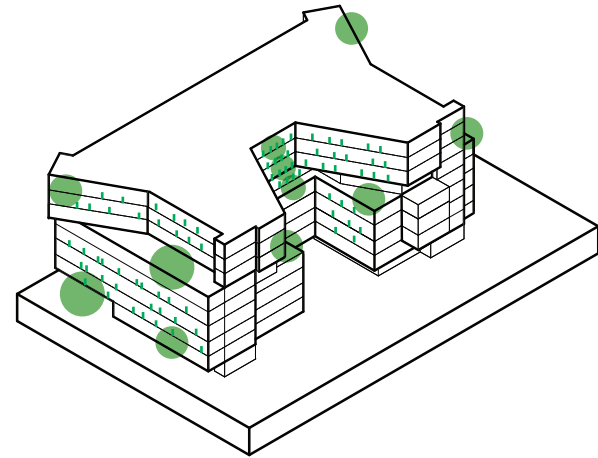
Photograph of Centennial Park



Paperbarks at Centennial Park, 1989.
Artist : Faye Grimshaw



Weaving of Green



6.2 Amendments to Section 5.2 Building Fabric and Materiality

The materiality of the form hierarchy builds on the inherent site characteristics - wetlands, sand dunes and sea cliffs.

Ground Plane and Level 01

The materiality of the ground plane and Level 1, references the site’s unique wetland ecology and is designed to merge with the surrounding endemic landscape design. Coloured back glass colourations, inspired by the local wetlands wrap these areas. As the building is designed to be accessible via multiple public entry points approaches, this colorful and playful façade wrapping around the building perimeter aims to draw people in. The entry points to the north, south will also have a wall of vertical green to mark the public entry points. Soffits at ground level and upper levels to external terraces taper to meet façade edge, to increase the perceived height and openness of these areas.



Figure 6 Artist Impression : View of Central courtyard

Midstorey and Upperstorey

The midstorey, (Level 2-5), is comprised of a simple, rectilinear form. Sitting above the midstorey is the sculptured form of the upperstorey (Level 6-9). To emphasise the building's unique form, a common façade approach has been adopted to the north, east, south and partially to the west. The materiality draws inspiration from the horizontal movement and shifting sand dunes and the horizontal striation of sea cliffs, characteristic of the immediate environ.

The façade, on these levels, will employ a series of shimmering light metallic finished aluminium panels folded to bounce light and create shadow play across the façade surfaces. The façade panelisation strategy reinforces and simplifies the built form, with repetitive folded panels used to create a 'ripple like' effect across the lower rectilinear form and a change in the panel scale and fold direction employed at the upper sculptured form. The movement in panel folds creates a shifting shadow play as the sun moves across the surface, throughout the day.



Figure 7 Artist Impression : View of Level 06 to 08 - North East corner

Central courtyard

The form of the building opens onto the main landscaped central courtyard. The angled upperstorey façades that embrace this courtyard, burst in their intensity of colour – mimicing the feel of walking through the heavily paperbark groves of the wetlands. This also incorporates a series of cascading green terraces- creating a ‘greened’ surround to this focal centre of the entire built form. It will allow internal users at each level access to visual and physical green as they move up and through the building.

The western façade (inner courtyard, levels 6-8) consists of a series of terraces with tapered ‘timber-look’ soffits, clear glass balustrades and planting to the perimeter, with the provision of vertical wires to allow the ‘greening’ of the façade overtime. These terraces come directly adjacent to communal areas.



Figure 8 Artist Impression : View of Level 06 to 08 - Central Courtyard

Ground Plane Interface Elements

An integrated design approach has been taken in the treatment of architectural elements which dot the ground plane - inclusive of canopies, bridge links and soffits. Refer also to Section 6.5

To mitigate the effects of low internal ceiling heights and to increase the perception of space, two triple height internal voids occur at the ground level. The main north- south circulation corridor has a sloped ceiling to maximise height and sense of space. A similar timber-look treatment of internal ceilings and external soffits is employed to create a seamless blending of internal and external spaces.



Figure 9 Artist Impression : View of Level 00 Central Courtyard and Soffit treatment

Emergency Department B1 Level

The entry to the Emergency Department is characterised by colour back glass panels to provide interest and warmth to the façade in this location and to tie in with the wetlands narrative of connected to the ground plane. The design of the Emergency drop-off canopy shares a similar structural expression and material treatment to that of the High Street canopy (not part of this application) thus providing clear definition as an additional entry point of the Hospital.

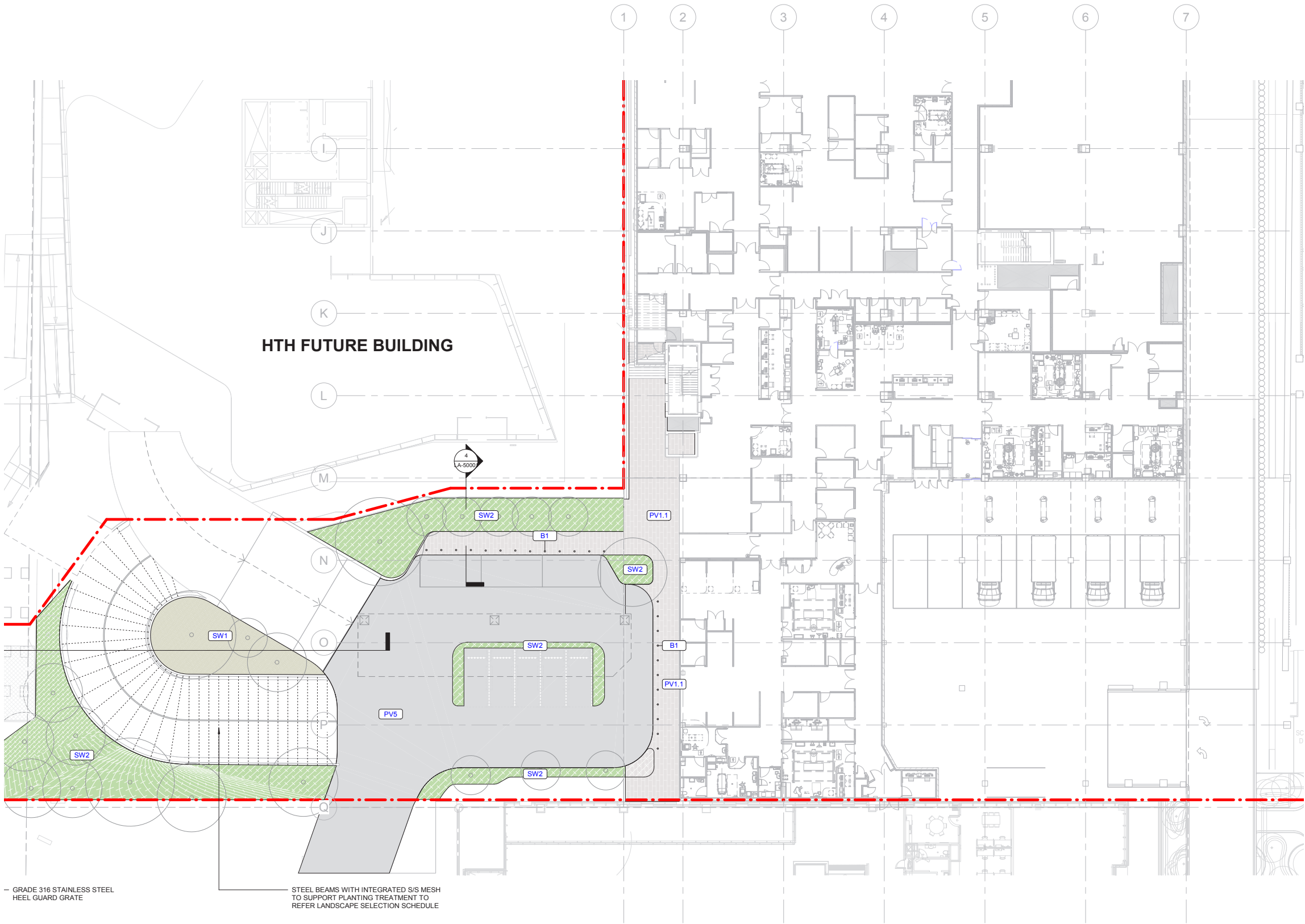


Figure 10 General Arrangement Plan - Level B1 south

ED Image



Sunshading

The building's sunshading has been designed to optimise performance. Their location, orientation and design aims to maximise the thermal comfort levels of internal spaces.

The sunshading devices' profiling are also integrated with the façade on which they are located - sunshades located along the folded metal façades have an angular profile, designed to appear to fold out from the rippling façade; the flat colour back glass façades have simpler rectilinear profiled sunshades.

Colour to the sunshades is strategically employed. The metal façade sunshades have colour applied to the surface facing the opening and to the front edge; the colour back glass façade's sunshades have colour to all surrounds to align with the corresponding façade colouration.

The sunshade colour and profiling strategy allows for an integrated approach to the overall façade treatment. It also allows for subtle changes in the building's appearance throughout the day and how one will experience it as they move around its full perimeter.



Figure 11 Sunshade Colour Scheme



NOTE : Colours are indicative only



Figure 12 Base building colour



Figure 13 Sunshade colours on metal panels

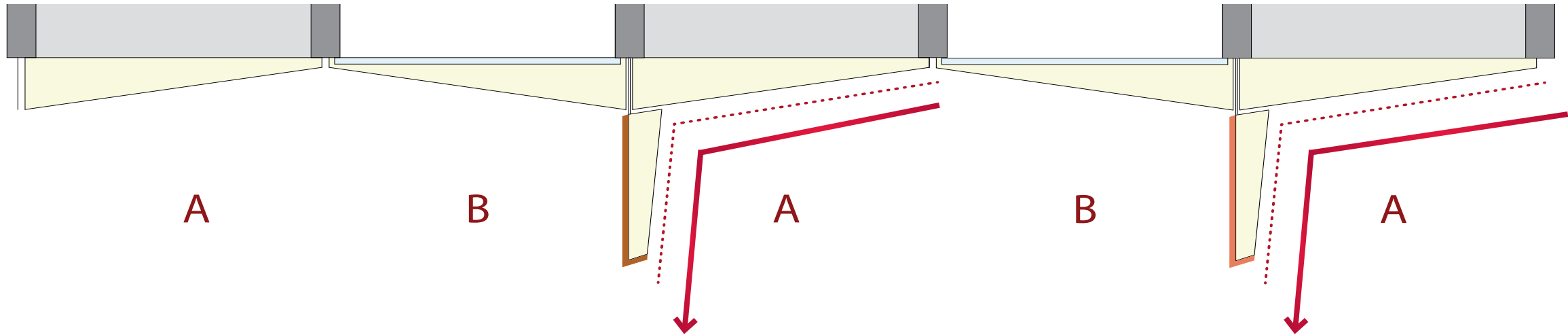


Figure 14 Typical Plan - Sunshades unfolding from the panel



Figure 15 Artist Impression : North elevation looking West.



Figure 16 Artist Impression : Eastern elevation looking south

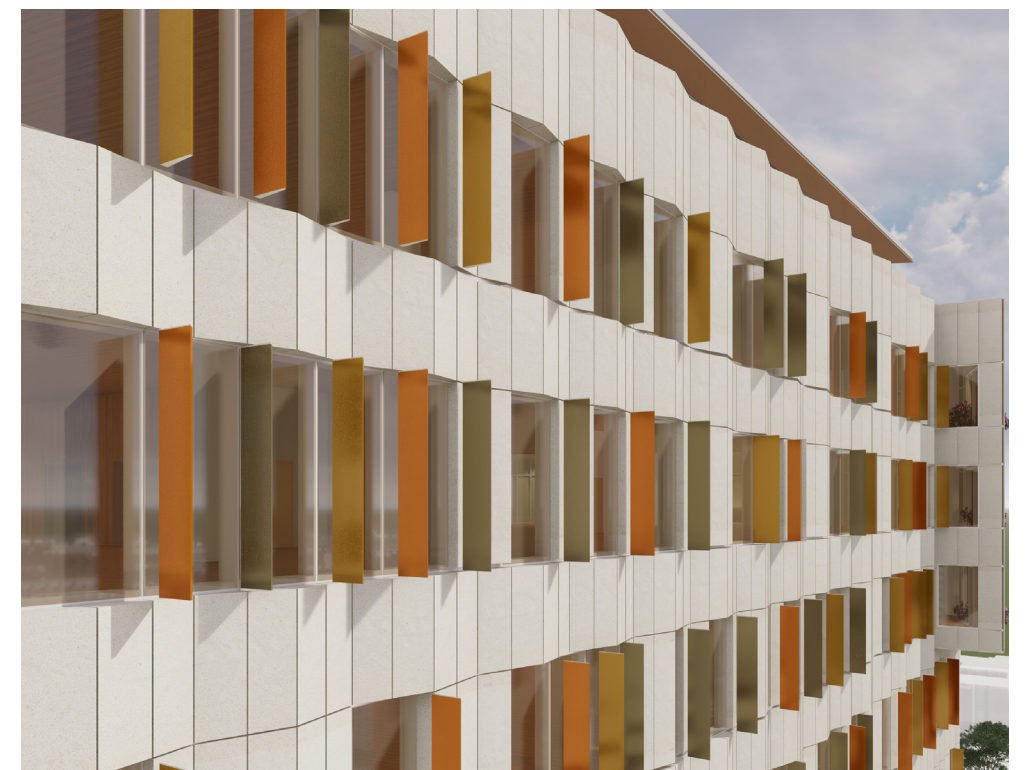


Figure 17 Artist Impression : Eastern elevation looking north

Colour Palette

A monochrome colour palette is employed for the metal folded panels, referencing the sand dunes and sandstone sea cliffs, as well as allowing the new SCH1/ CCCC to sit contextually within the surrounding building context. The intensity of colour has been limited to Levels 0-1 and the facades to Levels 6-8 which wrap around the western courtyard. The colour selection will reinforce the wetland characteristics of a lush undergrowth and the upper tree canopies. Intensity of colour is located where people will have the greatest engagement with the built form – at the lower levels where the public will interact with the building up close and in the round; and to the upper courtyard levels where they move up and through the building.

The colour strategy is intended to connect to the local endemic landscape, as well as provide a playful paediatric overlay – a strategy that flows into the treatment of internal spaces. The warmer golden hues are extracted from the overall colour palette and applied to the sunshades located on the folded metal panelled areas. This further reinforces the sand dune/ seacliff narrative.

The process of final colour selections also provides an opportunity for connection to Country. Yerrabingin will assist to guide further design development.

Note : Opportunities for connection to country and expression of aboriginal cultural heritage through colour spectrum.

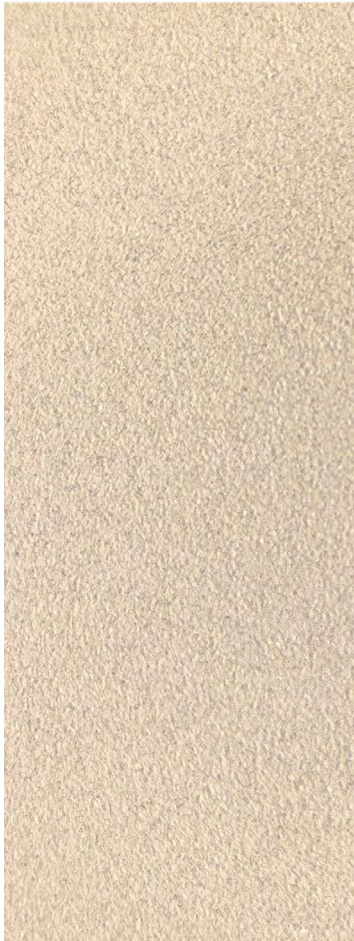


Figure 18 Base building colour

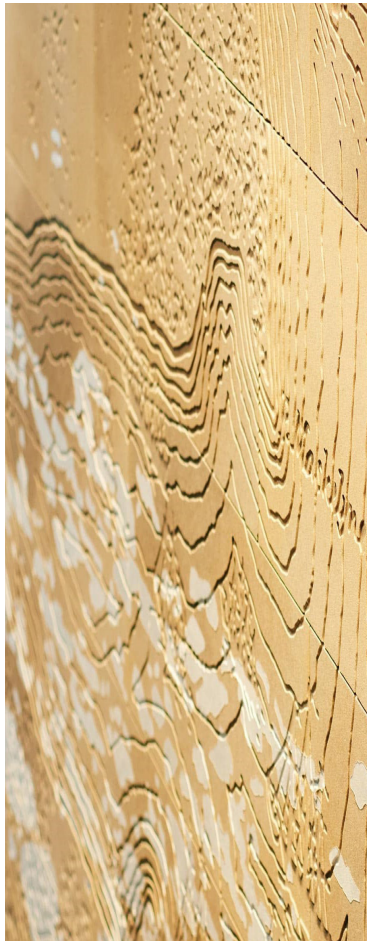


Figure 19 Soffit linings



Figure 20 Sunshade colours on metal panels



Figure 21 Colourback glass colours and associated sunshade colours

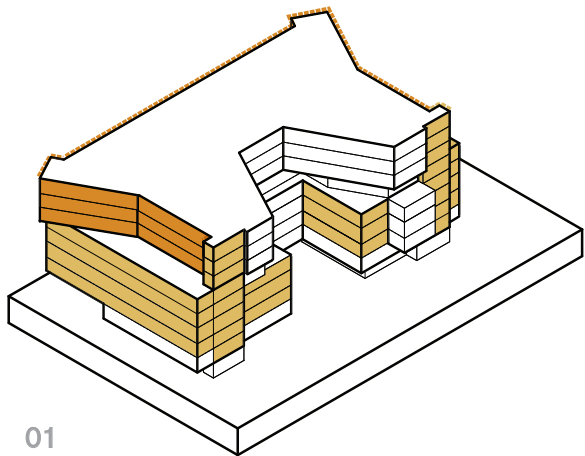
NOTE : Colours are indicative only

6.3 Amendments to 5.3 Facade Types

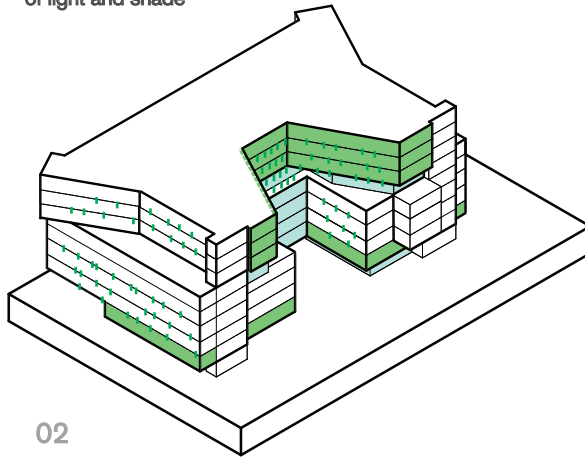
The overall number of façade types is minimised for clarity and construction efficiencies. Key façade types retain flexibility within the system to further articulate facades and adjust for internal planning changes.

Hierarchy of Facades

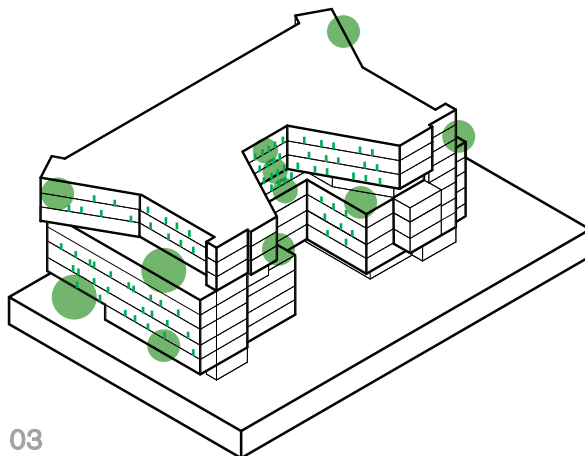
Differing orientations, aspect and address allows for the potential of creating a hierarchy of facade treatments. The facades to the north, east, south, and partially to the west have a common façade approach – to reinforce the form of the building. A layer of profiled and coloured sunshades fins is introduced over a monochrome base, as a response to the endemic landscape and to create a playful paediatric response. An increase in intensity of colour and green occurs around the central courtyard- the point where the public will move vertical up and through the building. The facades at ground and Level 1 create a horizontal banded perimeter to tie all the main entry points to the building. This allows for a colourful, playful, and human scale approach to the building- where the public will engage with the building up close. The facades have also been designed to allow windows to be positioned and sized as required to maximise natural light. In research areas the area of glazing to solid is increased to allow the research to be ‘visible’ externally.



01
Façade –
Abstraction of Seacliff and Sand Dune
Narrative
Use of rhythm, texture and colour; play
of light and shade

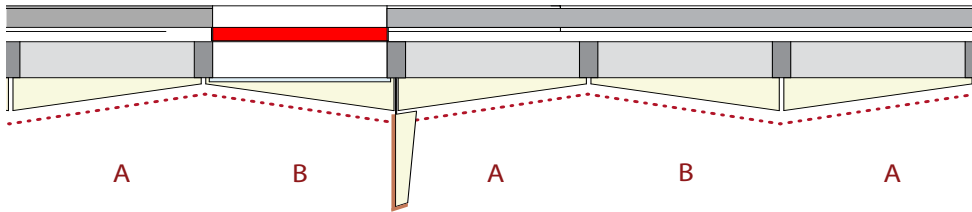


02
Façade –
Abstraction of the Wetland Narrative
Use of rhythm, texture, diversity of
colour and green

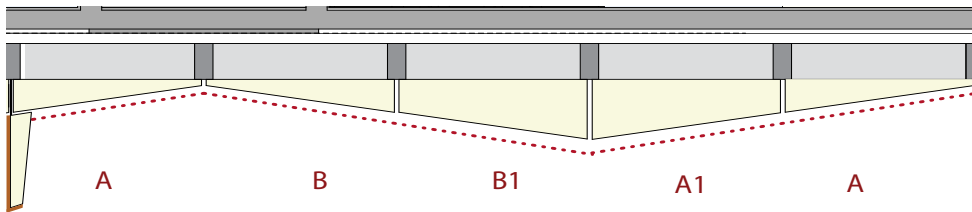


03
Façade –
Weaving of green opportunities
throughout the building

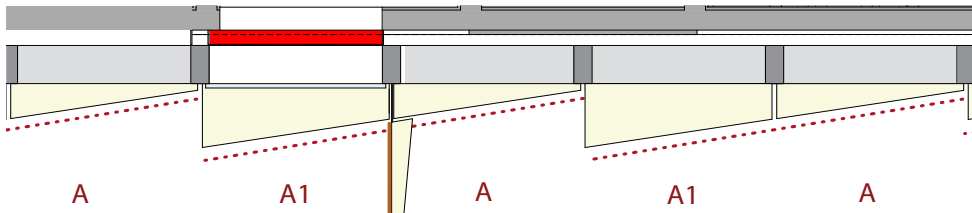
Figure 22 Design Intent: Façade Hierarchy



Level 02 - 05 - All Facades



Level 06 - 08 - East Facade



Level 06 - 08 - North and South Facade

Figure 23 Design Intent: Façade Composition

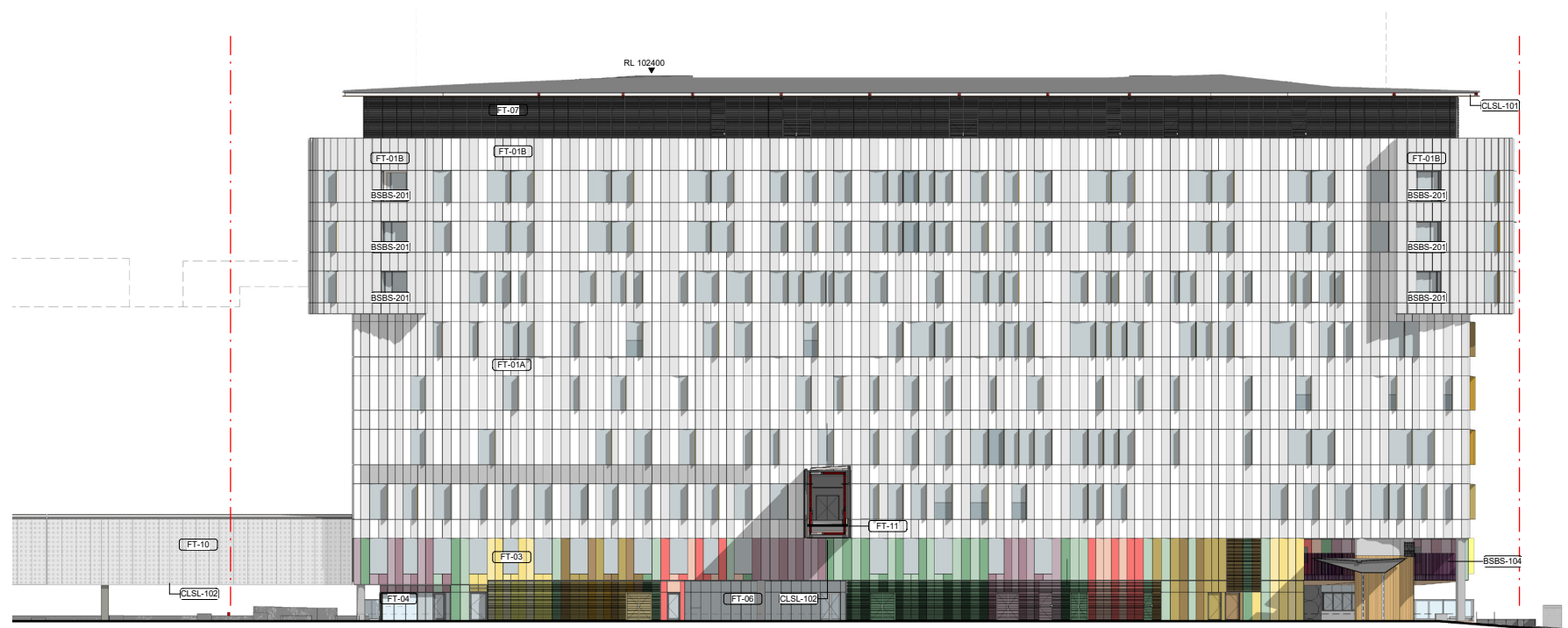


Figure 24 SCH1/ CCCC Elevation : Hospital Road



Figure 25 SCH1/ CCCC Elevation : High Street

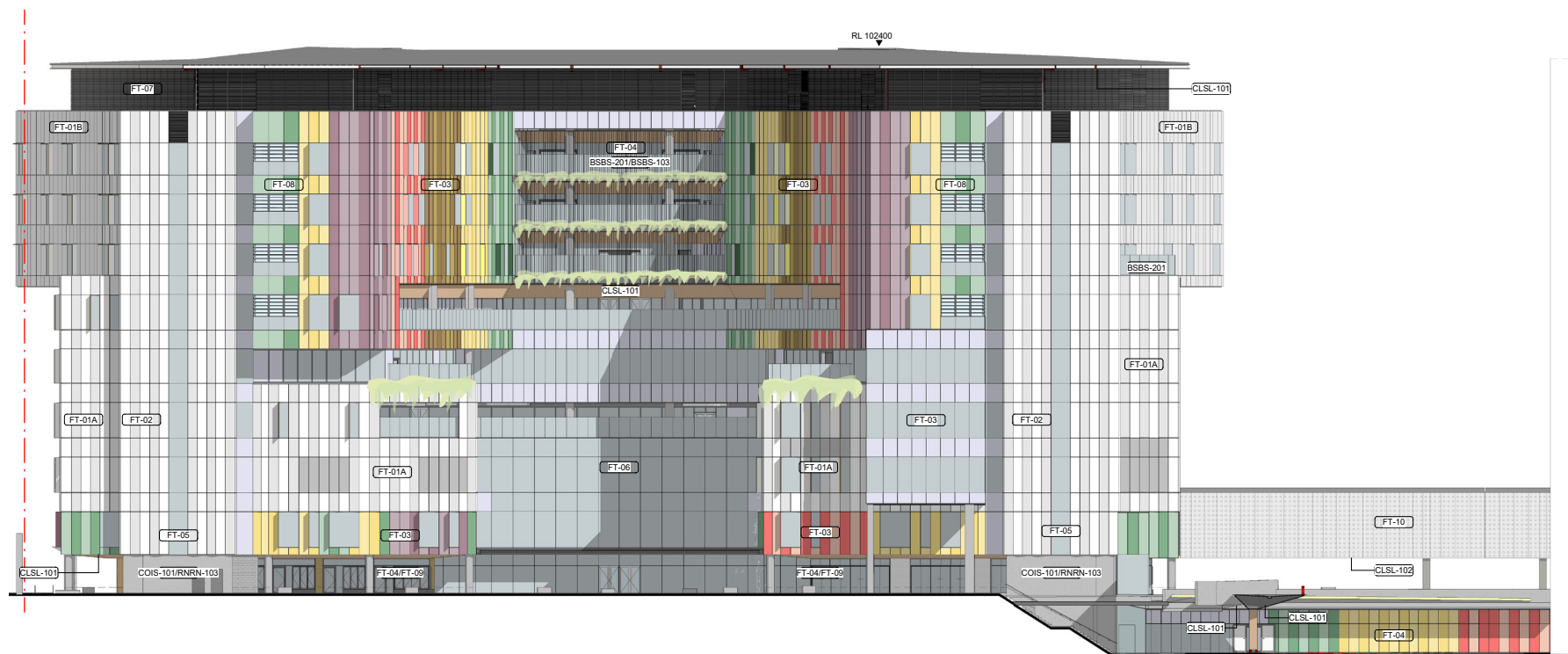


Figure 26 SCH1/ CCCC Elevation : High Street to Botany Street

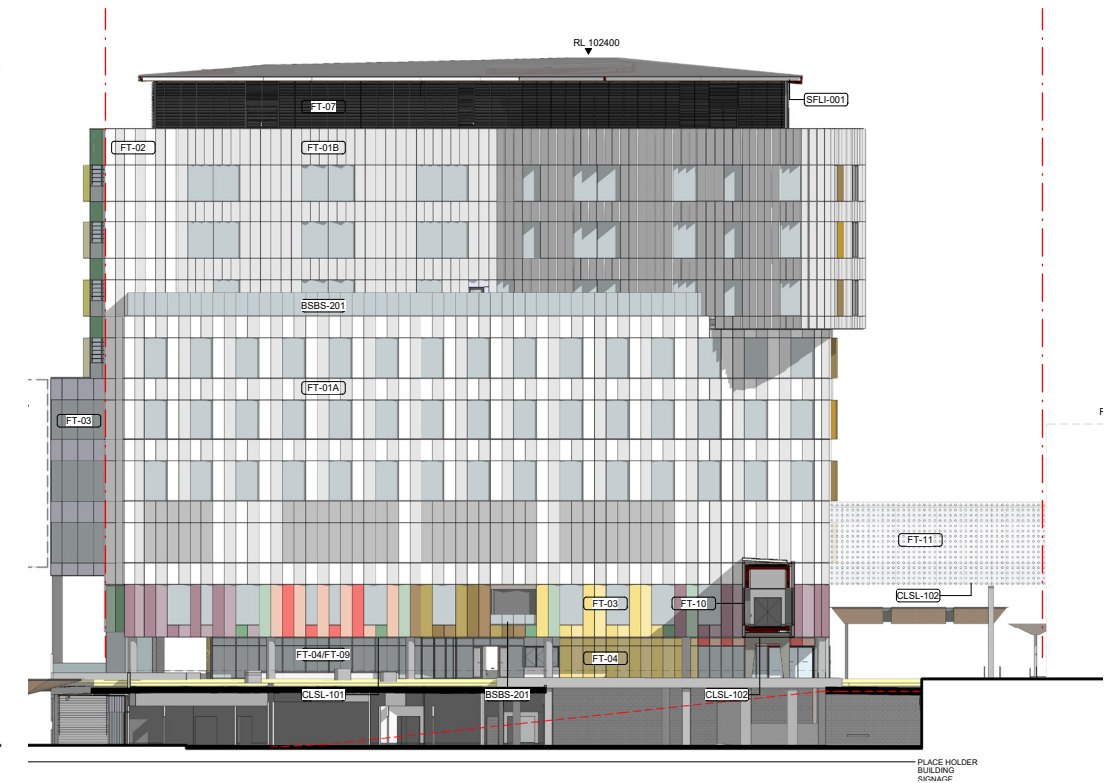


Figure 27 SCH1/ CCCC Elevation : South to Botany Street

6.4 Amendments to Section 5.4 Detailed Sections

Included below are sectional elevations through typical façade types. Systems will utilise floor-to-floor components that divide the façade vertically. Windows and cladding panels are based on elements that can be accommodated within the building’s 8.4m and 10.2m grid. Sill levels are set typically 150mm above floor levels and ceilings are 2700mm – 3000mm above floor level. Full height vision glazing spans 2550mm between these levels. Within the primary façade system, the location of glazed and solid elements can be varied from floor to floor. Vision glazing percentage varies around each façade depending on the internal planning. Glazing areas have been minimised and match internal planning requirements.

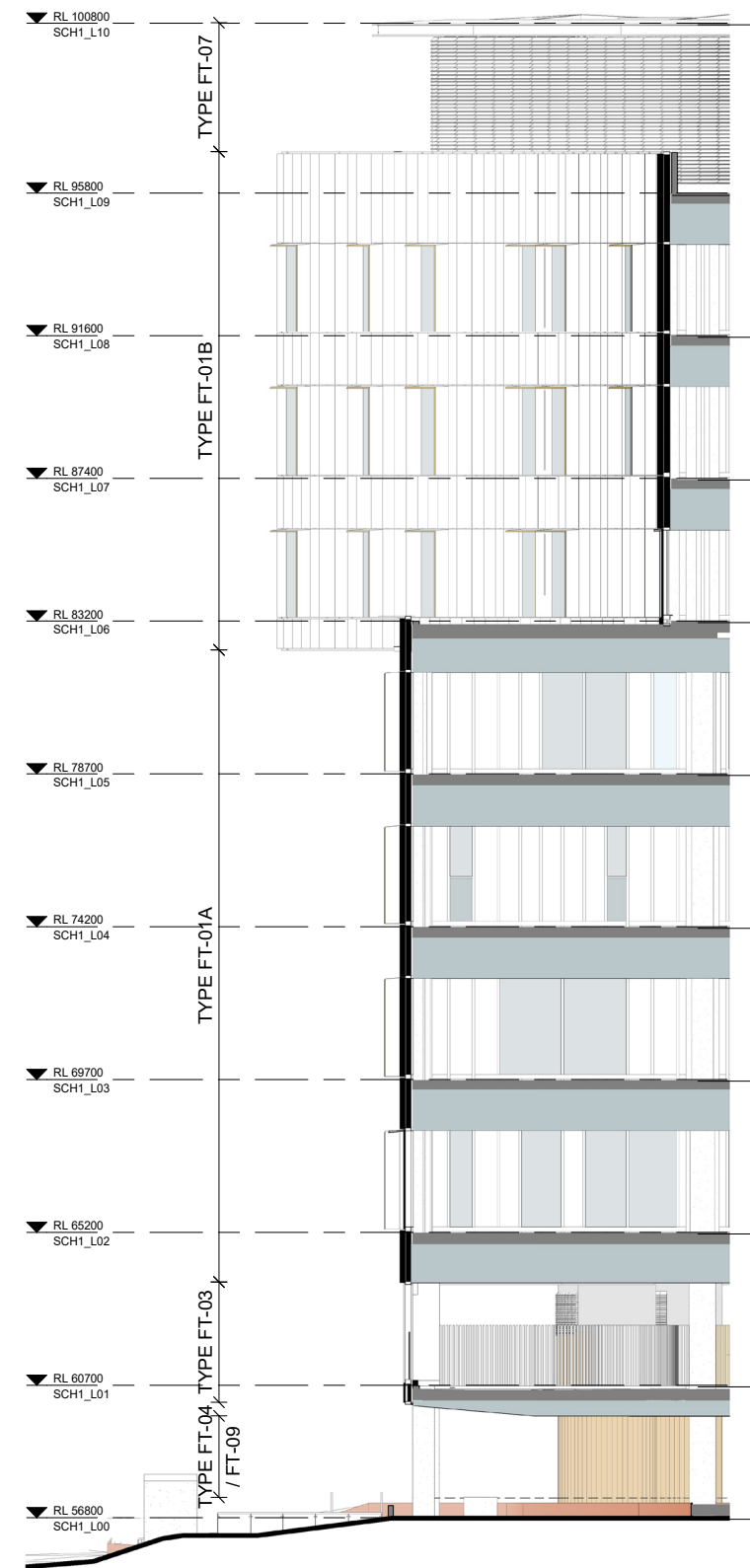


Figure 28 Typical Sectional Elevation Detail through the facade

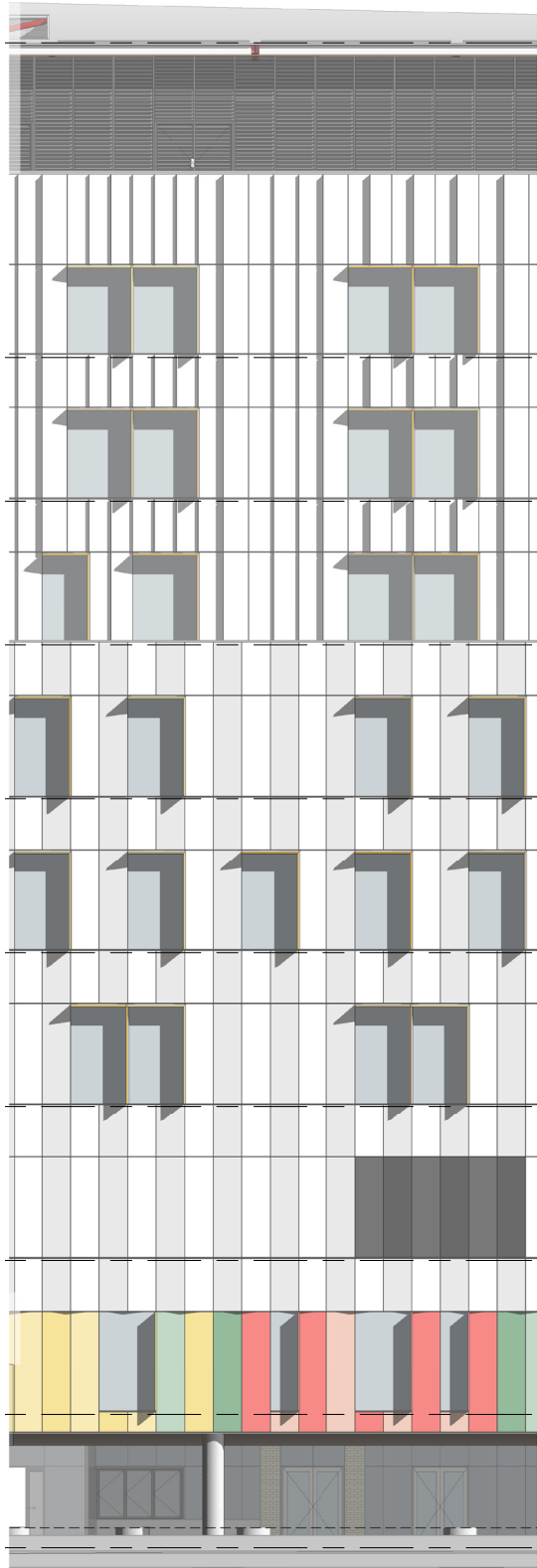


Figure 30 Typical Elevation Detail through the facade

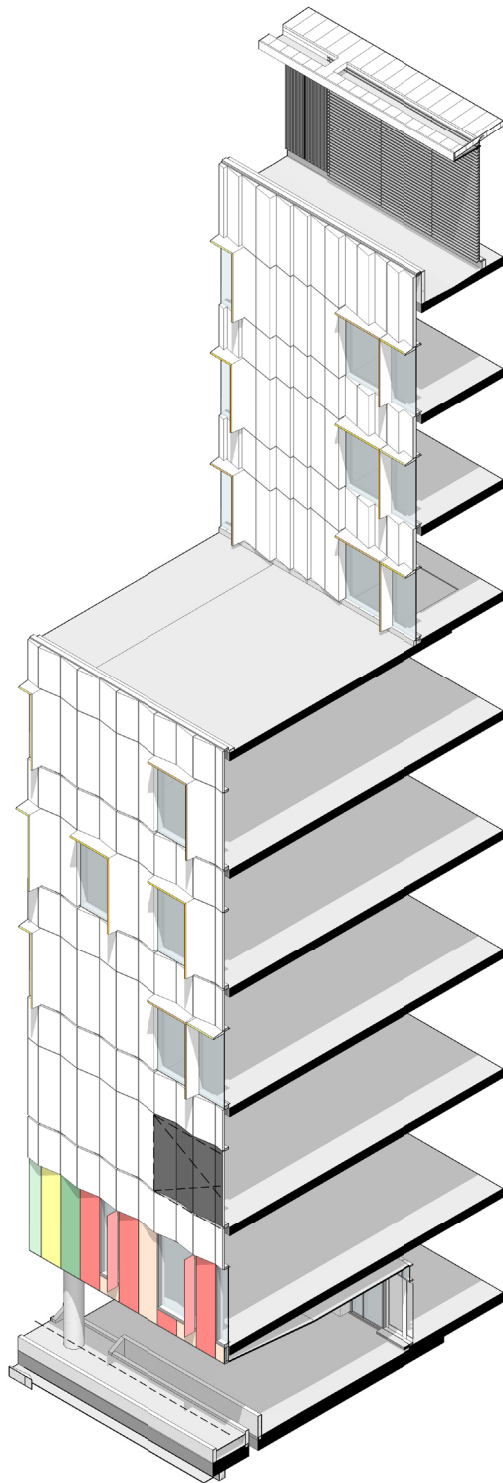


Figure 29 Typical Sectional Detail through the facade

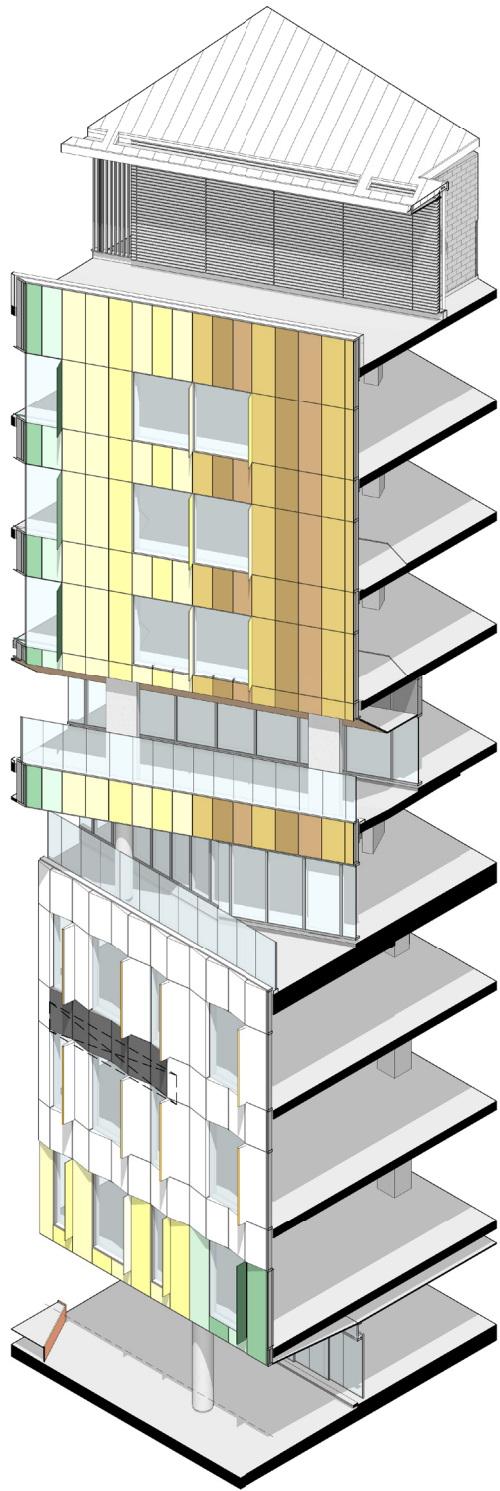


Figure 31 Typical Sectional Detail through the facade

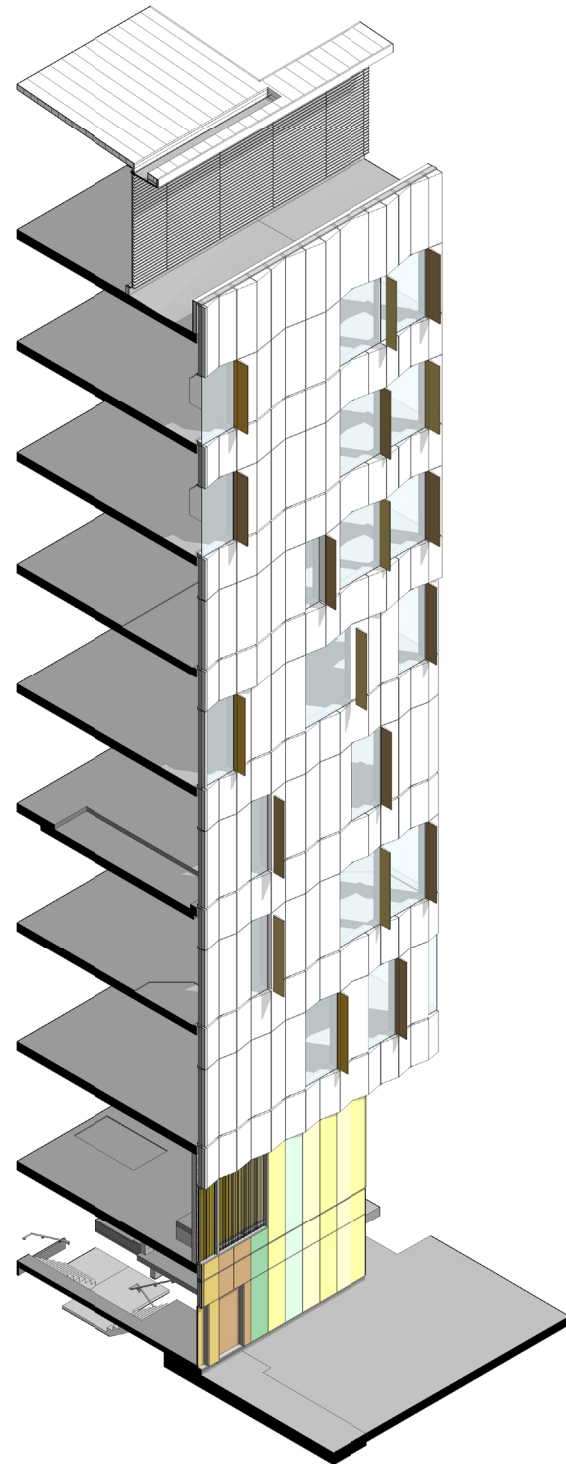


Figure 32 Typical Sectional Detail through the facade

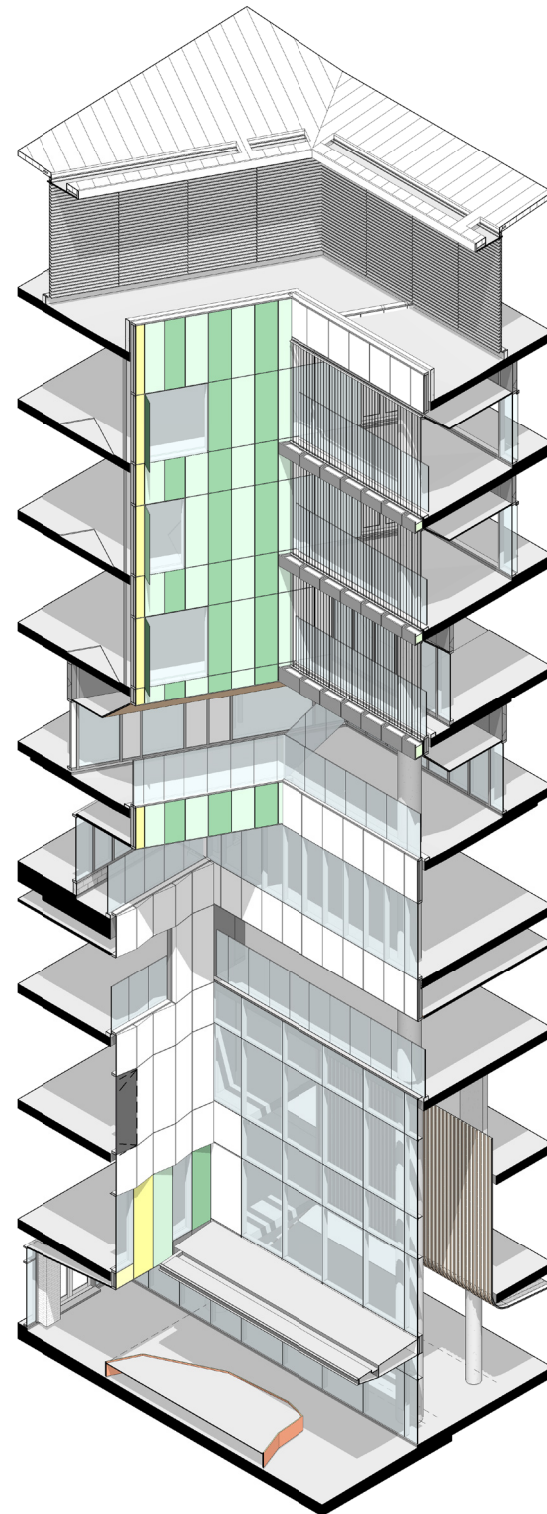


Figure 33 Typical Sectional Detail through the facade

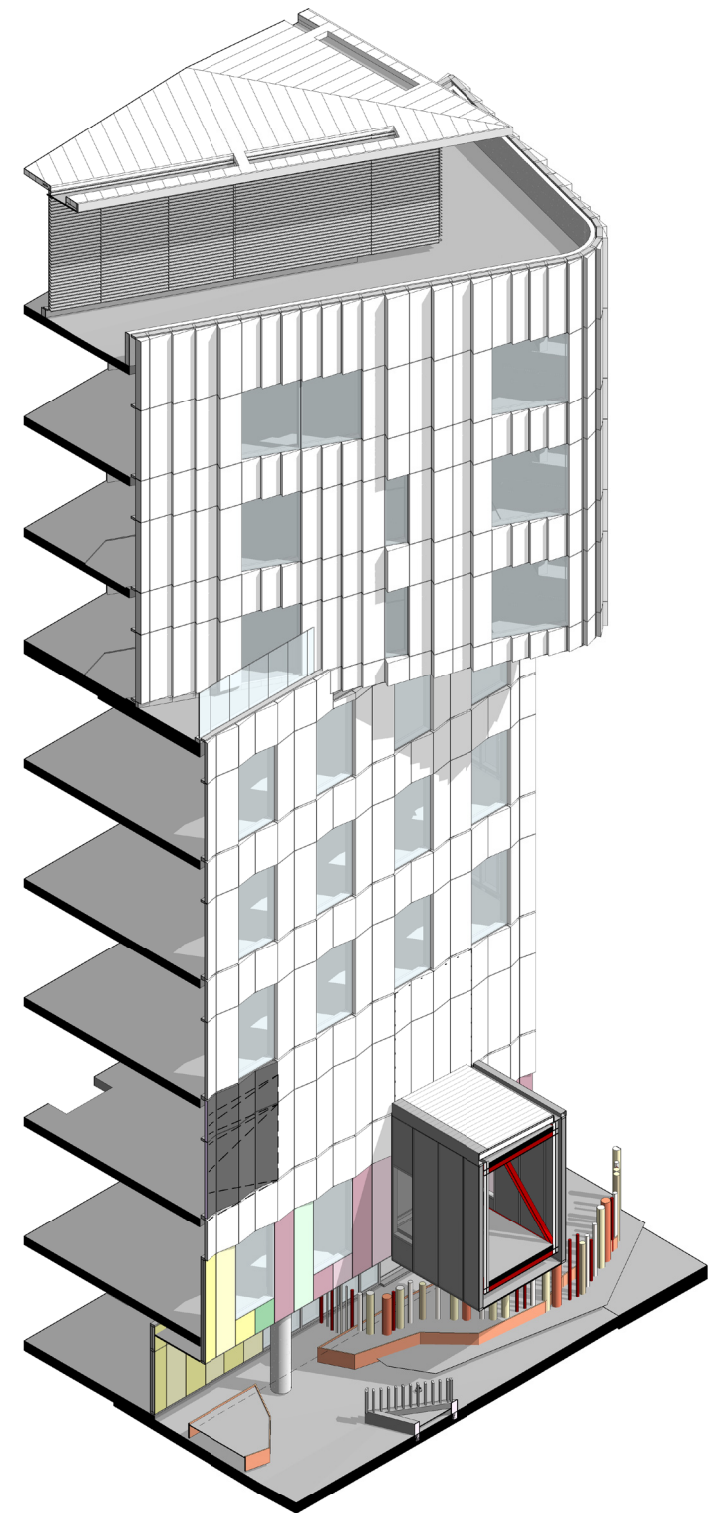
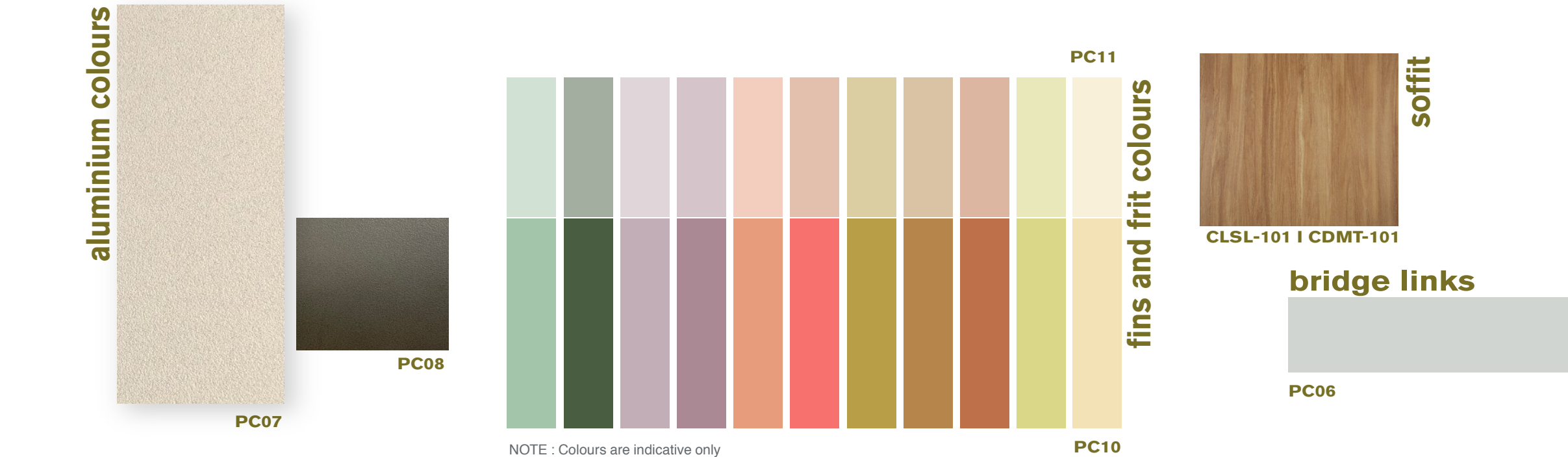


Figure 34 Typical Sectional Detail through the facade



NOTE : Colours are indicative only

SYSTEM DESCRIPTION AND EXTERNAL FINISHES

Construction Type	Description
Type FT-01A/B <i>[Previously FT-13]</i>	<ul style="list-style-type: none">Solid aluminium cladding cassettes tapered to form triangular projections and performance glazed punch and strip windows, supported on unitised curtain wall with extruded aluminium framing.Vertical tapered aluminium sunshading fins (with horizontal component as required).Mechanical two-stage weather resistant louvres to plant zones using extruded aluminium; set inboard to allow perforated aluminium cladding to face.
Colour and Finish	<ul style="list-style-type: none">Cladding Panel Finish: Powder coat or PVDF finish.Cladding Panel Colour: Interpon D2525 Sable <i>Piles Creek</i> [PC07]Aluminium Frame Finish: Powder coat or PVDF finish.Aluminium Frame Colour: Interpon D2525 <i>Flat Matt Medium Bronze</i> [PC08]Glass: <i>Neutral silver grey</i>Vertical Fins Finish: Powder coat or PVDF finish.Vertical Fins Colour: Allow for a number of various colours [PC10]
Type FT-02 <i>[Previously FT-03]</i>	<ul style="list-style-type: none">Solid aluminium cladding cassettes, tapered to form triangular projections supported on thin gauge steel sub-framing supported on brackets fixed to concrete core walls.
Colour and Finish	<ul style="list-style-type: none">Cladding Panel Finish: Powder coat or PVDF finish.Cladding Panel Colour: Interpon D2525 Sable <i>Piles Creek</i> [PC07]
Type FT-03 <i>[Previously FT-07/ FT-14]</i>	<ul style="list-style-type: none">Glazed fully unitised curtain wall with double glazed vision panels and single glazed colourback spandrel panels, with extruded aluminium framing.Vertical aluminium sunshading fins.Proprietary mechanical two-stage weather resistant louvres to plant/serice zones using extruded aluminium.
Colour and Finish	<ul style="list-style-type: none">Aluminium Frame Finish: Powder coat or PVDF finish.Aluminium Frame Colour: Interpon D2525 <i>Flat Matt Medium Bronze</i> [PC08]Vision Glass: <i>Neutral silver grey</i>Spandrel Glass: Allow for a number of various frit colours [PC11]Vertical Fins Finish: Powder coat or PVDF finish.Vertical Fins Colour: Allow for a number of various colours [PC10]
Type FT-04	<ul style="list-style-type: none">Proprietary window wall shopfront system with extruded aluminium framing.Front glazed system with external capture beading.Double glazed vision panels and single glazed colourback spandrel panels.Proprietary mechanical two-stage weather resistant louvres to plant/serice zones using extruded aluminium.
Colour and Finish	<ul style="list-style-type: none">Aluminium Frame Finish: Powder coat or PVDF finish.Aluminium Frame Colour: Interpon D2525 <i>Flat Matt Medium Bronze</i> [PC08]Glass: <i>Neutral silver grey</i>Spandrel Glass: Allow for a number of various frit colours [PC11]; and to match [PC-08]Vertical Fins Finish: Powder coat or PVDF finish.Vertical Fins Colour: Allow for a number of various colours [PC10]

Construction Type	Description
Type FT-05	<ul style="list-style-type: none">Glazed fully unitised curtain wall with double glazed vision panels with extruded aluminium framing.
Colour and Finish	<ul style="list-style-type: none">Aluminium Frame Finish: Powder coat or PVDF finish.Aluminium Frame Colour: Interpon D2525 <i>Flat Matt Medium Bronze</i> [PC08]Glass: <i>Neutral silver grey</i>
Type FT-06	<ul style="list-style-type: none">Flush glazed façade fixed to secondary steel framing with structural silicone to aluminium beads mechanically fixed to steel.
Colour and Finish	<ul style="list-style-type: none">Steel to painted to Interpon D2525 <i>Flat Matt Medium Bronze</i> [PC08]Glass: <i>Neutral silver grey</i>
Type FT-07 <i>[Previously FT-05]</i>	<ul style="list-style-type: none">Panelised two stage louvres fixed to aluminium framing.Proprietary horizontal extruded louvre blades.
Colour and Finish	<ul style="list-style-type: none">Aluminium frame finish: Powder coat or PVDF finish.Colour: Interpon D2525 <i>Flat Matt Medium Bronze</i> [PC08]
Type FT-08	<ul style="list-style-type: none">Unitised curtain wall with operable glass louvres.Fixed glass with integrated s/s balustrade.
Colour and Finish	<ul style="list-style-type: none">Steel to painted to Interpon D2525 <i>Flat Matt Medium Bronze</i> [PC08]Glass: <i>Neutral silver grey</i>
Type FT-09	<ul style="list-style-type: none">Glazed Brick Construction
Colour and Finish	<ul style="list-style-type: none">Finish: GlazedColour: White
Type FT-10 <i>[Previously FT-08]</i>	<p>Bridge Link:</p> <ul style="list-style-type: none">Unitised curtain wall with extruded aluminium framing inclusive of custom perforated aluminium rainscreen cladding to solid zones and double glazed punch windows.Glazed Openings: hinge open to internal; custom perforated aluminium screen forward of external face of openings.Curtain wall framing fixed to secondary steel structure of bridge with aluminium brackets.
Colour and Finish	<ul style="list-style-type: none">Aluminium Frame and Panel Finish: Powder coat or PVDF finish.Aluminium Frame and Panel Colour: Interpon <i>Spanish Silver Matt</i> [PC06]Glass: <i>Neutral silver grey</i>
Type FT-11 <i>[Previously FT-08]</i>	<p>Bridge Link:</p> <ul style="list-style-type: none">Glazed fully unitised curtain wall with double glazed vision panels and single glazed spandrel panels with custom frit pattern, with extruded aluminium framing.Curtain wall framing fixed to secondary steel structure of bridge with aluminium brackets.
Colour and Finish	<ul style="list-style-type: none">Aluminium Frame and Panel Finish: Powder coat or PVDF finish.Aluminium Frame and Panel Colour: Interpon <i>Spanish Silver Matt</i> [PC06]Glass: <i>Neutral silver grey</i>

Elements	Description
BSBS-201	<ul style="list-style-type: none">Glazed Balustrade fixed to s/s supports
BSBS-103	<ul style="list-style-type: none">Propertary ss wire balustrade; fixed vertically from slab to slab
BSBS-104	<ul style="list-style-type: none">Propretary rectilinear aluminium vertical batten system to balustrades with s/s handrailTimberlook finish
CLSL-101	<ul style="list-style-type: none">Propretary aluminium click on cladding system to soffitsTimberlook finish
CLSL-102	<ul style="list-style-type: none">Custom perforated aluminium panels to bridge soffits to match FT-10
CDMT-101	<ul style="list-style-type: none">Propretary rectilinear aluminium vertical batten system fixed to substrateTimberlook finish
CDCE-101	<ul style="list-style-type: none">Compressed fibre cement sheet cladding to column surroundsPaint Finish
COIS-101/ RNRN-103	<ul style="list-style-type: none">Exposed Concrete elements with render and elastometric acrylic finish.

COLOUR PALETTE

PC06	<ul style="list-style-type: none">Aluminium Frame and Panel Colour (Bridge Links): Interpon D2525 <i>Spanish Silver Matt</i>
PC07	<ul style="list-style-type: none">Metal Cladding Panel Colour (FT-01A/ 01B/ 02): Interpon D2525 <i>Sable Piles Creek</i>
PC08	<ul style="list-style-type: none">Aluminium Frame Colour and Horizontal Louvres (FT-07): Interpon D2525 <i>Flat Matt Medium Bronze</i>
PC10	<ul style="list-style-type: none">Horizontal Louvres and Vertical Fins: various colours
PC11	<ul style="list-style-type: none">Spandrel Glazing (Frit) Colour: various colours

6.5 Amendments to Section 5.5 Rooftop design, Services Strategy, Bridge Links, Canopies and Soffit Treatments

Rooftop Design

The upper most roof level slab will be a flat slab with ballast. The roof level will accommodate plant. Scattered throughout the lower levels are a series of terraces, that serve as active and respite areas to clinical spaces as required. Planting to these spaces will be contained and occur above slab level. Level 4 (northwest and southwest) and Level 6 (south) have accessible landscaped rooftop terraces. Provision has been that the latter can be expanded in the future. All external roof areas have the provision to be able to be landscaped in the future.

Plant Strategy

The main central plant is located on Levels 2 and 9 (Roof). Level 9 plant will have a continuous louvred facade. The plant louvres along all other facades will be faced with custom perforated aluminium panels folded and coloured to integrate seamlessly with the overall facade treatment.

Ground Plane Interface Elements – Bridge Links, Canopies and Soffit Treatments

The IASB and existing SCH bridge links are a simple form with a shared facade and soffit strategy of incorporating public art (common to both). The IASB bridge link which has a higher level of privacy requirements has a custom perforated panelled facade and the existing

The HTH bridge link facade retains a more neutral architectural expression that differs from both the HTH and SCH1/CCCC facade developments – creating its own identity. The canopies at High Street (Level 2) and Emergency (Level B1) both share a similar structural expression and material treatment. All soffits (inclusive of the roof plant area and canopies) will have a common language, of aluminium profiled panels with a timber look finish. This will add a softness to the underside of the building forms. Soffits at ground level and upper levels to external terraces taper to meet the facade edge, to increase the perceived height and openness of these areas.



Figure 35 ED Canopy

Link Bridge to existing SCH and IASB

- Design Principles
- Holistic approach
- Landscape approach -extension/connection with ground plane
- Artwork strategy (Opportunities for connection to country and expression of aboriginal cultural heritage)
- Materiality & Colour
- Façade and Soffit Strategy
- Connection to building independent strategy



Figure 36 North View of link bridge to existing SCH
NOTE : Artwork shown is indicative only and subject to change.



Figure 37 West View of link bridge to IASB
NOTE : Bridge is designed to structurally support a potential future additional level.
NOTE : Artwork shown is indicative only and subject to change.

6.6 Amendments to Section 5.6 Photomontages- Visual Impact Assessment



Figure 38 View 01 - Existing



Figure 39 View 01 - Proposed



Figure 40 View 02 - Existing



Figure 41 View 02 - Proposed



Figure 42 View 03 - Existing



Figure 43 View 03 - Proposed

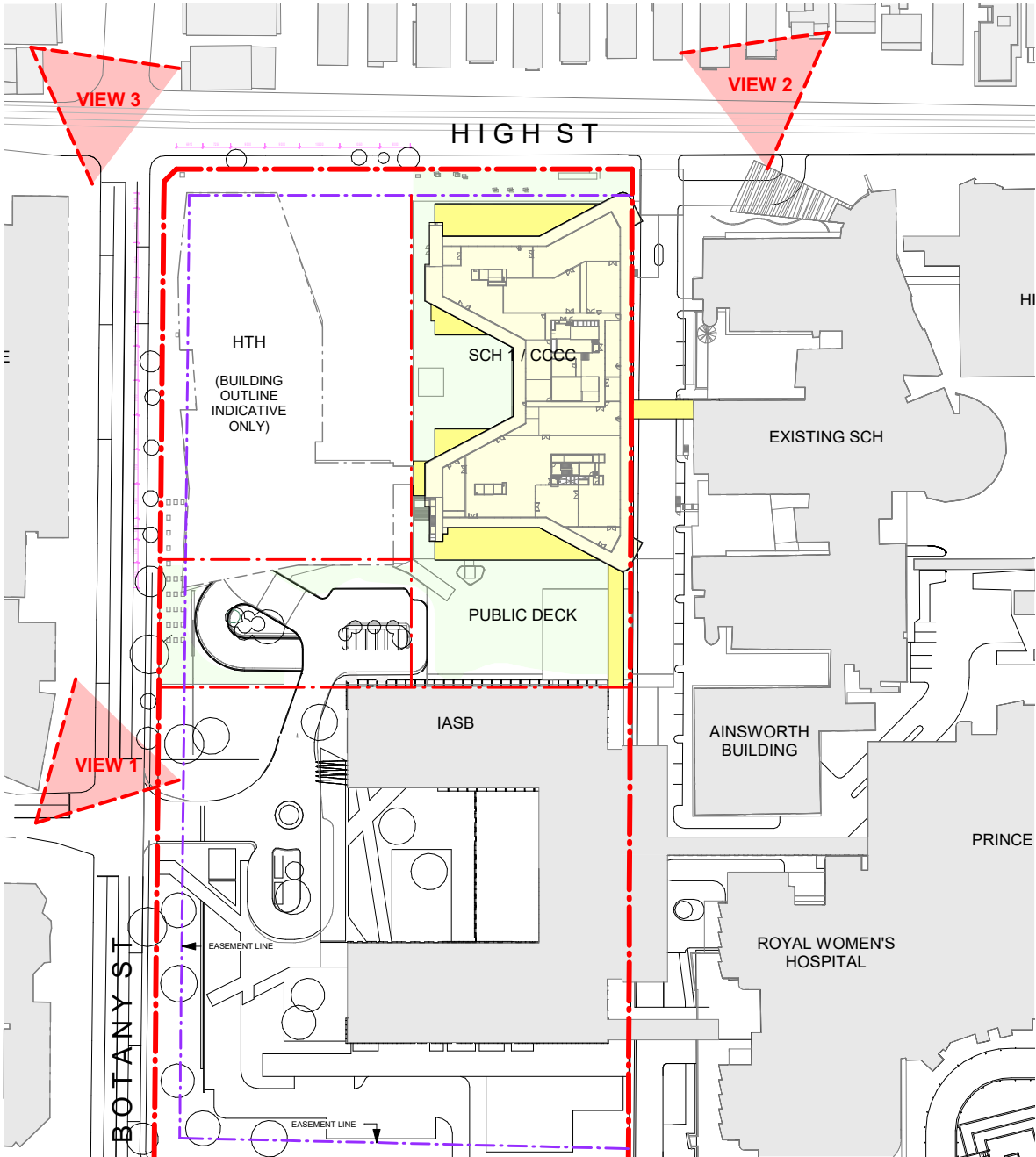


Figure 44 View 01 - Keyplan

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7.0

Response to comments from the GANSW, SDRP Session 5 – update to Section 10.0

The following table provides responses to the SDRP Session 5 commentary. This is to be read in conjunction with supporting material provided after the table.

Session 5 Fifth Review – HI SDRP #05 - 02.06.21		
	GANSW COMMENT	RESPONSE / REFERENCE SECTION
1	ARCHITECTURE	
1.1	The ambition to create a façade that references light and shadow on sand dunes and sea cliffs is considered a strong simple idea appropriate to the building form. A reductive approach that returns to this key idea is recommended in the development of the façade design;	<ul style="list-style-type: none"> – The façade has been simplified to reinforce the key design narrative. – Design of panels refined to enhance the play of light and shade.
1.2	The overall architectural expression with multiple colours, façade and blade patterning remains overly complex and unsuccessful. The elements require a hierarchy of language to develop a simple and elegant façade solution.	<ul style="list-style-type: none"> – The façade has been simplified and the colour strategy refined. – Neutral palette with colour applied to areas where the public will be engaging directly with the building. – Coloured sunshades retained to provide relief, breakdown the building scale and to create a playful pediatrics overlay against a neutral palette – The final colours will be developed as part of the aboriginal cultural heritage overlay.
1.3	While the sea cliff and dune precedents are supported, their materiality in reflective machined materials needs development to produce the desired character of eroded and weathered forms;	<ul style="list-style-type: none"> – The base building colour selected to tie in with the neighbouring precinct buildings. – The finish of the material will have a reflective and textured quality to maximise the play of light across the building surface – to allow the building appearance to change throughout the day
1,4	The logic behind colour application needs careful consideration. The desire from stakeholders for a colourful paediatric building should be steered by the design team and could be informed by world class precedents. The interior of the spaces, circulation zones and IPU's may be more appropriate locations for the use of playful colour that would have more impact on the users of the facility. Consideration should be given to the potential for exterior colours to fade over time.	<ul style="list-style-type: none"> – Colour Strategy across the project has been developed as a cohesive response that encompasses both the external and internal environment. – Colour, as well as, all material selections aim to create a warm, inviting and paediatric/ research response from the minute one approaches the building and is carried into all internal spaces. – Colour selection will take into account fading overtime.
1.5	Investigate opportunities for the ground plane, the soffit and/or the 3- storey light slot to incorporate colour, possibly through the use of public art, to activate this space and create a welcoming entry for children and their families.	<ul style="list-style-type: none"> – Public art (interactive and static) will be woven both externally and internally throughout the building, as part of the arts, play and discovery strategy – Key areas that have currently been identified for potential art works that will form part the user ground plan experience are: <ul style="list-style-type: none"> – The Bridge Links (IASB and existing SCH)- façade and soffit treatments – The Internal wall of the 3 storey void to the west – Soffit to High Street Entry
1.6	Sustainability and façade energy engineering input is required to develop the design of the façade, including refinements to the solar blades, and to rationalise façade treatments.	<ul style="list-style-type: none"> – Sunshading design has been modelled by the ESD Consultant as part of the daylight modelling. This has ensured that the sunshades are designed to maximise both thermal comfort and daylight.

	GANSW COMMENT	RESPONSE / REFERENCE SECTION
1.7	The scale of the ‘folded’ façade panels needs to be developed to create the desired ‘ripple effect’ referencing the play of light and shadow. The sun shading blades junction with the folded façade is not resolved. Consider these two elements as a singular system or two clearly distinct components.	<ul style="list-style-type: none"> — Currently undertaking prototyping. — Panel design (shape and configuration) has been refined to maximise the play of light and shade; to breakdown the scale of the built form (east); and to add textural accent to areas where the form changes (upper levels north and south) — The sunshades shape has been refined (as per above) but also to appear to ‘fold out’ of the building panels
1.8	Crimsafe as a screening mechanism to outdoor terraces is not supported. Consider stainless steel rope mesh or other more open screening options as a more child friendly solution;	<ul style="list-style-type: none"> — The façade to the western courtyard has been opened up to maximise the light into the outdoor terraces. — The edge treatment to the outdoor terraces, under consideration, of is a glass balustrade and planter box with vertical stainless steel tension wires . This will allow greening of this façade overtime. It also aims to not be intrusive whilst the plants are being established.
1.9	The foyer renders demonstrate the problems associated with the reduced height in this space and the lack of solar access and amenity. The lightwell shaft at the glazing edge is supported to facilitate ‘openness’ and solar access;	<ul style="list-style-type: none"> — The ground floor has two three storey volumes to minimise the effects of lower ceiling heights. — The ceilings have also been angled (not flat) to further increase the ‘feeling’ of height.
1.10	The glazing to the stair core is currently a singular vertical strip and requires further design development to break up the bulk and flatness of this facade.	<ul style="list-style-type: none"> — Current design remains — Having offset vertical strip windows, would create an undesired over complexity and businesses
1.11	Consider incorporating vertically connected terraces to create opportunities for playful articulated spaces within the footprint of the building;	<ul style="list-style-type: none"> — External terraces have been designed to support and enhance clinical outcomes.
1.12	The doors that lead out to the top of the podium require protection to mitigate both sunshading and wind. Incorporating an overhang at this level will also allow the articulation of the ‘tower’ and ‘podium’ form.	<ul style="list-style-type: none"> — Current design remains — The set back of the building form in this area already provides a high level of articulation of the built form. — The door services an outdoor terrace (south level 6) for the unit on this floor (minimal traffic)
1.13	It is understood that the half/half link bridge between the SCH and the HTH as presented is not its final form and that the construction of the bridge will occur at a single stage. The link bridge as a neutral element that does not reference the architectural expression of either of the towers is supported.	<ul style="list-style-type: none"> — The HTH link bridge final form and staged construction is ongoing (TBC) — The façade treatment of this element will be treated as neutral to both buildings. — The UNSW and Health Infrastructure teams have agreed to develop a cantilevered, neutral and uniform design for the link on both the HTH and SCH1/CCCC sites, thus the links will be read as a singular neutral entity in between the two buildings and distinct from each of the buildings. The teams will continue to develop and document the design of the links in collaboration with each other to ensure a uniform aesthetic is delivered.
2	ABORIGINAL CULTURAL HERITAGE	
2.1	Provide further details of how the connection to Country and expression of Aboriginal Cultural Heritage will be made evident throughout the hospital campus and integrated with the built forms: for example, using place naming, landscape, materials, plant selection, art installations/ murals, wayfinding devices, paving, colour, texture and so on.	<ul style="list-style-type: none"> — Ongoing – with direction to be the outcome of Yerrabingin consultation with community

Appendices

Appendix A. Amendment to Appendix B Artist Impressions

A

Artist's impression

High Street Entry



High Street Central Courtyard Entry



Hospital Road



South Entry



Emergency Entry



High Street Entry



END OF DOCUMENT