Appendix C

Design Response to the Design Review Panel recommendations

Item raised	Design response
Design Review Panel Meeting No. 1 Recommendations	
Lands Building	
• The Panel supports the strategy to make the building as open to the public as possible. It supports the opening up of the ground plane and the connectivity it provides through the site along with the potential at-grade entry on the southwest (currently a services area).	Support noted.
• The Panel supports the public access and general activation of the roof and the strategy of removing the old lifts and placement of new lifts.	Support noted.
• The Panel believes that the option of lift access to the observatory should be to the mezzanine of the dome and that it shouldn't challenge the primacy of the observatory, nor should the connection be visible from the street.	The proposal has been designed to avoid introduction of lift access to the observatory. A spiral staircase will provide access to the observatory which is considered to be more sympathetic to the fabric of the space.
• The Panel recommends detailed study of the thermal and reflectivity impacts of the glass roof, and the investigation of alternative materials to slate for the curved roof. Further it believes testing of the spatial qualities within the shallow curved roof is required.	Further solar analysis and design workshops were undertaken of the potential overheating of the NW glazed diagrid roof. The intention of the proposed design is to integrate a series of accoya treated timber louvres within the cavity of the double glazed units to mitigate excessive solar gain. The density of the louvres will increase where required to effectively block out direct sun whilst maintaining key views back to the harbour. The choice of louvres within the cavity facilitates maintenance and ease of glass cleaning. The solid roof in the south will be clad in matt, bead blasted stainless steel panels with a less than 20% specular reflectance in line with CofS requirements. The curvature of the roof has been increased in order to maximise the useable floor space without impacting on townscape views. A Solar Reflectivity Assessment was prepared by CPP Wind Engineering and Air Quality Consultants (Appendix W of the SSD DA). The report recommends that a exterior specular reflectance of less than 20% is adopted for the roof. The contractor will be critical in the selection of the final façade material following significant testing of materials before the final material is selected. The materials for the construction of the development will be finalised prior to submitting the application for Construction Certificate CC4 - façade. It is respectfully requested that a condition be

Item raised	Design response
	included within the Stage 2 development consent to this effect. Wood and Grieve have prepared a Section J Report (Appendix Y of the SSD DA) which assesses the proposal against the relevant provisions of Section J (Energy Efficiency) of the BCA. The Report confirms that if minimum glazing thermal properties for the Lands and Education Building are met, the estimated energy consumption for the proposal is in accordance with Section J of the BCA.
Education Building	
• The Panel requested further development of the new roof addition testing its setbacks from the parapet to lessen as far as possible its visual and shadow impact especially from Farrer Place. It should be clearly new but a more recessive and a secondary element to the original building.	The design was further developed and the outcome was a massing that is less extensive than the approved Stage 1 envelope which provides a highly articulated and contemporary, but subservient structure that utilises finer grained and lightweight materials to contrast with the sandstone base of the original Building. Shadow studies illustrate the proposed shadows cast by the Education Building indicate the proposed roof structure improves on the level of impact that was generated by the Stage 1 envelope and will not give rise to any additional overshadowing impacts to Farrer Place. While the extension is visible from the south the project designers sought to break down and articulate the envelope to present a series of distinct volumes with setbacks that soften the structure's relationship with the existing building. Visually, the volume proposed is less prominent than the approved Stage 1 envelope.
• It should none-the–less read as a strong element and the materials (such as stainless steel) should express the clear crisp lines as indicated in the current modelling.	The design approach was to draw on the existing language of regular repetitive rhythms, strong horizontals and anchoring corners to provide a new extension that is clearly contemporary and uses lighter materials to contrast with the robust sandstone form of the original building.
Design Review Panel Meeting No. 2 Recommendations	
Education Building	
• The Panel accepts the opportunity to lower some of the exterior window openings to allow people to exit onto and use the existing areas behind the upper level balustrades.	Support noted.
• The Panel supports the location of the ballroom.	Support noted.
• The Panel supports the proposed corner bar and the opportunity to activate the street.	Support noted.
• The Panel accepts the subterranean link, and supports taking a conservative approach and only excavating the smallest area possible.	Support noted.
• The Panel questioned the size of the central courtyard and scale of the planting and would like to see further detail of the location and design of the proposed planters. It expressed concern that the space could become too cluttered or over planted.	The ground floor centre court design evolved to provide a simplified layout that includes two key elements; • a lush and dense planted area with sculpture at the southern end of the courtyard that anchors the view from Farrer Place; and • planting of *Livistona australis* of various heights within the centre garden court that is top lit from above the six floor high light well. The planted area will be a discrete area that allows for a functional use of the remainder of the courtyard. The *Livistona australis* plantings will respond to the height of the courtyard and reflect the native palms that surround

Item raised	Design response
	this part of the CBD. At ground plane they will read as narrow vertical elements that will draw the eye up and allowing the guest to appreciate the building and space, increasing the sense of space and place. The upper level conservatory spaces will generally feature smaller variety planting that will positively address privacy concerns and give the rooms that face them their own special character. As these spaces are separated from the courtyard by glazing it is considered the various planting spaces will compliment and not compete with each other visually alleviating concerns about clutter or overplanting.
• The Panel supports the winter garden elements within the rooms and the opportunity they offer to mediate between room sizes and the fabric of the external walls.	Support noted.
• The Panel accepts the idea of placing the pool within the existing Gallery area, subject to the satisfactory resolution of engineering issues and equitable use of the space i.e. the ability for people to appreciate this important space without necessarily needing to use the pool facilities.	Support noted. Further engineering investigations will be undertaken to support the proposal. The space will allow for equitable DDA access.
Lands Building	
• No comments	N/A

Design Review Panel Meeting No. 3 Recommendations

Education Building	
• The Panel supports limiting new signage and keeping the original signs as part of the heritage interpretation.	Support noted.
• The Panel accepts the idea of a signage pylon outside the main entrance into the building from Farrer Place, subject to limited height. It supports the approach that it is designed as an elegant contemporary form.	Support noted.
• The Panel suggests that the best position for sesame stairs would be in the middle of the outside stair facing Farrer Place, but to one side for the internal stairs. The use of sesame stairs was generally supported.	Sesame stairs have been positioned in the middle of the outside stair facing Farrer Place, while being on one side for the internal stairs.
• The Panel supports the palms within the central courtyard, subject to detail design and integration with the skylights to the Ballroom.	Support noted.
• The Panel suggested that the glazed roof over the internal courtyard might be best supported by a tension structure rather than framed from the upper levels to lessen the structural intrusion.	Agreed. The proponent will investigate a tension structure.
• The Panel expressed concern about the glazed bays in the roof extension in terms of environmental control and the visual impact of blinds, and awaits further resolution.	These rooms will feature two internal blinds on integrated guide rails. The inner blind will be black out and have a consistent solar-reflective coating – this blackout blind will be linked to the room access and building environmental control system. When a guest has the left the room and the façade is receiving direct solar gain the blind will close in order to control heat transmission. A cavity is effectively formed between the inset blackout blind and the projecting glass bay – this cavity will have a mechanical extraction system to remove hot air from the

Item raised	Design response
	top and supply cool air from below. The outer blind will be an enhanced sheer to add to the environmental performance but mostly being used for privacy.
• The Panel supports the approach to external lighting as presented and agrees with the strategy to change the light temperature from warm for the sandstone building to cooler for the new elements. The panel noted there needed to be careful integration of the interface between the external and internal lighting design.	Support noted.
Lands Building	
• The Panel noted that the position of the two lifts in front of the Bridge Street entrance is under review.	The intrusive non-heritage lifts at the Bridge Street entrance will be removed and two new lifts installed adjacent to the Gresham Street entrance and stairs.
• The Panel expressed concern in relation to the location of bathrooms on the outside walls, but understands the design and final locations is under review.	During design development the majority of the bathrooms were relocated closer to the corridor in order to achieve workable hydraulic runs and limit interventions to the heritage fabric.
• The Panel supports the design for the glazed roof structure in principle and believes it is worth investigating the use of other materials such as timber for the structure.	Alternative materials for the primary structure were further investigated but none were able to achieve the slenderness of the double metal plate proposal. Key to the aesthetic of the new diagrid roof is to achieve a visual lightness which will offset against the heavy mass of the sandstone façade.
• The Panel does not support the use of slate on the curved roof elements but believes that the diagrid structure and louvres being developed could be applied and its geometry would suit a panelised cladding system in metal.	The solid roof in the south will be clad in matt, bead blasted stainless steel panels with a less than 20% specular reflectance in line with CofS requirements. The cladding system would entail a series of curved stainless steel panels with a chosen alloy to withstand Sydney's environmental conditions, particularly with respect to humidity and atmospheric salt levels.