

URBIS

SCIENTIA PROJECT - MONTE SANT ANGELO MERCY COLLEGE (SSD- 10393)

**RESPONSE TO
SUBMISSIONS**

Prepared for

MONTE SANT ANGELO MERCY COLLEGE

18 August 2020

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CONTENTS

1.	Introduction	1
2.	Response To Submission Matrix.....	3
3.	Build Form and Context	18
3.1.	Consultation with North Sydney Council	18
3.2.	Design Evolution	18
3.3.	Bulk and Scale	22
3.3.1.	Height Reduction	22
3.3.2.	Façade Refinement and Articulation	28
3.4.	Miller Street Setback.....	31
3.5.	Retention of the Boundary Wall on Miller Street.....	34
3.6.	Crime Prevention Through Environmental Design Principles	37
3.7.	Passive Solar Design Strategies	39
3.7.1.	Daylight.....	39
3.7.2.	Ventilation	39
3.8.	ESD Measures	40
4.	Landscape.....	41
4.1.	Miller Street Setback.....	41
4.2.	Compensatory Planting	42
4.3.	Tree Protection Zone	44
5.	Heritage	46
5.1.	Miller Street Wall.....	46
5.2.	Heritage Curtilage and Setting.....	46
5.3.	Improved Streetscape and View Corridor	47
6.	Community use	50
6.1.	Traffic and Parking Impact.....	50
6.2.	Noise Impact	50
7.	Traffic assessment.....	51
7.1.	Consultation with TfNSW	51
7.2.	Vehicle Queue Lengths	51
7.3.	Green Travel Plan.....	51
8.	Construction management and assessment	52
8.1.	Impact on Existing On-Site Staff Parking Spaces during Construction	52
8.2.	Impact on Available On-Site Recreational and Open Space Areas during Construction	53
8.3.	Cumulative Assessment of Construction Impacts	54
8.3.1.	Traffic.....	54
8.3.1.1.	Cumulative traffic impact from Victoria Cross South and North Sites	55
8.3.1.2.	Victoria Cross South Over Station Development	56
8.3.2.	Noise	56
8.3.3.	Construction Hour.....	57
9.	Sydney Metro infrastructure assessment	58
9.1.	Updated Survey	58
9.2.	Engineering Assessment	58
9.2.1.	Numerical Modelling on Sydney Metro City and South West Tunnel Infrastructure	58
9.2.2.	Electrolysis Assessment.....	58
9.3.	Clarifications with regards to Noise Assessment Report prepared by Wilkinson Murry	59
9.4.	Consultation with Sydney Metro	59
9.5.	Proposed Condition	60

10.	Response To Sydney Water Requirement.....	61
11.	Response to Proposed Conditions of Consent	63
12.	Conclusion	72
	Disclaimer.....	73

Appendix A	Updated Architectural Plans
Appendix B	Urban Design Response to Submission Report
Appendix C	Updated Landscape Plans
Appendix D	Landscape Response to Submission Report
Appendix E	Heritage Response to Submission Statement
Appendix F	Acoustic Response to Submission Statement
Appendix G	Updated Construction Traffic Management Plan
Appendix H	Traffic Response to Submission Statement
Appendix I	Monte Facility Usage Profile
Appendix J	Monte Sport Facilities Management 2021-2023
Appendix K	Updated Lighting Strategy
Appendix L	Updated Survey
Appendix M	Metro Infrastructure Numerical Modelling
Appendix N	Electrolysis and Stray Traction Current Report
Appendix O	North Sydney Council Post Exhibition Consultation Letter

FIGURES

Figure 1	Site Constraint Diagram	19
Figure 2	Heritage buildings location map	20
Figure 3	Design Development	22
Figure 4	Elevation Comparison	24
Figure 5	Area of height non-compliance – revised scheme	24
Figure 6	Revised Shadow Diagram before 3pm	26
Figure 7	Revised Shadow Diagram after 3pm	26
Figure 8	Façade Refinement.....	29
Figure 9	Elevation Comparison	30
Figure 10	Miller Street Montage Comparison.....	31
Figure 11	Street Frontage Setback Context.....	32
Figure 12	Key Impact of Setback Increase	34
Figure 13	Street Wall Treatment Comparison.....	36
Figure 14	Proposed Street Wall Treatment.....	37
Figure 15	Street Interface Treatment	39
Figure 16	Revised Landscape Treatment along Miller Street	41
Figure 17	Revised Miller Street Montage	42
Figure 18	Updated Landscape Plan	43
Figure 19	Landscape Connection to the Chapel and Masalou Building	44
Figure 20	Building Alignment Diagram – to heritage buildings.....	47
Figure 21	View comparison at Circular Drive Entry.....	48
Figure 22	View comparison from the corner of Miller Street and Berry Street.....	49
Figure 23	Temporary construction on site car parking plan – indicative locations.....	53
Figure 24	Location plan of nearby construction activity	54
Figure 25	Scientia and Victoria Cross North & South Sites – Haulage Routes	55
Figure 26	Construction Traffic Movements – Victoria Cross South OSD and Monte Scientia Project	56

TABLES

Table 1 Maximum Height Comparison 23

Table 2 Response to Sydney Water submission..... 61

Table 3 Recommended Conditions of Consent - Agencies..... 63

1. INTRODUCTION

This Response to Submissions Report (**RtS**) has been prepared in response to the community and agency submissions received during the public exhibition of the Environmental Impact Statement (EIS) for the new Sports and Science Building (the **Proposal**) at Monte Sant Angelo Mercy College, North Sydney (**Monte**).

The exhibition of the Proposal ended on 20 May 2020. Eight agency submissions and two community submissions from surrounding landowners were received. The items raised in the community submissions have been addressed through the provision of further information contained in this response report, which mostly relates to construction impact (addressed in **Section 8** of this RtS).

The Department of Planning, Industry and Environment (**DPIE**) as the consent authority has identified the following key issues to be addressed in this RtS:

- Built form and Landscaping;
- Construction management and assessment; and
- Community use.

The key issues raised in the eight agency submissions are summarised below:

- **North Sydney Council** commented on a number of issues including building height, character, setting and setback, Miller Street wall, heritage concerns, landscape and traffic and parking and other minor clarification issues. North Sydney Council also recommended a number of conditions of consent;
- **Transport for New South Wales (TfNSW)** recommended conditions of consent and requested for additional information on the following:
 - Vehicle Queue Lengths
 - Construction Pedestrian and Traffic Management
 - Green Travel Plan
- **Sydney Metro** requested for further consultation and additional information to determine if there are any impacts on the Sydney Metro City and Southwest rail corridor;
- The **Environment, Energy and Science Group** has no comments on the proposal with respect to aboriginal cultural heritage assessment, biodiversity and floodplain risk management;
- **Sydney Water** provided comments on post approval Section 73 Application for water servicing;
- **Environmental Planning Authority (EPA)** confirmed that the proposal does not require an Environment Protection Licence and the EPA has no further interest in the proposal and no further consultation is required;
- **Heritage Council** has no further heritage comments; and
- **Ausgrid** has no further comments.

All agency responses received to date, with the exception of North Sydney Council were supportive of the development on the basis of further information being provided or through the inclusion of recommended conditions of consent.

Monte and the project team presented the preliminary RtS design package to North Sydney Council on the 17 July 2020. The design response was well received by Council and Council has indicated that the revised scheme has largely addressed Council's concern and verbally confirmed that it was not their intention to object to the proposal.

Council confirmed the above in a letter dated 30 July 2020 and requested the RtS package to provide additional information on the remaining three issues (attached at **Appendix O**). The feedback received at the meeting and issues raised in the feedback letter have been addressed throughout this RtS and the accompanying documentations.

This RtS provides a comprehensive response to the key issues raised in the submissions. The RtS has been grouped into the following key themes which are discussed in the following sections of this report:

- Build form and context;
- Landscape;
- Heritage;
- Community use;
- Traffic assessment;
- Construction management and assessment;
- Sydney Metro infrastructure assessment;
- Response to Sydney Water requirement and
- Response to Proposed Conditions of Consent.

A summary of the Response to Submission Matrix is provided in **Section 2**.

The following reports have been updated to respond to the submissions and to accompany this RtS:

- Updated Architectural Plans - **Appendix A**
- Urban Design Response to Submission Report - **Appendix B**
- Updated Landscape Plans - **Appendix C**
- Landscape Response to Submission Report - **Appendix D**
- Heritage Response to Submission Statement - **Appendix E**
- Acoustic Response to Submission Statement - **Appendix F**
- Updated Construction Traffic Management Plan (CTMP) - **Appendix G**
- Traffic Response to Submission Statement - **Appendix H**
- Monte Facility Usage Profile - **Appendix I**
- Monte Sport Facilities Management 2021-2023 - **Appendix J**
- Updated Lighting Strategy - **Appendix K**
- Updated Survey - **Appendix L**
- Metro Infrastructure Numerical Modelling - **Appendix M**
- Electrolysis and Stray Traction Current Report - **Appendix N**

2. RESPONSE TO SUBMISSION MATRIX

Submission	Comments/Report Reference
Public Submissions – key issues	
Cumulative construction traffic and noise impact.	Additional accumulative traffic and noise impact are discussed in Section 8. An updated Construction Traffic Management Plan is attached at Appendix G. Cumulative construction noise impact has been assessed by Wilkson Murray and included in Appendix F.
Request construction to start at the beginning of next year in order to respect social distancing and nearby residents working from home. Construction hour is restricted to 5pm Monday to Friday and no weekend work.	In relation to community's concern on construction hour and COVID social distancing restriction, the College will comply with conditions placed by DPIE with regards to allowed construction hours, and government regulation on relevant COVID-19 construction and health advice and notes the gradual restoration of working practices. The proposed construction hours are consistent with the recommended standard hours of work by the NSW Interim Construction Noise Guideline. Timely construction of the project will reduce the period of construction, to allow students to benefit from the prompt commencement and efficient completion and delivery of the project.
Department of Planning, Industry and Environment	
<u>Built form and Landscaping</u>	
Provide a response and progress update on the revisions and investigations to improve the bulk and scale of the proposed redevelopment. This response must address the following, in particular:	Bulk and scale is discussed in detail in Section 3.3. Passive Solar Design Strategies is discussed in detail in Section 3.7.

Submission	Comments/Report Reference
- reducing the overall bulk and scale of the building through façade refinement, architectural detail and articulation, and reduction or consolidation of program (where feasible). - including details of passive solar design strategies to ensure access to natural light and ventilation for all internal spaces. - incorporating Crime Prevention Through Environmental Design Principles (where applicable) for the external space between the gymnasium and Miller Street at Level 1 of the proposed building. - investigating the potential for the building to include Environmentally Sustainable Development initiatives that exceed minimum requirements.	Crime Prevention Through Environmental Design Principles is discussed in Section 3.6. Environmentally Sustainable Development initiatives is discussed in Section 3.8.
Provide the following additional details for landscaping within the site: - a review of the setback of the proposed building from the Miller Street frontage (including location of the on-site detention tank within the setback) to explore opportunities for increased peripheral planting along this setback that may screen the building bulk and complement the streetscape. Alternatively, opportunities for planting on Miller street, along the entire building frontage should be explored. - opportunities to compensate for the loss of trees between the heritage listed chapel and the proposed building by proposing canopy trees on the northern side of the proposed development (within the identified curtilage of the chapel). - further justification to confirm that the existing trees on the northern side of the building (subject to 20% encroachment within the tree canopy due to the basement) can be retained and the methods to retain these trees.	The revised scheme has not adopted the additional 1.8m setback (7.8m in total) to Miller Street recommended by North Sydney Council for the reasons discussed in Section 3.4. Whilst the setback of the building is not being increased, the amended design includes a secondary façade setback to the north eastern corner of 2m to minimise visual impact from Miller Street Entrance. It is also important to note that the building is constraint by sports court dimensions, existing trees and the existing College buildings as discussed in Section 3.4. Landscape is discussed in Section 4. Additional trees have been proposed within the street setback and two additional street trees have been proposed along Miller Street (refer to Figure 16): - Three Tristaniopsis Laurina (Water Gum) located within the front setback, which will further partially screen the building from Miller Street. - Two Platanus × acerifolia (London Plane) street trees located between the pedestrian pathway and the brick wall. These street tree will help screen

Submission	Comments/Report Reference
	the new building and continue the existing landscape character along Miller Street (to be coordinated with North Sydney Council and Arborist). Revised Landscape Plans are attached at Appendix C. Tree protection zone is discussed in Section 4.3. As discussed above and confirmed by the Arboricultural Impact Assessment, the following trees are been retained and protected: ▪ High retention value: – Araucaria cunninghamii (Hoop Pine) - Tree 6 – Araucaria heterophylla (Norfolk Island Pine) - Tree 11 – Syzygium sp. (Lilli Pilli) - Tree 10 ▪ Medium retention value: – Lophostemon confertus (Brush Box) - Tree 9 These trees are also indicated on the Landscape Plan (see Appendix C). In accordance with the assessment provided within the Arboricultural Impact Assessment, Trees 6, 9, 10 and 11 are subject to moderate levels of encroachment (10-20%) of the TPZ. Three of the four trees have minor encroachment of less than 10%, tree pruning measures and TPZ has been established to protect these trees. Tree 11 has an enforcement of 20%, however there had been much previous disturbance from earlier works and the soil in this area is predominantly fill. Given the tree roots are less than 10mm, excavation is to be completed without benching or over-excavation i.e. contiguous piling, sheet piling or similar. The specific approach needs to be addressed in the final Construction

Submission	Comments/Report Reference
	Management Plan. This will need to be conducted under the direct supervision of an AQF level 5 consulting Arborist.
Provide details of the retention of the boundary wall on Miller Street (heritage item of local significance).	The design team and Monte have taken into consideration of North Sydney Council's recommendation for the retention of the Miller Street boundary wall, and has amended the proposal accordingly to retain the street wall along Miller Street (see Appendix A and Section 3.5). The revised design retains the existing brick wall that is currently located along the Miller Street frontage, and only demolish a small portion of the wall for the new car park driveway entry. It should be noted that there is no brick wall at the existing car park driveway entrance. Consequently, there is a small portion of new wall required to connect the retained wall with the proposed driveway entry (refer to Figure 14). Given that this portion of the boundary wall cannot and should not be replicated, the new boundary wall element will be complementary to the existing wall, through matching the height, stepped modulation, alignment and general form. This is consistent with the principles of the Burra Charter, and will assist to retain the importance and significance of the original wall fabric. This design approach is further supported by a Heritage RtS report prepared by NBRIS & Partners and attached at Appendix E and discussed in Section 5.
<u>Construction management and assessment</u>	
Provide an assessment of the impact of removing the existing on-site staff parking spaces (65 in total) during the construction period, including: - management strategies to address the loss of on-site car parking during the construction period. - provision of alternate car parking area for staff (within the site or elsewhere) during the construction period.	This is discussed in detail in Section 8.1, in summary: During construction the number of parking spaces across the Monte campus will be temporarily reduced. To manage staff carparking needs during the construction phase it is proposed to extend the use of existing parking onsite (e.g. small car park off Angelo Street acting as the loading bay area) and the introduction of initiatives such as staff carpooling.

Submission	Comments/Report Reference
	During construction and for those staff who drive (67% of staff currently drive to school), the College will manage a parking lottery, where the College will temporarily maximise utilisation of other areas on the campus for onsite staff parking. Approximately 30 spaces will be created for temporary staff parking during construction, and these include parking at 5 McLaren Street, 25 McLaren Street and the loading dock (refer to Figure 23). These areas will be managed operationally by the College in the same manner of the current carpark. In addition, information will be provided to staff regarding the parking stations available in the immediate area as well as utilising “Park and Ride” options in other non-CBD areas. Signage will also be used to indicate car-pooling parking spaces to support those embracing this temporary mode of transport. Street parking in the immediate area is time-limited, and this is not conducive to staff working hours and daily time requirements. Therefore, staff do not currently utilise street parking and the proposal will not impact on street parking during construction. The abovementioned onsite staff parking strategy has also been included in the updated Construction Traffic Management Plan (CTMP) attached at Appendix G.
Provide an assessment of the impact of removing the majority of available on-site recreational and open space during the construction of the proposed redevelopment. This assessment must include management strategies to address the loss of this space during the construction period and provision of alternate open space for students.	This is discussed in detail in Section 8.2, in summary: The Sisters of Mercy North Sydney have temporarily allowed students to use their Congregational Green to supplement required practical spaces. Students using the courts for lunch and break activities will be moved temporarily to other areas within the College grounds during construction, such as the Congregational Green or areas that are currently considered unavailable, such as the front of McLaren Street cottages. The Monte Sport Facility Plan 2020-2023 (attached at Appendix J) prepared by the Head of Sport, shows that the College has a management plan for the

Submission	Comments/Report Reference
	utilisation of a variety of nearby offsite facilities in order to temporarily accommodate the five sports during construction. The variety of locations temporarily utilised during construction will allow the College to support local facilities without overusing any one particular facility.
Provide a cumulative assessment of construction impacts, in particular for noise and traffic impacts on the on-going operation of the school and adjacent businesses and residences, as a result of the proposed redevelopment.	Additional accumulative traffic and noise impact are discussed in Section 8. An updated Construcion Traffic Management Plan is attached at Appendix G. Cumulative construction noise impact has been assessed by Wilkson Murray and included in Appendix F.
Provide documentation compliant with the Sydney Metro Underground Corridor Protection Guideline to demonstrate that there are no adverse impacts on the Sydney Metro infrastructure.	Survey drawings have been updated to show the 1st and 2nd reserves of the Sydney Metro City and Southwest rail corridor and the Monte site in plan and elevation. Please refer to Appendix L. Douglas Partners has undertaken engineering numerical modelling on the underlying Sydney Metro City and South West tunnel infrastructure (attached at Appendix M). Cathodic Protection Services has reviewed the possible exposure to stray traction current and prepared an Electrolysis and Stray Traction Current Report (attached at Appendix N). The report assess stray traction current and the impact of corrosion hazard to the proposed development and recommend remediation measures to reduce impact. The noise assessment indicated that there is potential for excessive vibration levels due to large rock breakers. If large hammers are used for construction, caution and trial testing should be conducted. The requirement for large hammers is to be determined by the Construction Noise and Vibration Management Plan, and the Plan should implement trial vibration monitoring period or exclusion of the use of large rock breakers if deemed unacceptable. Please refer to the Acoustic RtS Statement prepared by Wilkinson Murry and attached at Appendix F.

Submission	Comments/Report Reference
	We would like to propose to include the preparation of Work Method and Safety Statement and Instrumentation and monitoring Plan as part of the Condition of Consent to be satisfied prior to the issue of Construction Certificate. This will allow these plans to be prepared in conjunction with the final Construction Management Plan and to ensure all construction and monitor measures are aligned to ensure the protection of the rial corridor.
<u>Community use</u> Provide an assessment of the likely extent and frequency of out-of-hours community use, including weekend use of the proposed building and the surrounds. Provide an assessment of the likely use of the building by the school community during out-of-school hours or the weekends. The assessment must include details of the likely number of users, frequency of use, noise and traffic impacts with associated management strategies.	Community use and associated noise and traffic impact is addressed in Section 6. Post completion, the College anticipate a return to current College usage levels for both community use and after hour school activities as outlined in the attached Facility Usage Profile (refer to Appendix I). Therefore, there is no increase in frequency and variety of after hour and community use activities other than those currently undertaken by the school and the community. The rooftop court will not be available for external hire. All external hires for community usage will be accommodated in the indoor courts area, thus reducing noise from community usage. It is also anticipated that community experience will be improved given the provision of a new indoor facility and sound levels being contained within the basement. Given the frequency and variety of community and after hour activities remain the same as current usage, no change is expected to traffic generation or noise impact. The current level of traffic generation and noise impact from the existing community use is expected to remain post completion. Community use of school facilities will cease during construction and therefore no demand on on-site parking from community uses will occur during construction.

Submission	Comments/Report Reference
North Sydney Council	
<u>Building Height</u> It is recommended that amendments be sought to ensure that the termination of the building top (including faade screen) should comply with the 16m building height control. The proposed additional court fencing should be appropriately set back and should only be supported, subject to consideration of its impacts.	The revised scheme has responded to the request to reduce the height of various building elements (refer to Figure 4): ▪ The floor-to-floor heights to the above-ground science and innovation levels have been reduced, whilst maintaining adequate ceiling heights to ensure a high level of amenity. This has reduced the rooftop court level by 600mm, resulting in the whole rooftop slab level sitting below the 16m building height limit for the site. ▪ The architectural facade screening has also been reduced by 800mm. ▪ Cumulatively, by decreasing floor-to-floor heights and reducing the architectural facade screening the enclosed building area, excluding rooftop court, stairwells and lift core is compliant with the building height control. As the site steeply slopes to the southeast, the following elements exceed the 16m height control (Figure 5): ▪ Facade screen by a small portion at the south east corner of the building. ▪ Lift and stair access ▪ Rooftop mesh fence Section 3.3.1 provides assessment of the proposed variation to the building height control.
<u>Overshadowing Impacts</u>	Revised shadow diagram has been prepared to demonstrate that the revised scheme, including the rooftop court net will not create net increase in overshadowing to the 'Special Area' between 12 pm and 2 pm from March

Submission	Comments/Report Reference
The eastern side of Miller Street adjacent to the subject site contains a 'Special Area' in accordance with the NSLEP2013. Whilst the submitted shadow diagrams do not detail any overshadowing during 12pm - 2pm, it is unclear whether any additional overshadowing will occur outside these times to the Special Area. It is considered that any overshadowing to this Special Area, resulting from a breach to the building height control, is unacceptable. Plans must ensure there is no overshadowing impacts to the Miller Street special area.	equinox to September equinox (inclusive). Accordingly, the proposal can comply with Clause 6.3 of LEP 2013. In addition to the LEP provision, as requested by Council in the post exhibition meeting, additional shadow impact have been assessed to demonstrate the impact to the 'Special Area' after 3pm. Please note, the assessment has been provided for reference only and it does not change the proposal's compliance with Clause 6.3 of LEP 2013. As indicated in Figure 7 and Section 3.3.1, the proposed building will not overshadow the 'Special Area' at 3pm in March and September Equinoxes. However, it will create additional overshadow to the 'Special Area' at 3pm in winter solstice in comparison to the existing shadow from the street trees. Furthermore, it is important to note that a compliant building envelope (16m) would also overshadow the 'Special Area' at 3pm in winter. Accordingly, the impact is deemed acceptable and it is outside the compliance requirement of Clause 6.3 of LEP 2013. Detailed shadow diagrams are contained within Appendix B.
<u>Building setbacks</u> It is recommended that amendments be sought to ensure that the building setback to Miller Street be consistent with the existing setback of the McQuoin Centre, located to the building's south. A deep soil planted buffer zone of trees is provided behind the Miller Street heritage wall. <u>Demolition of Miller Street heritage wall</u> It is noted on the site's Statement of Significance as being an item of heritage significance. Demolition of the wall is therefore, not supported.	The revised scheme has not adopted the additional 1.8m setback (7.8m in total) to Miller Street recommended by North Sydney Council for the reasons discussed in Section 3.4. Whilst the setback of the building is not being increased, the amended design includes a secondary façade setback to the north eastern corner of 2m to minimise visual impact from Miller Street Entrance. It is also important to note that the building is constraint by sports court dimensions, existing trees and the existing College buildings as discussed in Section 3.4. The design team and Monte have taken into consideration of North Sydney Council's recommendation for the retention of the Miller Street boundary wall, and has amended the proposal accordingly to retain the street wall along Miller Street (see Appendix A and Section 3.5).

Submission	Comments/Report Reference
It is recommended that amendments be sought to retain the existing heritage brick wall.	The revised design retains the existing brick wall that is currently located along the Miller Street frontage, and only demolish a small portion of the wall for the new car park driveway entry. It should be noted that there is no brick wall at the existing car park driveway entrance. Consequently, there is a small portion of new wall required to connect the retained wall with the proposed driveway entry (refer to Figure 14). Given that this portion of the boundary wall cannot and should not be replicated, the new boundary wall element will be complementary to the existing wall, through matching the height, stepped modulation, alignment and general form. This is consistent with the principles of the Burra Charter, and will assist to retain the importance and significance of the original wall fabric. This design approach is further supported by a Heritage RtS report prepared by NBRS & Partners and attached at Appendix E and discussed in Section 5.
<u>Landscaping within building setback</u> It is recommended that the amendments be sought to provide additional landscaping, including canopy trees, within the setback between the proposed new building and the Miller Street heritage boundary wall.	Landscape is discussed in Section 4. Additional trees have been proposed within the street setback and two additional street trees have been proposed along Miller Street (refer to Figure 16): ▪ Three Tristaniopsis Laurina (Water Gum) located within the front setback, which will further partially screen the building from Miller Street. ▪ Two Platanus × acerifolia (London Plane) street trees located between the pedestrian pathway and the brick wall. These street tree will help screen the new building and continue the existing landscape character along Miller Street (to be coordinated with North Sydney Council and Arborist). Revised Landscape Plans are attached at Appendix C. Accordingly, consistent with North Sydney Council recommendation, the revised landscape treatment along the front setback is able to screen the building and the additional street trees can further complement the Miller

Submission	Comments/Report Reference
Design Excellence Panel comments	Street streetscape. Therefore, providing a further building setback is not required to achieve these landscape objective. Section 3 and 4 addresses the build form comments from Council Design Excellence Panel, which is supported by the Urban Design RTS report attached at Appendix B and the updated architectural drawings attached at Appendix A, prepared by Hayball Architecture.
<u>Traffic and parking</u> It is recommended that the proponent be required to prepare a Construction Management Plan for approval by the North Sydney Traffic Committee, prior to the issue of the Construction Certificate. Any use of Council property shall require appropriate separate permits/approvals. Further, all aspects of the carpark must ensure compliance with Australian Standards AS2890.1 Off-street parking.	A draft CPTMP has been prepared by Cornerstone and is attached at Appendix G. This draft CPTMP will be finalised post approval and prior to the issue of construction certificate and to be submitted to North Sydney Council Traffic Committee for approval. Noted. The internal configuration of the car park has been designed in accordance with AS289 and relevant condition of consent for car parking confirmation.
Council recommended condition	Council proposed condition of consent are been responded to and addressed in Section 11 .
Council Heritage officer detailed comments	Heritage issues raised by Council heritage officer is addressed in Section 5 and the Heritage Statement attached at Appendix E .
Transport for NSW (TfNSW)	
<u>Consultation</u> It is suggested that the proponent engages with the Transport cluster agencies regarding the matters raised prior to finalising the Response to Submissions.	TRAFFIX has consulted with Laura van Putten from TfNSW on 2 July 2020 to discuss the matters raised in the TfNSW submission letter prior to finalising the Traffic and Parking RTS report (attached at Appendix H). A follow up email was also sent on the 10 July 2020 to inform TfNSW on report progress, no further feedback was received. Consultation is detailed in Section 7.1.
<u>Western Harbour Tunnel and Beaches Link motorway</u>	Noted.

Submission	Comments/Report Reference
Conversely the proposed development is not likely to impact Western Harbour Tunnel and Beaches Link motorway projects. The applicant should be advised of the above and made necessary consideration on the planning of its construction activities in this regards.	
<u>Sydney Metro City and Southwest</u> The applicant and the proposal should consider construction activities of the Chatswood to Sydenham section of the Sydney Metro City and Southwest corridor.	Cumulative construction traffic impact has been assessed by Cornerstone and included in Appendix 4 of the Construction Traffic Management Plan (attached at Appendix G). Concurrent construction works from nearby sites includes the following: ▪ The Sydney Metro City and Southwest projects, which occupies two nearby sites. Victoria Cross Station South is located on the south east corner of Berry Street and Miller Street. Victoria Cross Station North is located at the corner of McLaren Street and Miller Street. ▪ The Victoria Cross South Over Station Development (VCOSD). Cumulative construction traffic impact is discussed in Section 8.3.1.
<u>Vehicle Queue Lengths</u> The applicant should identify the queue lengths of the existing and proposed car park accesses and their impact to the Miller Street/Berry Street intersection.	Traffix has prepared a Traffic and Parking RTS report (attached at Appendix H) which includes SIDRA modelling to assess the queue lengths on Miller Street. Vehicle Queue Lengths Is further discussed in Section 7.2.
<u>Construction Pedestrian and Traffic Management</u> The applicant shall be conditioned to prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with the Sydney Coordination Office within TfNSW and submit a copy of the final CPTMP plan to the Coordinator General, Transport Coordination for endorsement, prior to the issue of any construction certificate or any preparatory, demolition or excavation works, whichever is the earlier.	A draft CPTMP has been prepared by Cornerstone and is attached at Appendix G. This draft CPTMP will be finalised post approval and prior to the issue of construction certificate and to be submitted to North Sydney Council Traffic Committee (which comprise TfNSW and NSW Police) for approval.

Submission	Comments/Report Reference
Green Travel Plan	A Preliminary Green Travel Plan was submitted with the EIS (Appendix N). A revised Green Travel Plan will be prepared and adopting the requirements outlined in TfNSW's letter dated 18 May 2020. The requirement for the revised Green Travel Plan will form part of the Condition of Consent to be satisfied post approval.
Suggested Conditions of Consent	TfNSW proposed condition of consent are been responded to and addressed in Section 11 .
Sydney Metro	
The Applicant must prepare and provide documents compliant with the <i>Sydney Metro Underground Corridor Protection Guideline</i> to demonstrate that there are no adverse impacts on the Sydney Metro infrastructure including, but not limited to: a) Survey drawings b) The engineering assessment is to demonstrate there are no adverse impacts on Sydney Metro infrastructure; c) Provide a Work method and safety statement; d) Provide an Electrolysis assessment; e) Provide an Instrumentation and monitoring plan; and f) Clarifications on the followings with regards to Noise Assessment Report by Wilkinson Murry.	Response to Sydney Metro is detailed in Section 9. Survey drawings have been updated to show the 1st and 2nd reserves of the Sydney Metro City and Southwest rail corridor and the Monte site in plan and elevation. Please refer to Appendix L. Douglas Partners has undertaken engineering numerical modelling on the underlying Sydney Metro City and South West tunnel infrastructure (attached at Appendix M). Cathodic Protection Services has reviewed the possible exposure to stray traction current and prepared an Electrolysis and Stray Traction Current Report (attached at Appendix N). The report assess stray traction current and the impact of corrosion hazard to the proposed development and recommend remediation measures to reduce impact. The noise assessment indicated that there is potential for excessive vibration levels due to large rock breakers. If large hammers are used for construction, caution and trial testing should be conducted. The requirement for large hammers is to be determined by the Construction Noise and Vibration Management Plan, and the Plan should implement trial vibration monitoring period or exclusion of the use of large rock breakers if deemed unacceptable.

Submission	Comments/Report Reference
	Please refer to the Acoustic RtS Statement prepared by Wilkinson Murry and attached at Appendix F. We would like to propose to include the preparation of Work Method and Safety Statement and Instrumentation and monitoring Plan as part of the Condition of Consent to be satisfied prior to the issue of Construction Certificate. This will allow these plans to be prepared in conjunction with the final Construction Management Plan and to ensure all construction and monitor measures are aligned to ensure the protection of the rial corridor.
Sydney Metro recommends that the Applicant consult with Sydney Metro before submitting the Additional Information to DPIE.	Consultation with Sydney Metro is documented in Section 9.4. The project team has consulted with Metro three times post exhibition, to discuss the items Metro has raised in the submission letter.
Sydney Water	
Detailed water servicing requirements will be covered at the Section 73 Application phase requirements will be covered at the Section 73 Application phase Wastewater servicing should be available via a 225mm VC wastewater main (laid in 1908) within the property boundary. Amplifications may be required	Section 73 Application for water and wastewater servicing will be lodged with Sydney Water post approval. Response to Sydney Water comments are provided in Section 10.
Environment, Energy and Science Group (EES)	
<u>Aboriginal Cultural Heritage Assessment Report</u> EES notes that an ACHAR has been submitted and prepared by biosis dated 19 March 2020, and EES recommends that should an approval be granted that any recommendations within the ACHAR form part of conditions of consent. <u>Biodiversity</u>	Noted.

Submission	Comments/Report Reference
A Biodiversity Development Assessment Report waiver was approved 16 March 2020, and an addendum was approved on 26 March 2020. <u>Flooding</u> EES has no further flooding comments.	
EPA The EPA has reviewed the EIS and reminds the applicant to consider the previous comments on the management of seepage waters from basement or underground car parking areas. The EPA has no further interest in the proposal and no further consultation is required.	Noted.
Ausgrid and Heritage NSW – no further comments	

3. BUILD FORM AND CONTEXT

This section addresses the build form issues raised in DPIE's letter and North Sydney Council submission, including comments from Council Design Excellence Panel. The following sections should be read in conjunction with the Urban Design RtS report attached at **Appendix B** and the updated architectural drawings attached at **Appendix A**, prepared by Hayball Architecture.

3.1. CONSULTATION WITH NORTH SYDNEY COUNCIL

Monte and the project team presented the preliminary RtS design package to North Sydney Council on the 17 July 2020. The design response was well received by Council and Council has indicated that the revised scheme has largely addressed Council's concern and verbally confirmed that it was not their intention to object to the proposal.

Council confirmed the above in a letter dated 30 July 2020 and requested the RtS package to provide additional information on the remaining three issues (attached at **Appendix O**) outlined below:

- Overshadow resulting from the proposed development to adjacent 'special area' – refer to **Section 3.3.1**
- Landscape plans which maximise plantings between the building and front wall – refer to **Appendix D** and **Section 4**
- Details of new elements including the signage and illuminate – refer to **Appendix B**

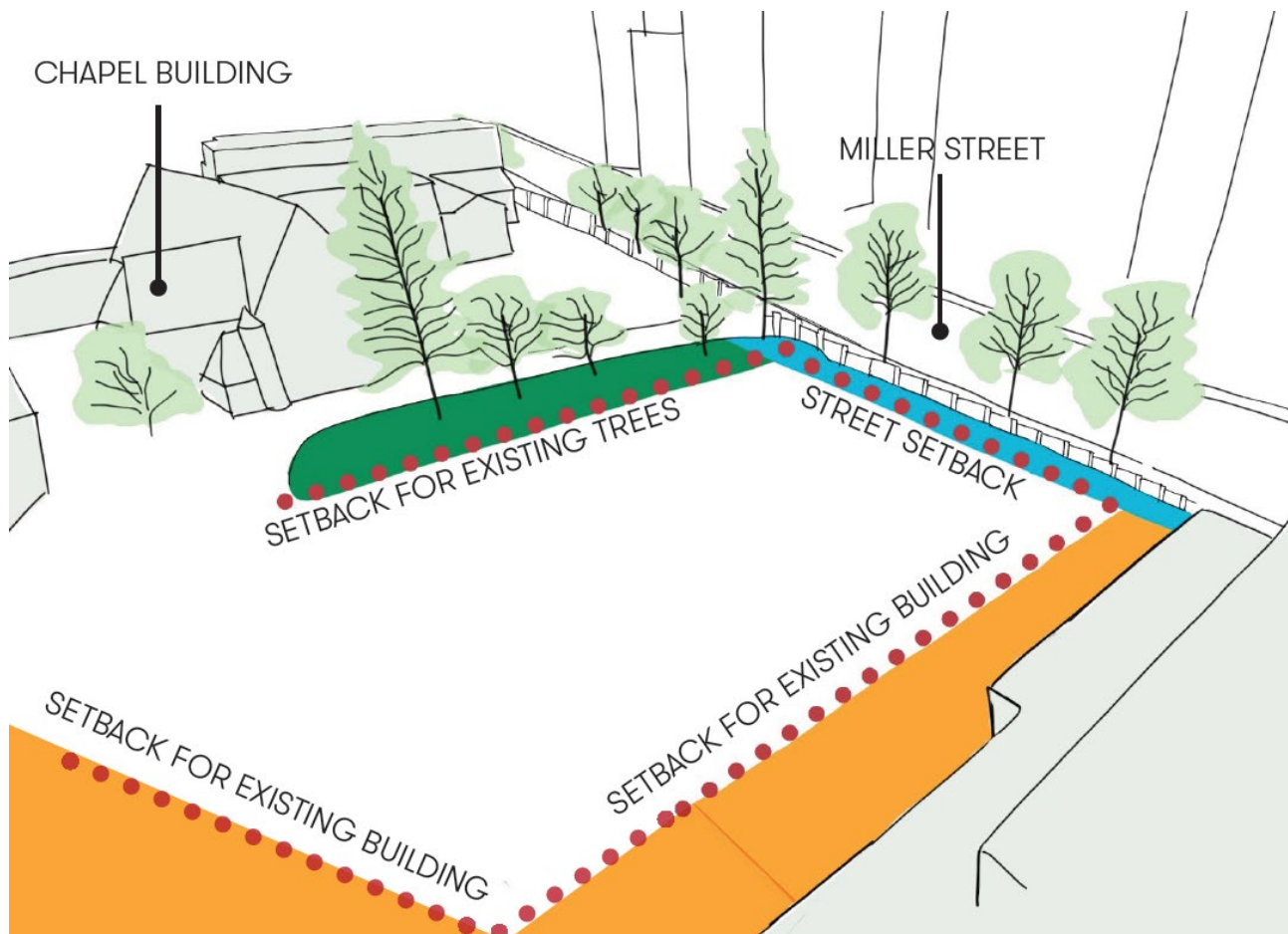
The feedback received at the meeting and issues raised in the feedback letter have been addressed throughout this RtS and the accompanying documentations.

3.2. DESIGN EVOLUTION

The proposed development is constrained the existing McQuoin Building to the south, mature trees and Circular Drive to the north and west, and Miller Street setback to the east (refer to Figure 1). Accordingly, sufficient separation distance is required to maintain the amenity of existing buildings and vegetation.

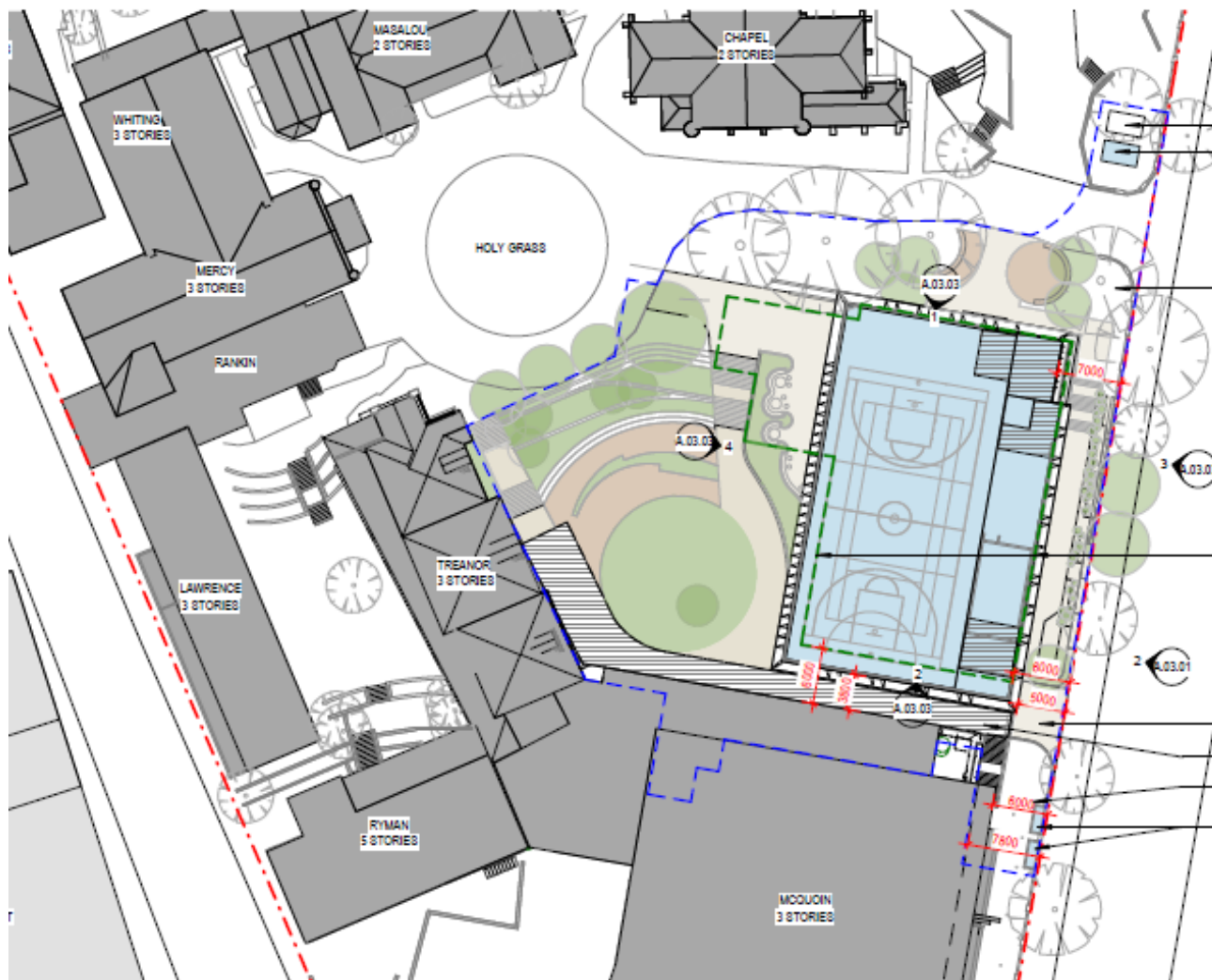
More importantly, the historic heart of the Campus is defined by the group of heritage buildings on the highest point of the campus, which is the group of buildings around the northern edge of the Holy Grass and the Circular Drive (see Figure 2). This cluster of buildings includes the Mercy Hall, Masalou Building and the Chapel. Accordingly, the proposed location of the building has been carefully selected so it does not obscure views of the items or adversely impact on the cultural significance of the precinct.

Figure 1 Site Constraint Diagram



Source: [Hayball Architects]

Figure 2 Heritage buildings location map



Source: Hayball Architecture

Given the physical and heritage constraints of the site, over the course of design development, the following design decisions have been made to address site constraint and optimise site opportunities:

Heritage

The location of the building on the site was selected after a comprehensive heritage study of the whole of the Monte Campus. The site selected was identified as having opportunity to accommodate a new building with the least potential impact on the heritage significance of the Monte Campus.

The proposed building is located to the southern edge of the Circular Drive, and as such sits within the visual curtilage of the heritage precinct. The topography of the campus supports the retention of the prominence and significance of the heritage items, by enabling the new building design to be sit below the heritage buildings.

The 'sinking' of the new built form allows the building to sit below the heritage height planes, which is an appropriate scale within the transition zone, and reduce its scale and bulk when viewed from the Holy Grass.

The height of the façade screen and netting around the rooftop court is lower than the Chapel building ridgeline, and while the proposed building directly addresses the southern Chapel elevation it is separated by approximately 17m of open space, including established vegetation which will be retained and enhanced.

There is no change to the physical heritage curtilage, and whilst the addition of the new building will add a new element to views across the College campus, the primary views from the driveway and the Holy Grass towards the heritage items will not be altered.

The location of the new building does not obscure views of the heritage items from within or outside the site, nor does it alter the cultural significance and interpretation of the precinct.

Heritage response is further discussed in **Section 5** of the RtS Report.

Reduction in Teaching Facilities within the new Building

The original school brief requested 12 science laboratories, which has been reduced to nine in order to adhere to the height limit of the site and keeping the building footprint in-line with the adjacent heritage and existing building fabric.

Reduction to Sports Court Run-Off Zones

Given the physical constraints of the underground excavation zone (due to existing buildings, trees and Miller street setback), the size of the sports court run-off zones has been significantly reduced.

The current run-off zones are at a minimum acceptable area to ensure usability of the courts, however, are non-compliant for formal competitions. Any additional reduction to the floor area would have significant impact to the usability of the courts and would compromise their functionality and serviceability.

Accordingly, the sports courts as proposed have been reduced to their minimum size without comprising their functionality.

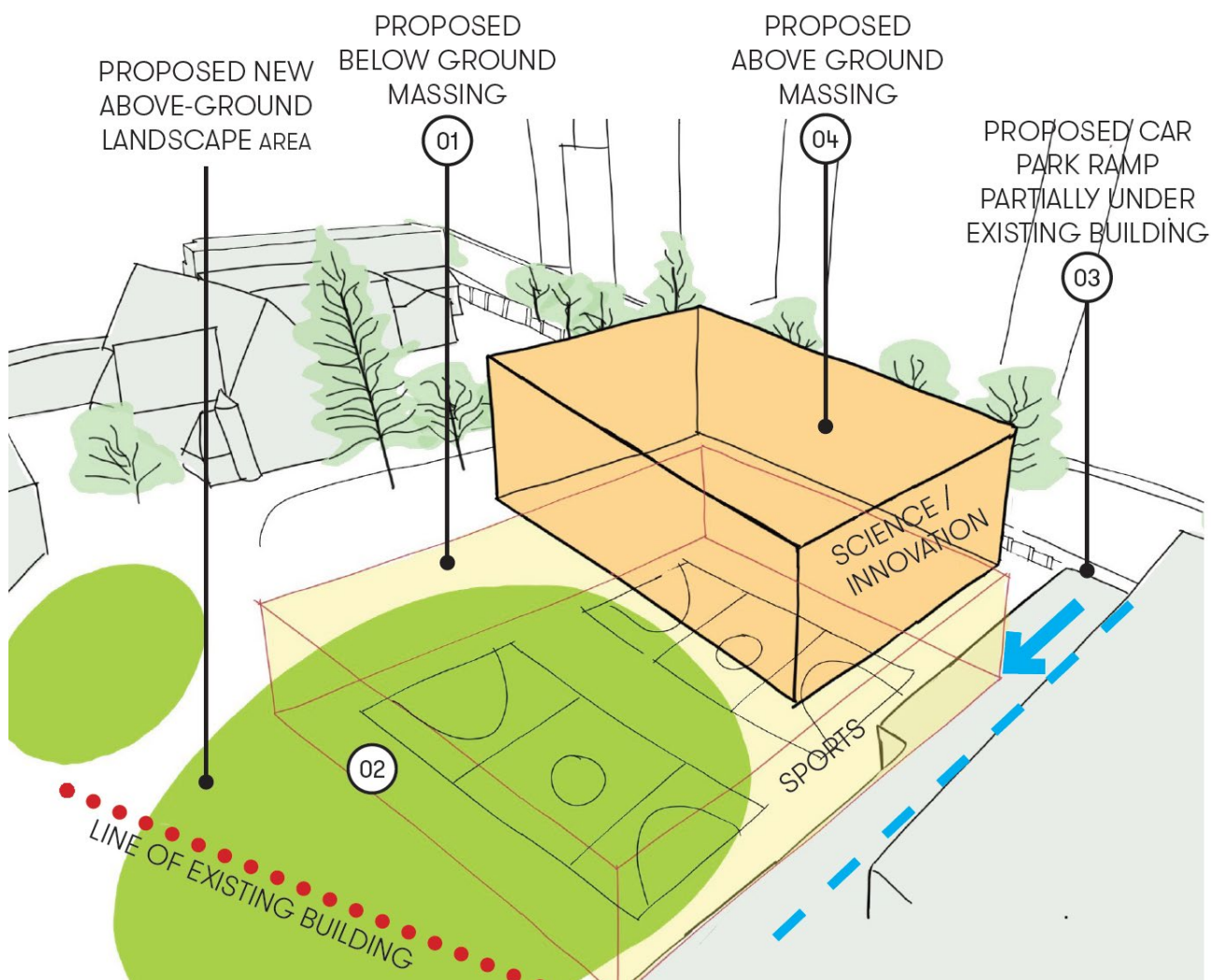
Significant Site Excavation

Sports facilities including the multi-purpose dual courts have been located underground to allow for maximum usable landscaped open space above ground and to provide a green oasis for the students.

In order to provide the required sports courts and carpark ramp, the southern edge of the new building footprint has also been extended under the existing McQuoin Building. In addition, the basement elements (sinking of the building) has reduced the visual bulk and scale when viewed from within the College Campus, surrounding heritage buildings and the surrounding public domain.

The provision of the underground sports courts will result in significant excavation costs and extensive requirements for services. However, the substantial benefit of providing additional green space on the ground level and sinking the building to comply with height limit have outweigh the project costs, and has informed this design decision.

Figure 3 Design Development



Source: Hayball Architecture

3.3. BULK AND SCALE

3.3.1. Height Reduction

The revised scheme has responded to the request to reduce the height of various building elements (refer to Figure 4):

- The floor-to-floor heights to the above-ground science and innovation levels have been reduced, whilst maintaining adequate ceiling heights to ensure a high level of amenity. This has reduced the rooftop court level by 600mm, resulting in the whole rooftop slab level sitting below the 16m building height limit for the site.
- The architectural facade screening has also been reduced by 800mm.
- Cumulatively, by decreasing floor-to-floor heights and reducing the architectural facade screening the enclosed building area, excluding rooftop court, stairwells and lift core, is compliant with the building height control.

The revised scheme has the following maximum height at various measured from the existing ground level:

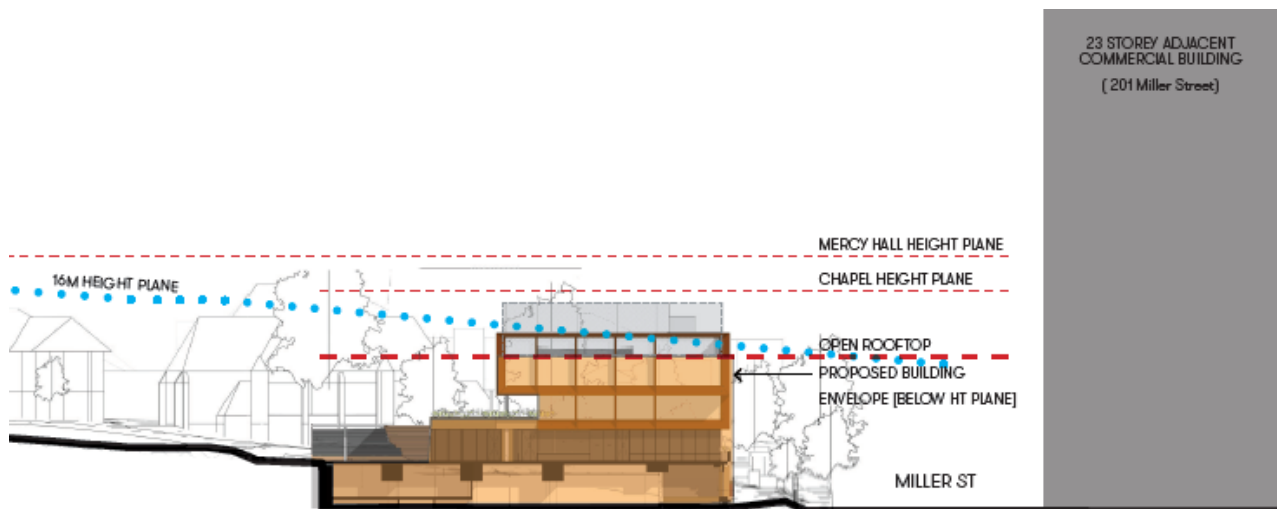
Table 1 Maximum Height Comparison

	Original Scheme	Revised Scheme
Maximum height to level 3	16.1m	15.5m
Maximum height to plant room/lift overrun	18.7m	18.1m
Maximum height to façade screen	19.4m	18.6m
Maximum height to the rooftop court mesh fence	21.7m	20.9m

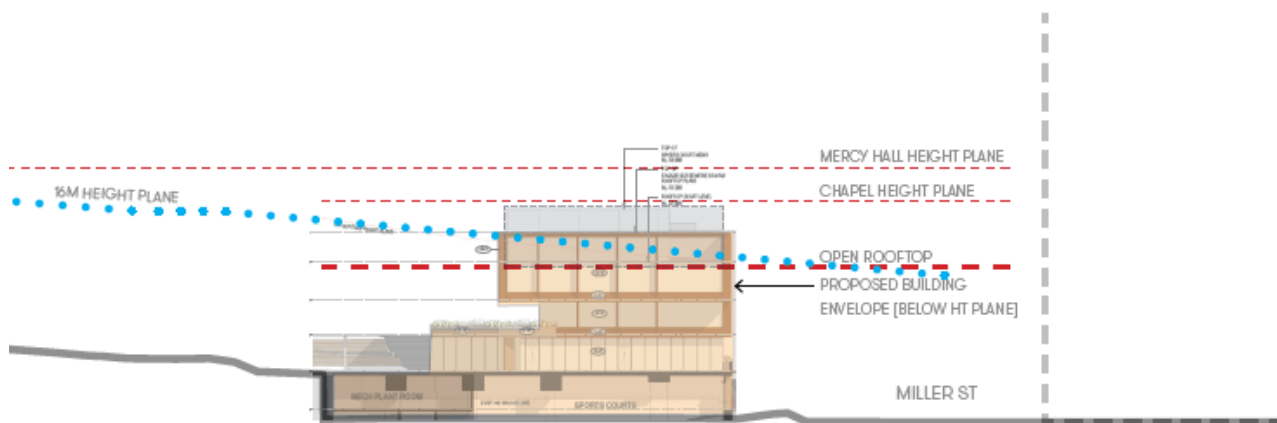
As the site steeply slopes to the southeast, the following elements exceed the 16m height control (Figure 5):

- Facade screen by a small portion at the south east corner of the building.
- Lift and stair access
- Rooftop mesh fence

Figure 4 Elevation Comparison



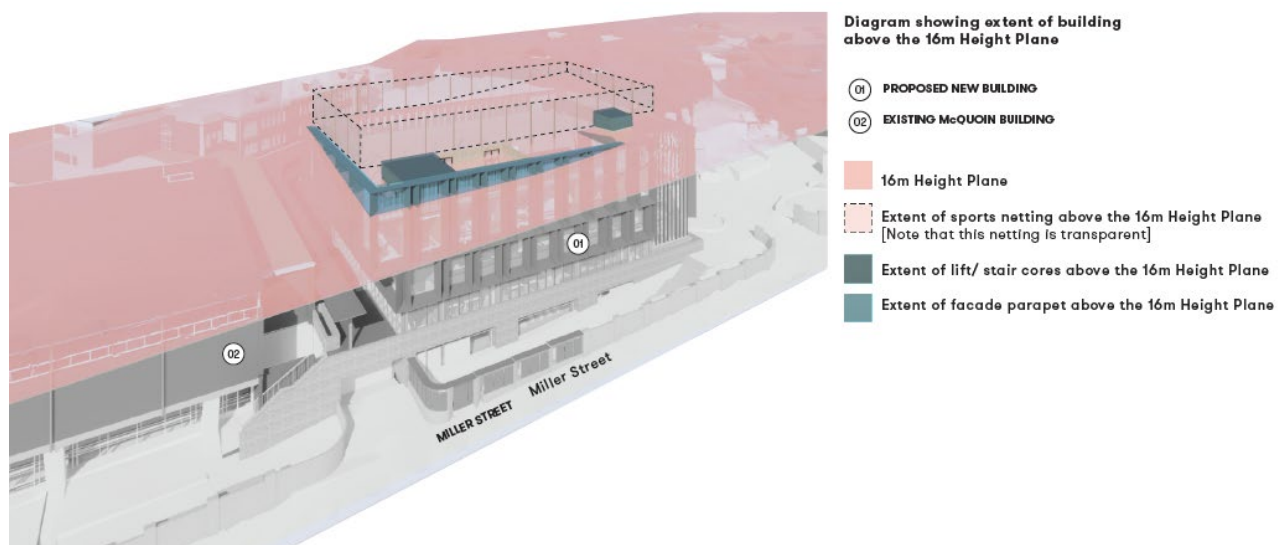
AFTER: REVISED PROPOSAL



BEFORE: ORIGINAL SSDA

Source: Hayball Architecture

Figure 5 Area of height non-compliance – revised scheme



Source: Hayball Architecture

Clause 42 of the Education SEPP states that:

“Development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted.”

As such a Clause 4.6 Variation Request is not required. Notwithstanding Clause 42 of the Education SEPP, the following section provides assessment of the proposed variation to the building height control.

Reduced scale

Given the sloping topography of the Site, the area of non-compliance occurs towards the south-eastern corner of the building. The highest point of the building (including the area of height non-compliance) has been designed to be located away from the heritage buildings to the west and north, to protect views to the heritage buildings and the heritage character of the northern portion of the College.

The Building has been designed with basement levels to further reduce the visual bulk and scale when viewed from within the College Campus, surrounding properties and the public domain. The ‘sinking’ of built form and the reduced height allows the building to sit below the heritage height planes, which is considered an appropriate scale within the transition zone and reduce its scale and bulk when viewed from the Holy Grass.

Minimal visual impact – architectural roof features

The area of height non-compliance primarily relates to the façade screen structure and the mesh fence surrounding the rooftop court. The rooftop court is open air therefore is not considered as a storey to the building and does not contribute to additional bulk and scale.

The mesh fence is a light weight structure to ensure the safety of the students and to reduce amenity impact to surrounding residents. It is setback from the building façade and the site frontage, therefore cannot be easily perceived from the public domain.

The façade screen element is an architectural roof feature, as it forms part of the architectural design of the building and is a decorative element to the rooftop court. It is not an advertising structure, does not comprise floor space and does not create significant overshadow. Accordingly, the architectural façade screen is consistent with the definition of an ‘Architectural roof feature’ as defined under the North Sydney Local Environmental Plan 2013 (**LEP 2013**) and is considered acceptable and contemplated departure from the building height control.

The area of height non-compliance also relates to the plant room and the lift overrun, which services the building and provides equitable access for students and staff to the rooftop facilities. The plant room is screened by the architectural façade screening, while the lift overrun is further setback from the building façade. Therefore these elements cannot be easily perceived from the street level and do not contribute to the visual bulk and scale of the building.

Overshadowing Impacts

Revised shadow diagram has been prepared to demonstrate that the revised scheme, including the rooftop court net will not create net increase in overshadowing to the ‘Special Area’ between 12 pm and 2 pm from March equinox to September equinox (inclusive).

Accordingly, the proposal can comply with Clause 6.3 of LEP 2013.

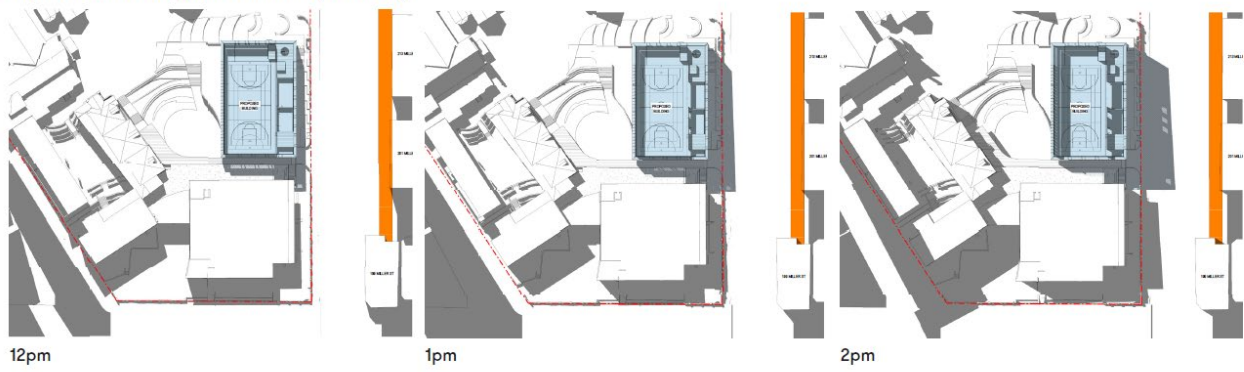
In addition to the LEP provision, as requested by Council in the post exhibition meeting, additional shadow impact have been assessed to demonstrate the impact to the ‘Special Area’ after 3pm. Please note, the assessment has been provided for reference only and it does not change the proposal’s compliance with Clause 6.3 of LEP 2013.

As indicated in Figure 7, the proposed building will not overshadow the ‘Special Area’ at 3pm in March and September Equinoxes. However, it will create additional overshadow to the ‘Special Area’ at 3pm in winter solstice in comparison to the existing shadow from the street trees. Furthermore, it is important to note that a compliant building envelope (16m) would also overshadow the ‘Special Area’ at 3pm in winter. Accordingly, the impact is deemed acceptable and it is outside the compliance requirement of Clause 6.3 of LEP 2013.

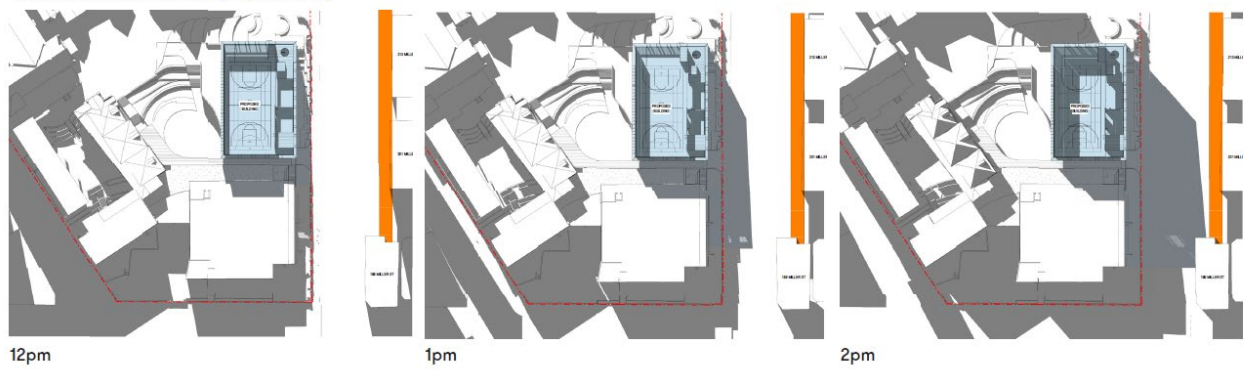
Detailed shadow diagrams are contained within **Appendix B**.

Figure 6 Revised Shadow Diagram before 3pm

Equinox Shadows [March and September]



Winter Solstice Shadows [June 21]

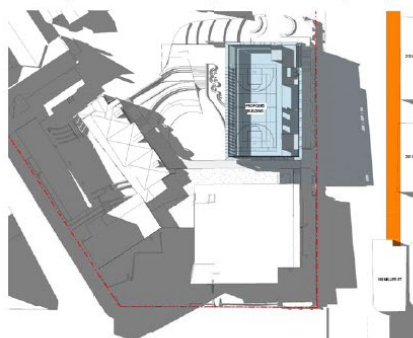


Source: Hayball Architecture

Figure 7 Revised Shadow Diagram after 3pm

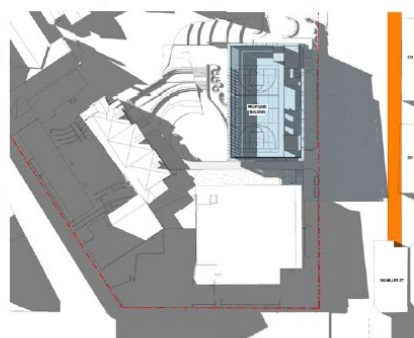
PROPOSED 3pm SHADOWS

01 Equinox Shadow [March 21/ Sept 21]



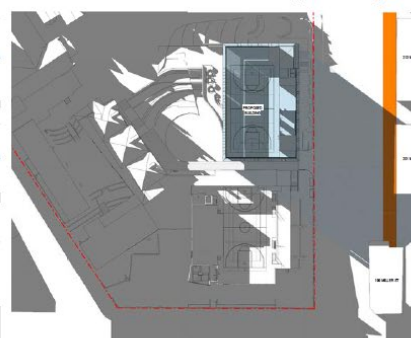
3pm [tree shadows excluded for clarity]

02 mid April/ end Aug Shadow



3pm [tree shadows excluded for clarity]

03 Winter Solstice Shadows [June 21]



3pm [tree shadows excluded for clarity]

EXISTING 3pm SHADOWS

04 Winter Solstice Shadows [June 21]



3pm [tree shadows INCLUDED]

FULLY COMPLIANT BUILDING HEIGHT

05 Winter Solstice Shadows [June 21]



3pm [tree shadows excluded for clarity]

Source: Hayball Architecture

Privacy

The height non-compliant elements, such as the screens and the mesh fencing around the rooftop building boundaries is incorporated to limit overlooking and protect the privacy of students and nearby developments.

Furthermore, privacy is achieved by the following design measures:

- The rooftop court is further setback from the Miller Street frontage to limit overlooking.
- The trafficable area fronting Miller Street is limited and restricted by plant room and stairs access. Where resting areas are proposed, landscaping screening is proposed around the seats.

Summary of Building Height Reduction

In summary, the height of the overall building has been reduced in response to DPIE and Council comments. Strict application of the height control would prevent effective redevelopment of the Site to provide improved and superior sports and teaching facilities for Monte, which has been achieved through the current proposal.

The plant room and lift overrun are building services structures and provide accessibility to all levels. The architectural façade screen and the rooftop court mesh fence provides protection for students and reduce amenity impact to surrounding developments, which are all necessary to deliver a high quality and safe rooftop courts. The areas of non-compliance are also setback from the building line and will not dominate the streetscape.

Given the nature of the proposed variation and the justification of the impacts provided, it is concluded the proposed height is well founded and the particular circumstances of the case warrant flexibility in the application of the maximum height of building development standard.

The scale of the building is further reduced through façade refinement and architectural articulation discussed below.

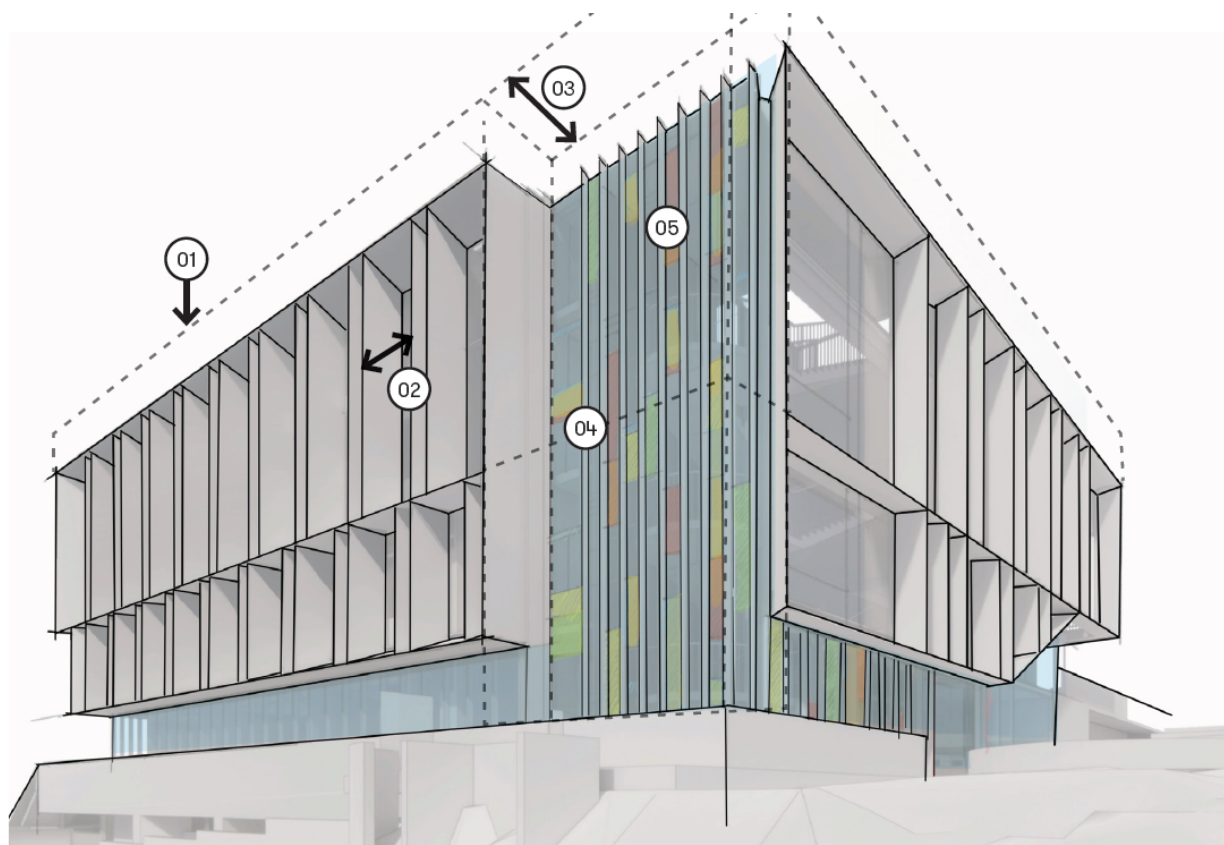
3.3.2. Façade Refinement and Articulation

In addition to height reduction, the building has been further refined in a number of ways to reduce the bulk and scale of the building, including (refer to Figure 8 and Figure 9):

- Articulation of the facade including the depth, spacing and detailing of the facade fins.
- Further setback of the eastern facade at the north-eastern corner by 2m, signalling the entry and reducing the overall building bulk when viewed from Miller Street (refer to Figure 10).
- The facade screening depth has been reduced to 750mm on Level 4 [three-quarter depth], and maintained at 1m on Level 5 and 6, creating a more varied facade pattern, and breaking up the 'monolithic' form.
- The modulation of the vertical fins has also been amended on the building facades, with the eastern facade presenting a staggered fin arrangement, which allows for more light and create facade pattern to enhance visual interest.
- The material of the facade screening has been changed to anodised aluminium. This allows for finer detailing and reduced edge dimensions, which reduce the appearance of bulk. The fins will have a combination of perforated and solid panels, which creates varied texture, light and shadow. The fins also create a veil, rather than a solid screen.
- The colour of the aluminium facade screen is deliberately a dark, earthy tone, to appear recessive when viewed from Miller Street. This colour will also intentionally contrast to the lighter colours of the heritage buildings, giving the heritage buildings greater emphasis in the campus.
- Introduction of Facade Compositional Heritage Overlay that integrates facade refinement and articulation with a representation of the heritage and values of the College. Primarily represented at the north eastern stair as an architectural representation of a lantern.
- Enhance the provision of street trees to screen the proposed building from Miller Street. **Section 4** of this RtS report further address landscape changes.

Collectively, the height reduction and façade refinements are able to reduce the bulk and scale of the building and create visual interest along Miller Street and within the college campus.

Figure 8 Façade Refinement



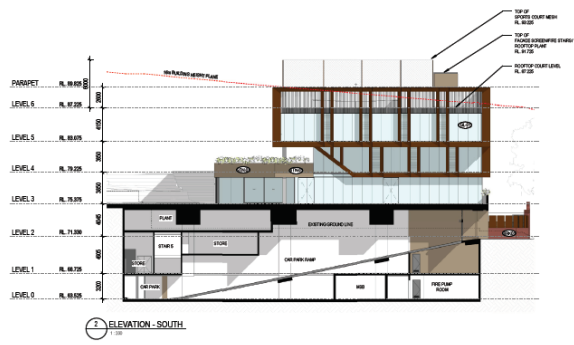
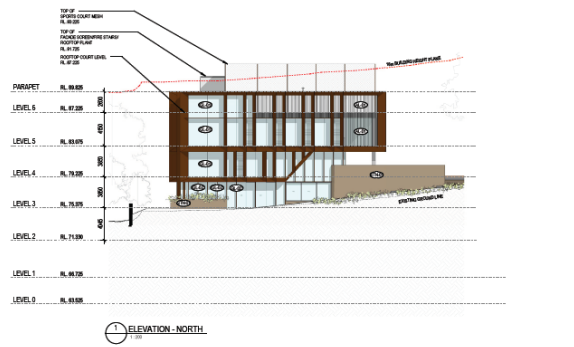
SUMMARY OF KEY BUILDING AMENDMENTS

- | | |
|--|---|
| <p>01 HEIGHT REDUCTION
Overall building height has been reduced.</p> | <p>04 VERTICAL ARTICULATION
The facade bulk has been broken down by removing horizontal articulation to create a strong vertical element at the north-east corner.</p> |
| <p>02 ARTICULATION OF FACADE SHADING
The spacing and detailing of the facade fins has been further articulated to allow for larger glazed zones and more differentiation in the facade.</p> | <p>05 SECONDARY DETAILING
Secondary detailing is proposed to the articulated north-east corner with graphics representing the heritage and values of the college.</p> |
| <p>03 SETBACK OF CIRCULATION CORE
The north-east corner of the building has been set back by two meters.</p> | |

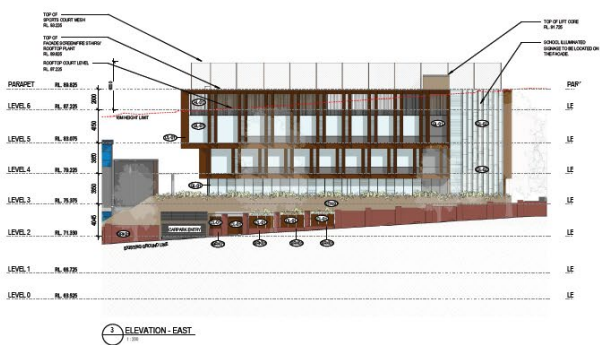
Source: Hayball Architecture

Figure 9 Elevation Comparison

AFTER: REVISED PROPOSAL

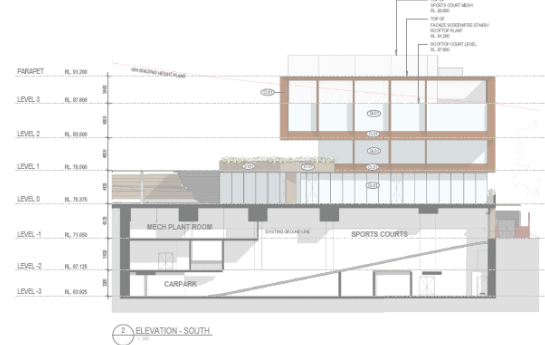
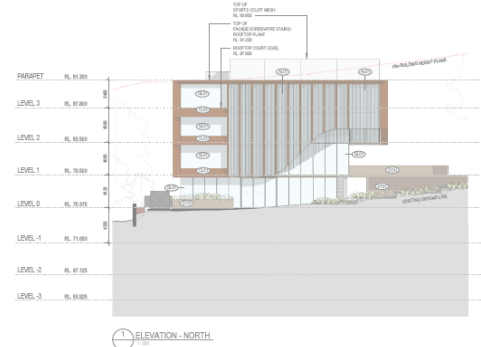


AFTER: REVISED PROPOSAL



Source: Hayball Architecture

BEFORE: ORIGINAL SSDA



BEFORE: ORIGINAL SSDA



Figure 10 Miller Street Montage Comparison



BEFORE: ORIGINAL SSDA



AFTER: REVISED PROPOSAL

Source: Hayball Architecture

3.4. MILLER STREET SETBACK

The revised scheme has not adopted the additional 1.8m setback (7.8m in total) to Miller Street recommended by North Sydney Council for the reasons discussed below.

Whilst the setback of the building is not being increased, the amended design includes a secondary façade setback to the north eastern corner of 2m to minimise visual impact from Miller Street Entrance. It is also important to note that the building is constraint by sports court dimensions, existing trees and the existing College buildings as discussed below.

Miller Street Setback Context

The existing setbacks along Miller Street are varied. Most of the contemporary buildings have zero street setback with ground floor activation to Miller Street. The Monte College buildings also have a varied setback, ranging from 2m-6m along the McQuioin Building, 6m-10m along the Chapel frontage to the O'Regan Arts and Cultural Common (**ACC**) building, 0-6m at the McLaren St intersection (refer to Figure 11).

In order to remain consistent with the existing street setback along Miller Street frontage, the proposed new development is set back 6m from Miller Street with a 1m facade articulation zone (5m setback from the site boundary to the façade line). The proposed setback from Miller street will protect the existing street tree canopy and provide opportunity to create a landscaped buffer between the proposed building and Miller Street.

By maintaining a consistent street setback to Miller Street, the new building can also maintain relationship with existing buildings and protect the existing street pattern along Miller Street (refer to Figure 12).

Figure 11 Street Frontage Setback Context



Source: Hayball Architecture

Site Constraints and Functionality of the Proposed Floorplate

As mentioned previously, the footprint required to accommodate the sports courts and classrooms has already been compromised to fit within the existing site area. The requested increased setback would consequently require a further deletion of some of the sports court run-off zones and classroom areas, as the building depth is largely determined by the depth of the sports courts and vertical circulation cores.

Any further consolidation or reduction of the floor plate will significantly impact on the provision of the College's unique dual curriculum and the required sports court and classroom size for teaching. Therefore, reduction of floor plate cannot be achieved.

In addition, setback increase would also result in basement excavation moving closer to the existing College buildings and could impact their structural stability.

Comprise Proposed Open Space Area

Increasing the front setback would require moving the building to the west of the site, which will compromise the proposed Wildflower Garden open space area.

The proposed Wildflower Garden provides much needed outdoor congregation space and encouraging active play for the students. This will be the largest green space within the school campus and can accommodate events such as outdoor music or drama performances.

The useability of this open space area will be significantly compromised if the new building is to be shifted further west. Additional overshadowing in the morning (particularly student recess time) will also be of concern if the building was to be shifted.

Unusable Open Space Along Front Setback

In comparison, providing an increased setback along Miller Street will not create a usable and safe open space area for students. This is evident in the existing setback between Miller Street and McQuoin Building, which is not currently utilised by students. As this area is overshadowed and has a closed feeling that is unwelcoming. As such the College do not wish to duplicate this space for the proposed building, particularly to compromise the size of the much more usable and versatile Wildflower Garden.

The Monte campus is highly constrained in terms of access to land and the provision of campus open space for the education and wellbeing of the students. Given that open space along Miller Street is not desirable, the design intention of the Miller Street setback area is to create a passageway for students entering and exiting the gymnasium and sports courts. It is the Colleges' position that the need to provide open space in a consolidated and usable location is outweighed by the small benefit that any additional 1.8 metre building setback from Miller Street would provide.

Impact on Trees

From a tree planting perspective, only one small tree is currently located within the front setback, and its removal has been recommended by the Arborist due to lack of light and space to develop to maturity. A small increase in the setback would not increase the potential for large canopy planting.

The existing proposed setback area allows for medium to large shrub planting within the deep-soil zone, which creates a landscaped buffer area between Miller Street and the proposed building. Therefore, the proposed landscape treatment is suitable within this setback area and additional street trees are proposed on Miller Street which is a much more suited location.

It should be noted that the proposed OSD tank is located under a required egress pathway (from the sports hall and gym) and this area is not available for a deep-soil zone.

More importantly, the placement of the building was driven by the retention of the significant trees identified along the Circular Drive. These trees also contribute to the heritage curtilage of the Chapel and views along the Circular Drive to the Holy Grass, Masalou Building and Mercy Hall. The canopy zone of these significant trees would therefore be impacted as a result of shifting the building further to the west.

Landscape treatment along Miller Street is further discussed in **Section 4**.

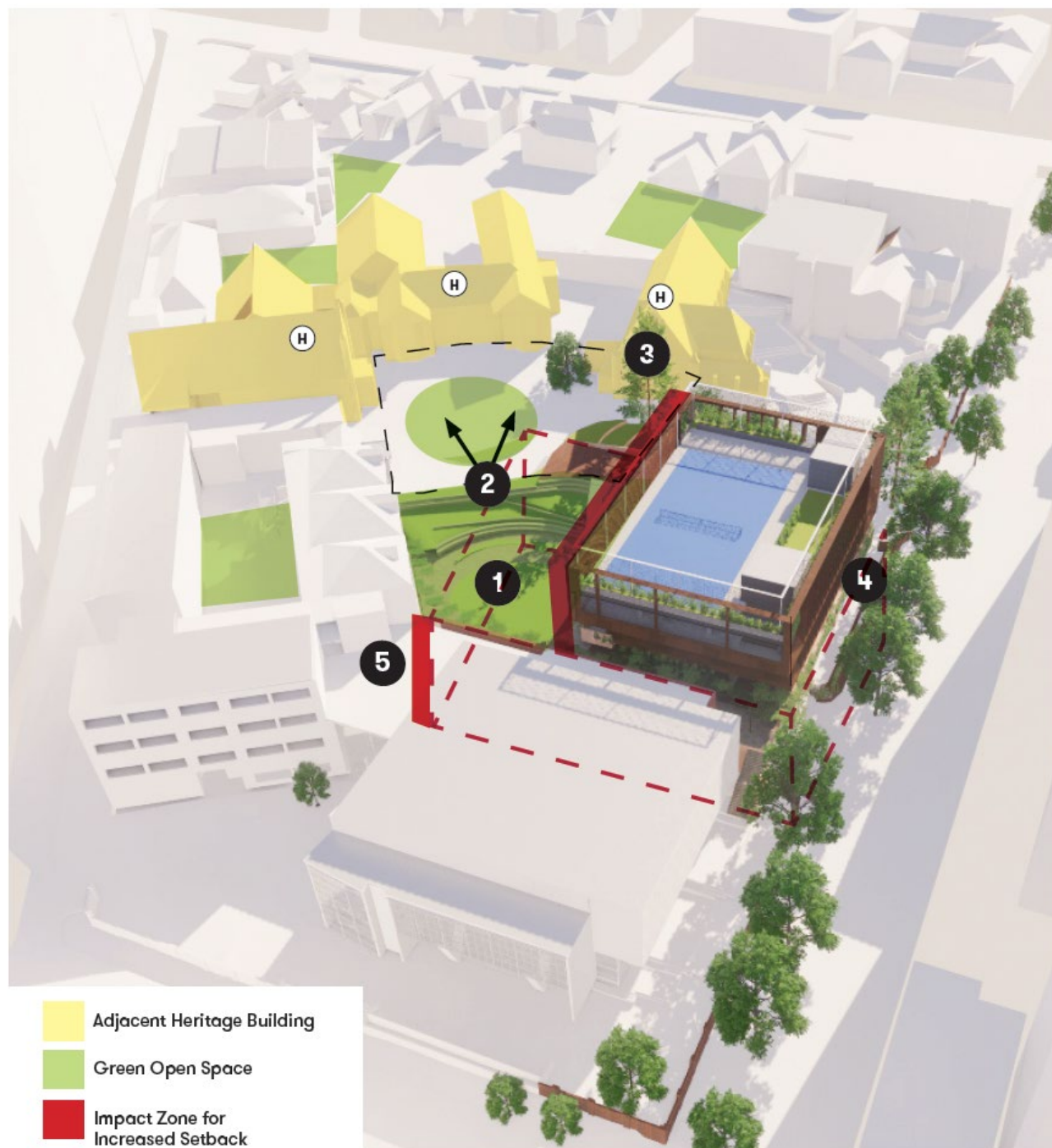
Heritage Impacts

Further setback to the north west corner will move the building closer to the Chapel and Masalou Building, which would intrude the heritage curtilage and negatively impact on the visual connection to the heritage curtilage. In addition, views towards the Chapel building from the congregation space would be compromised.

Moving the building to the south would also reduce the size of the 'Wildflower Garden' which will diminish the landscape relationship with The Holy Grass. This would also reduce views towards the heritage precinct from the garden, in particularly to The Chapel. Heritage impact is further discussed in **Section 5**.

In summary, the increase setback has not been adopted, as it would negatively impact on the provision of open space, reduce the functionality of the proposed sports and teaching facility and impact on the heritage curtilage. The bulk and scale of the building has been reduced through height reduction, façade refinement and retention of the heritage boundary wall, which are much more effective and positive improvement to the street presentation along Miller Street.

Figure 12 Key Impact of Setback Increase



Source: Hayball Architecture

3.5. RETENTION OF THE BOUNDARY WALL ON MILLER STREET

The design team and Monte have taken into consideration of North Sydney Council's recommendation for the retention of the Miller Street boundary wall, and has amended the proposal accordingly to retain the street wall along Miller Street (see Figure 13).

The revised scheme recognises the heritage significance of the brick wall and its contribution to the heritage character of the site, defining the Monte campus along Miller Street. The retained brick wall will also screen the building, provide separation between pedestrians and students, and retain some elements of the exiting street presentation.

The revised design retains the existing brick wall that is currently located along the Miller Street frontage, and only demolish a small portion of the wall for the new car park driveway entry. It should be noted that

there is no brick wall at the existing car park driveway entrance. Consequently, there is a small portion of new wall required to connect the retained wall with the proposed driveway entry (refer to Figure 14).

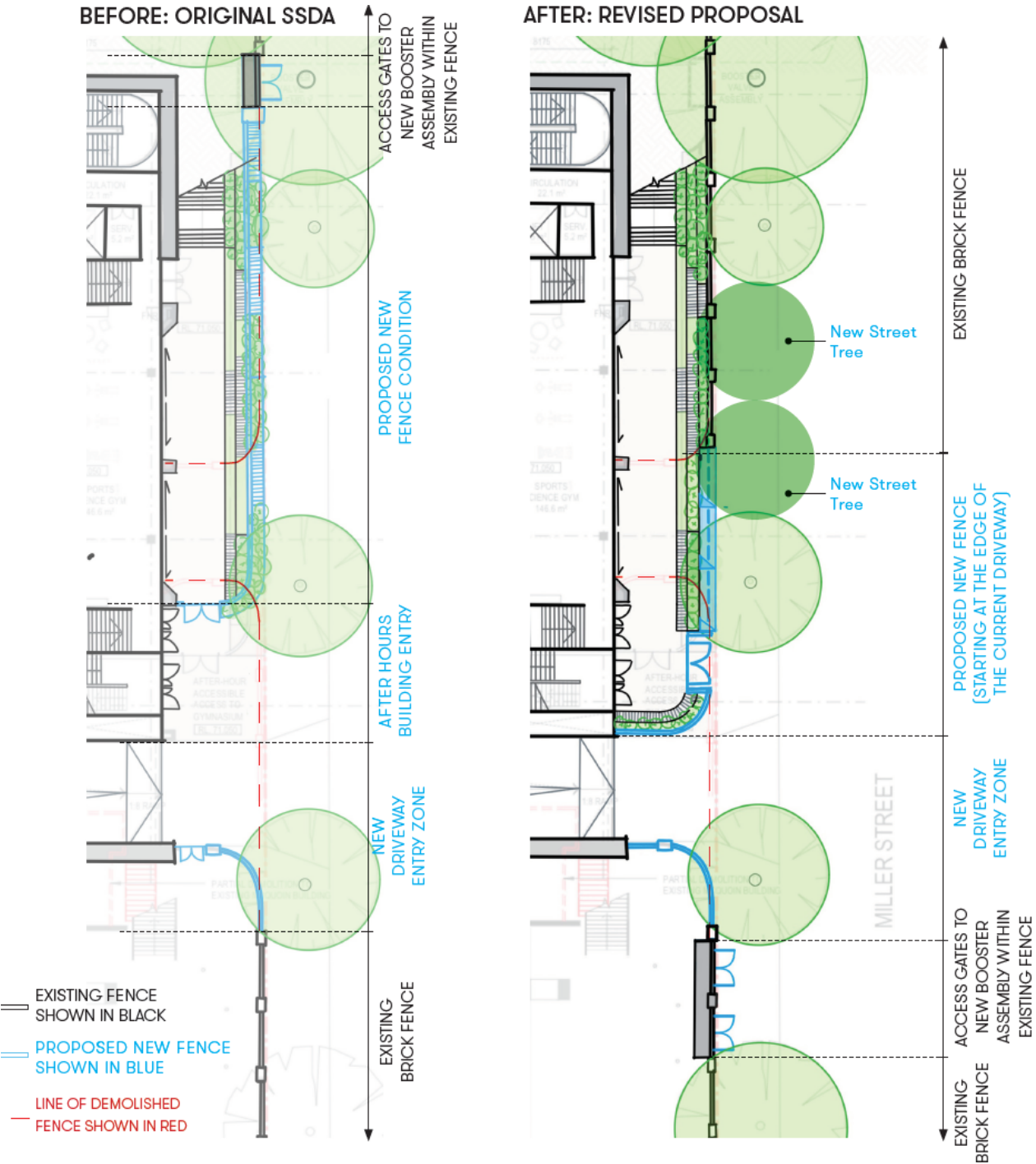
Given that this portion of the boundary wall cannot and should not be replicated, the new boundary wall element will be complementary to the existing wall, through matching the height, stepped modulation, alignment and general form (refer to Figure 14).

This is consistent with the principles of the Burra Charter, and will assist to retain the importance and significance of the original wall fabric. This design approach is further supported by a Heritage RTS report prepared by NBRS & Partners and attached at **Appendix E** and discussed in **Section 5**

The brick materiality is proposed to match the lower portion of the existing wall, utilising existing salvaged bricks if possible, to ensure consistency with new coloured metal screens inserted above to identify the wall as a new element.

The final design of the metal screen will be subject to a final heritage interpretation strategy (refer to Figure 14). The design team will work closely with the heritage interpretation consultant and North Sydney Council, with the aim of developing a sensitive interpretation design that will cherish the history of the College and create an engaging and informative experience for pedestrians on Miller Street.

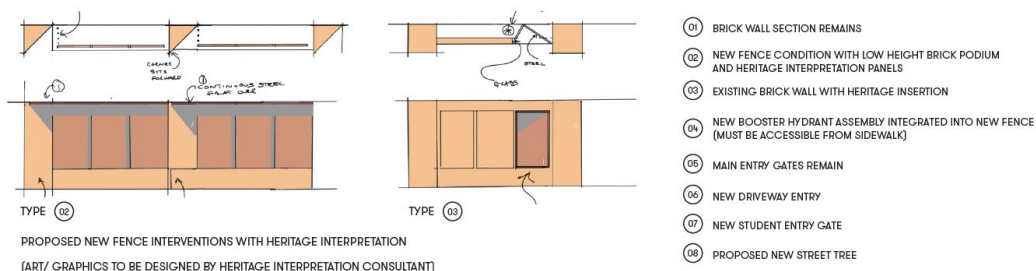
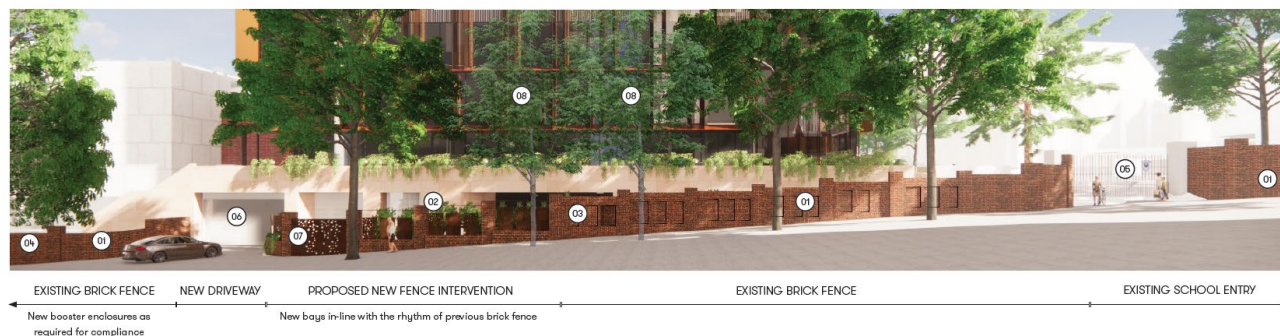
Figure 13 Street Wall Treatment Comparison



Source: Hayball Architecture

Figure 14 Proposed Street Wall Treatment

MILLER ST - PROPOSED FENCE ELEVATION



MILLER ST - PROPOSED FENCE PERSPECTIVE

Source: Hayball Architecture

3.6. CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN PRINCIPLES

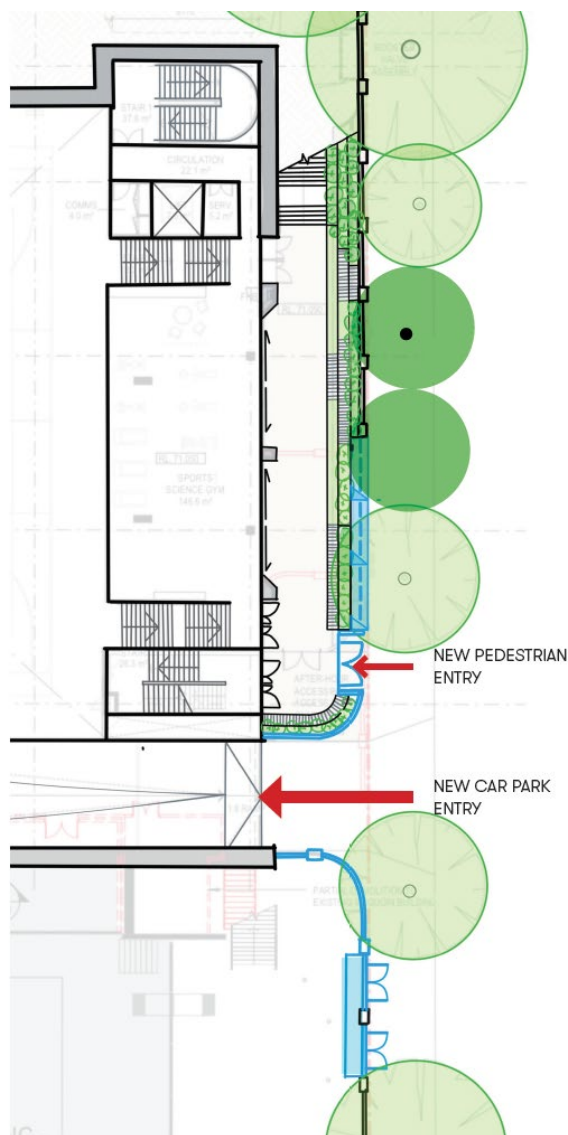
A Crime Prevention Through Environmental Design (CPTED) assessment has been provided in **Section 7.8.2** of the EIS.

Specifically, the proposal incorporates the following operation and design principles to ensure safety and security of external space between the gymnasium and Miller Street at Level 1 of the proposed building:

- The boundary wall along Miller Street provides opportunity for passive surveillance, as increased visibility has been provided through the new elements of the boundary wall, which has an element of visual porosity and can be glimpsed through the gaps of the boundary screen.

- The Miller Street façade of the proposed building includes large areas of glazing, which will assist with passive surveillance of the public domain, particularly during College hours. The building also has multiple windows overlooking the Monte campus.
- Pedestrian and vehicle access to the building has been separated. College hour pedestrian access for students is via the main campus, while afterhours access for visitors will be via a new and secure secondary pedestrian entry from Miller Street (refer to Figure 15).
- The secondary pedestrian entry on Miller Street will be accessible only using programmable swipe cards, provided to staff and guests using the Level 1 gym after hours. Students will not have access via this entry.
- Vehicle entry to the basement carparking is separated from pedestrian entry to avoid pedestrian and traffic conflict. The driveway will be gated and monitored, requiring a swipe card for access.
- All pedestrian and vehicle entries are proposed to be illuminated after dark.
- Territorial reinforcement is achieved by the clear demarcation of the street boundary and the College's private space along Miller Street. This is achieved by the boundary wall and gates, clear school and wayfinding signage and landscaping proposed along Miller Street.
- The setback area will be well-maintained by the school's asset management team, as part of the College campus.
- The campus is monitored after hours by a security service. Additional security personnel will be used for occasional after-hours College events held in the new Sports and Science building.
- The Sports and Science Building will also be fitted with electronic monitoring and security devices. Further details on these devices will be provided at the detailed design stage.

Figure 15 Street Interface Treatment



Source: Hayball Architecture

3.7. PASSIVE SOLAR DESIGN STRATEGIES

3.7.1. Daylight

The above-ground building levels have been designed to receive an abundance of natural light, with a simple floor layout that places learning areas adjacent to the facades, to allow light filtration from a central corridor. The facade glazing area is also maximised to allow sunlight. The spandrels are provided with shadow box/ aluminium back pan to reduce heat load.

The facade screening depth and horizontal spacing exceeds the glazing area and type, shading and insulation requirements under Section J of NCC 2019. The proposal is provided with appropriate sun-screening of the glazed façade and to enable glass selection to meet the Solar Heat Gain Coefficient and U-Values, with neutral colour to maximise visual light transmittance into the building.

Internally, voids have been created on Level 4 and 5, to allow for further transmission of daylight into the interior spaces.

3.7.2. Ventilation

Natural ventilation of teaching spaces is achieved via openable windows to reduce heating and cooling energy. Natural ventilation is achieved for 5% of the floor area through louvered glazing.

Fresh air is also delivered by in-ceiling Fan Coil Units. Additionally, louvres behind the horizontal spandrels [with perforated soffits] will provide for discrete fresh air intake for the A/C system. The fan coil units can also provide additional fresh air to the internal spaces in a fan-mode.

Thus, it is intended that the building operate in three different modes: fully naturally ventilated, boosted natural ventilation [utilising soffit ventilation and FCUs] and fully heated or cooled with A/C.

3.8. ESD MEASURES

An Ecologically Sustainable Development (**ESD**) framework has been developed for the proposal (refer to Appendix P of the EIS), which combines all applicable initiatives and targets and will be implemented as part of the construction and ongoing operation phases of the development.

The measures are being considered to minimise consumption of resources. Sustainability strategies and credit requirements are being targeted for the development, which include adhering to Green Star requirements to achieve an equivalent 4 Star Green Star and As Built v1.3 rating, representing **Industry Best Practice**.

Further sustainability initiatives related to operation of the building and lifelong learning will be developed and implemented by the College during the design and construction stage.

4. LANDSCAPE

4.1. MILLER STREET SETBACK

As discussed above, increasing the setback along Miller Street will further compromise the proposed Wildflower Garden and lawn terracing area, which will be one of the primary open space for the College. Nominal increase to the building setback will also not increase the potential for large tree planting within the front setback.

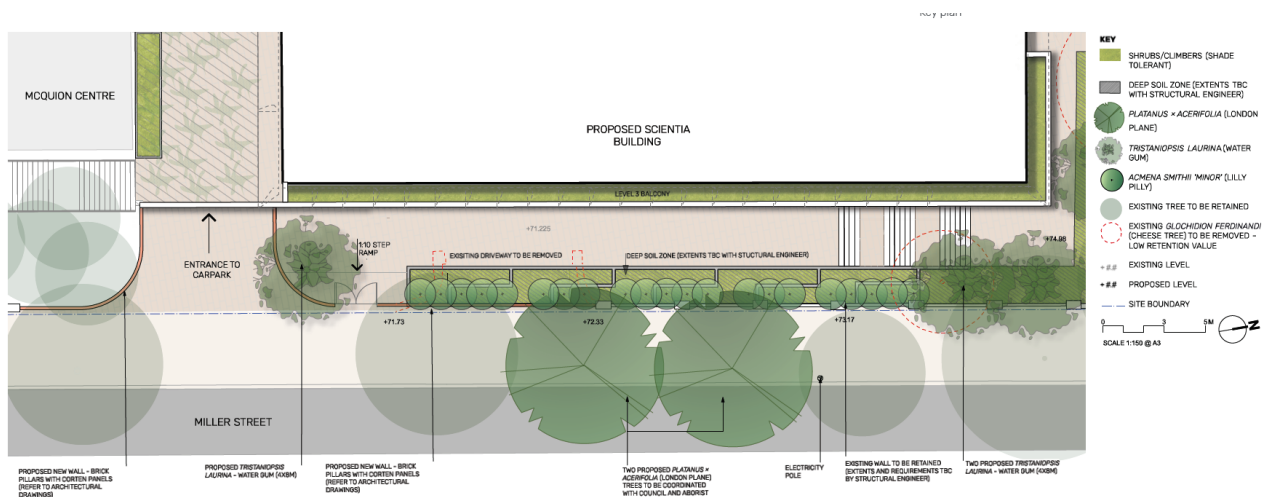
Notwithstanding, to address North Sydney Council and DPIE's post exhibition recommendation, additional trees have been proposed within the street setback and two additional street trees have been proposed along Miller Street (refer to Figure 16):

- Three *Tristaniopsis Laurina* (Water Gum) located within the front setback, which will further partially screen the building from Miller Street.
- Two *Platanus × acerifolia* (London Plane) street trees located between the pedestrian pathway and the brick wall. These street tree will help screen the new building and continue the existing landscape character along Miller Street (to be coordinated with North Sydney Council and Arborist).

Revised Landscape Plans are attached at **Appendix C**.

Accordingly, consistent with North Sydney Council and DPIE's post exhibition recommendation, the revised landscape treatment along the front setback is able to screen the building and the additional street trees can further complement the Miller Street streetscape (refer to Figure 17). Therefore, providing a further building setback is not required to achieve these landscape objective.

Figure 16 Revised Landscape Treatment along Miller Street



Source: Spackman Mossop Michael

Figure 17 Revised Miller Street Montage



Source: Hayball Architecture

4.2. COMPENSATORY PLANTING

A summary of trees removed, retained and proposed is outlined below (refer to Figure 18):

- Total trees being removed: 14
- Total trees being retained: 4 (including the only three trees of high landscape significance)
- Total trees proposed: 17 (>5m high) and 21 (<5m high – Dwarf Lilly Pillys)

Majority of the fourteen trees proposed to be removed are located within the internal courtyard area to the west of the site and are of low to medium retention value. The removal of these trees was proposed to create a new landscaped outdoor area for students – the Wildflower Garden, and to provide further landscape enhancement to the south of the Holy Grass.

Out of the 14 removed trees, only one tree is located along the Miller Street edge and two trees are located along the exiting driveway. However, they are in poor condition and considered to be of low retention value and landscape significance as confirmed by the Arboricultural Impact Assessment prepared by Truth About Trees (Appendix I of the EIS).

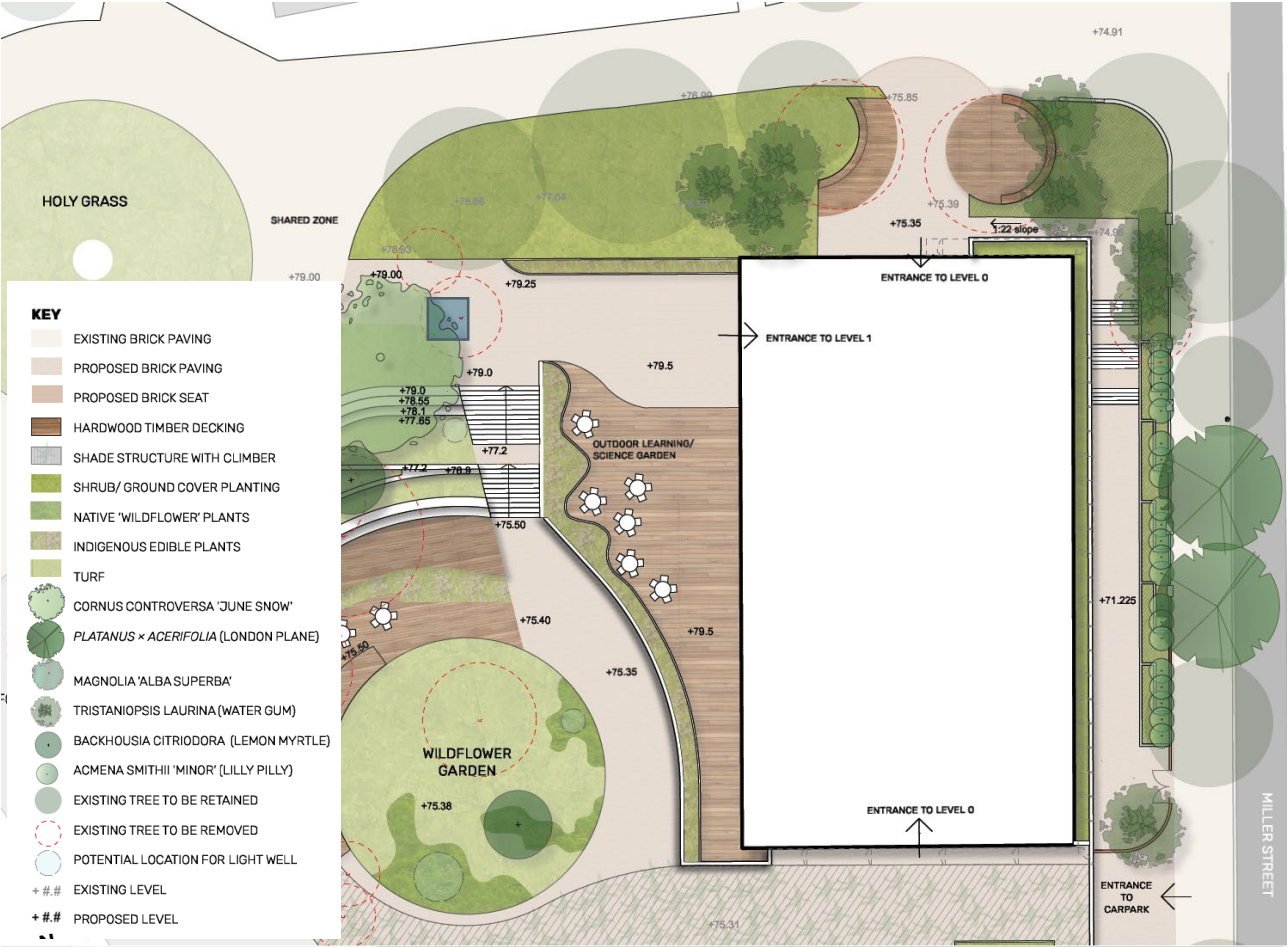
Accordingly, the removal of these trees will not diminish the landscape significance of the chapel and the heritage curtilage of the chapel.

Furthermore, the loss of trees is proposed to be offset by the planting of 38 trees throughout the site area and along Miller Street (including street trees). The location of these new trees has been selected to allow for maximum sunlight and assist with plant growth.

More importantly the planting of new trees and landscaping treatment to the north and east of the proposed building allows for landscape and visual connection with the landscape setting around the Chapel and the Holy Grass (refer to Figure 18 and Figure 19). Accordingly, the proposed landscape design can maximise the opportunity for tree planting and compensate for the loss of removed trees.

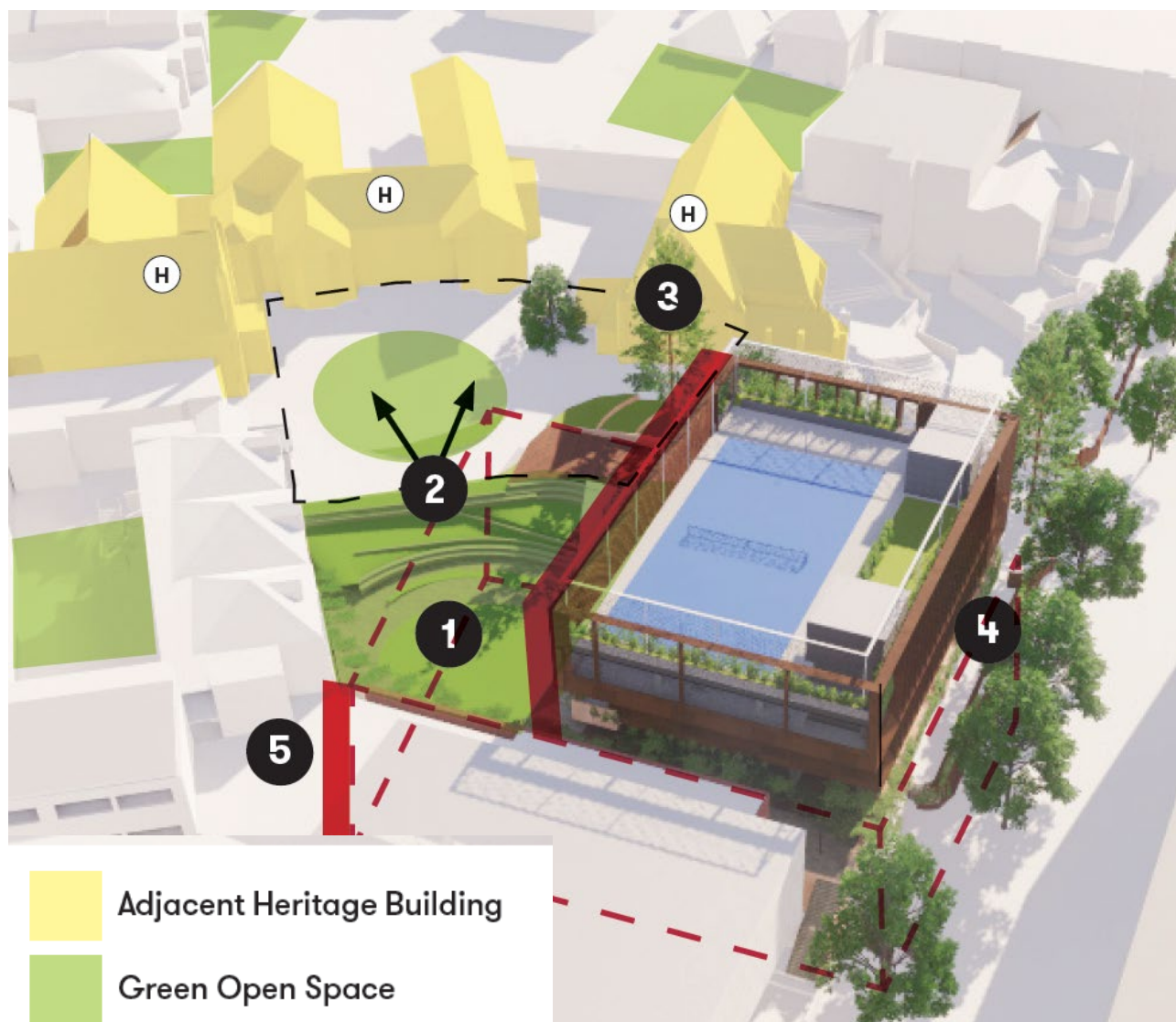
The detailed landscape response is attached at **Appendix D**.

Figure 18 Updated Landscape Plan



Source: Spackman Mossop Michaels

Figure 19 Landscape Connection to the Chapel and Masalou Building



Source: Hayball Architecture

4.3. TREE PROTECTION ZONE

As discussed above and confirmed by the Arboricultural Impact Assessment, the following trees are been retained and protected:

- High retention value:
 - Araucaria cunninghamii (Hoop Pine) - Tree 6
 - Araucaria heterophylla (Norfolk Island Pine) - Tree 11
 - Syzygium sp. (Lilli Pilli) - Tree 10
- Medium retention value:
 - Lophostemon confertus (Brush Box) - Tree 9

These trees are also indicated on the Landscape Plan (see **Appendix C**). The retained trees are located along the existing driveway leading up to Holy Grass, which forms part of the heritage landscape curtilage. Therefore, these trees have been retained for their landscape value and also heritage value to the site.

In accordance with the assessment provided within the Arboricultural Impact Assessment, Trees 6, 9, 10 and 11 are subject to moderate levels of encroachment (10-20%) of the TPZ.

A summary of assessment provided by Truth About Trees is extracted below:

“Tree six (6) suffers some encroachment from the proposed raised timber decking, however the structures have been designed in such a way so as to minimise negative impacts upon the tree. No grade level changes are proposed, and the level of impact is considered as minor.

Tree nine (9) is encroached upon by the proposed feature walls/entranceway. The feature walls are to be constructed of raised timber decking and have been designed in such a way so as to minimise negative impacts upon the tree. No grade level changes are proposed, and the level of impact is considered as minor.

Tree ten (10) has a minor encroachment of <10% for the proposed building. There will be the need to conduct minor canopy pruning of tree #10 for the proposed building alignment. The pruning will account for less than 5% of the trees live canopy and no negative impacts are expected. A pruning specification can be found in Appendix 3 of this report.

All pruning is to be completed by a minimum AQF level 3 Arborist and the pruning must be supervised by a minimum AQF level 5 Consulting Arborist.

All pruning must be conducted in accordance with AS4373-2007- The Pruning of Amenity Trees.

*Tree eleven (11) will have an encroachment of 20% of its notional TPZ for the sub-ground levels of the project. Early stage root mapping was conducted and found **the area to be primarily old fill from previous works**. There were no tree roots greater than 10mm in diameter discovered during the investigations, see photos in appendix 4. There is to be no benching, battering or over-excavation to achieve this building alignment. Contiguous piling, sheet piling or similar is to be used to retain the soil. This will need to be conducted under the direct supervision of an AQF level 5 consulting Arborist.*

Given the above, three of the four trees have minor encroachment of less than 10%, tree pruning measures and TPZ has been established to protect these trees. Tree 11 has an enforcement of 20%, however there had been much previous disturbance from earlier works and the soil in this area is predominantly fill.

Given the tree roots are less than 10mm, excavation is to be completed without benching or over-excavation i.e. contiguous piling, sheet piling or similar. The specific approach needs to be addressed in the final Construction Management Plan. This will need to be conducted under the direct supervision of an AQF level 5 consulting Arborist.

The following measures have been recommended by the Arborist to retain and protect the trees:

- 1. A site – specific tree protection plan will be required to identify specific controls in relation to the trees to be retained once designs have been finalised and this will also need to respond to any conditions raised by the consent authority.*
- 2. The tree protection plan must reference and consider the construction management plan and implement hold points for specific milestones, including but not limited to: Certification of tree protection measures, Certification of supervision for the erection of scaffolding, tree pruning, any excavation within the TPZ of any tree to be retained.*
- 3. Regular site inspections are to be conducted by the project Arborist, who will inspect the trees and ensure that all controls remain in place and are effective.*
- 4. All tree protection measures must be completed in accordance with AS4970-2009 and appendix 2 of this report.*

5. HERITAGE

A Heritage RtS Report prepared by NBRS & Partners is attached at **Appendix E**, which provides detailed response to the comments provided by DPIE and North Sydney Council Heritage Assessment Team. Response to the key three issues are discussed in the section below, please refer to **Appendix E** for detailed response to other matters.

5.1. MILLER STREET WALL

As discussed in **Section 3.5** of the report the revised scheme retains the full extent of the boundary wall from the driveway to the existing car park entry along Miller Street. Due to the relocation of the carpark further to the south of Miller Street, the only portion of the wall that is been sympathetically replaced is the existing car park entry where there is no existing wall present (refer to Figure 14).

The replaced portion of the wall is consistent in height to the existing boundary wall, as it steps up Miller Street and is articulated in bays to maintain the existing structural rhythm.

The requirement for light and street access to services, such as the hydrant booster valves, has been addressed through the insertion of metal screens above the replaced wall. This new addition has been designed to respect the retained wall through the following design decision:

- Maintain a consistent height to the existing wall
- selection of similar colour and finish of the metal screen to match the existing wall
- Matching brickwork
- Dark horizontal components to maintain the visual definition of the site

The metal screens also provide opportunity for heritage interpretation, to support and express the significance of the site to the wider community. The final design of the metal screen will be subject to a final heritage interpretation strategy.

This detailed design proposed for the infill wall is supported from a heritage perspective, as it represents a sensitive adaptation of the existing wall and is consistent with the heritage principle outlined in the Burra Charter.

Overall, the wall retention will ensure that the Miller Street wall continues to define the site as identified in the Heritage Statement of Significance, and the new infill portion of wall will be read as contemporary addition that is sympathetically integrated with the heritage significance.

5.2. HERITAGE CURTILAGE AND SETTING

The context of the College campus has been divided into two precincts, where the northern portion of the campus is visually and physically focussed around The Holy Grass, which is defined by a built edge of heritage buildings to the north and west. These buildings form part of the northern heritage precinct and the heritage curtilage.

The main entry from Miller Street divides this northern heritage precinct and the more recent developments to the south of the campus. It is important to note that the proposed building is located to the south of the driveway and is aligned to the Miller Street frontage and the McQuoin Centre. This building alignment is able to integrate with the contemporary building such as the McQuoin Centre to the south, while been designed to respect the heritage curtilage to the north (refer to Figure 20).

Instead of aligning the proposed building to the heritage buildings (as suggested by Council), the proposed siting of the building is able to create a stronger visual and landscape connection to the Chapel and the heritage buildings.

The driveway and along the frontage of the Chapel comprise trees and significant established landscaping, which will be retained and enhanced by the proposed landscaping treatment, extending along the driveway and to the west of the site. This landscape expansion connects the Chapel and the Holy Grass with the proposal and assists to strengthen the relationship between the heritage precinct and the southern precinct (refer to Figure 24). The additional landscaping proposed to the southern side of the driveway formalise and enhance the role of the Chapel leading towards Holy Grass.

Furthermore, the 'sinking' of the building to the lowest topographic level reduces the bulk and dominance on the proposal and reduces visual and physical impacts on the heritage curtilage and the heritage precinct.

As part of the post exhibition process, the building façade has been refined to further improve view to the Chapel from Miller Street. This is achieved by providing a further setback the north western corner of the building, which softens the façade and improve view corridor to the Chapel from the Miller Street driveway. This design refinement does not undermine the significance of the east-west orientation of the Chapel.

Therefore, it is appropriate from a heritage perspective to maintain the alignment with the McQuoin Centre so the building can continue the existing development pattern to the south of the site while materially improves landscape and views of the heritage precinct from within the school campus.

Figure 20 Building Alignment Diagram – to heritage buildings



Source: Hayball Architecture

5.3. IMPROVED STREETSCAPE AND VIEW CORRIDOR

View from Miller Street (refer to Figure 10)

As mentioned above, the retention of the brick wall and the provision of additional street trees along Miller Street will soften the proposed building and retain the existing heritage character along Miller Street. The retention of the brick will maintain the streetscape definition of the site and screening to the new building.

The further setback of the north eastern corner of the building will expand view corridors to the Chapel from the main entrance at Miller Street, while the east-west alignment to the Chapel will not be distracted by aligning the proposal to Miller Street.

View at Driveway Entry (refer to Figure 21)

The new entry court to the north of the proposed building mirrors and provides landscape connection to the entry court of the Chapel and the existing ACC building to the north.

Established trees and the proposed landscaping along the driveway will screen the proposed building and provide a landscape setting to complement the Chapel.

Figure 21 View comparison at Circular Drive Entry



VIEW 02 - DRIVEWAY ENTRY - BEFORE



VIEW 01 - DRIVEWAY ENTRY - PROPOSED

Source: Hayball Architect

View from Holy Grass (refer to Figure 22)

The view across the Holy Grass is bounded by the Chapel to the north and established vegetation located to the southern edge of the Circular Drive driveway. The tall commercial buildings dominate the skyline of the easterly views from within the Campus. These tall buildings will also form part of the backdrop of the proposed building.

The proposed building is contemporary and is been sympathetically designed to respond to the Chapel and its curtilage, providing visual transition from the dominating commercial building to the Chapel.

The scale of the proposed building has been reduced to follow the topography of the site as well as sinking the building into the basement. This reduced built form is less dominant in scale to the Chapel.

The proposed landscaping and trees also provides visual buffer between the Chapel and the proposed building. While the recessive colour enables the proposed building to blend into its environment and allows the light-painted colour Chapel to standout, emphasising the heritage significance of the site.

Accordingly, the building maintains the existing heritage character and is a contextual fit within the campus.

Figure 22 View comparison from the corner of Miller Street and Berry Street



VIEW 03 - FROM 'HOLY GRASS' - BEFORE



VIEW 02 - DRIVEWAY ENTRY - PROPOSED

Source: Hayball Architect]

6. COMMUNITY USE

Post completion, the College anticipate a return to current College usage levels for both community use and after hour school activities as outlined in the attached Facility Usage Profile (refer to **Appendix I**). Therefore, there is no increase in frequency and variety of after hour and community use activities other than those currently undertaken by the school and the community.

The rooftop court will not be available for external hire. All external hires for community usage will be accommodated in the indoor courts area, thus reducing noise from community usage. It is also anticipated that community experience will be improved given the provision of a new indoor facility and sound levels being contained within the basement.

6.1. TRAFFIC AND PARKING IMPACT

Given the frequency and variety of community and after hour activities remain the same as current usage, no change is expected to traffic generation. The current level of traffic generation from the existing community use is expected to remain post completion.

Community use of school facilities will cease during construction and therefore no demand on on-site parking from community uses will occur during construction.

Community use and out-of-hours use of school facilities rely on on-street parking at current and this arrangement will continue post-construction when community uses resume to existing usage.

Furthermore, the College has an on-site staffing presence while the campus is open for events to monitor and manage adherence to College management measures. This includes ensuring all users of the site leave in a calm, considered and prompt manner.

6.2. NOISE IMPACT

Noise impact from community and after hour activities are discussed in Section 5.7 of the Acoustic Report prepared by Wilkinson Murry (**Appendix T** of the EIS package).

The following current after hour and community use is anticipated to occur within the proposed building:

- Use of the underground carpark for community uses parking.
- Use of the indoor courts for team sports and community hire outside of school hours (as existing, no increase in frequency or hour).
- Occasional after hour school functions to be held at indoor courts and on the rooftop court (as existing, no increase in frequency or hour).
- After hour school extracurricular activities (team sports etc) to be held at the indoor courts and on the rooftop court (as existing, no increase in frequency or hour).
- The new rooftop court is unavailable for community hire outside of school hours.

It is noted that all the existing community uses will be moved to below ground level and be contained within the building structure by concrete walls and roof, which greatly limit noise emission to outside areas.

Further, the eastern entrance to the sports area is separated by two sets of doors that will act as a noise lock to Miller Street.

Accordingly, there will be no additional noise impact from the community and after hour activities, as there will be no change to the intensity or frequency of activities.

7. TRAFFIC ASSESSMENT

7.1. CONSULTATION WITH TfNSW

TRAFFIX has consulted with Laura van Putten from TfNSW on 2 July 2020 to discuss the matters raised in the TfNSW submission letter prior to finalising the Traffic and Parking RTS report (attached at **Appendix H**). A follow up email was also sent on the 10 July 2020 to inform TfNSW on report progress, no further feedback was received.

7.2. VEHICLE QUEUE LENGTHS

Traffic has prepared a Traffic and Parking RTS report (attached at **Appendix H**) which includes SIDRA modelling to assess the queue lengths on Miller Street.

Below is the summary of the SIDRA model assessment. Detailed SIDRA outputs are provided in Attachment 1 of the Traffic RTS report.

Table 1: Existing and Proposed Access Performances

Scenario	Period	Degree of Saturation	Average Delay (s)	Level of Service	Max. Queue Length (m)	Movement with Max. Queue
Existing	AM	0.244	18.2	B	2.6	Southbound vehicles on Miller St
	PM	0.248	17.4	B	3.5	Vehicles exiting site
Proposed	AM	0.242	18.0	B	2.3	Southbound vehicles on Miller St
	PM	0.248	17.3	B	3.1	Vehicles exiting site

The existing and proposed vehicle access to Miller Street experience minimal on street and on-site queuing. The proposed access arrangements will result in a minor reduction in overall queuing, noting the reduction of onsite parking spaces available for staff.

During the morning peak period, the maximum queue is at Miller Street southbound, which have two lanes that allows southbound vehicles to use the left lane to avoid vehicle waiting to turn right. Nevertheless, the southbound queue length is only 2.3m (equate to single vehicle), which will have minimal impact to traffic flow along Miller Street.

In the evening peak period, the maximum queue length of 3.1m is within the site and can easily be accommodated by the access driveway, which provides a 1:20 grade of 6m.

Therefore, the proposed development will result in minimal queuing on-street and within the site, and will have minimal impact on Miller Street/Berry Street intersection.

7.3. GREEN TRAVEL PLAN

A Preliminary Green Travel Plan was submitted with the EIS (**Appendix N**). A revised Green Travel Plan will be prepared and adopting the requirements outlined in TfNSW's letter dated 18 May 2020. The requirement for the revised Green Travel Plan will form part of the Condition of Consent to be satisfied post approval.

8. CONSTRUCTION MANAGEMENT AND ASSESSMENT

8.1. IMPACT ON EXISTING ON-SITE STAFF PARKING SPACES DURING CONSTRUCTION

During construction the number of parking spaces across the Monte campus will be temporarily reduced. To manage staff carparking needs during the construction phase, it is proposed to extend the use of existing temporary parking onsite (e.g. small car park off Angelo Street acting as the loading bay area) and the introduction of initiatives such as staff carpooling.

However, on completion of the development, there will be approximately the same number of parking spaces on the campus as currently available for staff. Vehicle trips generated by staff are also anticipated to be reduced with the implementation of the Green Travel Plan and the provision of the new Metro station.

The travel mode survey in the Traffic Impact Assessment (submitted as part of the EIS) indicated 67% of staff currently drive to school. During construction, for those staff who drive to school, the College will manage a parking lottery, where the College will temporarily maximise utilisation of other areas on the campus for onsite staff parking during construction.

Approximately 30 spaces will be created for temporary staff parking during construction, and these include parking at 5 McLaren Street, 25 McLaren Street and the loading area fronting Berry Street (refer to Figure 23). These areas will be managed operationally by the College in the same manner of the current carpark.

In addition, information will be provided to staff regarding parking stations available in the immediate area as well as utilising "Park and Ride" options in other non-CBD areas. Signage will also be used to indicate carpooling parking spaces to support those embracing this temporary mode of transport.

Street parking in the immediate area is time-limited, and this is not conducive to staff working hours and daily time requirements. Therefore, staff do not currently utilise street parking and the proposal is not anticipated to impact on street parking during construction.

The travel mode survey also showed no students drive to school and the College does not permit students driving. Accordingly, no onsite parking is provided for students currently, during construction, or post construction.

Impact on Loading Dock and Deliveries During Construction

The existing loading area fronting Berry Street is currently a small car park and also used for deliveries. It does not function as a typical loading dock like commercial developments. As this area will become the temporary main staff car park during construction, deliveries will be managed/split across the site, including utilising the delivery locations accessed via Circular Drive and next to the Catherine McAuley Place accessed via Angelo Street.

These existing and temporary loading areas allow deliveries to be dropped off at the closest intended end location. For example, art supplies will be dropped off the main Circular Drive closest to the art department rather than through the loading dock area fronting Berry Street. Deliveries for the northern part of the campus will be dropped off next to the Catherine McAuley Place accessed via Angelo Street.

Deliveries for McQuoin and Ryman buildings will remain at the current loading area on Berry Street. In order to facilitate some elements of delivery activity remaining in the loading area fronting Berry Street, a painted/designated marked area will be created inside the gates where trucks will arrive and park for delivery. The space designated will be more than sufficient and equal to how the dock operates currently.

During construction, delivery locations will be pre-defined and the School staff will manage this process and work with staff and suppliers to co-ordinate the appropriate timing and location of deliveries. The School staff will assist in managing staff parking in the morning and assist with stacked parking arrangements.

The abovementioned onsite staff parking strategy has also been included in the updated Construction Traffic Management Plan (CTMP) attached at **Appendix G**.

[illegible]

8.2. IMPACT ON AVAILABLE ON-SITE RECREATIONAL AND OPEN SPACE AREAS DURING CONSTRUCTION

Students using the courts for lunch and break activities will be moved temporarily to other areas within the College grounds during construction, such as the Congregational Green or areas that are currently considered unavailable, such as the front of McLaren Street cottages.

CONSTRUCTION MANAGEMENT AND ASSESSMENT 53

Sport, shows that the College has a management plan for the utilisation of a variety of nearby offsite facilities in order to temporarily accommodate the five sports during construction. The variety of locations temporarily utilised during construction will allow the College to support local facilities without overusing any one particular facility.

In addition, once the project has been completed, a number of the existing sports that are currently hosted by external facilities will be able to be accommodated on College grounds, utilising the new Scientia building and sporting facilities, freeing up offsite community sporting facilities.

After the appointment of the Contractor for project, the College will commence discussions regarding key operational times and days of significance where works may be modified to support school activities.

8.3. CUMULATIVE ASSESSMENT OF CONSTRUCTION IMPACTS

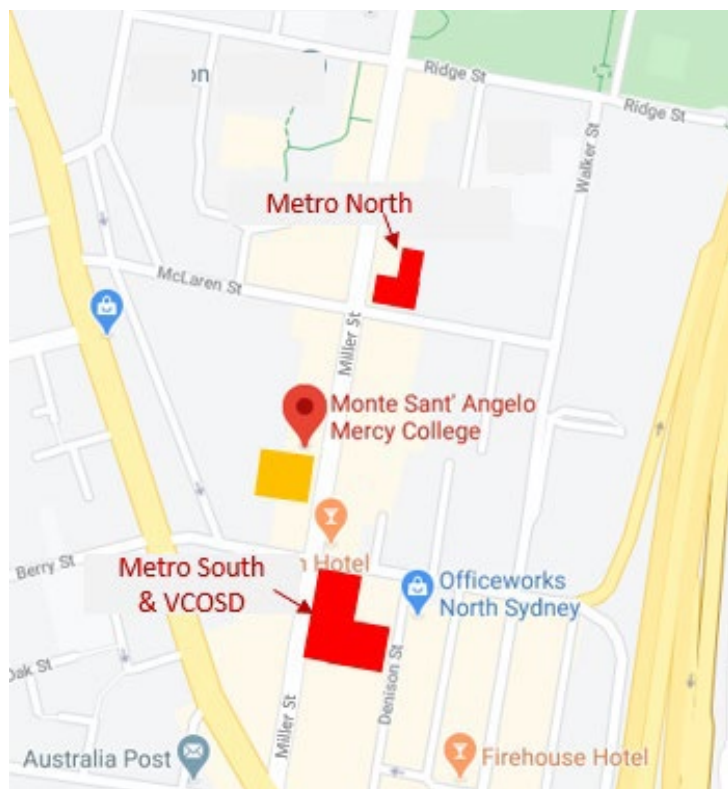
8.3.1. Traffic

Cumulative construction traffic impact has been assessed by Cornerstone and included in Appendix 4 of the Construction Traffic Management Plan (attached at **Appendix G**).

Concurrent construction works from nearby sites includes the following (refer to **Figure 24**):

- The Sydney Metro City and Southwest projects, which occupies two nearby sites. Victoria Cross Station South is located on the south east corner of Berry Street and Miller Street. Victoria Cross Station North is located at the corner of McLaren Street and Miller Street.
- The Victoria Cross South Over Station Development (**VCOSD**)

Figure 24 Location plan of nearby construction activity



Source: Cornerstone, 2020

In order to assess the cumulative impact from these nearby construction activities and the proposed works, reference was made to the following reports:

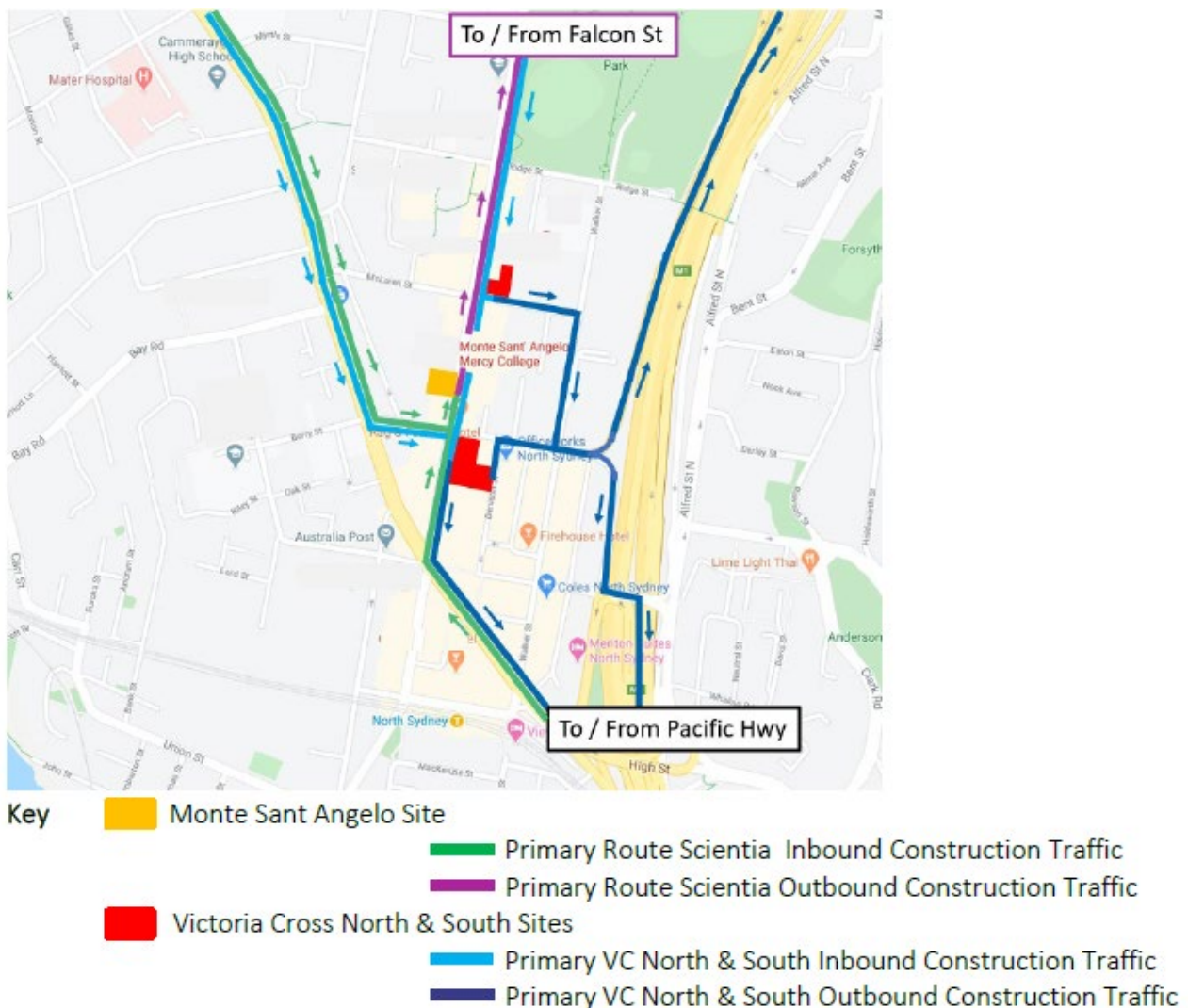
- a) OSD Detailed SSD DA – Traffic and Transport Impact assessment, Victoria Cross Over Station Development, Document No: SMCSWSVO-LLC-SVC-TI-REP-000001 Revision, Prepared for Lendlease Building Pty Limited

- b) Draft Construction Pedestrian and Traffic Management plan for Lend Lease relating to their project at Victoria Cross Over Station Development, titled “Draft Construction Pedestrian and Traffic Management plan”, V01 dated 26th August 2019, by The Transport Planning Partnership (TPPP)
- c) Construction Traffic Management Plan – Victoria Cross North Site Establishment Project: Sydney Metro City & Southwest – TSE Works Document No: SMCSWTSE-JCG-SVC-TM-PLN-002289, Rev D dated 8th Dec 2017, and
- d) Construction Traffic Management Plan – Victoria Cross South Site Establishment Project: Sydney Metro City & Southwest – TSE Works Document No: SMCSWTSE-JCG-SVC-TM-PLN-002292
- 1 Denison Street, North Sydney has been used as a reference project for traffic numbers to provide context to the cumulative numbers anticipated.

8.3.1.1. Cumulative traffic impact from Victoria Cross South and North Sites

Victoria Cross Station South and North are currently under construction. **Figure 25** below overlays the haulage routes of the Victoria Cross Station projects (North and South) and the proposed haulage routes of the Scientia project:

Figure 25 Scientia and Victoria Cross North & South Sites – Haulage Routes



Source: Cornerstone, 2020

From the routes overlay shown above, it is evident that the only planned haulage routes that the Scientia project will share with the two Victoria Cross Station sites are associated with traffic inbound to the Victoria Cross South Site. Where construction vehicles will share the southbound route on Pacific Highway, turning left into Berry Street and travelling east to the Miller Street intersection.

Given the low number of average truck movements per day associated with the Scientia project (max. 10 per day), the Scientia project will have no significant impact on potential cumulative traffic congestion occurring during the concurrent construction period of Victoria Cross Station sites and the proposal.

8.3.1.2. Victoria Cross South Over Station Development

The CVOSD will commence in May 2022, after the completion of the Victoria Cross Station developments mentioned above. It is important to note that the proposed Scientia project will be in the final stages of completion (June 2022) when the OSD commence.

Figure 26 below details the average daily truck movement and average peak hour truck movement forecasted for Victoria Cross South OSD and for the proposed Scientia project:

Figure 26 Construction Traffic Movements – Victoria Cross South OSD and Monte Scientia Project

Project Name & Stage	Daily Truck Movements																							
	2022												2023											
	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb
VOCD Project																								
Structure																								
Façade																								
Fitout																								
Commissioning																								
VCOSD Ave Daily Truck Movements																								
VCOSD Peak Hour Truck Movements																								
Monte Scientia Project																								
Site Establishment	1																							
Demo & Bulk Excav.		10	10	10	10	5																		
Structures and Finishes						5	5	5	5	5	5	5												
Balance of the Works													4	4	3	2	1							
Monte Ave Daily Truck Movements	1	10	10	10	10	10	5	5	5	5	5	5	4	4	3	2	1							
Monte Peak Hour Truck Movements	<1	1	1	1	1	1	1	1	1	1	1	1	<1	<1	<1	<1	<1							

Source of VCOSD data : Fig 3.1 from Report by Transport Planning (TPP) for Lend Lease relating to their project at Victoria Cross Over Station Development, titled "Draft Construction Pedestrian and Traffic Management plan", Version 01, 26th August 2019.

Source: Cornerstone, 2020

Given the Scientia project will be at the final stage of construction and the low level forecast of a maximum of 3 trucks per day, the number of truck movements will have no substantial cumulative traffic impact.

In summary, the number of average truck movements anticipated per day from the Scientia project are low in comparison to the nearby projects.

The Victoria Cross Station North site haulage routes are not shared with the planned Scientia project haulage routes. The Victoria Cross Station South site haulage routes are only shared with one inbound route, which is the southbound on Pacific Highway and left turn into Berry Street for a short length to the Miller Street intersection. This is considered acceptable given the low truck movements from the proposal and the short length of shared haulage route.

The Victoria Cross South OSD does not commence until May 2022, which is towards the end of the Scientia contrition programme and is not anticipated to generate a large number of truck movement on the road.

It is concluded that the proposal will have negligible cumulative impact of construction traffic movements in the nearby area.

8.3.2. Noise

Cumulative construction noise impact has been assessed by Wilkson Murray and included in **Appendix F**. Similar to the cumulative construction traffic impact, the Victoria Cross South OSD has also been considered as part of the cumulative construction noise assessment.

The assessment concludes that the combined hourly truck movement of the proposal and the Victoria Cross South OSD would be up to 2-3 truck movements per hour on Pacific Highway and Miller Street. Hourly traffic volumes of this magnitude on busy roads will result in negligible noise contribution on the overall traffic noise

levels impacting the sensitive receivers on Miller Street and Pacific Highway. Therefore, there is no risk of adverse cumulative construction traffic noise impacting the surrounding residences.

In terms of cumulative construction noise, it is noted that the OSD site is 90m south of Monte and is currently nearing the end of the excavation stage, which is the stage that will generate the highest construction noise. Therefore, no significant noise impact is anticipated from the OSD site when construction for Monte commences.

As a result of the above, construction noise from the OSD site will be more than 10 dBA lower than predicted construction noise levels associated with the Scientia project. Given the site separation distance, and staggered stages of construction, there will be no cumulative construction noise impacts at the identified sensitive receivers.

Overall, the cumulative construction traffic and construction noise impact on the surrounding road network, nearby residents and the College has been determined to be very low.

8.3.3. Construction Hour

In relation to community's concern on construction hour and COVID social distancing restriction, the College will comply with conditions placed by DPIE with regards to allowed construction hours, and government regulation on relevant COVID-19 construction and health advice and notes the gradual restoration of working practices.

All construction activities including deliveries will be undertaken during this time.

- Monday to Friday: 7am to 6pm
- Saturday: 8am to 1pm
- No work on Sundays and Public Holidays.

The proposed construction hours are consistent with the recommended standard hours of work by the *NSW Interim Construction Noise Guideline*.

Timely construction of the project will reduce the period of construction, to allow students to benefit from the prompt commencement and efficient completion and delivery of the project.

9. SYDNEY METRO INFRASTRUCTURE ASSESSMENT

Sydney Metro requested additional information be provided by the Applicant to determine if there are any impacts on the Sydney Metro City and Southwest rail corridor. In addition, additional assessment was requested to assess compliance with *Sydney Metro Underground Corridor Protection Guideline* to demonstrate that there are no adverse impacts on the Sydney Metro infrastructure.

The outcome of the additional assessment is outlined below.

9.1. UPDATED SURVEY

Survey drawings have been updated to show the 1st and 2nd reserves of the Sydney Metro City and Southwest rail corridor and the Monte site in plan and elevation. Please refer to **Appendix L**.

9.2. ENGINEERING ASSESSMENT

9.2.1. Numerical Modelling on Sydney Metro City and South West Tunnel Infrastructure

Douglas Partners has undertaken engineering numerical modelling on the underlying Sydney Metro City and South West tunnel infrastructure as requested by Sydney Metro (attached at **Appendix M**). The modelling is to estimate the induced stress changes in the permanent lining and the resulting displacements of the large-span cavern at Victoria Cross station, as the result of basement excavation and the final building loading from the proposed development.

The proposed bulk excavation level for the basement is at RL63.6m, relative to Australian Height Datum (AHD). This requires an excavation to the depths of approximately 16m to 17m above the crown of the station cavern.

Numerical analysis was undertaken using the Phase2 computer program by Rocscience. The input parameters, model sequence and results are discussed in the report.

Based on the results of the numerical modelling, the proposed development is likely to result in very minor displacements within the station cavern. Due to the heave in rock following the removal of overburden over the basement footprint, the minor displacements are upwards to the west towards the basement.

The predicated maximum horizontal and vertical cavern movements of approximately 1 mm. These movements are well below the displacement limit of 10mm for the metro cast in-situ cavern lining, as required by the '*Development Near Rail Tunnels Standards*' prepared by TfNSW and the *Sydney Metro Underground Corridor Protection Guideline*.

Across all stages, the maximum induced principal stresses in the cavern lining are predicted to be approximately 0.42 MPa in tension and 1.1 MPa in compression. These values are considered well below the tensile/compressive strengths of the reinforced concrete lining respectively.

Accordingly, the proposed excavation will not result in adverse impacts on the Sydney Metro infrastructure.

9.2.2. Electrolysis Assessment

Cathodic Protection Services has reviewed the possible exposure to stray traction current and prepared a Electrolysis and Stray Traction Current Report as required by Sydney Metro (attached at **Appendix N**). The report assess stray traction current and the impact of corrosion hazard to the proposed development and recommend remediation measures to reduce impact.

The assessment has reviewed the following elements

- On ground slab
- Footing
- Plies
- Rock and ground anchors
- Electrical earth system, water and fire services

The assessment concluded that when Victoria Cross Metro commences operation, stray traction current may be evident onsite. The proposed method of construction will prevent the entry of stray traction current into the structure, therefore minimise traction impact.

Corrosion of the water service or the electrical earth can be caused by stray traction current. Therefore, it is recommended to install an insulating fitting in the water service, or the use of a non-metallic water meter or PVC pipe to eliminate this hazard.

Subject to the implementation of the mitigation measure proposed above, the traction hazard can be eliminated.

9.3. CLARIFICATIONS WITH REGARDS TO NOISE ASSESSMENT REPORT PREPARED BY WILKINSON MURRY

The noise assessment indicated that there is potential for excessive vibration levels due to large rock breakers. If large hammers are used for construction, caution and trial testing should be conducted. The requirement for large hammers is to be determined by the Construction Noise and Vibration Management Plan, and the Plan should implement trial vibration monitoring period or exclusion of the use of large rock breakers if deemed unacceptable. Please refer to the Acoustic RtS Statement prepared by Wilkinson Murry and attached at **Appendix F**.

We can confirm that a Construction Noise and Vibration Management Plan for the site will be prepared by the successful contractor post approval and will be provided to Sydney Metro for review when it is available.

9.4. CONSULTATION WITH SYDNEY METRO

The project team has consulted with Metro multiple times post exhibition, to discuss the items Metro has raised in the submission letter. Consultation is documented below:

Date: 15 June 2020

Format: Microsoft Teams virtual meeting

Attendees: Peter Brogan, Glenn Ollerton, Peter Bourke (Metro Senior Manager Corridor Protection), Jiping Pan (Metro Technical Executive), Lauren McMahon (Metro Corridor Protection Co-ordinator)

Items discussed:

- Metro requirements and sourcing further information to enable accurate modelling.
- Metro also provided some insight into the outputs required on Electrolysis Report and that the work safety statement and monitoring obligations should be conditioned if applicable.
- Metro confirmed that no monitoring was required/allowed within the Metro tunnel itself. If monitoring was conditioned, this should be based on the subject site only.
- Metro confirmed that no further consultation is needed unless issues or further clarification is required.
- Resolutions: Metro to send further information on engineering modelling and College to complete reports requested.

Date: 16 June 2020

Email received from Metro on information for engineering modelling. Data and plan were forwarded to consultants to inform the Engineering Numerical Modelling Report and Electrolysis and Stray Traction Current Report.

Date: 28 July 2020

Engineering Numerical Modelling Report and Electrolysis and Stray Traction Current Report were forwarded to Metro for review. No response to date for further consultation or queries on the reports.

9.5. PROPOSED CONDITION

We would like to propose to include the preparation of Work Method and Safety Statement and Instrumentation and monitoring Plan as part of the Condition of Consent to be satisfied prior to the issue of Construction Certificate.

This will allow these plans to be prepared in conjunction with the final Construction Management Plan and to ensure all construction and monitor measures are aligned to ensure the protection of the rial corridor.

10. RESPONSE TO SYDNEY WATER REQUIREMENT

Table 2 Response to Sydney Water submission

Comments	Response
Water Servicing	
Potable water servicing should be available via a watermain on Miller Street. Amplifications, extensions and multiple connection points may be required.	A new connection to the 300mm watermain on Miller Street is proposed. Amplification is unlikely and will be confirmed by submitting a Section 73 Notice of Requirements application to Sydney Water post approval.
Special requirements such as firefighting requirements apply to this development. The proponent should provide details of this at the Section 73 application stage.	Fire fighting services are currently documented to connect to the 300mm watermain on Miller Street. There is no recycled watermain to connect fire services to.
Detailed requirements will be covered at the Section 73 Application phase.	Noted.
Wastewater Servicing	
Wastewater servicing should be available via a 225mm VC wastewater main (laid in 1908) within the property boundary. Amplifications may be required.	Noted. Connection to Sydney Waters Sewer system will be via the existing connection on Berry Street. Section 73 Notice of Requirements application will be submitted to Sydney Water post approval.
Requirements in the Attachments	
<u>Building Plan Approval</u> The approved plans must be submitted to the Sydney Water Tap in™ online service.	Noted. Building plans will be submitted to Sydney Water to ensure the development does not encroach on a Sydney Water asset. It is our understanding that there are no Sydney Water assets on site within the zone of development and a formal submission will be provided post approval.

Comments	Response
<u>Trade Wastewater Requirements</u> If this development is going to generate trade wastewater, the property owner must submit an application requesting permission to discharge trade wastewater to Sydney Water's sewerage system. You must obtain Sydney Water approval for this permit before any business activities can commence. It is illegal to discharge Trade Wastewater into the Sydney Water sewerage system without permission.	A dilution pit will be installed in line to receive discharge from the proposed Science Labs. A trade waste agreement will be entered with Sydney Water. The school has existing agreements, and this will need to be added.
<u>Backflow Prevention Requirements</u> All properties connected to Sydney Water's supply must install a testable Backflow Prevention Containment Device appropriate to the property's hazard rating. Property with a high or medium hazard rating must have the backflow prevention containment device tested annually. Properties identified as having a low hazard rating must install a non-testable device, as a minimum. Separate hydrant and sprinkler fire services on non-residential properties, require the installation of a testable double check detector assembly. The device is to be located at the boundary of the property.	All proposed connections will be documented with backflow prevention for potable water and fire services as required by Sydney Water. The will be located within the property boundary.
Water Efficiency Recommendations	WELS rated tapware and sanitary fixtures will be specified on plans at detailed design stage.
Contingency Plan Recommendation	Currently is it not proposed to store water on site for domestic use within the building. There are several connections along McLaren Street including a 50mm connection to 25 McLaren Street that could be utilised if there was a prolonged outage along Miller Street.

11. RESPONSE TO PROPOSED CONDITIONS OF CONSENT

North Sydney Council and TfNSW recommended conditions of consent be included as part of the determination of this application. These are documented in the table below together with a summary of the Applicant's position on each of these conditions:

Table 3 Recommended Conditions of Consent - Agencies

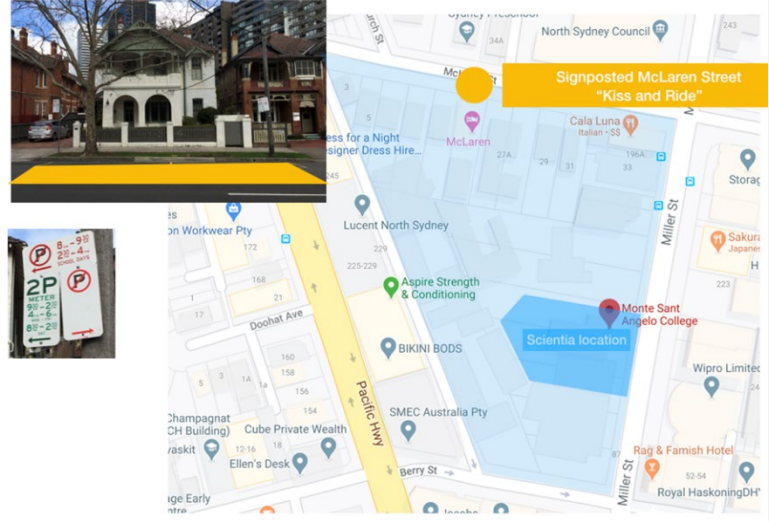
Agency	Recommended Condition	Applicant Response
North Sydney Council	<i>It is recommended that the proponent be required to prepare a Construction Management Plan for approval by the North Sydney Traffic Committee, prior to the issue of the Construction Certificate. Any use of Council property shall require appropriate separate permits/approvals.</i> <i>Further, all aspects of the carpark must ensure compliance with Australian Standards AS2890. I Off-street parking.</i> <i>Noise/Acoustic privacy - Noise and acoustic privacy from the use of site must demonstrate compliance with Section 3.2.5 NSDCP 2013 together with all other relevant noise criteria. Hours of use should be detailed as part of any approval.</i>	A draft CPTMP has been prepared by Cornerstone and is attached at Appendix G. This draft CPTMP will be finalised post approval and prior to the issue of construction certificate and to be submitted to North Sydney Council Traffic Committee for approval. Noted. The internal configuration of the car park has been designed in accordance with AS289 and relevant condition of consent for car parking confirmation. The project specific noise trigger levels as detailed in the Acoustic Report prepared by Wilkinson Murry are derived from the EPA'S <i>Noise Policy for Industry (2017)</i> and are lower than the noise levels detailed in NSDCP 2013. Therefore, the assessment criteria are more stringent than DCP requirement and compliance with site specific criteria will also result in compliance with the Council noise criteria. The College does not propose to amend the current hours of operation, including community use post-construction of the new building. The current and post construction operation usage are detailed in the Monte Sport Facility Plan 2020-2023 attached at Appendix J. Therefore, it is unnecessary to impose hour of operation for the College as there are no change to current operation hour.

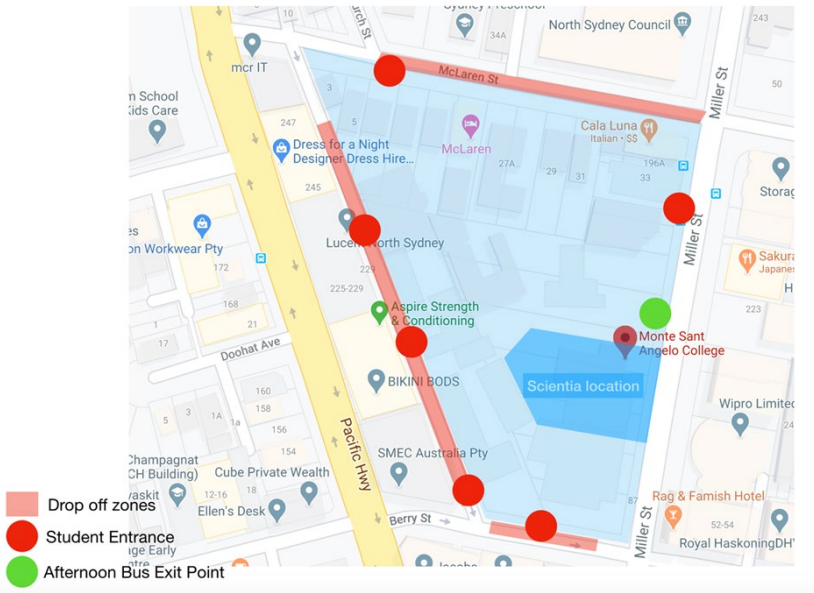
Agency	Recommended Condition	Applicant Response
	<i>Reflectivity of materials - All building materials, including the large expanses of glazing, should demonstrate that reflectivity will meet relevant standards and comply with the provisions of Section 3.2.6 NSDCP 2013.</i> <i>Illumination - The light spillage report must demonstrate that light will not result in adverse impacts to surrounding residential properties in accordance with the provisions of Section 3.2.7 NSDCP 2013. Provision P3 of Section 3.2.7 NSDCP 2013 prevents illumination of rooftop levels beyond 10pm daily.</i>	Section 11 of the Urban Design RtS Report (Appendix B) provides detailed reflectivity assessment, including solid to void ratio in accordance with Section 3.2.6 of NSDCP 2013. In summary: The proposed building will be largely shield by the existing mature street trees on the Miller Street, which will reduce glare to pedestrians and motorists. On the eastern elevation, the glazing area represents 47% of the total facade surface, and on the northern elevation the glazing area represents 49% of the total facade surface. Accordingly, majority of the building façade is not glazed. Additionally, the glazing is recessed behind a 1m/ 0.75m deep facade screen on the upper levels on all elevations, and recessed 1m behind the stone cladding on Level 2. There is also continuous planting along the Level 3 eastern facade, which will further shield the glazing. The currently selected matt anodized colour for the facade screen has a Light Reflectance Value [LRV] of 6%. The reflected solar glare from the other facade materials - stone, brick, concrete, etc, is negligible and hence will not cause any adverse solar glare effects. Accordingly, the proposal will not cause adverse solar glare to pedestrians and motorists in the surrounding area, or to occupants of neighbouring buildings, and is compliant with the DCP controls. Section 3.5 of the updated Lighting Strategy attached at Appendix K contain assessment of Section 3.2.7 NSDCP 2013. In summary: Lighting calculation will be carried out to demonstrate the compliance to AS4282.

Agency	Recommended Condition	Applicant Response
	<i>Visual privacy - Privacy to and from surrounding properties should be carefully and incorporated into the design where relevant, in accordance with Section 2.3.11 NSDCP 2013.</i>	Luminaires on the rooftop and/or podium will be controlled by timer to ensure illumination shall not exceed 10pm on any day. In addition, a local lighting control switches will be installed in the nearest electrical switchboard to override the system. The new building is not located adjacent to any residential dwellings. The new building is surrounded by College building to the north, south and west. Directly to the east, on the eastern side of Miller Street are commercial buildings and a service apartment building (Quest Apartments). It is important to note that the Quest serviced apartment are separated from the site by Miller Street which is approximately 14m wide, which creates sufficient separation distance between the proposed building and the serviced apartment. Section 12 of the Urban Design RtS Report (refer to Appendix B) assess the proposal in accordance with Section 2.3.11 NSDCP 2013. In summary: The proposed Scientia building facade along Miller Street is set back 6m from the property boundary. The residences on the eastern side of Miller Street also have a deep setback from their boundary. The setback and sufficient road width create extensive physical separation between the buildings, and limits overlooking. Additionally, the existing street trees and the proposed two street trees along Miller Street further scenes the building from other developments. The rooftop terrace and science garden learning areas are screened by closely spaced aluminium battens on the facade, providing privacy

Agency	Recommended Condition	Applicant Response
		for the students as well as residences located on the eastern side of Miller Street. Accordingly, the proposal will not create adverse privacy impact to nearby developments.
	<i>Entrances and exits - Entrances and exits should be designed to reduce conflict between pedestrians and cars, in accordance with Section 3.3.8 NSDCP 2013.</i>	The revised scheme incorporates a new pedestrian entry gate located north of the car park entry along Miller Street, providing a pedestrian site entry and an accessible afterhours entry into the new building. As a result, there is now no conflict between vehicles and pedestrians. Please refer to the updated architectural plan attached at Appendix A.
	<i>Landscaping - Landscaping opportunities across the site should be maximised. Existing landscaping should be retained on site where possible. The proposal must ensure that there is no impact to Council's street trees.</i>	As discussed in Section 4, the proposal has maximised landscape opportunities for the proposal and the revised landscape scheme includes five new trees along the street frontage. The 14 trees that are been removed are of low rendition value and landscape significance as assessed by the Arboricultural Impact Assessment 2020, therefore they are suitable for removal. The proposal will not have an impact to Council street trees. The two new street trees proposed (<i>Platanus × acerifolia</i>) will integrate with the existing landscape character along Miller Street.
	<i>No increase in number of students -The EIS outlines that there is no increase in student numbers. Conditions of consent should be imposed.</i>	The proposal does not relate to student number increase, therefore a condition on student number is unnecessary. As detailed in the <i>Department Circular Regulating the Expansion of Schools</i>, non-government schools can experience fluctuations in staff and student numbers for various reasons. Therefore, <i>'if the consent authority considers it necessary to impose a condition limiting student</i>

Agency	Recommended Condition	Applicant Response
		<i>and staff numbers at the school site, <u>the numerical cap imposed should be for a valid planning reason supported by a strong evidence base.</u></i> Given the proposal does not propose to increase student capacity there is no reason for the inclusion of a numerical cap.
	<i>Encroachments - No encroachments should be supported over Council's land.</i>	Noted.
	<i>Plan of management -The use of the site should be subject to an appropriate Plan of Management.</i>	Operational Management Plan (Appendix CC) has been prepared and submitted as part of the EIS Package.
	<i>Plan to manage student drop off and collection - The applicant should be required to prepare a Plan to appropriately manage student drop off and collection, given the impacts this currently has on the surrounding street network.</i>	As a Year 7-12 campus, the college do not have the same requirements as a school with Primary aged students who requires high volumes of drop off and pick up traffic. College students are able to travel to and from school independently, and where possible they are willingly utilising public transport options. This is also reflected in the travel mode survey in the Traffic Impact Assessment submitted as part of the EIS. In accordance to the travel mode survey (pre-Covid restrictions) 79.8% of the student population utilise public transport or walk to school each day and 94.6% utilise public transport or walk home each day. These high levels of public transport use by students are expected to remain the same having little or no impact on current student drop off and pick up routines. This proposal will not increase student numbers and therefore there is no increase to expected pick up and drop off numbers.

Agency	Recommended Condition	Applicant Response
		The construction zone is located on Miller Street. The existing Kiss and Ride zone is located on McLaren Street, which will be retained and is unaffected by the construction activities. Monte Existing Kiss and Ride Location (two allocated car spaces)  The College currently rosters staff to supervise students leaving the campus at pick up locations and this will continue as part of the College management strategy and student safety procedure. Additionally, the College has several existing campus entry points and drop off locations, which will not be impacted during construction and can continue to operate under supervision.

Agency	Recommended Condition	Applicant Response
		Existing entry and drop off points to be utilised during construction  Accordingly, given there is no increase in student capacity, no change is proposed to the existing Kiss and Ride zone, and the management measures for drop off and pick up are already included in the College Plan of Management, there is no need to prepare a separate Plan to manage student drop off and collection. The Applicant requests that this condition should not be.
Transport for NSW	<i>Prior to the issue of any construction certificate or any preparatory, demolition or excavation works, whichever is the earlier, the applicant shall:</i> <i>Prepare a final Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with the Sydney Coordination Office</i>	A draft CPTMP has been prepared by Cornerstone and is attached at Appendix G. This draft CPTMP will be finalised post approval and prior to the issue of construction certificate and to be submitted to North Sydney Council Traffic Committee (which comprise TfNSW and NSW Police) for approval.

Agency	Recommended Condition	Applicant Response
	<i>within TfNSW. The CPTMP needs to specify matters including, but not limited to, the following: A description of the development;</i> ▪ <i>Location of any proposed work zone(s);</i> ▪ <i>Details of crane arrangements including location of any crane(s) and crane movement plan;</i> ▪ <i>Haulage routes;</i> ▪ <i>Proposed construction hours;</i> ▪ <i>Predicted number of construction vehicle movements, detail of vehicle types and demonstrate that proposed construction vehicle movements can work within the context of road changes in the surrounding area, noting that construction vehicle movements are to be minimised during peak periods;</i> ▪ <i>Construction vehicle access arrangements;</i> ▪ <i>Construction program and construction methodology, including any construction staging;</i> ▪ <i>A detailed plan of any proposed hoarding and/or scaffolding;</i> ▪ <i>Measures to avoid construction worker vehicle movements within the precinct;</i> ▪ <i>Consultation strategy for liaison with surrounding stakeholders, including other developments under construction and Sydney Metro City and Southwest;</i> ▪ <i>Identify any potential impacts to general traffic, cyclists, pedestrians, bus services and any light rail within the vicinity of the site from construction vehicles during the construction of the</i>	

Agency	Recommended Condition	Applicant Response
	<i>proposed works. Proposed mitigation measures should be clearly identified and included in the CPTMP; and</i> ▪ <i>Identify the cumulative construction activities of the development and other projects within or around the development site, including the Sydney Metro City and Southwest and private development. Proposed measures to minimise the cumulative impacts on the surrounding road network should be clearly identified and included in the CPTMP;</i>	
	<i>Submit a copy of the final plan to Sydney Coordination Office within TfNSW for endorsement; and</i>	Noted
	<i>Provide the builder's direct contact number to small businesses adjoining or impacted by the construction work and the Transport Management Centre and Sydney Coordination Office within Transport for NSW to resolve issues relating to traffic, public transport, freight, servicing and pedestrian access during construction in real time. The applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction.</i>	Noted

12. CONCLUSION

This response has considered the submissions received from DPIE, North Sydney Council, agencies and the 2 community submissions during the exhibition of the EIS for the proposed Sports and Science Building at Monte Sant Angelo Mercy College, North Sydney.

Following consideration of the authority and public submissions, the applicant has:

- Consulted with North Sydney Council and Sydney Metro;
- Provided revised architectural and landscape plan responding to built form and heritage wall concerns;
- Provided updated technical information where requested; and
- Resolved to accept the majority of requested conditions.

The Proposal in its revised form is considered entirely appropriate for the location and should be supported by the Minister for the following reasons. The Proposal:

- retains the exiting portion of heritage wall along Miller Street as per North Sydney Council recommendation;
- reduce the height of the upper level screen façade and rooftop court fence by 750mm;
- incorporated new street trees and additional landscaping along Miller Street frontage to enhance landscape setting and screens the building from the frontage;
- does not have any unacceptable off-site impacts on adjoining or surrounding properties, the Metro Infrastructure or the public domain, in terms of traffic, amenity, noise and environmental impacts.
- ensures adequate acoustic and traffic management measures can be incorporated to address any construction related concerns.
- is a contextually fit built form within the Monte campus and responding to the heritage significance and the streetscape.
- Significantly improves the landscaping and open space area of Monte with upgraded recreational and learning areas and landscape improvements along the street frontage.
- will result in an improved educational environment for Monte through:
 - providing additional open space for students;
 - enabling an excellent dual academic programme;
 - supporting a fulfilling and diverse extra-curricular experience; and
 - providing efficient and environmentally sustainable facilities.

Considering the above and the limited issues raised by the community and Government Agencies, it is recommended that the Department approve this SSD Application, subject to appropriate conditions.

DISCLAIMER

This report is dated 12 August 2020 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Monte Sant Angelo Mercy College (**Instructing Party**) for the purpose of RESPONSE TO SUBMISSION Report (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purpose to rely on this report for any purpose other than the Purpose, and to any other person which relies or purpose to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A

UPDATED ARCHITECTURAL PLANS

APPENDIX B

URBAN DESIGN RESPONSE TO SUBMISSION REPORT

APPENDIX C

UPDATED LANDSCAPE PLANS

APPENDIX D

LANDSCAPE RESPONSE TO SUBMISSION REPORT

APPENDIX E

HERITAGE RESPONSE TO SUBMISSION STATEMENT

APPENDIX F

ACOUSTIC RESPONSE TO SUBMISSION STATEMENT

APPENDIX G

UPDATED CONSTRUCTION TRAFFIC MANAGEMENT PLAN

APPENDIX H

TRAFFIC RESPONSE TO SUBMISSION STATEMENT

APPENDIX I

MONTE FACILITY USAGE PROFILE

APPENDIX J

MONTE SPORT FACILITIES MANAGEMENT 2021-2023

APPENDIX K

UPDATED LIGHTING STRATEGY

APPENDIX L

UPDATED SURVEY

APPENDIX M

METRO INFRASTRUCTURE NUMERICAL MODELLING

APPENDIX N

ELECTROLYSIS AND STRAY TRACTION CURRENT REPORT

APPENDIX O

NORTH SYDNEY COUNCIL POST EXHIBITION CONSULTATION LETTER

