

Loreto Normanhurst Redevelopment (Concept Proposal and Stage 1)

State Significant Development Assessment
SSD 8996

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Cover image: Perspective looking east towards the Boarding Accommodation building across the existing oval / sports field (Source: Applicant's Supplementary Response to Submissions 2021)

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Glossary

Abbreviation	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
AIA	Arboricultural Impact Assessment
Applicant	Loreto Normanhurst Limited
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
CIV	Capital Investment Value
CNVMP	Construction Noise and Vibration Management Plan
Consent	Development Consent
Contributions Plan	Hornsby Shire Council Section 7.12 Development Contribution Plan 2014 – 2024
CTMP	Construction Traffic Management Plan
Council	Hornsby Shire Council
DA	Development application
Department	Department of Planning, Industry and Environment
Education SEPP	State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017
EESG	Environment, Energy and Science Group at the Department
ELC	Early Learning Centre
ELC Approval	Development consent approved on 18 December 2019, by the Sydney North Planning Panel (DA/1227/2018) for the construction of an ELC on the site.
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
FSR	Floor Space Ratio
GFA	Gross Floor Area

Greys Report	Independent traffic report prepared by Greys Consulting on behalf of Mount Pleasant Avenue residents, dated 15 March 2021
GTP	Green Travel Plan
HDCLP	Hornsby Development Control Plan 2013
HOB	Height of Building
Heritage NSW	Heritage Division of the Department of Premier and Cabinet
HIS	Heritage Impact Statement
HLEP	Hornsby Local Environmental Plan 2013
ICNG	Interim Construction Noise Guideline
LGA	Local Government Area
Minister	Minister for Planning and Public Spaces
NIA	Noise Impact Assessment
OTMP	Operational Traffic Management Plan
PCT	Plant Community Types
PMF	Probable Maximum Flood
PNTL	Project Noise Trigger Levels
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
RAP	Remediation Action Plan
RtS	Response to Submissions
SEARs	Planning Secretary's Environmental Assessment Requirements
BGF	Blue Gum High Forest
Secretary	Planning Secretary of the Department of Planning, Industry and Environment
SEPP	State Environmental Planning Policy
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SRtS	Supplementary Response to Submissions
SSD	State Significant Development
STIF	Sydney Turpentine Ironbark Forest
TfNSW	Transport for New South Wales
TAR	Transport Assessment Report
Wahroonga Approval	Concept Plan approved on 31 March 2010 by the Minister for Planning (MP 07_0166) for the Wahroonga Estate, mixed use development.

Executive Summary

This report provides an assessment of a State significant development (SSD) application (SSD 8996) lodged by Ethos Urban Pty Ltd on behalf of Loreto Normanhurst Limited (the Applicant) for the redevelopment of Loreto Normanhurst independent girls school in Normanhurst.

The proposal is a Concept development application for the redevelopment of Loreto Normanhurst, comprising a Concept Proposal for new building envelopes, car parking, internal roads, landscaping and staged increase of 850 students. Consent is also sought for concurrent Stage 1 works comprising the construction and operation of a Boarding Accommodation building, car parking, pick-up/drop-off facilities, through site road, landscaping works and an additional 500 students. Insufficient existing on-site car parking and drop-off/pick-up facilities has previously prevented an increase in the student population.

The proposal is SSD under clause 15(2) of Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011, as it is development for the purpose of alterations or additions to an existing school that has a capital investment value (CIV) of more than \$20 million.

Assessment summary and conclusions

The Department of Planning, Industry and Environment (the Department) considered the merits of the proposal in accordance with the relevant matters under section 4.15(1) and the objects of the *Environmental Planning and Assessment Act 1979* (EP&A Act), principles of ecologically sustainable development, issues raised in submissions and the Applicant's response to these.

The Department concludes that the proposal is in the public interest and recommends that the application be approved, subject to conditions. The application is referred to the Independent Planning Commission for determination as more than 50 public submissions were received by way of objection.

The Department identified traffic and parking, built form and heritage, tree removal and replacement, landscaping, and operational and construction noise impacts as the key issues for assessment. The Department's assessment concluded that the:

- on-site pick-up/drop-off facilities provided as part of Stage 1 works are sufficient to accommodate predicted vehicle queuing demand on-site and address existing vehicle queuing overflow onto Osborn Road, both for Stage 1 and the future stages of the Concept Proposal.
- proposed on-site staff car parking would address the existing staff parking shortfall and accommodate the proposed staff increase in the long term.
- road network can accommodate the Stage 1 development, subject to conditions requiring provision of all internal pick-up/drop-off spaces prior to the first increase in students and implementation of the Green Travel Plan and the Operational Traffic Management Plan.
- installation of time restricted "No Right Turn" signage at the Mount Pleasant Avenue / Pennant Hills Road intersection to prevent vehicles turning across Pennant Hills Road will improve the safety and performance of this nearby intersection in the future.
- future Development Applications would need to address the anticipated traffic and parking impacts of future development stages with proposed increases in student population.

- bulk and scale of the proposed building envelopes under the Concept Proposal would not result in unacceptable visual impacts in the future, subject to a reduction in the height of the proposed building envelope for the senior school (Envelope 2).
- new building envelopes of the Concept Proposal and the detailed design of new buildings and car parks of Stage 1 would not adversely impact on the heritage significance of the site.
- bulk and scale of the Boarding Accommodation building is acceptable and would not cause unreasonable visual impacts on the surrounding environment.
- buildings and works associated with Stage 1 works would not have adverse amenity impacts of overshadowing, overlooking, light spill or operational impacts.
- Boarding Accommodation building provides an appropriate standard of amenity for future occupants.
- majority of the Stage 1 tree removal is considered acceptable and unavoidable.
- opportunities exist for retention of additional trees, which is recommended via amendments to the design of the Boarding Accommodation building and Osborn Road carpark.
- overall Concept Proposal landscape masterplan would result in 42% tree canopy coverage to the site and is considered acceptable.
- landscaping works in Stage 1 would provide a high standard of design and replacement planting to compensate for the loss of trees.
- operational and construction noise during Stage 1 works would not have significant amenity impacts, subject to implementation of mitigation and management measures.

The Department is satisfied that the impacts of the proposal and the issues raised in the submissions have been addressed in the Applicant's Environmental Impact Statement (EIS), Response to Submissions (RtS) and Supplementary Response to Submissions (SRtS). Conditions of consent are recommended to ensure that the identified impacts are managed appropriately.

The proposal

The Proposal comprises a Concept development application involving the redevelopment of Loreto Normanhurst comprising:

- A Concept Proposal for:
 - 10 building envelopes for new or extended buildings.
 - a staged increase of 850 primary and secondary school students and 71 staff.
 - up to 236 additional car parking spaces, five pick-up/drop-off facilities, a through site road and bicycle parking.
 - establishment of a landscape masterplan.
- Stage 1 works involving:
 - demolition of buildings, structures, removal of 105 trees and bulk earthworks.
 - construction of a two to five storey Boarding Accommodation building for 216 students and staff with associated landscaping works.
 - construction of two single storey car parks with playing courts at roof level and alterations to existing parking areas providing for an overall increase of 123 on-site car parking spaces.
 - provision of a through site road, pick-up/drop-off facilities, bicycle parking and landscaping.
 - a staged increase in 500 students to align with the staged delivery of car parking and pick-up/drop-off infrastructure.

The Concept Proposal has a CIV of approximately \$130 million and is predicted to generate 555 future construction jobs and 71 future operational jobs. Stage 1 has a CIV of approximately \$40 million and is predicted to generate 184 construction jobs and 36 operational jobs.

The site

Loreto Normanhurst is located at 4, 6, 14, 16, 30-62, 24-28 Mount Pleasant Avenue, 89 and 91-93 Pennant Hills Road, Normanhurst in the Hornsby Shire local government area. The site currently includes buildings accommodating the Loreto Normanhurst school and adjoining residential property associated with the school. The school currently accommodates 1100 students with an approved capacity of 1150 students.

Engagement

The EIS was publicly exhibited from 28 June 2018 to 25 July 2018 (28 days). The EIS was re-exhibited between 9 December 2019 and 31 January 2020 due to an administrative error resulting in not all relevant surrounding landowners and occupiers being originally notified. The Department received a total of 72 submissions during both exhibition periods, comprising eight from public authorities (including comments from Hornsby Shire Council (Council)), 62 individual public submissions (including 61 objections), and two submissions from special interest groups (both providing comments).

Key issues raised in the submissions related to traffic and parking impacts associated with the increase in student population, built form impacts, tree removal, heritage impacts, operational and construction noise, overshadowing, overlooking, light spill, noise and adequacy of public consultation.

On 15 February 2021, the Applicant submitted an RtS responding to the issues raised in the submissions and included amendments to the proposal including:

- expanding the site boundary to include 4 Mount Pleasant Avenue.
- additional demolition works and amendments to the Concept Proposal building envelopes.
- introduction of a through site link road, increased on-site car parking facilities, improvements to the pick-up/drop-off spaces, staging of infrastructure works to align with student population increases and amendments to the design of the Boarding Accommodation building in Stage 1.

The RtS and amended proposal were publicly exhibited from 23 February to 8 March 2021 (15 days). The Department received a total of 90 submissions, comprising seven from public authorities, and additionally a submission from Council and 82 individual public submissions (including 78 objections). Overall 139 objections have been received from 144 submitters during the exhibition periods.

On 20 May 2021, the Applicant submitted a SRtS responding to the issues raised in the submissions, including updated traffic modelling, clarified traffic management measures, and inclusion of a bus bay area. The Department received five submissions in response to the SRtS, comprising three from public authorities (including comments from Council), and two objections from the public.

The Department engaged an independent consultant, Bitzios Consulting (Bitzios), to undertake a peer review of the Applicant's traffic assessment, following the EIS exhibition. The Applicant has provided additional information in response to concerns raised by Bitzios throughout the assessment of the proposal. Bitzios reviewed the final SRtS from the Applicant and did not raise any concerns with the proposal subject to conditions.

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1 Introduction

1.1 Introduction

- 1.1.1 This report provides an assessment of a State significant development (SSD) application (SSD 8996) for the staged redevelopment of Loreto Normanhurst located at 4, 6, 14, 16, 30-62, 24-28 Mount Pleasant Avenue, 89 and 91-93 Pennant Hills Road, Normanhurst.
- 1.1.2 The proposal is a Concept development application comprising:
- Concept Proposal: 10 building envelopes for school buildings and facilities, an increase in student numbers by 850 students, associated car parking and landscape masterplan.
 - Stage 1 of the development: staged construction and operation of a two to five storey Boarding Accommodation building for 216 students and staff, new and alterations to existing car parking areas, creation of a through site link road, provision of pick-up/drop-off facilities, hard and soft landscaping, and a staged increase of 500 students.
- 1.1.3 The application has been lodged by Loreto Normanhurst Limited (the Applicant).

1.2 Site description

Loreto Normanhurst

- 1.2.1 Loreto Normanhurst is an independent girls school located in Normanhurst, approximately 17 kilometres (km) north-west of Sydney CBD and 400 metres (m) south of Normanhurst village centre and train station (**Figure 1**). The site is located within Hornsby Shire local government area (LGA).

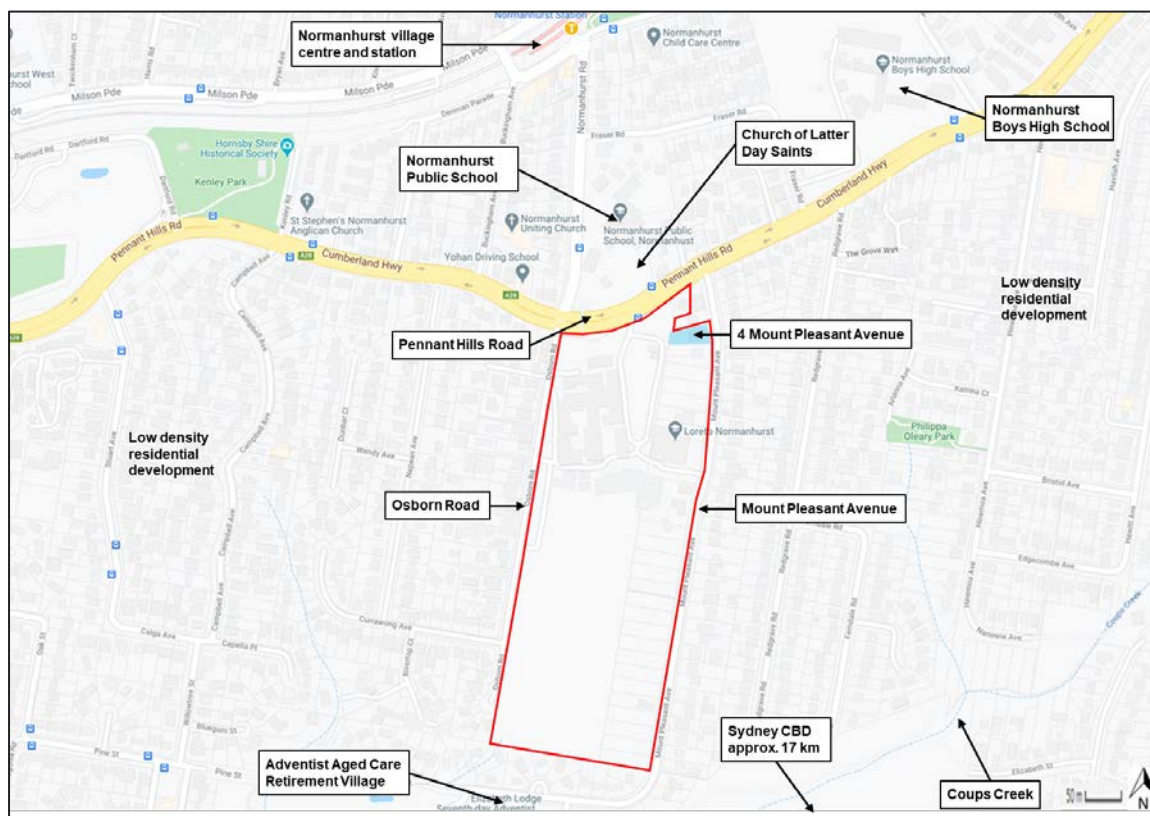


Figure 1 | The site location (outlined in red) (Base source: Google Maps 2021)

- 1.2.2 The site is irregular in shape, covers an area of approximately 13.17 hectares (ha) and is bounded by Pennant Hills Road to the north, Mount Pleasant Avenue to the east, Osborn Road to the west and residential properties to the south.
- 1.2.3 When the EIS was lodged, the description of the site included 6, 14, 16, 30-62, 24-28 Mount Pleasant Avenue and 89 and 91-93 Pennant Hills Road. The Application was amended under the RtS to include 4 Mount Pleasant Avenue as part of the site.
- 1.2.4 The site is legally described as Lot 5 DP 1218765, Lot 16 DP 6612, Lots 20-23 and 25-36 DP 6612, Lot 1 DP 34834, Lot 1 DP 114580, Lot 3 DP 1217496, Lot 1 - Lot 3 DP 1218765, Lot B DP327538, Lot 1 DP 809066, Lot C DP 366271, Lot D DP 366271, Lot 4 DP1218765 and Lot 1 DP136156.
- 1.2.5 Loreto Normanhurst was established in 1897 as a Catholic convent and school. Since its establishment, the school has expanded to include adjoining former residential lots on Mount Pleasant Avenue together with the incremental addition of new buildings. The campus now comprises 17 main school buildings, which are located at the northern end of the site and accommodate primary and secondary schools (Years 5 to 12), boarding facilities for students and ancillary uses. The main building and other school structures and recreation spaces are shown at **Figure 2**.



Figure 2 | Aerial view of the site and its key features, buildings and access points (Base source: Nearmap 2020)

Existing buildings

- 1.2.6 The school buildings on the site are generally between one and four storeys in height, a variety of ages, architectural styles and are generally of brick / masonry construction.
- 1.2.7 Details of buildings relevant to the Concept Proposal and Stage 1 works are summarised at **Table 1** and shown at **Figure 2** to **Figure 6**.

Table 1 | Description of existing buildings relevant to the application

Building		Use	Description
A	Birrane Wing (circa [c.]1982)	Administration and classrooms	<ul style="list-style-type: none"> Two storey brick building attached to the cloister on the western side of the Holy Angels Wing (B) and orientated in an east-west direction.
B	Holy Angel Wing (c.1921)	Administration and classrooms	<ul style="list-style-type: none"> Two storey brick building with pitched terracotta tiled roof, located to the west of the convent building (D). The majority of this building is concealed by later buildings and/or additions.
D	Convent Building (c.1897)	Boarding accommodation	<ul style="list-style-type: none"> Three storey brick building in the Federation Gothic Style, including brickwork, masonry, buttresses, pointed arched and quatrefoil windows, timber rafters and slate roof with terracotta ridge capping.
E	Givendale Building (c.1928)	Boarding accommodation and loading dock	<ul style="list-style-type: none"> Two to three storey 'L' shaped building including brickwork, slate roof and Gothic style windows. Backs onto, and encloses, the servicing yard. Two to three storey 1960s additions connecting the Givendale Building to the Convent (D) and Mary Ward (K) Buildings.
F	Mulhall / Frizelle Wings	Classrooms and loading dock	<ul style="list-style-type: none"> Two to three storey post World War II buildings enclosing the Main Quadrangle (Main Quad in Figure 2). The Frizelle Wing backs onto the servicing yard.
G	Deirdre Rofe Centre	Classrooms	<ul style="list-style-type: none"> Two to three storey brick building on the western side of the Main Quadrangle.
I	Resource Centre (c.1970)	Resource centre and theatres	<ul style="list-style-type: none"> Three to four storey brick and masonry building with gabled roof.
J	Mary Ward Building (c.1958)	Boarding accommodation and classrooms	<ul style="list-style-type: none"> Three to four storey brick building with a graduated brick base that steps with the fall of the land to the south.
K	Mary Ward Health Centre (1960-70s)	Health and wellbeing centre	<ul style="list-style-type: none"> A small free standing single storey face brick building with a hipped and gabled roof clad in terracotta tiles.
L	Teres Ball Centre (c.1930s / 1980s)	Primary / secondary school classrooms	<ul style="list-style-type: none"> Single storey building built around a courtyard and incorporating an interwar bungalow (eastern wing).
M	Veronica Reid portables	Classrooms	<ul style="list-style-type: none"> Four single storey portable classrooms set into the embankment on the northern side of the oval.
N	Gymnasium (c.1970 & 1990)	Gymnasium and indoor courts	<ul style="list-style-type: none"> Two to three storey predominately brick building (recently upgraded) set into the 6m embankment between the northern and central parts of the site.
P	Loreto Community House (c.1916 & 1990)	Two dwellings (previously used by Loreto Sisters)	<ul style="list-style-type: none"> Two buildings comprising a 1916 single storey Federation bungalow and 1990 single storey 'L' shaped brick building with gabled roof.

Q	Uniform Shop	Utilities / uniform shop	<ul style="list-style-type: none"> A single storey free-standing building containing utilities and the uniform shop.
S	4 Mount Pleasant Avenue	Vacant dwelling	<ul style="list-style-type: none"> A single storey Federation period dwelling house, landscaping and fencing.

1.2.8 Other structures relevant to the proposal include the three multi-purpose courts attached to the northern side of the Health Centre, single tennis court and the maintenance sheds adjacent to Pennant Hills Road.

1.2.9 The southern section of the site beyond the buildings accommodates a large oval. Remnant bushland is south of the oval and includes a bushland cemetery (marked 'T' in **Figure 2**) established in the 1890s, associated with the former use of the site as a convent.

1.2.10 An Early Learning Centre (ELC) is proposed to be located at the north-eastern side of the site (marked as 'R' in **Figure 2**) and is approved under a local development application (see **Section 2.6**).



Figure 3 | View from the Pennant Hills Road driveway towards the Convent Building (left) and tennis court and maintenance shed (right) (Source: DPIE 2020)



Figure 4 | View from Osborn Road towards the pick-up/drop-off entrance (left) and the pick-up/drop-off area (right) (Source: DPIE 2020)



Figure 5 | View from the sports fields towards the Veronica Reid portables (left) and the Uniform Shop (right) (Source: DPIE 2020)



Figure 6 | View across the sports field towards the bushland at the southern end of the site (left) and the bushland cemetery (right) (Source: DPIE 2020)

Heritage

- 1.2.11 The site is listed as a local heritage item under the Hornsby Local Environmental Plan 2013 (HLEP), referred to as 'Loreto Convent group, grounds, gates and cemetery'. However, not all of the school site is included in the listing, which excludes many of the allotments fronting Mount Pleasant Avenue. Buildings and spaces excluded include the Health Centre and multi-purpose courts, future ELC building, Aquatic Centre, Loreto Community House, Uniform Shop and eastern part of the sports fields (**Figure 7**). The site is also identified as having local archaeological significance under the HLEP for the bushland cemetery (A60 in **Figure 7**).
- 1.2.12 The site has local historic, aesthetic and social significance as a representative example of a Catholic school and former convent (associated with the Institute of the Blessed Virgin Mary) and due to the presence of a number of religious institutional buildings set within a mature landscape setting. The 1987 Convent building, Holy Angels Wing, Givendale building, Chapel (building C in **Figure 2**) and bushland cemetery are of particular significance.
- 1.2.13 The site does not contain any heritage items listed on the State Heritage Register (SHR). The Convent and bushland cemetery are listed on the National Trust of Australia's (non-statutory) Jubilee Register.

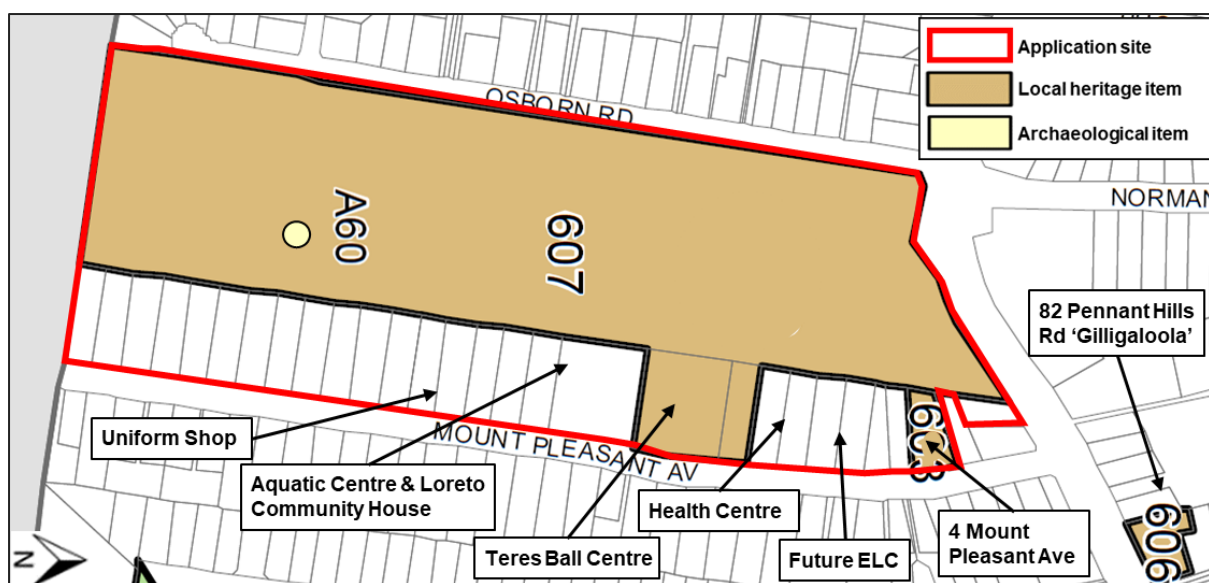


Figure 7 | HLEP Heritage Map identifying location of A60 and school buildings that are not identified as heritage items. (Base source: HLEP)

NOTE: The HLEP map shows an incorrect location of the bushland cemetery. The Department has overlayed the correct location of A60 in Figure 7 based on the Applicant's EIS.

Existing school operation

- 1.2.14 Loreto Normanhurst currently caters for Years 5 to 12, employs approximately 254 full time equivalent staff and has 1100 enrolled students (104 primary and 996 secondary students), 155 of which are student boarders residing in boarding accommodation within the Mary Ward, Givendale and Convent buildings. The school is subject to a maximum student enrolment cap of 1150 in accordance with development consent DA/1277/2004/C issued by Council.
- 1.2.15 The Applicant advises that the core school hours are between 8:20am and 3:15pm Monday to Friday. However, the campus remains open outside these hours for boarders (24 hours, seven days a week) and for an afterschool care program which operates Monday to Friday 3:15pm to 8pm.
- 1.2.16 Loreto Normanhurst also currently offers the use of its facilities to the local community, where such uses do not disrupt or conflict with the day to day operation of the school. A summary of existing community use of the school is provided at **Table 2**.

Table 2 | Existing community use of school facilities (Source: Applicant's RtS)

Facility / Space	Community Use	Hours / Frequency
Aquatic Centre	Swimming lessons	<ul style="list-style-type: none"> Monday, Wednesday and Friday: 5:30am to 7:00am and 3:30pm to 6:30pm. Tuesday and Thursday: 3:30pm to 8pm. Saturday: 5:30am to 7am and 1pm to 5pm.
Gymnasium	Basketball	<ul style="list-style-type: none"> Monday to Thursday: 5:30pm to 9:45pm (during the school term).
Campus grounds, sports fields and courts	Walking / running / play	<ul style="list-style-type: none"> Informal access for residents.

Access and parking

1.2.17 The site is accessed via six gated vehicle and pedestrian entry points, four along Osborn Road, one on Pennant Hills Road and one on Mount Pleasant Avenue. Separate and direct driveway access is provided to the Health Centre, Loreto Community House and No. 4 Mount Pleasant Avenue off Mount Pleasant Avenue (**Figure 8**).

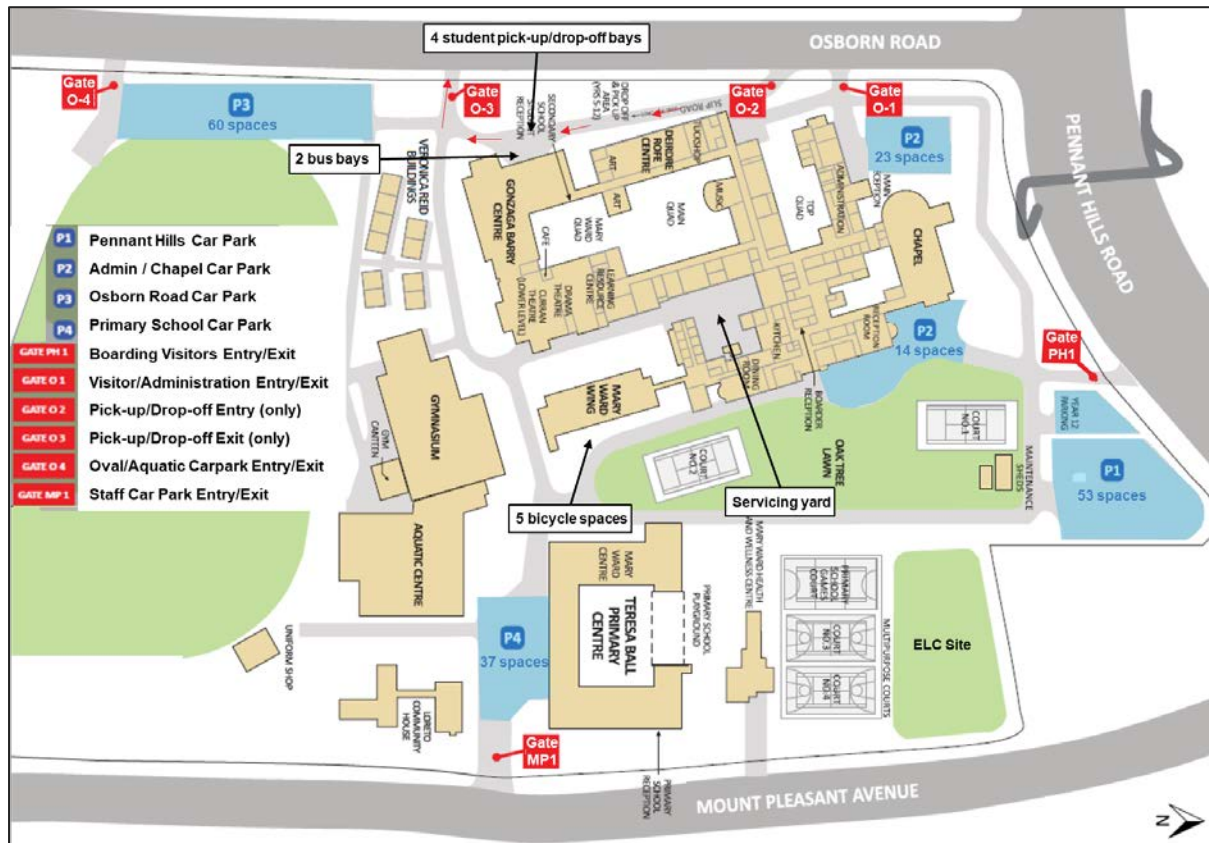


Figure 8 | Existing access, parking and servicing arrangements (Base source: Applicant's EIS 2019)

1.2.18 An on-site student pick-up/drop-off facility (four spaces) and two bus bays are co-located adjacent to the western side of the Gonzaga Barry building ('H' in **Figure 7**) and accessed via a one-way (south bound) slip lane off Osborn Road. The pick-up/drop-off facility has an on-site vehicle queuing capacity of 46.2m or approximately seven vehicles, including four pick-up/drop-off spaces and three vehicles queuing.

1.2.19 The site accommodates five bicycle parking spaces adjacent to the Mary Ward building.

1.2.20 The site contains four car parking areas providing for a total of 187 car spaces. Additionally, 10 car spaces have been approved under a separate DA. **Figure 8** shows the car parking distribution:

- 53 spaces within the P1 Pennant Hills carpark (including year 12 parking).
- 37 (23 and 14) spaces within the P2 Administration / Chapel carpark.
- 60 spaces within the P3 Osborn carpark.
- 37 spaces within the P4 Primary carpark.
- 10 spaces within the (future) Early Learning Centre (ELC) carpark.

1.2.21 A loading dock and vehicle servicing area is located behind the Frizelle Wing and Givendale building, with five bays for vehicles of various sizes including small school buses (**Figure 9**).



Figure 9 | Loading dock and servicing area (Source: DPIE 2020)

Topography, landscaping and bushland

1.2.22 The site is subject to significant level changes, with a fall of approximately 20m between its northern and southern boundaries. The site includes a number of ridgelines that result in the:

- northern part of the site being elevated above the level of Pennant Hills and Osborn Roads.
- eastern part of the site (adjacent to the Aquatic Centre and sports fields) being significantly lower than the level of Mount Pleasant Avenue.
- buildings in the northern part of the site being elevated above the sports fields in the south.

1.2.23 The school includes various landscaped, open spaces and play spaces including:

- three hard paved quadrangles enclosed by the secondary school buildings.
- formal lawns and gardens.
- two tennis courts on the eastern side of the Convent Building.
- grassed ovals / sports fields at the southern end of the site.
- a primary school quadrangle and play area.
- three multi-purpose courts attached to the Health Centre.
- indoor gymnasium and aquatic centre facilities.
- extensive landscaping adjacent to buildings and spaces throughout the site.

1.2.24 The southern section of the site beyond the main oval (**Figure 10**) contains remnant bushland comprising critically endangered plant communities, including:

- Sydney Turpentine Ironbark Forest (STIF) located at the southern portion of the site, including the bushland cemetery (**Figure 6**)
- Blue Gum High Forest (BGF) located at the northern end of the site and along the Osborn Road and Mount Pleasant Avenue frontages.



Figure 10 | Existing access, parking and servicing arrangements (Base source: Applicant's EIS 2019)

1.3 Surrounding context

- 1.3.1 The site is surrounded by low density residential dwellings to the east and west and beyond adjoining Osborn Road and Mount Pleasant Avenue. Residential dwellings adjoin the southern boundary of the site. The southern boundary of the site also forms the boundary between Ku-ring-gai LGA and Hornsby LGA. Beyond this is the Adventist Aged Care Retirement Village located within the Ku-ring-Gai LGA, and bushland including Coups Creek (**Figure 1**).
- 1.3.2 To the north on the opposite side of Pennant Hills Road is Normanhurst Public School and the Church of the Latter-Day Saints. Either side of these developments are low density residential dwellings. To the north-east is Normanhurst Boys High School (**Figure 1**).

Transport and access

- 1.3.3 Osborn Road and Mount Pleasant Avenue are local roads (single lane in each direction) running in a north-south direction. Both streets end in cul-de-sacs and include unrestricted on-street car parking.
- 1.3.4 Pennant Hills Road is a State road running generally in an east-west direction, with three lanes in each direction, with a central median and clearway restrictions on each side.
- 1.3.5 Osborn Road ends at the intersection with Pennant Hills Road, however the road continues north of Pennant Hills Road as Normanhurst Road. The Pennant Hills Road intersection with Osborn and Normanhurst Roads is signalised and includes an elevated pedestrian foot bridge that provides a north-south pedestrian link between Osborn Road and Normanhurst Road. The Pennant Hills Road intersection with Mount Pleasant Avenue is priority controlled and pedestrians are unable to cross Pennant Hills Road at this point. Right-turn vehicle movements onto Pennant Hills Road from Mount Pleasant Avenue is currently allowed.
- 1.3.6 Osborn Road and Pennant Hills Road include footpaths on both sides of their roadways. Mount Pleasant Avenue includes a continuous footpath on its eastern side, a footpath is provided on the western (school) side up until the northern edge of the ELC site.

- 1.3.7 The site has good access to public transport services being located within 400m of Normanhurst Railway Station (**Figure 1**) and three bus stops on Pennant Hills Road and Normanhurst Road, which provide high-frequency services during peak times. There are no dedicated cycling routes within the immediate vicinity of the site.

Surrounding heritage

- 1.3.8 The site does not immediately adjoin any HLEP local or SHR listed heritage items. However, a HLEP local and SHR listed heritage item (a dwelling house and gardens) is located 160m to the north-east of the site at 82 Pennant Hills Road (known as 'Gilligaloola') (**Figure 7**).

2 Project

2.1 Description of development

- 2.1.1 The key components and features of the proposal, as set out in the Environmental Impact Statement (EIS) and amended by the Response to Submissions (RtS) and Supplementary RtS (SRtS), are summarised at **Table 3** and shown in **Figure 14** to **Figure 24**.

Table 3 | Main components of the Concept Proposal and Stage 1 works

CONCEPT PROPOSAL			
Component	Description		
Project summary	<ul style="list-style-type: none"> Concept Proposal for 10 building envelopes for school buildings and facilities, an increase in student numbers by 850 students, associated car parking, infrastructure and landscape masterplan. Eight of the 10 building envelopes would be new buildings while the remaining two would be expansions to existing buildings. Stage 1 of the development comprising staged increase of 500 students, staged construction and operation of a two to five storey Boarding Accommodation building for 216 students and staff, alterations to existing car parking areas, new carparks, creation of a through site link road, provision of pick-up/drop-off facilities and hard and soft landscaping. 		
Site area	13.17 ha.		
Demolition	<ul style="list-style-type: none"> The application indicatively shows the demolition of the following buildings (excluding those proposed for removal as part of Stage 1 works) to facilitate the development (Figure 14): <ul style="list-style-type: none"> Birrane, Mulhall and Frizelle Wings. Deirdre Rofe Centre. gymnasium building. Veronica Reid portables. Mary Ward Health Centre. Section of Teres Ball Centre . 		
Building envelope height and Gross Floor Area (GFA)	10 building envelopes located within the northern part of the site, comprising:		
	Building Envelopes #	Max. Height	Max. GFA
	Envelope 1 - Boarding Accommodation building	RL199.5m (17.7m)	4845m ²
	Envelope 2 - Senior School	RL 211.5m (20m)	5200m ²
	Envelope 4 - Primary School	RL 201.5m (13.6m)	9000m ²
	Envelope 5 - Mary Ward building	RL 209m (20.6m)	400m ²
	Envelope 6 - Gymnasium	RL 195m (13.1m)	3800m ²
	Envelope 7 - Gonzaga Barry Performing Arts Centre	RL 200m (18.2m)	2200m ²
	Envelope 8 - P3A Osborn Road carpark and sports field	RL 181.23 (0-2m)	0m ²
	Envelope 12 - Pedestrian link building	RL 201.5m (13m)	450m ²
	Envelope 13 - P4A Multi-sport Court carpark	RL 190.3m (3m)	0m ²
	Envelope 14 - P1A Tennis Court carpark	RL 195m (3m)	0m ²
	Total		25,895m²
# As part of the RtS, the Applicant deleted Envelopes 3, 9 and 10 from the proposal and Envelope 11			

relates to the Mount Pleasant Avenue ELC (not part of this application).

Student capacity	<ul style="list-style-type: none"> An overall increase of student capacity of 850 students (from 1150 to 2000 students): <ul style="list-style-type: none"> predicted 450 primary and 1550 secondary students. delivery in two stages, including an increase of: <ul style="list-style-type: none"> 500 students linked with the construction of new car parking and pick-up/drop-off facilities in the Stage 1 works 350 students associated with the development of Envelope 8 (underground carpark). Boarding accommodation for 216 students within Stage 1 works (increase of 61 boarders).
Car parking and pick-up / drop-off	<ul style="list-style-type: none"> A staged increase of 236 on-site car parking spaces (from 197 to 433 spaces): <ul style="list-style-type: none"> 123 car parking spaces as part of the Stage 1 works. up to 113 additional car parking spaces at a later stage within Envelope 8 (underground carpark) accessed from Osborn Road. The car parking spaces would be used as follows: <ul style="list-style-type: none"> 423 car parking spaces for the use of the school. 10 car parking spaces for the sole use of the future ELC. An increase of one pick-up/drop-off space (from four to five spaces) in Stage 1. An increase of two bus parking bays (from two to four bays) accessed via the slip road off Osborn Road.
Bicycle parking	<ul style="list-style-type: none"> Bicycle parking and end-of-trip facilities to be provided in accordance with the Hornsby Development Control Plan 2013 (HDCP).
Landscaping and tree removal	<ul style="list-style-type: none"> Concept landscape masterplan including: <ul style="list-style-type: none"> landscaping between building envelopes and on the roof of Envelope 8 hard and soft landscaping provided as part of Stage 1 works. Removal of 119 trees (105 within Stage 1 and 14 in future stages).
Concept staging	<ul style="list-style-type: none"> The Concept Proposal establishes a long-term 30-year framework for growth of the school with no details of future stages (beyond Stage 1) provided.
Jobs	<ul style="list-style-type: none"> Total jobs over all construction and operational stages associated with the Concept Proposal: <ul style="list-style-type: none"> 555 full time equivalent construction jobs 71 additional full time equivalent operational jobs (from 254 to 325 jobs).
Capital investment value (CIV)	<ul style="list-style-type: none"> \$130,133,710. \$90,025,000 excluding Stage 1.

STAGE 1 WORKS

Component	Description
Project summary	Staged construction and operation of a two to five storey Boarding Accommodation building for students and staff, amendments to existing and provision of new car parking areas, a through site link road, pick-up/drop-off facilities, and hard and soft landscaping.
Site preparation works and remediation	<ul style="list-style-type: none"> Demolition of existing building and structures: <ul style="list-style-type: none"> Loreto Community House (2 dwellings) 1960's additions connecting the Givendale, Convent and Mary Ward Buildings Mount Pleasant multi-purpose basketball courts and associated structures two tennis courts and sheds fronting Pennant Hills Road

	<ul style="list-style-type: none"> ○ the garage of No. 4 Mount Pleasant Avenue. • Temporary relocation of the Uniform Shop to the site of the future ELC building. • Bulk earthworks resulting in the removal of approximately 10,462 cubic metres (m³) from the site, (11,470 m³ of cut and 1008m³ of fill). • Remediation works.
Built form	<ul style="list-style-type: none"> • Construction of a two to five storey (maximum RL 199.5m / 17.7 m) Boarding Accommodation building including: <ul style="list-style-type: none"> ○ accommodation for 216 students within 125 rooms (6-bed, twin and single rooms) ○ amenities including common areas, kitchen, dining, lounge, music, wellness, luggage/storage, active lobby and laundry rooms ○ two self-contained three bedroom apartments for staff at levels 2 and 3 each with kitchen, bathroom, living and dining areas. • Construction of a single storey building (P1A Tennis Court carpark) containing 42 car parking spaces at lower-ground level and two tennis courts on the roof. • Construction of a single storey building (P4A Multi-purpose carpark) with 64 car parking spaces at lower-ground level and three multi-purpose courts on the roof. • Construction of a stand-alone electrical sub-station outside the Teres Ball Centre.
GFA	4845m ² .
Student capacity	<ul style="list-style-type: none"> • Staged increase of 500 school students (from 1150 to 1650 students) associated with the construction of car parking and pick-up/drop-off facilities.
Car parking	<ul style="list-style-type: none"> • Provision of three new car parking areas and amendment of existing car parking areas, to provide an overall increase of 123 car parking spaces (from 197 to 320 spaces).
Pick-up/drop-off facilities	<ul style="list-style-type: none"> • One additional student pick-up/drop-off bay (from four to five) comprising removal of four existing and provision of five replacement pick-up/drop-off bays within the P3A Osborn Road carpark and adjacent to the P1 Pennant Hills Road carpark. • Two additional bus parking bays (from two to four bus bays).
Through site link road	<ul style="list-style-type: none"> • Creation of a new east-west through site link road: <ul style="list-style-type: none"> ○ one-way road from the Osborn Road entry to the P2 Admin car-park, and exit via 4 Mount Pleasant Avenue ○ providing access to the P1A Tennis Court car park and three pick-up/drop off bays.
Bicycle parking	<ul style="list-style-type: none"> • A total of 21 bicycle parking spaces: <ul style="list-style-type: none"> ○ 5 to 15 spaces within the basement of the Boarding Accommodation building ○ 6 spaces within the P4A car-park ○ 10 spaces elsewhere within the campus (subject to detailed design).
Trees and landscaping	<ul style="list-style-type: none"> • Removal of 105 trees (70 in the location of the Boarding Accommodation building and 35 elsewhere), provision of 105 replacement trees • Hard and soft landscaping. • Expansion of the existing oval and running track.
Staging	<ul style="list-style-type: none"> • Four construction and operational stages (see Section 2.4).
Jobs	<ul style="list-style-type: none"> • Total jobs over the four construction and operational stages: <ul style="list-style-type: none"> ○ 184 construction jobs ○ 36 operational jobs
CIV	<ul style="list-style-type: none"> • \$40,108,710.

2.2 Concept Proposal building envelopes and landscaping

2.2.1 The Concept Proposal (as amended by the RtS) seeks approval for 10 building envelopes. Three building envelopes (1, 13 and 14) form part of the Stage 1 works.

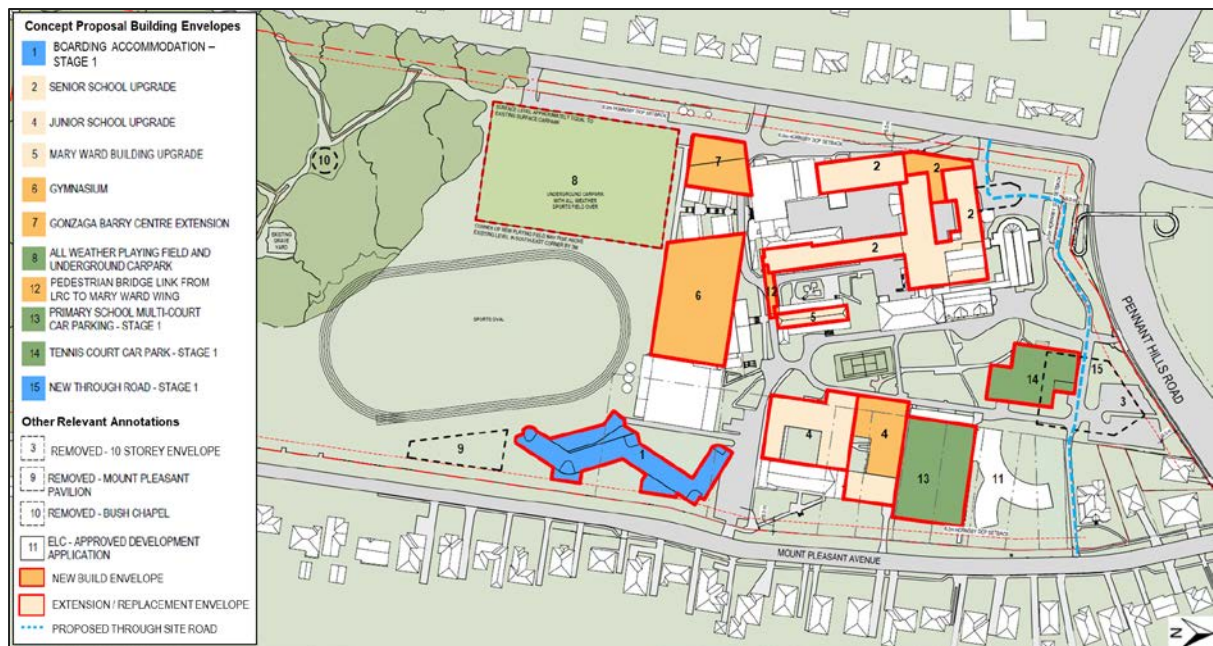


Figure 11 | Concept Proposal building envelope locations (Base source: Applicant's SRtS)

2.2.2 The 10 Concept building envelopes include (**Figure 11** and **Figure 12**):

- Envelope 1 (Boarding Accommodation) - a two to five storey building (max. RL199.5m / 17.7m) providing for 4845m² GFA for student and staff accommodation.
- Envelope 2 (senior school) - new and replacement building envelopes (max. RL 211.5m / 20m) providing a 5200m² GFA extension to the senior school, including:
 - two and three storey building envelopes replacing Birrane, Frizelle and Mulhall Wings and Deirdre Rolf building (to be demolished)
 - a new two storey envelope connecting the Birrane and Frizelle Wings and Deirdre Rolf buildings fronting Osborn Road
 - one and two storey roof extension envelope above the Resource Centre.
- Envelope 4 (primary school) - two storey building envelope (max. RL 201.5m / 13.6m) replacing the 1980's rear single storey component of the Teres Ball Centre and the Health Centre (to be demolished) and providing a 9000m² GFA extension to the primary school.
- Envelope 5 (Mary Ward building) - one storey roof extension to the Mary Ward building (RL 209m / 20.6m) providing additional 400m² GFA, converting the former boarding accommodation to teaching spaces.
- Envelope 6 (gymnasium) - a three storey / double height building envelope (RL 195m / 13.1m) providing 3800m² GFA for a new gymnasium to replace the existing.
- Envelope 7 (Gonzaga Barry Performing Arts) - a two to four storey building envelope (RL 200m / 18.2m) providing 2200m² GFA for a theatre and classrooms.
- Envelope 8 (P3A Osborn carpark) a basement carpark envelope with surface level playing field above (replacing the interim at grade carpark of Stage 1).

- Envelope 12 (pedestrian link) - three storey building envelope (RL 201.5m / 13m) providing 450m² GFA for school use and connecting the Resource Centre and Mary Ward buildings.
- Envelope 13 (P4A Multi-Purpose Court carpark) - a single storey building envelope (RL 190.3m / 3m) for a lower-ground level carpark and three multi-purpose courts above.
- Envelope 14 (P1A Tennis Court carpark) - a single storey building envelope (RL 195m / 3m) for a lower-ground level carpark and two tennis courts above.

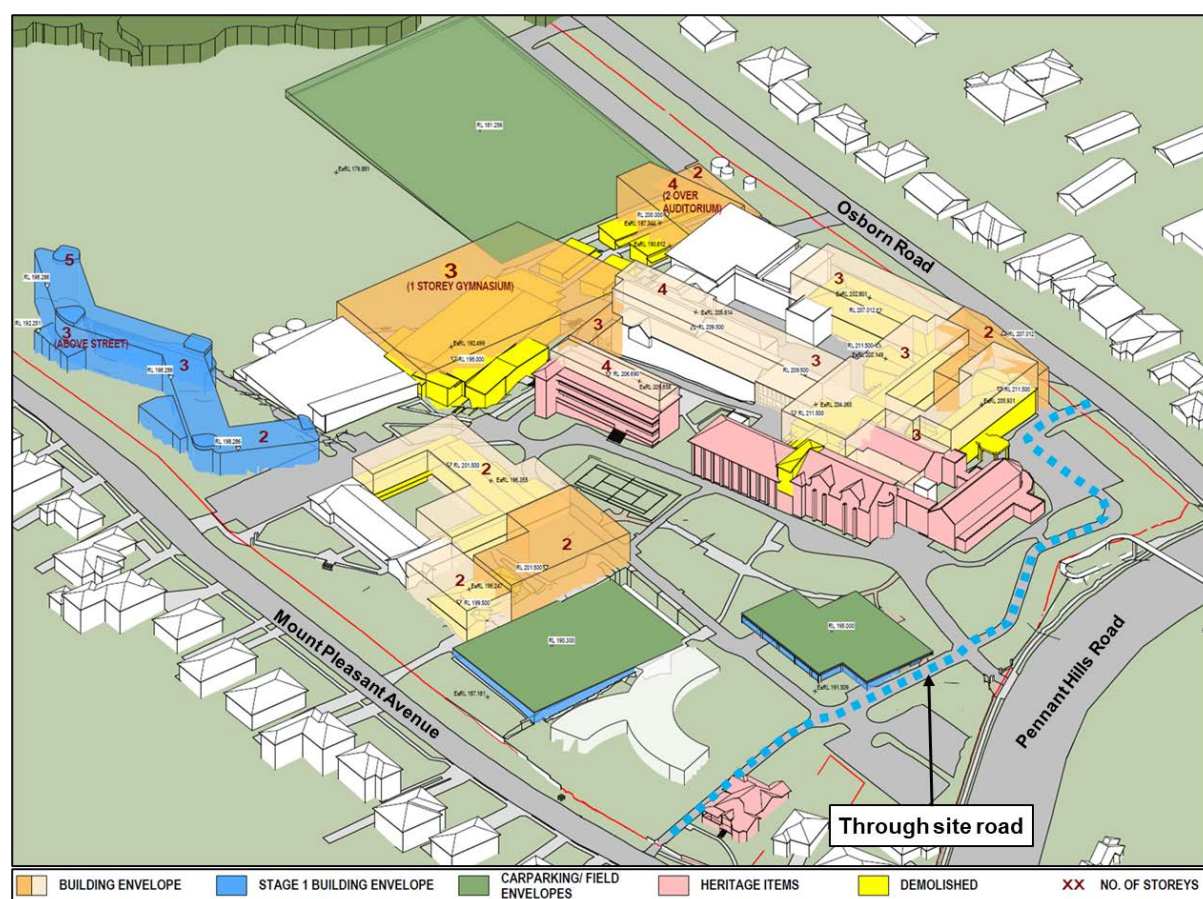


Figure 12 | Concept Proposal building envelope heights and massing (Base source: Applicant's SRtS)

- 2.2.3 The application includes a concept landscape masterplan for the site that envisages hard and soft landscaping works around proposed building envelopes and indicatively shows the removal of 119 trees to facilitate the development (105 in Stage 1 and 14 in the remainder of the Concept Proposal). The Applicant has stated that landscape designs would form part of future detailed development applications (**Figure 13**).
- 2.2.4 The Concept Proposal includes 236 additional car parking spaces (from 197 to 433 spaces) resulting from the reconfiguration of existing surface car parking and provision of new car parking spaces as described in **Table 1**.
- 2.2.5 As part of the Stage 1 works, an at-grade carpark (87 spaces) would be temporarily provided in the location of future Envelope 8. In the future stages, Envelope 8 would replace this at-grade carpark and provide a total of 113 car spaces (including the 87 car spaces in Stage 1).



Figure 13 | Concept landscape masterplan (Base source: Applicant's SRtS)

Demolition and construction works

- 2.2.6 The Concept Proposal seeks consent for the demolition and removal of a number of existing school buildings, demountable structures. The extent of the demolition, including those proposed in Stage 1, is summarised at **Table 3** and shown at **Figure 14**.

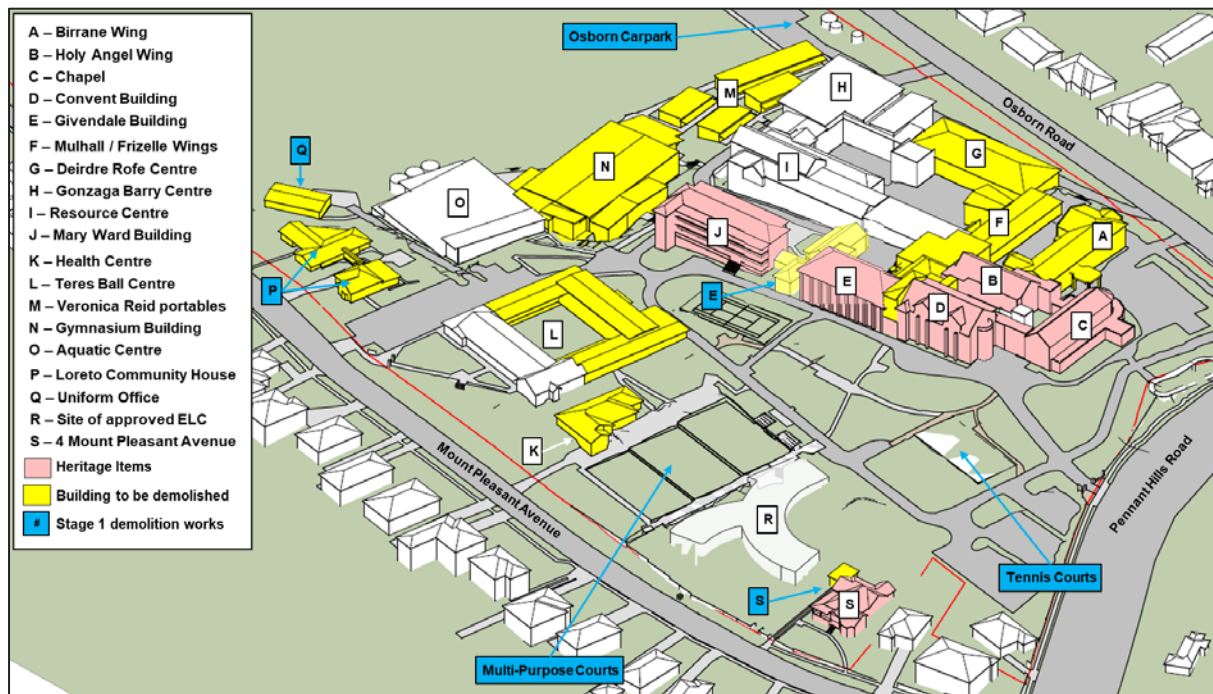


Figure 14 | Concept Proposal and Stage 1 works demolition strategy (Base source: Applicant's SRtS)

2.3 Stage 1 works

The proposed Stage 1 demolition works are identified in **Figure 14**, and Stage 1 works layout is shown at **Figure 15**.

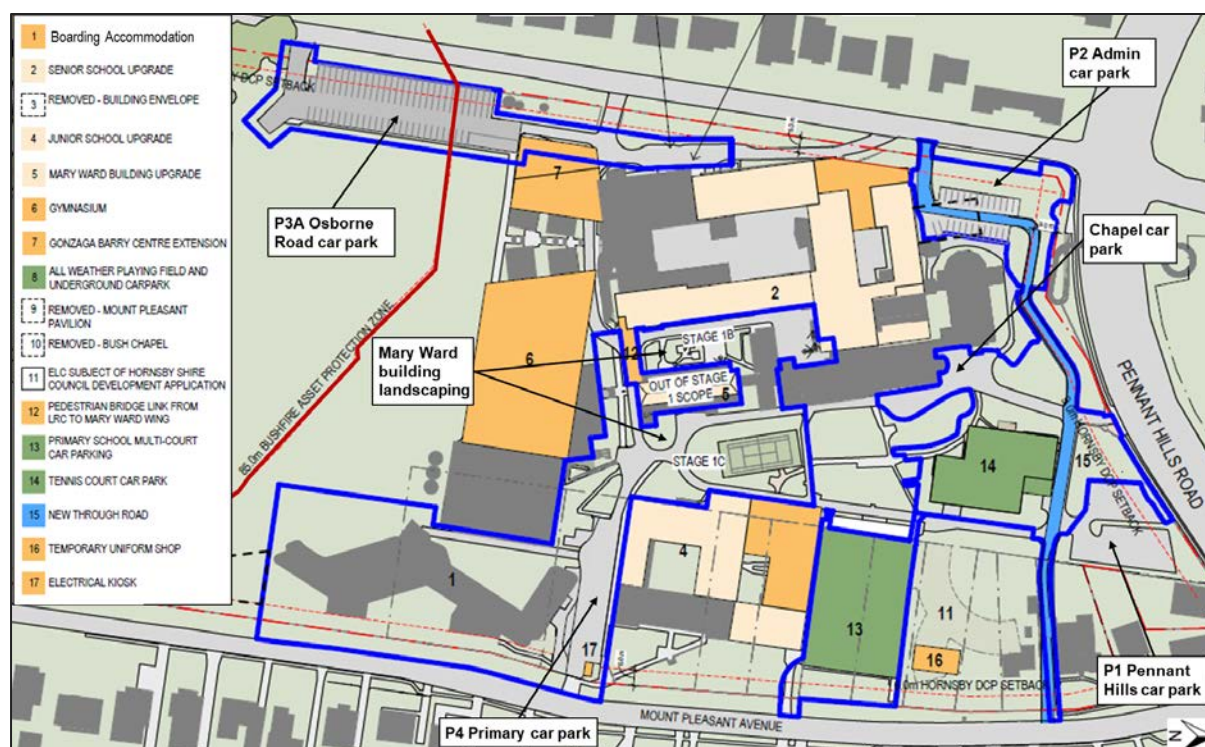


Figure 15 | The Stage 1 works (Base source: Applicant's SRtS)

Boarding Accommodation building

- 2.3.1 The proposed Boarding Accommodation is contained within Building Envelope 1, located mid-way along the eastern boundary of the site. The building has an irregular 'W' / zig-zag shaped footprint located over a basement level and fronts Mount Pleasant Avenue to the east and the existing school oval and aquatic centre to the west. The Boarding Accommodation building has a unified height of 17.7m. However, due to the notable fall in land in this location (south along Mount Pleasant Avenue and west into the school site), the building is two storeys at its northern end and five storeys at its southern end.
- 2.3.2 The Boarding Accommodation building provides for 125 shared and individual student rooms (216 beds), two self-contained three bedroom staff dwellings. 32 car parking and five to 15 bicycle parking spaces are located in the basement. Student amenities include common areas, kitchen, dining, lounge, music, wellness, luggage/storage, lobby and laundry rooms.
- 2.3.3 The main pedestrian entrance to the Boarding Accommodation is via the lobby located at the northern end of the building. A new vehicle drop-off/pick-up area is provided at the main pedestrian entrance. An existing carpark containing 15 spaces is located directly north of the main entrance and new drop-off/pick-up area. Two separate driveways are provided at the southern end of the building, one for deliveries at ground floor level and the other providing ramped basement access.
- 2.3.4 Landscaping is provided around the Boarding Accommodation building including outdoor dining areas, timber benches and mound planting, lawn areas, fencing and gates, firepit, trees, shrubs and groundcovers, planted buffers and green roofs above the main entrance and dining hall.

2.3.5 The building design is contemporary, incorporating a range of finishes including brickwork, concrete panelling, louvres and blades. The elevations are highly articulated by the varied setbacks resulting from the zig-zag shaped building footprint and the grouping of materials, windows and architectural treatments.



Figure 16 | Boarding Accommodation typical floor layout (Base source: Applicant's SRtS)

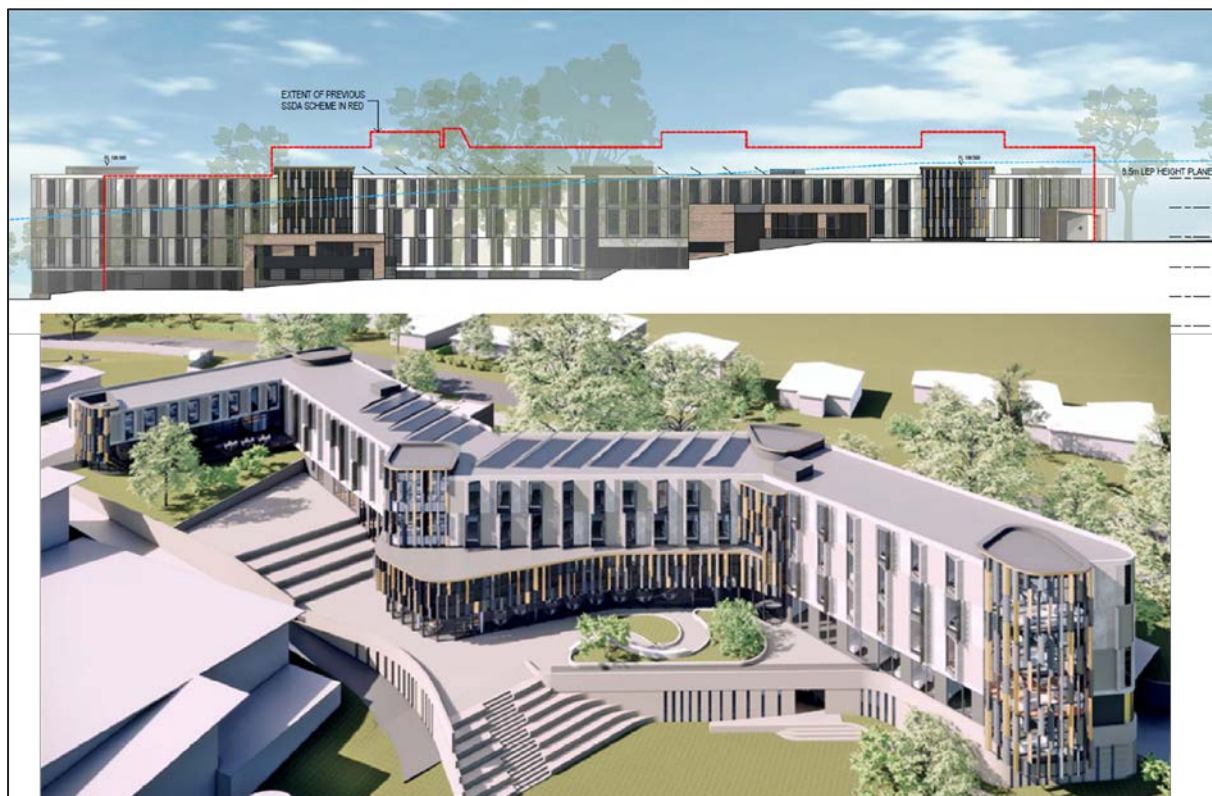


Figure 17 | The eastern / Mount Pleasant Avenue elevation (top) and a perspective of the rear / western elevation of the Boarding Accommodation building facing the school oval (Source: Applicant's SRtS)

New and altered car parking arrangements

- 2.3.6 The Stage 1 works include demolition of existing carparks as described in **Table 1**, and creation of the P4A Multi-Purpose and P1A Tennis Court car parking areas, the Boarding Accommodation building basement carpark, alterations to the Osborn Road carpark, and reconfiguration of existing car parking areas around the school.
- 2.3.7 The Stage 1 works result in a net increase of 123 car parking spaces (from 197 to 320 spaces) (**Table 4** and **Figure 23**). The construction stages are identified as sub-stages in **Table 4**.

Table 4 | The staged alterations of existing and new car parking proposed under the Stage 1 works

Stage	Carpark	Existing	Proposed	Change	
Stage 1, sub-stage 1	P3A Osborn Road	60	87	+27	
Stage 1, sub-stage 2a	P1 Pennant Hills	53	45	-8	+19
	P1A Tennis Court	0	42	+42	
	P2 Administration	23	22	-1	
	P2 Chapel	14	0	-14	
Stage 1, sub-stage 2b	Boarding Accommodation basement	0	32	+32	+13
	P4 Primary	37	18	-19	
Stage 1, sub-stage 3	P4A Multi-Purpose Court	0	64	+64	
Previous approval	Future ELC (separate DA)	10	0	0	
Stage 1 Total		197*	320*	+123	
* Includes the 10 ELC site car parking spaces (not yet constructed) that are not part of this application.					

- 2.3.8 The details of the new carparks are provided below:
- construction of the P1A Tennis Court carpark, a single storey building (partly underground) with 42 car parking spaces at lower-ground floor level (including two spaces at grade, located on the opposite side of the through site link), two tennis courts and fencing on the roof, and vehicle access from the proposed through site road (**Figure 18**).
 - construction of P4A Multi-Purpose Court carpark, a single storey building (partly underground) with 64 new parking spaces at lower-ground floor level, three multi-purpose courts on the roof and vehicle access from Mount Pleasant Avenue. The building includes six bicycle parking spaces for staff and students (**Figure 19**).
- 2.3.9 The Applicant has confirmed that in accordance with the ELC Approval, 15 car parking spaces within the school campus would be allocated for the exclusive use of staff at the future ELC, including 10 in the P1A Tennis Court carpark and five in the Administration car park (P2). This, and the 10 approved car spaces in the ELC Approval, create 25 car spaces for ELC exclusive use.

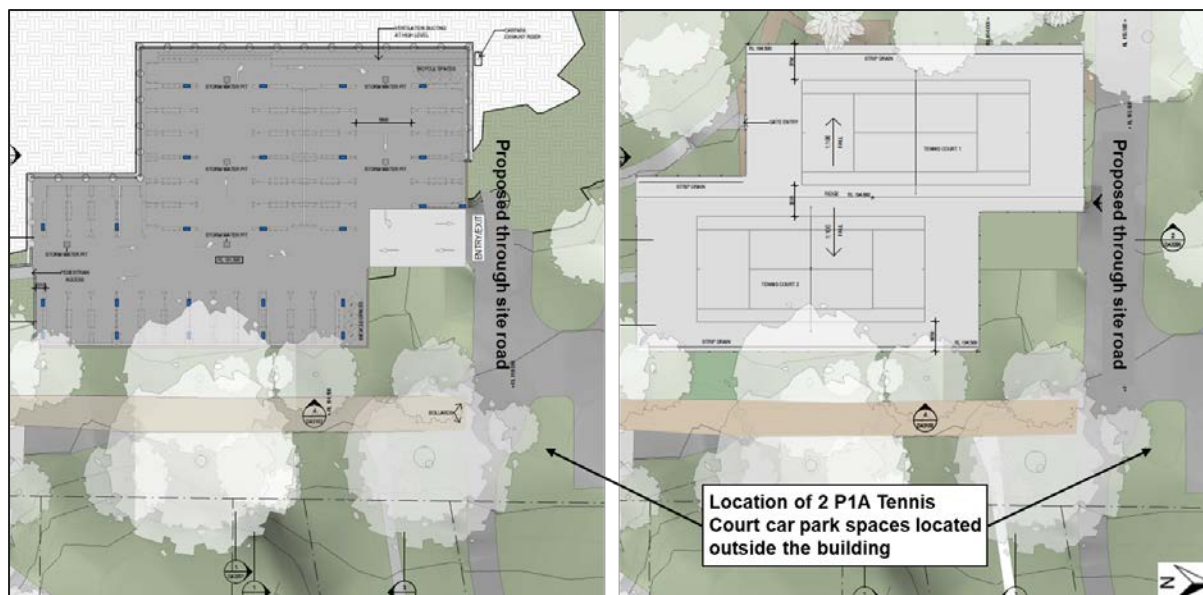


Figure 18 | Lower ground floor (left) and roof (right) levels of the P1A Tennis Court carpark
(Base source: Applicant's SRtS)



Figure 19 | Lower ground floor (left) and roof (right) levels of the P4A Multi-Purpose Court carpark
(Base source: Applicant's SRtS)

2.3.10 The alterations to the Osborn Road carpark (P3A carpark) comprises interim works, preceding development of Envelope 8 for an underground car park with sports field above. The P3A carpark works include the reconfiguration of the existing 60 car parking spaces, provision of 27 new car parking spaces (87 in total), two pick-up/drop-off spaces (54.6m queuing length / 12 vehicles) and removal of 10 trees. Vehicles would enter the carpark from Osborn Road via the southern vehicle entrance (Gate O-4) and exit onto Osborn Road via the northern exit (Gate O-3) (**Figure 20**).

2.3.11 In addition to the above increase in car parking in the new and altered car parking areas, the Stage 1

works also result in minor reconfigurations and reduction of 42 car parking spaces within the existing P1 Pennant Hills (-8 spaces), P2 Admin / Chapel (-15 spaces) and P4 Primary car parking (-19 spaces) areas to facilitate the provision of the Boarding Accommodation building, through site road and rationalisation of spaces.

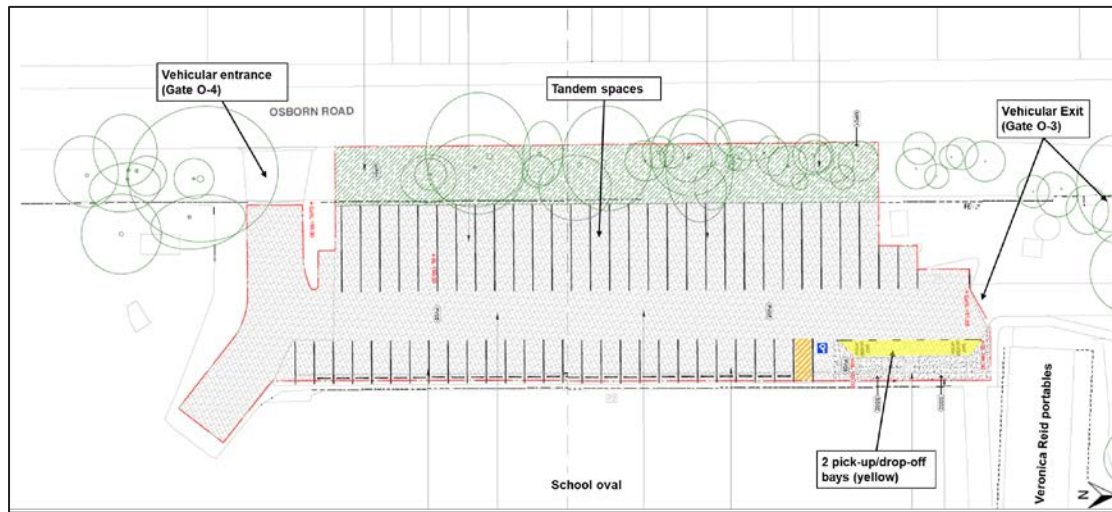


Figure 20 | Altered Osborn Road carpark (interim layout) (Base source: Applicant's SRtS)

Through site link road and pick-up/drop-off facilities

- 2.3.12 The proposal includes the creation of a new one-way through site road connecting Osborn Road in the west with Mount Pleasant Avenue in the east and running through the northern part of the site. Three new pick-up/drop-off spaces are proposed opposite the P1A Tennis Court carpark (**Figure 21**).

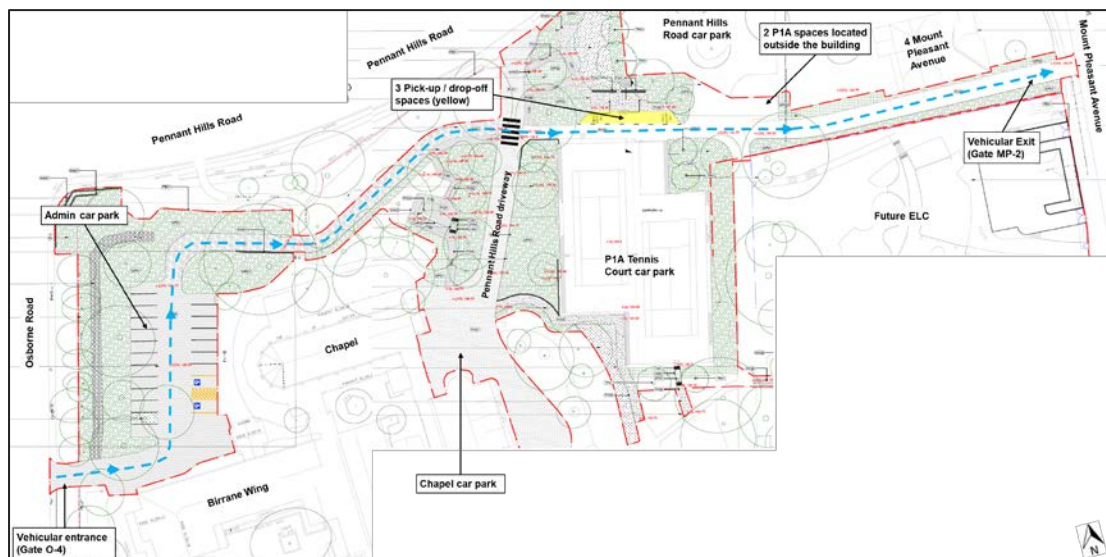


Figure 21 | The through site road, direction of travel and pick-up/drop-off spaces (Base source: Applicant's SRtS)

- 2.3.13 The purpose of the through site road is primarily to provide on-site vehicle queuing capacity for student pick-up/drop-off, establishing an on-site queuing capacity of approximately 24 vehicles (88.3m queue length / 24 vehicles). The road also provides access to the existing P1 Pennant Hills carpark and the proposed P1A Tennis Court carpark.
- 2.3.14 The P3A Osborn Road interim carpark provides two additional pick-up/drop-off spaces with queuing capacity for 12 vehicles (**Figure 20**).

Trees and landscaping

2.3.15 The scope of the Stage 1 landscaping works include the areas in/around the P1A Tennis Court, P3A Osborn Road and P4A Multi-Purpose Court carparks, the through site link road, Boarding Accommodation building and Mary Ward building (**Figure 22**).

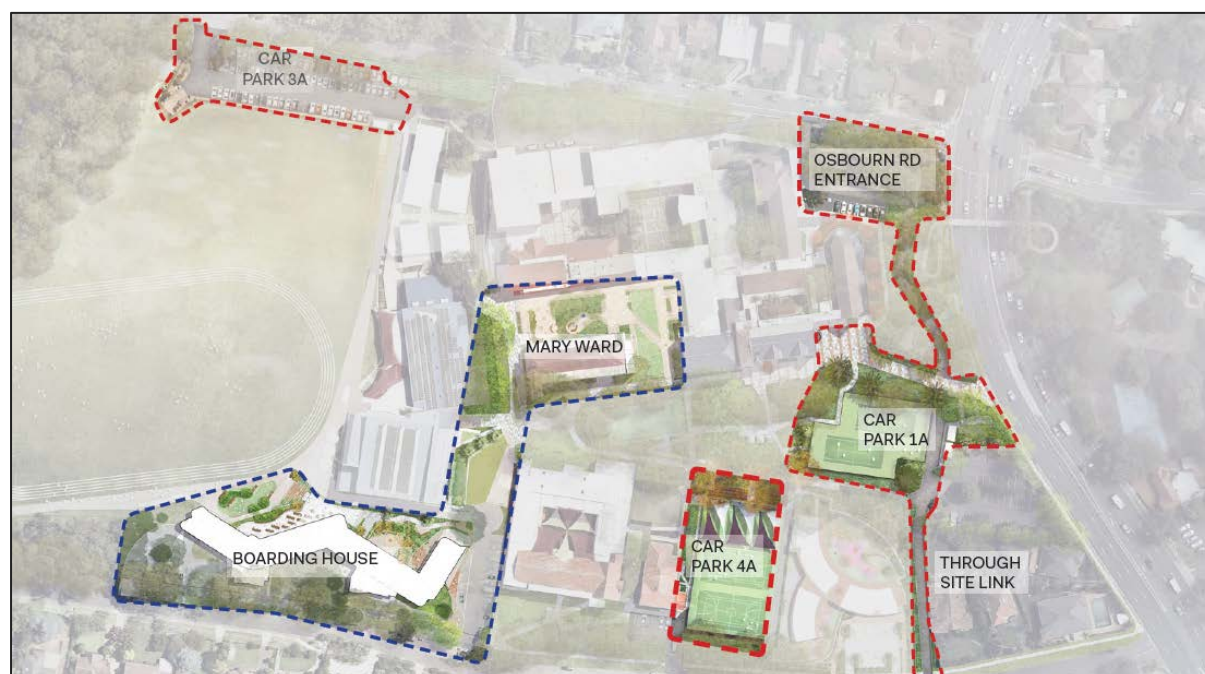


Figure 22 | Stage 1 works scope of landscaping (Base source: Applicant's SRtS)

2.3.16 The application includes the removal of 105 existing trees (70 in the location of the Boarding Accommodation building, 10 for the P4A Osborn Road carpark and 25 throughout the remainder of the Stage 1 works) and provision of 105 replacement trees.

2.3.17 Hard and soft landscaping improvements are proposed around the:

- Boarding Accommodation building, including outdoor dining areas, timber benches and mound planting, lawn areas, fencing and gates, firepit, trees, shrubs and groundcovers, planted buffers and green roofs above the main entrance and dining hall
- Mary Ward Wing and adjacent to the Aquatic Centre, including new paths, lawn, seating platforms, raised planting beds and a water feature
- P1A Tennis Court, P3A Osborn Road and P4A Multi-Purpose Court car parking areas, including new retaining walls, seating and bleachers, pedestrian paths, shade shelters, fencing and gates, trees, shrubs and groundcovers, hedge buffer planting, planters and terraced planting.

2.4 Staging of works and student and staff increases

Staging of works and increase of student and staff numbers – Concept Proposal

2.4.1 The Concept Proposal seeks approval for the staged increase in the maximum student population by 850 students (from 1150 to 2000 students) and 71 staff (from 254 to 325 staff).

2.4.2 Of the 850 additional students (**Table 6**):

- 500 students form part of the Stage 1 works, linked to the staged provision of infrastructure including the pick-up/drop-off facilities (five spaces), through site road, P1A Tennis Court, P3A Osborn Road and P4A Multi-Purpose Court car parks and bicycle parking.
- 350 students would be linked to the completion of the final P3A Osborn underground car park (Envelope 8) as part of a future stage in accordance with the Concept Proposal.

2.4.3 The Applicant has not finalised the staging for the development beyond the Stage 1 works, and has stated the Concept Proposal is intended to establish a long-term framework for growth of the school with the delivery of future stages being contingent on the operational needs of the school.

Staged construction and student / staff numbers - Stage 1 works

2.4.4 The EIS (as updated by the SRTS) states the construction of the Stage 1 works would be divided into four sub-stages for physical works (**Table 5**) and five sub-stages for student/staff population increases outlined in **Table 6** and shown at **Figure 15**.

Table 5 | The four construction sub-stages of the Stage 1 works

Sub-stage	Description of works	Estimated timing
1	<ul style="list-style-type: none"> • Reconfigure the P3A Osborn car park and removal of vegetation. • Provide 27 new parking spaces (total of 87), 2 new pick-up/drop-off spaces and hard and soft landscaping. • Convert four existing pick-up/drop-off spaces into two bus bays adjacent to the Gonzaga Barry Building. • Increase of 100 students. 	<ul style="list-style-type: none"> • Begins: 21 December 2021. • Ends: 21 June 2022. • Duration: approx. 3 months.
2a	<ul style="list-style-type: none"> • Demolish existing tennis courts and sheds. • Construct P1A Tennis Court car park, including two new tennis courts and 42 new parking spaces. • Reconfigure P2 Admin/Chapel and Pennant Hills car parks removing 15 spaces. • Construct the through site road and three pick-up/drop-off spaces. • Provide hard and soft landscaping around all structures and the through site road. 	<ul style="list-style-type: none"> • Begins: 21 December 2021. • Ends: 21 September 2022. • Duration: approx. 6-9 months.
2b	<ul style="list-style-type: none"> • Relocate the Uniform Shop to the ELC site and demolish Loreto Community House and buildings between the Givendale, Convent and Mary Ward buildings and remove vegetation. • Construct the Boarding Accommodation building for 216 students and hard and soft landscaping, 32 car and five to 15 bicycle parking spaces. • Reconfigure the P4 Primary car park removing 19 spaces. • Provide hard and soft landscaping around the Mary Ward building and Boarding Accommodation building. 	<ul style="list-style-type: none"> • Begins: 22 June 2022. • Ends: 22 June 2024. • Duration: approx. 24 months.
3	<ul style="list-style-type: none"> • Demolish three multi-purpose courts and structures. • Construct P4A Multi-Purpose Court car park, including three new multi-purpose courts, 64 new parking spaces, six bicycle parking spaces and hard and soft landscaping. • Increase of 150 students and 12 staff. 	<ul style="list-style-type: none"> • Begins: 22 September 2022. • Ends: 22 March 2023. • Duration: approx. 6 months.

- 4
 - No building works.
 - Provide 10 bicycle parking spaces.
 - Increase of 250 student and 24 staff.
- Following Stage 1 Sub-Stage 3.

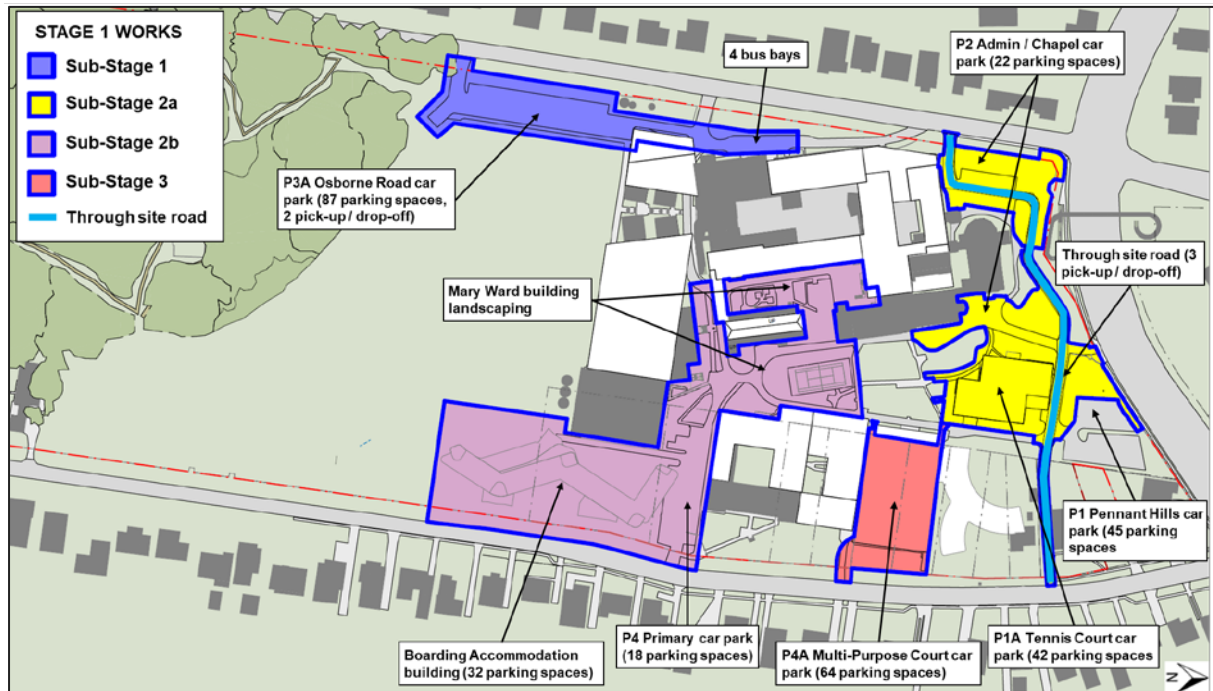


Figure 23 | The Stage 1 works construction and sub-stages (Base source: Applicant's SRtS)

2.4.5 The key components of the staged student and staff increases in Stage 1 and the future stages of the Concept Proposal, and the relationship with the provision of car parking spaces on-site, is at **Table 6**.

Table 6 | Key components of the staging of car parking, pick-up/drop-off and students (Source: Applicant's SRtS 2021)

Stage	Student population	Staff population	Pick-up / drop-off	On-site parking spaces			Bus	Bicycle spaces
				School	Boarding	ELC		
Existing	1,150	254	4	187	0	10	2	5
Stage 1 (1)	1,250 (+100)	254	2 (+2 -4)	214 (+27)	0	10	4 (+2)	10 (+5)
Stage 1 (2a)	1,250	254	5 (+3)	233 (+42 -23)	0	10	4	10
Stage 1 (2b)	1,250	254	5	214 (-19)	32 (+32)	10	4	10
Stage 1 (3)	1,400 (+150)	266 (+12)	5	278 (+64)	32	10	4	16 (+6)
Stage 1 (4)	1,650 (+250)	290 (+24)	5	278	32	10	4	26 (+10)
Stage 1 Total	1,650 (+500)	290 (+36)	5 (+1)		320 (+123)		4 (+2)	26 (+21)

Concept Stage beyond Stage 1	2,000 (+350)	235 (+35)	0	391 (+113)	32	10	4	40 (+14)
Overall Total	2,000 (+850)	325 (+71)	5 (+1)	433 (+236)			4 (+2)	40 (+35)

2.5 Uses, activities and hours of operation

- 2.5.1 The application does not change existing school operation hours, out of hours care or community use of existing facilities.
- 2.5.2 The application does not propose community access to proposed facilities forming part of the Stage 1 works. The Applicant has suggested that potential community use of facilities in future stages of the Concept Proposal (beyond Stage 1) would be considered as part of future DAs.

2.6 Related development

Loreto Normanhurst

- 2.6.1 On 3 November 2004, Council approved local DA, DA/1277/2004, for new school building and imposed a maximum student cap of 850 students. On 27 July 2011, the consent was modified to allow for alterations and additions and the increase in the student cap to 1150 students.
- 2.6.2 On 18 December 2019, the Sydney North Planning Panel approved local DA DA/1227/2018 for the demolition of an existing dwelling and construction of a split-level, two storey Early Learning Centre (ELC) in the north-eastern part of the site (fronting Mount Pleasant Avenue) to provide for 80 places. Site amalgamation is a requirement of the determination. On 22 April 2020, the consent was modified providing for minor internal and external alterations (**Figure 24**) (ELC Approval).
- 2.6.3 Condition 61 of the ELC Approval requires 25 car spaces to be allocated to the ELC. 10 of these car spaces are located adjacent to the ELC building. The remaining 15 must be provided within the site school site with 5 of these spaces being pick-up/drop-off spaces.

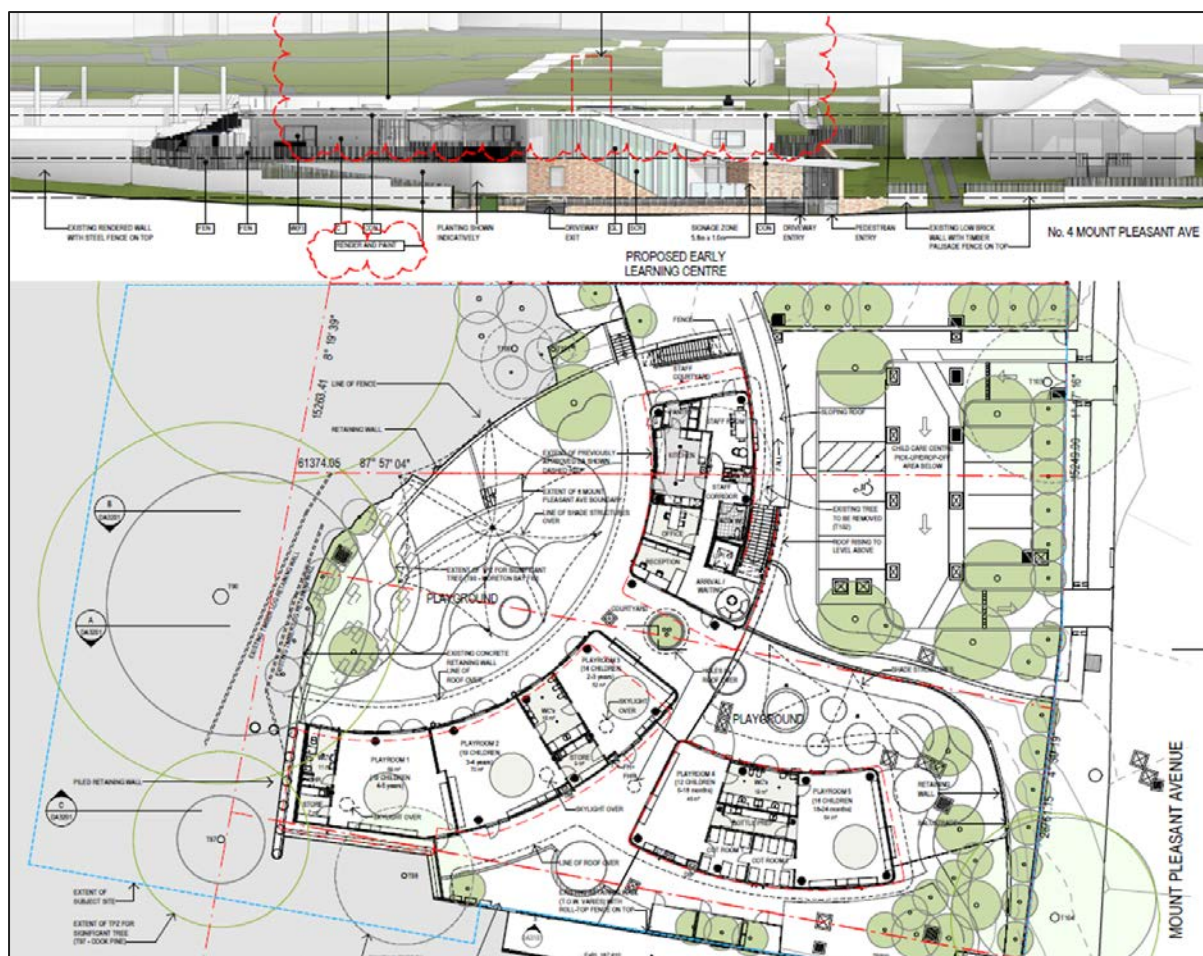


Figure 24 | ELC Mount Pleasant Avenue elevation (top) and ground level layout (bottom)
(Source: DA/1227/2018)

Wahroonga Estate Concept Approval

- 2.6.4 On 31 March 2010, the then Minister for Planning approved the Wahroonga Estate Concept Plan (MP 07_0166) for a new hospital, 500 dwellings, student accommodation, seniors housing, commercial uses, new school and church (Wahroonga Approval) within the Ku-ring-gai LGA. The Wahroonga Approval site boundary adjoins the southern boundary of Loreto Normanhurst and includes the properties located at the southern end of Mount Pleasant Avenue (**Figure 25**).
- 2.6.5 Condition B7(2) of the Wahroonga Approval requires the Proponent to install signage at the Mount Pleasant Avenue / Pennant Hills Road intersection detailing a 'No Right Turn' restriction for vehicle movements from Mount Pleasant Avenue across and onto Pennant Hills Road. Condition B7(2) requires the 'No Right Turn' restriction to be installed prior to the release of the first Construction Certificate for the Mount Pleasant Precinct. At the time of preparing this assessment report, a detailed DA for the Mount Pleasant Precinct had not been lodged.

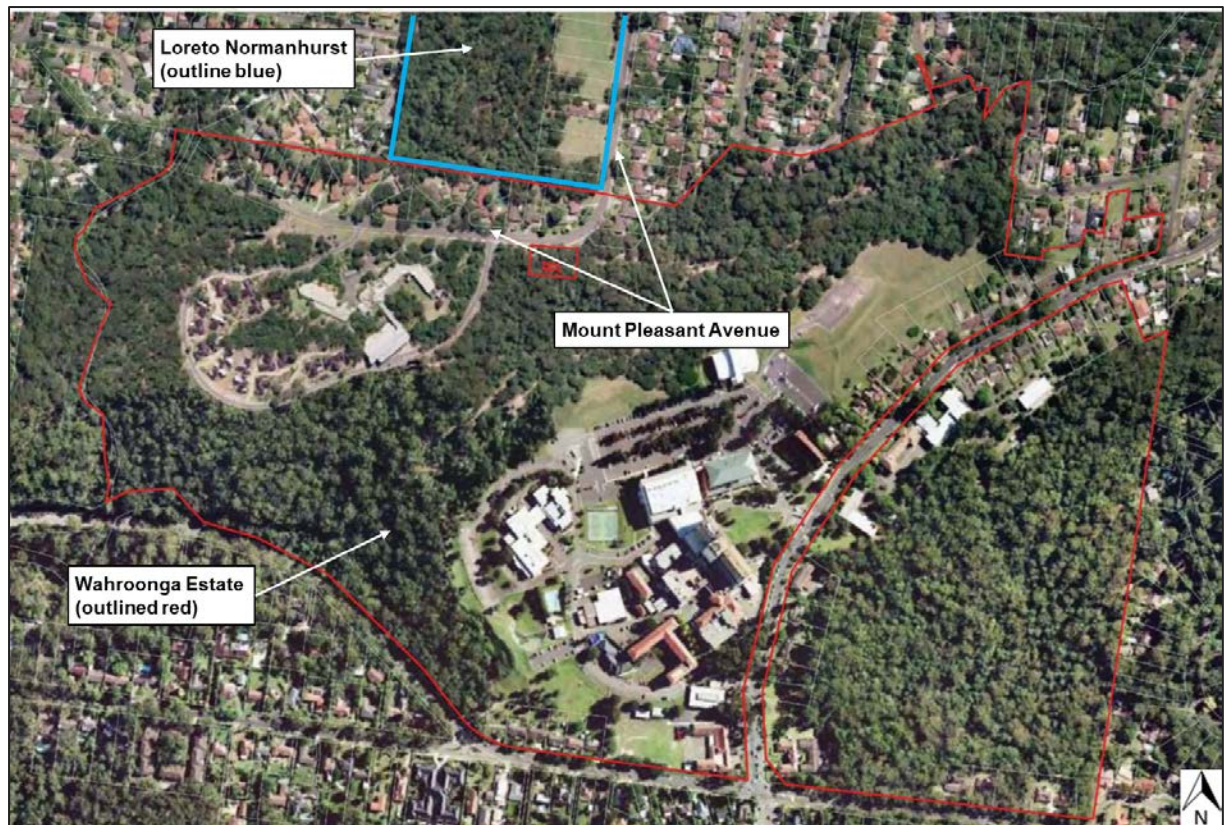


Figure 25 | The Wahroonga Approval and Loreto Normanhurst sites (Base Source: MP 07_0166)

3 Strategic context

3.1 Project need and justification

- 3.1.1 The Applicant has identified the need for a staged redevelopment and upgrade of the school to meet contemporary and evolving learning and educational standards, and the expectations of the school community.
- 3.1.2 The redevelopment is intended to provide a high-quality educational environment for staff and students, in particular to:
- develop a new strategic masterplan that can guide future development of the school in an orderly and organised manner and expansion consistent with the school's anticipated growth strategy
 - protect, preserve, and retain areas of unique ecological, aesthetic and historic qualities, while identifying opportunity areas to accommodate the additional density.
 - provide improved boarding facilities.
 - upgrade and improve student and staff learning/teaching facilities throughout the campus.
 - review opportunities to improve connectivity, accessibility and legibility across the campus.
 - develop a facility that increasingly meets the needs of the growing population in the North District.

3.2 Strategic context

- 3.2.1 The Department considers that the proposal is appropriate for the site as:
- it is consistent with NSW State Priorities to provide a new education facility through the provision of new and improved teaching and education facilities.
 - it is consistent with the Greater Sydney Commission's (GSC) *The Greater Sydney Regional Plan: A Metropolis of Three Cities*, as it proposes improved school facilities to meet the growing need
 - the increase in the student cap by 850 students would contribute to the provision of 21,900 new student spaces required in the North District over the next two decades.
 - it is consistent with the State Infrastructure Strategy 2018 – 2038: Building the Momentum, as it proposes investment in the non-government school sector to provide modern learning environments for students and share infrastructure and facilities with communities
 - it is consistent with the *NSW Future Transport Strategy 2056*, as it supports the ongoing provision of a modern education facility in a highly accessible location.
 - it is consistent with the vision outlined in the GSC's North District Plan, as it would provide school infrastructure conveniently located near existing public transport services and opportunities to co-share facilities with the local community.
 - the Concept Proposal has a CIV of \$130,133,710 and is predicted to generate 555 construction jobs for the duration of all stages and 71 new operational jobs.
 - the Stage 1 works has a CIV of \$40,108,710 and is predicted to generate 184 construction jobs and 36 new operational jobs.

4 Statutory context

4.1 State Significant Development

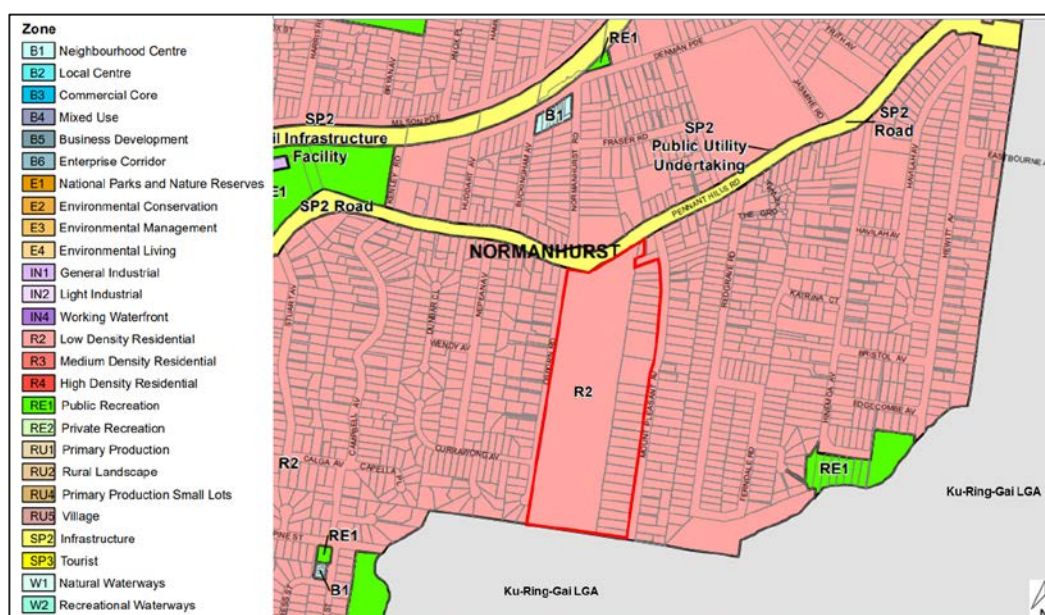
- 4.1.1 The proposal is SSD under section 4.36 (development declared SSD) of the *Environmental Planning and Assessment Act 1979* (EP&A Act), as defined under clause 15(2) of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP), as it is development for the purpose of an educational establishment comprising alterations or additions to an existing school, with a CIV of more than \$20 million.
- 4.1.2 Clause 8(2) of the SRD SEPP provisions confirms that where a single proposed development, in this instance the school component, is the subject of one development application and comprises development that is only partly State significant development under subclause 8(1), the remainder of the development is also declared to be State significant development.
- 4.1.3 The proposed staff and student accommodation is considered to be sufficiently related to the school. Thus, the entire development is considered to be SSD.

4.2 Consent Authority

- 4.2.1 In accordance with section 4.5 of the EP&A Act and clause 8A of the SRD SEPP, the Independent Planning Commission (the Commission) is the consent authority for the SSD application as the Department received more than 50 public submissions by way of objection.
- 4.2.2 The application is referred to the Commission for determination.

4.3 Permissibility

- 4.3.1 The site is located in the R2 Low Residential zone (**Figure 26**) under the Hornsby Local Environmental Plan 2013 (HLEP).



- 4.3.2 Educational establishments are permitted with consent within the R2 zone, including any development which is ordinarily incidental or ancillary to educational establishment. The development is consistent with the objectives of the zone, as it seeks to support the wellbeing of the community, including educational, recreational, community, religious and other activities.
- 4.3.3 The proposed student / staff Boarding Accommodation is not defined in the HLEP and not prohibited in the R2 zone. The Department is satisfied that the proposed student / staff Boarding Accommodation is an integral part of the school's functions.
- 4.3.4 Development for the purpose of "*residential accommodation for students that is associated with a school*" may also be carried out with development consent, on land within the boundaries of an existing school, under the provisions of Clause 35(11) of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP).
- 4.3.5 Noting the above, the Commission may determine the carrying out of the development.

4.4 Biodiversity Conservation Act 2016

- 4.4.1 Under section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act), SSD applications are to be accompanied by a Biodiversity Development Assessment Report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.
- 4.4.2 The application included a BDAR, which provides an assessment of the biodiversity on the site in accordance with the BC Act.
- 4.4.3 The Environment, Energy and Sciences Group of the Department (EESG) considered the proposal and initially raised concerns the BDAR did not consider the impact of the Concept Proposal, the bush cemetery and pathways, consideration of impact on planted threatened species, include floristic analysis, and provide a table of credit classes and profiles in accordance with the Biodiversity Assessment Method (BAM).
- 4.4.4 During the EIS exhibition, public submissions raised concerns about the impact of the development on the existing bushland.
- 4.4.5 In response to comments provided by EESG, the Applicant submitted an amended BDAR. The BDAR identified that there are two principal plant community types (PCT) in varying conditions present on the subject site. They have been mapped as (**Figure 10, page 9**):
- PCT 1237 - *Blue Gum High Forest (BGF) – Blackbutt - Smooth-barked Apple moist shrubby open forest on shale ridges of the Hornsby Plateau, Sydney Basin Bioregion*. This PCT is located at the northern end of the site and along the Osborn Road and Mount Pleasant Avenue frontages.
 - PCT 1281 - *Sydney Turpentine Ironbark Forest (STIF) - Grey Ironbark open forest on shale in the lower Blue Mountains, Sydney Basin Bioregion*. This PCT is located at the southern portion of the site.
- 4.4.6 The amended BDAR confirms the development footprint of the Concept Proposal (including Stage 1) is 4.34ha. Vegetation within the development footprint is highly disturbed, with a mixed canopy of mature exotic and native planted species and some remnant regrowth canopy species which have been incorporated into horticultural landscape gardens.

- 4.4.7 The amended BDAR states that a small amount of the patches of PCT 1237 BGF within the development footprint are considered to be a threatened ecological community under the BC Act. None satisfied the criteria for listing under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The PCT 1281 STIF in the southern part of the site ranges from good to weedy condition, and is considered to be a critically endangered ecological community under the EPBC Act and endangered under the BC Act. Both PCT are listed as candidates for Serious and Irreversible Impacts as defined by the BDAR.
- 4.4.8 In addition, three threatened flora species *Grevillea juniperina*, *Eucalyptus scoparia* (Wallangarra White Gum) and *Syzygium paniculatum* (Magenta Lilly Pilly) were recorded within the landscaped gardens. However, as these specimens are cultivated / planted and not planted for rehabilitation or recovery purposes, they do not require additional assessment. Further, the White Gum and Lilly Pilly would not be affected by the development.
- 4.4.9 Despite the presence of native vegetation, no threatened fauna species were recorded within the study area during the targeted surveys on the site. Notwithstanding, the BDAR states that the Grey Headed Flying Fox and Powerful owl are likely to use the site for foraging purposes. The vegetation on the site may also be utilised by the species for movement.

Concept Proposal

- 4.4.10 The proposed development has been sited to avoid and minimise impacts on significant vegetation, identified plant communities or species within the site.
- 4.4.11 The Concept Proposal site (including the Stage 1) would result in the removal of 0.31ha of non-native planted vegetation, 0.35ha native planted vegetation and 0.05ha remnant non-planted vegetation. The remaining 3.63ha development footprint represents buildings and cleared areas. The BDAR confirms these areas are not consistent with any listed PCT, do not contain any threatened species, would not result in direct or indirect impacts, and no future assessment or offsets are required. Further, the proposed removal of vegetation would not result in any serious or irreversible impacts on the local biodiversity.
- 4.4.12 As the Concept Proposal does not include construction works or removal of trees, the Department considers the Concept Proposal would not result in any direct or indirect impacts.
- 4.4.13 The prescribed impacts of the development on the habitat of threatened fauna species (given the likelihood of foraging), and the hydrology of the Coups Creek (downslope of the site) have been assessed as negligible in the amended BDAR.
- 4.4.14 Based on the comments from EESG, the Department is satisfied that the Concept Proposal would not result in any significant impact on the surrounding biodiversity.

Stage 1 works

- 4.4.15 The BDAR indicates that the Stage 1 works involve the expansion of the oval and running track (**Figure 13**) and this would result in the direct biodiversity impact of the removal of 0.05ha of STIF. The BDAR has assessed the impacted area of STIF to be degraded, weedy and low condition and the removal would not result in direct or indirect fragmentation of the STIF. However, notwithstanding this, the direct impact of the removal of 0.05ha of STIF requiring one ecosystem credit to be offset in accordance the BAM.

- 4.4.16 The BDAR indicates that the Stage 1 works, including the Boarding Accommodation, through site link, P1A Tennis Court, P3A Multi-Purpose and P4A Osborn Road car parks would result in direct biodiversity impact of the removal of 0.35ha of BGF and a hollow bearing tree to facilitate the development.
- 4.4.17 The amended BDAR confirms that targeted surveys were conducted to identify roosting habitats of threatened microchiropteran bat species (microbats) within the roof cavities of existing buildings that are proposed to be demolished as part of Stage 1 works. The targeted surveys did not identify the presence of any bats and concluded it is unlikely that microbat species utilise the site for breeding or roosting habitat. The BDAR considered *Pteropus Poliocephalus* (Grey-headed Flying-fox) may use the site for foraging, however, after assessing the site against the Commonwealth Significant Impact Criteria concluded the proposal would not impact this species. No species offset credits have been recommended.



Figure 27 | Direct biodiversity impacts requiring offset (left) and not requiring offsets (right)
(Base source: Applicant's RtS 2020)

- 4.4.18 The amended BDAR identifies that indirect impacts may arise relating to noise, dust, light spill, sedimentation, weeds, vehicle strike, rubbish, wood/rock removal, pest animals and fire risk. Relevant mitigation measures are proposed including:
- pre-clearance surveys, avoiding clearance during breeding season and supervision by qualified professional(s).
 - new landscaping to include locally derived native species, consider replacement hollows, protection of retained vegetation, soil / erosion measures and weed management.
 - appropriate education for construction staff and vehicles to only use designated areas.
- 4.4.19 The amended BDAR concludes that residual impacts would be low, with no requirement for offsetting.

- 4.4.20 The amended BDAR has also assessed the prescribed impacts to be negligible due to the Stage 1 works. The Applicant has confirmed that all ecosystem offset credits due to the works would be purchased and addressed as part of the Stage 1 works.
- 4.4.21 EESG considered the amended BDAR and confirmed it has addressed its initial concerns.
- 4.4.22 Based on the Applicant's and EESG's submission, the Department is satisfied the Stage 1 works have minimal direct impacts on vegetation and the residual impact due to the removal of 0.05ha of PCT 1281 STIF and PCT 1237 0.35ha BGF can be appropriately offset but retiring the eight generated ecosystem credits prior to the commencement of any works in Stage 1. The Department concludes that, subject to the retiring of the credits, the direct impacts would not adversely impact on the biodiversity values of the site. The Department has recommended a condition accordingly.
- 4.4.23 The Department is satisfied that indirect impacts occurring during construction are likely to be minor and can be adequately managed and mitigated by the implementation of the BDAR mitigation measures and the Department's recommended Construction Environmental Management Plan (discussed later in this report). The Department has recommended a condition requiring the BDAR mitigation measures be implemented.

Matters of National Environmental Significance

- 4.4.24 The BDAR identified that one Matter of National Environmental Significance (MNES), *Pteropus poliocephalus* (Grey-headed Flying-fox), which is listed as Vulnerable under the EPBC Act and is likely to use some of the site for foraging. The *Eucalyptus scoparia* (Wallangarra White Gum) and *Syzygium paniculatum* (Magenta Lilly Pilly) are also listed as threatened species in the EPBC Act. The BDAR included an assessment of the Grey-headed Flying-fox, *Eucalyptus scoparia* and *Syzygium paniculatum* against the Commonwealth Significant Impact Criteria and concluded that the proposal would not have a significant impact on these species. Notwithstanding, MNES is not a matter for consideration under this application, which is not subject to the NSW Assessment Bilateral Agreement.

4.5 Mandatory matters for consideration

- 4.5.1 The following are the relevant mandatory matters for consideration:
- relevant EPIs including draft EPIs.
 - objects of the EP&A Act.
 - the matters in section 4.15(1) of the EP&A Act.
 - Ecological Sustainable Development (ESD).
 - *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).
 - Planning Secretary's Environmental Assessment Requirements (SEARs).

Environmental Planning Instruments

- 4.5.2 Under section 4.15 of the EP&A Act, the consent authority is required to take into consideration any EPI that is of relevance to the development the subject of the development application. Consideration must also be given to any proposed instrument (draft EPI) that is or has been the subject of public consultation under the EP&A Act.

- 4.5.3 Therefore, the assessment report must include a copy of, or reference to, the provisions of any EPIs and draft EPIs that substantially govern the project and that have been considered in the assessment of the project.
- 4.5.4 The Department has undertaken a detailed assessment of these EPIs in **Appendix B** and is satisfied the application is consistent with the requirements of the EPIs and draft EPIs.

Objects of the EP&A Act

- 4.5.5 Decisions made under the EP&A Act must have regard to the objects as set out in section 1.3 of the Act.
- 4.5.6 The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent / approval) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore, in making an assessment, the objects should be considered to the extent they are relevant.
- 4.5.7 The Department has considered the proposal to be satisfactory with regard to the objects of the EP&A Act (**Table 7**).

Table 7 | Consideration of the proposal against the objects of section 1.3 of the EP&A Act

Objects of the EP&A Act	Consideration
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources	<p>The proposal involves upgrades and improvements of an existing school in a well-connected location.</p> <p>The overall proposal is estimated to generate 555 construction and 71 new operational jobs.</p> <p>The site is located within an existing urban area and its redevelopment would have a positive impact on the economic welfare of the community.</p> <p>Impacts on the natural environment can be mitigated.</p>
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	<p>The Concept Proposal and Stage 1 works include measures to deliver ESD (paragraphs 4.5.9 to 4.5.15).</p>
(c) to promote the orderly and economic use and development of land,	<p>The Concept Proposal and Stage 1 works involve the orderly and economic use of land through the efficient redevelopment of an existing school site that is in close proximity to existing services and public transport.</p> <p>The proposal provides for improvements of an existing educational facility on a site owned by the Applicant. The merits of the proposal are considered in Section 6.</p> <p>The development of the site will also provide economic benefits through job creation.</p>

(d) to promote the delivery and maintenance of affordable housing,	The proposal, being an educational establishment, does not include any affordable housing, and is not required to do so.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,	A BDAR was submitted with the application. The Department's consideration of impacts of the Concept Proposal and the Stage 1 works is outlined in Section 4.4 and tree removal and replacement at Section 6.4 of this report.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),	The proposal involves the demolition of existing buildings and structures on a site of local heritage significance and the establishment of new building envelopes and the construction of a new Boarding Accommodation building. The Department has considered the heritage impacts of the Concept proposal and the Stage 1 works, including impacts to Aboriginal cultural heritage, in detail at Section 6.6 , and concludes the proposal is acceptable subject to conditions.
(g) to promote good design and amenity of the built environment,	The proposed building envelopes, subject to conditions, would have acceptable impacts, and the proposed Boarding Accommodation building is considered to achieve a high standard of design (see Section 6.2). The Department has recommended built form conditions which ensure future developments within the building envelopes would achieve a high standard of design.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,	The Concept Proposal does not include any building works. The Stage 1 works promote proper construction and maintenance of buildings subject to recommended conditions of consent. Future DA(s) for the remaining Stages would be required to include detailed report(s) confirming the development is capable of meeting relevant construction standards.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,	The Department publicly exhibited the proposed development (and further exhibited the amended proposal) as outlined in Section 5 , which included consultation with Council and other public authorities and consideration of their responses.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The Department publicly exhibited the proposal including notifying adjoining landowners, placing a notice in newspapers, and displaying the proposal during the exhibition period on the Department's website and at Council's office.

Section 4.15(1) matters for consideration

- 4.5.8 The matters for consideration under section 4.15(1) that apply to SSD in accordance with section 4.40 of the EP&A Act have been addressed in **Table 8**.

Table 8 | Section 4.15(1) Matters for Consideration

Section 4.15(1) Evaluation	Consideration
(a)(i) any environmental planning instrument	Satisfactorily complies. The Department's consideration of the relevant EPIs is provided below, at Section 6 and Appendix B .
(a)(ii) any proposed instrument	The Department's consideration of the relevant draft EPIs is provided at Appendix B .
(a)(iii) any development control plan	Under clause 11 of the SRD SEPP, development control plans (DCPs) do not apply to SSD. Notwithstanding, consideration has been given to the relevant controls under the HDCP at Section 6 and Appendix B .
(a)(iia) any planning agreement	Not applicable.
(a)(iv) the regulations	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications (Part 6), public participation procedures for SSD and Schedule 2 relating to EIS.
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	The impacts of the proposal have appropriately mitigated or conditioned as discussed in Section 6 .
(c) the suitability of the site for the development	The site is suitable for the development as discussed in Section 6 .
(d) any submissions	Consideration has been given to the submissions received during the exhibition of the proposal as summarised at Section 5 and Section 6 .
(e) the public interest	The proposal is in the public interest, as discussed at Section 6 .

Ecologically sustainable development

- 4.5.9 The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- the precautionary principle.
- inter-generational equity.
- conservation of biological diversity and ecological integrity.
- improved valuation, pricing and incentive mechanisms.

Concept Proposal

4.5.10 The Applicant is targeting measures to achieve a minimum of a 4-Star Green Star rating equivalency for the Concept Proposal. In addition, the following ESD initiatives and opportunities have been identified, which would be explored as part of the detailed design of future development(s):

- rainwater collection / re-use and water treatment.
- photovoltaic panels, bio-digester and tri-generation units.
- building upgrades to improve insulation / reduce heat loss.
- upgrades to improve shading / reduce solar gain.
- building design to take advantage of natural ventilation opportunities and passive cooling opportunities.

4.5.11 The Department has recommended that future DA(s) demonstrate how ESD principles have been incorporated into the proposal, the minimum 4-Star Green Star rating or equivalent sustainability target is met, and all new buildings consider the installation of green / biodiversity roofs.

Stage 1 works

4.5.12 The Applicant is targeting a 5-Star Green Star rating equivalency for the Boarding Accommodation building, which exceeds the 4-Star target of the Concept Proposal and Educational Facilities Standards and Guidelines design guide. In addition, the proposal includes the following initiatives:

- minimise operational energy demand through passive building design measures (external shading), use of low energy lighting fixtures, high efficiency cooling and heating plants and energy monitoring and metering.
- use of water efficient fixtures (5-Star taps, urinals and dishwashers, 4-Star toilets and clothes washing machines and 3-Star showers) that will meet or exceed the Water Efficiency Labelling and Standards (WELS) ratings.
- 90 x 400w (38.4kW) photovoltaic solar panels on the roof level of the building.
- a 120 kilolitre water tank within the building for rainwater capture and reuse.
- preparation and implementation of a Green Travel Plan.

4.5.13 The Department has considered the project in relation to the ESD principles. The precautionary and inter-generational equity principles have been applied in the decision making process by a thorough assessment of the environmental impacts of the development. The proposed development is consistent with ESD principles as described in the Applicant's EIS, which has been prepared in accordance with the requirements of Schedule 2 of the EP&A Regulation.

4.5.14 The Department has recommended conditions for the Stage 1 works:

- appointment of a suitably qualified Green Star accredited professional to monitor the detailed design to ensure the ESD measures indicated above are incorporated.
- the applicant must obtain evidence from a suitably qualified Green Star accredited professional demonstrating that the detailed design of the development achieves all the ESD measures set

out in the EIS, including achieving a minimum 5-star Green Star rating with the Green Building Council Australia or equivalency, prior to the commencement of buildings works (excluding earthworks).

- 4.5.15 Subject to the Department's recommended conditions, the proposed development would be consistent with ESD principles and the Department is satisfied the future detailed developments and the Stage 1 works are capable of achieving ESD in accordance with the objects of the EP&A Act.

Environmental Planning and Assessment Regulation 2000

- 4.5.16 Subject to any other references to compliance with the EP&A Regulation cited in this report, the requirements for Notification (Part 6, Division 6) and Fees (Part 15, Division 1AA) have been complied with.

Secretary's Environment Assessment Requirements

- 4.5.17 On 12 January 2018, the Department notified the Applicant of the Planning Secretary's Environmental Assessment Requirements (SEARs) that apply to the proposal. The Department is satisfied that the EIS and RtS adequately address the requirements of the SEARs to enable the assessment and determination of the application.

4.6 Other approvals

- 4.6.1 Under section 4.41 of the EP&A Act, a number of other approvals are integrated into the SSD approval process, and consequently are not required to be separately obtained for the proposal.
- 4.6.2 Under section 4.42 of the EP&A Act, a number of further approvals are required, and must be substantially consistent with any development consent for the application (e.g. approvals for any works under the *Roads Act 1993*),

The Department has consulted with the relevant public authorities responsible for integrated and other approvals that would have been required should the development not have been SSD, considered their advice in its assessment of the application, and included suitable condition in the recommended conditions of consent (see **Appendix D**).

5 Engagement

5.1 Department's engagement

- 5.1.1 In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the application between 28 June 2019 and 25 July 2019 (28 days). The EIS was re-exhibited between 9 December 2019 and 31 January 2020 due to an administrative error resulting in not all relevant surrounding landowners and occupiers being originally notified. The application was made publicly available on the Department's website, at the NSW Service Centre and at Hornsby Shire Council's (Council's) office.
- 5.1.2 The Department placed a public exhibition notice in the Hornsby and Upper North Shore Advocate on 27 June 2020 and notified surrounding landholders, Council and relevant public authorities in writing. On 15 September 2020 and 1 June 2021, Department representatives visited the site to inform the assessment of the proposal.
- 5.1.3 The Department has considered the comments raised in public authority and public submissions during the assessment of the application (**Section 6**) and/or by way of recommended conditions in the instrument of consent at **Appendix D**. The submissions are summarised in the following sections of this report.

5.2 Summary of submissions

- 5.2.1 In response to the two exhibitions of the EIS, the Department received a total of 72 submissions, comprising eight submissions from public authorities (including one from Council providing comments), two comments from special interest groups and 62 individual public submissions. Of the public submissions two provided comment and 61 raised objections to the proposal.
- 5.2.2 A summary of the submissions is provided at **Table 9** and a summary of the issues raised in the submissions is provided at **Section 5.3** and **5.4**. Copies of the submissions may be viewed at **Appendix A**.

Table 9 | Summary of public authority, Council, community and special interest group submissions

Submitters	Number	Position
Public Authority	7	
<ul style="list-style-type: none">Transport for New South Wales (also incorporating comments from former Roads and Maritime Services (RMS)) (TfNSW) **	1	Comment
<ul style="list-style-type: none">Heritage NSW, Department of Premier and Cabinet (Heritage NSW)	1	
<ul style="list-style-type: none">EESG	1	
<ul style="list-style-type: none">NSW Rural Fire Service (RFS)	1	
<ul style="list-style-type: none">Sydney Water	1	

• Environment Protection Authority (EPA)	1	
• Ausgrid	1	
Council	1	Comment
Community	64	
	61	Object
• General public	1	Comment
• The Church of Jesus Christ of Latter-day Saints	1	
• Adventist Aged Care Sydney	1	Comment
TOTAL Submissions	72	

** Submissions were received from RMS and TfNSW. However, since the exhibition of the application, RMS has been incorporated into TfNSW. The submissions from RMS and TfNSW are therefore counted as one submission

5.3 Submissions

Public authority submissions

5.3.1 A summary of the issues raised in public authority submissions is provided at **Table 10**.

Table 10 | Summary of public authority submissions to the exhibition of the EIS

Council
Council does not object to the proposal and provided the following comments:
<u>Concept Proposal</u>
<ul style="list-style-type: none"> the proposal should consider details of the ELC approval (DA/1227/2018), which relies on existing car parking within the school site. the Boarding Accommodation building is excessive in height, bulk and scale when viewed from adjacent properties on Mount Pleasant Avenue. the proposal results in unacceptable heritage impacts, including: <ul style="list-style-type: none"> the development of the bushland for a new chapel would have an adverse impact on the natural heritage values of the bushland and isolated setting of the bushland cemetery and is not supported. insufficient detail has been provided on the upgrade of the Mary Ward Wing building, insufficient detail has been provided on the changes to the Convent and Angel Wing buildings. the secondary school expansion would have an adverse impact on the setting of the Chapel building and the relationship with the Convent and Angel Wing buildings. the height and scale of building envelope 3 (adjacent to Pennant Hills Road) is inappropriate, out of character and would adversely impact the landscaped setting of the site and obscure historic views to the Convent building and alter the residential scaled setting of No.4 Mount Pleasant Avenue. the loss of 'high retention value' trees on the site is concerning. the Traffic Assessment Report (TAR) should be updated as follows: <ul style="list-style-type: none"> the existing pick-up/drop-off arrangements and operation should be reviewed and improved. potential for vehicle queuing onto Osborn Road during pick-up/drop-off times and future ELC car

parking should be addressed.

- any dedicated bus services for students, including operational details should be confirmed.
- the date of the traffic survey/counts undertaken should be confirmed.

Stage 1 works

- the height, form and scale of the Boarding Accommodation building should be revised to complement the scale and style of the earliest buildings on the site.
- the new garden area and demolition of buildings between the Mary Ward Wing and Givendale building are acceptable subject to archival photographic recording of all affected areas.
- tree removal should be limited and provision of replacement of trees is supported. No significant trees should be removed and the heritage listed grounds should be retained.
- connection and augmentation of services and utilities should be in accordance with the Conservation Management Plan policy for services.

Council recommended the following:

- changes should be limited to reversible works, including reinstatement of former floorplan and excluding roof extension.
- changes should be consistent with the Conservation Management Plan.
- details of remaining heritage fabric should be included, by reinstating removed original elements and original spatial relationship with the Convent building.
- removal of unsympathetic elements should be considered.
- the front of the school should remain undeveloped and landscaped.

TfNSW

TfNSW provided the following comments:

- the TAR should be updated to:
 - review travel preferences, availability of on-street parking, pick-up/drop-off spaces to estimate trip assignment and update intersection analysis.
 - assess the suitability of the existing pick-up/drop-off facility to accommodate the future school population and provide details of a re-designed facility in the event it is found to be inadequate.
 - investigate the impact of vehicle movements relating to exiting manoeuvres, pick-up/drop-off facilities and parking on Mount Pleasant Avenue to cause vehicle conflicts/crashes and provide management / mitigation measures where required.
- The proposal should include the removal of the existing vehicular access on Pennant Hill Road to maintain road safety and network efficiency.

Heritage NSW

Heritage NSW provided the following comments:

- the site is locally listed in the HLEP and does not include any items on the SHR.
- proposed Envelope 10 (bush chapel) should be appropriately designed/placed to reduce visual impact on the bushland cemetery.
- the Stage 1 works are not located near the bushland cemetery and are unlikely to disturb archaeological relics.

Heritage NSW recommended a condition requiring works not result in the removal or damage to the bushland cemetery.

EESG

EESG provided the following comments:

- the BDAR should be updated to include:
 - an assessment of the direct and indirect biodiversity impacts of proposed alterations to the bush chapel.
 - an assessment of the proposed impact on the three identified threatened species on the site.
 - floristic analysis of PCTs.
 - a table of credit classes and matching credit profile as required by the BAM.

RFS

RFS recommended conditions relating to water and utility services, bushfire emergency access and management, future construction of buildings, landscaping and requiring works to comply with the 'Planning for Bushfire Protection 2006'.

EPA

EPA noted the proposal:

- does not require an environmental protection licence under the *Protection of the Environment Operations Act 1997* (PEOA).
- is not being undertaken on behalf of a NSW Public Authority and does not include activities for which the EPA is the appropriate regulatory authority.

Sydney Water

Sydney Water provided advice on drinking water and sewer connections

- 5.3.2 The Department notified Ku-Ring-Gai Council about the application as the site adjoins the Ku-Ring-Gai LGA boundary. However, Ku-Ring-Gai Council did not make a submission on the EIS. Ausgrid also provided no comments in relation to the SSD application.

Community submissions

- 5.3.3 A total of 64 public submissions (including two from special interest grounds) were received in response to the exhibition of the proposal comprising 61 objections and three comments.
- 5.3.4 The key issues raised within the public submissions are summarised at **Table 11**.

Table 11 | Public submissions made in response to the EIS exhibition

Issue	Proportion of total (64) submissions
• Traffic, parking and pick-up/drop off impacts	88%
• Adverse impact on the operation of Osborn Road and Mount Pleasant Avenue intersections with Pennant Hills Road	64%
• Adverse increase in student numbers	46%
• Cumulative impacts with Childcare Centre	32%

• Adverse visual impact	26%
• Question the validity of the traffic assessment	25%
• Inappropriate height, scale and location of building envelopes	23%
• Adverse height and scale of the Boarding Accommodation building	22%
• Insufficient public consultation	13%
• Bushfire danger	7%
• Trees should be protected and not removed	6%

5.3.5 Other issues raised in public submissions (5% or less) included construction impacts, removal of internal road network and operational noise.

5.3.6 In addition to the 64 public submissions received during the public exhibition, an additional five late submissions were received from community members and the Safe Osborn Action Group after the close of the public exhibition period. The submissions raised concerns (including traffic, parking, pedestrian safety, tree removal, emergency vehicle access, construction impact, building scale and public consultation) that have already been summarised in **Table 11**.

5.4 Response to submissions

5.4.1 Following the exhibition of the proposal, the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised in the submissions and matters raised following the Department's preliminary review of the EIS.

5.4.2 On 15 February 2021, the Applicant submitted its RtS (**Appendix A**). The RtS provides additional information and clarification in response to the issues raised in submissions. The RtS also included the following key amendments to the proposal (**Figure 28**):

Concept Proposal

- expansion of the site boundary to include No. 4 Mount Pleasant Avenue and increase of the overall site area by 1500m² (from 13.02ha to 13.17ha).
- amend the staging of infrastructure works to align with proposed student population increases.
- amend building envelopes including:
 - delete Envelopes 3, 9 and 10.
 - minor amendment to Envelope 8 to refine its height in relation to the sports field.
 - include two new building envelopes:
 - Envelope 13 comprising the P4A Multi-Purpose Court carpark.
 - Envelope 14 comprising the P1A Tennis Court carpark.
 - various reductions / amendments to other building envelope sizes and heights.
- site-wide increase of 120 new staged carparking spaces (from 116 to 236 new spaces).

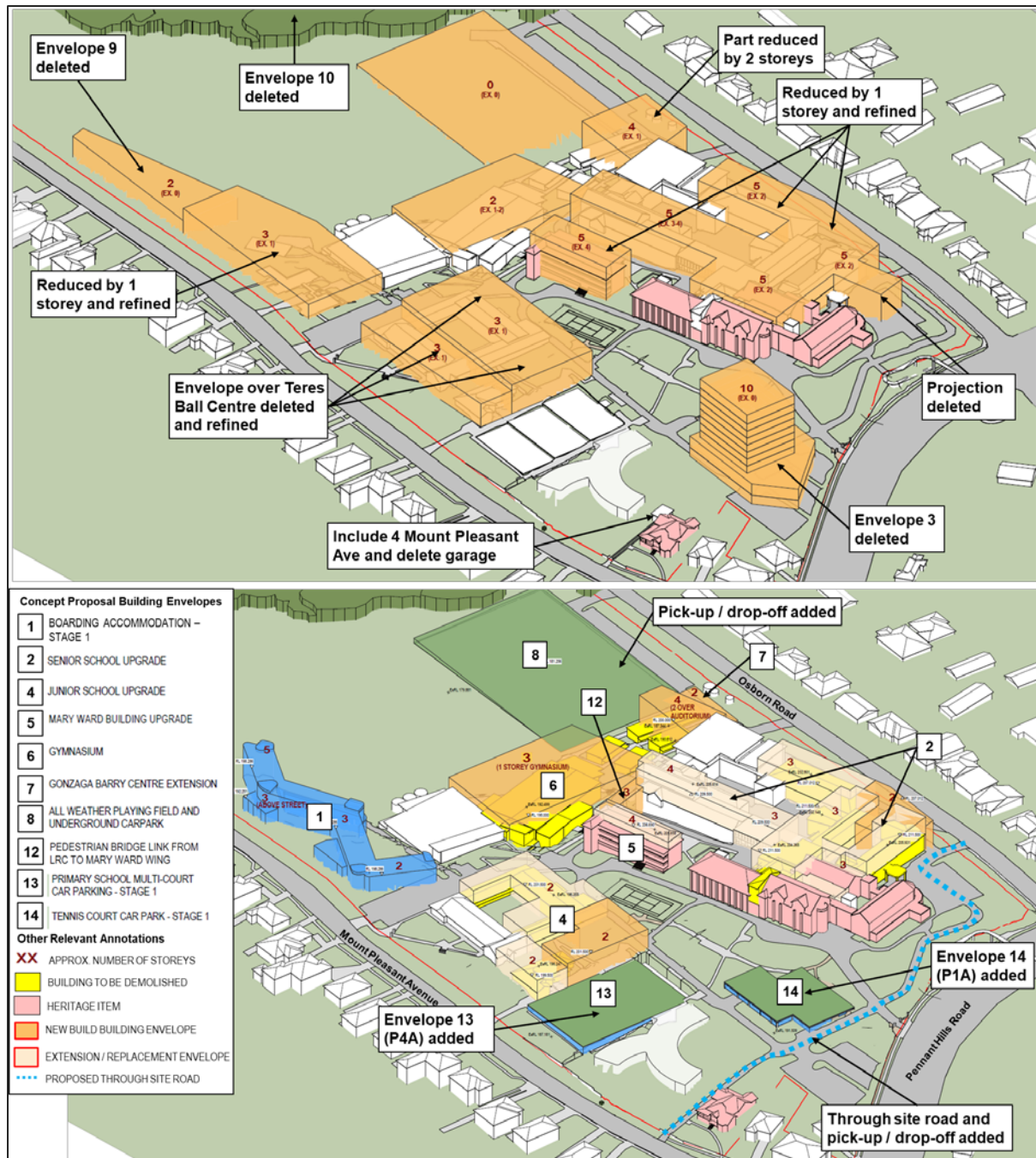


Figure 28 | Comparison between the original EIS (top) and revised RtS (bottom) Concept Proposal envelopes and layouts indicating the key changes (Base source: Applicant's EIS 2019 and RtS 2021)

Stage 1 works

- expand the scope to include P1A, P3A and P4A carparks and the through site link road.
- confirm the maximum student population for Stage 1 to be 1650 students.
- reduce the maximum height of the Boarding Accommodation building by 4.3m / one storey (from RL 203.8m / 6 storeys to RL 199.5m / 5 storeys).
- amend and increase setbacks of the Boarding Accommodation building from Mount Pleasant Avenue.
- amend the scale, architectural and landscape design of the Boarding Accommodation building.
- introduce a through site link road between Osborn Road and Mount Pleasant Avenue.

- revise pick-up/drop-off and bus parking facilities including:
 - convert the existing four pick-up/drop-off spaces adjacent to the Gonzaga Barry building into an additional two bus parking bays (resulting in four bus bays in total).
 - provide three new pick-up/drop-off spaces accessed from the through site link road.
 - provide two new pick-up/drop-off spaces within the P3A Osborn Road carpark.
- amend the existing Osborn Road carpark, including tree removal, to provide for an additional 27 car parking spaces.
- remove existing tennis and multi-purpose basketball sports courts and construction of P1A Tennis Court and P4A Multi-Purpose Court carparks.

5.4.3 The RtS was publicly exhibited between 23 February 2021 and 8 March 2021. The Department made the RtS publicly available on its website and notified surrounding landholders, Council and relevant public authorities in writing.

5.4.4 A total of 90 submissions were received in response to the RtS, including seven submissions from public authorities (including one from Council) and 82 from the public, including 78 objections and four comments. No submissions were received from special interest groups.

5.4.5 A summary of the issues raised in the submissions is provided at **Table 12** and **Table 13** and copies of the submissions may be viewed at **Appendix A**.

Public authority submissions

Table 12 | Summary of public authority submissions to the notification of the RtS

Council

Council reviewed the RtS and confirmed the Concept Proposal and Stage 1 works as amended by the RtS would not have adverse heritage impacts subject to the imposition of requested conditions (below). Council provided the following additional comments:

Concept Proposal

- the building envelopes (up to 20.6m) exceed the HLEP maximum building height control (8.5m). Height exceedances (including scale and setbacks) should not result in adverse amenity impacts and should satisfy the requirements of clause 4.6 of the HLEP.

Stage 1 works

- the Boarding Accommodation building:
 - has an unbroken building length of 150m fronting Mount Pleasant Avenue and results in an atypical scale and character within the low-density residential zone.
 - does not provide an appropriate transition in scale or setbacks to Mount Pleasant Avenue and does not satisfy Council's controls for landscaping, setbacks or built form and **articulation**.
- address the following pick-up/drop-off, traffic and parking concerns:
 - update the TAR to consider pick-up/drop-off impacts, including queuing, during the PM peak.
 - further consider the queuing impacts along Osborn Road and Pennant Hills Road due to existing operational arrangements.
 - provide the proposed new pick-up/drop-off facilities prior to any increase in student numbers.
 - widen Osborn Road to accommodate two traffic lanes along the School side.
 - widen footpaths adjoining the site by 800mm (from 1.2m to 2m) to accommodate increased pedestrian movements.
 - provide additional on-site car parking to alleviate the impact of staff and students parking on-street.
 - address existing school staff car parking shortfall prior to any increase in school population.

- Council maintains its concern about the removal of trees of medium to high retention value. Council recommended that replacement trees should be provided as part of Stage 1 and an updated landscape plan provided confirming the species, location and number of replacement trees.

Council recommended heritage conditions requiring a heritage interpretation strategy, archival recording of significant heritage fabric, supplementary heritage assessment of heritage tree loss, consideration of Aboriginal cultural heritage and archaeology during construction and detailed heritage reports to accompany future DA(s).

TfNSW

TfNSW reviewed the RtS and did not provide any additional comments.

TfNSW recommended conditions relating to siting of buildings and the road reserve, kerb and gutters, excavation adjacent to the roadway, green travel plan, stormwater drainage, School Zones, pedestrian paths, signposting, Road Safety Audit of pick-up/drop-off and pedestrian and vehicle arrangements, vehicle manoeuvrability and preparation of a Construction Pedestrian and Traffic Management Plan.

Heritage NSW

Heritage NSW reviewed the RtS and advised:

- the works have been designed in accordance with the Conservation Management Plan and manage significant elements.
- the deletion of the alterations to the bush chapel is supported.
- the proposed works would not have a significant impact on the bush chapel.
- there is nil to low likelihood of non-aboriginal archaeology in the project area.

Heritage NSW, Aboriginal Cultural Heritage (ACH)

Heritage NSW ACH reviewed the RtS and advised the Aboriginal Cultural Heritage Assessment Report (ACHAR) adequately identifies and assesses the proposal in the context of Aboriginal cultural heritage values.

Heritage NSW ACH recommends a condition requiring the preparation and implementation of an archaeological unexpected finds protocol for the project.

EESG

EESG reviewed the RtS and provided the following comments:

- the RtS has addressed its previous comments on biodiversity.
- a flood impact risk assessment and emergency response plan is required.
- consider the impact of the development on overland flow flooding up to the Probable Maximum Flood (PMF) storm event and identify management options to mitigate any impacts.

EPA

EPA reviewed the RtS and reiterated its comments provided in response to the EIS exhibition.

Ku-Ring-Gai Council

Ku-Ring-Gai Council reviewed the RtS and confirmed it had no comments to make.

Community submissions

5.4.6 The public submissions made in response to the RtS exhibition are summarised at **Table 13**.

Table 13 | Public submissions made in response to the RtS exhibition

Issue	Proportion of total (81) submissions
• Traffic (congestion, safety, emergency vehicle access)	94%
• Impact on Mount Pleasant Avenue intersection with Pennant Hills Road	61%
• Green travel plan is inadequate / ineffectual	46%
• Car parking (too much / not enough) and parking pressure on surrounding streets	43%
• Impact on Osborn Road intersection with Pennant Hills Road	42%
• Increase in student numbers	37%
• Bulk and scale of building envelopes	28%
• Design and operation of the through site link road	27%
• Tree removal and impact on BGF	20%
• Bulk and scale of the Boarding Accommodation building	18%
• Cumulative traffic impact with operation of ELC	9%
• Closure of the school vehicular entrance to Pennant Hills Road	7%

5.4.7 Other issues raised in public submissions (5% or less) included operational noise impact, construction impacts, overlooking of Mount Pleasant Avenue properties, light spill, incremental development, adequacy of public consultation, pick-up/drop-off facilities, overshadowing of dwellings on Mount Pleasant Avenue, substation location and impact on property values.

5.4.8 One public submission (in objection) included an independent traffic report prepared by Greys Consulting dated 15 March 2021 (the Greys Report) that considered the amendments made by the RtS and concluded further amendments and assessment are necessary to address and quantify traffic impacts. The Department has considered the Greys Report in its assessment of traffic impacts at **Section 6.2**.

5.4.9 In addition to the 81 public submissions, the Department also received two additional objections from community members after the close of RtS exhibition period. Those submissions raised concerns (including traffic impacts, the link road, tree removal and property values) that have already been summarised in **Table 13**.

5.5 Supplementary response to submissions and further information

5.5.1 Following the exhibition of the RtS, the Department placed copies of all submissions received during the exhibition period on its website and requested the Applicant provide a response to the issues raised in the submissions and matters raised following the Department's review of the RtS.

5.5.2 On 20 May 2021, the Applicant submitted its supplementary response to submissions (SRtS) (**Appendix A**). The SRtS does not include any amendments to the proposal other than to expand the scope of the Stage 1 work to include the bus bay area adjacent to Gonzaga Barry building and Osborn Road.

- 5.5.3 The SRtS provides additional information and clarification in response to the issues raised in submissions, including the following key matters:
- clarification of car, bus and bicycle parking and pick-up/drop-off arrangements and queuing, traffic modelling assumptions, operational traffic management and response to resident's and the Department's independent traffic assessments.
 - confirmation that the pick-up/drop-off facility and through site road would be provided as part of the initial phases of the Stage 1 works.
 - clarification of development staging, CIV, operational jobs and student numbers.
 - details of excavation cut/fill and updated consideration of stormwater and flooding.
 - provision of a Concept Proposal landscape masterplan.
 - clarification of the green star rating target, ecosystem credits, tree removal/replacement and details of solar panels.
 - an assessment against the following draft EPIs:
 - Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities).
 - Draft State Environmental Planning Policy (Housing Diversity).
 - State Environmental Planning Policy (Building Sustainability Index BASIX) 2004.
- 5.5.4 The Department made the SRtS publicly available on its website and notified Council and relevant public authorities in writing.
- 5.5.5 Additional submissions were received from Council, TfNSW, EESG and two submissions from the public both raising objections.
- 5.5.6 A summary of the issues raised by Council and public authorities is provided below:
- **Council** considered the SRtS and confirmed it supports the provision of the pick-up/drop-off facilities as part of Stage 1 works. Council also provided the following comments and recommended conditions:
 - the Department should satisfy itself that the scale and setbacks of the Boarding Accommodation building has negligible visual impacts and that clause 4.6 is addressed.
 - the photomontage submitted with the SRtS is an internal view and does not depict what the development would look like from Mount Pleasant Avenue.
 - canopy trees should be planted in front of the building to lessen its visual impact and the private terraces and formalised garden should be permeable with minimal hard surfaces to allow for landscaping and canopy trees.
 - Osborn Road should be widened (along the eastern/school side of the road) from Pennant Hills Road to Gate 03. Council recommended conditions to achieve this outcome.
 - Council recommended general conditions relating to engineering works, stormwater drainage, water quality, driveway design and vehicle crossing, roadworks, traffic control plan, Council assets and creation of easements.
 - **TfNSW** confirmed it had no further comments and reiterated the conditions it recommended in its submission on the EIS and RtS.
 - **EESG** confirmed the updated Civil Engineering Report addresses its previous comments on flooding.

- 5.5.7 Two submissions were received from the public in response to the SRtS, which raised concerns about traffic congestion, parking disruption, the direction of the one-way road should be reversed to exit onto Osborn Road and increase in student numbers.
- 5.5.8 On 21 June 2021, the Department requested the Applicant provide additional information relating to traffic noise, traffic modelling, pick-up/drop-off, construction management, relocation of the Uniform Shop and the proposed substation.
- 5.5.9 On 20 July 2021, the Applicant provided a further SRtS, which included:
- a noise statement considering noise emissions associated with the through site road.
 - updated draft Construction Management Plan including revised construction site layout.
 - a traffic statement including responses to Department's requests and clarification of details relating to the pick-up/drop-off facilities and operation.
 - revised Concept Proposal drawings to correct inconsistencies relating to proposed buildings to be demolished.
 - details and revised location of the electrical substation.
 - details and timing of the temporary relocation of the uniform office and its removal.
 - amendment of the P1A Tennis Court carpark to relocate two car parking spaces from within the building to the opposite side of the through site road adjacent to the P1 Pennant Hills car park.

5.6 Independent peer-review of the TAR

- 5.6.1 Following the EIS exhibition and the concern raised in the submissions, the Department engaged Bitzios Consulting (Bitzios) to undertake an independent peer review of the Applicant's TAR and the concerns raised in submissions.
- 5.6.2 Bitzios provided a peer review report in April 2020, which considered the EIS, TAR and government agency and public submissions. Bitzios requested that the Applicant provide additional information and justification, including:
- consideration of the HDCP parking provisions and the Transport for NSW Guide to Traffic Generating Developments 2002.
 - clarify trip origin and destination information for students and staff and confirmation of currency and validity of traffic surveys.
 - traffic modelling output authentication, methodology, calibration, generation in local streets and consistency with RMS guidelines.
 - operational and safety considerations at Pennant Hills Road / Mount Pleasant Avenue intersection.
- 5.6.3 The Applicant's RtS included a response to the Bitzios review and included:
- inclusion of additional car parking, the through site road, pick-up/drop-off spaces and bus bays.
 - revised SIDRA modelling, calibration including further justification and intersection performance and operation.
- 5.6.4 Bitzios reviewed the Applicant's RtS and government agency and public submissions received during the exhibition of the RtS (including the Greys Report from residents) in March 2021. Bitzios confirmed the RtS had addressed many of its previous comments. However the following concerns remained outstanding:

- further detail on vehicle queuing lengths and relationship to peak times.
- additional modelling considering PM peak results, 95th percentile queues, calibration and validation, intersection modelling, staging of development, pedestrian volumes.
- clarification of the recirculation of drivers where pick-up/drop-off spaces are not available.
- operational management measures relating to drivers using the pick-up/drop-off spaces.

5.6.5 The Applicant's SRtS included a response to the Bitzios review and included:

- clarification of queuing analysis and surveys undertaken as part of the ELC approval.
- updated SIDRA modelling and consideration of intersection performance.
- clarification of recirculation rules, operational management and use of Traffic Marshalls.

5.6.6 Bitzios reviewed the Applicant's SRtS and stated the GTP should be updated in accordance with TfNSW requirements and infrastructure should be delivered on a stage-by-stage basis in line with student and staff population growth. Bitzios concluded the SRtS has addressed the majority of its comments, however, requested the Applicant should clarify the following final matters:

- whether the pick-up/drop-off facility would be opened prior to the afternoon pick-up to address the current issues and if so at what time.
- whether the future year SIDRA modelling scenarios considered the rerouted east traffic via Normanhurst Road and whether there would be any associated impacts.
- SIDRA modelling of the No Right Turn (or any other changes) from Mount Pleasant Avenue (south) into Pennant Hills Road (east) in the event it is installed and identifying any impacts to Normanhurst Road as a result of rerouted traffic.

5.6.7 The Applicant provided additional information in response to the Bitzios review including:

- confirmation that the pick-up/drop-off facilities would be open 30 minutes prior to the afternoon pick-up to allow queuing on-site.
- existing SIDRA modelling has already taken account of potential rerouting traffic and the No Right Turn restriction.

5.6.8 Bitzios raised no further concerns following lodgement of the additional information.

5.6.9 The Bitzios peer review is provided at **Appendix C**.

6 Assessment

6.1 Key assessment issues

6.1.1 The Department has considered the Applicant's EIS, RtS and SRtS and the issues raised in submissions in its assessment of the proposal. The Department considers the key assessment issues associated with the Concept Proposal and Stage 1 works are:

- traffic and parking.
- built form.
- tree removal and replacement.
- operational and construction noise.

6.1.2 Each of these issues is discussed in the following sections of this report. Other issues were taken into consideration during the assessment of the Concept Proposal and are discussed at **Section 6.6**.

6.2 Traffic and parking

6.2.1 The site is located within a low-density residential area. As summarised at **Section 1.3**, the closest classified road to the site is Pennant Hills Road, with access to the site provided along Osborn Road and Mount Pleasant Avenue, both of which are local roads with on-street car parking. The site has excellent access to public transport, including high frequency train and bus services.

6.2.2 The application includes a Transport Assessment Report (TAR), Green Travel Plan (GTP), Operational Traffic Management Plan (OTMP) and Construction Traffic Management Plan (CTMP), which consider the existing road and pedestrian conditions, transport mode share and sustainable transport measures and construction and operational impacts.

6.2.3 In response to the exhibition of the EIS, public authorities and the public raised concerns about the operational traffic impacts of the proposal. Key traffic and parking concerns raised in the public submissions are summarised below:

- increased traffic congestion and impact on the performance of the Osborn Road / Pennant Hills Road and Mount Pleasant Avenue / Pennant Hills Road intersections due to increased traffic and queuing from pick-up/drop-off.
- the intersection of Mount Pleasant Avenue / Pennant Hills Road should be signalised and a pedestrian crossing provided.
- the right-hand turn from Mount Pleasant Avenue onto Pennant Hills Road should be retained.
- additional traffic onto Mount Pleasant Avenue from new through site road.
- cumulative traffic congestion from surrounding development approvals including the Wahroonga Approval.
- safety concerns (pedestrians and vehicle accidents) from additional traffic on local streets. Existing unsafe vehicle behaviour already occurs during pick-up/drop-off.
- Osborn Road is too narrow to accommodate additional traffic.
- insufficient car parking would result in cars parking on the street and reducing on-street parking for residents.
- the proposal includes too much parking which would encourage more students/staff to drive to the school.
- overall concerns regarding the suitability of the Transport Assessment Report.

6.2.4 In response to these concerns, the RtS and SRtS included amendments, further clarification of impacts and mitigation measures.

6.2.5 The key assessment issues include:

- mode share and green travel plan.
- operational traffic impacts and intersection performance.
- through site road and student pick-up/drop-off facilities.
- car parking.
- staging of student and staff population increases.
- construction traffic.

Mode share and green travel plan

6.2.6 The application has included a GTP as a way to manage the transport needs of staff, students and visitors of the school. The aim of the GTP is to reduce traffic congestion, environmental impacts and support walking, cycling, public transport and car sharing, while reducing dependence on private vehicles and parking.

6.2.7 The GTP confirms that in 2018 a travel mode share survey was undertaken to determine staff and student travel patterns to and from school. Approximately 75% of staff and 70% of students responded to the survey, which found that:

- 30% of students drove or were driven to school and 70% used public or active transport options.
- 90% of staff drove to school and 10% used public or active transport options.

6.2.8 To reduce the amount of traffic congestion experienced by users and the public, the GTP anticipates the school could achieve a mode share for staff and students as summarised at **Table 14**. The application targets an overall reduction in private vehicle usage of:

- 5.1% for staff and 11.4% for students at the completion of the Stage 1 works.
- 9.1% for staff and 16.9% for students at completion of the redevelopment of the site.

Table 14 | Anticipated travel mode of school staff and students (Source Applicant's RtS 2021)

Travel Mode	Staff Travel Mode Share			Student Travel Mode Share		
	Existing	Stage 1	Concept	Existing	Stage 1	Concept
Driver	89.1%	84% (-5.1%)	80% (-9.1%)	13.9%	3.5% (-10.4%)	3% (-10.9%)
Dropped off	0.5%	0.5%	0.5%	15.8%	15% (-0.8%)	10% (-5.8%)
Taxi / ride share	0%	0%	0%	0.2%	0% (-0.2%)	0% (-0.2%)
Train	5.7%	10.8% (+5.1%)	12.8% (+7.1%)	19.5%	23% (+3.5%)	25.5% (+6%)
STA bus	0%	0%	2% (+2%)	16.2%	17% (+0.8%)	19% (+3.8%)
Loreto bus	0%	0%	0%	12.7%	14% (+1.3%)	15% (+2.3%)
Cycle	0.5%	0.5%	0.5%	0%	2% (+2%)	2%
Walk	2.6%	2.6%	2.6%	3.8%	4% (+0.2%)	5% (+1.2%)
Live on campus	0%	0%	0%	10.4%	14% (+3.6%)	14%
Other	1.6%	1.6%	1.6%	7.5%	7.5%	7.5%

- 6.2.9 To achieve the above mode share and to generally encourage the use of sustainable transport, the GTP sets out a sustainable transport management strategy for future students and staff. Key measures include:
- induction information for new users, including a Transport Access Guide and periodic reminders, to provide information of public and active transport options and routes.
 - provision of bicycle parking and end of trip facilities and development of annual programs and events to encourage active transport such as bike safety programs and bike maintenance demonstrations.
 - investigating the provision of a school shuttle bus to the train station.
 - encouraging staff carpooling.
 - ongoing annual monitoring and review of the GTP.
 - reduction in on-site car parking for future stages of the Concept Proposal in order to discourage private car usage (discussed further under the 'Car parking' section below).

Submissions and Applicant's response

- 6.2.10 Concern was raised in public submissions and the Greys Report, submitted by residents, that the GTP mode share targets were unachievable and would not address existing traffic congestion and car parking pressures.
- 6.2.11 TfNSW did not object to the proposed mode share targets and recommended that the GTP be updated in consultation with TfNSW and incorporate an Implementation Strategy that commits to specific management actions, including operational procedures to be implemented. Council did not raise any concern with the proposed travel mode share or the GTP.
- 6.2.12 Bitzios considered the GTP and confirmed it supports TfNSW's recommendations to update the GTP.
- 6.2.13 In response to the concerns raised in public submissions, the Applicant noted that Council's Integrated Land Use Traffic Study for the LGA identifies there has been a trend away from vehicle usage, with public transport use growing 30% and car driver/passenger modes reducing by 4% over a five-year (2011-16). This is in line with the targets proposed within the GTP.

Departments consideration

- 6.2.14 The Department has carefully considered the GTP, TAR, concerns raised in the public submissions about traffic impact and TfNSW's comments. The Department supports the preparation and implementation of the GTP and considers that it would be an effective tool to guide the mode share ambition and encourage sustainable modes of transport.
- 6.2.15 The Department considers the provision of bicycle facilities and the implementation of the GTP would assist in encouraging public and active transport modes from the outset of the operation of the Stage 1 works. The implementation of GTPs for future stages of the Concept Proposal would likely further reduce private vehicle use to the site and reduce the pressure on the operation of the surrounding road network and the proposed drop-off/pick-up facilities.
- 6.2.16 The Department is satisfied that the Applicant's proposed mode share shift of approximately 10% is not unreasonable or unattainable, subject to the implementation and ongoing annual monitoring and review of the GTP.

6.2.17 The Department has recommended:

- that all future DA(s) include a GTP that incorporates and builds on the Stage 1 works GTP.
- conditions requiring the preparation and implementation of the GTP prior to the occupation / first use of the Stage 1 works and the ongoing monitoring and annual review of the GTP.

Through site link road and student pick-up/drop-off facilities

6.2.18 The school currently provides for four on-site pick-up/drop-off spaces located adjacent to the Gonzaga Barry building, accessed via a one-way slip lane off Osborn Road and with a vehicle queuing length of approximately 46.2m / seven cars (including the four spaces), as summarised at paragraph 1.2.18.

6.2.19 Travel mode survey results (**Table 14**) indicate that currently 15.8% of students are dropped off and approximately 52% of students driven to school approach the site along Pennant Hills Road from the east and 48% from the west.

6.2.20 The TAR has assessed the traffic impacts of the existing pick-up/drop-off facility and confirms that:

- traffic movements are concentrated during the AM (8am to 8:20am) and PM (3:15pm to 3:30pm) peak periods.
- 95 vehicles arrive/depart the facilities during the AM peak, which is approximately double the demand at the PM peak period.
- typically each vehicle takes 90 seconds to pull into the space, unload the passenger and exit the space.
- based on the above observations, currently there is a vehicle queue demand of seven to eight vehicles at any one time (of which three can currently be contained on-site).

6.2.21 The TAR observed that design and operational issues with the existing pick-up/drop-off facility driveway result in vehicle queuing overflowing at Osborn Road. Issues include:

- drivers arriving in groups due the proximity to the Osborn / Pennant Hills intersection.
- the geometry of the existing driveway reduces manoeuvrability and deters recirculation.
- the steepness of the driveway encourages drivers to queue further apart to avoid collisions.

6.2.22 Drone surveys undertaken in September 2019 (associated with the ELC Approval) indicate the current school pick-up/drop-off facility results in a peak queue overflow on Osborn Road of up nine vehicles.

6.2.23 The TAR supporting the EIS included a number of traffic mitigation measures to manage the pick-up/drop-off facilities within the site. However, following concerns raised by the public authorities and public, the TAR was amended as part of the RtS. The relevant matters and the assessment of the updated TAR are provided below.

EIS Submissions and Applicant's response

6.2.24 In response to the EIS exhibition, concern was raised in public submissions about the adequacy of the existing pick-up/drop-off facility (four spaces), with many noting current problems with cars overflowing onto Osborn Road and Pennant Hills Road during peak times. Concern was also raised about the increase in student numbers as it would exacerbate this issue.

- 6.2.25 Council recommended the pick-up/drop-off operation should be improved and raised concern that the existing facility would not be able to meet the demand arising from the proposed increase in student numbers. TfNSW recommended the TAR include analysis to determine the suitability of the existing pick-up/drop-off facility to accommodate the future school population and provide mitigation measures if the analysis indicated this would be necessary.
- 6.2.26 Bitzios recommended the Applicant review the suitability of the existing pick-up/drop-off facility to accommodate the school population and consider likely demand, timing, queue lengths and any overflow.
- 6.2.27 In response to the concerns raised during the EIS exhibition, and to address existing traffic issues and accommodate the proposed increase in student numbers, the Applicant amended the scope of the Stage 1 works to include additional works and updated the TAR.
- 6.2.28 Based on the proposed student population, short-term travel mode share targets and the typical pick-up/drop-off usage (90 seconds) the updated TAR predicts during the peak periods, the school would generate demand for the following vehicle queuing on Osborn Road:
- eight to nine vehicles queuing - 100 additional students.
 - 10 to 11 vehicles queuing - 150 additional students.
 - 13 to 14 vehicles queuing - 250 additional students.
 - 15 to 16 vehicles queuing - 500 additional students.
- 6.2.29 To address existing traffic issues and to meet future demand due to student and staff increase, the Applicant's RtS proposed a new through site road, two pick-up/drop-off areas (five spaces) and on-site queuing capacity for approximately 36 vehicles (**Figure 29**). In addition, the Applicant advised that the existing four pick-up/drop-off spaces would be converted into two bus bays.
- 6.2.30 The RtS also included an Operational Traffic Management Plan (OTMP), which sets out management and mitigation measures for the operation of the pick-up/drop-off facilities (discussed later).
- 6.2.31 The updated TAR concludes the new through site road and improved pick-up/drop-off facilities as part of the Stage 1 works would significantly increase the current on-site vehicle queuing capacity (from three to 36 vehicles), which would ameliorate existing impacts and address overflow queuing onto Osborn Road. In addition, the above infrastructure and facilities would be provided prior to any increase of student numbers in Stage 1.
- 6.2.32 With reference to future stage(s) of the Concept Proposal, the updated TAR confirms that the future development of Envelope 8 P3A Osborn Road underground carpark would replace and incorporate the pick-up/drop-off facility (two spaces) provided as part of Stage 1 works. In addition, future travel demand studies would be undertaken to refine and extend the pick-up/drop-off facility depending on any outcomes of the travel demand study.

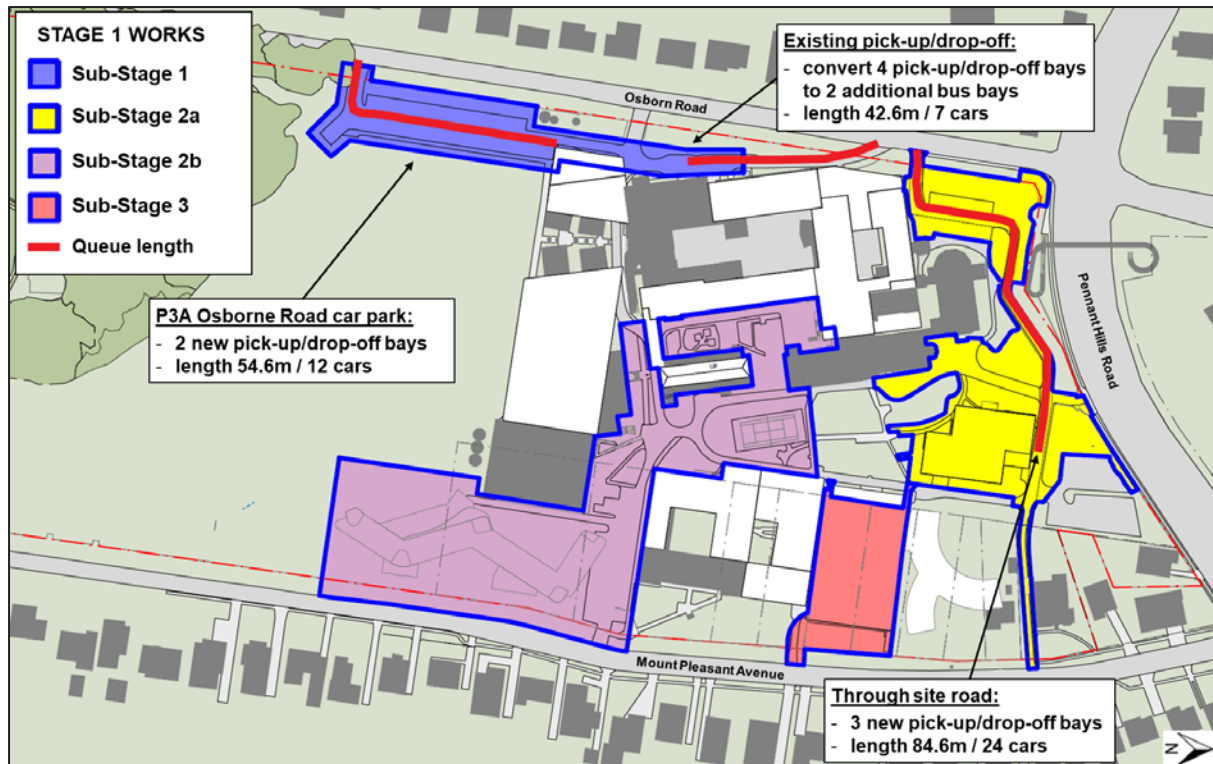


Figure 29 | Existing and proposed Stage 1 pick-up/drop-off facilities and queue lengths
(Base source: Applicant's SRtS)

RtS Submissions and Applicant's response

- 6.2.33 In response to the RtS exhibition, concern was raised in public submissions about the operation of the through site road, the adequacy of the new pick-up/drop-off facilities, potential vehicle and pedestrian conflicts, and continued overflow problems on Osborn Road. Submissions reiterated concern about the increase in student numbers. In addition, the Greys Report, submitted by residents, raised concern the TAR did not include queuing analysis and that a Road Safety Audit (RSA) is required.
- 6.2.34 Council raised concern that analysis of queuing impacts is required together with consideration of the impacts during the afternoon peak time and any overflow impacts on Osborn and Pennant Hills Roads. In addition, Council noted the school does not open its gates until the afternoon pick-up is about to begin, which exacerbates traffic issues. Council recommended all pick-up/drop-off facilities should be provided as part of Stage 1 works and prior to any increase in student numbers.
- 6.2.35 TfNSW recommended a Stage 1 works condition requiring the preparation of a RSA for the operation of the pick-up/drop-off areas and amendments to the design in accordance with the RSA (where necessary).
- 6.2.36 Bitzios reviewed the RtS and requested additional analysis of potential vehicle queue lengths and any overflow onto Osborn Road resulting from the re-circulation of vehicles that cannot be accommodated within the pick-up/drop-off facilities. In addition, Bitzios suggested the proposal include a no-stopping restriction within the through site road and implement marshalling as part of the Stage 1 OTMP, to further restrict drivers from stopping within this road.
- 6.2.37 In response to the concerns raised by Council and Bitzios, the Applicant's SRtS provided detail of queue lengths for all stages of the Concept Proposal (**Figure 29**) and confirmed the pick-up/drop-off facilities have been designed to include through-lanes that enable vehicles to pass and recirculate

when pick-up/drop-off spaces are full. These facilities would be marshalled to prevent queuing overflow. The Applicant agreed to no-stopping restrictions as part of the Stage 1 works and updated the OTMP to provide the following final key management and mitigation measures to be implemented as part of the Stage 1 works:

- allocated pick-up/drop-off facility for parents based on their direction of arrival (east or west).
- traffic marshals (school staff members) to direct vehicles into the facilities.
- marshals to require vehicles to recirculate when the designated facilities are full:
 - for the Osborn Road carpark, exit onto Osborn Road and enter via the entry driveway.
 - for the through site road, exit onto Mount Pleasant Avenue, left onto Pennant Hills Road, left onto Osborn Road and enter via the through site link entry driveway.
- marshals to manage the safe merging of vehicles back into the through lanes of the facilities.
- two minute stopping time restriction for drivers within the pick-up/drop-off facilities.
- requirement for drivers to remain inside or within 3m of their vehicles at all times.
- management strategies including information guides, website / email and newsletters.
- drivers to be directed to turn left only at the Mount Pleasant Avenue / Pennant Hills Road intersection (i.e no right-turn).
- quarterly review of school vehicles to check adequacy of the no right-turn restriction from Mount Pleasant Avenue on to Pennant Hills Road.

6.2.38 The Applicant concludes that the above facilities and management measures proposed to be implemented in Stage 1 works would ensure additional on-site queuing capacity within the site and minimise overflow/queuing on surrounding streets. In addition, the Applicant confirms that the measures would address the predicted needs for Stage 1 and all future stages of the development.

6.2.39 The updated TAR noted a RSA of the existing adjoining roads was undertaken in response to requirements of the ELC Approval and the proposal has been considered against the findings of that RSA. Notwithstanding, the Applicant did not object to TfNSW's recommended condition requiring the RSA to be undertaken and the recommended measures (if any) implemented in Stage 1.

SRtS Submissions and Applicant's response

6.2.40 In response to the SRtS concern two public submissions reiterated concerns regarding the increase in student numbers and traffic impacts associated with the operation of the through site road including increased traffic congestion on Mount Pleasant Avenue and impacts on accessibility and travel time from a 'no right-turn' restriction on to Pennant Hills Road.

6.2.41 Council did not raise any further concerns and recommended general conditions relating to internal driveways and vehicle areas, crossovers and road works in association with Stage 1.

6.2.42 Bitzios confirmed the issues that were previously raised have been addressed. However, Bitzios requested the Applicant to clarify whether the gated entrances to the pick-up/drop-off facilities would be open prior to the afternoon pick-up to address current issues with early queuing on Osborn Road. Bitzios recommended conditions be imposed to ensure relevant infrastructure is provided on a stage-by-stage basis in line with student and staff population growth and the RSA recommendations be implemented in consultation with Council and TfNSW.

6.2.43 In response to the concerns raised and Bitzios' comments, the Applicant provided further information which confirmed that the pick-up/drop-off facilities would be open 30 minutes prior to the afternoon pick-up to allow queuing on-site.

Department's consideration

- 6.2.44 The Department has carefully considered the concerns raised in submissions, the peer review by Bitzios and the Applicant's amendments to the proposal and responses to submissions.
- 6.2.45 Based on the peer review by Bitzios and the comments from Council, the Department considers that the proposed pick-up/drop-off facilities in Stage 1 would provide for sufficient on-site vehicle queuing capacity to address existing vehicular queuing overflow on Osborn Road and to accommodate the future demands of the development including Stage 1 and the completed development.
- 6.2.46 The Department supports the provision of the through site road and both pick-up/drop-off areas (five spaces) at the initial sub-stages of the Stage 1 works to cater for the future growth in student population.
- 6.2.47 However, the Department notes that in Stage 1 the Applicant proposes the removal of the existing four pick-up/drop-off spaces, provision of two new spaces (P3A Osborn Road carpark) and increase of 100 students prior to the provision of the through site road and three additional pick-up/drop-off spaces. If the construction staging for Stage 1 is allowed to progress in its current form, there would be approximately 3-6 months where the school would operate with 100 additional students and two less pick-up/drop-off spaces.
- 6.2.48 The Department is concerned, that in the above scenario, there would be a period of time between two construction sub-stages (1 and 2a) where traffic impacts associated with pick-up/drop-off would be worse than the existing situation, which is unacceptable. The Department does not support the proposed sequence of construction works in Stage 1 due to this reason, and recommends a condition requiring the sub-staging of the Stage 1 works to be amended requiring:
- construction and commencement of operation of all pick-up/drop-off facilities and through site road in Stage 1, prior to any proposed increase of student numbers.
 - retention of the existing pick-up/drop-off facility until the new facilities proposed under sub-stages 1 and 2a are operational.
 - staging of increase in student numbers as proposed in the Stage 1 sub-stages, with the above amendments implemented (summarised in **Table 18**).
- 6.2.49 The Department supports the Applicant's approach in implementing management measures via the OTMP. Noting comments from Bitzios and the public authorities in relation to traffic management within the site, the Department has recommended conditions requiring the:
- preparation and implementation of the OTMP prior to the first use of both pick-up/drop-off facilities as part of the Stage 1 works.
 - the OTMP to confirm all pick-up/drop-off facilities would be opened for use no less than 30 minutes before the afternoon pick-up period commences.
 - review and update of the OTMP with each subsequent staged increase in student numbers.
 - preparation of a RSA and implementation of its recommendations.
 - use of a traffic marshal to monitor Osborn Road and Mount Pleasant Avenue to ensure no pick-up/drop-off occurs on these streets.
- 6.2.50 The Department concludes the implementation of the transport infrastructure, facilities and the OTMP, as amended, would ensure safe access / movements within the site and minimise impacts on the local roads due to vehicle queuing, both in Stage 1 and in the future stages of the Concept Proposal.

6.2.51 The Department notes that the Applicant's OTMP proposes to implement a right-turn ban during school peak times from Mount Pleasant Avenue onto Pennant Hills Road through management measures. The Department's consideration of this measure is discussed in detail as part of the operational traffic impacts and intersection performance assessment below.

Car parking

6.2.52 The site currently contains 197 car parking spaces. Based on the existing school population, the recommended car parking space rate contained within the HDCP would require a minimum of 254 car parking spaces to be provided. Therefore there is currently a 57 space shortfall.

6.2.53 Initially the EIS proposed 116 additional car spaces within the site associated with the Concept Proposal. The Concept Proposal was later amended by the RtS to include 236 additional car parking spaces, of which 123 would be located within the Stage 1 works.

6.2.54 A comparison between the HDCP car parking requirements, the existing and proposed car parking is provided at **Table 15**.

Table 15 | Comparison between the HDCP, existing and proposed car parking rates

Stage	HDCP car parking rate	Proposed car parking	Compliance with HDCP
Existing school	254	197 (existing)	-57
Stage 1 (including existing school population)	326	320	-6
Concept (including existing school population and Stage 1)	381	up to 433*	+52*

*P3A Osborn Road carpark building envelope would have capacity to provide up to 433 car parking spaces on-site overall. However the TIA states the final number of car parking spaces to be provided in the P3A carpark should be determined based on the travel mode split at the time the future development application is lodged.

Submissions and Applicant's response

6.2.55 During the EIS exhibition, some public submissions considered that the proposal provides insufficient car parking while others consider that it provides too much car parking.

6.2.56 Council initially did not raise any concerns with the car parking provision and recommended the proposal incorporate the car parking spaces required by the ELC Approval. However, after reviewing the RtS Council noted the current school parking provision (197 spaces) does not meet the HDCP requirement (254 spaces) for the existing school population (57 space shortfall). Council advised that additional parking should be provided as part of the Stage 1 works to meet existing demand prior to any increase in student and staff numbers.

6.2.57 Bitzios recommended the Applicant consider the HDCP car parking requirements.

6.2.58 In response to the concerns raised, the Applicant amended the Concept Proposal and Stage 1 works to reconfigure the existing car parking throughout the site to provide for 236 additional spaces (**Table 15**) instead of the previously proposed 116 additional spaces.

- 6.2.59 The TIA states that the car parking strategy for the proposal is to remove the existing shortfall of parking on-site through a combination of reducing the existing private vehicle usage rate and by providing additional car parking.
- 6.2.60 The TIA explains that when combining the existing and proposed Stage 1 school population and on-site car parking, there would be six less car parking spaces than the HDCP recommended car parking rate due to the existing car parking shortfall. The TIA states that to manage this car parking shortfall for Stage 1, the Green Travel Plan would be implemented to reduce private car use to the site and demand for on-site car parking (**Table 14**).
- 6.2.61 In relation to the proposed car parking for future stage/s associated with the Concept Proposal, the TIA states that the P3A Osborn Road carpark would have capacity to provide up to 433 car parking spaces on-site overall which would exceed the recommended minimum car parking rate under HDCP (381). However the TIA considers that the final number of car parking spaces to be provided in the P3A carpark should be based on the travel mode split at the time the future DA(s) is lodged and determined at that time.
- 6.2.62 The Stage 1 car parking would be constructed in stages in accordance with the staging plan which would ensure the necessary car parking infrastructure is provided before any increase in student and staff numbers (**Table 19**). The Applicant also confirmed that 15 car parking spaces within the site, designed as part of the Stage 1 works, would be allocated to ELC staff and for pick-up/drop-off (outside the school peak times).

Departments consideration

- 6.2.63 The Department is satisfied that the proposed Stage 1 car parking (123 additional spaces) is sufficient to cater for both staff members and students of driving age, noting the:
- proposal addresses the historical shortfall of on-site car parking and would provide 51 of the 57 shortfall staff spaces as part of the Stage 1 works.
 - minor shortfall of 6 spaces with HDCP car parking rate would be acceptable as the GTP is targeting an overall reduction in private vehicle usage of 5.1% for staff and 11.4% for students (Stage 1 targets).
 - staging of the amended and new car parking ensures adequate car parking is provided for staff and students prior to any increase of staff and student numbers (**Table 19**).
- 6.2.64 In relation to proposed car parking for the future stage/s of the Concept Proposal, the Department notes that the P3A Osborn Road carpark building envelope would have capacity to provide for up to 433 car parking spaces on-site overall which would comply with the recommended minimum car parking rate under the HDCP (381 spaces). The Department supports the provision of the P3A carpark building envelope in order to ensure that there is certainty that sufficient car parking could be provided for the future increase in school population under the future stage/s.
- 6.2.65 However, the Department agrees with the TIA's recommendation that the final number of car parking spaces to be provided within the future detailed design of the P3A carpark should be determined under the future DA(s) as:
- the travel behaviour changes proposed in the GTP (long-term targets) would occur over time with gradual shifts away from private vehicle use. As completion of the Concept Proposal is intended to occur over a long timeframe (20-30 years), travel behaviour is difficult to predict for the future stages.

- the number of spaces provided within the P3A carpark can be adjusted to suit the car parking shortfall on completion of the Concept Proposal, allowing for flexibility dependent on the success of the GTP in reducing private vehicle use.
- if the long term travel mode share targets are met, the full capacity of car parking within the P3A carpark would not be required.

6.2.66 Consequently, the Department has recommended conditions requiring the provision of the P3A carpark which can allow for a total of 433 spaces to be provided on-site under the future stage/s and for the final car parking rate to be based on evidence on the mode share / reduction in private car use under the GTP at the time of lodgment of the future DAs.

6.2.67 Overall, the Department is satisfied that the proposed car parking strategy, implementation of the GTP and recommended conditions of consent would address existing short-term issues with the insufficient car parking on-site (raised by Council and the community) while also allowing for flexibility in the future to adjust the required carparking rate to align with changes to travel behaviour.

6.2.68 The Department has reviewed the car parking arrangements within the basement of the Boarding Accommodation building. The Department notes that the basement carpark is intended to be used for school staff parking and its vehicular entrance would be security controlled by a roller shutter. Noting this, and in the interest of preventing unauthorised access to the Boarding Accommodation building basement, the Department recommends the OTMP be updated to include security measures for this car parking facility.

Bicycle parking

6.2.69 The TIA notes that there are limited cycling facilities and dedicated routes provided within proximity of Loreto Normanhurst. However, Council are currently undertaking a review of the Hornsby Shire Bike Plan with the aim to prioritise the development of local connections to and from areas that would generate demand for cycling trips such as schools.

6.2.70 The school currently provides for five bicycle parking spaces outside the Mary Ward building. The proposal includes 21 bicycle racks as part of the Stage 1 works and staged as shown in **Table 16**. Council clarified that under the HDCP, a 'bicycle rack' equates to one bicycle space and a 'school class' is considered to be 30 students.

Table 16 | Comparison between the HDCP and proposed bicycle parking rates

	Sub-stage 1	Sub-stage 2a / 2b	Sub-stage 3	Sub-stage 4	Total
Student increase	+100	0	+150	+250	500
Staff increase	0	0	+12	+24	36
HDCP	3.5 racks	0	6 racks	10 racks	19.5 racks
Proposal	5 racks	0	6 racks	10 racks	21 racks

6.2.71 The Concept Proposal plans also indicatively propose 14 racks to be delivered in future stages. The Applicant acknowledges that future DA(s) would need to comply with the HDCP requirements in terms of provision of bicycle parking.

- 6.2.72 Council reviewed the EIS and recommended bicycle parking be provided in accordance with the HDCP requirements. The HDCP requires one bicycle rack to be provided per 20 full-time staff and 5 racks per class (between grades 5 and 12).
- 6.2.73 The Department notes:
- the school currently provides for five bicycle spaces which is significantly below the HDCP requirements (51 spaces).
 - the GTP is targeting a 2% bicycle mode shift in the short and long term and recommends the appropriate provision of bicycle facilities to encourage this shift. However, the current proposal does not address the existing shortfall of bicycle parking spaces (46 spaces) which undermines the aims of the GTP.
 - bicycle spaces are proposed within the basement of the Boarding Accommodation building which has a controlled entrance (roller door). It is unclear how students would be granted access to the proposed bicycle parking spaces.
- 6.2.74 To meet the targeted increase in bicycle mode share and encourage a shift away from private car use, the Department recommends conditions requiring, prior to the first increase in student numbers as part of Stage 1 works, the proposal to be amended to:
- include 51 secure and conveniently located bicycle storage facilities for use by students and staff in accordance with the HDCP requirements.
 - update the OTMP to clarify access and security arrangements for bicycle parking within the basement of the Boarding Accommodation building.
 - provide bicycle parking in accordance with the staging plan, as amended by the Department (**Table 18**).
- 6.2.75 The Department acknowledges that there are currently limited cycling facilities and dedicated routes provided within proximity of Loreto Normanhurst and that the 2% bicycle mode shift under the GTP is based on the existing surrounding cycling infrastructure. However, the provision of the recommended increase in bicycle spaces would align with the strategic direction of Council to improve cycling infrastructure in the locality. This may result in more than 2% bicycle mode shift in the future once improvements are made to surrounding cycling routes.
- 6.2.76 The Department concludes, subject to the above amendments, the Stage 1 works would provide adequate bicycle parking provisions for the proposed increased staff and student population. The Department has recommended that future DA(s) associated with the Concept Proposal include bicycle parking in accordance with the HDCP requirements.

Bus services

- 6.2.77 The school currently provides for two on-site bus bays located adjacent to the Gonzaga Barry building and accessed via the Osborn Road slip road. The proposal includes the retention of these existing bus bays and the conversion of the four existing pick-up/drop-off bays into two additional bus bays, resulting in a total of four bus bays.
- 6.2.78 In response to the EIS exhibition Council requested clarification of how many school buses services are currently provided and proposed.
- 6.2.79 In response to Council's comments, the RtS confirmed the school currently provides for six bus services and these services are currently running at approximately 60% capacity. In addition, the two

new bays would provide for additional bus service capacity as may be required following the staged increase of student numbers.

- 6.2.80 The Department supports the increase in bus parking on the site to cater for the increased demand. However, the Department notes that the delivery of the two additional bays would require removal of all existing pick-up/drop-off facilities from the site. To ensure the retention of sufficient pick-up/drop-off facilities within the site at all times, the Department recommends that the construction of these bays be deferred until the new pick-up/drop-off facilities are operational.
- 6.2.81 The Department recommends that the an increase in student population does not occur until the new pick-up/drop-off facilities are operational and the two the additional bus bays are installed. This is discussed further below (paragraph 6.2.129).

Operational traffic impacts, intersection performance and road upgrades

- 6.2.82 The site currently has six principal vehicle access points, four along Osborn Road and one each on Mount Pleasant Avenue and Pennant Hills Road (**Figure 8**). As summarised in **Section 1**, Osborn Road and Mount Pleasant Avenue are local roads and Pennant Hills Road is a State road. The Mount Pleasant Avenue / Pennant Hills Road intersection is priority controlled (by a stop sign). The Osborn / Normanhurst / Pennant Hills Road intersection is signalised.
- 6.2.83 Where Mount Pleasant Avenue intersects with Pennant Hills Road, it comprises three lanes, one lane in (from Pennant Hills Road), one left turn and one right outbound turn lane (onto Pennant Hills Road). Where Osborn Road intersects with Pennant Hills Road, it comprises three lanes, one lane in, one left turn lane and one combined forwards and right turn lane onto Pennant Hills Road and Normanhurst Road.
- 6.2.84 The TAR has considered the impact of the proposal on traffic and parking in the locality. The TAR undertook a traffic count assessment and identifies existing background traffic volumes of the Mount Pleasant Avenue / Pennant Hills Road and Osborn Road / Pennant Hills Road intersections that adjoin and would be impacted by the development. The TAR supporting the EIS identified that the proposed increase in student numbers would have impacts on the surrounding local network and recommended traffic mitigation and management measures within the site.

EIS submissions

- 6.2.85 In response to the EIS exhibition, concern was raised in public submissions about the impact on intersection operation resulting from the increase in student numbers and that the application should include a cumulative assessment incorporating the predicted ELC site traffic generation. A number of submissions recommended the Applicant upgrade the Mount Pleasant Avenue / Pennant Hills Road intersection to a signalised intersection to address existing and future issues. Concerns were also raised about the accuracy of the TAR.
- 6.2.86 TfNSW recommended that the existing vehicular access point to Pennant Hills Road be removed to maintain road safety and efficiency and that the trip assignment and intersection analysis contained within the TAR should be updated to consider travel preferences. Council requested additional clarity around the traffic counts undertaken.
- 6.2.87 Bitzios requested clarification of the SIDRA modelling calibration, assumptions and methodologies, authentication and consistency with RMS Modelling Guidelines, assessment of the cumulative

impacts with the ELC site, trip origin and destination analysis, safety at the Mount Pleasant Avenue / Pennant Hills Road intersection and traffic volumes in residential streets.

Applicant's response

6.2.88 In response to the concerns raised and Bitzios' comments, the Applicant's RtS amended the proposal to include the through site road, revised pick-up/drop-off, car parking arrangements with 236 additional car spaces and contained an updated TAR. In addition, the RtS:

- verified traffic counts, updated SIDRA modelling and included details of trip distribution, mode share targets, and ELC site trip generation in calculating the total traffic volume (**Table 16**).
- included an OTMP for traffic management within the site with a provision to restrict right-turns from Mount Pleasant Avenue to Pennant Hills Road during school peak hours for school drivers (managed by traffic marshals).

6.2.89 Trip generation analysis in the updated TAR is based on future pick-up/drop-off, parking demands and predicted trips associated with the ELC development in order to provide a cumulative impact assessment. The trip generation analysis also incorporates the proposed car reduction associated with the mode share target (discussed at paragraph 6.2.8). A comparison between the existing and the total vehicle trip generation (Stage 1 and overall Concept Proposal) is provided at **Table 16**. The updated TAR concludes the proposal would result in an increase of 374 trips as part of Stage 1 works increasing to 541 trips once the development is complete.

Table 17 | Comparison between the existing and predicted Stage 1 works and overall Concept trip generation (Source: Applicant's RtS)

Trip	Type	Existing (total vehicular trips)	Stage 1 works only (total vehicular trips)	Concept (all stages) (total vehicular trips)
School	Pick-up/drop-off (in/out)	390	748	872
	Parking	365	287	327
ELC	Pick-up/drop-off (in/out)	0	84	84
	Parking	0	10	10
Total		755	1129 (+374)	1296 (+541)

6.2.90 The proposal does not include any upgrades to existing intersections or the road network. Based on the background traffic volume, the updated TAR provides the existing performance levels for the identified nearby intersections using SIDRA modelling. It then provides the SIDRA analysis for the peak hour performance at the identified intersections considering the future total vehicular trips, reduction in traffic due to implementation of the mode share targets, and the proposed internal infrastructure to reduce queuing. The SIDRA modelling includes results for existing, Stage 1 (2026) and completed development (2036) future scenarios.

6.2.91 A comparison of the existing and future intersection performance results are provided at **Table 17**. The updated TAR concludes that in both future scenarios, intersections would continue to operate at

the same level of service (LoS) to the existing situation, subject to only minor increases to approach delays during the AM and PM peaks.

Table 18 | Intersection performance Level of Service (LoS) (Source: Applicant's RtS 2020)

Intersection	Existing (2019)		Base (2026)		Base with Stage 1 (2026)		Future Base (2036)		Future Base with Proposal (2036)	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Osborn / Pennant Hills / Normanhurst	B	B	B	B	C	B	B	B	C	B
Mount Pleasant / Pennant Hills	F	F	F	F	F	F	F	F	F	F

6.2.92 The Applicant's RtS identifies that the poor performance of the Mount Pleasant Avenue / Pennant Hills Road intersection is largely due to cars undertaking right turn movements onto Pennant Hills Road. The Wahroonga Approval (paragraph 2.6.4) requires the installation of 'No Right Turn' signage at Mount Pleasant Avenue, which is likely to result in improved intersection performance. However, the timeframe for the installation of signage is not yet known.

6.2.93 To address the existing congestion and delay at this intersection, the OTMP includes a restriction requiring drivers leaving the site to only make left turns at the Mount Pleasant Avenue / Pennant Hills Road intersection during peak times (no right-turn). This would be managed by marshals to ensure compliance.

6.2.94 The RtS did not propose to:

- signalise the Mount Pleasant Avenue / Pennant Hills Road intersection stating that due to the close proximity between this intersection and the Osborn Road / Pennant Hills Road intersection, signalisation would not be supported by TfNSW.
- remove the existing Pennant Hills Road vehicular entrance. However, the OTMP confirmed access would be limited to occasional ceremonial use on weekends and removable bollards would be installed to prevent access Monday to Friday.

RtS Submissions and Applicant's response

6.2.95 In response to the RtS exhibition, concerns were raised in public submissions about potential ongoing traffic congestion and impacts on Mount Pleasant Avenue and Osborn Road intersections with Pennant Hills Road, cumulative traffic impacts with the ELC site and student safety. Some residents recommended that the Pennant Hills Road vehicle entrance should not be closed and instead be used as the entrance/exit for the pick-up/drop-off facilities.

6.2.96 The Greys Report, submitted by residents, raised concern the SIDRA model has not been validated, pedestrian survey counts should be undertaken, site observation undertaken to determine local background traffic and a micro-simulation platform should be used to inform traffic modelling and assessment.

6.2.97 Council recommended the Applicant consider widening Osborn Road to accommodate an additional traffic lane, widen footpaths adjoining the school by 800mm (from 1.2m to 2m) and consider signalisation of the Mount Pleasant Avenue / Pennant Hills Road intersection.

6.2.98 TfNSW recommended a condition requiring the restriction of the use of the Pennant Hills Road entrance as proposed by the Applicant (paragraph 6.2.94).

6.2.99 Bitzios requested updated SIDRA model data, validation, intersection analysis including modelling of the left turn only requirement for Mount Pleasant Avenue / Pennant Hills Road intersection and staging of the development and clarification of afternoon peak traffic results. Bitzios confirmed matters relating to traffic counts, ELC site, trip distribution, the Pennant Hills Road entrance, school zones, pedestrian paths have been addressed.

6.2.100 In response to the concerns raised during the exhibition of the RtS and Bitzios' comments, the Applicant's SRtS:

- confirmed afternoon peak traffic results.
- updated SIDRA modelling including modelling of re-routed traffic as a result of the no right turn at Mount Pleasant Avenue.
- noted that since traffic counts were conducted, NorthConnex tunnel has been constructed and is now operational, which has resulted in significant reductions in traffic flows along Pennant Hills Road.
- stated that TfNSW advised that the signalisation of the Mount Pleasant Avenue / Pennant Hills Road intersection is not appropriate due to its proximity to the Osborn Road / Pennant Hills Road intersection and impacts on traffic flow on Pennant Hills Road.
- explained that the implementation of the OTMP would restrict drivers from turning right on to Pennant Hills Road during peak hours and improve the performance of this intersection.

6.2.101 In response to Council's suggestion to widen Osborn Road, the SRtS considered that the widening of Osborn Road would have significant adverse impacts on the streetscape and is not necessary as the provision of new pick-up/drop-off facilities would address Osborn Road queuing/overflow. The SRtS also indicated that there are low pedestrian volumes at the Osborn / Pennant Hills intersection due to the availability and high use of the pedestrian overpass and as trains and buses are located east of Normanhurst Road. In addition, the new facilities internalise traffic movements within the school boundary and alleviate demand on external footpaths, making the provision of expanded footpaths unnecessary.

6.2.102 In response to the Greys Report the Applicant stated the development is not of sufficient scale to warrant the development of a micro-simulation model and on-site observations were made to inform the proposed development.

SRtS Submissions and Applicant's response

6.2.103 In response to the notification of the SRtS two submissions were received reiterating concerns about traffic and intersection congestion particularly increased traffic congestion on Mount Pleasant Avenue and impacts on accessibility and travel time from a 'no right turn' restriction onto Pennant Hills Road. Council reiterated its recommendation that Osborn Road should be widened and suggested conditions to achieve this outcome.

6.2.104 Bitzios reviewed the Applicant's SRtS and confirmed the majority of its concerns regarding SIDRA modelling had been addressed and the proposal is not of a scale to warrant a micro-simulation.

6.2.105 Bitzios confirmed it agreed with the Applicant's conclusions that the signalisation of Mount Pleasant Avenue / Pennant Hills Road intersection is not appropriate and the widening of Osborn Road is not

necessary. Bitzios noted the majority of pedestrians would enter the school from Pennant Hills Road therefore there is no need to widen footpaths on Osborn Road and Mount Pleasant Avenue.

6.2.106 In addition, subject to the implementation of the OTMP and use of marshals, Bitzios supported the left turn only at Mount Pleasant Avenue / Pennant Hills Road intersection and the recirculation of vehicles, noting this would prevent vehicles queuing back onto Osborn Road.

Department's consideration

6.2.107 The Department has carefully considered the concerns raised in submissions including Greys Report, the peer review by Bitzios and the Applicant's amendments to the proposal and responses to submissions. Based on the assessment by Bitzios and the information submitted by the Applicant, the Department concludes that, on balance, the traffic modelling and associated assessment of traffic impacts provided by the Applicant are suitable for considering the nature and extent of operational traffic impacts associated with the proposal.

6.2.108 The Department notes that the Applicant has consulted with TfNSW and Council and committed to management and mitigation measures (OTMP, GTP, pick-up/drop-off and car parking) to address existing congestion and queuing issues as well as accommodate the increase in student and staff populations. The Department agrees with the Applicant and Bitzios that there is no need to widen Osborn Road.

6.2.109 The Department notes that subject to the implementation of the management measures, the proposal would result in a minimal change to the current LoS of nearby intersections following the first use of the Stage 1 works (2026) or predicted future completed development (2036) scenarios. In addition, since the submission of the application, the NorthConnex Tunnel has been completed and is operational and this has resulted in a significant reduction of traffic along Pennant Hills Road, which is likely to result in further improvements to the operation of surrounding intersections.

6.2.110 The Department supports the Applicant's proposal to provide infrastructure and facilities to accommodate the school traffic within the site and notes this would address queuing needs and the existing overflow problems onto Osborn Road. Further, as these issues would be addressed, there would be no need to undertake improvements to existing surrounding pedestrian or intersection infrastructure.

6.2.111 In relation to the drop-off/pick-up facilities, the Department agrees with the Applicant and with Bitzios that subject to the implementation of the OTMP and the use of marshals, the recirculation of vehicles could appropriately manage operational traffic issues within the site as well as on the surrounding roads immediately adjoining the site boundaries (especially Osborn Road). In addition, the Department notes the RtS amended the design of the through site road to allow for vehicle passing and this ensures vehicles are not prevented from recirculating and causing queuing onto Osborn Road.

6.2.112 Additionally, the OTMP proposes allocation of a pick-up/drop-off facility for parents based on their direction of arrival (east or west) (paragraph **6.2.37**). Parents arriving from the east will be required to use the Osborn Road pick-up/drop-off facility (exiting via Osborn Road) and parents arriving from the west will be required to use the through site road pick-up/drop-off facility (exiting via Mount Pleasant Avenue). Travel mode survey results (**Table 14**) indicate that currently 15.8% of students are dropped off and approximately 52% of the students driven to school approach the site along Pennant Hills Road from the east and 48% from the west. The Department considers that the fairly even distribution

of direction of travel by parents coupled with designation of an allocated pick-up/drop-off facility would allow for traffic exiting the site to be disbursed relatively evenly amongst both Osborn Road and Mount Pleasant Avenue.

6.2.113 The Department has recommended a condition requiring the OTMP, to be implemented for the life of the development and reviewed and updated (if necessary) on an annual basis to ensure operational transport impacts are effectively managed and mitigated.

6.2.114 The Department supports TfNSW's conditions (paragraph 6.2.98) and agrees the closure of the Pennant Hills Road entrance Monday to Friday would improve vehicular safety along Pennant Hills Road.

6.2.115 The Department recommends a condition requiring future DA(s) include a TAR which considers traffic generation, operational traffic impacts resulting from the detailed design of the development, and review and update (where necessary) the OTMP.

Mount Pleasant Avenue 'No Right Turn' ban

6.2.116 The Department is supportive of the Applicant's proposed through site road to resolve existing vehicle queuing issues on the surrounding roads as well as accommodate the predicted vehicle queuing within the site from the proposed student increase. However, the Department acknowledges that the new through site road would result in an increase in vehicles exiting the site onto Mount Pleasant Avenue.

6.2.117 The Applicant's updated TAR states that the Mount Pleasant Avenue / Pennant Hills Road intersection has an existing LoS of 'F' (**Table 17**) and that this overall poor intersection performance is due to the right turn movement out of Mount Pleasant Avenue on to Pennant Hills Road. However, the left turn movement out of Mount Pleasant Avenue is modelled at LoS 'A' and is predicted to continue to perform at LoS 'A' following Stage 1 and the completed development.

6.2.118 Bitzios advised that the right turn is an extremely difficult and dangerous manoeuvre to undertake during school peak periods due to needing to cross three lanes of traffic on Pennant Hills Road. Bitzios recommended a potential mitigation measure could be a no right turn ban during peak time periods. There are alternative routes through the road network on the northern side of Pennant Hills Road which would allow drivers to travel east during peak periods (**Figure 30**).



Figure 30 | Alternative route for vehicles travelling to the east during peak periods
(Base source: SIX Maps, 2021)

6.2.119 As previously discussed, a number of public submissions raised safety concerns with the Mount Pleasant Avenue / Pennant Hills Road intersection and recommended the Applicant upgrade the Mount Pleasant Avenue / Pennant Hills Road intersection to a signalised intersection to address existing and future issues. The Applicant's updated TAR states that the Applicant and Council support the signalisation of Mount Pleasant Avenue / Pennant Hills Road. However, TfNSW does not support the signalisation of this intersection due to its proximity to the Osborn Road/ Pennant Hills Road intersection and impacts on traffic flow on Pennant Hills Road.

6.2.120 In light of the safety concerns and performance issues of the Mount Pleasant Avenue / Pennant Hills Road raised in the public submissions, the Applicant proposes to rely on marshals to manage the movement of vehicles exiting the through site road onto Mount Pleasant Avenue. The Applicant proposes to restrict vehicles that have exited the school to only make left turns from Mount Pleasant Avenue onto Pennant Hills Road through traffic marshalling. The Department is concerned this proposed mitigation measure, while acceptable in principle, is likely to be difficult to enforce.

6.2.121 The Department acknowledges the Wahroonga Approval 'No Right Turn' signage would be installed in the future to formally restrict right turns (at all times) onto Pennant Hills Road and this would address the Department's above concern. However, this future scenario is reliant on the timing of the development of the Wahroonga Approval and at the time of the writing of this report this is unknown / uncertain.

6.2.122 The Department liaised with TfNSW about the potential to install 'No Right Turn' signage to restrict right turns out of Mount Pleasant Avenue onto Pennant Hills Road during peak times (8am – 9.30am and 2.30pm – 4pm on school days). TfNSW advised that it is not opposed to the Department requiring the Applicant to install the signage subject to consultation and approval of Council.

6.2.123 The Department acknowledges and has considered the concerns raised in some public submissions about the impact a right turn ban would have on residents travelling to the east.

6.2.124 While the Department acknowledges a right turn ban may cause some inconvenience to residents, the Department notes:

- the right turn ban would be limited to peak periods on school days.
- there are alternative routes through the road network on the northern side of Pennant Hills Road which would enable residents to travel to the east during the peak periods.
- the SIDRA modelling contained in the updated TAR has taken into account the rerouted traffic as a result of the proposed no right turn ban.
- the no right turn ban has already been approved under the Wahroonga Estate approval (at all times, Monday – Sunday).

6.2.125 On balance, the Department concludes the ban would minimise the risk of accidents caused by vehicles turning right onto Pennant Hills Road and would be in the public interest. Consequently, the Department has recommended a condition requiring the Applicant obtain evidence of endorsement from the Council's Local Traffic Committee and/or TfNSW to install "No Right Turn" signage restricting right turns from Mount Pleasant Avenue onto Pennant Hills Road 8am-9:30 and 2:30pm–4pm on school days.

Staging of student and staff population increases

6.2.126 The proposal includes staged student and staff population increases, which are linked to the staged provision of transport infrastructure and facilities as summarised in **Section 2**.

6.2.127 Concern was raised in public submissions about the increase in student numbers and particularly the impact of additional student numbers on traffic congestion, intersection performance and car parking.

6.2.128 Bitzios has recommended that conditions be imposed to ensure the staged increase in student and staff population be linked to the staged provision of improved transport infrastructure and facilities.

6.2.129 Based on the assessment of the traffic and parking impacts in the preceding sections, the Department considers the following amendments are necessary to ensure essential infrastructure is provided prior to the relevant staged student and staff population increases:

- construction and operation of the five proposed pick-up/drop-off spaces in the P3A Osborn road carpark.
- retention of the four existing pick-up/drop-off spaces until the delivery of the internal infrastructure.
- the amendment of the OTMP to address the Boarding Accommodation building car and bicycle parking access and security.
- an additional sub-stage should be undertaken following the completion of sub-stage 2a and before sub-stage 2b, which:
 - allows the first increase in student numbers (by 100 students).
 - allows the removal of the four existing pick-up/drop-off spaces to provide for two bus bays.
 - requires the provision of 51 bicycle parking spaces.

6.2.130 Conditions to the above effects have been recommended. A summary of the amended staging plan is provided at **Table 19**.

Table 19 | Department's amendments to the staged development. Deletion of words/numbers struck out and insertion of new words/numbers shown bold and underlined. (Base source: Applicant's SRtS 2021)

Stage	Student population	Staff population	Pick-up / drop-off	On-site parking spaces			Bus	Bicycle spaces
				School	Boarding	ELC		
Existing	1,150	254	4	187	0	10	2	5
Stage 1, substage 1	1,250 <u>1150</u>	254	2 <u>6</u> (+2)	214 (+27)	0	10	4 <u>2</u>	10 <u>5</u>
Stage 1, substage 2a	<u>1,250 (+100)</u> <u>upon completion of works within substage 2a</u>	254	5 <u>8</u> (+3)	233 (+42 -23)	0	10	4 <u>2</u>	5 <u>36</u> (+31)
<u>Stage 1, substage 2aa</u>	<u>1,250</u>	<u>254</u>	<u>5</u> (-4)	<u>233</u>	<u>0</u>	<u>10</u>	<u>4</u> (+2)	<u>36</u>
Stage 1, substage 2b	1,250	254	5	214 (-19)	32 (+32)	10	4	<u>51</u> (+15)
Stage 1, substage 3	1,400 (+150)	266 (+12)	5	278 (+64)	32	10	4	<u>57</u> (+6)
Stage 1, substage 4	1,650 (+250)	290 (+24)	5	278	32	10	4	<u>67</u> (+10)
Stage 1 Total	1,650 (+500)	290 (+36)	5 (+1)		320 (+123)		4 (+2)	67 (+62)
Concept Stage 2+	2,000 (+350)	235 (+35)	0	391 (+113)	32	10	4	<u>86*</u> (+19)
Overall Total	2,000 (+850)	325 (+71)	5 (+1)		433 (+236)		4 (+2)	<u>86*</u> (+81)

* Concept Proposal bicycle parking to be determined with future DA(s) in accordance with HDCP requirements.

Construction traffic

6.2.131 The Concept Proposal does not involve construction works. Therefore, the construction impacts associated with the development are only relevant to Stage 1 works. The TAR and Construction Traffic Management Plan (CTMP), updated by the RtS and SRtS, assess the construction impacts of Stage 1 works on the neighbours and the local road network.

6.2.132 The RtS confirmed the Stage 1 works would result in the removal of 10,462m³ soil and waste from the site. The TAR anticipates a maximum of 60 heavy construction vehicle movements per day to facilitate the earth movement. In addition, a mixture of large and medium rigid construction vehicles (up to 12.5m in length) are likely to service the site during Stage 1.

6.2.133 The TAR and CTMP state that there would be a maximum of 60 workers on the site at any given time. Limited on-site parking is proposed for construction workers and the use of on-street parking in the vicinity of the site would be discouraged. Workers would therefore be encouraged to make use of public transport and car-pool where practicable.

6.2.134 The TAR indicates construction vehicles would approach the site from Pennant Hills Road via Mount Pleasant Avenue and Osborn Road. Site access would be via No. 4 Mount Pleasant Avenue driveway for the through site road, Health Centre driveway for P3A carpark, the Primary School driveway and new basement ramp for the Boarding Accommodation building and existing entrances on Osborn Road.

6.2.135 The TAR originally proposed a temporary road along the southern boundary of the oval allowing construction vehicles to cross the site and exit onto Osborn Road via the existing P4 Osborn Road carpark. However, the amended proposal does not confirm this arrangement (**Figure 31**).

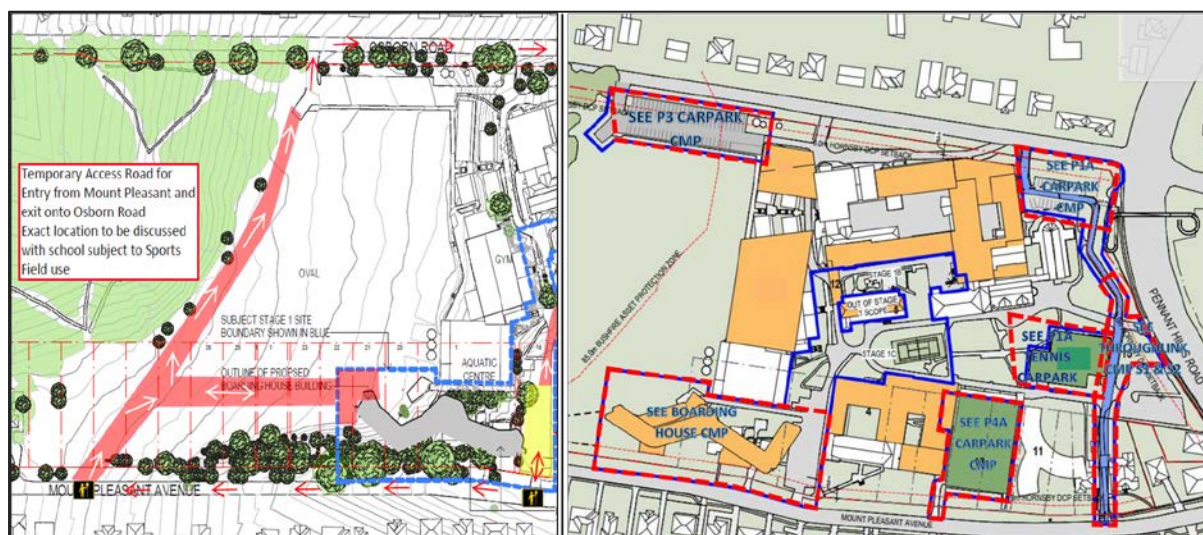


Figure 31 | The TAR temporary through site road originally proposed by the RtS (left) and updated construction site and access arrangements proposed by the SRtS (right) (Base source: Applicant's RtS and SRtS)

6.2.136 Concern was raised in public submissions about general construction impacts. Council did not raise any concerns regarding construction traffic management. TfNSW recommended that the Applicant prepare a final CTMP prior to the issue of a Construction Certificate. The Department reviewed the CTMP and is satisfied that the local road network can accommodate the predicted construction vehicle movements. Management measures contained in the CTMP and the provision of on-site car parking for site personnel would assist in minimising impacts on the surrounding roads.

6.2.137 The Department has reviewed the matters in relation to construction traffic and is satisfied that construction traffic can be appropriately managed given:

- each sub-stage of the development would occur in sequence over 24 months and would allow flexibility for construction traffic to be managed, scheduled and amended to respond to a detailed construction methodology.
- construction vehicle arrival and departures would be spread across Osborn Road and Mount Pleasant Avenue.
- the current road geometry can accommodate construction vehicles.

6.2.138 Further, the Department considers the proposed construction would not have an adverse impact on operational traffic associated with the school as:

- site access to the P1A, P4A, Boarding Accommodation and through site link is proposed from Mount Pleasant Avenue and therefore would not interfere with the existing pick-up/drop-off facility accessed off Osborn Road.

- site access for P4A and eastern portion of the through site link is required from Osborn Road, however, this is planned to occur during the Christmas holiday period when school is not in session.

6.2.139 The Department does not have concerns with the creation of a temporary through site construction road, provided this road does not result in the removal or damage of any STIF within the native bushland at the south of the site or BGF / existing trees along Mount Pleasant Avenue (not already considered for removal).

6.2.140 The Department has recommended conditions requiring that the:

- the Applicant prepares and implements a final CTMP in consultation with Council and TfNSW.
- the Applicant update the CTMP to ensure construction works do not result in the removal of any trees or bushland not already identified for removal as part of the consent for Stage 1 works.
- construction associated with the P4A Osborn Road car park and eastern portion of the through site link be undertaken at times of the year when the school is not in session or outside the school peak AM and PM pick-up/drop-off times.

6.3 Built form

6.3.1 The Concept Proposal (as amended by the RtS) includes 10 building envelopes comprising new and extended school buildings. The Stage 1 built form works include the construction of buildings within Envelopes 1, 13 and 14 including the Boarding Accommodation building, the P1A Tennis Court and P4A Multi-Purpose Court carpark as summarised at **Sections 2.2 and 2.3**.

6.3.2 The site comprises a large school site including 17 main buildings (one and four storeys) of a variety of ages and architectural styles. The site is subject to a significant land level change (20m) and includes significant trees, as discussed at **Section 1.2**. The existing surrounding environment is characterised as a generally low-density residential area. The residential properties surrounding the site comprise one and two storey suburban dwelling houses (up to 8.5m) on large landscaped lots, including mature trees as discussed at **Section 1.3**.

6.3.3 The layout, height and mass of building envelopes and Stage 1 buildings are shown at **Figure 11** and **Figure 12**.

Building height, bulk and scale – Concept Proposal

6.3.4 The HLEP identifies that the site is subject to an 8.5m height of building (HOB) development standard. Seven of the 10 concept building envelopes, including the Stage 1 Boarding Accommodation building envelope, would exceed the HOB development standard as summarised at **Table 20** and **Figure 32**.

6.3.5 The site is not subject to floor space ratio or other development standards under the HLEP.

Table 20 | HLEP clause 4.3 HOB development standard and proposed building heights in the Concept Proposal

Building Envelope	HLEP Maximum HOB	Proposed Maximum Height	Difference (+/-)	Complies
1 – Boarding Accommodation	8.5m	17.7m	+9.2m	No
2 - Senior School		20m	+11.5m	No

4 - Primary School	13.6m	+5.1m	No
5 - Mary Ward building	20.6m	+12.1m	No
6 - Gymnasium	13.1m	+4.6m	No
7 - Gonzaga Barry Performing Arts Centre	18.2m	+9.7m	No
8 - P3A Osborn Road carpark / sports field	2m	-6.5m	Yes
12 - Pedestrian Link building	13m	+4.5m	No
13 - P4A Multi-Purpose Court carpark	3m	-5.5m	Yes
14 - P1A Tennis Court carpark	3m	-5.5m	Yes

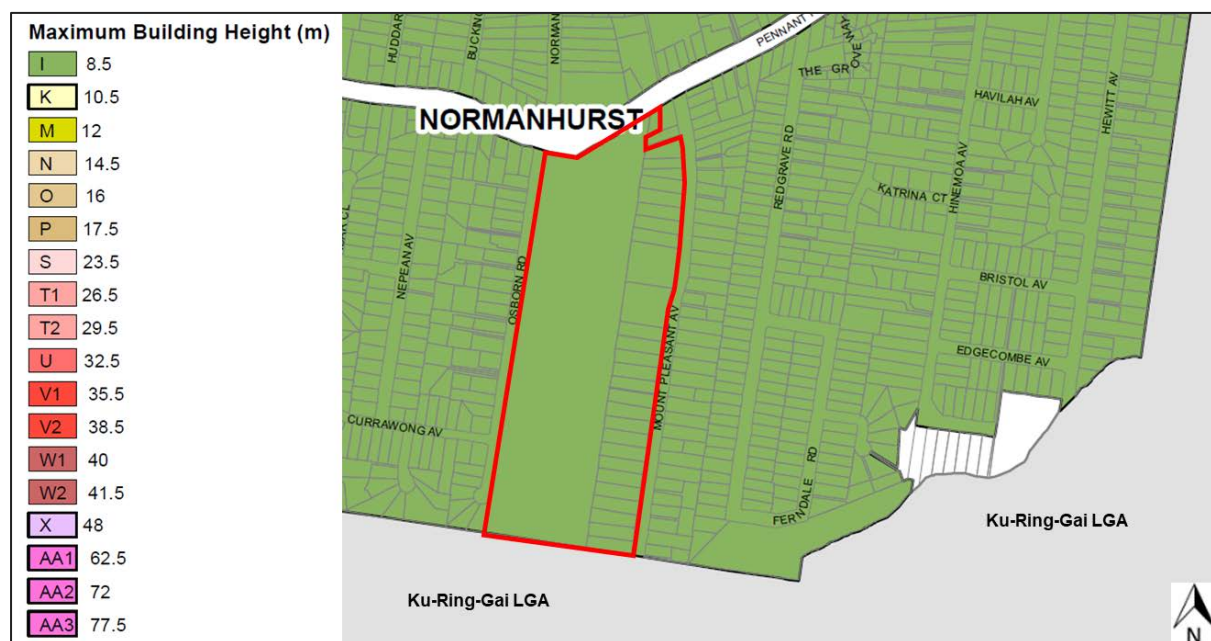


Figure 32 | HLEP HOB development standard (Base source: Applicant's RtS)

- 6.3.6 Clause 42 of the Education SEPP provides that consent may be granted for the development of a school that is SSD, even where the development would contravene a development standard imposed by that SEPP or any other environmental planning instrument under which the consent is granted. Consequently, the HOB development standard within the HLEP does not apply to this development. However, it is still appropriate to give it consideration as a development assessment guide.
- 6.3.7 Clause 4.6 of the HLEP provides flexibility when a development standard is contravened. The Applicant's EIS (as amended by the RtS) included the following justification for the building envelope heights and exceedances, having regard to clause 4.6 of the HLEP, as a guide:
- the increase in height is limited to key locations at the northern end of the site, away from the oval and forest areas, maintaining the natural environment as a key feature of the school site.

- the existing buildings on-site already exceed the HLEP HOB development standard and, as an educational establishment, the existing development scale and the development potential of the site is greater than other permissible land uses.
- building envelopes fronting Mount Pleasant Avenue and Osborn Road largely present as 2-3 storeys and buildings with the greatest non-compliances occur within the centre of the site, which ensures an appropriate built form relationship to neighbouring properties.
- the development is sympathetic to the heritage items on-site and would allow for the appropriate transition in height to these items.
- the proposal would not result in any amenity impacts on adjoining properties relating to overshadowing, visual impact and loss of privacy.

Submissions

- 6.3.8 Concern was raised in the public submissions about the height, scale and visual impact of the building envelopes and that they would appear out of place and have an adverse impact on the Mount Pleasant Avenue and Osborn Road streetscapes.
- 6.3.9 Council initially raised concern that Envelope 1 (Boarding Accommodation), Envelope 2 (senior school) expansion adjacent to the Chapel building, and Envelope 3 (10 storey building) were excessive in height, bulk and scale. Council also recommended Envelope 10 (bush chapel) be deleted.
- 6.3.10 Following its initial assessment of the application, the Department raised concern with the proposed building envelopes and advised the Applicant that:
- all building envelopes lack sufficient built form parameters and refinement in terms of GFA, setbacks, height modulation and articulation.
 - the height and location of Envelope 3 (10 storey building) was not supported.
 - the height and bulk of Envelope 2 (senior school) is likely to have a domineering visual impact on the Osborn Road streetscape.
 - further revision was required of Envelope 4 (primary school), Envelope 9 (pavilion) and Envelope 10 (bush chapel).

Applicant's SRtS and Council's response

- 6.3.11 In response to the concerns raised, the Applicant revised the proposed building envelopes as follows (detailed in **Section 5** and **Figure 28**):
- deleted Envelopes 3, 9 and 10 and removed the Envelope 2 expansion adjacent to the Chapel.
 - reduced the height and scale of Envelopes 1, 2, 4 and 7 by between one and two storeys.
 - shrunk Envelope 1 to form-fit the scale of the detailed Stage 1 Boarding Accommodation building.
- 6.3.12 The RtS also introduced two new building envelopes (13 and 14) providing for two single storey carparks with rooftop sports courts.
- 6.3.13 In response to the Applicant's RtS, Council stated that height exceedances should not result in adverse amenity impacts and should satisfy the requirements of clause 4.6 of the HLEP.

Department's consideration of all building envelopes, excluding Envelope 2 (senior school)

- 6.3.14 The Department has considered the Concept Proposal (as amended), concerns raised in public

submissions and the Applicant's justification for contravening the HLEP HOB development standard, as set out above.

6.3.15 The Department considers that, with the exception of Envelope 2 (senior school), the revised building envelopes (**Figure 33** and **Figure 35**) in the Concept Proposal are acceptable, noting:

- Envelope 1 (Boarding Accommodation), as amended, would be three to two storeys at its northern end and from six to five storeys at its southern end. The detailed design of Envelope 1 forms part of the Stage 1 works. The Department has reviewed the detailed design and considers the height, bulk and scale of the Boarding Accommodation to be acceptable (discussed later).
- Envelope 4 (primary school), as amended, would provide for a building sited behind the retained Teres Ball Centre fronting Mount Pleasant Avenue and would be limited to two to three storeys in height. Due to the topography of the site in this location and retention of the Teres Ball Centre, it would not be highly visible from the street (**Figure 34**).
- Envelope 5 (Mary Ward building) rooftop building envelope is limited to a single storey located along the central ridgeline of the roof. The envelope would not be visible from surrounding streets and as discussed at **Section 6.6** would not have adverse heritage impacts.
- Envelope 6 (gymnasium) replaces and increases the height of the existing gym by one storey (approximately three storeys in total) and greatly expands its footprint. Despite these changes, this envelope is acceptable as it frames the northern boundary of the sports oval, is located centrally within the site and would have limited visibility from surrounding streets.
- Envelope 7 (performing arts) is a stepped envelope comprising two storeys fronting Osborn Road and four storeys deeper into the site. The proposed street setback (approximately 12m) coupled with the stepped built form transition up to the Gonzaga Barry building would mitigate the bulk and scale of the envelope on the streetscape (**Figure 35**).
- Envelope 12 (pedestrian link) is located between / connecting the senior school and Mary Ward buildings. Due to its location within the development and its relative low height this envelope is acceptable and would not have any adverse visual impacts.
- Envelopes 8 (P3A Osborn Road), 13 (P4A Multi-Purpose Court) and 14 (P1A Tennis Court) carparks are all below the maximum HLEP HOB development standard. These buildings are single storey and would not be visually dominant within the streetscape. The detailed design of the Stage 1 P1A Tennis Court and P4A Multi-Purpose Court carparks is considered by the Department later in this report.

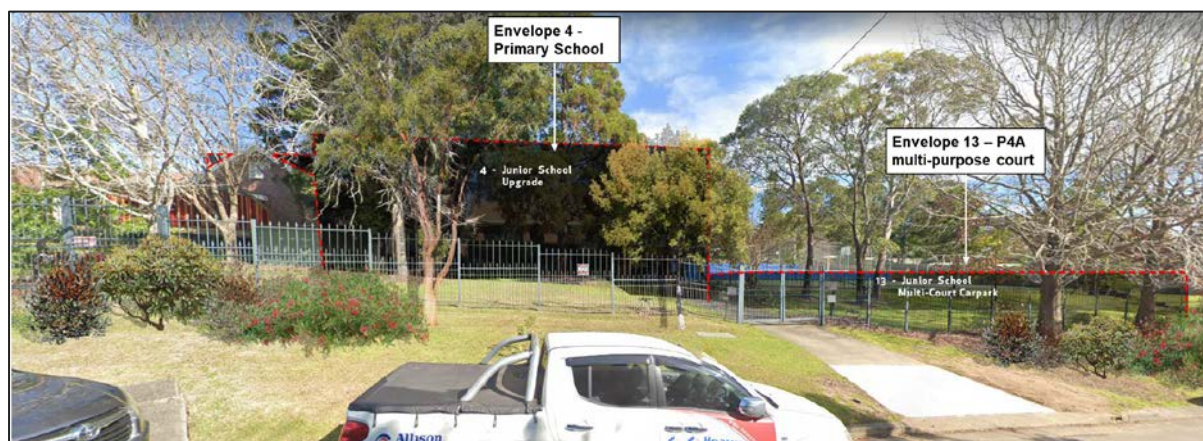


Figure 33 | Envelopes 4 and 13 fronting Mount Pleasant Avenue (Base source: Applicant's RtS)



Figure 34 | Envelopes 1 and 4 fronting Mount Pleasant Avenue (Base source: Applicant's RtS)



Figure 35 | Envelopes 2 and 7 fronting Osborn Road (Base source: Applicant's RtS)

6.3.16 In considering the merits of the proposal and the building height, the Department is also guided by clause 4.6 of HLEP, which allows for contravention of a development standard where compliance is unreasonable and unnecessary. The Department has also considered the established principle in the case of *Four2Five Pty Ltd v Ashfield Council* [2015] NSWLEC 1009. In accordance with this decision, sufficient environmental planning grounds, unique to a site, must be demonstrated by the Applicant for a clause 4.6 variation request to be upheld.

6.3.17 Based on the above, the Department considers the proposed exceedance to the HLEP HOB development standard is acceptable in this case (except Envelope 2) as:

- the site is constrained due to the existence of an extensive ecologically sensitive forest and open sports field to the south. These constraints restrict the built form to locations on the higher (northern) end of the site and result in less flexibility for the distribution of building mass throughout the site to reduce building heights.
- the building envelope locations, height and scale are appropriate for the site, consistent with the ongoing use of the site and would not have adverse visual impacts, as discussed above.
- the site is large and the development would not have any significant amenity impacts arising from overshadowing, visual impact and loss of privacy, as discussed at **Section 6.6**.
- contemporary schools that involve new or redeveloped built form in established urban environments commonly provide for buildings that are in excess of 8.5m in height.

6.3.18 On balance, the Department considers that the height and scale of the building envelopes (except Envelope 2) are acceptable and strict compliance with the HLEP HOB development standard is unnecessary and unreasonable and finds that there are sufficient environmental planning grounds to justify contravening the development standard, for the reasons set out in paragraph 6.3.17.

Department's consideration of Envelope 2 (senior school)

6.3.19 Building envelope 2 (senior school) comprises (**Figure 36**):

- demolition and/or extension of the Birrane, Mulhall-Friezelle Wings and Deirdre Rolf Centre.
- three storey Birrane, Frizelle, and Mulhall Wing envelope and an infill envelope adjoining Holy Angel Wing.
- three/four storey Resource Centre envelope and two/three storey Deirdre Rolf Centre envelope.
- a new two storey envelope connecting Birrane Wing and Deirdre Rolf Centre.

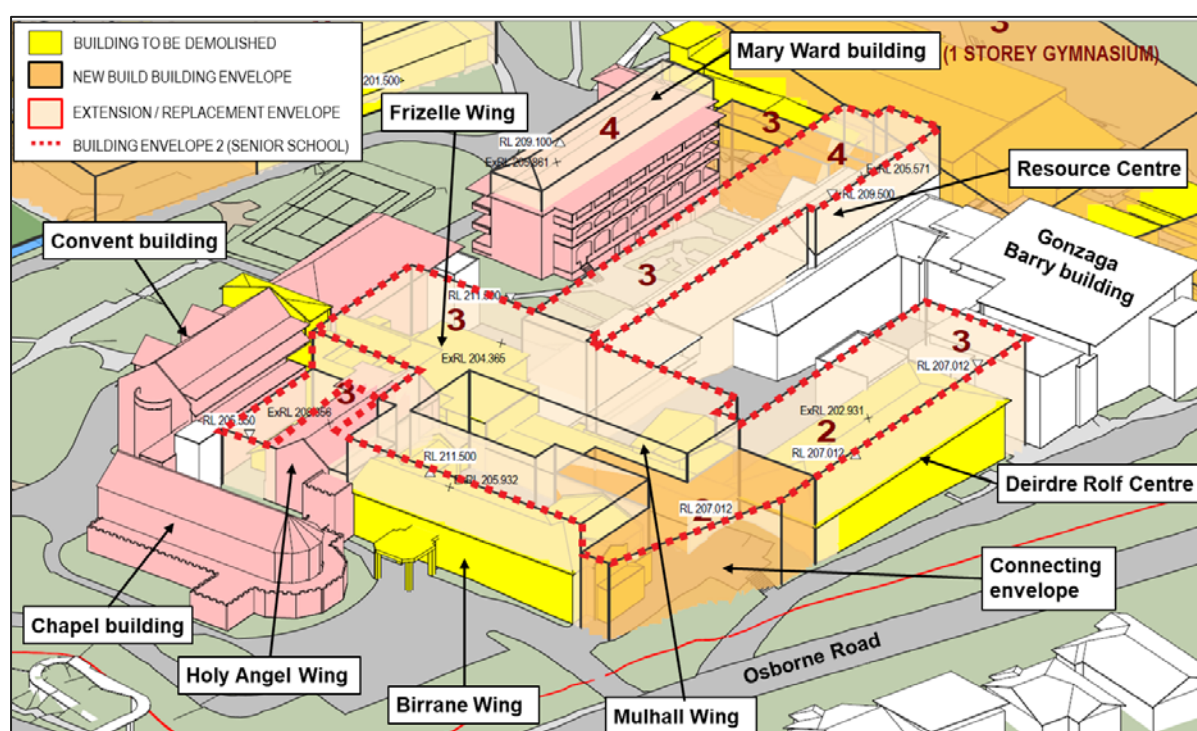


Figure 36 | Massing of Envelope 2 looking south-west (Base source: Applicant's RtS)

6.3.20 As discussed in **Section 1**, the land at the northern end of the site (and particularly in the location of the existing Birrane Wing and Deirdre Rolf Centre) is elevated above Osborn Road and Pennant Hills Road and forms the highest point of the site. The result is that this part of the site, and particularly these buildings, are highly visible from within the Osborn Road streetscape (**Figure 35**).



Figure 37 | Existing view of the Birrane Wing and Deirdre Rolf Centre from Osborn Road (top), Applicant's massing perspective from Osborn Road (bottom) (Base source: Applicant's RtS)

6.3.21 Having regard to **Figure 35**, the Department considers the majority of Envelope 2 that will facilitate an extension to the Resource Centre, the Friezelle and Mulhall Wings, and provide an infill envelope next to the Holy Angel Wing would not have any adverse height, bulk, visual or amenity impacts as:

- they are contained within the middle of the existing school development, away from adjoining roads / properties, and are screened from view by surrounding school buildings and landscaping.
- they comprise the equivalent of a one storey extension to the Friezelle and Mulhall Wings and one to two storey extension to the Resource Centre building.
- the infill between the Holy Angel Wing and the Covent building is below the eaves line of both buildings and therefore recessive in height and scale.
- these envelopes are set back from existing adjoining heritage items and, as discussed at **Section 6.6**, heritage impacts would be considered in detail as part of the assessment of future DA(s).

6.3.22 The Department acknowledges the Applicant's response to the Department's concerns about the height, bulk and scale of Envelope 2 and its relationship to Osborn Road. In particular, the Department notes the RtS amendments included a reduction in the height of the Deirdre Rolf Centre and of the connecting envelope by one storey and deletion of the projecting envelope near the Chapel building.

6.3.23 Notwithstanding these changes, the Department maintains its concern that the Birrane Wing, Deirdre Rolf Centre and connecting envelope that form part of Envelope 2 have the potential to facilitate future development that would present significant height, bulk and scale when viewed from Osborn Road as evident in **Figure 35**. This is because:

- the land in this location is elevated and topographically, the highest point of the site. Therefore, the buildings would appear to be much taller than proposed (at least, a full storey higher than indicated), when viewed from Osborn Road.
- the location of the vehicular accessway (Gate O-2) prevents the opportunity to provide for any effective planting to screen the development in this location.
- the connecting building and the northern end of the Deirdre Rolf Centre would be setback 6m from the Osborn Road boundary. However, given the above circumstances the setback would be ineffective in mitigating height, bulk and scale.
- the existing two storey Birrane Wing and Deirdre Rolf Centre buildings are already visually prominent within the Osborn Road streetscape when compared to the opposite side of Osborn Road which is predominantly characterised by single storey dwellings. Providing an additional storey would further negatively exacerbate this built form relationship.
- the subject components of Building Envelope 2 do not contain modulation, upper level setbacks and/or articulation zones resulting in a sheer street wall height of between 14m – 18m (viewed from the footpath level). This results in a lack of transitional height between the low scale residential character on the opposite side of Osborn Road.

6.3.24 Consequently, the Department considers that the excessive height, bulk and scale of the subject components of Building Envelope 2 would not provide a positive contribution to the streetscape and character of the area. The Department is not satisfied that the design of the building envelope in its current form would be consistent with the Design Quality Principles for schools under Schedule 4 of the Education SEPP, particularly Principles 1 and 7 (assessed in detail in **Appendix B**):

- *Principle 1—context, built form and landscape*

Schools should be designed to respond to and enhance the positive qualities of their setting, landscape and heritage, including Aboriginal cultural heritage. The design and spatial organisation of buildings and the spaces between them should be informed by site conditions such as topography, orientation and climate...

- *Principle 7—aesthetics*

School buildings and their landscape setting should be aesthetically pleasing by achieving a built form that has good proportions and a balanced composition of elements. Schools should respond to positive elements from the site and surrounding neighbourhood and have a positive impact on the quality and character of a neighbourhood.

The built form should respond to the existing or desired future context, particularly, positive elements from the site and surrounding neighbourhood, and have a positive impact on the quality and sense of identity of the neighbourhood.

6.3.25 The Department recognises that a refined design in this area could potentially address the above issues including consistency with the Design Quality Principles of the Education SEPP. The Department therefore requested the Applicant to provide an indicative development design that demonstrated how future development within that part of the envelope could achieve an appropriate

built form relationship to the street and adjoining single storey dwellings. However, the Applicant did not provide this information. Given the absence of a representative or schematic design scheme for these envelopes, the Department does not consider that there is sufficient certainty or evidence at this stage to demonstrate that the proposed bulk, scale and height of Envelope 2 can be supported in its current form.

6.3.26 Based on the above assessment, the Department has recommended a condition requiring the Applicant to modify the Concept Proposal envelopes by:

- reducing the height of the Birrane Wing and Deirdre Rolf Centre building envelopes to not exceed the maximum heights of the existing buildings at this location (RL 205.93m Birrane Wing and RL 202.93m Deirdre Rolf building).
- reducing the height of the connecting building to not exceed the existing height of the Deirdre Rolf building (RL 202.93m).

6.3.27 The recommended condition would reduce the GFA of the entire Building Envelope 2 by approximately 764sqm (from 5200sqm to 4446sqm).

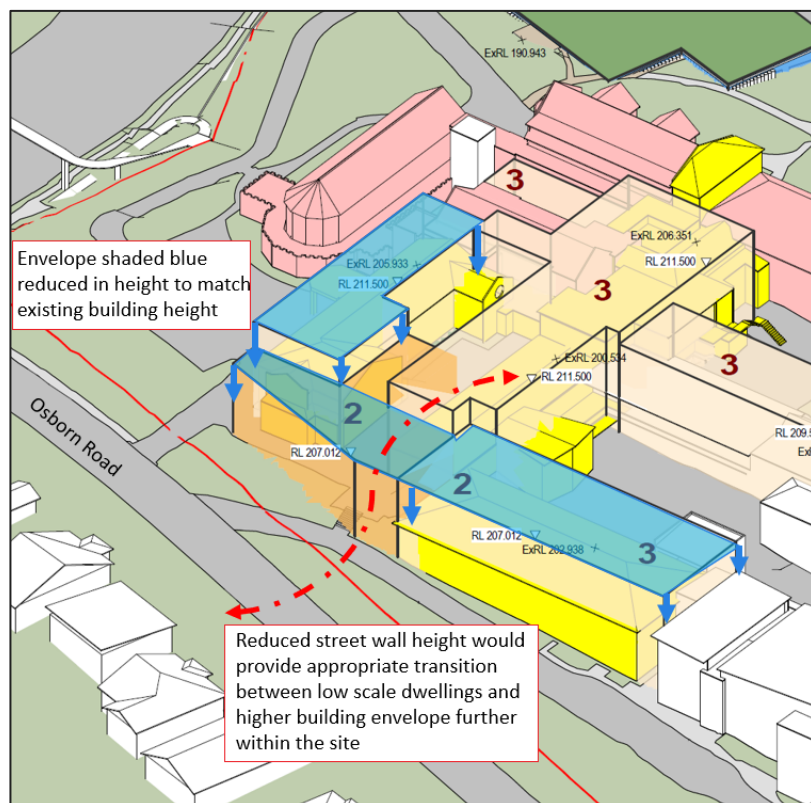


Figure 38 | Recommended reduction in height to Building Envelope 2

6.3.28 The recommended condition would result in the subject components of Building Envelope 2 not exceeding the existing building heights in this location (**Figure 38**). This would also result in an appropriate transition in height between the low scale residential dwellings and the higher portions of Building Envelope 2, further, within the site. Therefore, the Department concludes that subject to this recommended condition, Building Envelope 2 would not be visually dominant within streetscape and would be compatible with the existing low scale residential character on the opposite side of Osborn Road.

- 6.3.29 The Department has also recommended conditions for the Concept Proposal requiring all future built form to be contained wholly within the proposed building envelopes and future DA(s) include a comprehensive assessment of amenity impacts including solar access, visual and acoustic privacy and light spill.
- 6.3.30 In summary, the Department concludes that the proposed height, bulk and scale of the Concept Proposal building envelopes are acceptable subject to the Departments recommended modifications to Envelope 2 (senior school) and the future assessment requirements. In addition, the exceedance of the HLEP HOB development standard is justified for the reasons set out in paragraph 6.3.17.

Building height, bulk and scale – Stage 1 works

- 6.3.31 The Stage 1 works include the Boarding Accommodation building and carparks. The Boarding Accommodation building is a two to five storey building fronting Mount Pleasant Avenue. The P1A Tennis Court and P4A Multi-Purpose Court carpark buildings are single storey buildings, partially cut into ground level. The detail of the proposed buildings and their layouts are discussed in **Section 2**.

Submissions

- 6.3.32 Concern was raised in public submissions that the height bulk and scale of the Boarding Accommodation building is excessive and would appear out of place within the existing Mount Pleasant Avenue streetscape.
- 6.3.33 Council raised initial concern that the Boarding Accommodation building is excessive in height, bulk and scale when viewed from adjacent properties on Mount Pleasant Avenue and recommended the building should be revised to complement the scale and style of the earliest buildings on the site. Council did not raise any concern with the P1A Tennis Court and P4A Multi-Purpose Court carparks.

Applicant's RtS and Council's response

- 6.3.34 In response to concerns raised in public submissions and by Council, the Applicant reduced the maximum heights of the Boarding Accommodation building from three to two storeys at its northern end and from six to five storeys at its southern end and reconfigured the footprint of the building. The views of the Boarding Accommodation building, as amended, are provided in **Figure 39** to **Figure 41**.



Figure 39 | Perspective looking south along Mount Pleasant Avenue, the northern end (pedestrian entrance) of the Boarding Accommodation building to the right hand side of image (Source: Applicant's RtS)



Figure 40 | Perspective looking west towards the middle section of the Boarding Accommodation building
(Source: Applicant's RtS)



Figure 41 | Perspective looking north along Mount Pleasant Avenue, the southern end of the Boarding Accommodation building to the left hand side of image (Base source: Applicant's RtS)

6.3.35 Council reviewed the RtS and raised concern that the Boarding Accommodation building has an unbroken building length of 150m fronting Mount Pleasant Avenue and results in an atypical scale and character within the low-density residential zone. In addition, it does not provide an appropriate transition in scale or setbacks to Mount Pleasant Avenue and does not satisfy the HDCP built form controls.

Applicant's SRtS and Council's response

6.3.36 In response to Council's concerns the Applicant stated that the Boarding Accommodation building's zig-zag footprint and layout provide modulation, and increased landscaped setbacks to the streetscape ensure the building would not be visually intrusive or out of place in the streetscape. The Applicant noted the provisions of the HDCP do not apply to this application as it is SSD and in accordance with clause 42 of the Education SEPP.

6.3.37 Council stated the Department should satisfy itself that the scale and setbacks of the Boarding Accommodation building do not result in adverse visual amenity impacts. In addition, Council was

concerned that the photomontage submitted with the SRtS does not depict what the development would look like from Mount Pleasant Avenue.

Department's consideration of the Stage 1 works

- 6.3.38 The Department acknowledges the existing surrounding developments primarily consist of one and two storey residential dwellings. In comparison, the Boarding Accommodation building would comprise a larger building mass with a continuous façade and would not represent a typical low-density character.
- 6.3.39 The Department has carefully considered the concerns raised in public submissions and by Council and has concluded the height, bulk and scale of the Boarding Accommodation building is acceptable and the visual impact of the building on the Mount Pleasant Avenue streetscape is appropriate as:
- the building is wholly contained within the building envelope.
 - the building comprises a zig-zag footprint, which provides for setbacks (between 6m and 24m) from the Mount Pleasant Avenue site boundary.
 - the design ensures the elevation is highly modulated, despite its 150m length. This in turn reduces the perceived bulk and scale of the building from Mount Pleasant Avenue as the tallest, five storey component of the building would be angled deeply into the site, away from the road.
 - the design facilitates the retention of existing significant trees and includes new plantings, which sufficiently screen and soften the Mount Pleasant Avenue elevation of the building (subject to the Department's recommended design amendments to enable retention of additional trees discussed at **Section 6.4**).
 - due to the fall of the land, the height of the building would largely appear as a two to three storey building, south of Mount Pleasant Avenue.
 - the design of the building is a result of the functional requirements. The building layout has been designed to maximise access to natural light and ventilation. Reducing the length of the building or providing separate buildings would compromise its functions or result in a taller building.
 - the building is of a height and scale consistent with buildings commonly found on school sites.
 - the building would not result in any adverse amenity impacts in terms of overlooking, overshadowing or operational management as discussed at **Section 6.6**.
- 6.3.40 The Department notes Council's comments regarding the appropriateness of the submitted photomontages. However, the Department is satisfied that the photomontage provided with the SRtS (**Figure 17**) is an internal view from within the site and therefore does not relate to Mount Pleasant Avenue.
- 6.3.41 The Department also notes that, while not applicable to the development, the proposal is consistent with the relevant provisions of the HDCP as it provides a minimum building setback of 6m from Mount Pleasant Avenue (required for dwelling houses) and would provide adequate landscaping, open space and access to sunlight for occupants as discussed at **Section 6.6**.
- 6.3.42 The P1A Tennis Court and P4A Multi-Purpose Court carpark buildings are wholly contained within the building envelopes. The Department has considered the height and form of these buildings and concluded that they are acceptable given their unobtrusive nature and sympathetic built form relationship to existing buildings and the site context.

Design and materials

Concept Proposal

- 6.3.43 The application does not include detailed designs of buildings, except for those that form part of the Stage 1 works. The detailed design of all future buildings within the building envelopes would form part of future detailed DA(s).
- 6.3.44 The Department has recommended conditions requiring future DA(s) to include detailed architectural drawings, photomontages and a design statement demonstrating the design quality of the proposed development has had regard to the existing buildings on the site and character of the surrounding area.

Stage 1 works

- 6.3.45 The design of the Boarding Accommodation building has a distinctive zig-zag built form and a contemporary architectural design and finish. The elevations comprise a sympathetic combination of earth-coloured face brickwork, feature brickwork, precast concrete panelling, vertical louvres and blades, angled and projecting windows and a flat roof. The building has considered Crime Prevention Through Environmental Design Principles through casual surveillance opportunities around the Boarding Accommodation building and carparks. Access to the Boarding Accommodation building is controlled via the main pedestrian and vehicular access points (**Figure 39** and **Figure 41**).
- 6.3.46 The carpark buildings are of simple concrete designs with courts above and their ground floor open elevations are proposed to include wires for screening climbing plants (**Figure 42**).



Figure 42 | Mount Pleasant Avenue perspectives of the P1A Tennis Court (top) and P4A Multi-purpose Court (bottom) carparks (Base source: Applicant's RtS)

- 6.3.47 The Applicant has stated that the buildings have been designed to make a positive contribution to the surrounding area and the Boarding Accommodation building has intentionally been designed to reflect a contemporary architectural expression rather than the former residential dwellings (Loreto Community Centre) it replaces. The materials and finishes of the development are proposed to be durable and complement the character of the school site and its surroundings.
- 6.3.48 The EIS addressed the Design Quality Principles for schools under Schedule 4 of the Education SEPP. The EIS concluded that design of the Boarding Accommodation building would respond to its existing and surrounding context and the fall of the land, a warm palette of durable materials are proposed reflective of the surrounding bushland, the zig-zag footprint and pop-out ground floor staff apartments provide visual interest and the development is supported by extensive landscaping to complement the existing and future character of the area.
- 6.3.49 No specific concerns were raised in public submissions or by Council about the detailed design of the proposed buildings.
- 6.3.50 The Department concludes overall that the Stage 1 works achieve a high standard of design and materiality. The Boarding Accommodation building would not have an adverse impact on the character of the locality as:
- the modern design approach provides a coherent and well proportioned building of overall architectural composition that is highly articulated and makes a positive contribution to the Mount Pleasant Avenue streetscape.
 - the proposed external materials are of a high quality and include a natural colour palette consistent with the character of the school and the streetscape.
 - the grouping of windows, materials and use of vertical blades on the Mount Pleasant Avenue facade positively contribute to the zig-zag layout of the building to further break down the bulk of the building and reduce its visual impact.
 - the façade treatment and selection of materials establishes an architectural rhythm which emphasises the vertical proportions of the building.
 - The building achieves a high internal amenity and whole of life flexibility and adaptability as discussed at **Section 6.6**.
- 6.3.51 The Department concludes the proposed development achieves a high standard of design and results in a building which has been designed and articulated to appropriately fit within its urban context without having an adverse impact on the character of the locality.

Heritage

- 6.3.52 The majority of the site is identified as a local heritage item under the HLEP (**Figure 7**) and as summarised at paragraph 1.2.12 the site has local historic, aesthetic and social significance.
- 6.3.53 The proposal includes the demolition of existing buildings (as summarised at paragraph 2.2.6) and the creation of 10 building envelopes and construction of Stage 1 works as summarised at **Section 2**.
- 6.3.54 The EIS included a Heritage Impact Statement (HIS) (updated by the RtS) that found the:
- buildings to be demolished are all of little to no significance.
 - landscaping to the northern portion of the site is of little significance, excluding individually significant trees.

- new building envelopes / buildings would not adversely affect the setting or significance of the heritage item.
- proposal is acceptable from a heritage perspective.

6.3.55 Council initially raised concern about the potential heritage impacts. However, following consideration of the RtS, including the removal and amendment of relevant building envelopes, Council confirmed the building envelopes and the Stage 1 works are now acceptable in heritage terms. Council recommended:

- a condition requiring future DA(s) associated with the Concept Proposal include an interpretation strategy, archival recording, HIS and detailed drawings and management and mitigation measures.
- conditions requiring archival recording of fabric and spaces associated with the Stage 1 works.

Concept Proposal

6.3.56 The Department considers the proposal would not result in a significant or unacceptable impact to the heritage significance of the site or nearby heritage items, subject to compliance with the recommended conditions.

6.3.57 The Department notes the proposal includes building envelopes adjoining and near to existing heritage items, including the Convent Building and Angels Wing. The Department considers the proposed building envelopes would not result in adverse heritage impacts on those heritage items as:

- heritage impacts can be managed through the sympathetic detailed design of future buildings.
- future DAs would include a HIS that assesses heritage impact and recommends mitigation measures.
- the reduction in the height and scale of Building Envelope 2 ensures an appropriate built form relationship to existing adjoining buildings.

6.3.58 The Department has recommended a condition requiring future DA(s) associated with the Concept Proposal for demolition or new built form to be accompanied by a HIS. In addition, the Department agrees with Council's suggested conditions requiring appropriate details be submitted with future DA(s) and has recommended conditions accordingly.

Stage 1 works

6.3.59 The Department notes that none of the buildings to be demolished as part of Stage 1 works (Givendale 1960s additions, Loreto Community House, courts and sheds) are identified as having heritage significance and in some instances are detracting additions to items. Their demolition is therefore considered acceptable.

6.3.60 The Department has recommended amendments to the application to increase the retention of existing trees including those of significance value. As discussed at **Section 6.4**, the Department concludes the removal of the remaining individually significant trees is unavoidable and would be compensated for by the proposed 105 replacement trees.

6.3.61 The Department agrees with the HIS and Council that the built form of the Boarding Accommodation building and carparks would not have adverse heritage impacts on the heritage significant buildings on the site.

- 6.3.62 The Department agrees with Council's suggested condition requiring archival recording of fabric and spaces associated with Stage 1 works and has recommended a condition accordingly.

Aboriginal and non-Aboriginal heritage

- 6.3.63 An ACHAR was prepared for the site which confirmed no Aboriginal Heritage Information Management System (AHIMS) sites were identified within the site. In addition, the Applicant consulted with the Registered Aboriginal parties and no relevant or social or cultural values for the site were identified.
- 6.3.64 With regards to subsurface archaeological potential for both European and Aboriginal relics, the ACHAR and HIS both indicated that the development areas of the site have been significantly disturbed and the potential for subsurface Aboriginal and European archaeology is limited.

Concept Proposal

- 6.3.65 The application does not propose any works within, or near, the bushland cemetery, which is identified under the HLEP as an archaeological item of significance (**Figure 7**).
- 6.3.66 The Department has recommended a condition requiring future DAs for demolition or new built form to be accompanied by an assessment of Aboriginal and European archaeology and cultural heritage where relevant to the stage.

Stage 1

- 6.3.67 Council recommended the construction management plans address Aboriginal cultural heritage and archaeology.
- 6.3.68 Heritage NSW recommended an Aboriginal archaeology unexpected finds protocol be developed during construction. No specific concerns were raised by Heritage NSW with regard to non-aboriginal archaeology.
- 6.3.69 The Department reviewed the ACHAR and HIS and although both indicate the potential for archaeological finds is limited, the Department considers it appropriate that an unexpected finds protocol is put in place to manage any unexpected finds of any archaeological artefacts.
- 6.3.70 The Department has recommended the Construction Environmental Management Plan include an unexpected finds protocol for any Aboriginal objects or deposits and European archaeology.

6.4 Tree removal, replacement and landscaping

Tree removal and replacement

- 6.4.1 The Application includes an Arboricultural Impact Assessment (AIA) that has considered the existing trees on the site, their health, significance, relationship to the development, tree retention / removal and mitigation measures.
- 6.4.2 The proposal is likely to result in the removal of 119 trees (105 within Stage 1 and 14 within the remainder of the Concept Proposal) to facilitate the development.
- 6.4.3 The biodiversity impacts of the proposed removal of trees is discussed in Section 4. The other relevant matters are discussed below.

Concept Proposal

- 6.4.4 The Concept Proposal does not include any physical works. As such, it does not seek approval for tree removal at this stage with any tree removal to be considered with the detailed design of future buildings and spaces as part future detailed DA(s). Notwithstanding this, the AIA states that 13 trees are located within the footprint of building envelopes 2, 4, 6 and 7 (excluding Stage 1 works). However, the Department notes the AIA plans indicate 14 trees for removal including (**Figure 43**):
- four trees with high significance / retention value
 - six trees of moderate significance / retention value
 - four trees with low significance / retention value
- 6.4.5 Council did not provide any comment on the indicative removal of the 14 trees associated with the Concept Proposal (excluding Stage 1 works). General concern was raised in public submissions about the impact of tree removal.
- 6.4.6 The Applicant has stated that as the trees are wholly located within the footprint of the buildings envelopes it is unlikely they would be able to be retained. However, any tree removal would be considered during the detailed design phase of future buildings within the proposed buildings envelopes.
- 6.4.7 As discussed in Section 6.3, the Department recommends that the footprint of Envelope 2 be reduced. This would result in the retention of four trees of moderate significance, which are currently indicated for removal.
- 6.4.8 The Department acknowledges the remaining 10 trees, including three of high significance, are located entirely within the footprints of the building envelopes and the potential to retain or remove these trees would depend on future building designs.
- 6.4.9 The Department has recommended conditions requiring future DA(s) associated with the Concept Proposal to include a detailed AIA assessing existing trees, proposed tree removal (including justification) and landscaping plans confirming any new / replacement trees.

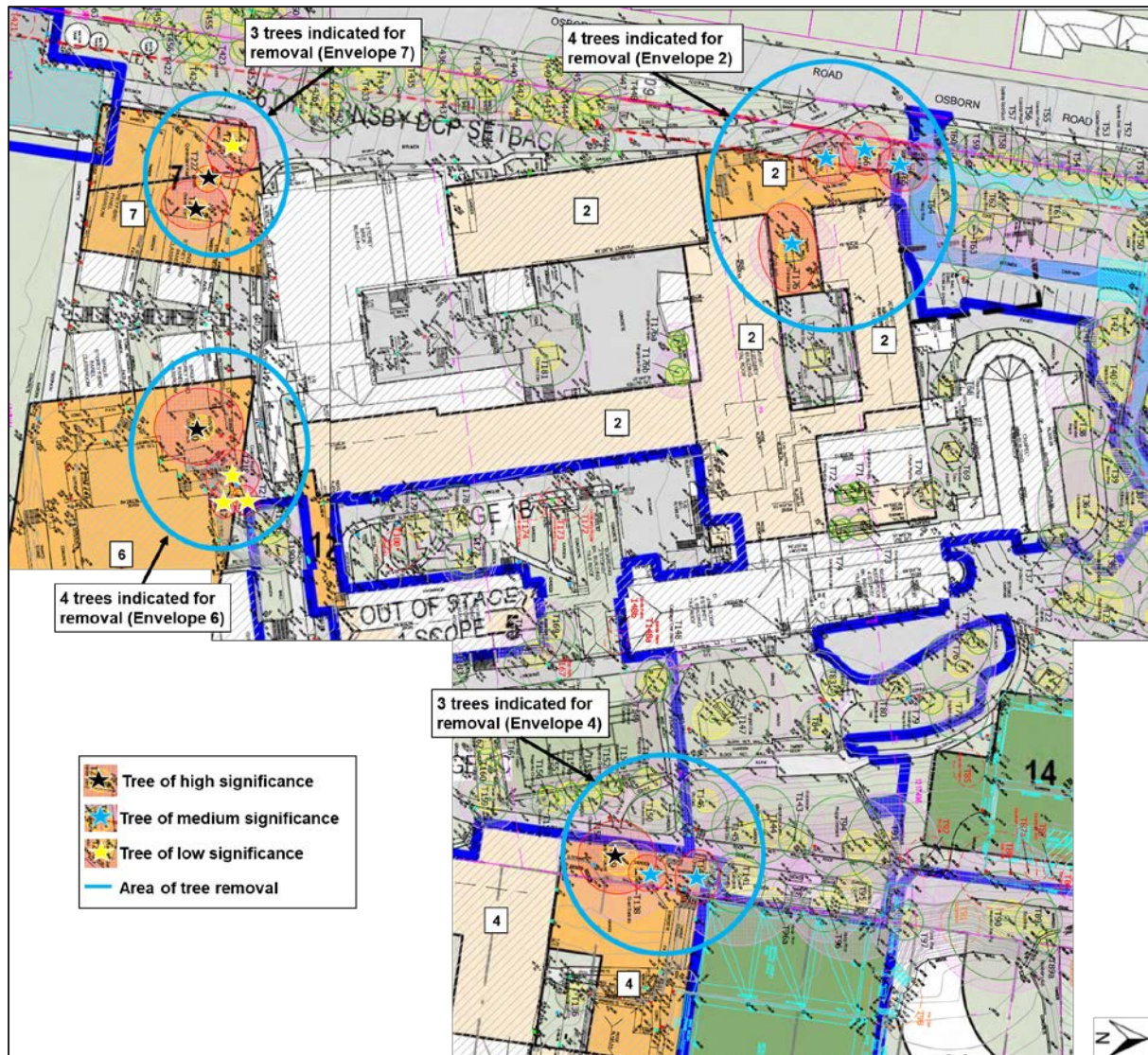


Figure 43 | AIA plan showing the location of building envelopes and the 14 trees indicatively marked for removal (Base source: Applicant's RtS)

Stage 1 works

6.4.10 The AIA confirms the Stage 1 works would result in the removal of 105 existing trees, including 70 associated with the Boarding Accommodation building and 35 associated with the through site road and car parking areas. The AIA assessment indicates the 105 trees identified for removal have the following values:

- nine trees with high significance / retention value.
- 46 trees of moderate significance / retention value.
- 50 trees with low significance / retention value.

6.4.11 The AIA has stated that due to the location of the Boarding Accommodation building, carparks and the through site road, it is not possible to retain the trees identified for removal.

6.4.12 To offset the proposed tree removal the proposal includes the planting of 105 replacement trees throughout the site (67 within Stage 1 and 38 elsewhere within the campus). In addition, the AIA includes management, mitigation and tree protection measures for all retained trees during the construction phase of the Stage 1 works.

Submissions and Applicant's response

- 6.4.13 Council raised concern about the removal of trees of medium to high significance associated with the Boarding Accommodation building. Council recommended, if approved, replacement trees should be provided as part of Stage 1 and an updated landscape plan provided confirming the species, location and number of replacement trees. Concerns were raised in public submissions that every effort should be made to retain trees, particularly along the Mount Pleasant Avenue frontage.
- 6.4.14 The Department reviewed the proposed tree removal and recommended that the Applicant remove the ground floor loading dock of the Boarding Accommodation building from the Mount Pleasant Avenue frontage to within the basement in order to reduce the number of trees proposed for removal and increase landscape opportunities along Mount Pleasant Avenue.
- 6.4.15 In response to the Department's recommendations, the Applicant has stated the:
- amendments to the footprint of the Boarding Accommodation building has allowed for the greater retention of trees along the Mount Pleasant Avenue frontage.
 - the proposal includes the planting of 105 replacement trees, which equates to a ratio of 1:1 replacement of the trees to be removed.
 - the loading dock has been relocated to basement level. However, the driveway and turning head have been retained for a secondary point of delivery and for waste collection vehicle pick-up.
- 6.4.16 In response to the Applicant's SRtS Council raised concern the private terraces and formalised garden planting in front of the Boarding Accommodation building compromises the ability to achieve canopy trees. Council recommended this area be redesigned to be permeable with minimum hard surfaces to allow for landscaping and canopy trees.

Department's consideration

Boarding Accommodation building (70 trees for removal)

- 6.4.17 The Department notes Council's concern that the staff apartment terraces and front gardens compromises the ability to achieve canopy trees. However, the Department notes neither front terrace would require the removal of any existing trees and front gardens are shown as providing for naturalistic planting, including canopy trees. The Department considers the terraces and front gardens are therefore acceptable. The Department has recommended a condition requiring the front gardens to contain canopy trees and minimal hard surfaces.
- 6.4.18 However, due to the location and extent of the Boarding Accommodation building's footprint and its basement, it would not be possible to retain the majority of the 70 trees identified for removal without fundamental and significant redesign of the Boarding Accommodation building or the overall site planning. In addition, the zig-zag footprint of the building has allowed for the retention of numerous trees that would have been lost if the building were to have a more conventional rectilinear footprint.
- 6.4.19 Notwithstanding the above, the Department has identified nine additional trees (including three of high retention value) that could be retained subject to minor design amendments to the Boarding Accommodation building ground level and basement layout. The proposed building contains an at-grade loading dock (for deliveries and waste collection), associated turning circle area and separate driveway only to service the loading dock (**Figure 44**) requiring the removal of nine trees identified in **Figure 45**.

6.4.20 Approximately 15m south of the loading dock driveway is the proposed driveway to access the basement which requires the removal of thirteen trees (including two of high retention value). Consequently as a result of the two driveways and at-grade loading area, a total of 22 trees would require removal (**Figure 45**).

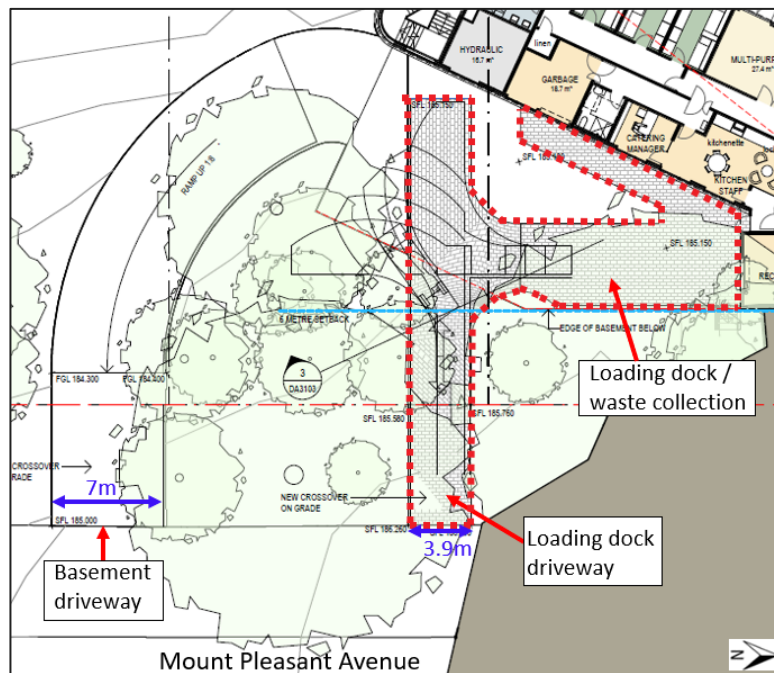


Figure 44 | Proposed ground floor plan showing location of the loading dock area and new driveways (Base source: Applicant's RtS)

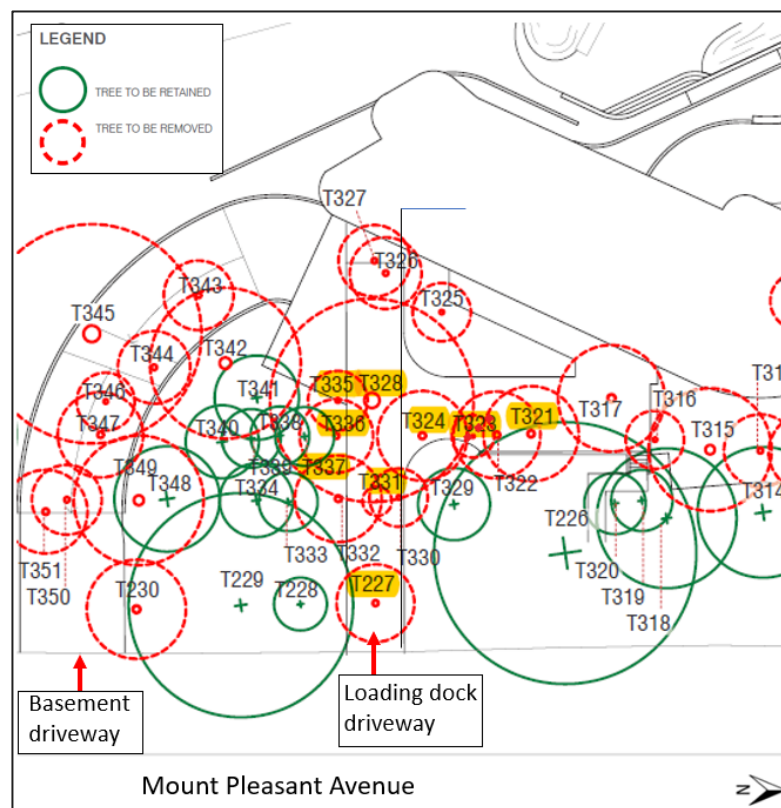


Figure 45 | Landscape plan showing the proposed tree removal. The trees shaded yellow would be required to be removed to accommodate the loading dock area. (Base source: Applicant's RtS)

6.4.21 Given thirteen trees are already proposed to be removed for the construction of the basement driveway and all of the building's servicing requirements could occur within the basement, the Department concludes that the proposed removal of nine trees associated with the at-grade loading dock area is not justified.

6.4.22 The Department considers that the design of the basement could be amended to provide for all servicing, deliveries and waste collection to occur within the basement in order to avoid the unnecessary removal of trees and at least retain the nine subject trees (**Figure 46**).

6.4.23 Consequently, the Department has recommended conditions of consent requiring:

- the retention of tree numbers 227, 321, 323, 324, 328, 331, 335, 336 and 337 as identified on the landscape plans.
- the deletion of the at-grade loading dock and associated driveway.
- redesign of the basement, including ceiling clearance and turning circle, to enable all servicing to occur within the basement including waste collection.
- relocate the five basement car parking spaces located underneath the at-grade loading dock to another part of the redesigned basement.

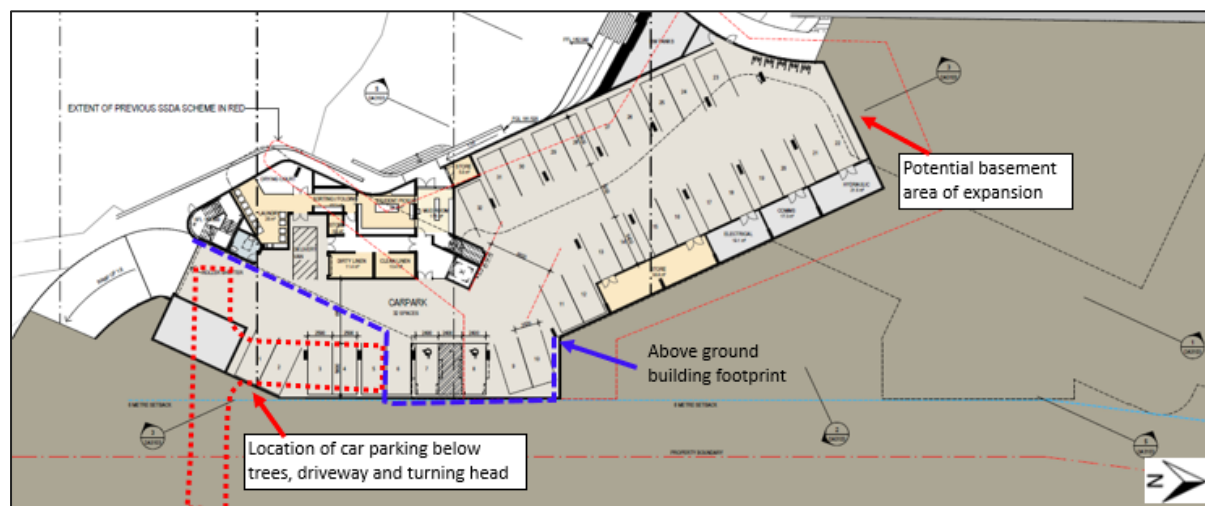


Figure 46 | Basement plan showing potential redesign of basement (Base source: Applicant's RtS)

6.4.24 The Department acknowledges that relocating the loading dock / waste collection area to within the basement may require some minor internal changes to enable practical servicing of the site. For example, the waste storage room located at ground level may need to be moved to the basement. However any associated minor internal floor layout changes would not alter the building envelope or result in any changes to the boarding rooms / apartments.

6.4.25 The Department notes that in addition to the positive outcome of additional tree retention, the recommended design amendments would:

- provide a positive contribution to the streetscape through minimising the extent of driveways and hardstand areas within the existing landscaped setting.
- improve the amenity of the boarding rooms which have windows looking directly onto the proposed loading dock through improved visual outlook and noise reduction associated with deliveries and waste collection.

P1A, P3A and P4A carparks and the through site road (35 trees for removal)

6.4.26 The P3A Osborn Road carpark includes the creation of 28 tandem car parking spaces along the western side of the surface carpark that results in the removal of 10 existing trees (two high, three medium and three low significance) (**Figure 47**).

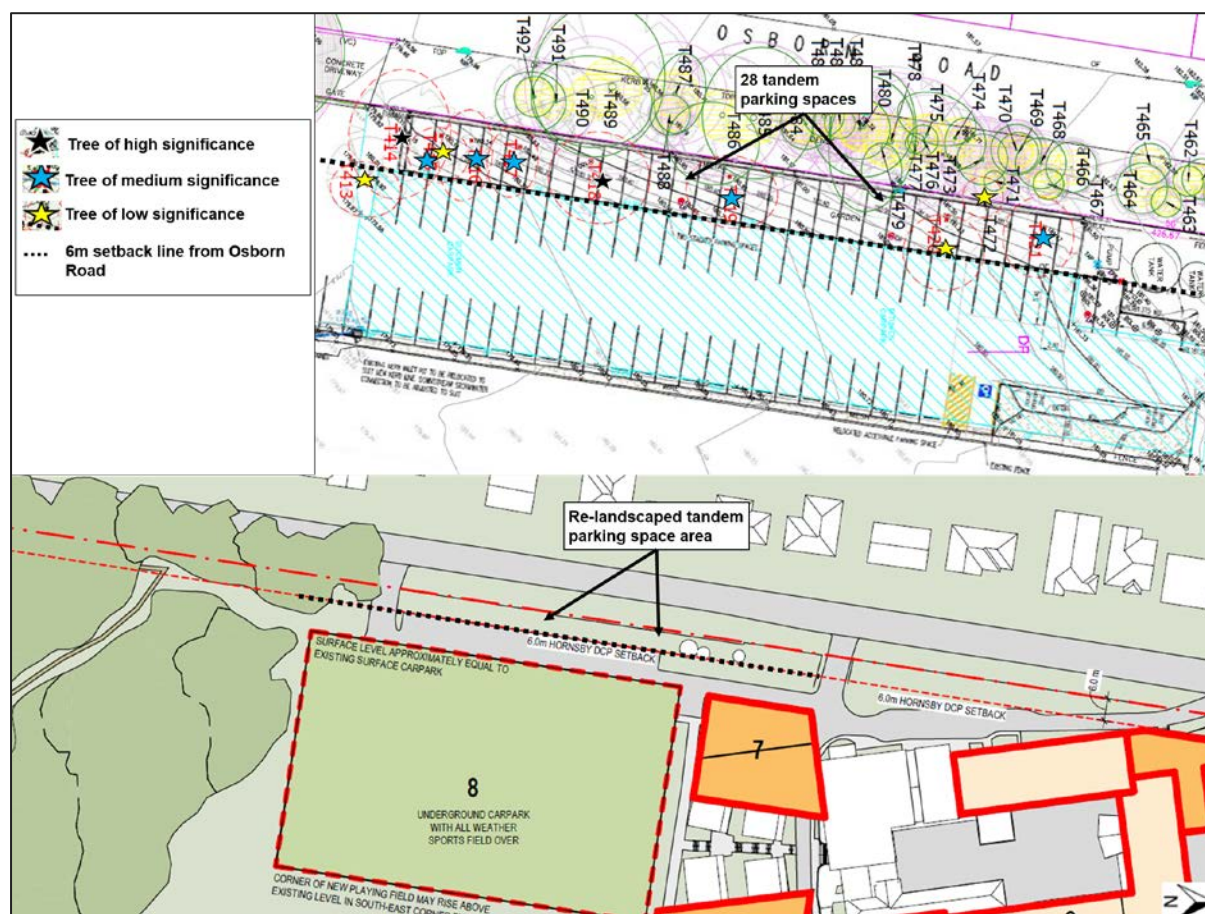


Figure 47 | Plan showing the Stage 1 (top) and Concept Proposal (bottom) P4A Osborn Road carpark layout and the 10 trees that may be retained subject to carpark revision (Base source: Applicant's RtS)

6.4.27 The Department notes that the proposed tandem car parking area forms part of the Stage 1 P3A Osborn Road carpark design (i.e. reconfiguration and expansion of existing surface carpark). In addition, the Concept Proposal indicates the final Envelope 8 P3A Osborn Road carpark design (i.e. basement carpark with sports field above) envisages the tandem parking area would be removed and converted back into a landscaped area with tree planting. The Department therefore considers the tandem parking to be an interim / temporary measure within the scope of the long-term masterplan for the site.

6.4.28 Given the significance of the trees and that their removal only facilitates temporary car parking the Department considers, every effort should be made to consider alternative designs that retain the existing trees. Noting this, the Department has identified that through a simple amendment of relocating the tandem spaces to the eastern (oval) side of the carpark it would be possible to retain all existing 10 trees. The Department has recommended a condition requiring this amendment, or an alternative design that retains the identified trees.

6.4.29 All other trees proposed for removal located within the through site road and P1A Tennis Court and P4A Multi-Purpose Court carparks (25 trees) are wholly contained within the footprint of those

components of the Stage 1 works. The Department is satisfied these facilities are critical to the traffic management of the school and they cannot be readily relocated or redesigned without resulting in similar or worse impacts on existing trees and heritage items. This being the case, the Department concludes there is no alternative option other than the removal of those 25 trees.

Conclusion

6.4.30 The Department has considered the proposal and the issues raised in submissions and is satisfied the proposed tree removal is acceptable, on balance, as:

- the removal of these trees to facilitate the redevelopment is unavoidable due to their location on the site.
- the AIA identifies that 50 of the 105 trees to be removed (47.6%) are of low retention value and therefore their removal and replacement would not have an adverse visual or amenity impact.
- the Applicant has committed to planting 105 replacement trees, which would result in a site tree canopy coverage of 55,865m² (42%). The proposed tree planting represents only a minor decrease from the current situation, from 57,130m² (43%) and exceeds the recommended canopy coverage target (40%) within the NSW Government's draft Greener Places Design Guide 2020.
- the use of advanced tree stock would ensure rapid achievement of the 42% canopy cover.

6.4.31 The Department has recommended conditions requiring the Applicant explore options to amend the Boarding Accommodation building and P3A Osborn Road carpark to increase tree retention (potential 23 existing trees, including seven high and six medium significance).

6.4.32 In addition to the above conditions, the Department has also recommended conditions requiring:

- the trees identified for retention to be protected during the construction in accordance with the recommendations of the AIA.
- the proposal provide for no less than 105 replacement trees comprised of advanced tree stock.
- the proposal provide for a mature tree canopy cover of no less than 42% of the site.

6.4.33 The Department concludes that subject to the above conditions requiring amendments to the Boarding Accommodation building, P3A Osborn Road carpark, tree retention, protection and replacement, the proposed tree removal is acceptable.

Landscaping

6.4.34 The EIS included a landscape masterplan (amended by the RtS) which would predominantly be delivered as part of the Stage 1 works, as summarised in **Section 2**.

6.4.35 The Applicant has stated the hard and soft landscaping around the:

- Boarding Accommodation building would create new meaningful, functional and well-designed outdoor areas and a buffer to neighbouring properties.
- Mary Ward building provides formalised courtyards and breakout spaces.
- through site road and carparks improves the public domain interface, screens and softens structures and integrates with the existing heritage landscaping.

6.4.36 No concerns were raised by Council or in public submissions about the proposed landscaping.

6.4.37 The Department is satisfied the proposed landscaping works are appropriate and would form a key part of the integration of the development into the existing site.

Concept Proposal

6.4.38 The concept landscape plan includes indicative landscaping within the spaces between building envelopes. Landscaping would be subject to assessment as part of future DA(s).

6.4.39 The Department has recommended a condition requiring future DA(s) associated with the Concept Proposal to include detailed landscaping plans.

Stage 1 works

6.4.40 The Department considers the proposed landscaping provides for a high standard of design. Proposed materials are robust and the use of majority native planting interspersed with a number of non-native species relevant to the history of the site is supported.

6.4.41 The proposal includes the expansion of the existing oval and running track which would result in the removal of some existing vegetation. This is assessed by the Department as acceptable (subject to conditions) as detailed in **Section 4.4**.

6.4.42 The proposal maintains extensive deep soil areas around the Boarding Accommodation and Mary Ward building and car parking areas and along the through site road. The provision of these deep soil areas ensures the proposed tree planting can be achieved throughout the Stage 1 works site and around proposed buildings and within the new spaces created. As discussed in Section 6.4, the Department recommends the provision of advance tree stock and the achievement of at least 42% tree canopy coverage.

6.4.43 The Department notes the Stage 1 works landscape masterplan indicates the provision of two tennis courts adjacent to the Principal's Residence (at the southern end of the site). However, no details of need, impact or justification has been provided for these courts and the courts are not shown on the architectural drawings or considered in the BDAR. In the absence of any information the Department has recommended a condition confirming no consent is granted for those two tennis courts as a result of this application.

6.5 Operational and construction noise

6.5.1 The EIS was supported by a Noise Impact Assessment (NIA) (updated by the RtS) which provides an assessment of potential construction and operational noise impacts of the proposal and includes recommendations to minimise and mitigate any noise impacts.

6.5.2 The closest residential receivers to the site and NIA noise monitoring locations are shown at **Figure 48**.

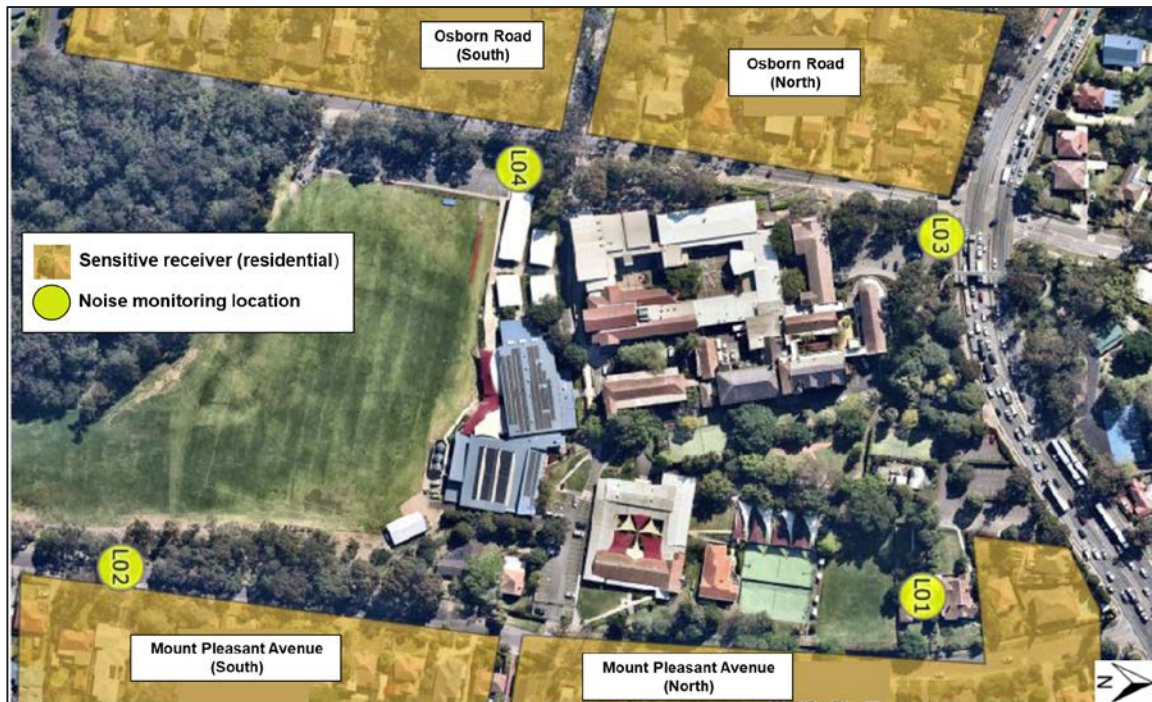


Figure 48 | Subject site in context to the nearest sensitive receivers (Base source: Applicant's RtS)

Operational noise

- 6.5.3 The NIA identified operational noise sources would primarily arise from the use of buildings, courts, and carparks, mechanical plant, school bell and public address (PA) system and the through site road and road traffic noise.
- 6.5.4 Noise monitoring was carried out to determine the existing background and ambient noise levels and established the following project noise trigger levels (PNTLs) at the nearest residential receivers, in accordance with the Noise Policy for Industry:
- between 47dBA and 64dBA for the daytime period (intrusiveness criterion).
 - 58dBA for the daytime period (amenity criterion).

Concept Proposal

- 6.5.5 The NIA stated that the indicative use and operation of the future P4A Osborn Road carpark sports field (Envelope 8) and Gonzaga Barry Performing Arts Centre (Envelope 7) may result in noise impacts on surrounding residential receivers. The NIA has undertaken a preliminary assessment of these buildings and concludes, subject to future assessment and the adoption of reasonable noise management and mitigation measures, noise impacts from these buildings can be addressed.
- 6.5.6 The Department agrees the assessment of operational noise impacts is best undertaken at future DA(s) stage, when uses, operational capacity and hours of operation are defined. The Department recommends future DA(s) include a Noise and Vibration Impact Assessment (NVIA) to enable potential operational noise impacts to be considered.

Stage 1 works

- 6.5.7 The NIA has considered the use of the Boarding Accommodation building, P1A Tennis and P4A Multi-purpose Courts and the Osborn Road carpark and concludes the:

- Boarding Accommodation building is expected to generate domestic level noise, which would be adequately contained by the façade of the building. In addition, the outdoor dining area (west of the building) and the loading dock would not exceed the PNTL.
- P1A Tennis Court is 60m from the nearest property and the P4A Multi-Purpose Court is 40m away from the nearest property. The operation of both courts would not exceed the PTNL at peak use.
- noise from vehicle movements associated with the P4A Osborn Road carpark is predicted to be up to 41dB at nearest receivers, which is below the NSW Road Noise Policy (55dB) criteria.

- 6.5.8 The NIA confirmed detailed specifications of mechanical plant services and the school bell and PA systems would be determined during the detained design phase of the development. Mitigation measures for plant may include acoustic louvres / barriers, plant controls and attenuators and the school bell / PA system may include volume control, appropriate speaker orientation and limitation to school days.
- 6.5.9 Concern was raised in public submissions about the operational noise impact of the Boarding Accommodation building and proposed carparks. Council did not raise any concerns about operational noise impacts.
- 6.5.10 The Department requested the Applicant to provide an assessment of traffic noise impacts on nearby residential properties associated with the operation of the through site road.
- 6.5.11 In response to the Department's request, the Applicant's SRtS included an updated noise statement which confirmed the 'worst case' would occur during the school pick-up/drop-off peak periods, with 40% of demand distributed within a 15 minute period.
- 6.5.12 The SRtS confirmed the PNTL are between 52-58 $L_{Aeq, 15min}$ at nearest affected properties and, based on the 'worst case' scenario, predicts noise emissions would reach 51 $L_{Aeq, 15min}$. As noise emissions are predicted to be less than the PNTL criteria, the Applicant concludes noise impacts would be acceptable.

Department's consideration

- 6.5.13 The Department has reviewed the amended NIA and taken in to consideration the public submissions. The Department acknowledges that the school would generate some level of additional noise from its operation. However, the noise generated from the proposal Stage 1 works is acceptable as the:
- noise would not be excessive or sustained over prolonged periods during the day.
 - application does not propose any new community use of the outdoor facilities or the out of hours use of the proposed P1A Tennis and P4A Multi-Purpose Courts.
 - the NIA has confirmed the operation of buildings, facilities and the through site road would not exceed the relevant PTNL.
 - noise impacts from mechanical plant and school bell / PA system can be managed and mitigated subject to a condition requiring those components be appropriately designed, installed and maintained.
- 6.5.14 The Department considers that the amended NIA provides a comprehensive assessment of the operational noise sources generated by the proposed school and is satisfied the proposal can operate in accordance with the established noise limits set out in the Noise Policy for Industry and NSW Road

Noise Policy, subject to the implementation of the recommended management and mitigation measures.

- 6.5.15 The Department concludes, subject to the above conditions, the proposal would not have an adverse operational noise impact on nearby sensitive receivers.

Construction noise and vibration

- 6.5.16 The site is located on the opposite side of Osborn Road and Mount Pleasant Avenue from existing residential properties.

- 6.5.17 The Interim Construction Noise Guideline 2009 (ICNG) includes recommended standard hours of construction as follows:

- Monday to Friday - 7am to 6pm.
- Saturday – 8am to 1pm.
- No work on Sundays or public holidays.

- 6.5.18 For residential receivers, the ICNG recommends construction noise management levels (NML) be limited to +10 dB above the background noise level during standard construction hours. For work outside standard hours, noise should be limited to +5 dB above the background noise level. The ICNG notes that impacts above 75 dB represent a point where sensitive receivers may be 'highly noise affected'.

- 6.5.19 The NIA confirms the Stage 1 works and the future stages would be constructed in accordance with the ICNG general standard hours of construction and the NMLs for residential properties are between 52 to 69 dB. The NIA predicts the noise impact to the school itself is likely to be similar to the levels predicted for receivers immediately surrounding the site.

- 6.5.20 Construction plant and equipment likely to generate significant noise emissions include the use of excavators, various trucks, cranes, saws, piling rigs and concrete pumps.

- 6.5.21 Concerns were raised in public submissions about the impact of construction noise on neighbouring properties on Osborn Road and Mount Pleasant Avenue. Council did not provide any comments on construction noise.

- 6.5.22 In response to the concerns raised, the Applicant stated the construction program would be undertaken in accordance with the NIA, the Construction Management Plan and the recommended noise management and mitigation measures.

Concept Proposal

- 6.5.23 The NIA confirmed the methodology, criteria and measures established for the Stage 1 works would be representative of the future approach that would be taken in preparing future DA(s). Therefore management and mitigation measures to address construction noise and vibration impacts may include noise and vibration monitoring, selection of quiet plant/machinery, acoustic barriers and community liaison.

- 6.5.24 The Department recommends a condition requiring future DA(s) associated with the Concept Proposal be accompanied by a Construction Noise and Vibration Management Plan (CNVMP) and management and mitigation measures to address any noise exceedances.

Stage 1 works

6.5.25 The NIA predicts the construction noise associated with the Stage 1 works may exceed the NMLs by up to 13dBA if no construction noise mitigation measures are implemented. However, construction noise levels were not expected to exceed the ICNG's highly affected noise criterion (75dBA) for residential receivers. Therefore, the NIA recommends the following potential mitigation measures:

- preparation and implementation of a CNVMP.
- installation of hoardings and localised treatments such as barriers, shrouds and the like.
- use of saw cutting rather than rock-breaking where feasible.
- selection of quietest feasible construction equipment, including silencers, acoustic enclosures and other attenuation measures.
- noise testing of equipment before commissioned for operation and operator training.
- Optimisation of the layout and positioning of equipment to minimise noise emissions.
- community consultation and general approaches to mitigation.

6.5.26 The NIA stated measures will be adopted to manage noise and vibration impacts on users of the school. These mitigation measures are likely to include closing classroom windows, relocating classes during busy construction periods and scheduling particular work during school holidays.

6.5.27 The NIA confirms nearby residential dwelling are approximately 40m from the site and therefore exceed the minimum working distances between vibration generating activities (2m to 7m for excavation and pile boring). The NIA concludes that the proposal is unlikely to result in vibration impacts on nearby residential properties.

Department's consideration of Stage 1 works

6.5.28 The Department has considered the public submissions and the findings of the NIA. The Department considers that given the suburban nature of the immediate surrounding area, some noise impacts during construction would be unavoidable. Notwithstanding this, the Department notes the predicted construction noise levels would not exceed the ICNG's highly affected criteria (75dBA).

6.5.29 The Department considers the Applicant's proposed mitigation measures would be acceptable subject to construction hours being limited to the standard hours of construction and the implementation of a CNVMP including site specific measures to manage and mitigate construction noise and vibration impacts. To further limit the risk of noise and vibration impacts the Department also recommends the following additional management and mitigation measures:

- work to be carried out in accordance with the ICNG.
- implementation of respite periods from the noisiest activities on the site.
- all construction vehicles only to arrive to the work site within the permitted hours of construction.
- no noise to be 'offensive noise' as defined by the Protection of the Environment Operations Act 1997(POEO Act).

6.5.30 The Department is satisfied construction impacts would not adversely impact the ongoing operation of the school subject to the implementation of the CNVMP, the above mitigation measures and the proposed operational management measures to be implemented by school to address noise impact on classrooms.

6.5.31 On this basis, and subject to the Applicant's compliance and commitment to implement all reasonable and feasible mitigation measures to mitigate and manage noise, the Department is satisfied construction work can be appropriately managed to minimise disruption to residential amenity.

6.6 Other issues

6.6.1 The Department's consideration of other issues is provided at **Table 21**.

Table 21 | Department's consideration of other issues

Issue	Findings	Department's consideration
Future residential amenity (staff apartments)	<ul style="list-style-type: none"> The State Environmental Planning Policy No. 65 (Design Quality of Residential Apartment) (SEPP 65) and Apartment Design Guide (ADG) recommend standards for new residential developments including their impact on existing residential buildings. Although the proposal is for Educational Establishment use and only includes a minor ancillary component of residential accommodation, the Department considers the ADG is a helpful guide to assess the acceptability of the staff apartments and impact of the proposal on adjoining existing residential development and has therefore considered the ADG recommendations, where relevant. The Applicant stated the two staff accommodation apartments located on Levels 2 and 3 of the Boarding Accommodation building comply with the ADG recommended residential standards. The SRtS included a compliant BASIX certificate for the two proposed staff apartments. 	<ul style="list-style-type: none"> The Department concludes the apartments meet or exceed the ADG requirements and are satisfactory having regard to SEPP 65. In particular, the apartments: <ul style="list-style-type: none"> meet or exceed the various ADG minimum apartment sizes. have access to an approximately 13ha open space within the school grounds. achieve 2 hours of solar access in mid-winter, exceeding the ADG 70% requirement for metropolitan areas. are both naturally ventilated, exceeding the ADG 60% requirement are 39m away from existing Mount Pleasant Avenue properties, exceeding the ADG minimum of 18m.
Boarding Accommodation amenity	<ul style="list-style-type: none"> The proposed student Boarding Accommodation building includes the provision of 125 student boarding rooms for 216 students, comprising: <ul style="list-style-type: none"> four 6-bed dormitories (35m²). 71 twin rooms (13.4m²). 50 individual rooms (10.7m²). The Boarding Accommodation 	<ul style="list-style-type: none"> The Department is satisfied that the proposed boarding and staff accommodation are permissible on the site under the Education SEPP. The Department has undertaken an assessment of the amenity of the Boarding Accommodation against the provisions of the draft Housing Diversity SEPP in Appendix B and concludes the

building also provides 1043 m² communal student amenities including a dining room at lower ground level, common rooms on each floor, music room, lobby lounge, multi-purpose room and laundry/storage areas.

- Gardens, terraces and tiered seating is provided to the rear of the building (fronting the sports oval). Landscaping is provided to the Mount Pleasant frontage.
- The SRtS includes an assessment of the Boarding Accommodation against the draft Housing Diversity SEPP and considers it to be satisfactory.

development would provide for a satisfactory level of amenity for future student and staff residents.

Boarding Accommodation operational management

- The Boarding Accommodation building is to be constructed at Stage 1, sub-stage 3 and would:
 - operate 24 hours a day, seven days a week during school term and close during school holidays.
 - include a reception staffed between 7:30am and 9pm.
 - be limited to student boarders and staff residents.
 - include two live-in staff apartments with access to the boarding component of the building.
- The Applicant has stated that it does not predict any adverse operational impacts given the:
 - residential nature of the Boarding Accommodation building.
 - residential character of the area.
 - NIA concludes operational noise impacts would be minimal.
 - proposal largely represents a relocation of the existing Boarding Accommodation.
- The Department is satisfied that the Boarding Accommodation building has been sited and designed to minimise the potential for amenity impacts on neighbouring residential properties. In particular the:
 - communal outdoor spaces are located at the rear of the building away from neighbouring properties.
 - building is setback approximately 6m from Mount Pleasant Avenue and a minimum of 39m from dwellings on the opposite side of Mount Pleasant Avenue.
 - building includes reception and live-in staff quarters providing appropriate management and security.
- To ensure the day-to-day operation of the Boarding Accommodation does not have adverse impacts on the amenity of adjoining residents, the Department has recommended a condition requiring the preparation of a Boarding Accommodation Operational Management Plan (OMP), including measures relating to management, student code of conduct, complaints handling, induction and signage.
- Noting the above design features, and subject to appropriate management through the OMP, the Department is satisfied the operation of the Boarding Accommodation would not have an

unreasonable impact on the amenity of adjoining properties. The future operation of the Boarding House would be consistent with the long term use of the site as a school providing similar services to students.

Solar access

- Concerns were raised in public submissions that the Boarding Accommodation building would reduce solar access to residential properties on Mount Pleasant Avenue.
- The Applicant provided shadow diagrams for the Concept Proposal and Stage 1 works between 9am and 3pm during mid-winter.
- The Department reviewed the shadow diagrams and concludes the overall development would not have any overshadowing impacts on neighbouring properties during mid-winter (excluding the Boarding Accommodation building).
- The HDCP requires 50 per cent of the required principal private open space of residential properties to receive no less than 3 hours of unobstructed sunlight access between 9am and 3pm in mid-winter.
- The submitted shadow diagrams show that the Boarding Accommodation building would not result in any overshadowing of adjoining properties between 9am and 2pm during mid-winter. From 2pm there would be minor overshadowing of the front yards of three residential properties on Mount Pleasant Avenue.
- However, as the proposal would not impact on existing solar access to the principal private open space of these residential properties, the proposal complies with the HDCP. Consequently, the Department concludes that the minimal overshadowing of the subject front yards would be acceptable.

Visual Privacy

- Concern was raised in a public submission that the Boarding Accommodation building would overlook residential properties on Mount Pleasant Avenue.
- The ADG recommends buildings between five and eight storeys provide for a building separation distance of 18m between neighbouring habitable rooms.
- The Applicant has stated the Boarding Accommodation building would not adversely overlook neighbouring Mount Pleasant Avenue properties as:

Concept Proposal

- The Department recommends a condition requiring future DA(s) associated with the Concept Proposal to include an amenity assessment demonstrating future buildings would not overlook neighbouring residential properties.

Stage 1 works

- The Department notes the Boarding Accommodation building, at its closest point, is set back a minimum of 39m from residential properties located on the opposite side of Mount Pleasant Avenue.
- As the proposal exceeds the ADG minimum recommended building

- windows are angled away from the street and also fitted with louvers and screens to prevent overlooking.
- the building is setback a minimum of 6m from the Mount Pleasant Avenue site boundary and the setback includes extensive landscaping.

separation distance (18m), and noting the building includes angled windows and screens, the Department considers the proposal would not have an adverse impact on the privacy of Mount Pleasant Avenue residential properties.

Light spill

- Concern was raised in the public submissions about potential light spill from the operation of the proposed car parking areas and through site road on properties on Mount Pleasant Avenue.
- The Applicant has stated the Boarding Accommodation building carpark is contained within a basement and would not result in light spill. In addition, the application does not propose to amend the existing school operating hours or change community use of school facilities.

Concept Proposal

- The Department notes the future buildings and spaces (excluding the Stage 1 works) relate to a Concept Proposal only and future detailed DA(s) would be submitted to the Department for the detailed design of the development within the building envelopes.
- The Department has recommended a condition requiring a lighting assessment be submitted with future detailed DA(s) associated with the Concept Proposal to enable potential impacts to be considered at that stage.

Stage 1

- The Department notes car parking and the through site road would be used during normal school hours and any lighting in the evening / night time would be predominantly limited to internal lighting, which is likely to have minimal impacts.
- No external floodlighting of the buildings / grounds is proposed under this application. Outdoor lighting would be limited to external security lighting and must comply with relevant Australian Standard for lighting to ensure it does not result in intrusive light spill to nearby residents. In addition, existing and proposed trees and landscaping (including screening climbing plants) would mitigate any general lighting proposed within the P1A Tennis Court and P4A Multi-Purpose Court car parking areas.
- The Department is satisfied, subject to compliance with the relevant Australian Standards for lighting, the proposal would not result in unreasonable lighting impacts beyond what would normally be expected from the operation of a school and recommends a condition accordingly.

Bushfire

- The EIS included a Bushfire Protection Assessment which concluded:
 - the forested area on-site represents the primary bushfire hazard and the proposed buildings are adequately separated from that hazard.
 - the existing Asset Protection Zone (APZ) extends approximately 70m north of the forest and remains relevant for the proposal.
 - the development complies with the APZ required by Planning for Bushfire Protection 2006.
 - the buildings should comply with the relevant construction standards applicable to the bushfire prone areas.
 - an evacuation and emergency management plan is required.
- The application was referred to the RFS who provided recommended conditions of consent in relation to provision of utilities, site access, preparing an evacuation and emergency management plan and construction and landscaping standards.
- Concern was raised in the public submissions about bushfire risk and that an evacuation and emergency management plan is required.
- The Department notes the proposed building envelopes, including Stage 1 works, are at their closest point a considerable distance (107m) north of the forest area and also separated by the open grassed playing fields.

Concept Proposal

- The Department has recommended a condition requiring future DA(s) include a detailed Bushfire Protection assessment.

Stage 1

- The Department notes the Boarding Accommodation is located 113m north of the forested area and therefore outside the existing APZ.
- The Department agrees with the RFS comments and has recommended conditions of consent which require the Applicant to:
 - ensure utilities, construction and landscaping is carried out in accordance with the relevant standards contained within Planning for Bushfire Protection 2006.
 - Maintain emergency vehicle access onto the sports fields via Mount Pleasant Avenue and Osborn Road.
 - prepare an Emergency Management Plan.

Flooding and drainage

- The application includes a Civil Engineering Report that considers the flooding and drainage impacts of the proposal and includes management / mitigation measures.
- The report noted the:
 - site is not subject to flood planning controls.
 - parts of the forest and sports field are subject to some flood affectation during the Probable Maximum Flood (PMF) storm event.
 - Envelope 8 (P3A Osborn
- The Department notes the site is not subject to flood planning controls and flood affectation is limited to the southern end of the site.
- The existing stormwater management measures and provisions for on-site detention of stormwater would ensure surface flows are appropriately managed.
- Further, the Department is satisfied that the quantity and quality of stormwater flows discharged from the site would meet Council's standards.

Concept Proposal

- The Department notes the future carpark within Envelope 8 may experience

- carpark) would be affected during the PMF. However, as this is a carpark and not a habitable building, the flood impact would be acceptable.
 - all Stage 1 works are located outside the flood affected areas.
 - For the detailed Stage 1 works, stormwater collected from buildings and surfaces would be collected in roof gutters and site grading and conveyed to the in-ground pipe system and inlet pits. A new on-site detention (OSD) system is proposed for the Boarding Accommodation building.
 - The report confirmed OSD and stormwater treatment would be consistent with the HDCP requirements.
 - EESG initially requested additional information on overland flow and PMF impacts. However, following consideration of the SRtS, EESG confirmed flooding impact had been clarified and it had no additional comments.
 - Council recommended conditions related to the implementation of stormwater drainage, on-site stormwater detention (including easements) and water saving urban design for Stage 1 works.
- inundation during PMF events. However, as a carpark is not a habitable area this impact can be managed.
 - The Department has recommended a condition requiring future DA(s) associated with the Concept Proposal for new built form to include a:
 - detailed flooding report (if the relevant part of the site is impacted by flooding).
 - stormwater management report.

Stage 1

- The Department notes all Stage 1 works are located away from the identified flood affected areas of the site.
- The Department has recommended a condition requiring the Applicant design an operational stormwater management system for the development in accordance with the conceptual design provided in the SRtS.
- The Department has reviewed Council's suggested stormwater conditions and concludes they are appropriate and necessary and has recommended them accordingly.

Contamination

- The application has considered contamination and includes a:
 - Preliminary Site Investigation Report (PSIR) and Remediation Concept Plan (RCP), relating to the Concept Proposal.
 - Detailed Site Investigation (DSI) and Remediation Action Plan (RAP) relating to the Stage 1 works.
 - The PSIR identified, prior to 1933, the site was vacant/grassland and contained dwellings. Since 1933 the site has been used by Loreto for school uses.
 - The PSIR and DSI included a review of historical data, aerial
- The Department has reviewed the PSIR and RCP and is satisfied that the Applicant has adequately demonstrated that the site is suitable, subject to remediation, for the continued use as a school as required by State Environmental Planning Policy No.55 – Remediation of Land.

Concept Proposal

- The Department has recommended a condition requiring future DAs for demolition or new built form include a DSI, including requirements for a RAP, where necessary.

Stage 1 works

- The Department notes that the RAP proposes that the extent of remediation for

photography and previous site investigations, undertook a site walkover, laboratory testing, data analysis and investigations of soil and groundwater.

- The EPA confirmed the proposal does not constitute a Scheduled Activity under Schedule 1 of the POEO Act and does not require an Environmental Protection Licence under the POEO Act. Council did not provide comment on land contamination.

Concept Proposal

- The PSIR confirmed the site contamination potential of the site is moderate due to the presence of unknown fill, historic use of pesticides and former demolition of buildings potentially containing hazardous materials.
- The RCP confirmed that the site can be made suitable for the proposed subject to:
 - detailed site investigations for each stage.
 - excavation and off-site disposal of waste and contaminated soils or the capping of contaminated soil.
 - preparation of a RAP and site validation (where necessary).

Stage 1 works

- The DSI confirmed contaminants of concern were generally associated with the previous imported fill and demolitions and included Polycyclic aromatic hydrocarbons , Total Recoverable Hydrocarbons, benzo(a)pyrene and zinc. One fibre cement fragment containing asbestos was collected from the site.
- The DSI confirmed the contaminants were recorded above the site assessment criteria however, overall, posed a low-risk to human health and the environment.
- The RAP indicated there were

each stage would be confirmed following the data gap investigation, including:

- preparation of a Sampling Analysis and Quality Plan for each staging area
- walkover, test pit sampling, bulk sample screening, waste classification, sampling review.
- compliance with minimum requirements for sites where asbestos is known to be present and appropriate quality control.
- The Department has recommended conditions requiring the Applicant to conduct future site investigations to close data gap investigations, associated amendments to the RAP (if needed) and engaging an EPA-accredited Site Auditor.
- The Department accepts the RAPs recommended mitigation measures (subject to further amendments if needed) and recommends conditions accordingly.
- The Department also recommends conditions requiring Site Audit Statements for each stage of the development, implementation of a unexpected finds protocol, environmental management plan and site validation.

some investigation data gaps and consequently additional investigations will be required.

- The RAP concluded the site can be made suitable for its use subject to the following mitigation measures:
 - the RAP / remedial works plan should be updated (if necessary) to address any additional findings following the data gap investigation.
 - excavation and off-site disposal of contaminated soils and materials.
 - waste classification in accordance with POEO Act.
 - prepare and implement an unexpected finds protocol.
 - site validation.
 - prepare and implement an Environmental Management Plan for the long-term management of contaminated materials contained and capped on-site.

Staging and construction impact

- The Stage 1 works are to be constructed over four sub-stages and works are predicted to take approximately 27 months (**Section 2.4**).
- The Applicant has not finalised the staging for the development beyond the Stage 1 works with the delivery of future stages being contingent on the operational needs of the school.
- The Stage 1 works staging plan (**Figure 15** and **Table 6**) identifies the works that are proposed in the four construction stages. The fifth stage does not include any infrastructure works, however, includes the final Stage 1 increase of student and staff numbers up to 850 students and 71 staff.
- The RtS includes a preliminary Construction Management Plan (CMP) outlining the likely impacts of construction activities on-site and suggests indicative management measures and procedures.

- Overall, the Department is satisfied that staged construction, operation and remediation can be appropriately managed on the site, subject to the implementation of a CMP incorporating the other environmental management plans (CPTMP, CNVMP, RAP, archaeological unexpected finds protocol) as discussed previously in this report.

Concept Proposal

- The Department has recommended a condition requiring future DA(s) associated with the Concept Proposal for demolition or new built form include a CMP. The CMP must consider construction impacts and including a CPTMP, CNVMP, Community Communication Strategy, Construction Waste Management Plan and Air Quality Management Plan and associated management and mitigation measures.

Stage 1 works

- The Department notes the CMP provides a framework for construction management. However, the document has not been

	<ul style="list-style-type: none"> Proposed key mitigation measures include noise and vibration, hazardous material mitigation treatments, fencing, hoarding, dust and odour control, sediment and erosion control, dilapidation, tree protection. The CMP has considered the potential impacts on the operation of the school and advises that revised pedestrian and vehicle access would be managed throughout the construction process. In addition, the construction contractor would work collaboratively with the school, neighbours and Council to prepare a stakeholder communication strategy to address concerns. Concern was raised in public submissions about the potential amenity impacts (dust, noise and pollution) arising from construction activities. TfNSW recommended future DA(s) include a Construction and Pedestrian Traffic Management Plan (CPTMP). Council did not comment on the CMP. The Department requested the Applicant clarify what is intended to happen to the Uniform Shop. The Applicant confirmed consent is sought for the temporary relocation of the Uniform Shop demountable to the ELC site. The demountable would be demolished and the Uniform Shop incorporated into school buildings when construction commenced on the ELC. 	<p>finalised and relies on the involvement / input of the future construction contractor. The Department therefore recommends a condition requiring the preparation of a final CMP, incorporating the environmental plans (above), prior to any demolition or construction works commencing on-site.</p> <ul style="list-style-type: none"> With regard to the staged increase in student and staff numbers, the Department concludes that subject to the completion of the through site road, pick-up/drop-off and parking infrastructure (sequence as amended by the Department at Table 19) the Stage 1 works would adequately accommodate the increase of up to 500 students and 36 staff. The Department notes the Applicant updated the drawings to include the Uniform Shop relocation and that the proposed structure is temporary and would be demolished when construction of the ELC commences. The Department is satisfied the relocation is acceptable. The Department is satisfied that the conditions would ensure that the site operates within its capacity and delivers critical additional infrastructure prior to increasing students.
Development contributions	<ul style="list-style-type: none"> Section 7.12 of the EP&A Act provides for a consent authority to impose, as a condition of development consent, a requirement for the Applicant to pay a fixed levy. The Hornsby Shire Council Section 7.12 Development Contribution Plan 2014 – 2024 (Contributions Plan) recommends developments be 	<ul style="list-style-type: none"> The Department concludes that a Section 7.12 contribution is applicable to the development and considers the Contributions Plan levy requirement is appropriate. <p><i>Concept Proposal</i></p> <ul style="list-style-type: none"> The Department considers it is appropriate for development contributions relating to future buildings associated with the

	<p>subject to a 1% contribution levy based on the development CIV.</p> <ul style="list-style-type: none"> • The Applicant's EIS confirmed a contribution in accordance with the Contributions Plan is required for the Stage 1 works and agreed to an appropriate condition of consent. • Council provided no comments on development contributions. 	<p>Concept Proposal to be determined as part of the assessment of future detailed DA(s).</p> <p>Stage 1</p> <ul style="list-style-type: none"> • The Department has recommended a condition requiring the Applicant pay a development contribution to Council, prior to the commencement of the Stage 1 works. • The amount payable should be levied in accordance with the Contributions Plan.
Utility and services	<ul style="list-style-type: none"> • The Stage 1 works include the connection of new water, sewer, gas and electricity services for the Boarding Accommodation building and the construction of a stand-alone electrical sub-station. • Sydney Water provided comments regarding water and sewer connections. • Concern was raised in one public submission about the location of the sub-station, which was originally proposed outside the Mount Pleasant Avenue frontage of the Teres Ball Centre building. The Department requested the Applicant provide details and assessment of the sub-station. • The Applicant advised it has contacted utility service providers. • In response to the concern raised about the sub-station the Applicant relocated the proposed sub-station from Mount Pleasant Avenue to the Primary School car park opposite the driveway entrance and the Boarding Accommodation within Stage 1. 	<ul style="list-style-type: none"> • The Department considers the site can be sufficiently serviced by necessary utility connections and electricity supply, subject to further consultation with, and approvals from, the relevant public authorities in each construction stage. Conditions to this effect are recommended. • The Department supports the relocation of the proposed sub-station noting the revised sub-station: <ul style="list-style-type: none"> ◦ location is set back 6m from Mount Pleasant Avenue and within the existing car park. ◦ would not result in the removal of any existing trees. • To ensure the sub-station does not have adverse impacts on visual amenity or existing trees the Department recommends a condition requiring: <ul style="list-style-type: none"> ◦ no sub-station service connections to be tracked the through TPZ of any existing adjoining trees. ◦ access to sub-station must be from the existing driveway and must not include a new separate driveway connected to Mount Pleasant Avenue. ◦ landscape screening must be provided around the sub-station. • The Department concludes the utility and services connections and the provision of an electrical sub-station is acceptable subject to the recommended conditions.
Operational waste	<ul style="list-style-type: none"> • The EIS includes a preliminary operational waste management plan (WMP) for the Stage 1 works. • The Boarding Accommodation operational waste would be stored at ground level and waste vehicle 	<p>Concept Proposal</p> <ul style="list-style-type: none"> • The Department recommends a condition requiring future DA(s) associated with the Concept Proposal include an operational waste management plan.

pick-up would be via the secondary driveway.

Stage 1

- The Department has recommended the Applicant consider relocating all servicing requirements to the basement level (**Section 6.4**). If achieved, this change would require the amendment of the WMP.
- The Department has recommended a condition requiring the preparation of an amended final WMP for the site.

Adequacy of public consultation

- Concern was raised in the public submissions that inadequate public consultation has been undertaken.
- The Applicant has confirmed that it undertook community engagements prior to the lodgement of the application (between August 2018 and October 2018) including letterbox drops, community information sessions, newspaper advertisement and presentation to Loreto Normanhurst school parents.
- Between August and November 2020, prior to the submission of the RtS, the Applicant undertook additional community consultation including two local community information sessions, establishing a public enquiry line and circulating fact sheets.
- In accordance with the EP&A Act, the Department publicly exhibited the EIS from 28 June 2018 to 25 July 2018 (28 days). The EIS was re-exhibited between 9 December 2019 and 31 January 2020 due to an administrative error resulting in not all relevant surrounding landowners and occupiers being originally notified. Due to the changes proposed by the RtS, the Department also publicly exhibited the RtS (14 days) (**Section 5**).
- The Department is satisfied that sufficient community consultation has occurred and the community has had sufficient opportunity to comment on the proposal.
- Notwithstanding, to ensure adequate community consultation throughout and during construction the Department recommends:
 - a Community Communication Strategy.
 - a Community Consultative Committee to be established prior to commencement of construction and continued for a period of six months following completion of Stage 1 works.

Incremental development

- Concern was raised in public submissions about the incremental expansion of the school over time.
- In response to the concern raised, the Applicant has stated the school has the capacity to support growth and that associated impacts can be appropriately managed
- The EP&A Act allows for the amendment and extension of existing developments and any future applications would be assessed on their merits and in accordance with the planning framework established by the Concept Proposal.
- The Department has assessed the current proposal on its merits, having regard to the impacts of the proposal and issues raised in submissions. The Department concludes, as discussed in **Section 6**, the proposal is acceptable.

Property values	<ul style="list-style-type: none"> Concern was raised in the public submissions that the proposal would have an adverse impact on property values. 	<ul style="list-style-type: none"> The Department notes that matters relating to the private contracts of sale and/or value of properties are not planning matters. No further assessment in this regard is necessary.
Public Interest	<ul style="list-style-type: none"> The Applicant has advised that the proposal is in the public interest. 	<ul style="list-style-type: none"> The Department is satisfied that the proposal would be in the public interest. The proposal would benefit the community as it would provide for expanded primary and secondary school facilities including contemporary teaching and learning facilities with adaptable and collaborative learning spaces that would improve educational outcomes. The proposal would result in direct investment in the area of \$130,133,710 and overall is predicted to generate 555 construction jobs for the duration of all stages and 71 new operational jobs.

6.7 Summary of Departments consideration of submissions

6.7.1 A summary of the Department's consideration of the issues raised in submissions is provide at **Table 21**.

Table 22 | Department's consideration of key issues raised in submissions

Issue raised	Department's consideration
Traffic and parking and increase in student numbers	<p>The Department has carefully considered the issues raised in the public submissions regarding the potential traffic and amenity impacts associated with increased student and staff numbers.</p> <p>The Department considers the Applicant has proposed adequate traffic and travel demand management and mitigation measures to allow a staged increase in the student population in Stage 1. Traffic impacts would also be considered further as part of the assessment of future DA(s) that include an increase in student numbers.</p> <p>The Department's assessment in Section 6.2 concludes that, subject to the delivery of the proposed critical transport infrastructure and facilities within the site and the implementation of the OTMP, the traffic impacts of the proposal, in particular the increase in student numbers, can be managed and mitigated. To address the concerns raised in the submissions, the Department has recommended conditions requiring:</p> <ul style="list-style-type: none"> preparation, implementation and annual review of the GTP. all pick-up/drop-off spaces to be provided and be operational prior to the first increase in student numbers. existing pick-up/drop-off spaces to be retained until the new facilities are operational. the implementation of the OTMP, which includes marshals to manage vehicle movements into, through and out of the site and Mount Pleasant Avenue. an increase of 51 bicycle parking spaces to address the existing shortfall and to accommodate the development.

Height and scale of building envelopes and the Boarding Accommodation building	<p>The proposed building envelopes under the Concept Proposal would facilitate future built form on the site that would not result in unacceptable visual impacts, is appropriate in the context of the scale of current future development at the site and the adjoining site context, subject to amendment of the height and scale of Envelope 2 (senior school). This recommended amendment would ensure that the envelope would have an acceptable relationship with the Osborn Road streetscape.</p> <p>The Boarding Accommodation building, in Stage 1, is wholly contained with Envelope 1 of the Concept Proposal and would not result in adverse amenity impacts in terms of overlooking or overshadowing. The height and scale of the building is considered acceptable as it includes varied and appropriate street setbacks, would present as a two to three storey building at Mount Pleasant Avenue and is of a height and scale of development consistent with a school site (Section 6.3).</p>
Biodiversity and trees	<p>The Department acknowledges the proposal would result in direct impacts by removing 0.35ha of BGF located at the northern end of the site and 0.05ha of STIF located in the southern part of the site. The Department has reviewed the submitted BDAR and considers that the impacts of removing the vegetation are considered acceptable noting the Applicant has committed to retire / purchase eight ecosystem offset credits prior to the commencement of clearing of any vegetation as part of the Stage 1 works (Section 4.4).</p> <p>The Stage 1 works would result in the removal of 105 existing trees (including the removal of BGD and STIF discussed above). The Department has concluded the majority of the tree removal is acceptable and unavoidable due to the location of proposed buildings and works. However, the Department has recommended amendments to the Boarding Accommodation building and Osborn Road carpark to increase tree retention in those locations (Section 6.4).</p>
Operational and construction noise	<p>The Department considers that the noise and vibration impacts during operation and construction of the development can be adequately mitigated or managed through the recommended conditions (Section 6.5).</p>
Amenity impacts	<p>The Department has considered the proposed development against the recommended amenity standards within the Apartment Design Guide and relevant 'desired outcomes' of HDCP and concludes the:</p> <ul style="list-style-type: none"> • Concept Proposal envelopes and the Boarding Accommodation building would not result in any adverse overshadowing of neighbouring residential properties during mid-winter. • Boarding Accommodation building elevation fronting Mount Pleasant Avenue is setback 39m from residential properties on the opposite side of the road and also includes angled windows and blades that ensure the building would not have adverse overlooking impacts. <p>The Department has recommended the Applicant prepare an Operational Management Plan for the Boarding Accommodation to ensure its operation does not have unacceptable amenity impacts on neighbouring properties.</p> <p>Any lighting to buildings and spaces outside the standard school hours would be limited to internal lighting and security lighting and is unlikely to result in adverse light spill subject to compliance with relevant Australian Standards (Section 6.6).</p>
Bushfire risk	<p>The Department has recommended a condition requiring future DA(s) include a detailed Bushfire Protection assessment relevant to that development.</p> <p>The Department has recommended conditions requiring:</p> <ul style="list-style-type: none"> • utilities, construction and landscaping is carried out in accordance with the relevant

standards contained within Planning for Bushfire Protection 2006.

- emergency vehicle access onto the sports fields via Mount Pleasant Avenue and Osborn Road is maintained.
- the preparation of an Emergency Management Plan (**Section 6.6**).

Staging and construction impacts	<p>The Department has recommended a condition requiring future DA(s) associated with the Concept Proposal for demolition or new built form include a Construction Environmental Management Plan (CEMP). The CEMP is required to address construction impacts, associated management and mitigation measures and is to include a:</p> <ul style="list-style-type: none">• Construction Pedestrian Traffic Management Plan.• Construction Noise Vibration Management Plan.• Construction Waste Management Plan.• Construction Noise and Vibration Management Plan.• Construction Soil and Water Management Plan.• Community Consultation Plan. <p>The Department has recommended a condition requiring the preparation of a final CEMP, incorporating the environmental plans (listed above), prior to any demolition or construction works commencing on-site for Stage 1 works.</p> <p>The Department concludes that subject to the completion of the through site road, pick-up/drop-off and parking infrastructure the Stage 1 works would adequately accommodate the proposed school population increase (Section 6.6).</p>
Sub-station	<p>The electricity sub-station has been relocated to be within the site adjacent to the Primary School car park reducing its visual and landscape impact (Section 6.6).</p>
Consultation	<p>The Department is satisfied that sufficient community consultation has occurred and the community has had sufficient opportunity to comment on the proposal (Section 6.6).</p> <p>Conditions of consent are recommended requiring ongoing consultation with Council in relation to a number of management plans associated with Stage 1. A condition is also recommended requiring the preparation of a Community Consultative Committee in relation to Stage 1 which will facilitate ongoing consultation with the community.</p>
Incremental development	<p>Future application(s) will be assessed on their merits and in accordance with the planning framework established by the Concept Proposal (Section 6.6).</p>
Property values	<p>The Department notes that matters relating to the private contracts of sale and/or value of properties are not planning matters (Section 6.6).</p>

7 Evaluation

- 7.1.1 The Department has reviewed the Environmental Impact Statement (EIS), Response to Submissions (RtS), and Supplementary Response to Submissions (SRtS) and assessed the merits of the proposal, taking into consideration advice from the public authorities, including Hornsby Shire Council (Council). Issues raised in public submissions have been considered and environmental issues associated with the proposal have been thoroughly assessed. The Department concludes the impacts of the proposal can be mitigated and the proposal can be approved, subject to the implementation of recommended conditions of consent.
- 7.1.2 The proposed redevelopment of Loreto Normanhurst would facilitate opportunities to provide improved teaching and learning outcomes through the future development of new, purpose-built and modern educational facilities and upgrade of existing aging assets to meet contemporary and evolving educational standards.
- 7.1.3 The proposal is consistent with the objects of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and is consistent with North District Plan, as it would provide additional and contemporary school infrastructure on the site of an existing educational establishment to meet the growing needs of Sydney.
- 7.1.4 The EIS was publicly exhibited between 28 June 2018 and 25 July 2018 and re-exhibited between 9 December 2019 and 31 January 2020. The Department received a total of 71 submissions, including eight from public authorities including comments from Council, 64 from the public submissions (including 61 objections).
- 7.1.5 The Applicant submitted a RtS including an amended proposal on 15 February 2021, which included an expanded site boundary, amendments to building envelopes, Stage 1 building heights and setbacks, on-site vehicle infrastructure and parking, landscaping and increased scope of Stage 1 works and alterations to the staging of works.
- 7.1.6 The RtS was publicly exhibited for 14 days between 23 February 2021 and 8 March 2021. The Department received a total of 90 additional submissions comprising seven from public authorities (including comments from Council) and 82 public submissions including 78 objections (a number of which were made by previous submitters). Overall, 139 objections have been received from 144 submitters.
- 7.1.7 The Applicant submitted a SRtS on 20 May 2021, which further increased the scope of the Stage 1 works to include the bus bay area and provided further clarification and information in response to submissions.
- 7.1.8 The Department has considered the merits of the proposal in accordance with section 4.15(1) of the EP&A Act, the principles of ESD, and issues raised in submissions. The Department identified traffic and parking, built form, tree removal and replacement and operational and construction noise as the key issues for assessment. The Department has concluded the:
- road network can accommodate the Stage 1 development, subject to conditions requiring reduction in car usage via the GTP, management measures in the OTMP, delivery of internal infrastructure aligned with student population and the installation of time restricted 'No Right Turn' signage at the Mount Pleasant Avenue / Pennant Hills Road intersection.
 - sufficient on-site pick-up/drop-off facilities would be provided as part of Stage 1 works to

accommodate predicted vehicle queuing demand on-site and address existing vehicle queuing overflow onto Osborn Road.

- the proposed on-site staff car parking would address the existing staff parking shortfall and also accommodate the proposal. The Department requires 51 bicycle parking spaces to be provided on-site.
- future Development Application(s) associated with the Concept Proposal would be required to address the anticipated traffic and parking impacts of future development stages where further increases in the student population is sought.
- Applicant's justification for the variation of the height of buildings control in the Hornsby Local Environmental Plan 2013 relating to the Concept Proposal envelopes and Stage 1 works buildings are considered acceptable.
- proposed building envelopes under the Concept Proposal would facilitate future built form on the site that would not result in unacceptable visual impacts subject to the reduction in the height and scale of proposed Envelope 2 (senior school).
- buildings and works associated with the Stage 1 works would not have adverse amenity impacts in terms of overshadowing, overlooking, light spill or operational impacts and the Boarding Accommodation provides for an appropriate standard of future amenity.
- majority of the Stage 1 work tree removal is considered acceptable and unavoidable. However, the Department has recommended amendments to the Boarding Accommodation building and Osborn Road carpark to increase tree retention in those locations.
- a minimum of 105 replacement trees would be provided, resulting in a site tree canopy coverage of approximately 42% compared to the existing 43% coverage, exceeding the recommended canopy coverage target (40%) within the NSW draft Greener Places Design Guide 2020. Stage 1 landscaping works would provide for a high standard of design and planting comprising predominantly native species and areas of deep soil planting. Further detailed assessment would be required as part of future DA(s) where landscaping is proposed.
- operational and construction noise emissions from the site during Stage 1 works would not have significant amenity impact, subject to implementation of mitigation and management measures. Further detailed assessment would be required as part of future development stages where demolition or new built form is proposed.

7.1.9 The Department concludes the impacts of the proposal would be acceptable and appropriately mitigated through the implementation of the recommended conditions of consent.

7.1.10 The application is referred to the Independent Planning Commission as more than 50 public submissions by way of objection were received in response to exhibition of the application.

7.1.11 This assessment report is hereby presented to the Independent Planning Commission for determination.

Prepared by:

Aditi Coomar (Team Leader) and Tahlia Alexander (Principal Planning Officer)

Recommended by:

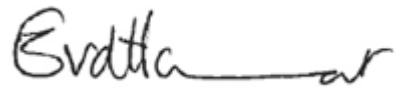


Karen Harragon

Director

Social and Infrastructure Assessments

Endorsed by:



Erica van den Honert

Executive Director

Infrastructure Assessments

Appendices

Appendix A – Relevant Supporting Information

The following supporting documents and supporting information to this assessment report can be found on the Department's website as follows.

1. Environmental Impact Statement

<https://www.planningportal.nsw.gov.au/major-projects/project/10486>

2. Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/10486>

3. Applicant's Response to Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/10486>

4. Applicant's Response to Submissions Supplementary information

<https://www.planningportal.nsw.gov.au/major-projects/project/10486>

5. Additional submissions and correspondence received after close of exhibition

[Submitted under separate cover.](#)

Appendix B – Consideration of Environmental Planning Instruments

To satisfy the requirements of section 4.15(a)(i) of the EP&A Act, this report includes references to the provisions of the EPIs that govern the carrying out of the project and have been considered in the Department's assessment.

Controls considered as part of the assessment of the proposal are:

- State Environmental Planning Policy (State & Regional Development) 2011 (SRD SEPP).
- State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP).
- State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP).
- Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities) (Draft Education SEPP).
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 (BASIX).
- State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55).
- Draft State Environmental Planning Policy (Remediation of Land) (Draft Remediation SEPP).
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SHC SREP).
- Draft State Environmental Planning Policy (Environment) (Draft Environment SEPP).
- Draft State Environmental Planning Policy (Housing Diversity) (Housing Diversity SEPP).
- Hornsby Local Environmental Plan 2013 (HLEP).

COMPLIANCE WITH CONTROLS

State Environmental Planning Policy (State and Regional Development) 2011

The aims of the SRD SEPP are to identify SSD, State significant infrastructure (SSI), critical SSI and to confer functions on regional planning panels to determine development applications.

The proposal is SSD as summarised at **Table 23**.

Table 23 | SRD SEPP compliance table

Relevant Sections	Department's consideration	Compliance
8 Declaration of State significant development: section 4.36 (1) Development is declared to be State significant development for the purposes of the Act if: (a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and (b) the development is specified in Schedule 1 or 2.	The proposal is permissible with development consent. The development is specified in Schedule 1 of the SRD SEPP.	Yes
Schedule 1 State significant development — general (Clause 15(2))	The proposal is development for the purpose of alterations and additions to an existing school	Yes

Development that has a capital investment value of more than \$20 million for the purpose of alterations or additions to an existing school.

with a CIV in excess of \$20 million. The boarding accommodation component is considered to be substantially related to the school development.

State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and providing for consultation with relevant public authorities about certain development during the assessment process.

The site has existing direct access to Pennant Hills Road which is a state classified road. In accordance with clause 101(2), the consent authority must be satisfied that, where practical and safe, vehicle access is to be provided by a road other than the classified road and that the development would not impact on the safety, efficiency and ongoing operation of the classified road. Osborn Road and Mount Pleasant Avenue would be the primary vehicle access and egress points to the school. Use of the Pennant Hills Road vehicle access would be limited to occasional ceremonial use on weekends and removal bollards would be installed to prevent access Monday to Friday. This restriction would be implemented through the Operational Traffic Management Plan.

The Department has consulted with TfNSW being the relevant roads authority for the classified road network. TfNSW raised no objections to the limited weekend use of the existing Pennant Hills Road vehicle access. The Department has considered potential traffic impacts of the proposal at **Section 6.2** and is satisfied the proposal would not have a significant impact on the ongoing safety, efficiency and ongoing operation of Pennant Hills Road, subject to recommended conditions which incorporate TfNSW requirements.

Pennant Hills Road has an average daily traffic volume of more than 20,000 vehicles. In accordance with clause 102, the consent authority must take into consideration any guidelines to assess the impacts of road noise and vibration on the development. The boarding accommodation is located in excess of 100m from the classified road and therefore it would not be adversely impacted by traffic noise or vibration. Any future development application for parts of the school in close proximity to the classified road would be assessed against the requirements of clause 102.

The development constitutes traffic generating development in accordance with clause 104 as it has an access to a classified road and entries within 90m of a classified road and will generate more than 50 vehicles per hour. The Infrastructure SEPP requires traffic generating development to be referred to RMS (now TfNSW) for comment.

The application was referred to TfNSW in accordance with the Infrastructure SEPP. TfNSW did not object to the proposal, provided comments and recommended conditions summarised at **Section 5**. The Department considered TfNSW's response at **Section 6** and incorporated its recommended conditions.

The proposal is therefore consistent with the Infrastructure SEPP given the consultation and consideration of the comments from TfNSW, subject to the recommended conditions (**Appendix D**).

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

The Education SEPP aims to simplify and standardise the approval process for schools, TAFEs, universities and childcare centres, while minimising impacts on surrounding areas and improving the quality of facilities. The Education SEPP includes planning rules for where these developments can be built, which development standards can apply and construction requirements. The application has been assessed against the relevant provisions of the Education SEPP.

Clause 35(6)(a) requires that the design quality of the development should be evaluated in accordance with the design quality principles set out in Schedule 4 of the Education SEPP. An assessment of the development against the design principles is provided at **Table 24**.

Clause 42 of the Education SEPP states that development consent may be granted for development for the purpose of a school that is SSD, even though the development would contravene a development standard imposed by this or another EPI under which consent is granted. The proposed school buildings would exceed the permissible height limit of 8.5m allowed under the HLEP. The Department notes that the height exceedance is permitted under clause 42 and that the Applicant has provided justification for contravening the development standard. The Department's consideration of the variation to the development standard is provided at **Section 6.2**.

Clause 57 of the Education SEPP requires traffic generating development that involve an addition of 50 or more students to be referred to the RMS (now TfNSW). The Application was referred to TfNSW in accordance with this clause.

Table 24 | Consideration of the Education SEPP Design Quality Principles (clause 35(6)(a))

Design Principles	Department's consideration
Principle 1 Context, built form and landscape	<p>The configuration and siting of the new buildings has regard to the site constraints, particularly topography, existing significant trees and heritage significant elements of the existing Loreto Normanhurst school campus.</p> <p>The Department has recommended conditions amending the height and scale of Envelope 2. While the proposed building envelopes (as amended by the recommended conditions) would exceed the maximum Height of Building (HOB) control in the HLEP, the Department finds that the proposed building heights would be acceptable within context of the site, as detailed in Section 6.3.</p> <p>The design of the Stage 1 works includes the provision of new landscaping which would establish an appropriate landscaped setting for the new buildings, spaces and through site road. The proposal includes tree retention, replacement planting of 105 trees and deep soil zones for large canopy trees to be planted. The proposed removal of trees is acceptable subject to the Department's recommended design amendments to retain additional trees (Section 6.4).</p> <p>The proposed layout maximises solar access and ventilation to the Boarding Accommodation building. The proposal would have minimal impacts on adjoining residential properties, which are located on the opposite side of existing roads.</p>

Principle 2 Sustainable, efficient and durable	<p>The proposal has been designed with consideration of ESD principles. The Applicant is targeting measures to achieve a 4-Star Green Star rating for the Concept Proposal and 5-star rating for the Stage 1 component.</p> <p>Bicycle parking is provided to encourage sustainable modes of travel. Conditions are recommended requiring the preparation and implementation of a GTP prior to the operation of Stage 1 and reviewed annually after that.</p>
Principle 3 Accessible and inclusive	<p>The Access Report has assessed the proposal against the relevant access regulations, including Access Standards (AS 1428 series, AS 1735.12), the <i>Disability Discrimination Act 1992</i>, the Building Code Australia and the Disability Standards for Education 2005. The report confirms that the development achieves compliance or can readily achieve compliance by way of developing alternate performance solutions during the Construction Certificate stage.</p> <p>The Department has recommended a condition requiring all future development applications to include an Access Assessment to certify that the development complies with the relevant accessibility requirements.</p>
Principle 4 Health and safety	<p>The proposal has considered the Crime Prevention through Environmental Design principles in its design, including clear separation of pedestrian and vehicle areas, maximising clear sightlines and lighting for improved surveillance to ensure a high level of safety and security of students, staff and visitors.</p> <p>The Boarding Accommodation building maximises access to natural light and ventilation and the Stage 1 works provide for a landscaped environment to benefit the health and well-being of students, staff and visitors.</p>
Principle 5 Amenity	<p>The proposal would not unreasonably impact the amenity of adjoining residents through operational noise, overshadowing or overlooking. The Department has recommended conditions relating to operational noise and requiring the preparation of an Operational Management Plan for the Boarding Accommodation building.</p> <p>The Boarding Accommodation building maximises access to natural light and ventilation and provide for visual and acoustic privacy. The Stage 1 works provide for extensive landscaped areas available for the use of students, staff and visitors.</p> <p>The Department has recommended conditions to ensure construction noise and vibration impacts are appropriately managed and mitigated.</p>
Principle 6 Whole of life, flexible and adaptive	<p>The proposed Boarding Accommodation building includes generously sized rooms a variety of spaces and spaces that are flexible and can be adapted to suit a wide range of uses and changing needs over the long term.</p>
Principle 7 Aesthetics	<p>The Stage 1 works achieve an appropriate standard of design and appearance and would not have any adverse visual impacts.</p> <p>The proposed external materials of the Boarding Accommodation building are of a high quality and include a natural colour palette consistent with the character of the school and the streetscape. Overall, the building design responds appropriately to its context and would result in a positive impact on the streetscape through the sufficient street setback, façade articulation, selected materiality and landscaping.</p>

Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities) (Draft Education SEPP)

The Draft Education SEPP will retain the overarching objectives of the Education SEPP to facilitate the effective delivery of educational establishments and child care facilities across the State.

The provisions of the Draft Education SEPP aim to improve the operation, efficiency and usability of the Education SEPP and to streamline the planning pathway for schools, TAFEs and universities that seek to build new facilities and improve existing ones. The exhibited Explanation of Intended Effects (EIE) also proposes changes to the requirements that need to be met for an application to be SSD.

The Department is satisfied that the proposal will be consistent with the objectives of the Draft Education SEPP and continues to meet the requirements for SSD in accordance with the EIE.

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

The BASIX SEPP applies to all residential development and accordingly applies to the proposed two staff apartments located in the Boarding Accommodation building. BASIX aims to deliver equitable and effective water and, greenhouse gas reductions across the State.

A BASIX certificate (1194482M) was submitted with the SRtS, which demonstrates that the two staff apartments comply with the BASIX water, energy and thermal comfort requirements. The Department recommends a condition of consent requiring compliance with the BASIX certificates.

State Environmental Planning Policy No. 55 - Remediation of Land

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application.

As detailed at **Section 6.6**, the Department is satisfied that, subject to appropriate remediation and validation, the site can be made suitable for the proposed use and recommends conditions requiring engagement of a site auditor, submission of site audit statements, remediation and validation.

Subject to the implementation of conditions, the application is satisfactory with regard to SEPP 55.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

SHC SREP provides planning principles for development within the Sydney Harbour catchment. The site is located within the Sydney Harbour Catchment area. However, it is not located within the 'Foreshores and Waterways Area' and is not identified on the SREP zoning map.

Under clause 12, the planning principles for development within the Sydney Harbour catchment are to be considered in the preparation of EPIs, DCPs, environmental studies and masterplans. The proposal does not include the preparation of such instruments, therefore the SHC SREP planning principles are not relevant to the application. Notwithstanding, the Department notes the principles relate to achieving development that achieves a high standard of design and has acceptable environmental, visual, heritage and flooding/drainage impacts. The Department has considered these issues as part of its assessment of the application (**Section 6**) and concludes the proposal is acceptable subject to conditions.

The Department is satisfied the proposal would not have any significant adverse impact on the Sydney Harbour catchment.

Draft State Environmental Planning Policy (Environment)

The Draft Environment SEPP is a consolidated SEPP which proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property. Once adopted, the Draft Environment SEPP will replace seven existing SEPPs. The proposed SEPP will provide a consistent level of environmental protection to that which is currently delivered under the existing SEPPs. Where existing provisions are outdated, no longer relevant or duplicated by other parts of the planning system, they will be repealed.

Given that the proposal is consistent with the provisions of the existing SEPPs that are applicable, the Department concludes that the proposed development will generally be consistent with the provisions of the Draft Environment SEPP.

Draft State Environmental Planning Policy (Housing Diversity) (Housing Diversity SEPP)

The Draft Housing Diversity SEPP was exhibited from 29 July to 9 September 2020. It introduces a new definition for student housing and provides controls for Student Housing Development. The proposed development would constitute Student Housing under the draft SEPP and would no longer be an educational facility once the SEPP is made. **Table 25** provides an assessment of the proposal against the key development standards for student housing.

Table 25 | Consideration of student housing development standards under Draft Housing Diversity SEPP

Housing Diversity SEPP Development Standard	Department Comment/Assessment
Height of Buildings: in accordance with the LEP	Building height exceeds the HLEP control but is considered acceptable, as discussed at Section 6.2 .
Floor Space Ratio: in accordance with the LEP	There is no applicable FSR control.
Car Parking: No minimum spaces required	32 spaces provided at basement level.
Bicycle Parking: 1 space per 3 bedrooms (42 spaces required)	<p>5 to 15 spaces are proposed. The Department notes the Draft Housing SEPP confirms this is a non-discretionary parking rate and non-compliance is not a reason for refusal.</p> <p>The Department has recommended an increase in bicycle parking provision on the site in accordance with the HDCP requirements. Subject to these increases, the Department is satisfied adequate bicycle parking would be provided on the site as discussed at Section 6.2.</p>
Motorcycle parking: 1 space per 2 bedrooms (62 spaces required)	<p>No motorcycle parking provided. The Department notes the Draft Housing SEPP confirms this is a non-discretionary parking rate and non-compliance is not a reason for refusal.</p> <p>The proposal did not include motorcycle parking as there were no applicable planning controls which required motorcycle parking throughout the design and</p>

assessment process. The Draft SEPP which recommends provision of parking was exhibited during the assessment process and therefore little weight is given to the recommendations for motorcycle parking.

Room Size: Minimum 10sqm but smaller areas permitted where there is adequate internal amenity and shared facilities	All rooms are larger than 10m ² .
Communal Area Indoor: 15sqm per 12 students (270m ² required)	1043m ² indoor communal area provided (87m ² per 12 students).
Communal Area Outdoor: No requirement where located within a University Campus with other outdoor space	Boarding students would have access to 13ha of open space within the Loreto Normanhurst school campus.

Hornsby Local Environmental Plan 2013 (HLEP)

The HLEP aims to encourage the development of housing, employment, infrastructure and community services to meet the needs of the existing and future residents of the Hornsby LGA. The HLEP also aims to conserve and protect natural resources and foster economic, environmental and social well-being.

The Department consulted with Council throughout the assessment process and considered the relevant provisions of the HELP and those matters raised by Council (**Sections 5 and 6**). Consideration of the relevant provisions of the HLEP is provided at

Table 26.

Table 26 | Consideration of the relevant clauses of the HLEP

Clause	Control	Department's consideration	Compliance
Clause 2.2 Land use zones	The proposed development is on land zoned R2 Low Density Residential	Educational establishments are permissible with consent within the R2 Low Residential zone and in accordance with clause 35(1) of the Education SEPP.	Yes
Clause 2.7 Demolition	The demolition of a building may be carried out only with development consent.	Development consent is sought for the demolition of some existing buildings on the site to facilitate the construction of the Stage 1 works.	Yes
Clause 4.3	The site is identified as having a maximum building height of 8.5m.	The proposed maximum building heights are between 3m and 20.6m. While the HOB development standard does not technically	Not applicable (refer to the

Height of buildings (HOB)		apply to the development, the Department has considered this clause 4.3 in its assessment and concludes the proposal is consistent with the objectives of this clause (Section 6.3).	Education SEPP)
Clause 5.10 Heritage conservation	To conserve the environmental heritage of Hornsby, the significance of heritage items and heritage conservation areas, including associated fabric, settings and views, archaeological sites, Aboriginal objects and Aboriginal places of heritage significance.	The site is identified as a local heritage item and is nearby a heritage item on the SHR. The Department has considered the heritage impact of the proposal at Section 6.6 . The Department concludes the heritage impacts can be appropriately mitigated and managed.	Yes
Clause 6.4 Terrestrial biodiversity	Development consent must not be granted for development likely to have adverse impact on terrestrial biodiversity. Impacts must be managed and mitigated.	The southern part of the site is identified as terrestrial biodiversity. The Department has considered the development's impact on existing trees and terrestrial biodiversity at Sections 4.4 and 6.4 . The Department concludes the impacts can be appropriately mitigated and managed.	Yes

Other policies

In accordance with Clause 11 of the SRD SEPP, development control plans do not apply to SSD. Notwithstanding, the objectives of relevant controls under the HDCP, where relevant, were considered in **Section 6** of this report.

Appendix C – Independent TAR Peer Review Report by Bitzios

<https://www.planningportal.nsw.gov.au/major-projects/project/10486>

Appendix D – Recommended Instrument of Consent

The recommended instrument of consent can be found on the Department's website as follows.

<https://www.planningportal.nsw.gov.au/major-projects/project/10486>