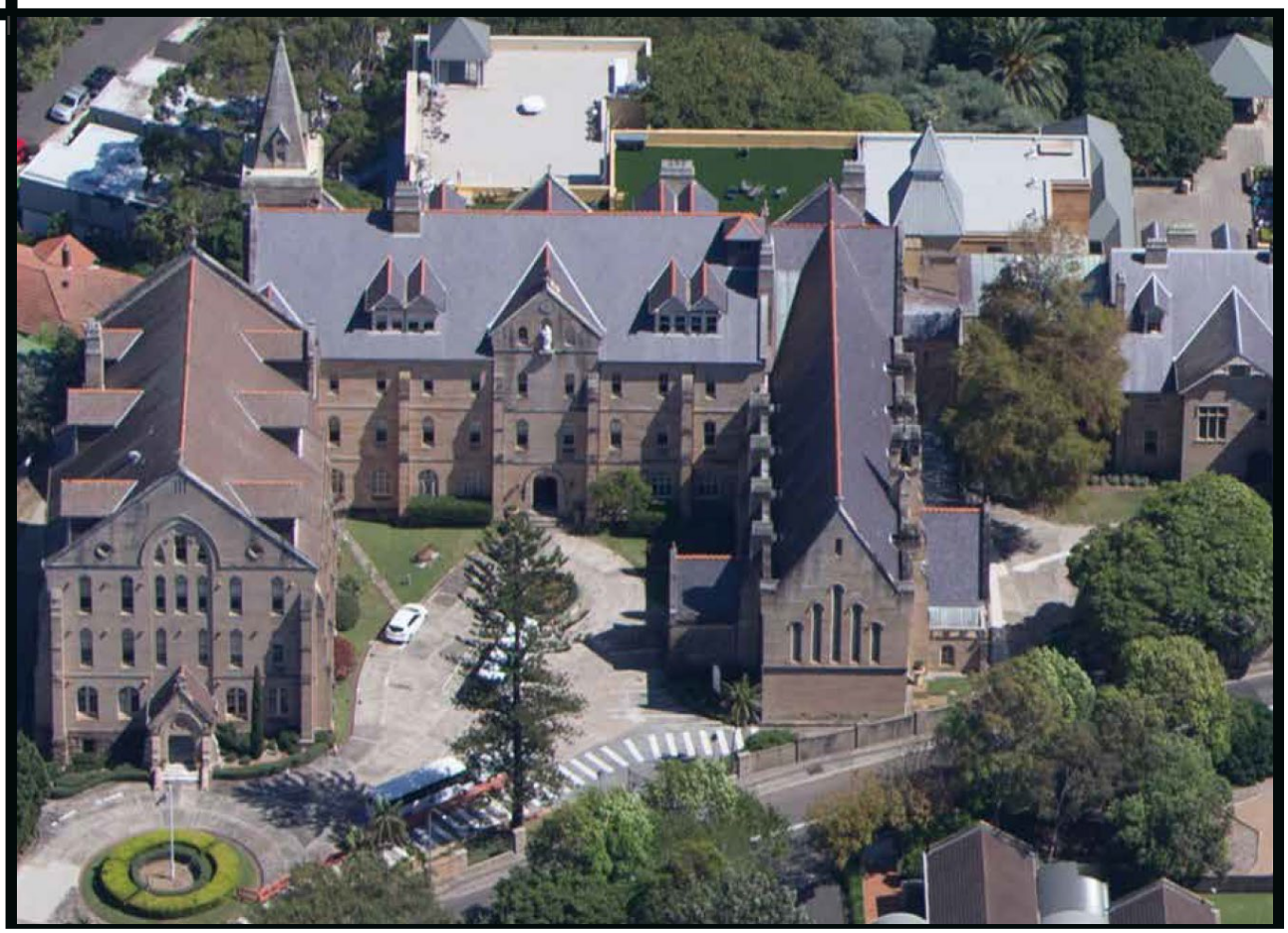

ENVIRONMENTAL IMPACT STATEMENT

Kincoppal-Rose Bay School

Prepared for

KINCOPPAL-ROSE BAY SCHOOL

27 November 2020

URBIS

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Peter Strudwick
Consultant	Liz Jones
Project Code	P0001245
Report Number	EIS FINAL

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GLOSSARY AND ABBREVIATIONS

Abbreviation	Meaning
ACHA	Aboriginal Cultural Heritage Assessment
AHIMS	Aboriginal Heritage Information Management System
AS	Australian Standard
ASS	Acid Sulfate Soils
BC Act	*Biodiversity Conservation Act 2016*
BCA	Building Code of Australia
BDAR	Biodiversity Development Assessment Report
CMP	Construction Management Plan
Council	Woollahra Council
CPTED	Crime Prevention Through Environmental Design
CPTMP	Construction Parking and Traffic Management Plan
District Plan	*Eastern City District Plan*
DPIE/Department	NSW Department of Planning, Industry and Environment
DP	Deposited Plan
DSI	Detailed Site Investigation
EIS	Environmental Impact Statement
EPA	*NSW Environment Protection Authority*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
ESD	Ecologically Sustainable Development
ESEPP	*State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017*
GANSW	NSW Government Architect's Office
HIS	Heritage Impact Statement
HMS	Hazardous Materials Survey
IMP	Infrastructure Management Plan
Infrastructure Strategy	*State Infrastructure Strategy 2018-2038*
KRB	Kincoppal-Rose Bay

Abbreviation	Meaning
LGA	Local Government Area
m	metre
NIA	Noise Impact Assessment
OEH	Office of Environment and Heritage
OWMP	Operational Waste Management Plan
PSI	Preliminary Site Investigation
Region Plan	*A Metropolis of Three Cities – Greater Sydney Region Plan*
RAP	Remediation Action Plan
RAPs	Registered Aboriginal Parties
RMS	Roads and Maritime Services
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SEPP 55	*State Environmental Planning Policy No.55 – Remediation of Land*
SEPP 64	*State Environmental Planning Policy No. 64 – Advertising and Signage*
sqm	Square Metres
SSD	State Significant Development
SEPP SRD	*State Environmental Planning Policy (State and Regional Development) 2011*
SSDA	State Significant Development Application
Woollahra LEP 2014	Woollahra Local Environmental Plan 2014
Woollahra DCP 2015	Woollahra Development Control Plan 2015
TfNSW	Transport for New South Wales
The Minister	the Minister for Planning, Industry and Environment
The Regulation	*Environmental Planning and Assessment Regulation 2000*
The School	Kincoppal-Rose Bay
TPZ	Tree Protection Zone
Transport Strategy	*Future Transport Strategy 2056*
Urbis	Urbis Pty Ltd
WSUD	Water Sensitive Urban Design

SIGNED DECLARATION

This Environmental Impact Statement (**EIS**) has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*.

Environmental Assessment Prepared by:	
Names:	▪ **Peter Strudwick (Director)** – Bachelor of Planning, University of New South Wales ▪ **Liz Jones (Consultant)** – Bachelor of Arts (Geography and History), Master of Urban and Regional Planning (University of Sydney)
Address:	**Urbis Pty Ltd** Angel Place, Level 8, 123 Pitt Street, Sydney, NSW 2000, Australia
In Respect of:	Kincoppal-Rose Bay School

Applicant and Land Details:	
Applicant:	Kincoppal-Rose Bay School C/- Urbis Pty Ltd
Applicant Address:	Urbis Pty Ltd Angel Place, Level 8, 123 Pitt Street, Sydney, NSW 2000, Australia
Land to be Developed:	Lot 104 DP1092747 3-13 and 2 Vaucluse Road, Vaucluse or New South Head Road, Rose Bay
Project:	The proposed works comprise the following components: **Concept Development (under Division 4.4 of the Environmental Planning and Assessment Act 1979):** ▪ **Hughes Centre:** The extension of the existing Hughes Centre to provide for a new multipurpose teaching facility within the senior school precinct (Precinct B). ▪ **Circulation Hub:** Reconfiguration of the Senior School circulation structure connecting the existing Science Lab, student accommodation building and the new multipurpose teaching facility within the senior school precinct (Precinct B). ▪ **New Boarding House:** Building envelope for a new boarding house aligned to the existing Sheldon House building (Precinct C). **Detailed Development:** **Junior School and the Early Learning Centre (Precinct A)** ▪ **ELC Expansion:** Expansion of the Early Learning Centre (**ELC**) and associated outdoor play areas.

Applicant and Land Details:	
	▪ **Junior School Building:** Alterations and additions to the Junior School, including the refurbishment of the north and west wing and the addition of a rooftop outdoor learning area ▪ **Elevated Pedestrian bridge/pathway:** An elevated pedestrian pathway/bridge for access to the Junior School (a developed design element to enhance pedestrian safety as part of Precinct B). ▪ **Traffic & Car Park Management:** Reconfiguration of the Junior school outdoor and landscaped areas resulting in the addition of an additional 28 on-grade car parking spaces. **Senior School (Precinct B)** ▪ **Main Entrance & Front Reception:** Refurbishment of the Senior School Reception and upgrade of the Main Entrance, including replacement of vehicular access with pedestrian friendly access and associated landscaping. ▪ **Year 8 Learning Centre:** Expansion and refurbishment of Level 3 of the North Wing to provide a new learning hub and staff areas for Year 8. ▪ **Traffic Management:** – Reconfiguration of the main forecourt to provide a dedicated bus parking area for set-down/pick-up, separate carpark area and separate pedestrian pathway. – Construction of a new driveway crossing and internal road from Vaucluse Road. ▪ **Bus & Carparking Structure:** – Provision of on on-site bus parking bay and a at grade parking area adjacent to the main entrance (7 KRB mini-bus spaces). – A new basement staff carpark directly below the bus parking bays (30 car parking spaces). **Student Capacity Increase** The proposal also seeks to increase the maximum student cap for the school population from 955 students to 1,205 students over a 10-year timeframe. This anticipated growth will be distributed across the school as follows: ▪ Early Leaning Centre – Existing = 40 students – 10 Year Forecast = 70 students ▪ Junior School (Kindergarten to Year 6) – Existing = 372 students – 10 Year Forecast = 445 students ▪ Senior School (Year 7 to Year 12) – Existing = 543 students (including 148 boarders) – 10 Year Forecast = 690 students (including 190 boarders) The proposed development will be staged, as the School will continue to operate during the various project works. Proposed staging will be discussed within the EIS.

I certify that the contents of the Environmental Impact Statement, to the best of my knowledge, has been prepared as follows:

- *In accordance with Schedule 2 of the Environmental Planning and Assessment Regulations 2000;*
- *In accordance with the requirements of the Environmental Planning and Assessment Regulations 2000; and State Environmental Planning Policy (State and Regional Development) 2011;*
- *The statement contains all available information that is relevant to the environmental assessment of the proposed development; and*
- *The information contained in this report is neither false nor misleading.*

Name:	**Peter Strudwick, Director**	**Liz Jones, Consultant**
Signature:		
Date:	9/11/2020	9/11/2020

EXECUTIVE SUMMARY

This Environmental Impact Statement (**EIS**) has been prepared by Urbis Pty Ltd on behalf of Kincoppal Rose Bay School (**the Applicant)** in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*. This EIS supports the State Significant Development (**SSD**) Development Application (DA) SSD_10325 to guide the future development at Kincoppal School, Rose Bay (**the site**).

This EIS responds to the Secretary's Environmental Assessment Requirements (**SEARs**) attached at **Appendix A.** This document should be read in conjunction with the supporting documents provided from **Appendix B to Appendix Z.**

The Site

Kincoppal Rose Bay (**KRB**) School is located on the western side of New South Head Road at 2 Vaucluse Road within the Woollahra Council local government area (**LGA**). The site is irregular in shape and is located approximately 10 kilometres east of Sydney CBD and caters for boys (Early Learning Centre – year 6) within the Junior School and girls (Early Learning Centre - year12) within both the Junior School and Senior School.

The legal description of the site is Lot 104 in DP 1092747 and the site's address is commonly identified as either 2 Vaucluse Road, Vaucluse, 3-13 Vaucluse Road, Vaucluse or New South Head Road, Rose Bay.

The school site spans both the eastern and western sides of Vaucluse Road. The outdoor play areas, sports facilities and landscaped spaces are predominantly located on the eastern side of Vaucluse Road, including the Maureen Tudhope Centre (**MTC**).

The main school campus is located on the western side of Vaucluse Road, and comprises extensive grounds and a mix of building typologies ranging in age, architectural style and heritage significance.

As part of the main school campus, the Junior School is situated within the northern portion and the Senior School within the southern portion of the main school campus grounds.

The Proposal

Concept Development (under Division 4.4 of the Environmental Planning and Assessment Act 1979):

- **Hughes Centre:** The reconfiguration of the existing Hughes Centre to provide for a new multipurpose teaching facility within the senior school precinct (Precinct B).
- **Circulation Hub:** The reconfiguration of the Senior School circulation structure connecting the existing Science Lab, student accommodation building and the new multipurpose teaching facility within the senior school precinct (Precinct B).
- **New Boarding House:** A building envelope for a new boarding house aligned to the existing Sheldon House building (Precinct C).

In accordance with Division 4.4 of the EP&A Act, the above concept proposals will be the subject of separate development applications seeking consent.

Detailed Development:

Junior School and the Early Learning Centre (Precinct A)

- **ELC Expansion:** Expansion of the Early Learning Centre (**ELC**) and associated outdoor play areas.
- **Junior School Building:** Alterations and additions to the Junior School, including the refurbishment of the north and west wings.
- **Elevated Pedestrian bridge/pathway:** An elevated pedestrian pathway/bridge for access to the Junior School (a developed design element to enhance pedestrian safety as part of Precinct B).
- **Traffic & Car Park Management:** Reconfiguration of the Junior school outdoor and landscaped areas resulting in the addition of an additional 28 on-grade car parking spaces.

Senior School (Precinct B)

- **Main Entrance & Front Reception:** Refurbishment of the Senior School Reception and upgrade of the Main Entrance, including replacement of vehicular access with pedestrian friendly access and associated landscaping.
- **Year 8 Learning Centre:** Expansion and refurbishment of Level 3 of the North Wing to provide a new learning hub and staff areas for Year 8.
- **Traffic Management:**
  - Reconfiguration of the main forecourt to provide a dedicated bus parking area for set-down/pick-up, separate carpark area and separate pedestrian pathway.
- Construction of a new driveway crossing and internal road from Vaucluse Road.
- **Bus & Carparking Structure:**
  - Provision of on on-site bus parking bay and a at grade parking area adjacent to the main entrance (7 KRB mini-bus spaces).
  - A new basement staff carpark directly below the bus parking bays (30 car parking spaces).

Student Capacity Increase

One of the more recent approvals on the site (DA550/2016) approved by Woollahra Council (Council) on 24 April 2017, included a 'Condition which must be satisfied during the ongoing use of the development' capping the school's maximum student population at 970 students and 20 children attending the ELC facility. The condition of development consent was applied to the McGuinness Centre gymnasium to create a Year 12 Learning Hub. However, this condition was subsequently modified via a section 96 approval (DA550/2016/3) on 31 August 2017. The modification updated the condition to cap the school's maximum student population at 970 students (rather than 900, which was a typographical error). An extract of the condition is provided below:

> *"Staff and student number shall be capped at existing levels to minimise adverse traffic and parking impacts associated with the proposal"*
>
> *"The existing permitted student numbers are 970 students attending Kincoppal from Kindergarten to Year 12, and 20 children attending the child care centre."*

The cap was originally imposed by Council based on the student numbers provided in the submitted Traffic and Parking Assessment. It was not imposed on the basis of any traffic analysis or constraints. As such, this SSDA seeks to provide a renewed student cap for KRB to accommodate its long term growth plan. The proposal seeks to increase the maximum student cap for the school population from 955 students to 1,205 students over a 10-year timeframe. This anticipated growth will be distributed across the school as follows, however this is subject to fluctuation across the different components of the school:

- Early Leaning Centre
  - Existing = 40 students
  - 10 Year Forecast = 70 students
- Junior School (Kindergarten to Year 6)
  - Existing = 372 students
  - 10 Year Forecast = 445 students
- Senior School (Year 7 to Year 12)
  - Existing = 543 students (including 148 boarders)
  - 10 Year Forecast = 690 students (including 190 boarders)

Planning Framework

Pursuant to Schedule 15 of *State Environmental Planning Policy (State and Regional Development) 2011*, alterations and additions to an existing 'educational establishment' with a capital investment value (**CIV**) of more than $20 million is identified as 'SSD'.

The CIV for the proposal is calculated at **$48,822,131** which is over the $20 million threshold. This is detailed in the Quantity Surveyors Cost Assessment at **Appendix B.** As the cost of works exceeds $20 million, the proposal is SSD and the EIS will be submitted to the NSW Department of Planning, Industry and Environment (**DPIE**) for assessment and determination.

Consultation

Consultation was held with relevant public authorities and the surrounding local residents on the SSD DA proposal. Community and stakeholder consultation as undertaken with:

- Woollahra Council.
- Government Architect NSW (through the State Design Reginal Panel process).
- Transport for NSW.
- Transport for NSW (Roads and Maritime Services) (**TfNSW & RMS**);
- Local Aboriginal land councils and registered Aboriginal stakeholder; and
- Surrounding local residents.

Assessment

The proposal has been assessed against all items contained within the SEARs issued on 14 January 2020. In summary:

- **The proposal satisfies the applicable local and state planning policies –** The proposal is consistent with all relevant strategic policies and satisfies the objective of all relevant planning controls.
- **The proposal is suitable for the site –** The proposal continues the educational use of the site, which is consistent with the zone objectives. Further, there are no significant environmental constraints that would limit the proposal from being developed at the site.
- **The proposal is in the public's interest –** The proposal will relieve pressure off existing public schools in the surrounding locality and ensure more children have access to new state of the art school facilities, learning spaces and equipment. The proposal will create job opportunities in manufacturing, construction and construction management during the project's construction phase of works (approximately **257** jobs), and increased job opportunities in teaching and administration at the project's completion (resulting in **35** additional full-time teaching jobs).
- The proposal will not have any unacceptable impacts on neighbouring residential properties or the public domain. Subject to the various mitigation measures recommended by the specialist consultants, the proposal will not generate any unreasonable or significant traffic, heritage, social and environmental impacts on adjoining or surrounding properties or the public domain.
- The proposal satisfies the SEARs as demonstrated in this EIS and accompanying specialist reports.

Considering the above and the content contained in this EIS, it is recommended that the Department of Planning, Industry and Environment approve this SSDA, subject to appropriate conditions.

SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

A request was made to the Minister for the Secretary's Environmental Assessment Requirements (**SEARs**), pursuant to Clause 3, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* and the SEARs was received on 14 January 2020. The SEARs are addressed within this report and included in full at **Appendix A.**

Table 1 below provides a summary of the SEARs and identifies the section of the report where the relevant requirement is addressed and/or the appendix reference for the technical consultant's report associated with that requirement.

Table 1 SEARs Compliance Table

Item/Description	Document/Reference
General Requirements	
The Environmental Impact Statement (EIS) must be prepared in accordance with and meet the minimum requirements of clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000 (the Regulation). Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development. Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: ▪ adequate baseline data ▪ consideration of potential cumulative impacts due to other development in the vicinity (completed, underway or proposed) and ▪ measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.	This EIS has been prepared in accordance with the Secretary's Requirements and meets the minimum form and content requirements specified in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. **Section 6** of the EIS includes a comprehensive assessment of the environmental risks and impacts associated with the development.
The EIS must be accompanied by a report from a qualified quantity surveyor providing ▪ a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived ▪ an estimate of the jobs that will be created by the future development during the construction and operational phases of the development and certification that the information provided is accurate at the date of preparation.	Refer to **Appendix B.**
Key Issues	
CONCEPT PROPOSAL The EIS must address the following specific matters:	
1. Statutory and Strategic Context	Statutory and Strategic Context is addresses in

Item/Description	Document/Reference
Address the statutory provisions contained in all relevant environmental planning instruments, including: ▪ *Biodiversity Conservation Act 2016* ▪ *State Environmental Planning Policy (State & Regional Development) 201* ▪ *State Environmental Planning Policy (Infrastructure 2007)* ▪ *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* ▪ *State Environmental Planning Policy No. 64 – Advertising and Signage* ▪ *State Environmental Planning Policy No.55 – Remediation of Land* ▪ *Draft State Environmental Planning Policy (Remediation of Land)* ▪ *Draft State Environmental Planning Policy (Environment)* ▪ *Woollahra Local Environmental Plan 2014*. *Permissibility* Detail the nature and extent of any prohibitions that apply to the development. *Development Standards* Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards. *Provisions* Adequately demonstrate and document in the EIS how each of the provisions in the listed instruments are addressed, including reference to necessary technical documents.	**Section 5** of the EIS, which includes assessment of permissibility and development standards.
2. Policies Address the relevant planning provisions, goals and strategic planning objectives in the following: ▪ NSW State Priorities ▪ The Greater Sydney Regional Plan, A Metropolis of three cities ▪ Future Transport Strategy 2056 and supporting plans ▪ State Infrastructure Strategy 2018 – 2038 Building the Momentum ▪ Sydney's Cycling Future 2013 ▪ Sydney's Walking Future 2013 ▪ Sydney's Bus Future 2013 ▪ Crime Prevention Through Environmental Design (CPTED) Principles ▪ Healthy Urban Development Checklist (NSW Health)	Planning provisions, goals and strategic planning objectives in the identified policies have been addressed in **Section 3.11** of the EIS.

Item/Description	Document/Reference
▪ Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017) ▪ Draft Greener Places Policy ▪ Eastern City District Plan ▪ Woollahra Development Control Plan 2015.	
3. Operation ▪ Provide details of the existing and proposed school operations, including staff and student numbers, school hours of operation, and operational details of any proposed before/after school care services and/or community use of school facilities. ▪ Provide a detailed justification of suitability of the site to accommodate the proposal.	Operation details are provided in **Section 3**
4. Built Form and Urban Design ▪ Address the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces. ▪ Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, massing, setbacks, building articulation, materials and colours. ▪ Clearly demonstrate how design quality will be achieved in accordance with Schedule 4 Schools – Design Quality Principles of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 and the GANSW Design Guide for Schools. ▪ Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development. ▪ Provide detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development. ▪ Provide a detailed site-wide landscape strategy, including consideration of equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation. ▪ Provide a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape including views to and from the site and any adjoining heritage items. ▪ Address CPTED Principles. ▪ Demonstrate good environmental amenity including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility.	Built form and urban design are addressed in **Section 6.1** of this Report. The CPTED Principles are addressed in **Section 6.15** of this Report. Environmental amenity is addressed in **Section 6.5** of this Report.

Item/Description	Document/Reference
▪ Demonstrate that Aboriginal culture and heritage is considered and incorporated holistically in the design proposal.	
5. Design Excellence ▪ Describe the design process leading to the concept proposal. ▪ Provide design quality guidelines for the future built form and integration of landscape design. ▪ Provide a design excellence strategy, developed in consultation with the Government Architect NSW through the State Design Review Panel (SDRP) process, for the future stages of the development which demonstrates how design excellence will be achieved. This strategy should set out: – the design process leading to the concept proposal – a method setting out how the proposed design excellence, public domain and landscape excellence process will be implemented as part of the planning process – details of the method for the incorporation of sustainability into design.	Design Excellence is addressed in **Section 6.2** of this Report and **Appendix E.**
6. Environmental Amenity ▪ Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing and acoustic impacts. ▪ Conduct a view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building envelope and likely future development). ▪ Include a lighting strategy and measures to reduce spill into the surrounding sensitive receivers. ▪ Identify any proposed use of the school outside of school hours (including weekends) and assess any resultant amenity impacts on the immediate locality and proposed mitigation measures. ▪ Detailed outline of the nature and extent of the intensification of use associated with the increased floor space, particularly in relation to the proposed increase in staff and student numbers.	Environmental amenity is addressed in **Section 6.5** of this Report.
7. Staging ▪ Provide details regarding the staging of the proposed development, including details of any decanting of students that will be required to accommodate works.	Staging is addressed in **Section 6.6** of this Report.
8. Transport and Accessibility Include a transport and accessibility impact assessment, which details, but not limited to the following:	Transport and Accessibility is addressed in **Section 6.7** and **Appendix R** of this Report**.**

Item/Description	Document/Reference
▪ accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development ▪ details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips based on surveys of the existing and similar schools within the local area ▪ the adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development ▪ measures to integrate the development with the existing/future public transport network ▪ the impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years) ▪ the identification of infrastructure required to ameliorate any impacts on traffic efficiency and road safety impacts associated with the proposed development, including details on improvements required to affected intersections, additional school bus routes along bus capable roads (i.e minimum 3.5 m wide travel lanes), additional bus stops or bus bays ▪ details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel plan) and the provision of facilities to increase the non-car mode share for travel to and from the site ▪ the proposed walking and cycling access arrangements and connections to public transport services ▪ the proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones ▪ proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance ▪ proposed number of on-site car parking spaces for teaching staff and visitors and corresponding compliance with existing parking codes and justification for the level of car parking provided on-site ▪ an assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development	

Item/Description	Document/Reference
▪ an assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures and personal safety in line with CPTED ▪ emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times). *Relevant Policies and Guidelines:* ▪ *Guide to Traffic Generating Developments (Roads and Maritime Services)* ▪ *EIS Guidelines – Road and Related Facilities (DoPI)* ▪ *Cycling Aspects of Austroads Guides* ▪ *NSW Planning Guidelines for Walking and Cycling* ▪ *Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development* ▪ *Standards Australia AS2890.3 (Bicycle Parking Facilities).*	
9. Aboriginal Cultural Heritage ▪ Identify and describe the Aboriginal cultural heritage values that exist across the whole area that would be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH 2010), and guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011). ▪ Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR. ▪ Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.	Aboriginal Cultural Heritage us addresses in **Section 6.10** of this Report and **Appendix H**
10. Ecologically Sustainable Development (ESD) ▪ Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design and ongoing operation phases of the development.	ESD is addressed in **Section 6.8** of this Report and **Appendix S.**

Item/Description	Document/Reference
▪ The climate change projections developed for the Sydney Metropolitan area are used to inform the building design and asset life of the project. ▪ Include a framework for how the future development will be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design (including water sensitive urban design) and technology and use of renewable energy. ▪ Include preliminary consideration of building performance and mitigation of climate change, including consideration of Green Star Performance. ▪ Include an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level. ▪ Provide a statement regarding how the design of the future development is responsive to the CSIRO projected impacts of climate change. Specifically: – hotter days and more frequent heatwave events – extended drought periods – more extreme rainfall events – gustier wind conditions – how these will inform landscape design, material selection and social equity aspects (respite/shelter areas). *Relevant Policies and Guidelines:* ▪ NSW and ACT Government Regional Climate Modelling (NARCliM) climate change projections	
11. Heritage ▪ Provide a statement of significance and an assessment of the impact on the heritage significance of the heritage items on the site in accordance with the guidelines in the NSW Heritage Manual. ▪ Address any archaeological potential and significance on the site and the impacts the development may have on this significance. ▪ Provide an updated Conservation Management Plan (CMP) including: – Updated historic research based on primary sources – Plans showing the different phases of development of the precinct since its early phases up to the current times using plans and elevations; – Grading of significance in accordance with the NSW Heritage Office methodology precinct on a plan and table	Heritage is addressed in **Section 6.9** of this Report**,** and **Appendix C**, **Appendix C**, **Appendix T** and **Appendix U**

Item/Description	Document/Reference
– For built and landscape elements assessed as being of Moderate, High and Exceptional significance, a Fabric Analysis is to be prepared in a table format with each room on a different row, including photographs of each room and component (including the roof and chimneys), significant fabric in each room (fireplaces, cornices, ceilings, floorings, etc.), date of construction of each room and type of walls (brick/stone/etc). ▪ The CMP is to be prepared by a qualified heritage architect in accordance with the Office of Environment & Heritage guidelines "Conservation Management Documents" [including: Model Brief], 1996, revised 2002, "The Conservation Plan" [Fifth Edition] by James Semple Kerr for the National Trust 2000, "Conservation Management Plan: A Checklist", Heritage Office, 2003. The CMP must incorporate input from qualified historical and aboriginal archaeologists as well as qualified landscape heritage consultants.	
12. Noise and Vibration Identify and assess operational noise at a concept level, including consideration of any use of any school hall for concerts etc. (both during and outside school hours) and any out of hours community use of school facilities, and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. *Relevant Policies and Guidelines:* ▪ NSW Noise Policy for Industry 2017 (EPA) ▪ Interim Construction Noise Guideline (DECC) ▪ Assessing Vibration: A Technical Guideline 2006 ▪ Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning, 2008).	Noise and Vibration is addressed in **Section 6.11** of this Report and in **Appendix I.**
13. Contamination Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. *Relevant Policies and Guidelines:* ▪ Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP).	Contamination is addressed in **Section 5.6** of this Report**,** and **Section 6.14** and **Appendices O, Appendix P, Appendix Q,** Appendix O, **Appendix CC.**
14. Utilities ▪ Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure. ▪ Prepare an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.	The provision of infrastructure and utilities are addressed in **Section 6.12** of this Report, and **Appendix Y.**

Item/Description	Document/Reference
15. Contributions Address Council's 'Section 7.11 / 7.12 Contribution Plan' and/or any Voluntary Planning Agreement, which may be required to be amended because of the proposed development.	The matter of contributions is addressed in **Section 5.13.6** of this Report**.**
16. Drainage Detail drainage associated with the proposal, including stormwater and drainage infrastructure. *Relevant Policies and Guidelines:* ▪ Guidelines for development adjoining land and water managed by DECCW (OEH, 2013).	Drainage matters are addressed in **Section 6.13** of this Report and **Appendix N.**
17. Flooding and Coastal Hazards Assess any flood risk on site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (DIPNR, 2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity.	Flooding issues are addressed in **Section 6.13** of this Report and Appendix N**.**
18. Biodiversity Assessment ▪ Biodiversity impacts related to the proposed development are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method. ▪ The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method ▪ The BDAR must include details of the measures proposed to address the offset obligation as follows: – the total number and classes of biodiversity credits required to be retired for the development/project. – the number and classes of like-for-like biodiversity credits proposed to be retired. – the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules – any proposal to fund a biodiversity conservation action – any proposal to conduct ecological rehabilitation (if a mining project) – any proposal to make a payment to the Biodiversity Conservation Fund.	N/A – Refer to **Section 5.1** of this Report and **Appendix K**

Item/Description	Document/Reference
▪ If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits. ▪ The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016. ▪ Where a Biodiversity Assessment Report is not required, engage a suitably qualified person to assess and document the flora and fauna impacts related to the proposal. ▪ *Note: Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report unless otherwise specified under the Act.*	
STAGE 1 WORKS The EIS for the construction and fit-out of the building works must address the following specific matters:	
1. Built Form and Urban Design ▪ Address the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces. ▪ Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colours. ▪ Provide details of any digital signage boards, including size, location and finishes. ▪ Clearly demonstrate how design quality will be achieved in accordance with Schedule 4 Schools – Design Quality Principles of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 and the GANSW Design Guide for Schools. ▪ Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development. ▪ Provide detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development. ▪ Provide a detailed site-wide landscape strategy, including consideration of equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation. ▪ Provide a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape including views to and from the site and any adjoining heritage items.	Built form and urban design are addressed in **Section 6.1** of this Report. The CPTED Principles are addressed in **Section 6.15** of this Report. Environmental amenity is addressed in **Section 6.5** of this Report. Refer to **Appendix E.**

Item/Description	Document/Reference
▪ Address CPTED Principles. ▪ Demonstrate good environmental amenity including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility.	
2. Operation ▪ Provide details of the proposed school operations, including staff and student numbers to be accommodated in Stage 1, school hours of operation, and operational details of any proposed before/after school care services and/or community use of school facilities. ▪ Where relevant, detail how the school will continue to operate during construction activities, including proposed mitigation measures. Provide details of all existing conditions of consent relating to these matters (i.e. student/staff caps, hours of operation, etc).	Operation details are provided in **Section 3** of this Report.
3. Environmental Amenity ▪ Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing and acoustic impacts. ▪ Conduct a view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building envelope and likely future development). ▪ Include a lighting strategy and measures to reduce spill into the surrounding sensitive receivers. ▪ Identify any proposed use of the school outside of school hours (including weekends) and assess any resultant amenity impacts on the immediate locality and proposed mitigation measures. ▪ Detailed outline of the nature and extent of the intensification of use associated with the increased floor space, particularly in relation to the proposed increase in staff and student numbers. ▪ Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding	Environmental amenity is addressed in **Section 6.5** of this Report.
4. Utilities ▪ Identify any potential impacts of the proposed construction and operation on the existing utility infrastructure and service provider assets, and demonstrate how these will be protected or impacts mitigated.	The impact in utilities are addressed in **Section 6.12** of this Report and **Appendix Y.**
5. Transport and Accessibility ▪ A Transport Impact Assessment must be prepared that reassess the transport impacts of Stage 1 works within the context of the assessment undertaken for the Concept Proposal.	Transport and Accessibility is addressed in **Section 6.7** of this Report and **Appendix R.**

Item/Description	Document/Reference
▪ Detail access arrangements for construction of Stage 1 and measures to mitigate any associated pedestrian, cyclist or traffic impacts, including the preparation of a preliminary Construction Traffic and Pedestrian Management Plan (CTPMP) to demonstrate the proposed management of the impact. The CTPMP should also consider cumulative impacts associated with other construction activities and assess road safety at any key intersections subject to heavy vehicle movements and high pedestrian activity *Relevant Policies and Guidelines:* ▪ Guide to traffic generating developments (RMS).	
6. Noise and Vibration ▪ Identify and provide a quantitative assessment of the main noise and vibration generating sources and activities during construction. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. ▪ Identify and assess operational noise including consideration of any public address system, school bell, mechanical services (e.g. air conditioning plant), use of any school hall for concerts etc (both during and outside school hours) and any out of hours community use of school facilities, and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land. *Relevant Policies and Guidelines:* ▪ Interim Construction Noise Guideline (DECC) ▪ Assessing Vibration: A Technical Guideline 2006	Noise and Vibration is addressed in **Section 6.11** of this Report and in **Appendix I**
7. Ecologically Sustainable Development (ESD) ▪ Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design and ongoing operation phases of the development. ▪ Include a framework for how the development in Stage 1 will be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design (including water sensitive urban design) and technology and use of renewable energy. ▪ Include an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level. (if applicable depending on what is proposed). ▪ Include preliminary consideration of building performance and mitigation of climate change, including consideration of Green Star Performance.	ESD is addressed in **Section 6.8** of this Report and **Appendix S.**

Item/Description	Document/Reference
▪ Detail how the development incorporates green walls, green roof and/or cool roof into the design. ▪ Provide a statement regarding how the Stage 1 works is responsive to the CSIRO projected impacts of climate change. Specifically: – hotter days and more frequent heatwave events – extended drought periods o more extreme rainfall events – gustier wind conditions – how these will inform landscape design, material selection and social equity aspects (respite/shelter areas). ▪ *Relevant Policies and Guidelines:* ▪ NSW and ACT Government Regional Climate Modelling (NARCliM) climate change projections.	
8. Flooding and Coastal Hazards The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including: ▪ Flood prone land ▪ Flood planning area, the area below the flood planning level ▪ Hydraulic categorisation (floodways and flood storage areas) ▪ Flood Hazard. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1 % AEP, flood levels and the probable maximum flood, or an equivalent extreme event. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios: ▪ Current flood behaviour for a range of design events as identified in 14 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change Modelling in the EIS must consider and document: ▪ Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies. ▪ The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood. ▪ Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include	Flooding issues are addressed in **Section 6.13** of this Report and **Appendix N.**

Item/Description	Document/Reference
redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories ▪ Relevant provisions of the NSW Floodplain Development Manual 2005. ▪ The EIS must assess the impacts on the proposed development on flood behaviour including: ▪ Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure. ▪ Consistency with Council floodplain risk management plans. ▪ Consistency with any Rural Floodplain Management Plans. ▪ Compatibility with the flood hazard of the land. ▪ Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land. ▪ Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site. ▪ Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses. ▪ Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council. ▪ Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council. ▪ Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the NSW SES ▪ Any impacts the development may have on the social and economic costs to the community as consequence of flooding.	
9. Sediment, Erosion and Dust Controls Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. *Relevant Policies and Guidelines:* ▪ Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom). ▪ Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA). ▪ Guidelines for development adjoining land and water managed by DECCW (OEH, 2013).	Refer to **Section 6.14** of this Report and **Appendix FF.**

Item/Description	Document/Reference
10. Contamination ▪ Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. ▪ Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works. *Relevant Policies and Guidelines:* ▪ Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP).	Refer to **Section 5.6** of this Report and **Appendix BB.**
11. Drainage ▪ Detail measures to minimise operational water quality impacts on surface waters and groundwater. ▪ Stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties. The EIS must map the following features relevant to water and soils including: ▪ Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map) ▪ Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method) ▪ Wetlands as described in s4.2 of the Biodiversity Assessment Method. Groundwater ▪ Groundwater dependent ecosystems ▪ Proposed intake and discharge locations. ▪ The EIS must describe background conditions for any water resource likely to be affected by the development, including: ▪ Existing surface and groundwater ▪ Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations ▪ Water Quality Objectives (as endorsed by the NSW Government htt1r//www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters ▪ Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government ▪ Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions http://www.environment.nsw.gov.au/research-	Drainage is addressed in **Section 6.13** of this Report, and in **Appendix N**.

Item/Description	Document/Reference
and-publications/publicationssearch/risk-based-framework-for-considering-waterway-health-outcomes-instrategic-land-use-planning. ▪ The EIS must assess the impacts of the development on water quality, including: ▪ The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction ▪ Identification of proposed monitoring of water quality ▪ Consistency with any relevant certified Coastal Management Program (or Coastal Zone Management Plan). The EIS must assess the impact of the development on hydrology, including: ▪ Water balance including quantity, quality and source ▪ Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas ▪ Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems ▪ Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches) ▪ Changes to environmental water availability, both regulated/licensed and unregulated/rules- based sources of such water ▪ Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options ▪ Identification of proposed monitoring of hydrological attributes. *Relevant Policies and Guidelines:* ▪ Guidelines for development adjoining land and water managed by DECCW (OEH, 2013).	
12. Waste Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	Waste is addressed in **Section 6.16** of this Report and **Appendix V**

Item/Description	Document/Reference
13. Construction Hours Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.	Refer to the Construction Management Plan (CMP) attached at **Appendix X.**
Plans and Documents The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: ▪ A section 10.7(2) and (5) Planning Certificates (previously Section 149(2) and (5) Planning Certificate) ▪ Architectural drawings showing key dimensions, RLs, scale bar and north point, including: – plans, sections and elevation of the proposal at no less than 1:200 showing indicative furniture layouts and program – illustrated materials schedule including physical or digital samples board with correct proportional representation of materials, nominated colours and finishes – details of proposed signage, including size, location and finishes o detailed annotated wall sections at 1:20 scale that demonstrate typical cladding, window and floor details, including materials and general construction quality – site plans and operations statement demonstrating the after hours and community use strategy ▪ Site Survey Plan, showing existing levels, location and height of existing and adjacent structures / buildings site boundaries and remnant and planted vegetation on the site ▪ Site Analysis Plan, including: – site and context plans that demonstrate principles for future development and expansion, built form character and open space network – active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links – site and context plans that demonstrate principles for future network, active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links. ▪ Sediment and Erosion Control Plan. ▪ Shadow Diagrams.	The various plans and documents cited here are included within **Appendices Appendix BAppendix FF**

Item/Description	Document/Reference
▪ View analysis, photomontages and architectural renders, including those from public vantage points. ▪ Landscape architectural drawings showing key dimensions, RLs, scale bar and north point, including: – integrated landscape plans at appropriate scale, with detail of new and retained planting, shade structures, materials and finishes proposed including articulation of playground spaces. – plan identifying significant trees, trees to be removed and trees to be retained or transplanted. ▪ Design report to demonstrate how design quality will be achieved in accordance with the above Key Issues including: – architectural design statement. – diagrams, structure plan, illustrations and drawings to clarify the design intent of the proposal. – detailed site and context analysis. – analysis of options considered including building envelope study to justify the proposed site planning and design approach. – visual impact assessment identifying potential impacts on the surrounding built environment and adjoining heritage items. – summary of feedback provided by GANSW and SDRP and responses to this advice. – summary report of consultation with the community and response to any feedback provided. ▪ Geotechnical and Structural Report. ▪ Accessibility Report. ▪ Acid Sulfate Soils Report. ▪ Arborist Report. ▪ Schedule of materials and finishes	
Consultation During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, special interest groups, including local Aboriginal land councils and registered Aboriginal stakeholders, and affected landowners. In particular, you must consult with: ▪ Woollahra Council. ▪ Government Architect NSW (through the SDRP process).	The consultation process is discussed in **Section 8** of this Report and **Appendix L**

Item/Description	Document/Reference
▪ Transport for NSW. ▪ Transport for NSW (Roads and Maritime Services) Consultation should commence as soon as practicable to agree the scope of investigation. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.	

1. INTRODUCTION

1.1. OVERVIEW

This Environmental Impact Statement (**EIS**) has been prepared by Urbis Pty Ltd on behalf of Kincoppal-Rose Bay School (**the Applicant**) in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*. This EIS supports the State Significant Development (**SSD**) Development Application (**DA**) SSD_10325 to guide future development at Kincoppal-Rose Bay School (**the site**).

The proposed works are limited to the main school campus located on the western side of Vaucluse Road only. The proposal seeks consent for the following:

The proposal is lodged as a concept development application under the provisions of Division 4.4 of the Environmental Planning and Assessment Act and seeks for consent for various concept proposals across the site. The proposal also includes detailed development proposals forming the first stage of the development.

Concept Development (under Division 4.4 of the Environmental Planning and Assessment Act 1979):

- **Hughes Centre:** The reconfiguration of the existing Hughes Centre to provide for a new multipurpose teaching facility within the senior school precinct (Precinct B).
- **Circulation Hub:** The reconfiguration of the Senior School circulation structure connecting the existing Science Lab, student accommodation building and the new multipurpose teaching facility within the senior school precinct (Precinct B).
- **New Boarding House:** A building envelope for a new boarding house aligned to the existing Sheldon House building (Precinct C).

In accordance with Division 4.4 of the EP&A Act, the above concept proposals will be the subject of separate development applications seeking consent.

Detailed Development:

Junior School and the Early Learning Centre (Precinct A)

- **ELC Expansion:** Expansion of the Early Learning Centre (**ELC**) and associated outdoor play areas.
- **Junior School Building:** Alterations and additions to the Junior School, including the refurbishment of the north and west wings.
- **Elevated Pedestrian bridge/pathway:** An elevated pedestrian pathway/bridge for access to the Junior School (a developed design element to enhance pedestrian safety as part of Precinct B).
- **Traffic & Car Park Management:** Reconfiguration of the Junior school outdoor and landscaped areas resulting in the addition of an additional 28 on-grade car parking spaces.

Senior School (Precinct B)

- **Main Entrance & Front Reception:** Refurbishment of the Senior School Reception and upgrade of the Main Entrance, including replacement of vehicular access with pedestrian friendly access and associated landscaping.
- **Year 8 Learning Centre:** Expansion and refurbishment of Level 3 of the North Wing to provide a new learning hub and staff areas for Year 8.
- **Traffic Management:**
  - Reconfiguration of the main forecourt to provide a dedicated bus parking area for set-down/pick-up, separate carpark area and separate pedestrian pathway.
  - Construction of a new driveway crossing and internal road from Vaucluse Road.

Bus & Carparking Structure:

- Provision of on on-site bus parking bay and a at grade parking area adjacent to the main entrance (7 KRB mini-bus spaces).
- A new basement staff carpark directly below the bus parking bays (30 car parking spaces).

Student Capacity Increase

This SSDA also seeks to seeks to increase the maximum student cap for the school population from 950 students to 1,205 students over a 10-year time-frame. The background of this matter is set out below.

One of the more recent approvals on the site (DA550/2016) approved by Woollahra Council (Council) on 24 April 2017, included a 'Condition which must be satisfied during the ongoing use of the development' capping the school's maximum student population at 970 students and 20 children attending the ELC facility. The condition of development consent was applied to the McGuinness Centre gymnasium to create a Year 12 Learning Hub. However, this condition was subsequently modified via a section 96 approval (DA550/2016/3) on 31 August 2017. The modification updated the condition to cap the school's maximum student population at 970 students (rather than 900, which was a typographical error). An extract of the condition is provided below:

> *"Staff and student number shall be capped at existing levels to minimise adverse traffic and parking impacts associated with the proposal*"
>
> *"The existing permitted student numbers are 970 students attending Kincoppal from Kindergarten to Year 12, and 20 children attending the child care centre."*

The cap was originally imposed by Council based on the student numbers provided in the submitted Traffic and Parking Assessment. It was not imposed on the basis of any traffic analysis or constraints. As such, this SSDA seeks to provide a renewed student cap for KRB to accommodate its long term growth plan. The proposal seeks to increase the maximum student cap for the school population from 955 students to 1,205 students over a 10-year timeframe. This anticipated growth will be distributed across the school as follows, however this is subject to fluctuation across the different components of the school:

- Early Leaning Centre
  - Existing = 40 students
  - 10 Year Forecast = 70 students
- Junior School (Kindergarten to Year 6)
  - Existing = 372 students
  - 10 Year Forecast = 445 students
- Senior School (Year 7 to Year 12)
  - Existing = 543 students (including 148 boarders)
  - 10 Year Forecast = 690 students (including 190 boarders)

The proposed development will be staged, as the School will continue to operate during the various project works. Proposed staging will be discussed within the EIS.

1.2. PROJECT CONTEXT AND BACKGROUND

1.2.1. Kincoppal-Rose Bay School (KRB)

Kincoppal was established at Elizabeth Bay in 1909 and the Convent of the Sacred Heart, Rose Bay was founded in 1882. In 1971, the two schools amalgamated on the Convent of the Sacred Heart campus and became known as Kincoppal-Rose Bay, School of the Sacred Heart. Kincoppal is situated on a single campus located within the suburb of Rose Bay. KRB caters for boys (ELC-6) within the Junior School and girls (ELC-12) within both the Junior School and Senior School.

1.2.2. Project History

Planning History

The site has previously been subject to a number of development applications (**DA**), The extent of approvals over the site are detailed in **Table 2.**

Table 2 Site DA History

Approval Date	DA Number	Description of Works
9 April 2018	DA550/2016	Section 4.55 Modification: An increase to the height of the approved lift overrun by 320mm.
31 August 2017	DA550/2016	Section 4.55 Modification Amend Condition I.5 to correct a typographical error. Relating to the maximum student population (refer further explanation below under the heading 'Student Cap').
24 April 2017	DA550/2016	Refurbishment of existing McGuinness Centre gymnasium to create a Year 12 Learning Hub, the construction of landscaped multi-purpose outdoor learning space in place of the existing Sheldon swimming pool, an outdoor terrace for recreation, an external pedestrian access bridge, an outdoor terrace for boarding house dining, the installation of an internal accessible lift within the existing South Hughes Centre and landscaping works.
11 October 2016	DA284/2016	The construction of 2 x 2 storey buildings housing a total of 3 staff accommodation dwellings, 3 hard-stand car parking bays, internal driveway extension & associated landscape works.
1 June 2015	DA457/2014	Proposed childcare centre for twenty children.
18 August 2008	DA387/2007	Construction of a multi-purpose facility comprising the following; - a 25m indoor swimming pool and associated facilities including tiered seating, storerooms, change rooms, amenities and office - an indoor multi-purpose sports hall accommodating a single netball/basketball court and associated tiered seating and stage - associated amenities, change rooms, storerooms, offices, classrooms, food preparation areas and entry foyer - an outdoor playing field - basement car parking comprising a total of 53 car parking spaces including a formalised one-way set down/pick up facility being accessed by separated ingress and egress driveways off Vaucluse Road.

1.3. PROJECT OBJECTIVES

The project objectives are listed below:

- To refurbish and revitalise existing internal and external spaces across the Junior and Senior Precincts while preserving the character of the School Campus and its buildings.
- To provide new state of the art educational facilities, to accommodate the current and projected population of the school.
- To improve existing on-site parking provisions (including bus parking) within the campus.
- To improve the efficiency of drop-off and pick-up operations.

- To improve pedestrian amenity and accessibility to, from and within the campus.
- To provide for certainty for the ongoing and long-term growth of the School.

1.4. ANALYSIS OF FEASIBLE ALTERNATIVES

The proposed design responds strongly to the site constraints and opportunities and is considered the best response to both the site and surrounding context.

A 'do nothing' approach

Alternatives to the proposed concept plan include the 'do nothing' scenario which would not achieve the project objectives. The consequences of not carrying out the project are far reaching and include:

- Failure to provide state of the art learning facilities for pupils and teachers.
- Failure to provide the most efficient internal layout of the school.
- Failure to create a more accessible campus for staff, pupils and visitors.
- Failure to better utilise the existing school site and buildings.
- Increased maintenance costs of degraded sub-standard buildings.
- Inconsistency with Conservation Management Plan (CMP) which recommends re-establishing the Senior School main courtyard as pedestrian only.

Alternative design approach

Over the past few years, KRB's architect BVN have prepared various versions of a Site Masterplan that have shown possible development scenarios for both the Senior and Junior School.

Options for the development of buildings within the Senior school have been limited given the heritage significance of this school, the need to achieve accessibility throughout these heritage buildings, as well as the limited building footprint opportunities beyond the upper areas of the site (noting the lower areas of the site are constrained by topography and vegetation). Possibilities of not progressing with the options associated with the reception, forecourt and parking areas were considered, however were discarded given the importance attributed to returning this forecourt area to a more pedestrian friendly environment and also providing a separated and more effective area to accommodate parking for cars and mini-buses.

Options for the Junior School are also limited due to the constrained topography and vegetation in the eastern part of the site and available space around existing buildings toward the main road frontage. Options for a greater extent of demolition associated with the Junior School were considered but discarded due to the relative (good) condition of these buildings, the ability to adapt and refurbish these buildings (and the associated cost and sustainability advantages in doing this), as well as the desire to maximise open spaces near the Junior school and between the Senior school, which in turn provides greater flexibility for learning environments.

The above considerations have led to the progression of the proposed option.

1.5. PROJECT TEAM

Specialist consultants were engaged to assist in the preparation of this SSD, as outlined in Table 3**.**

Table 3 Project Team

Discipline/Input	**Consultant**	**Appendix**
SEARs		**Appendix A**
Cost Report	*Altus Group*	**Appendix B**
Architectural Plans	*BVN*	**Appendix C**

Discipline/Input	Consultant	Appendix
Site Plans	*BVN Architects*	**Appendix D**
Architectural Design Report and Schedule of Materials & Finishes	*BVN Architects*	**Appendix E**
Civil Plans	*Henry & Hymas*	**Appendix F**
Landscape Plans	*CAB*	**Appendix G**
Aboriginal Cultural Heritage Assessment	*Coast History & Heritage*	**Appendix H**
Acoustic Report	*Wilkinson Murray*	**Appendix I**
Arborist Report	*Botanics Tree Wise People*	**Appendix J**
Biodiversity Development Assessment Report Waiver	*Department of Planning, Industry & Environment*	**Appendix K**
Community Consultation Outcomes Report October 2020	*Elton Consulting*	**Appendix L**
Community Consultation Outcomes Report July 2019	*Elton Consulting*	**Appendix M**
Civil Engineering Report	*Henry & Hymas*	**Appendix N**
Geotechnical Report - ELC Building	*JK Environments*	**Appendix O**
Geotechnical Report – Walkway & Road	*JK Environments*	**Appendix P**
Geotechnical Report – Bus & Car Parking Structure	*JK Environments*	**Appendix Q**
Transport and Accessibility Impact Assessment	*CBRK*	**Appendix R**
Ecologically Sustainable Design (ESD) Report	*Cundall*	**Appendix S**
Heritage Impact Statement	*Design 5*	**Appendix T**
Conservation Management Plan	*Design 5*	**Appendix U**
Operational Waste Management Plan	*Mahady Management*	**Appendix V**
Electrical Infrastructure Management Plan	*Northrop*	**Appendix W**
Construction Management Plan	*Mahady Management*	**Appendix X**
Infrastructure Management Plan	*Henry & Hymas*	**Appendix Y**
Structural Report	*Henry & Hymas*	**Appendix ZAppendix Y**
Historical Archaeological Assessment	*Coast History & Heritage*	**Appendix AA**

Discipline/Input	Consultant	Appendix
Remediation Action Plan	*JK Environments*	**Appendix BB**
Preliminary Site Investigation	*JK Environments*	**Appendix CC**
Facilities Operations Plan	*Mahady Management*	**Appendix DD**
Solar Access Study	*BVN*	**Appendix EE**
Sediment & Erosion Control Plans	*Henry & Hymas*	**Appendix FFAppendix CC**

1.6. REPORT STRUCTURE

The purpose of this report is to provide an assessment of the proposal as described above, within the EIS and the attached supporting documents. This EIS provides the following:

- A description of the site and surrounding context; including identification of the site, existing development on the site, and surrounding development.
- A detailed description of the proposed development.
- An assessment of the proposed development against the relevant strategic and statutory planning controls.
- An assessment of the key issues and impacts generated by the proposed development.
- A detailed description of the consultation undertaken with respect to the proposal.

This EIS responds to the Secretary's Environmental Assessment Requirements (SEARs) attached at **Appendix A**. This document should be read in conjunction with the supporting documents outlined in **Table 3**.

2. SITE AND SURROUNDING LOCALITY

2.1. SITE DESCRIPTION

The school site spans both the eastern and western sides of Vaucluse Road as illustrated in **Figure 1** below. The outdoor sporting fields, sports facilities and landscaped spaces are predominantly located on the eastern side of Vaucluse Road, which also includes the Maureen Tudhope Centre (**MTC**).

The main school campus is located on the western side of Vaucluse Road, comprises extensive grounds and a mix of building typologies ranging in age, architectural style and heritage significance.

The main school campus comprises Junior School located to the north, centrally located student and staff accommodation and Senior School located to the south of the school campus.

The proposed works relates to the main school campus only. No works are proposed within the eastern side of Vaucluse Road.

Figure 1 Aerial Photograph of the Site

Source: BVN

2.2. SITE CONTEXT AND SURROUNDING DEVELOPMENT

Kincoppal-Rose Bay School is located within Rose Bay, approximately 10 kilometres east of the Sydney CBD. Rose Bay is accessible by ferry and train via the Rose Bay Ferry Wharf and nearby railway stations including Bondi Junction and Edgecliff. The locality is predominantly residential, with significant open space areas and Kambala School to the south. Specifically, the site is surrounded by the following:

- To the north is multiple low-density residential dwellings and the St Michael's Anglican Church.

- Directly adjacent to the south is Forsyth Park, several low-density residential dwellings and Kambala School.
- To the east the pattern of low density residential continues.
- To the west is the Heritage Foreshore Walk that runs parallel to Sydney Harbour.

Figure 2 Location Plan

Source: Urbis

2.3. EXISTING DEVELOPMENT

The School is divided into three precincts as illustrated in Figure 3 and described below.

2.3.1. Senior School (Precinct B)

The Senior School is located towards the southern side of the main school campus towards Bayview Hill Road. The Senior School has a science wing, library and resource centre, maths learning centre, performing arts studio, maker space, design and creative arts wing, pottery studio, sports centre, swimming pool, indoor and outdoor tennis, netball and basketball courts, lecture theatre, Wallis Auditorium and Chapel and administration building. Large, landscaped grounds with gardens and shaded areas is provided to the west of the campus.

2.3.2. Junior Campus (Precinct A)

The Junior School situated at the northern end of the campus, near the intersection of Gilliver Avenue and Vaucluse Road. The campus features modern, light-filled classrooms, a state-of-the-art library and a dedicated language centre, as well as a music centre, gymnasium and auditorium. Administration office and a uniform shop is also located within the Junior campus. The Junior School is set on lawns used for recreational activities, physical education and sport.

2.3.1. Student and Staff Accommodation (Precinct C)

Precinct C comprise student and staff accommodation spread across two campus buildings. The current arrangement is split with the year 7 – 10 boarders in the top two levels of the Main Building (Central + South Wings) and the senior students in the Sheldon House Building, located north of the Library. Precinct C also comprise a recently built staff accommodation building.

Figure 3 Existing Campus Buildings & Layout

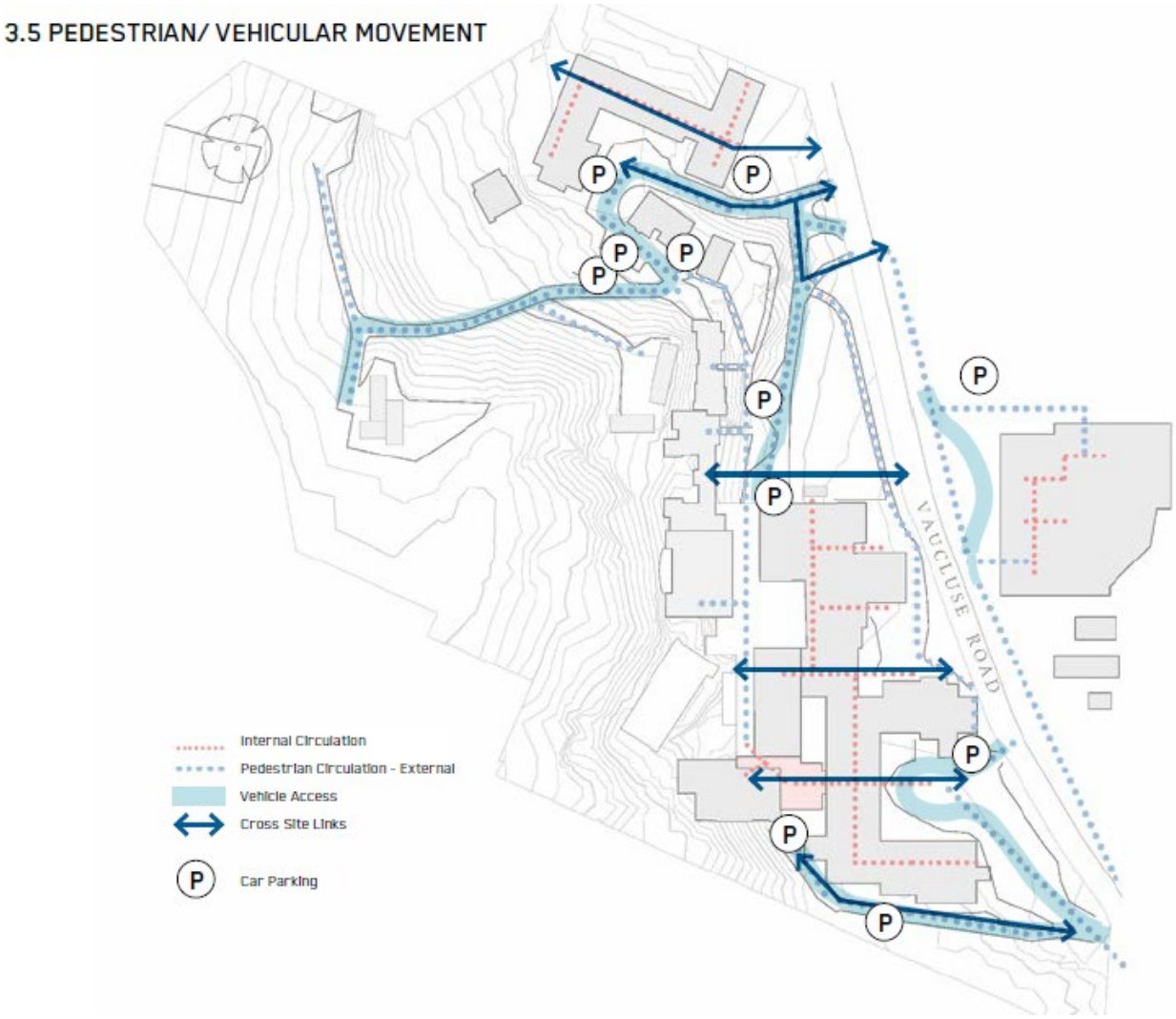
Source: BVN

2.4. SITE ACCESS

The school is located on the corner of New South Head Road and Vaucluse Road, Rose Bay. The main vehicular access into the site is from Vaucluse Road and via the formal entry gate. Multiple secondary vehicular access points are also provided on Vaucluse Road. A pedestrian tunnel located beneath Vaucluse Road links the main school campus to the MTC across the road.

Vehicle and pedestrian site access is illustrated in **Figure 4**.

Figure 4 Vehicle and Pedestrian Stie access



Source: BVN

2.5. EXISTING ROAD NETWORK

The road network surrounding the site includes New South Head Road, Vaucluse Road, Gilliver Avenue and Towns Road. New South Head Road is located adjacent to the eastern boundary of the school and provides a north-south traffic route linking the Sydney CBD to Rose Bay and Watsons Bay. In the vicinity of the site, it provides an undivided carriageway with two traffic lanes and one parking lane in each direction, clear of intersections. The intersection of New South Head Road and Vaucluse Road is controlled by traffic signals.

Vaucluse Road divides the main school campus on the western side of the road and the MTC on the eastern side of the road. A pedestrian tunnel beneath Vaucluse Road links the main school campus to the MTC.

Vaucluse Road is an undivided road with one traffic lane in each direction, with no stopping restrictions either side of the road. The intersection of Vaucluse Road and Gilliver Avenue is an unsignalised three-way priority controlled intersection.

Gilliver Avenue is located to the north and provides a north south connection between Vaucluse Road and Wentworth Road. It provides an undivided road with one traffic lane and one parking lane in each direction, clear of intersections.

Towns Road is located to the east and provides an east west connection between New South Head Road and Old South Head Road. It provides an undivided road with one traffic lane and one parking lane in each direction, clear of intersections. The intersection of New South Head Road with Towns Road is an unsignalized three-way priority controlled intersection.

2.6. WALKING & CYCLING LINKS

There are several existing pedestrian and cyclist links which connect the school to the greater road network including the pedestrian underpass located beneath Vaucluse Road and several pedestrian crossings and traffic signals along New South Head Road.

End of Trip (**EOT**) facilities are provided in the MTC building, for students and staff who choose to cycle and/or walk to and from the school.

2.7. PUBLIC AND PRIVATE TRANSPORT

2.7.1. Public Transport Services

The site is well located within close proximity to public transport services. These services include bus services which operate along New South Head Road and Vaucluse Road, linking the school to other long haul bus and rail services operating from Bondi Junction Interchange, Edgecliff interchange and the City.

The school is serviced by the following public bus services:

- Route 324 – Walsh Bay to Watsons Bay via Old South Head Road.
- Route 325 – Walsh Bay to Watsons Bay via Vaucluse Road.
- Route 386 – Vaucluse to Bondi Junction via New South Head Road.
- Route L24 – Limited stop service Vaucluse to the city.

These bus routes combine to provide convenient and regular services to and from the school. Students can transfer from bus services to rail/train services at Bondi Junction Interchange, Edgecliff interchange and CBD railway station, providing access to the Sydney metropolitan area. Students can also catch ferry services from Circular Quay to Rose Bay Wharf, which is located close to the school.

2.7.2. Private Transport Services

In addition to the local bus services, the school provides dedicated KRB minibus services. These services provide transportation for the following areas:

- Little Bay/Maroubra/Coogee/Bronte/Bondi/school.
- Marrickville/Paddington/Woollahra/Bondi/school.
- Seaforth/Balmoral/Mosman/Neutral Bay/Edgecliff/school.
- Rozelle/Hunters Hill/Lane Cove/Kings Cross/school.
- Willoughby/Northbridge/Cammeray/Double Bay/school.
- Stanmore/Annandale/Balmain/City/Woollahra/Double Bay/school.

The KRB minibus service operates before and after school, setting down and picking up students on-site from the main senior school forecourt. The school also provides a staff shuttle bus service to Edgecliff interchange. Three services operate during the morning and afternoon periods, at the start and end of the school day.

2.1. CAR PARKING

The school currently provides a total off-street parking for 90 vehicles (refer to Figure 4). The main parking area within the school is located beneath the sports playing field, adjacent to MTC, providing parking for 55 vehicles. The remaining off-street parking areas are located adjacent to the junior school, along the internal access road within the main school campus and adjacent to the main administration building. In addition, there are 30 unrestricted on-street parking spaces on the western side of New South Head Road, along the school frontage.

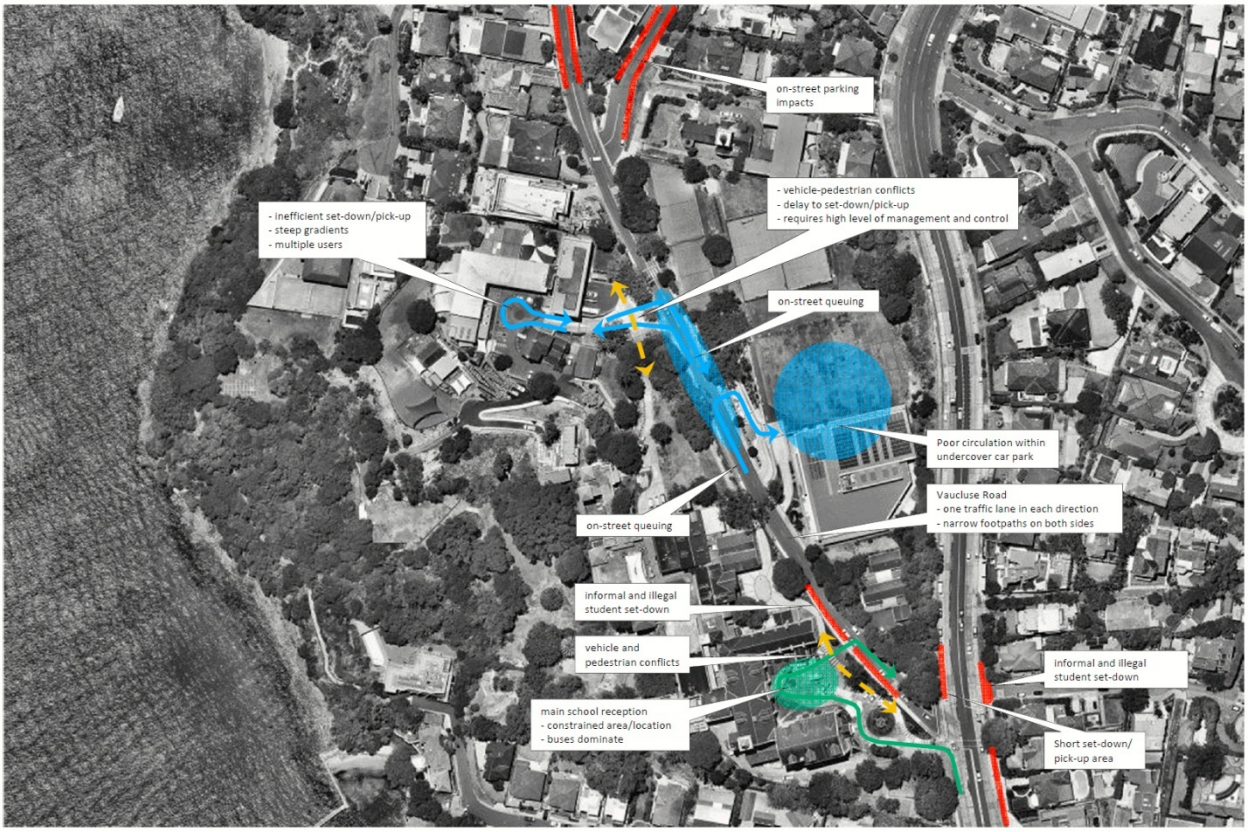
2.2. DROP-OFF AND PICK-UP FACILITIES

There are currently two on-site student set-down/pick-up areas. The first is located adjacent to the junior school within the main school campus, and the other is located within and adjacent to the MTC car park, on the western side of Vaucluse Road.

The set-down and pick-up facility provide formalised drive through operations. During the afternoon period Kindergarten to Year 2 students are marshalled to the lower access road, adjacent to the junior school. All other students are marshalled to the MTC basement car park.

Vehicles collecting students are required to queue and proceed through the supervised student pick-up areas. When vehicles arrive at the head of the queue, staff escort the students to the waiting vehicle and supervise the student pick-up operation.

Figure 5 Existing pedestrian, traffic, parking and bus issues



Source: CBRK

2.3. EXISTING MODE SHARE

- A questionnaire survey was conducted to ascertain the modes of travel of students and staff to and from the school. The results of the survey are presented in the Traffic and Parking Report attached at **Appendix R.**
- The key outcomes of this survey are summarised as follows:
- The majority of junior school students travel to and from school by car drop-off, equivalent to 76% of students during the morning and afternoon peak periods. In comparison, 37% and 30% of the senior students travel by car drop-off during the morning and afternoon periods respectively. Only 2% of the senior students drive to school.
- 19% to 21% of junior school students and 47% to 54% of senior school students travel to and from school by public transport and KRB mini bus service.
- 87% of junior school staff and 75% of senior school staff drive a car to work.
- No student or staff members currently cycle to the school.

Table 4 Mode of Travel Survey Results

Mode of Travel	**Junior School**			**Senior School**		
	To School	From School	Staff	To School	From School	Staff
Car Driver	-	-	87%	2%	2%	75%
Car Passenger (car line)	76%	76%	-	37%	30%	2%
Train (Plus KRB shuttle)	15%	16%	9%	16%	18%	12%
Public Bus and KRB Bus	4%	5%	-	31%	36%	5%
Walk	3%	2%	-	12%	12%	5%
Other	2%	1%	-	2%	2%	1%

3. PROPOSED DEVELOPMENT

3.1. DEVELOPMENT SUMMARY

The proposal is lodged as a concept development application under the provisions of Division 4.4 of the Environmental Planning and Assessment Act and seeks for consent for various concept proposals across the site. The proposal also includes detailed development proposals forming the first stage of the development.

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- **New Boarding House:** A building envelope for a new boarding house aligned to the existing Sheldon House building (Precinct C).

In accordance with Division 4.4 of the EP&A Act, the above concept proposals will be the subject of separate development applications seeking consent.

Detailed Development:

Junior School and the Early Learning Centre (Precinct A)

- **ELC Expansion:** Expansion of the Early Learning Centre (**ELC**) and associated outdoor play areas.
- **Junior School Building:** Alterations and additions to the Junior School, including the refurbishment of the north and west wing and the addition of a rooftop outdoor learning area
- **Elevated Pedestrian bridge/pathway:** An elevated pedestrian pathway/bridge for access to the Junior School (a developed design element to enhance pedestrian safety as part of Precinct B).
- **Traffic & Car Park Management:** Reconfiguration of the Junior school outdoor and landscaped areas resulting in the addition of an additional 28 on-grade car parking spaces.

Senior School (Precinct B)

- **Main Entrance & Front Reception:** Refurbishment of the Senior School Reception and upgrade of the Main Entrance, including replacement of vehicular access with pedestrian friendly access and associated landscaping.
- **Year 8 Learning Centre:** Expansion and refurbishment of Level 3 of the North Wing to provide a new learning hub and staff areas for Year 8.
- **Traffic Management:**
  - Reconfiguration of the main forecourt to provide a dedicated bus parking area for set-down/pick-up, separate carpark area and separate pedestrian pathway.
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- **Bus & Carparking Structure:**
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  - Existing = 372 students
  - 10 Year Forecast = 445 students
- Senior School (Year 7 to Year 12)
  - Existing = 543 students (including 148 boarders)
  - 10 Year Forecast = 690 students (including 190 boarders)

The proposed development will be staged, as the School will continue to operate during the various project works. Proposed staging will be discussed within the EIS.

Further detail of the proposed works is provided in the subsections below and within **Appendices B – CC**. A masterplan of the proposal is shown in **Figure 6** below **.**

Figure 6 Masterplan of the Campus

PRECINCT A:

1. EARLY LEARNING CENTRE EXTENSION + ADDITIONAL CARPARKING
2. JUNIOR ScHOOL - ASSEMBLY + GLA'S + TRAFFICABLE ROOF SPACE
3. JUNIOR SCHOOL - GLA'S + TRAFFICABLE ROOF SPACE
4. JUNIOR SCHOOL - VERTICAL CIRCULATION LINK
5. JUNIOR SCHOOL - GLA'S + AMPHITHEATRETRAFFIC MANAGEMENT
9. TRAFFIC MANAGEMEMENT - PROPOSED SECONDARY ENTRY, PICK UP AND DROP OFF AND ELEVATED FOOT BRIDGE

PRECINCT B:

6. SENIOR SCHOOL - MAIN ENTRY RECEPETION +FOYER, ADMINISTRATION +LEADERSHIP OFFICES (LVL 02)
7. SENIOR SCHOOL - MAIN ENTRY FORECOURT, LANDSCAPING + ACCESSIBLE ENTRY RAMP
8. SENIOR SCHOOL -YEAR 8 CENTRE (LVL 03)
10. TRAFFIC MANAGEMENT - PROPOSED PICK UP AND DROP OFF WITH WIDENING OF EXIT ROAD
13. TRAFFIC MANAGEMENT - BUS + CAR PARKING

PRECINCT B (CONCEPT DA):

11. SENIOR SCHOOL - CIRCULATION HUB
12. SENIOR SCHOOL - HUGHES CENTRE

PRECINCT C (CONCEPT DA):

14. BOARDING ACCOMMODATION - EXTENSION

3.2. DESIGN PRINCIPLES

The Architectural Design Statement prepared by BVN identifies the following principles that have informed the proposed detailed design works and the concept envelopes:

- To provide external learning opportunities
- To provide more opportunity for community based and flexible learning environments
- To generate a “heart” of the school
- To improve the staff, work experience across the campus
- To provide more opportunity for community based and flexible learning environments
- To acknowledge the unique opportunities in relation to heritage
- To seek clarity in circulation, internally and externally
- Increase the opportunities for daylight to internal spaces
- Increase the access to views across the campus to maximize the unique harbour view
- To improve accessibility across the campus
- To recognise the importance of the school community and greater community

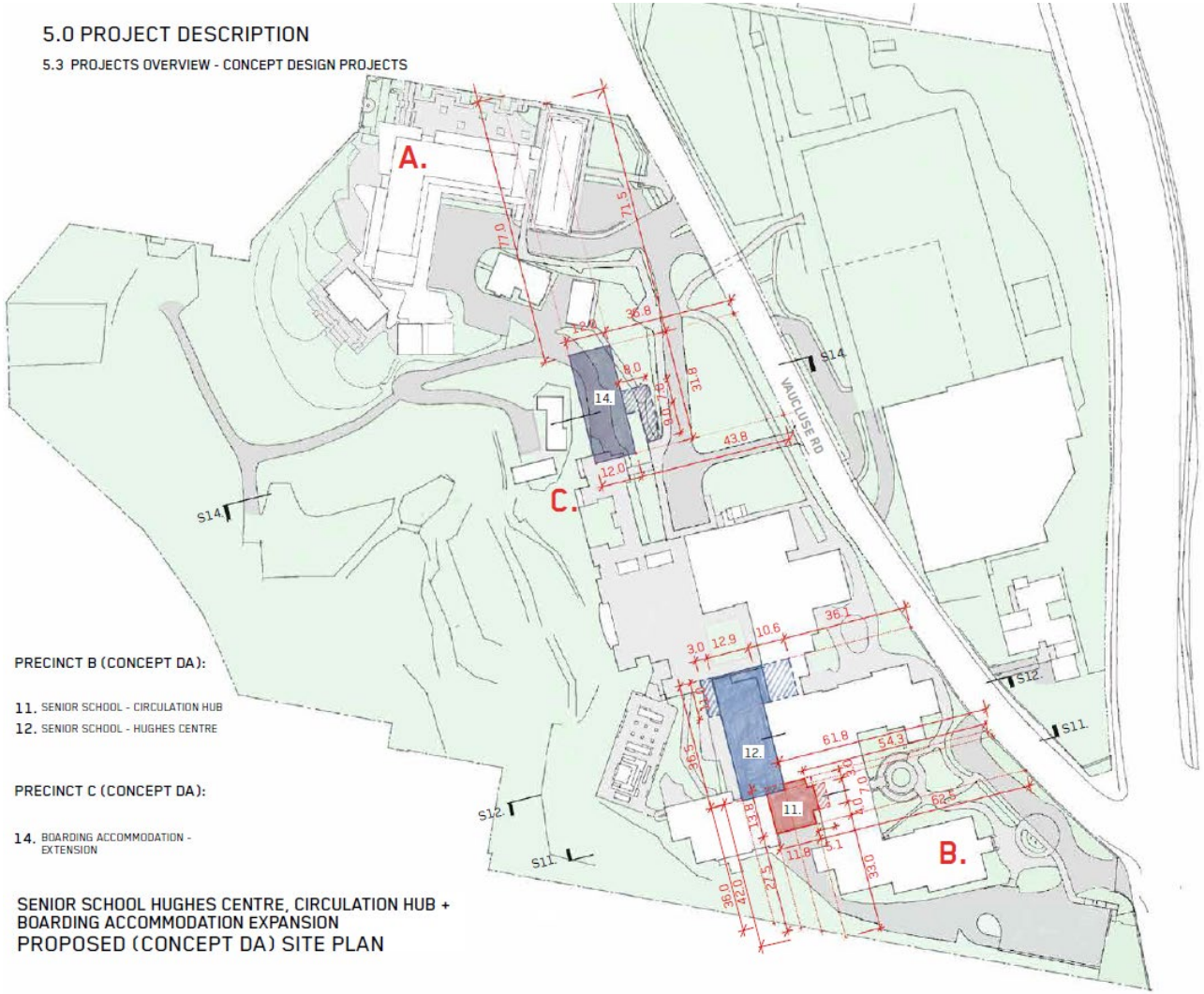
3.3. CONCEPT DEVELOPMENT

A description of the proposed concept development component of the proposal is described in the following sections.

The intention of the Concept Proposal is to establish an approved building envelope within that shown on **Figure 7** and within **Section 3.3** below, which responds to a site’s opportunities and constraints and sets the framework which a detailed building design can be established at a later stage.

.

Figure 7 Concept Development Site Plan



Source: BVN

3.3.1. Extension to the Hughes Centre

It is proposed to revitalise the Hughes Centre to realize its potential as an importance space at the heart of the school. The Hughes Centre is currently underutilised and does not serve a purpose.

As such, it is proposed to extend the building to the east and west to provide for a new multi-purpose space for drama, performing arts, gatherings, music recitals, stage shows, small lectures, junior school assemblies, information evenings, exams, film night dans exhibitions. A subsequent DA will be lodged for internal alteration and detailed design of the extension.

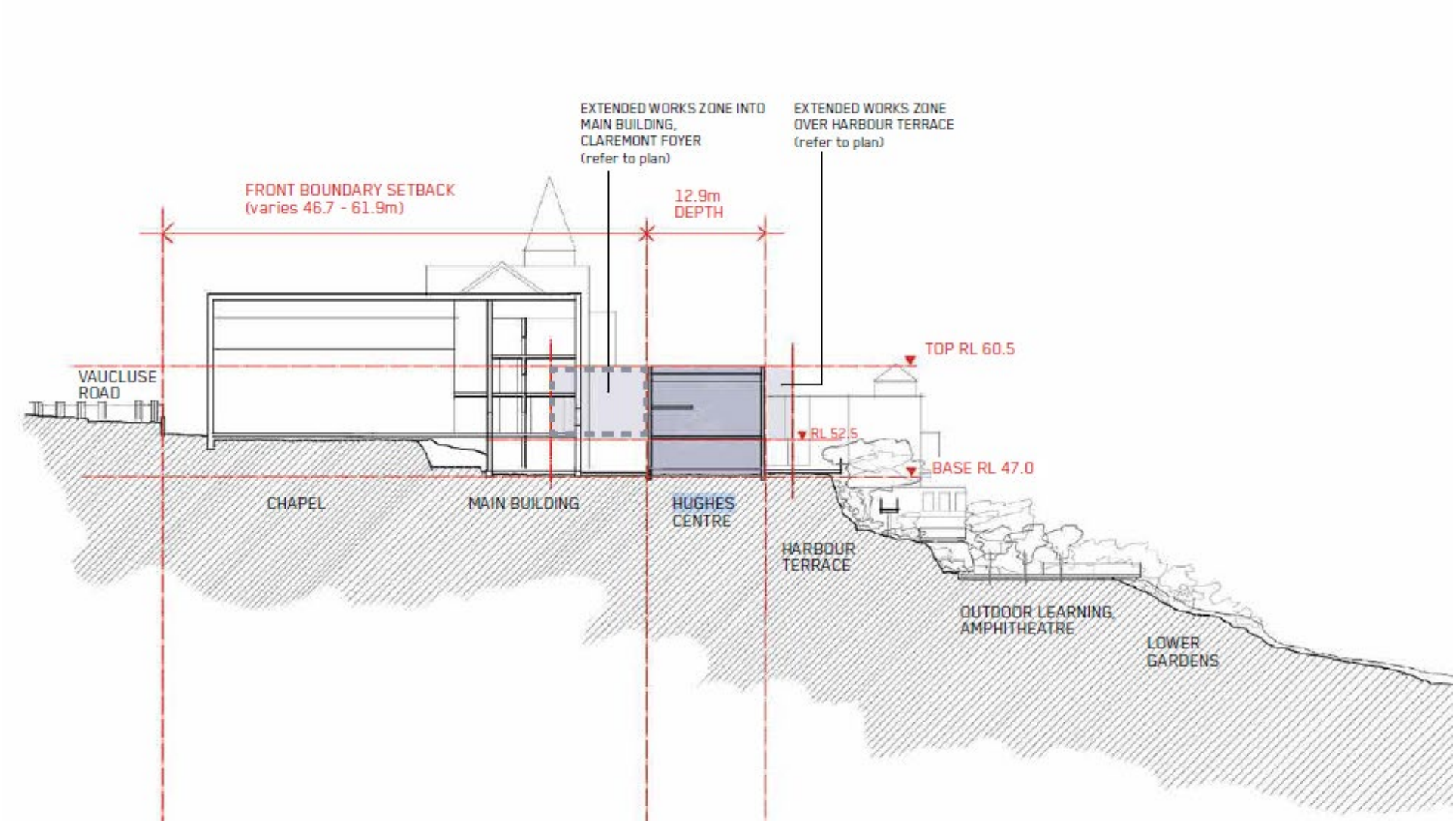
The space will be accessible from several entry points and will serve as an important node within the main heart of the school campus. As illustrated in **Figure 7**, Figure 8 **and** Figure 9, the proposed alterations and additions to the Hughes Centre will not alter the existing height or GFA. The change to the existing building envelope is limited to the balcony on the western side of this building.

The key numerical details sought for concept approval are detailed in **Table 5** below.

Table 5 Key Numerical Breakdown of Hughes Centre

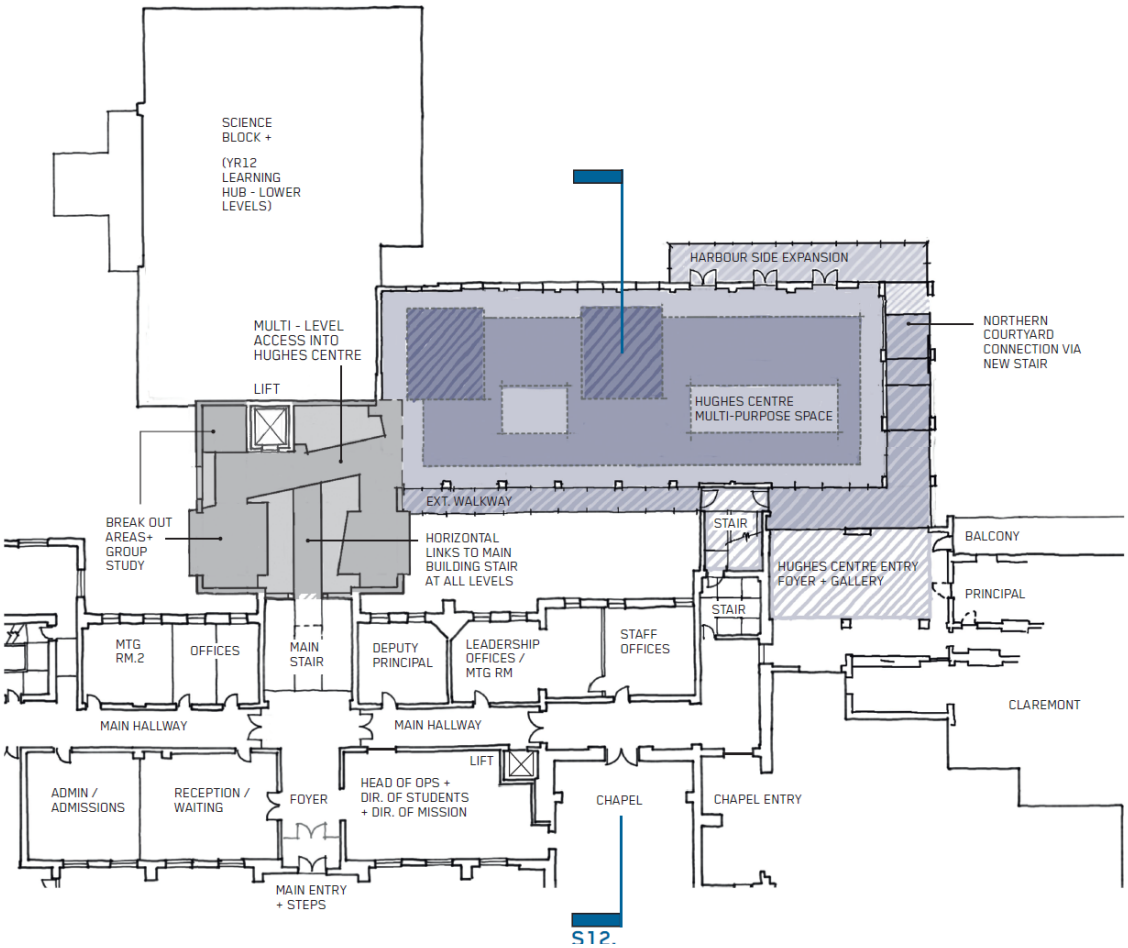
Building Element	**Existing**	**Proposed**
GFA (estimate)	LVL 02: 470 sqm LVL 03: 470 sqm MEZZANINE: 170sqm Max = 1,110sqm	LVL 02: 470 sqm LVL 03: 470 sqm MEZZANINE: 170sqm Max = 1,110sqm No change is proposed to the existing GFA – the reconfiguration may result in a redistribution of GFA but not an increase.
Height	13.5 m 60.5 RL	13.5m (no change) 60.5 RL (no change)

Figure 8 Hughes Centre Extension Envelope – Section Plan



Source: BVN

Figure 9 Hughes Centre Extension Envelope – Floor Plan



Source: BVN

3.3.2. Senior School Circulation Hub

As part of the Concept Development for the school it is proposed to reconfigure the Senior School Circulation Hub. The reconfigurations of the existing three storey circulation hub will provide multiple up/down and cross-site connections to the existing accommodation building, the science lab and the proposed multi-purpose Hughes Centre.

The proposed reconfiguration will be entirely contained within the existing stairwell which is located between the existing circulation hub and Main building. As illustrated in **Figure 7**, **Figure** 10 andFigure 11, the proposed reconfiguration will not alter the existing height or GFA of the Circulation Hub building element.

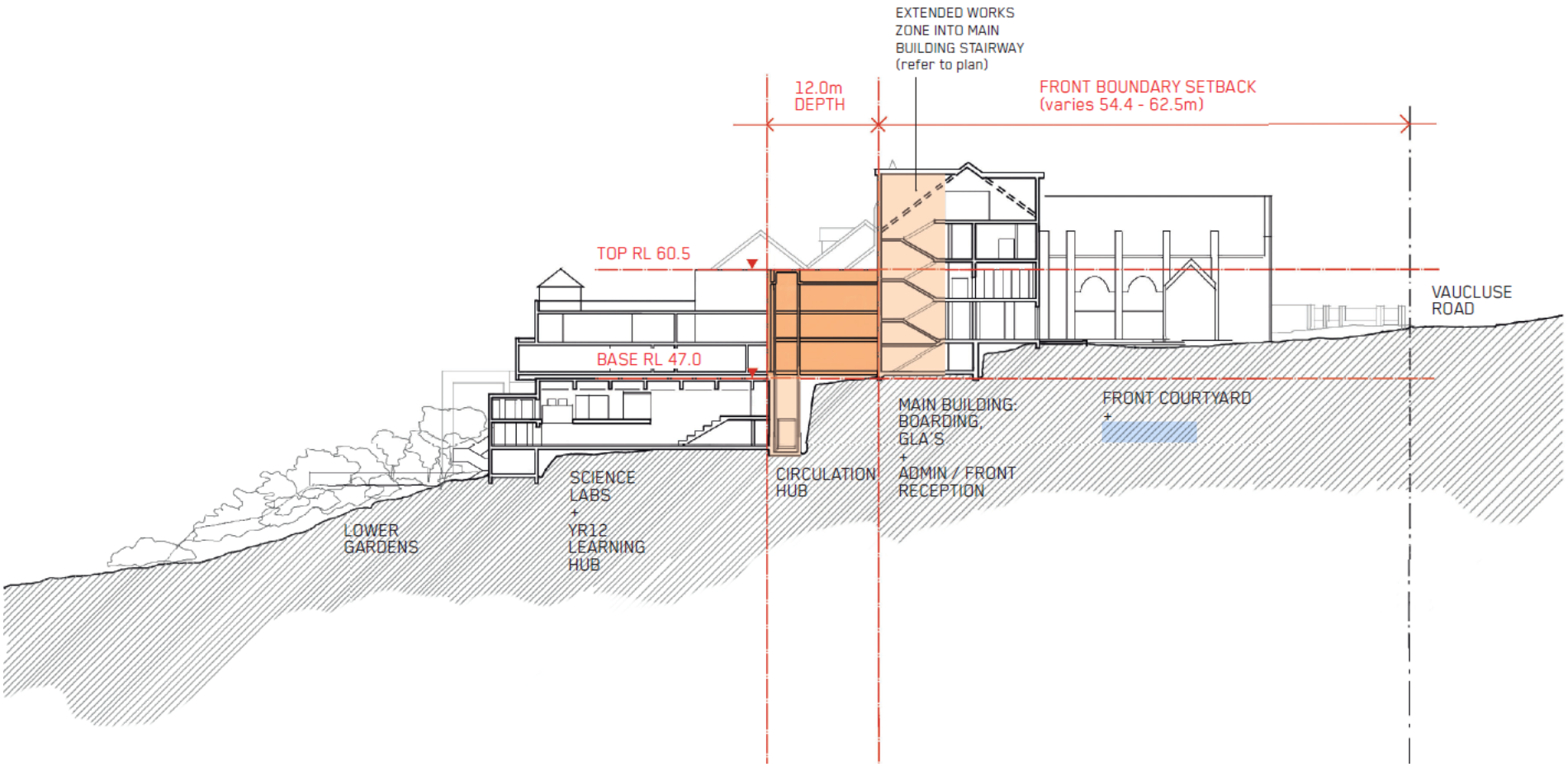
The key numerical details sought for concept approval are detailed in **Table 6** below.

Table 6 Key Numerical Breakdown of Circulation Hub

Building Element	**Existing**	**Proposed**
GFA (estimate)	LVL 01: 160 sqm LVL 02: 160 sqm LVL 03: 160 sqm Max = 480sqm.	LVL 01: 160 sqm LVL 02: 160 sqm LVL 03: 160 sqm Max = 480sqm

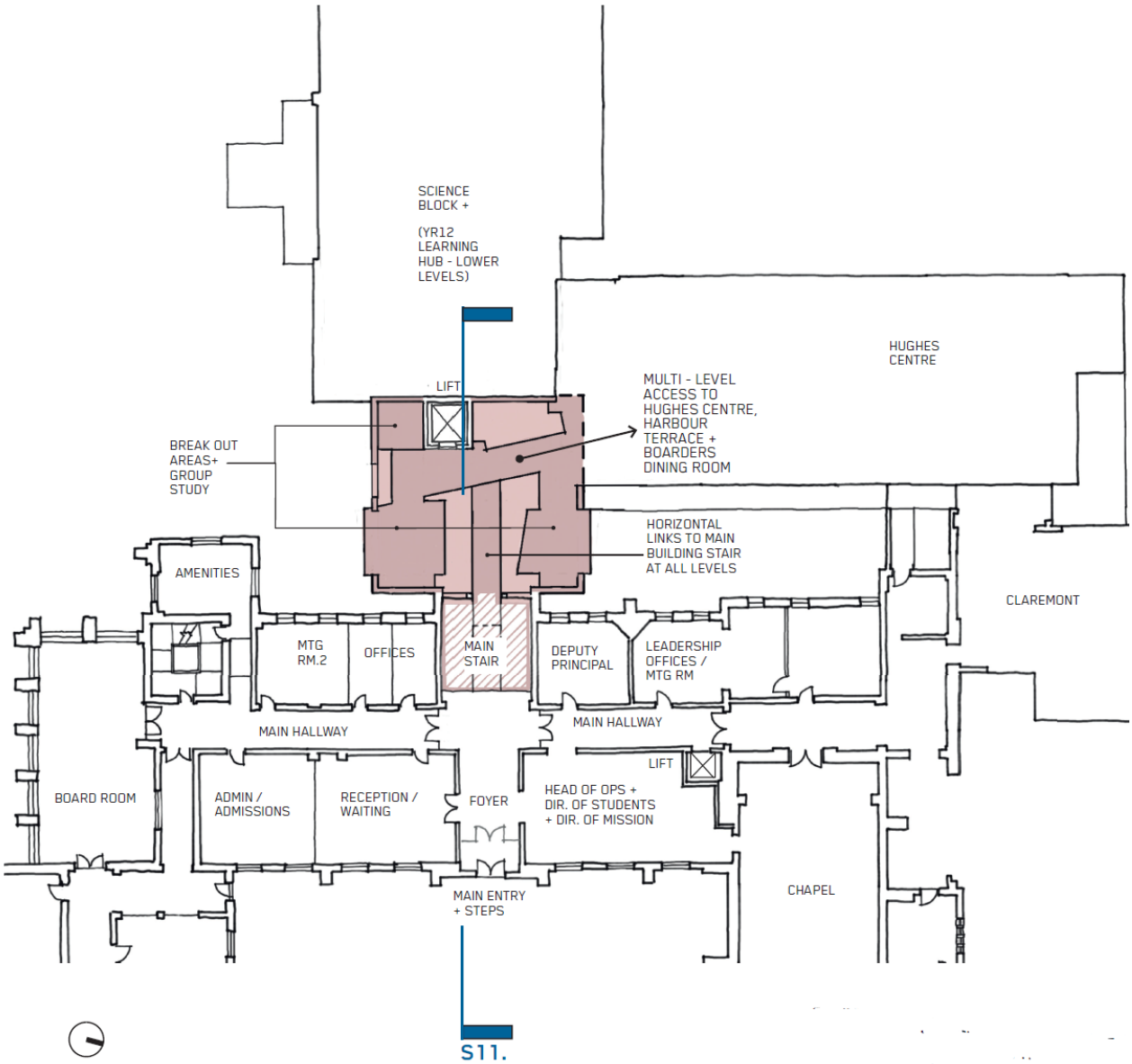
Building Element	Existing	Proposed
		No change is proposed to the existing GFA – the reconfiguration may result in a redistribution of GFA but not an increase.
Height	13.5m 60.5 RL	13.5m (no change) 60.5 RL (no change)

Figure 10 Circulation Hub Envelope – Section Plan



Source: BVN

Figure 11 Circulation Hub Envelope – Floor Plan



Source: BVN

PRECINCT C

3.3.3. Boarding Accommodation Extension

A three-storey building envelope is proposed for a new boarding house aligned to the existing Sheldon House building. It will be connected to the main school campus via a bridge and pedestrian walkway linking the Senior and Junior campuses.

Each level will have single bed dormitory rooms with a western outlook to the harbour or eastern back to the inner garden areas. A central common area on each level will serve as a social gathering space providing a homely lounge feel, with bathroom amenities in close proximity.

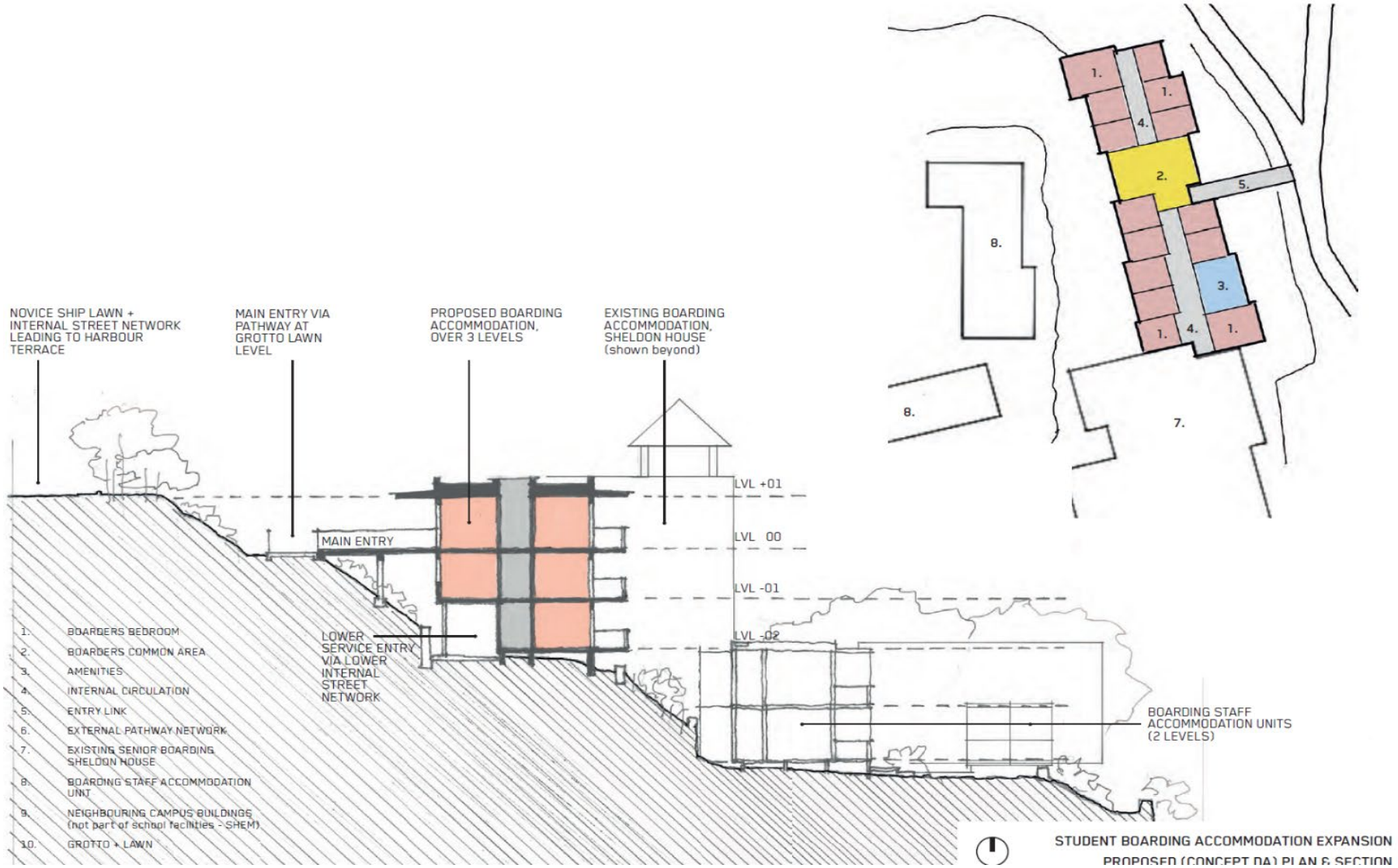
The concept building envelope is proposed to accommodate a maximum gross floor area (GFA) of 1,020sqm and up to height datum of RL 50.5 (13.5m). In addition, and as indicated above, this building will be connected via a bridge and pedestrian walkway which does not constitute floor space and like the concept building envelope would be the subject of a detail development application.

The key numerical details sought for concept approval are detailed in **Table 7** below.

Table 7 Key Numerical Breakdown of Circulation Hub

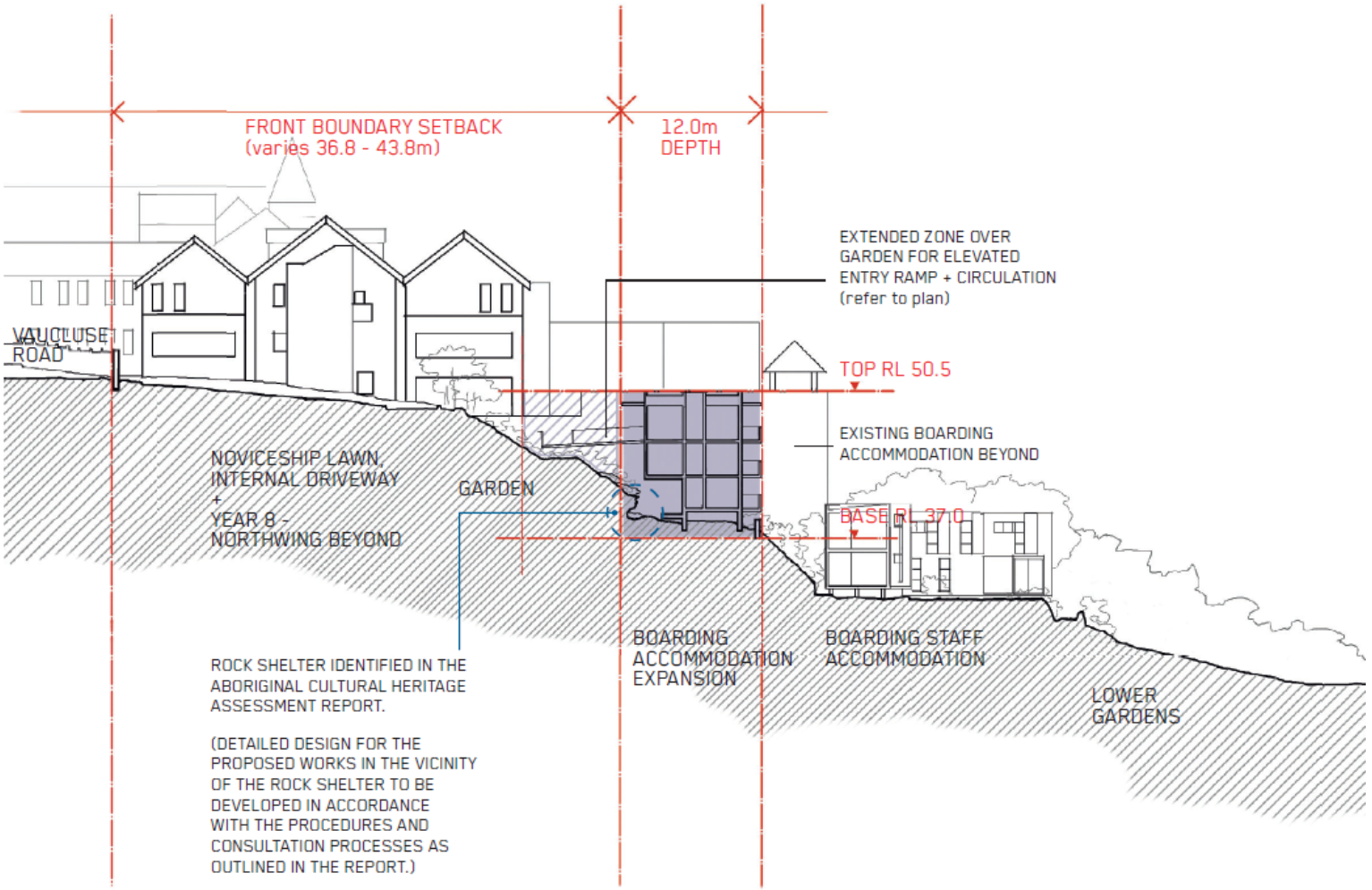
Building Element	**Proposed**
GFA (estimate)	LVL 01: 250 sqm LVL 02: 385 sqm LVL 02: 385 sqm Max = 1,020sqm
Height	13.5m 15.5 RL

Figure 12 Boarding House Envelope – Section Plan 1 of 2



Source: BVN

Figure 13 Boarding House Envelope – Section Plan 2 of 2



Source: BVN

3.4. DETAILED DEVELOPMENT

A description of the proposed detailed development component of the proposal is described in the following sections.

3.4.1. Junior School and Early Learning Centre (Precinct A)

The Junior School and Early Learning Centre are located in Precinct A. The redevelopment of the Junior School and Early Learning Centre has been guided by the opportunities identified in a Master Plan report prepared in 2013 by BVN Architects.

The proposal seeks to undertake alterations and additions to the Junior School Building (containing three wings) and extend the existing ELC currently contained within Sophie's Cottage. The proposed development includes the following works:

Early Learning Centre Extension

- Two storey extension to the ELC, providing new ELC spaces, rooms and amenities. The extension will provide a new lift and stair, enabling better access to the Junior School.
- Modified and expanded outdoor play areas with shade structures and accessible ramps.

Junior School Refurbishment and Extension & Elevated Pedestrian Bridge/Pathway

West and North Wings (Four Storeys):

- Refurbishment of Level -02 to provide
  - West Wing: a multipurpose space that can be used for Assemblies, Music or After School Care.
  - North Wing: a learning hub, general learning area (GLA), quiet staff rooms and amenities.
  - New rooftop outdoor learning space.
- Alterations and addition to Levels -01 and 00 to enable:
  - Upgrade of the North Wing Courtyard with shading, play areas and access to the Sundial Terrace.
  - Reconfiguration of the West and North Wings to provide GLA – 2 x 3 room modules (year group) including informal expansion zones, quiet work pods, wet area zones, informal learning areas, flexible breakout spaces, meeting rooms, storage zones, a central learning hub, amenities and vertical circulation links.
  - New pedestrian link bridge from central node of junior School building across the lower driveway network, and elevated footpath connection back to the senior school.
- Upgrade of Level 01 to create a trafficable roof with outdoor learning areas, vegetable gardens, landscaped roof zones and seating areas and connection to the East Wing.

Junior School – East Wing (Three Storeys):

- Refurbishment of the East Wing to provide:
  - Levels 01 and 02: GLA – 2 room module (year group), internal amphitheatre connecting to LVL 02, wet area, Stem space, quiet/staff room, amenities, common area including Kitchenette and new vertical circulation links.
  - Level 03: GLA – 2 room module (year group), quiet collaboration spaces, common area including Kitchenette, new vertical circulation links and outdoor covered terrace

The proposed alterations, additions and reconfiguration to the Junior School and ELC will result in the provision of 28 additional on-site at-grade car parking spaces.

Figure 14 Photomontage of Precinct A

The external materials and finishes have been selected to maximise natural daylight penetration, enable natural ventilation and articulate and reclad the existing building. The proposal includes the following materials:

- Perforated aluminium screening.
- Concrete columns, awnings and paving.
- Wall tiles.
- Glazing.
- Steel pop out window frames.

Figure 15 Junior School External Finishes


1. PERFORATED SCREEN - ALUMINIUM, FINISH - POWDERCOATED WHITE


2 - CONCRETE COLUMNS AND AWNING


3 - INTERIOR WALL TILES


4 - GLAZING 1

5 - GLAZING 2

6. POPOUT WINDOW FRAMES - STEEL, FINISH - POWDERCOAT WHITE


7. GLAZING FRAME - ALUMINIUM, FINISH - POWDERCOAT CHARCOAL


8. CONCRETE PAVING

1. ROOF PAVILION SOFFIT/ ROOF TRIM - STEEL, FINISH - POWDERCOAT WHITE

9. ROOF PAVILION GLAZING FRAME - ALUMINIUM, FINISH - POWDERCOAT WHITE

Senior School (Precinct B)

Upgrade of Main Entrance and Front Reception

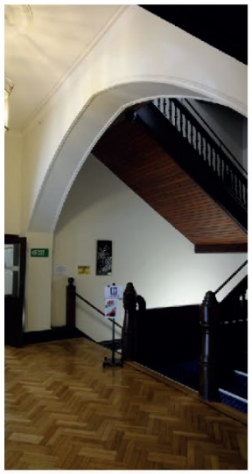
The proposal seeks to enhance and improve the existing main entry, foyer and reception space located at the Senior School building. The proposed upgrades to the building and forecourt area will provide:

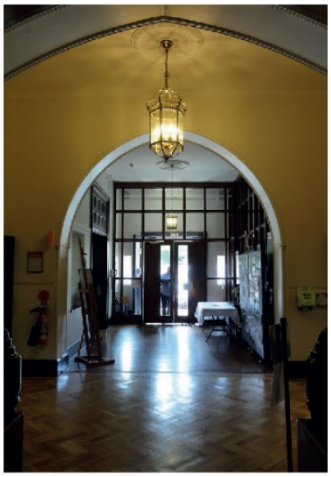
- Building enhancements that improve and create a more inviting image and interface between the school and broader community.
- Design interventions for heritage fabric in the main entry, foyer and receptions spaces to be preserved, enriched, reinstated and celebrated.
- Better accessibility via new ramps, pathways, flush finished floor levels and automatic doorways.
- Clearer circulation and wayfinding to the established main internal corridor and stairway links to other parts of the campus.
- Opportunities through design for increased daylight to the internal foyer & reception areas; and
- Interior re-design of the main reception and administration offices that will benefit staff, students and visitors.

Figure 16 Central Wing

Picture 1 Entrance

Source: BVN

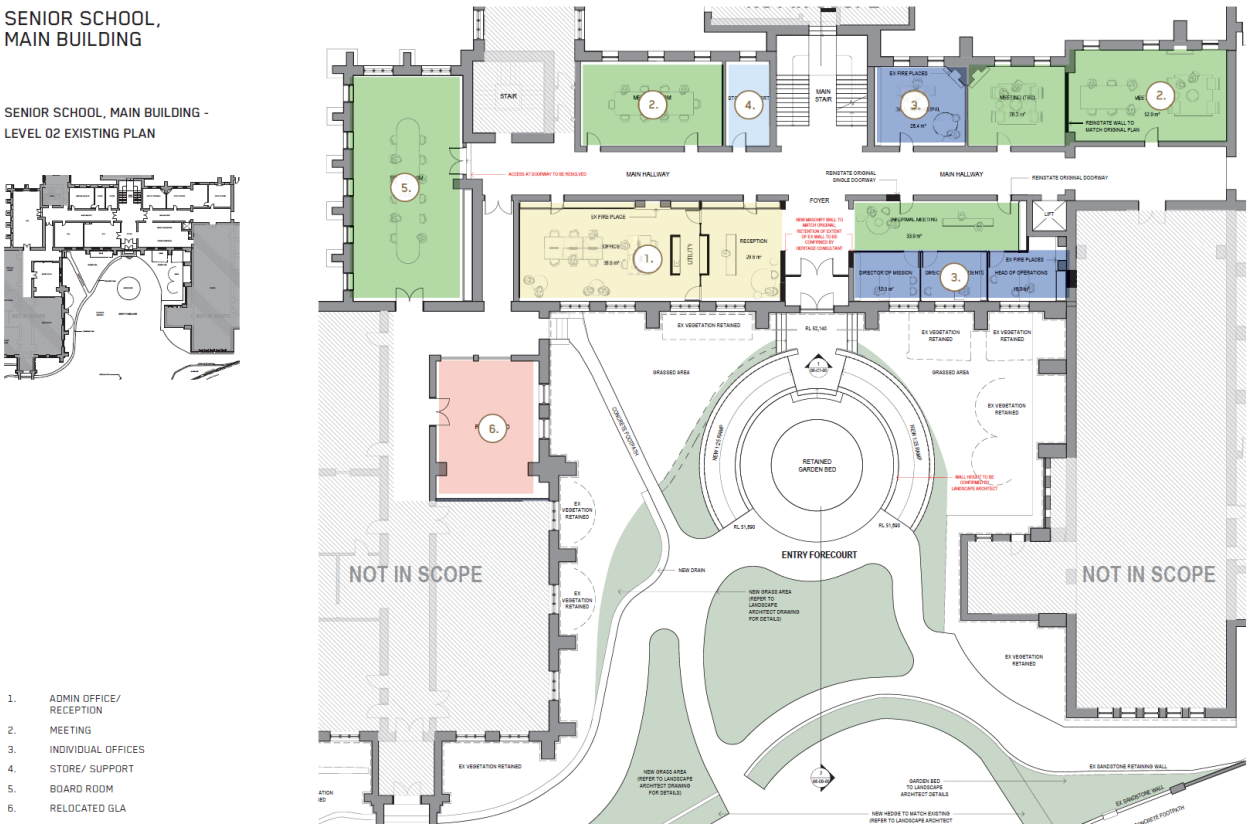




Picture 2 Foyer

Source: BVN

Figure 17 Upgrade to Main Entry

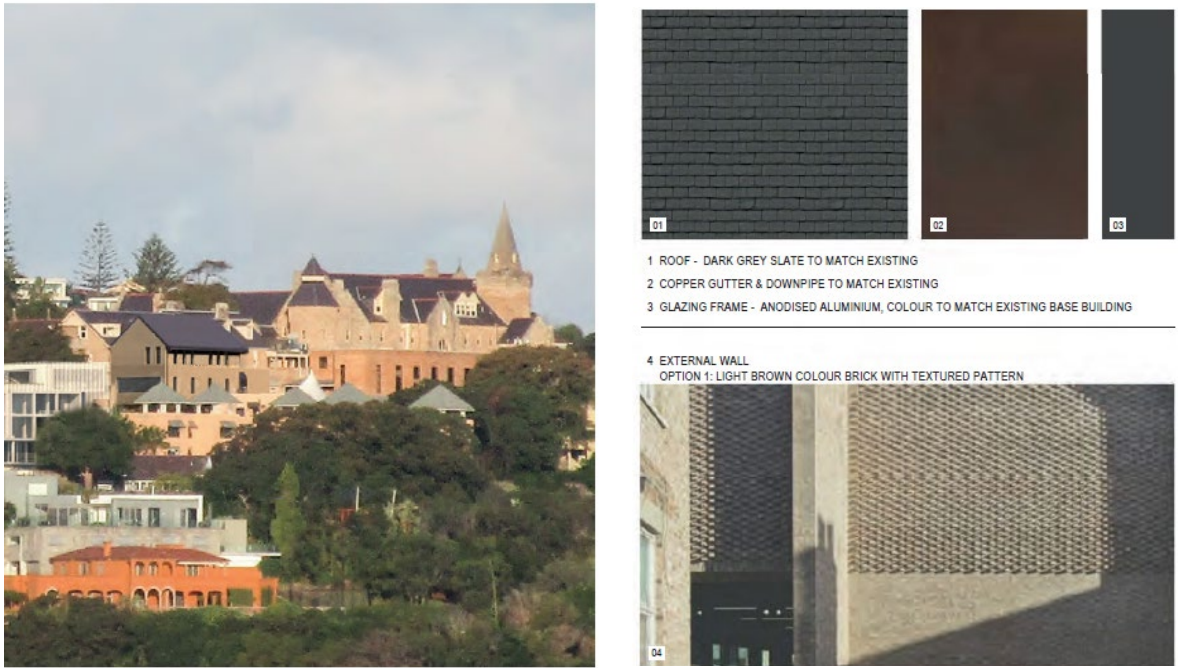


Year 8 Learning Centre

The proposed addition to the North-Wing of the Senior School seeks to undertake the following works to enable the new Year 8 Learning Hub:

- Removal of external rendered walls, windows, lightweight partitions and metal deck roof.
- Addition of a new communal learning hub consisting of 3-5 GLA's with operable walls, student lockers, a common area with kitchenette, amenities, outdoor terrace, quiet room and coordinator office

Figure 18 Year 8 Learning Hub Photomontage and External Finishes

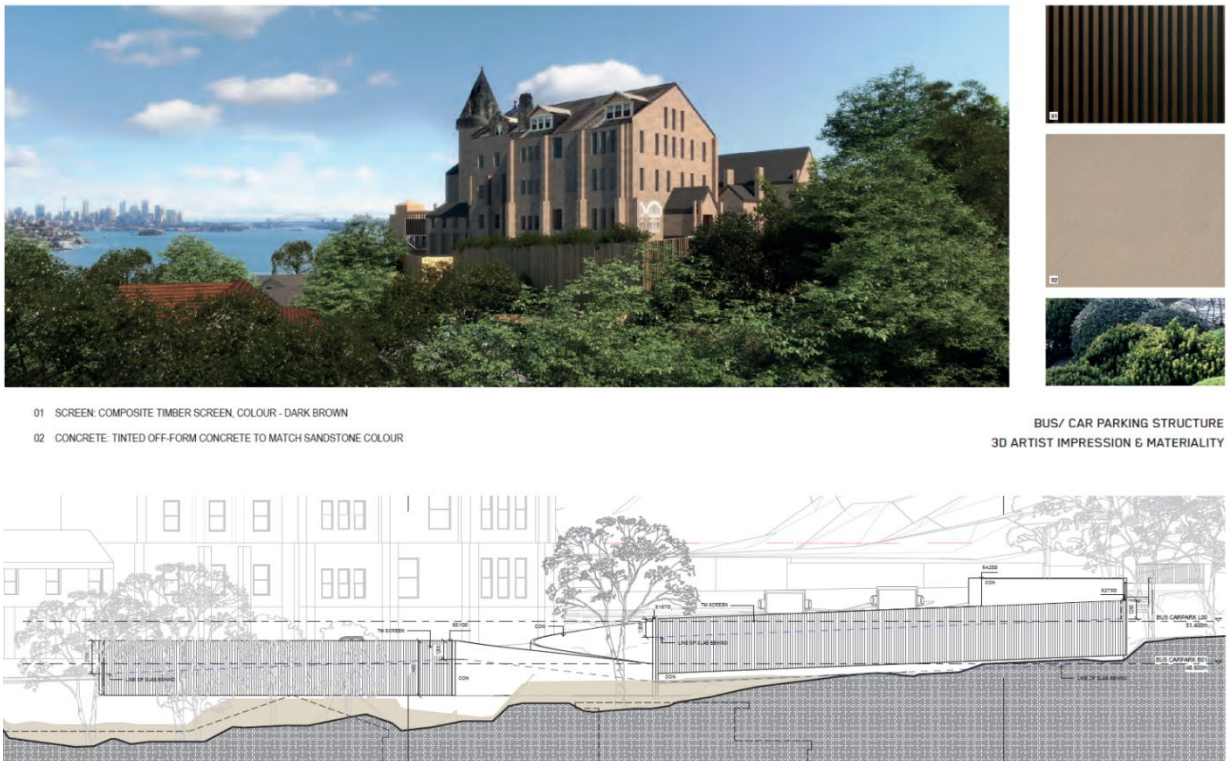


New Bus Bays and Basement Car Park

The proposal seeks to construct a one storey basement car park for 30 additional staff car parking spaces. Additional on-grade minibus bays are provided directly above the basement, containing 7 spaces. The new bus bays and basement car park is located to the south eastern corner of the site.

The basement car park and bus bays will increase the school's car parking capacity and relocate the minibus parking area away from the main forecourt. This will reduce congestion, improve pedestrian safety and create a more welcoming entry to the school campus.

Figure 19 Proposed Bus & Car Park Structure



Source: BVN

3.5. STUDENT CAPAPCITY INCREASE AND ASSOCIATED TRAFFIC MANAGAMENT MEASURES

As previously stated, KRB has an existing student cap of 970 students which was imposed via a condition of consent (DA550/2016/3).

KRB is seeking to progressively increase the maximum student population cap for the school from 970 to 1,205 students over the next 10 years. The 1,205 number also incorporates a buffer allowing for future variances to the forecast.

To account for this staged growth, KRB has prepared a masterplan, staging plan and undertaken comprehensive traffic generation modelling and analysis to determine the potential impacts of long-term growth of the school population.

In addition, KRB has worked with CBRK to prepare a Green Travel Plan (Error! Reference source not found.), which builds on the existing traffic management plan and will support the increase to the current student population. This includes a series of works, strategies and operational protocols which will support the staged increase in student population. Refer to **Section 3.9** and **Appendix R** for detailed information on the measures proposed to address any impacts caused by the school on the local network.

This SSDA seeks a renewed student cap and also seeks to modify the previous Development Consent DA550/2013/3 by deleting Condition I.5 that references the current cap in accordance with clause 4.17(1)(b) of the *Environmental Planning and Assessment Act 1979*. The relevant clause is described below (**our emphasis added**):

> ***4.17 Imposition of conditions*** *(cf previous s 80A)*
>
> *(1) Conditions—generally a condition of development consent may be imposed if—*
>
> *(a) it relates to any matter referred to in section 4.15(1) of relevance to the development the subject of the consent, or*
>
> *(b)* ***it requires the modification*** *or surrender* ***of a consent granted under this Act*** *or a right conferred by Division 4.11* ***in relation to the land to which the development application relates,*** *or*

Accordingly, it is anticipated that the consent associated with the subject SSDA would include a condition that establishes the revised maximum student cap of 1,205 students for Kincoppal-Rose Bay.

This anticipated growth will be distributed across the school as follows, however is subject to fluctuate across the different school precincts in response to demand:

- Early Leaning Centre
  - Existing = 40 students
  - 10 Year Forecast = 70 students
- Junior School (Kindergarten to Year 6)
  - Existing = 372 students
  - 10 Year Forecast = 445 students
- Senior School (Year 7 to Year 12)
  - Existing = 543 students (including 148 boarders)
  - 10 Year Forecast = 690 students (including 190 boarders)

The proposed development will be staged, as the School will continue to operate during the various project works. Proposed staging is discussed in **Section 6.6** of the EIS.

3.5.1. Operational Details

School Hours of Operation

The school operation hours will be maintained and are detailed in **Table 8** below.

Table 8 School Hours of Operation

	Monday to Friday	Term Dates	Extended arrival Departure times
Senior School	▪ Classes Commence: 8.15am ▪ Classes Conclude: 3.10pm	▪ Term 1: late January to late March ▪ Term 2: mid April to mid June ▪ Term 3: mid July to mid September ▪ Term 4: early October to early December	N/A
Junior School	▪ Classes Commence: 8.20am ▪ Classes Conclude: 3.10pm	▪ Term 1: late January to late March ▪ Term 2: mid April to mid June ▪ Term 3: mid July to mid September ▪ Term 4: early October to early December	N/A
Early Learning Centre	▪ Classes Commence: 7.30am ▪ Classes Conclude: 6.00pm	The Early Learning Centre operates for 48 weeks per year from mid-January to mid-December.	▪ Drop-off: 7.30am - 9.30am ▪ Pick-up: 2.30pm - 6.00pm

Before and After School Care Services

KRB also provides a before and after school program for Junior School students utilising classroom facilities and outdoor areas of the Junior School Campus. Timeframe for the services are as follows:

- Before School Care: 6.30am – 8.20am
- After School Care: 3.00pm – 6.00pm

Community Use of School Facilities

KRB has two facilities within the campus which are used by the Community. The first is the indoor 25 metre swimming pool – the Blann Family Pool. This pool provides swimming training for the community on weekdays as follows:

- Morning Squad: 5.30am – 9.00am
- Afternoon Squad: 4.00pm – 7.30pm

The second facility used by the community is the school's heritage Chapel. The Chapel hosts weddings on Saturday afternoons, generally around 12 – 15 times per year.

3.6. LANDSCAPING

3.6.1. Landscape Concept and Principles

A Landscape Design Strategy has been prepared by BVN and CAB Consulting and is attached at **Appendix G.** The landscape design of the school is based on the following key strategies:

Landscape Plans have been prepared by CAB Consulting and are attached at Appendix F. The proposed landscape design integrates open spaces with appropriately sized built elements to create a landscaped

environment which both respects the existing scale of the built environment and the contemporary scale of the architectural nature of the proposed development.

The landscape design for the Masterplan projects has employed three major principles:

- Conservation
- Interpretation; and
- Adaptation.

These principles have arisen from an understanding of the historical evolution of the place known now as Kincoppal-Rose Bay and its cultural significance as an evolving cultural landscape associated with the Sisters of Mercy Convent School and as a significant educational institution in Sydney now known as Kincoppal-Rose Bay.

The master plan projects are centred around two main areas of the school property. These areas are the Main Entrance Courtyard and Senior School complex with access off the junction of New South Head Road and Vaucluse Road and the Junior School complex together with Sophie's Cottage and Early Learning Centre to the north of the property and accessed off Vaucluse Road.

3.6.2. Landscape Design

The landscape design integrates the spatial structure of the open spaces used for both play and learning opportunities for individuals and groups of students together with the creation of built forms of an appropriate scale with a range of vegetation which both respects the existing scale of the built environment and the contemporary scale of the architectural nature of the proposed development.

The planting design through the manipulation of tree canopy, shrub layers and ground cover layers are designed to visually screen both off site buildings and on-site development, provide varying microclimates and provide shelter and shade.

The use of selected sandstone for walls, paving and steps is intended to create a sense of harmony with the distinctive sandstone fabric of existing buildings and retaining walls as well as the natural sandstone outcrops found throughout the property.

Existing vegetation and selected significant garden areas, including built fabric, are proposed to be conserved where possible. Previous settings are interpreted through contemporary design compositions to give a greater sense of vegetated space and integrated into learning facilities through adaptation of levels to create socially and educationally useful facilities for gathering and seating whilst maintaining a human scale.

The proposed vegetation as layers of ground cover, low and tall shrubs and trees reflects a mixture of exotic species and indigenous species building upon the established landscape character of the place as institutional parkland.

3.6.3. Tree Removal

An Arborist Report has been prepared by *Botanics Tree Wise People* and is attached at **Appendix J**.

A total of twenty-six (26) trees have been assessed using Visual Tree Assessment (VTA) criteria and notes. As required under *Clause 2.3.2 of the Australian Standard 4970 (2009)* for the Protection of Trees on Development Sites, each tree has been allocated a Retention Value based on the tree's Useful Life Expectancy and Landscape Significance with consideration to its health, structure, condition and site suitability. All trees have been allocated 1 of 4 Retention Values which are defined as follows:

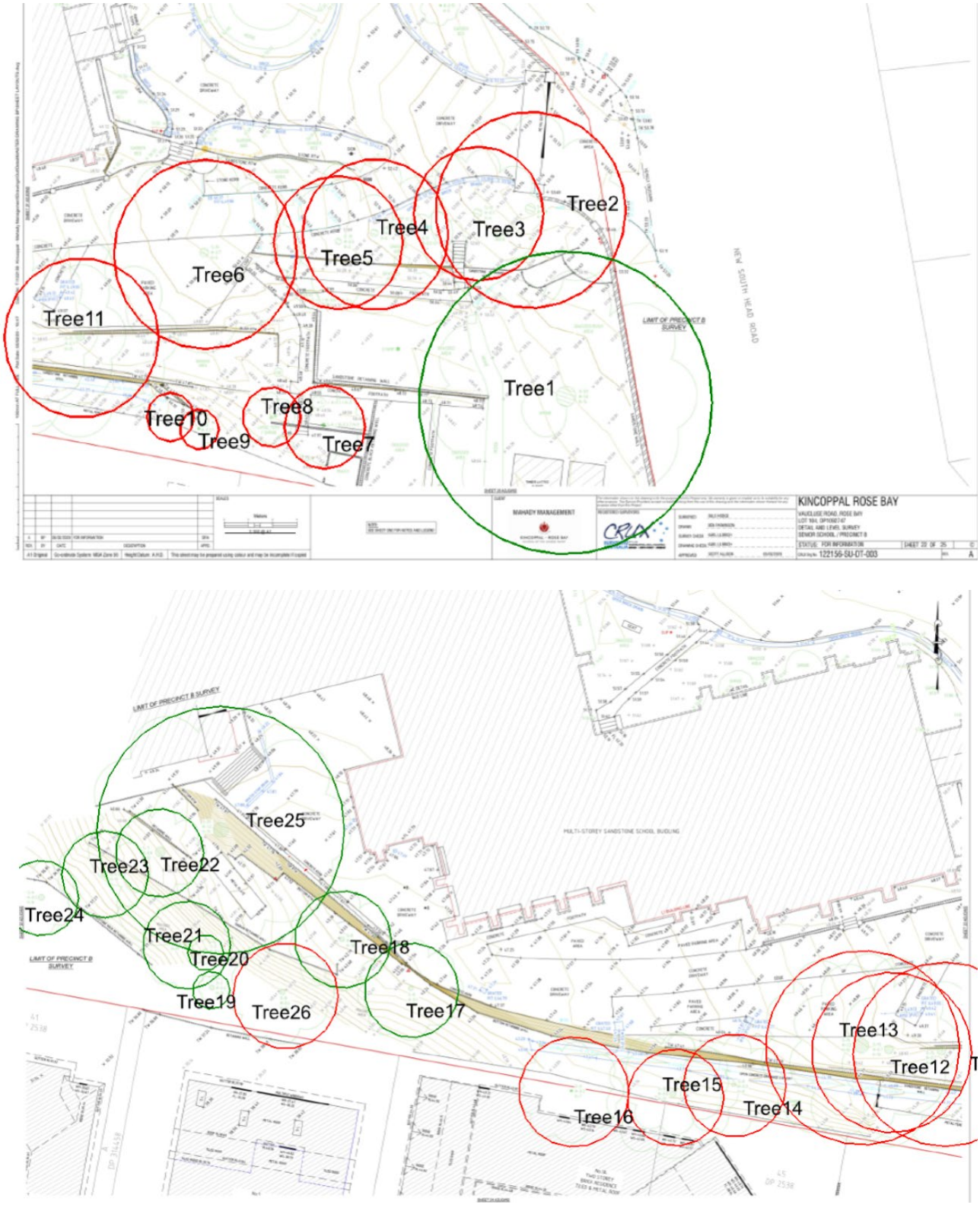
- High value – Priority for Retention
- Moderate Value – Consider for Retention
- Low Value – Consider for Removal
- Remove – Recommended for Removal irrespective of works.

As outlined in **Table 9** below, it is proposed to remove 16 of the 26 trees that have been assessed. None of the trees to be removed have a high value retention value.

Trees 1, 17, 18, 19, 20, 21, 22, 24, 24 and 25 will be retained and protected through the implementation of Tree Protection measures such as the establishment of a Tree Protection Zone (TPZ), construction of tree protection fencing, informative signage and appropriate mulching.

Figure 20 and **Figure 21** below illustrated the trees to be removed and retained. The trees circled in red are to be removed and the trees circled in green are to be retained.

Figure 20 Tree removal - Junior School



Source: Botanics Tree Wise People

Table 9 Tree Removal Schedule

Tree Number	Species	Maturity	Retention Value
#2	Grevillea robusta/Silky Oak	Semi mature-early mature	Moderate
#3	Erythrina x skyesii/Coral Tree	Well established	Low
#4	Podocarpus elatus/Plum Pines	Mature	Moderate
#5			Moderate
#6			Moderate
#7	Celtis sinensis/Hackberry	juvenile	Remove
#8	Howea forsteriana/Kentia Palm	Semi mature	Moderate
#9	Nerium oleander/Oleander	N/A	Remove
#10	Harpephyllum caffrum	small	Low
#11	Harpephyllum caffrum	Well established-mature	Moderate
#12			Moderate
#13			Moderate
#14	Populus alba/Silver Poplars	Dead	Remove
#15		mature	Low
#26	Harpephyllum caffrum	Semi mature	Low

3.7. SIGNAGE

As illustrated on page 58 of the Architectural Design Report attached at **Appendix E**, the proposal seeks consent to upgrade the existing wayfinding signage for the school as well as the existing (double sided) blade wall sign at the entrance to the Junior School which is best defined as a 'business identification sign'.

The upgrading of the existing blade wall sign at the entrance to the Junior School involves a new surface covering involving a sandstone coloured render (replacing the blue) and signage to match the existing dimension. As assessment against Schedule 1 of SEPP 64 has been completed in **Section 5.5** of this Report.

3.8. SITE ACCESS

3.8.1. Pedestrian and Cyclist Access

Pedestrian and cyclist access to and from the site will be maintained. Pedestrian access within the campus will be enhanced through the implementation of the following upgrades:

Precinct A

- Installation of an elevated pedestrian pathway/bridge for access to the Junior School (a developed design element to enhance pedestrian safety).

Precinct B

- Replacement of vehicular access with pedestrian friendly access and associated landscaping
- Reconfiguration of the main forecourt to provide a separate pedestrian pathway.

3.9. PROPOSED TRAFFIC MEASURES

3.9.1. Vehicular Access

Vehicular access to the school will be maintained via the existing driveway crossings on New south Head Road and Vaucluse Road. In addition, a new driveway crossing will be provided on Vaucluse Road providing access to the new on-site student set-down and pick-up area on the northern side of the senior school building. The new driveway will only be available during the morning and afternoon periods to provide for the set-down and pick-up of students. The new access driveway will be closed at other times. Access to the school during the day will therefore be maintained via the existing access driveways.

3.9.2. New Bus and Car Parking

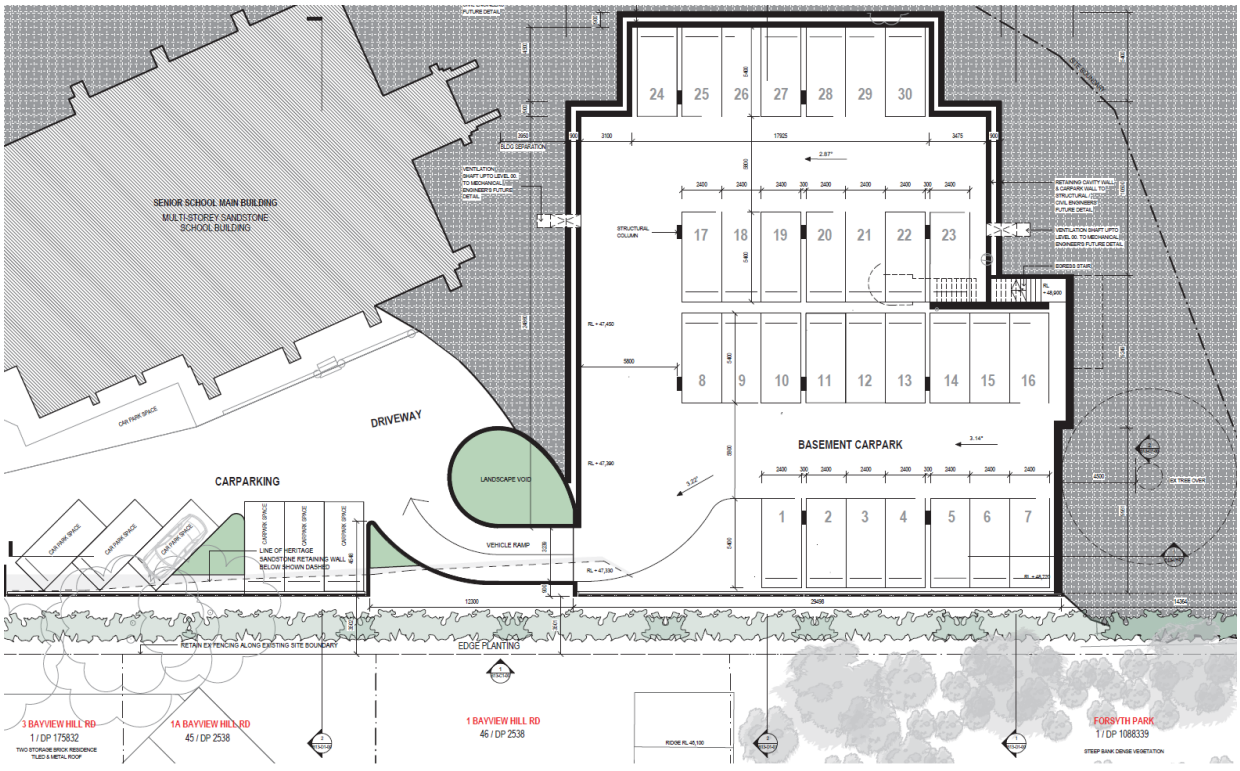
The development will provide an additional 45 on-site car parking spacing for staff and visitors. The spaces will be provided as follows:

- 19 spaces within the new basement car park adjacent to the main entrance to the school on New South Head Road, beneath the new bus parking area.
- 5 visitor spaces within the reconfigured senior school forecourt.
- 6 spaces within the new on-site student set-down and pick-up area on the northern side of the senior school; and
- 15 spaces on the western side of the Early Learning Centre.

Appropriate disabled parking will be provided in accordance with the WDCP 2015 accessibility requirements. Therefore, the proposed parking provisions satisfy the WDCP 2015 requirements for parking. Further

A new minibus parking area will be provided adjacent to the main entrance to the school on New South Head Road. The new facility will provide for seven KRB minibuses, plus appropriate draw-in and draw-out manoeuvring areas for buses.

Figure 21 Proposed Basement car park



Source: BVN

3.9.3. Kiss and Ride Facilities

To mitigate queuing and traffic congestion associated with the set-down and pick-up operations a new on-site student set-down and pick-up facility will be provided. The new facility (located off Vaucluse Road) will accommodate 12 vehicles and will improve the efficiency of the existing system, particularly during the peak morning and afternoon periods. Further to this, the additional facility will improve on-road traffic conditions and reduce traffic queues on Vaucluse Road.

The existing on-site student set-down and pick-up operations at the junior school will be maintained. During the morning and afternoon peak periods, staff will distribute students by year group to one of the two pick-up/drop-off locations

3.10. WASTE

3.10.1. Construction Waste Management

A Construction Waste Management (CWMP) has been prepared by Mahady Management and included in the Construction Management Plan attached at **Appendix X**.

The CWMP outlines the various types of demolition and construction waste anticpiated to be produced by the proposal. The Plan identifies the amount of waste to be generated and the treatment method for each type of waste be that on-site reuse, recycle or disposal.

3.10.2. Operational Waste Management

3.10.2.1. Existing & Projected Waste Generation

A Waste Management Plan (OWMP) has been prepared for the School and is attached at **Appendix V**. The OWM has been prepared in accordance with the relevant state and local legislation and guidelines.

The proposal will result in an increase of the school population from 955 to 1,205. This represents a growth of 25%. This planned growth will occur over a 10-year time period. Based on a pro-rate increase in waste, it is predicted that the proposed development will result in an increase in waste as summarised **Table 10** below.

The existing loading areas within the main school campus and MTC building will be maintained. A new waste collection area will be provided adjacent to the existing junior school access driveway. It will provide for small to medium rigid trucks to enter the site, circulate and exit in a forward direction. The access driveway, loading and manoeuvring area will be provided to accommodate swept paths of these vehicles in accordance with AS 1890.2-2002.

Table 10 Existing and Projected Waste Generation

Waste Stream	Bin Size		No. of Bins		Clearance Frequency		Weekly Volume	
	Existing	**Projected**	**Existing**	**Projected**	**Existing**	**Projected**	**Existing**	**Projected**
Food Organics	240 Litre	240 Litre	3	4	1/week	1/week	720 Litres	960 Litres
Cardboard	1,100 Litre	1,100 Litre	4	3	1/week	2/week	4,400 Litres	6,000 Litres
Mixed Waste	Included in General Waste	1,100 Litre	Included in General Waste	3	Included in General Waste	2/week	Included in General Waste	6,000 Litres
General Waste	16,000 Litre Compactor	10,000 Litre Compactor	1	1	1/fortnight	1/fortnight	8,000 Litres	5,500 Litres

3.11. SITE SERVICES

An Electrical Infrastructure Management Plan has been prepared by Northrop and is attached at Appendix Y.

The site is bound by Ausgrid high-voltage (HV) infrastructure (11 kV cabling) on the eastern boundary roads, New South Head Road and Vaucluse Road, downstream of the zone substation. Ausgrid public lighting services also exist on the two boundary streets. The existing Senior School site is supplied by one instance of HV electrical utility infrastructure (kiosk substation) from Ausgrid. Based on the extent of works proposed the existing padmount substation S.4621, and associated electrical infrastructure, is likely to be sufficient to carry the minor uplift in demand.

3.12. FLOODING

Henry and Hymas obtained a copy of Woollahra Municipal Council's Flood study report for Rose Bay (prepared by WMA water).

The Flood study catchment comprises of areas within the suburbs Bellevue Hill and Rose Bay with a very small portion of the suburb Vaucluse included. The majority of the flood study, however, covers Rose Bay and Bellevue Hill sub-catchments and also New South Head Road. It is understood that New South Head Road captures and conveys the majority of the overland flow from the upper eastern catchment of approximately of 8.56 Ha. The overland flow path is understood to be along the eastern side of New South Head Road along the kerb and gutter.

According to the flood study for Rose Bay, the overland flow for the New South Head Road is in the range of between 5 m3/s and 10m3/s in the 100 year ARI storm event. It is also assumed that New South Head Road will wholly contain the overland flow.

In regards to the Floodplain Development Manual (NSW Government 2005), Henry and Hymas have identified that the site is not flood prone and is not considered to be in a flood way or flood storage area and does not have a flood hazard categorisation on the basis that the site is not within the 100 year or PMF for a mainstream watercourse or catchment.

4. STRATEGIC PLANNING CONTEXT

In accordance with SEARs, the following strategic planning policies have been considered in the assessment of the proposal:

- *NSW State Priorities*
- *The Greater Sydney Regional Plan, A Metropolis of three cities*
- *Future Transport Strategy 2056 and supporting plans*
- *State Infrastructure Strategy 2018 – 2038 Building the Momentum*
- *Sydney's Cycling Future 2013*
- *Sydney's Walking Future 2013*
- *Sydney's Bus Future 2013*
- *Crime Prevention Through Environmental Design (CPTED) Principles*
- *Healthy Urban Development Checklist (NSW Health)*
- *Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)*
- *Draft Greener Places Policy*
- *Eastern City District Plan*
- Woollahra Development Control Plan 2015
- Woollahra Local Strategic Planning Statement 2020

Consistency with the relevant goals contained to the above strategic policies is discussed in **Table 11** below.

Table 11 Consistency with Strategic Planning Policies

Strategic Planning Document	**Comment**
NSW State Priorities	NSW State Priorities is the State Government's plan to guide policy and decision making across the State. The proposed redevelopment of the site is consistent with key objectives contained within the plan, including: Creating Jobs: Create 150,000 new jobs by 2019 The proposal will create 257 job opportunities in construction, and construction management during the project's construction phase of works. The proposed alterations and additions will generate 35 new staff positions. The proposal will: provide additional learning spaces for the senior school students and staff.

Strategic Planning Document	Comment
	revitalise the aged structure and design of various internal and external spaces across the campus. Improve the efficiency of movement within the campus. Provide a much-needed upgrade to internal and external aged building elements; and Improve the efficiency of existing drop-off and pick-up operations Overall, it is considered that the proposal is consistent with the goals and objectives set out within the NSW State Priorities.
A Metropolis of Three Cities – Greater Sydney Region Plan	A Metropolis of Three Cities is a bold vision for three, integrated and connected cities that will rebalance Greater Sydney – placing housing, jobs, infrastructure and services within easier reach of more residents, no matter where they live. The Plan sets a 40-year vision (to 2056) and establishes a 20-year plan to manage growth and change for Greater Sydney in the context of social, economic and environmental matters. It is anchored on the strategies of infrastructure and collaboration, liveability, productivity, sustainability and implementation. Education facilities are considered as vital infrastructure in the city. The proposal seeks to update the facilities of an existing school within an established neighbourhood. By doing so, it will help to maintain the diverse mix of people and activities within Woollahra. As mentioned in other parts of the EIS, jobs will be provided in construction phase and 35 new permanent jobs will be provided in education and service-related sector. Sustainability is also a key consideration, particularly in the proposed design, construction, and operation of the buildings. The design of the school incorporates sustainable design principles and is further discussed in **Section 6.8** of the report.
Future Transport Strategy 2056	Future Transport Strategy 2056 is the NSW Government's update of the 2012 NSW Long Term Transport Master Plan and was finalised on 18 March 2018. The focus of the plan is to enable people and goods to move safely, efficiently and reliably around Greater Sydney, including having access to their nearest centre within 30 minutes by public transport, 7 days a week. The transport system will also support the liveability, productivity and sustainability of places on our transport networks. The subject site benefits from access to public transport services, including numerous bus services along New South Head Road and Vaucluse Road. These bus services link the school to other bus and rail services operating from Bondi Junction Interchange, Edgecliff Interchange and the City. Therefore, the site is located within a highly accessible

Strategic Planning Document	Comment
	location and is well serviced by public transport. This is reflected in the fact students to the school come from all over Sydney.
State Infrastructure Strategy 2018 –2038	State Infrastructure Strategy 2018-2038 sets out Infrastructure NSW's independent advice on the current state of NSW's infrastructure and the needs and priorities over the next 20 years. It looks beyond the current projects and identifies policies and strategies needed to provide infrastructure that meets the needs of a growing population and a growing economy. The Strategic objective for the Education sector is to *'Deliver infrastructure to keep pace with student numbers and provide modern, digitally-enabled learning environments for all students.'* The proposed development will help meet this objective by improving the School's facilities and providing a better learning environment for its pupils.
Sydney's Cycling Future 2013	Sydney's Cycling Future seeks to make bicycle riding a feasible transport option within Sydney through the three pillars of safe, connected cycle networks, better use of existing infrastructure, and policy and partnerships. There are currently limited dedicated cycling facilities and routes that directly connect with the School. A Green Travel Plan (GTP) has been prepared and is included within the TIA attached at ached at **Appendix R.** The GTP includes a number of sustainable transport measures and strategies to be implemented at KKRB.
Sydney's Walking Future 2013	Sydney's Walking Future (2013) aims to promote walking as a means of effective transport within Sydney by encouraging investment in safe, permeable walking networks. The actions set out in Sydney's Walking Future will make walking the transport choice for quick trips under two kilometres and will help people access public transport. The document draws from research and consultation of stakeholders by the NSW Government. It found that more than 50 per cent of children live less than two kilometres from School. However, 70 per cent of 5-9-year-old children and 46 per cent of 10-14 year old children are driven to school in Greater Sydney. Connectivity and reduced delays, pedestrian safety and security, health and wellbeing benefits, and supporting facilities will encourage Sydneysiders to walk more. KRB is located within an established residential neighbourhood and benefits from several existing pedestrian links which connect the school to the pedestrian and road network. The pedestrian underpass located beneath Vaucluse Road safely connects pedestrians to the school. The School is very accessible by walking for students, parents, staff and

Strategic Planning Document	Comment
	visitors from the local community as well as from several nearby bus stops which link the school to the greater Sydney Metropolitan area.
Sydney's Bus Future 2013	Sydney Bus Future (2013) outlines the NSW Government's long-term plan to deliver simpler, faster, and better bus services within Sydney to meet current and future customer needs. There are numerous bus stops within walking distance to KRB School, which are serviced by several bus routes outlined in **Section 2.7** of this EIS.
Crime Prevention Through Environmental Design (CPTED) Principles	Crime Prevention Through Environmental Design (CPTED) Principles are addressed in **Section 6.15** of this report.
Healthy Urban Development Checklist	The Healthy Urban Development Checklist by NSW Department of Health seeks to ensure that communities in the State are created to promote healthy habits and active mobility. The proposal for KRB satisfies a range of items contained to the checklist, including: *Encourage incidental physical activity.* *Promote opportunities for walking, cycling and other forms of active transport.* *Promote access to usable and quality public open spaces and recreational facilities.* *Reduce car dependency and encourage active transport.* *Consider crime prevention and sense of security* *Promote quality streetscapes that encourage activity* *Provide access to a range of facilities to attract and support a diverse population; and* *Promote a sense of community and attachment to place* The proposal therefore aids in promoting a healthy and sustainable built environment.
Better Placed: An integrated design policy for the built environment of New South Wales	Better Placed – An integrated design policy for the built environment of NSW 2017 is the NSW Government Architect's Office policy to guide design. Better Placed provides clarity on what the NSW Government means by good design and outlines processes for achieving this. It has been created to assist everyone involved in design projects or the development assessment process and advocates that everyone has a role in ensuring our cities and towns are better places. The policy is based on seven objectives that define the key considerations in the design of the built environment: *Better fit: contextual, local and of its place*

Strategic Planning Document	Comment
	Better performance: sustainable, adaptable and durable *Better for community: inclusive, connected and diverse* *Better for people: safe, comfortable and liveable* *Better working: functional, efficient and fit for purpose* *Better value: creating and adding value* *Better look and feel engaging, inviting and attractive* The Architectural Design Statement attached at **Appendix E** discuss how the proposal has adopted these seven objectives into the design process.
Draft Greener Places Policy	The Draft Greener Places Policy has been prepared by the NSW Government Architect to guide the planning, design and delivery of Green Infrastructure in urban areas across NSW. It aims to create a healthier, more liveable and sustainable urban environment by improving community access to recreation and exercise, supporting walking and cycling connections, and improving the resilience or urban areas. The proposal has been developed with consideration for the Draft Greener Places Policy through the implementation of four key design principles: *Integration* *Connectivity* *Multifunctionality* *Participation* The Architectural Design Statement attached at **Appendix E** discusses how the proposal has adopted the four principles into the design process.
Eastern City District Plan	The Eastern City District is at the centre of the Eastern Harbour City, recognised as Australia's global gateway and financial capital. The district is highly accessible to the Harbour CBD, which has half a million jobs and the largest office market in the region. The Eastern City District covers the Bayside, Burwood, City of Canada Bay, City of Sydney, Inner West, Randwick, Strathfield, Waverley and Woollahra local government areas. This District Plan responds to major transport, health and education investments in the District, either committed or planned, such as Sydney Metro and the CBD and South East Light Rail, which aligns with Future Transport 2056. Planning priorities that directly relate to the proposed development at KRB include: Planning for a city supported by infrastructure The School benefits from good access to public transport, specifically through bus links to major transport interchanges such as Bondi Junction and Edgecliff. The students, staff and visitors benefit from the close

Strategic Planning Document	Comment
	proximity to public transport and the well-connected and established walkways around the School. Providing services and social infrastructure to meet people's changing needs With the proposed development, KRB is adapting to changing requirements of students and trends in learning methods. KRB has focused on providing for additional high-quality facilities for enhanced learning and new common areas. The proposed alterations and additions will generate 35 new staff positions and will: provide additional learning spaces for the senior school students and staff. revitalise the aged structure and design of various internal and external spaces across the campus. Improve the efficiency of movement within the campus. Provide a much-needed upgrade to internal and external aged building elements; and Improve the efficiency of existing drop-off and pick-up operations Overall, it is considered that the proposal is consistent with the goals and objectives set out within the NSW State Priorities. The proposed alterations and additions will provide additional learning spaces for the school students and staff and revitalise several aged spaced across the campus. These proposed internal upgrades will improve access and efficiency of movement across the campus for students and staff. The external design changes to the pick-up and drop-off operations will significantly improve the efficiency of these operations and reduce traffic generation within the school and greater road network. The final outcome will be a revitalised, state-of-the art campus, which captures the full potential of the site whilst preserving the existing character of the school and environment.
Woollahra Development Control Plan 2015	The relevant provisions of the Woollahra Development Control Plan 2015 has been addressed in Section 5.13.5 of this report.
Woollahra Local Strategic Planning Statement	The Woollahra Local Strategic Planning Statement outlines the long-term vision for land use and infrastructure provisions within the LGA. The proposed development is consistent with the goals and actions outlined in the Draft LSPS. Of particular relevance to the proposal is the following action: *Action 20. Collaborate with neighbouring councils, government agencies and service providers to monitor and plan for easily accessible*

Strategic Planning Document	Comment
	infrastructure and services that meet our community's changing needs, especially: *Young children and school students (including public school places)* Our ageing population People with a disability, restricted mobility or other needs The proposed increase to the student cap will allow for a greater number of children to attend KRB school. Furthermore, the proposed upgrades will ensure the school's longevity and ability to provide essential educational services to children across the LGA and wider metropolitan area.

5. STATUTORY PLANNING ASSESSMENT

As outlined in the SEARs, the statutory provisions contained in the following planning instruments were considered:

- *Biodiversity Conservation Act 2016*
- *State Environmental Planning Policy (State & Regional Development) 2011*
- *State Environmental Planning Policy (Infrastructure 2007)*
- *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017*
- *State Environmental Planning Policy No. 64 – Advertising and Signage*
- *State Environmental Planning Policy No. 55 – Remediation of Land*
- *State Environmental Planning Policy (Coastal Management) 2018*
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*
- *Draft State Environmental Planning Policy (Remediation of Land)*
- *Draft State Environmental Planning Policy (Environment)*
- *Draft State Environmental Planning Policy (Education)*
- *Draft State Environmental Planning Policy (Housing Diversity)*
- *Woollahra Local Environmental Plan 2014*

5.1. BIODIVERSITY CONSERVATION ACT

The purpose of the Biodiversity Conservation Act 2016 (BC Act) is 'to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.'

An Arboricultural Impact Assessment has been prepared by Botanics Tree Wise and is attached at **Appendix J.** The proposed development will require the removal of a total of sixteen trees, four of which are of low retention value and eight trees with moderate retention value. The remaining trees are considered exotic, noting that no trees with a high retention value will be removed. The assessment indicates a number for trees which are to be protected during the construction of the development. To ensure these trees are protected it recommends a Tree Protection Plan be prepared prior to construction.

Based on the minor amount of tree removal and that the site is not identified on the Biodiversity Values Map, a BDAR Waiver Request was prepared by Eco Logical Australia (ELA) following the issuance of the SEARs. The request was in relation to the removal of the following vegetation:

- *Tree 2 is a semi mature to early mature Grevillea Robusta, or Silky Oak. This tree has been planted directly adjacent to the front entrance of the school. The tree has been planted too high in the soil profile and has exposed structural roots. Several of these sites above the soil surface with visible surface decay noted. The tree's canopy has grown to a height of over 12m and is supported on a co dominate trunk that forks at approximately 2.8m above ground level. The tree appears to have had a number of upper canopy limbs fail.*
- *Tree 3 is a well-established Erythrina x sykesii, or Coral tree. This tree has grown to a height of approximately 8m and is supported on a co dominate trunk that forks at 40cm above ground level. The tree is on Woollahra Council's noxious and exempt tree species list and can be removed without seeking formal approval.*
- *Trees 4, 5 and 6 are all semi mature Podocarpus elatus or Plum Pines. These are a well-suited native tree species that have established here. The largest of these (Tree 6) is supported on a trunk of over 90cm in diameter and all can be described as mature examples of this native tree species. All are required for removal to allow for the proposed.*

- *Tree 7 is a juvenile Celtis sinensis, or Hackberry. These are another well recognise invasive tree species that is exempt from Woollahra Council's tree preservation legislation and should be removed irrespective of this, or any proposed development.*
- *Tree 8 is a semi mature Howea forsteriana, of Kentia Palm located directly adjacent to the site's southern boundary. These are a native (Norfolk Island) palm species that will have been planted as part of earlier landscape works. English Ivy has been allowed to grow over the tree's lower trunk limiting its visual amenity. Required for removal.*
- *Tree 9 is a clump of Nerium oleander, or Oleander that will have been planted on the lower embankment and directly adjacent to the site's southern boundary. Another noxious and exempt tree species recommended for removal irrespective of the proposed development.*
- *Tree 10 is one of the smaller Harpephyllum caffrum, or Kaffir Plum trees on site. This one is again located on the lower embankment adjacent to the site's southern boundary. This tree has grown over the neighbouring boundary due to partial suppression. Although located outside the CIZ of the proposed works this tree has been recommended for removal.*
- *Trees 11,12 and 13 are all Harpephyllum caffrum species. All are well established and mature examples of this exotic tree species. Tree 12 is the largest and will likely have been the first planted. All have grown to over 10m and remain a fraction of their biological potential. All are within 1.5m of the sandstone retaining wall that supports this elevated parking area. Moderate significance but required for removal.*
- *Trees 14 and 15 are both Populus alba, and Silver Poplars. Tree 14 has declined and died, while Tree 15 continues to grow here. This tree supports three (3) leaders and has developed a broad canopy rather that the tall conical structure of unpruned trees. The tree is poorly suited for this location and is largely out of context. Low value and recommended for removal irrespective of the proposed.*
- *Tree 16 is a well-established Olea europea, or Wild Olive. This is a hardy and long-lived tree species that will have established here over twenty (20) years ago from a bird or bat dropping. The tree has been cut to ground level and allowed to regrow, a practice formally known as coppicing. The tree is on Woollahra Council's noxious and exempt tree species list and can be removed without seeking formal approval. The tree is however located well outside the site's CIZ and may be retained.*
- *Tree 26 and is located on the site's south western corner. This is a semi mature example of the species that has grown to a height of less than 12m. This is a small fraction of its full biological potential and given its current good health it can be expected to continue to grow towards this in time. This will effectively block visual access to the harbour and foreshore. Low value and recommended for removal.*

The request was prepared in accordance with the Department of Planning and Environment Fact Sheet (2018) and included an assessment of the impacts of the proposed development on biodiversity values. The assessment concluded that the proposal will not have a significant impact on biodiversity values and as such a BDAR Waiver Request should be sought. Following the completion of the assessment the request was submitted to DPIE on 11 May 2020.

On 9th April 2020, DPIE confirmed in a letter (refer **Appendix K**) that the development is not considered to have any significant impact on biodiversity values, and therefore the SSDA is not required to be accompanied by a Biodiversity Development Assessment Report. The letter detailed that DPIE had reviewed the application of the test of significance in accordance with section 1.5 and 7.3 of the BC Act and values 1.4 of the Biodiversity Conservation Regulation 2017 prior to lodgement. It also stated that the delegated Environment Agency Head in the Environment, Energy and Science Group (EESG) has also granted a waiver in a letter dated 13 March 2020. Therefore, the Biodiversity requirement of the SEARs has been waived and a BDAR does not need to be submitted.

5.2. STATE ENVIRONMENTAL PLANNING POLICY (STATE & REGIONAL DEVELOPMENT) 2011

The proposal is classified as State Significant Development on the basis that it falls within the requirements of clause 15 of Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (SRD SEPP), being '*development that has a capital investment value of more than $20 million for the purpose of alterations or additions to an existing school'*. The capital investment value of the project is anticipated to be **$48,822,131** (Excl. GST) as outlined within the Cost Report provided at **Appendix B**.

It is noted that Part 2 of the SEPP further states that development control plans do not apply to State-significant developments.

5.3. STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE 2007)

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) provides the legislative planning framework for infrastructure and the provision of services across NSW. Since gazettal of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* on 1 September 2017, each of the provisions that related to educational establishments within ISEPP have been repealed. Accordingly, ISEPP no longer applies to the proposal.

5.4. STATE ENVIRONMENTAL PLANNING POLICY (EDUCATIONAL ESTABLISHMENTS AND CHILD CARE FACILITIES) 2017

The *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (**SEPP Education and Child Care**) aims to ensure that childcare facilities and educational establishments are established effectively and consistently. It incorporates standardised planning provisions relating to childcare centres, schools, universities and TAFEs.

In accordance with Part 1 Clause 5 of the Education SEPP, the existing Campus includes two separate elements: the first being an Early Learning Centre (ELC) and the second being the School. The Early Learning Centre (ELC) is incorporated within the following definition as outlined in the Education SEPP:

> ***early education*** *and care facility means a building or place used for the education and care of children, and includes any of the following—*
>
> *(a)* ***a centre-based child care facility****,*
>
> *(b) home-based child care,*
>
> *(c) school-based child care*

The School element is defined as follows in accordance with Part 1 Clause 5 of the Education SEPP:

> *educational establishment means a building or place used for education (including teaching), being—*
>
> *(a) a* ***school****, or*
>
> *(b) a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act.*

As the proposal includes both an ELC facility and an educational establishment, Part 3 and 4 of the Education SEPP must be assessed.

The Education SEPP establishes consistent State-wide assessment requirements and controls, that override development standards contained within other environmental planning instruments. Part 4 of the Education SEPP identifies school specific development controls, with clause 35 Schools—development permitted with consent containing the relevant controls.

The proposal has been assessed against the relevant provisions of Part 4 within the following table.

Table 12 Education SEPP Compliance Table

Clause	Proposal	Compliance
(1) Development for the purpose of a school may be carried out by any person with development consent on land in a prescribed zone.	The proposed development is in the SP2 Infrastructure – Education Establishment sone, which is a prescribed zone for the purposes of the Education SEPP.	Yes
(2) Development for a purpose specified in clause 39 (1) or 40 (2) (e) may be carried out by any person with development consent on	Development consent is sought for the proposed works.	Yes

Clause	Proposal	Compliance
land within the boundaries of an existing school.		
(3) Development for the purpose of a school may be carried out by any person with development consent on land that is not in a prescribed zone if it is carried out on land within the boundaries of an existing school.	The proposed development is in the SP2 Infrastructure zone, which is a prescribed zone for the purposes of the Education SEPP.	Yes
(4) Subclause (3) does not require development consent to carry out development on land if that development could, but for this Policy, be carried out on that land without development consent.	The proposed development and staged increase to the student cap cannot be undertaken as development without consent as per clause 36 of the Education SEPP as it involves alterations to traffic arrangements and an increase to the number of staff and students.	N/A
(5) A school (including any part of its site and any of its facilities) may be used, with development consent, for the physical, social, cultural or intellectual development or welfare of the community, whether or not it is a commercial use of the establishment.	The community does not use the school facilities outside of school hours. This is not proposed to change.	N/A
(6) Before determining a development application for development of a kind referred to in subclause (1), (3) or (5), the consent authority must take into consideration: (a) the design quality of the development when evaluated in accordance with the design quality principles set out in Schedule 4, and (b) whether the development enables the use of school facilities (including recreational facilities) to be shared with the community.	The EIS addresses the design quality of the development. A formal response to the Schedule 4 School Design Principles is included in the Design Report prepared by BVN (refer to **Appendix E**). As stated, the community does not use any of the school facilities out of school hours and this is not proposed to change.	Yes
(7) Subject to subclause (8), the requirement in subclause (6) (a) applies to the exclusion of any provision in another environmental planning instrument that requires, or that relates to a requirement for, excellence (or like standard) in design as a prerequisite to the granting of development consent for development of that kind.	The *Woollahra Local Environmental Plan 2014* does not require a competitive design process to be completed for this site.	N/A
(8) A provision in another environmental planning instrument that requires a competitive design process to be held as a	The CIV of the proposal is less than $50 million and a competitive design process is not required.	Yes

Clause	Proposal	Compliance
prerequisite to the granting of development consent does not apply to development to which subclause (6) (a) applies that has a capital investment value of less than $50 million.		
(9) A provision of a development control plan that specifies a requirement, standard or control in relation to development of a kind referred to in subclause (1), (2), (3) or (5) is of no effect, regardless of when the development control plan was made.	Noted	-
(10) Development for the purpose of a centre-based childcare facility may be carried out by any person with development consent on land within the boundaries of an existing school.	The proposal seeks Stage 1 approval to undertake alterations and additions to the existing Early Learning Centre (ELC) in Precinct A.	Yes
(11) Development for the purpose of residential accommodation for students that is associated with a school may be carried out by any person with development consent on land within the boundaries of an existing school.	The proposal seeks Concept approval for a building envelope, which involves an addition to the existing boarding house located on the campus.	Yes

Clause 35(6) requires the consent authority to consider the design quality principles set out in Schedule 4 of the Education SEPP prior to determination. The proposal has been designed having regard to the design quality principles and responds to each of them in the following way:

Principle 1: Context, built form and landscape

The proposed development has been designed sympathetically to have regard to the heritage significance of the site. The scale and orientation of the addition and new building envelopes have been designed to protect views to and from the harbour.

The design of the proposed new school buildings has been influenced by the surrounding built and natural character of the School and Rose Bay. In particular, the proposal incorporates a range of building materials and colours that are sympathetic against the existing school buildings and the surrounding residential character. Landscape plans are prepared for each precinct, which enhance the landscape setting throughout the campus and provide outdoor play area for students.

Principle 2: Sustainable, efficient and durable

The proposal will adopt a range of ESD initiatives, and an ESD Report is attached at Appendix S. The proposal will also provide positive social and economic benefits for the school community and local community by ensuring that teaching facilities are meeting contemporary educational needs.

Principle 3: Accessible and inclusive

The proposed school buildings and playground have been inclusively designed to provide safe and equal access for all, as outlined within the Architectural Design Report attached at **Appendix E.**

Principle 4: Health and safety

The proposal will provide additional playground space for the ELC and the Junior school, which will encourage passive recreation.

Crime Prevention Through Environmental Design (CPTED) measures will be incorporated into the design, operation and management of the site to ensure a high level of safety and security for students and staff. A CPTED assessment is provided in the design report attached at **Appendix E.**

Principle 5: Amenity

The proposal will contain state-of-the-art facilities, spaces and equipment for use by students and staff, and will provide a pleasant learning environment. Subject to the careful management and implementation of each recommended mitigation measure in Section 9 of the report and the attached consultant reports, the proposal will not result in any unacceptable impacts on neighbouring properties.

Principle 6: Whole of life, flexible and adaptive

The proposal involves upgrading and construction of new classrooms and associated facilities, which have been designed to ensure flexibility and longevity.

Principle 7: Aesthetics

The design of the new buildings and playground area will incorporate high quality finishes, which are aesthetically pleasing and respond to the site context and surrounding receiving environment.

Clause 42 of the Education SEPP allows the proposal to contravene a development standard imposed by the Education SEPP or any other environmental planning instrument under which the consent is granted:

'State significant development for the purpose of schools—application of development standards in environmental planning instruments

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

The following elements of the proposal exceed the maximum building height of 9.5 metres:

Detailed Development:

- East Wing of Junior School by **2.73m**
- West Wing of Junior School by **3.746m**
- East side of Year 8 Centre by **1.907m**
- West side of Year 8 Centre by **5.693m**
- **Concept Development:**
- Senior School Circulation Hub by **4m**
- Hughes Centre by **4m**
- Senior School Boarding Accommodation extension by **4.5m**

Education SEPP Clause 42

Clause 42 of the Education SEPP allows the proposal to contravene a development standard imposed by the Education SEPP or any other environmental planning instrument under which the consent is granted:

'State significant development for the purpose of schools—application of development standards in environmental planning instruments"

Development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted.' However, as per clause 42 of the Education SEPP, development consent may still be granted without the need for a formal clause 4.5 variation as this is considered SSD.

Education SEPP Clause 57

Clause 57 stipulates that development for the purposes of an 'educational establishment' that will result in the educational establishment being able to accommodate 50 of more additional students and with direct

access to any road must be referred to the Roads and Maritime Services (RMS). The RMS were consulted during the SEARs stage and in the preparation of this EIS. The Traffic Impact Statement prepared by Colston Budd Roger & Kafes, submitted at **Appendix R**, addresses the matters raised by the RMS in the SEARs. A referral to the RMS will be made during the assessment of the SSDA.

5.4.1. Childcare Centre Assessment

Clause 23 of the Education SEPP requires that any development proposing a centre-based childcare facility must take into consideration the applicable provisions of the Child Care Planning Guideline 2017 (the Guideline).

Part 3 of the Education SEPP *Early education and care facilities -specific development controls* contain controls development controls for the such excluding building height, rear and side setbacks and car parking. Clause 23 and 25 of Part 3 are applicable to the proposal.

Part 3 Clause 23 of the Education SEPP includes matters which must be considered by the consent authority when assessing an application for a childcare facility. These matters are outlined in the *Child Care Planning Guidelines*. The applicable provisions have been addressed in **Table 13** below.

Part 3 Clause 25 of the Education SEPP outlines the requirements for internal and external areas of Childcare facilities as per the National Quality Framework (NQF). The relevant provisions of this clause are assessed in **Table** 14 below.

Table 13 Part 3 - Matters for Consideration

Matters for Consideration	Proposed	Complies
3.1 Site Selection and location:		
Objective: To ensure that appropriate zone considerations are assessed when selecting a site.	The proposal relates to an existing early learning centre (ELC) located within an existing school site. Therefore, it is suitably located.	Yes
Objective: To ensure that the site selected for a proposed childcare facility is suitable for the use.		
Objective: To ensure that sites for childcare facilities are appropriately located.		
Objective: To ensure that sites for childcare facilities do not incur risks from environmental, health or safety hazards.	The site is not located in close proximity to any environmental, health or safety hazards. The adjoining land uses are predominantly residential and as such to not pose any health or safety risk to the proposed development.	Yes
3.2 Local character, streetscape and the public domain interface		
Objective: To ensure that the childcare facility is compatible with the local character and surrounding streetscape.	The location of the ELC is compatible in relation to surrounding land uses, including other school uses.	Yes

Matters for Consideration	Proposed	Complies
Objective: To ensure clear delineation between the childcare facility and the public spaces	The ELC facility is located within an existing school ground and is separated from public spaces by the existing school buildings.	Yes
Objective: To ensure that front fences and retaining walls respond to and complement the context and character of the area and do not dominate the public domain.	N/A	N/A
3.3 Building orientation, envelope and design		
Objective: To respond to streetscape and site, while optimising solar access and opportunities for shade.	As illustrated in the solar access diagrams included within **Appendix C**, the play areas associated with the proposed ELC will receive a sufficient level of shade between 9-12am during summer and sufficient solar access from 9-12am during winter.	Yes
Objective: To ensure that the scale of the childcare facility is compatible with adjoining development and the impact on adjoining buildings is minimised.	The proposal is unlikely to impact on nearby and adjoining developments. The acoustic impact of the proposal has been assessed and is detailed in **Section 6.11** of this report.	Yes
Objective: To ensure that setbacks from the boundary of a childcare facility are consistent with the predominant development within the immediate context.	The extension to the ELC facility respects the surrounding school buildings is designed to be a contextually fit within the campus.	Yes
Objective: To ensure that the build form, articulation and scale of development relates to its context and buildings are well designed to contribute to an area's character	The ELC facility will form an integral part of the school campus and be wholly contained within the site. The outdoor play space will be open to the sky and provide a break in the roofline.	Yes
Objective: To ensure that buildings are designed to create safe environments for all users.	CPTED measures are outlined in the Design Report attached in Appendix E.	Yes
Objective: To ensure that childcare facilities are designed to be accessible by all potential users.	The proposal includes a new access lift to the internal street network for child set-down and pick-up. Internal circulation has been provided to connect to the outdoor play space and other existing school buildings.	Yes
3.4 Landscaping		

Matters for Consideration	Proposed	Complies
Objective: To provide landscape design that contributes to the streetscape and amenity.	The attached Landscape Design (**Appendix G)** illustrates the landscape elements proposed for the new ELC building. The Landscape Plan illustrates that the ELC facilities will be softened by the provision of sufficient open green space and trees.	Yes
3.5 Visual and acoustic privacy		
Objective: To protect the privacy and security of children attending the facility. *Objective: To minimise impacts on privacy of adjoining properties.* *Objective: To minimise the impact of childcare facilities on the acoustic privacy of neighbouring residential developments.*	The proposal relates to an existing ELC facility. The location of the childcare centre is separated from residential properties with limited opportunity for overlooking to and from adjoining developments. Acoustic impact is discussed in **Section 6.11** of this report and in the Acoustic Report in Appendix I.	Yes
3.6 Noise and air pollution		
Objective: To ensure that outside noise levels on the facility are minimised to acceptable levels. *Objective: To ensure air quality is acceptable where childcare facilities are proposed close to external sources of air pollution such as major roads and industrial development.*	The proposal relates to an existing ELC facility. The location of the ELC facility is away from busy road and screened by existing school buildings to minimise noise and air pollution.	Yes
3.7 Hours of operation		
Objective: To minimise the impact of the childcare facility on the amenity of neighbouring residential developments. *C29 of the guideline's states:* *Hours of operation within areas where the predominant land use is residential should be confined to the core hours of 7.00am to 7.00pm weekdays. The hours of operation of the proposed childcare facility may be extended if it adjoins or is adjacent to non-residential land uses.* *C30* *Within mixed use areas or predominantly commercial areas, the hours of operation for each childcare*	The proposed ELC facility will operate in accordance with the existing hour of operation, The Early Learning Centre will continue to operate in accordance with the following timetable: Monday to Friday: ▪ Classes Commence: 7.30am ▪ Classes Conclude: 6.00pm	Yes

Matters for Consideration	Proposed	Complies
facility should be assessed with respect to its compatibility.		
3.8 Traffic, parking and pedestrian circulation		
Objective: To provide parking that satisfies the needs of users and demand generated by the centre.	The proposal provides sufficient parking for students and staff in accordance with generation rates predicted for the school.	Yes
Objective: To provide vehicle access from the street in a safe environment that does not disrupt traffic flows.	The school will continue to provide equitable access in a safe and controlled environment.	Yes
Objective: To provide a safe and connected environment for pedestrians both on and around the site.	The proposal will provide a safe and well-connected environment for pedestrians.	Yes

An assessment against Part 4 of the *Guidelines 'Applying the National Regulations to development proposals'* has been undertaken and summarised in **Table 14** below.

Table 14 Applying the National Regulations to development proposals

Regulations	Proposed	Complies
4.1 Indoor space requirements		
Regulation 107 Every child being educated and cared for within a facility must have a minimum of 3.25m^2 of unencumbered indoor space.	Number of Children:70 (10 year) Required Indoor Space: 70 x 3.25 m^2 **= 227.5** Provided Indoor Space: - ELC Sophie's Cottage: 76m^2 - ELC New Level 03: 153m^2 **TOTAL: 229m^2**	Yes
4.2 Laundry and hygiene facilities		
Regulation 106 There must be laundry facilities or access to laundry facilities; or other arrangements for dealing with soiled clothing, nappies and linen, including hygienic facilities for storage prior to their disposal or laundering. The laundry and hygienic facilities must be located and maintained in a way that does not pose a risk to children. Childcare facilities must also comply with the requirements for laundry facilities that are contained in the National Construction Code.	The existing and extended ELC facility will continue to operate long day care programs for both three (3) and four (4) year olds. The existing Senior school boarding house contains laundry facilities which can be utilised by the ELC if required. However, children are required to be toilet trained prior to enrolment in the ELC and therefore additional on-site facilities are not required.	Yes
4.3 Toilet and hygiene facilities		
Regulation 109	Each Playroom has direct access to toilet amenities and can be easily supervised	Yes

Regulations	Proposed	Complies
A service must ensure that adequate, developmentally and age appropriate toilet, washing and drying facilities are provided for use by children being educated and cared for by the service; and the location and design of the toilet, washing and drying facilities enable safe use and convenient access by the children. Childcare facilities must comply with the requirements for sanitary facilities that are contained in the National Construction Code.	by staff. All toilets have washing, and drying facilities designed with convenient access for children.	
4.4 Ventilation and natural light		
Regulation 110 Services must be well ventilated, have adequate natural light, and be maintained at a temperature that ensures the safety and wellbeing of children. Childcare facilities must comply with the light and ventilation and minimum ceiling height requirements of the National Construction Code. Ceiling height requirements may be affected by the capacity of the facility.	The new ELC building has been designed in accordance with the AS1668.4 – Natural Ventilation standards. Refer to the Structural Report attached at **Appendix Z** for further details. The new building will have large windows which will be glazed to allow cross ventilation and natural light spill into the facility whilst maintaining privacy.	Yes
4.5 Administrative space		
111. Administrative space A service must provide adequate area or areas for the purposes of conducting the administrative functions of the service, consulting with parents of children and conducting private conversations.	The proposed development includes an administration office as a separated room, which allows for talks with parents and private consultations. Further to this, there is substantial reception area near the entry deck for open conversation. The proposal also facilitates a dedicated staff room and toilet for staff only.	Yes
4.6 Nappy change facilities		
Regulation 112 Childcare facilities must provide for children who wear nappies, including appropriate hygienic facilities for nappy changing and bathing. All nappy changing facilities should be designed and located in an area that prevents unsupervised access by children. Childcare facilities must also comply with the requirements for nappy changing and	As discussed above, children are required to be toilet trained prior to enrolment in the ELC. As such, nappy changing facilities are not required.	Yes

Regulations	Proposed	Complies
bathing facilities that are contained in the National Construction Code.		
4.7 Premises designed to facilitate supervision		
Regulation 115 A centre-based service must ensure that the rooms and facilities within the premises (including toilets, nappy change facilities, indoor and outdoor activity rooms and play spaces) are designed to facilitate supervision of children at all times, having regard to the need to maintain their rights and dignity. Childcare facilities must also comply with any requirements regarding the ability to facilitate supervision that are contained in the National Construction Code.	The proposed development ensure that sufficient levels of supervision is available through sight lines and glazing of glass windows and doors. The toilets provide adequate privacy for children whilst also ensuring children are adequately supervised and supported. The outdoor area is designed with clear lines of sight, facilitating supervision.	Yes
4.8 Emergency and evacuation procedures		
Regulations 97 and 168 Regulation 168 sets out the list of procedures that a care service must have, including procedures for emergency and evacuation. Regulation 97 sets out the detail for what those procedures must cover including: ▪ instructions for what must be done in the event of an emergency ▪ an emergency and evacuation floor plan, a copy of which is displayed in a prominent position near each exit ▪ a risk assessment to identify potential emergencies that are relevant to the service.	The existing ELC a has management plan which outlies procedures for emergency and evacuation.	Yes
4.9 Outdoor space requirements		
Regulation 108 An education and care service premises must provide for every child being educated and cared for within the facility to have a minimum of 7.0m^2 of unencumbered outdoor space.	Number of Children: 70 (10 years) Required Outdoor Space: 490m^2 Provided Outdoor Space: 524.6m^2	Yes
4.10 Natural environment		
Regulation 113	A variety of landscaping, textures, materials and elements will be provided	Yes

Regulations	Proposed	Complies
The approved provider of a centre-based service must ensure that the outdoor spaces allow children to explore and experience the natural environment.	in both the outdoor and indoor areas. These different materials will include timber decking, brick pavers, plastered walls with rendered finishes, mixed planting and artificial grass. The inclusion of these various elements will complement the different activities accommodated by the facility and to allow children to explore and experience the natural environment.	
4.11 Shade		
Regulation 114 The approved provider of a centre-based service must ensure that outdoor spaces include adequate shaded areas to protect children from overexposure to ultraviolet radiation from the sun. <u>Design Guidance:</u> Outdoor play areas should: ▪ have year-round solar access to at least 30 per cent of the ground area, with no more than 60 per cent of the outdoor space covered. ▪ provide shade in the form of trees or built shade structures giving protection from ultraviolet radiation to at least 30 per cent of the outdoor play area ▪ have evenly distributed shade structures over different activity spaces ▪ Shade structures should allow adults to view and access the children's play areas, with a recommended head clearance of 2.1 metres.	Solar access diagrams are included within the Architectural Plans attached at **Appendix C.** A solar access study was also conducted for the ELC and Junior School Outdoor Play Area and is attached at **Appendix EE.** The solar access study concludes that more than 30% of the ground outdoor play area will receive solar access for 2 hours in mid-winter (from 10am to 12pm). To meet the 30% shade requirement (if required), adequate sun shading devices can be installed across the outdoor play areas. Further to this, the proposed new trees will also enhance the provision of shade in the outdoor areas as they mature. As such the proposal is capable of compliance with the relevant solar access provisions.	Yes.
4.12 Fencing		
Regulation 104 Any outdoor space used by children must be enclosed by a fence or barrier that is of a height and design that children preschool age or under cannot go through, over or under it. Childcare facilities must also comply with the requirements for fencing and protection	The outdoor space is separated by a fence. The fence is approximately 2m high and has been designed to ensure preschool age children cannot go through, over or under it.	Yes

Regulations	Proposed	Complies
of outdoor play spaces that are contained in the National Construction Code.		
4.13 Soil assessment		
Regulation 25 Subclause (d) of regulation 25 requires an assessment of soil at a proposed site, and in some cases, sites already in use for such purposes as part of an application for service approval. With every service application one of the following is required: ▪ a soil assessment for the site of the proposed education and care service premises ▪ if a soil assessment for the site of the proposed childcare facility has previously been undertaken, a statement to that effect specifying when the soil assessment was undertaken ▪ a statement made by the applicant that states, to the best of the applicant's knowledge, the site history does not indicate that the site is likely to be contaminated in a way that poses an unacceptable risk to the health of children.	The proposal relates to an existing ELC centre located within an existing school site. Therefore, it is suitably located.	Yes

5.5. STATE ENVIRONMENTAL PLANNING POLICY NO. 64 –ADVERTISING AND SIGNAGE

State Environmental Planning Policy No. 64 –Advertising and Signage (SEPP 64) aims to ensure that advertising and signage is compatible with the desired amenity and visual character of an area and provides effective communication in suitable locations and is of high-quality design and finish. It does not regulate the content of signs and advertisements.

Clause 8 and Clause 13 of SEPP 64 prevents development consent from being granted to signage unless the consent authority is satisfied that it is consistent with the objectives of the SEPP and has satisfied the assessment criteria specified in Schedule1.

The proposal seeks consent to upgrade the existing wayfinding signage for the school as well as the existing (double sides) bade wall sign at the entrance to the Junior School which is best defined as a business identification sign.

The proposal does not seek consent for any third-party advertising. In accordance with Part 4 Clause 38(h) of the Education SEPP, directional signage for pedestrians is considered exempt development if it is on land within the boundaries of an existing school. As such, the existing and proposed wayfinding signage is exempt.

The upgrading of the existing blade wall sign at the entrance to the Junior School involves a new surface covering involving a sandstone coloured render (replacing the blue) and signage to match the existing

dimension. This provides an improved visual outcome, and the required assessment under Schedule 1 of SEPP 64 has been completed within **Table 15** below.

Table 15 SEPP 64 Compliance Table

Provision	Comment	Compliance
Character of the area		
Is the proposal compatible with the character of the area or locality in which it is proposed to be located?	The proposal seeks to upgrade an existing blade wall sign located at the main entrance to the Junior School. The existing sign has a stark blue background which is not compatible with the existing character of the school. The upgraded sign will be more compatible with the existing character of the area in which it is located.	Yes.
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	The proposal does not include any third-party advertising and is consistent with the existing outdoor advertising theme for building and business ide notification signage relevant to the site.	Yes.
Special Areas		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscape or residential areas?	The proposal is for the refurbishment of an existing business identification sign. The upgraded signage does not detract from the existing amenity and visual quality of the surrounding locality.	Yes.
3. Views and Vistas		
Views and Vistas *Does the proposal obscure or compromise important views?*	The signage to be upgraded is located entirely within the approved building envelope and does not compromise any important views.	Yes.
Does the proposal dominate the skyline and reduce the quality of vistas?	The proposed signage will have negligible impact on the skyline and associated vistas.	Yes.
Does the proposal respect the viewing rights of other advertisers?	There are no advertisers located in the vicinity of the site.	Yes.
4. Streetscape, setting or landscape		

Provision	Comment	Compliance
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The scale, proportion and form of the proposed sign is consistent with that existing and is therefore considered compatible with the existing context of the site and the surrounding locality.	Yes.
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposed signage will contribute to the visual interest of the New South Head Road streetscape, by identifying the School in a format consistent with the overall design of the proposed development.	Yes.
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	The proposal is for the upgrade of existing signage. The proposed upgrade will result in a cleaner signage aesthetic for the school.	Yes.
Does the proposal screen unsightliness?	The proposed signage does not screen unsightliness.	Yes.
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	No. The signage does not protrude above buildings, structures or tree canopies.	Yes.
Does the proposal require ongoing vegetation management?	No.	Yes.
5. Site and Building		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed upgrade of existing signage is compatible with the approved scale and proportion of the site. The location and design of the sign is considerate of the surrounding streetscape and existing character of the school.	Yes.
Does the proposal respect important features of the site or building, or both?	The proposed signage will not dominate or detract from the existing and proposed school buildings, but rather enable the identification of the school, whilst being subservient to the overall form of the site.	Yes.
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The upgrades sign is modern in nature and has been designed to complement the existing scale, proportion, and form of the school.	Yes.
6. Associated devices and logos with advertisement and advertising structures		

Provision	Comment	Compliance
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	Not applicable.	N/A.
7. Illumination		
Would illumination result in unacceptable glare?	Not applicable.	N/A.
Would illumination affect safety for pedestrians, vehicles or aircraft?	Not applicable.	N/A.
Would illumination detract from the amenity of any residence or other form of accommodation?	Not applicable.	N/A.
Can the intensity of the illumination be adjusted, if necessary?	Not applicable.	N/A.
Is the illumination subject to a curfew?	Not applicable.	N/A.
8. Safety		
Would the proposal reduce the safety for any public road?	The proposed signage will not reduce the safety for any public road.	Yes.
Would the proposal reduce the safety for pedestrians or bicyclists?	The proposed signage will not reduce the safety for pedestrians or bicyclists.	Yes.
Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The proposed signage will not obscure any sightlines, and therefore is not considered to reduce the safety of pedestrians	Yes.

5.6. STATE ENVIRONMENTAL PLANNING POLICY NO.55 –REMEDIATION OF LAND

State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55) provides a state-wide planning approach for the remediation of land and aims to promote in the remediation of contaminated land to reduce the risk of harm to human health or the environment. Clause 7(1) requires the consent authority to consider whether land is contaminated prior to consent of a development application, and if the land is contaminated consider whether the site is suitable for its intended purpose either in a contaminated state or whether it needs to be remediated.

A Preliminary Phase 1 Environmental Site Assessment (PSI) has been undertaken by JK Environments and is attached at **Appendix CC.** The PSI consists of a review of the current and historical activities that occur on

the site, and an assessment of the potential risk of soil/groundwater contamination existing on the land. The PSI confirmed that lead and carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs) contamination was identified in soils in northern and southern parts of the site within the areas of proposed development works, specifically:

- Lead contamination hotspot in the northern part of the site where the new ELC building is proposed.
- Carcinogenic PAHs within the southern part of the site area where the new two-storey bus/carpark is proposed.
- Total Recoverable Hydrocarbons (TRH) F3 identified also within northern and southern parts of the site which poses a risk to ecological receptors.
- These TRH exceedances where co-located with carcinogenic PAHs requiring remediation due to the potential risk to human health.
- The source of the contamination was identified as fill material historically imported on the site.

Based on the abovementioned findings, the PSI provides the following recommendations:

- Prepare a Remedial Action Plan (RAP) to address the data gaps and contamination issues identified on the site. This will include the requirements to complete the data gap assessment and the preparation of an unexpected find protocol (UFP); and
- Undertake a validation assessment documenting the remediation works.

Subject to the implementation of the recommendations, the PSI concludes that the site can be made suitable for the proposed development.

5.7. STATE ENVIRONMENTAL PLANNING POLICY (COASTAL MANAGEMENT) 2018

State Environmental Planning Policy (Coastal Management) 2018 (CM SEPP) updates and consolidates into one integrated policy SEPP 14 (Coastal Wetlands), SEPP 26 (Littoral Rainforests) and SEPP 71 (Coastal Protection), including clause 5.5. of the *Standard Instrument – Principal Local Environmental Plan*.

The CM SEPP gives effect to the objectives of the Coastal Management Act 2016 from a land use planning perspective, specifying how development proposals are to be assessed if they fall within the coastal zone.

The subject site is located within the coastal zone and is identified, in part as ‘coastal environment area’, and ‘coastal use area’.

5.7.1. Coastal Environment Area

Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following:

(a) the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment,

(b) coastal environmental values and natural coastal processes,

(c) the water quality of the marine estate (within the meaning of the Marine Estate Management Act 2014), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1,

(d) marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms,

(e) existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,

(f) Aboriginal cultural heritage, practices and places,

(g) the use of the surf zone.

The western side of the site is located within the boundaries of land identified as 'coastal environment area' in accordance with the CM SEPP. The proposed building works are located away from the coastline, towards Vaucluse Road. In addition, and as outlined in **Section 6.13** of this report, the proposal has been designed and sited to minimise potential impacts on the coastal environment area. Mitigation Measures outlined in the Civil Engineering Report attached **Appendix N** and summarised in **Section 6.13** will be implemented to manage and avoid any adverse impacts on the coastal environmental area.

5.7.2. Coastal Use Area

Development consent must not be granted to development on land that is within the coastal use area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the access, amenity and cultural values of the coast. As discussed in the Civil Engineering Report attached at **Appendix N** and illustrated in the Sediment and erosion control plans attached at **Appendix FF**, the proposal will not have an adverse impact on access and amenity of the neighbouring coastline.

The proposal does not seek to extend the existing building envelope and will not result in intensification of use of the site that would detract from the existing amenity of the coastal use area in which it is located.

5.8. SYDNEY REGIONAL ENVIRONMENTAL PLAN (SYDNEY HARBOUR CATCHMENT) 2005

A portion of the site is located within a wetlands protection area as identified with the *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005.* As such, the matters for consideration outlined within Part 6 Clause 63 of the SREP 2005 must be considered as part of this proposal.

As discussed in Section 6.13 of this report, the quality of water entering the wetlands is expected to be equal to current conditions due to the implementation of appropriate mitigation measures, such as the provision of a site wide drainage system, Stormwater Detention Tank and Ocean Gard storm filters. As a result, no significant impact on the hydrological integrity is expected on the Coastal Wetland.

Furthermore, and as outlined in the geotechnical reports attached at **Appendix O**, **Appendix P,** Appendix **Q,** the proposed development is not expected to have any impacts on soil quality or the quantity and quality of groundwater. As such potential impacts on the Coastal Wetland, are considered unlikely to occur.

5.9. DRAFT STATE ENVIRONMENTAL PLANNING POLICY (REMEDIATION OF LAND)

The *Draft State Environmental Planning Policy (Remediation of Land)* is the proposed new land remediation SEPP set to replace SEPP 55. Public exhibition of the 'explanation of intended effect' for the Draft Remediation SEPP and draft planning guidelines was completed in April 2018.

The Draft Remediation SEPP will retain the objectives of SEPP 55 and reinforce the successful aspects of the framework. In terms of relevant changes applicable to development applications, clause 7 of SEPP 55 is proposed to be incorporated into the Draft Remediation SEPP. In addition, the list of potentially contaminating activities and the purpose of a 'preliminary site investigation' (PSI) and 'detailed site investigation' (DSI) will be integrated into clause 7 of the Draft Remediation SEPP.

As requested in the SEARs a contamination assessment has been submitted with this application, refer to **Appendices 0, 9, Q and CC.**

5.10. DRAFT STATE ENVIRONMENTAL PLANNING POLICY (ENVIRONMENT)

The *Draft State Environmental Planning Policy (Environment)* (Draft Environment SEPP) is the new SEPP seeking to consolidate, repeal and replace the following seven existing SEPPs:

- *State Environmental Planning Policy No. 19 – Bushland in Urban Areas*
- *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*
- *State Environmental Planning Policy No. 50 – Canal Estate Development*
- *Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment*
- *Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No.2-1997)*

- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*
- *Willandra Lakes Regional Environmental Plan No. 1 – World Heritage Property.*

Public exhibition of the Draft Environment SEPP was completed in January 2018. The Draft Environment SEPP will deliver a policy instrument that contains a single set of planning provisions for catchments, waterways, bushland and protected areas.

The land the site is located on is currently not subject to any of the abovementioned SEPPs, nor is it identified as being attributed to any catchments, waterways, bushland or protected areas.

5.11. DRAFT AMENDMENTS TO STATE ENVIRONMENTAL PLANNING POLICY (EDUCATIONAL ESTABLISHMENTS AND CHILD CARE FACILITIES) 2017

The Department has very recently completed its review of the Education SEPP and is proposing some amendments. The draft amendments were released on 20 November 2020 and seek to improve the operation and usability of the SEPP.

The proposed amendments to the Education SEPP focus on resolving operational issues, clarifying provisions and other housekeeping amendments to clarify the policy intention. These are sought to modernise, simplify and improve the effectiveness and usability of the SEPP.

The key amendments to the Education SEPP propose to:

- clarify existing provisions to better reflect the policy intent,
- facilitate ongoing assessment commensurate with impacts and capital investment values,
- update organisation names, definitions and legislation references,
- introduce measures to support two-storey buildings being development without consent, without changing car parking or student number limits,
- increase the capital investment value trigger for new schools and alterations and additions to existing schools and tertiary institutions to better reflect the nature and impact of these developments,
- include hours of operation for the use of school-based child care in the exempt development pathway,
- clarify investigations, including geotechnical and other testing, surveying and sampling as exempt development,
- extend the timeframe for short-term portable classrooms under the exempt development pathway from 24 months to 48 months,
- update provisions to prevent child care centres within close proximity of each other, in low density residential zones (R2),
- provide clearer guidance on evacuation considerations for child care centres and references to the National Construction Code,
- provide a clearer planning pathway for student housing to be built on existing schools, universities and TAFE sites,
- provide an opportunity for innovation hubs for commercial uses to be permitted on existing tertiary institution sites.

Minor changes are also proposed to supporting documents such as the Child Care Planning Guideline, the Guide to the Education SEPP and the Code of Practice for Part 5 activities to ensure consistency with the SEPP and clarify existing policy.

Many of the proposed amendments are not relevant as proposal does not seek approval via an alternate planning pathway, or otherwise the amendments not apply to the site or the specific works associated with the proposal.

Those matters that are of relevance to the proposed amendments are identified in **Table 16** below.

Table 16 Draft Education SEPP Amendment Response Table

Relevant Provision	Response
Enabling student housing on sites with existing educational establishments; The Education SEPP proposes to allow student housing as a development permitted with consent, by any person who obtains land owner's consent, within the boundaries of an existing educational establishment. No other forms of housing will be permissible on educational establishments	The proposed extension to the boarding accommodation (proposed in concept form and the subject of detailed development consent) would be defined as 'student housing' as per the Explanation of Intended Effects accompanying the proposed Housing Diversity SEPP. This proposal will remain being considered as a permissible use under the provisions of the Draft amendments to the Education SEPP. The proposed student housing is not a 'stand-alone' matter, being proposed as part of a variety of other concept proposals and detailed works within the current application, and in this context would remain being considered as state significant development.
Directional signage and information boards: It is proposed to remove Subclause 38(1)(h) from the Education SEPP. This will mean that directional signage and information boards will be exempt development if they are consistent with the development standards identified in Schedule 1	The directional signage that is included within this application will remain to be defined as exempt development under the provisions of the Draft amendments to the Education SEPP.
Threshold triggers for State significant development: It is proposed to increase the capital investment value for alterations and additions to existing schools from $20 million to $50 million, and to permit demolition and redevelopment of an existing school via this clause.	The proposal is classified as state significant development by virtue of Subclause 15(2), Schedule 1 of the State and Regional Development SEPP in that it involves alterations and additions to an existing school that involves a CIV of greater than $20M. The CIV associated with the proposal involves a CIV of approximately $48.8M and therefore the proposal would not be classified as 'state significant development' under the provisions of the provisions of the Draft amendments to the Education SEPP.

5.12. DRAFT STATE ENVIRONMENTAL PLANNING POLICY (HOUSING DIVERSITY)

The Department is proposing to prepare a new SEPP to consolidate and update the Government's housing-related policies. It is proposed to introduce three new land use terms to help facilitate housing projects that will stimulate economic recovery. Build-to-rent (BTR) housing in particular has been identified as an opportunity for stimulus, and this policy establishes a planning pathway to support developments of this type. In addition, it is proposed to amend some planning provisions, particularly relating to boarding house and seniors housing development

As part of this reform, it is proposed that the definition for 'student housing' would be contained within the Standard Instrument LEP and would refer to a building that:

- provides accommodation and communal facilities principally for students enrolled to study at an education establishment during teaching periods; and
- may incorporate some fully self-contained dwellings.

It is noted that under the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP), development for the purpose of residential accommodation for students associated with a school or university may be carried out within the boundaries of an existing school or university respectively. To improve consistency across environmental planning instruments, it is proposed that both the new Housing Diversity SEPP and the Education SEPP would rely on the proposed new Standard Instrument LEP definition of 'student housing' in the future.

The explanation of intended effect accompanying the new Housing Diversity SEPP also indicated that the new SEPP could include development standards for student housing to apply across the State.

In response to this new SEPP, the proposal would continue to remain a permissible use on the site, and at the appropriate time, the detailed development application would need to respond to any relevant development standards. (noting that the subject application simply seeks to achieve a general envelope approval for this future building).

5.13. WOOLLAHRA LOCAL ENVIRONMENTAL PLAN 2014

Woollahra Local Environmental Plan 2014 (WLEP) is the principal environmental planning instrument governing development at the site. An assessment against the relevant controls of the WLEP has been undertaken in the subsections below.

5.13.1. Zoning and Permissibility

The site is zoned SP2 – Infrastructure, 'educational establishments' are permitted with consent in this zone. As per *WLEP 2014*, an educational establishment is defined as:

> *"a building or place used for education (including teaching), being:*
>
> *(a) **a school**, or*
>
> *(b) a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act."*

The proposed school is therefore permitted with consent.

5.13.2. Zoning Objectives

The relevant objectives of the SP2 – Infrastructure zone are:

- *To provide for infrastructure and related uses.*
- *To prevent development that is not compatible with or that may detract from the provision of infrastructure.*

The proposal is consistent with these objectives as:

- The site will continue to operate as an educational establishment, which is considered a key piece of social infrastructure.
- The proposal is compatible with the existing and intended use of the site as an educational establishment.

5.13.3. LEP Provisions and Development Standards

Table 17 WLEP Compliance Table

Consideration	Control	Proposal	Compliance
Clause 4.3 – Building Height	The site is subject to a building height control of 9.5 metres.	**Detailed Development:** **New ELC Building:** 7,570 m **Junior School East Wing:** 12,230 m **Junior School West Wing:** 13,246 m **Year 8 Centre:** - East Side: 11,407 m - West Side: 15,193 m **Bus/Carpark Structure:** 4,077 m **Concept Development:** **Senior School Circulation Hub:** 13.5 m **Hughes Centre:** 13.5 m **Senior School Boarding accommodation extension:** 14 m	The New ELC Building and bus/car parking structure are compliant with the 9.5 m maximum building height for the site. The proposed east wing of the junior school exceeds the maximum building height permitted for the site by **2.73 m.** The proposed west wing of the junior school exceeds the maximum building height permitted for the site by **3.746 m.** The east side of the proposed Year 8 Centre exceeds the maximum building height permitted for the site by **1.907 m.** The west side of the proposed Year 8 Centre exceeds the maximum building height permitted for the site by **5.693 m.** The Senior School circulation hub and Hughes Centre will exceed the maximum building height for the sites by **4 m.** The senior school boarding accommodation extension building will exceed the maximum building height for the site by **4.5 m.** However, as outlined in Section 5.4 of this report, in accordance with clause 42 of the Education SEPP, development consent may still be granted without the need for a formal clause 4.5 variation as this is considered SSD.
Clause 4.4 - Floor Space Ratio (FSR)	N/A	The site is not subject to a maximum FSR standard under WLEP 2014.	N/A

Consideration	Control	Proposal	Compliance
Clause 5.10 – Heritage Conservation	There are a number of locally listed heritage items on the site, and immediately surrounding it, including: ▪ Item 396 – Kincoppal, Roman Catholic Convent of the Sacred Heart and school—buildings and interiors, grounds, trees, sandstone and wrought iron fence, gateposts and gates. ▪ Item 393 – St Michael's Anglican Church—church and interiors, grounds, sandstone works, gateposts and iron arch, obelisk ▪ Item 365 – Hermit Bay Slipway and landing	A Heritage Impact Statement and Aboriginal Cultural Heritage Report are attached at **Appendix T** and **Appendix H** respectively. The proposal does not unreasonably impact the heritage significance of the items on or near the site Aboriginal Heritage and European Built Heritage matters are discussed in more detail at **Section 6.9.1**and **Appendix T** and **Appendix U** of this report.	Yes
6.1 Acid Sulfate soils	Development consent is required for the carrying out of works described below on land shown on the Acid Sulfate Soils Map as being of the class of specified for those works. Class of Land: 5 Works within 500m of adjacent Class 1, 2, 3 or 4 land that is below 5m AHD and by which the water table is likely to be lowered below 1m AHD on adjacent Class 1, 2, 3 or 4 land.	The school campus is located wholly within land identified as Class 5 Acid Sulfate soil. No works are proposed within 500m of the adjacent Class 1, 2, 3 or 4 land.	Yes
Clause 6.2 - Earthworks	Earthworks must not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.	The proposed earthworks will involve some minor cut and fill to accommodate the extension to the ELC and new basement carpark. However, the earthworks are not anticipated to have an adverse environmental impact. A Geotechnical Report has been prepared	Yes

Consideration	Control	Proposal	Compliance
		by JK Environments attached at **Appendix O.**	
Clause 6.3 Flood Planning	Given the location of the property with harbour foreshore frontage, the site is identified as flood prone land. In this respect, development must: ▪ Be compatible with the flood hazard of the land. ▪ Not adversely affect the flood behaviour resulting in detrimental increases in flooding of other development or properties. ▪ Incorporates measures to mitigate flood risks. ▪ Not adversely affect the environment causing avoidable erosion or destruction of riparian vegetation.	A Civil Report has been prepared by Henry & Hymas and attached at **Appendix N.** Flooding, drainage and stormwater management are discussed in more detailed in **Section 6.13.**	Yes

5.13.4. Height of Building

The maximum height limit on the site is 9.5m (refer to **Figure 22**). The proposed development includes alterations and additions to various existing buildings, will result in maximum building heights and variances outlined in **Table 18** below.

Table 18 Summary of Maximum Building Heights

Precinct	Proposed Development/Building	Max Height (m)
Detailed Development		
A	Early Learning Centre Junior School (max height)	7,570 m 13,246 m
B	Year 8 Centre Bus/Carpark Structure	15,193 m 4,077 m
Concept Development		
B	Senior School Circulation Hub Hughes Centre	13.5 m 13.5 m
C	Senior School Boarding accommodation extension	14 m

Typically, a Clause 4.6 Variation would be required to vary this height of buildings standard, however Clause 42 of the Education SEPP states that:

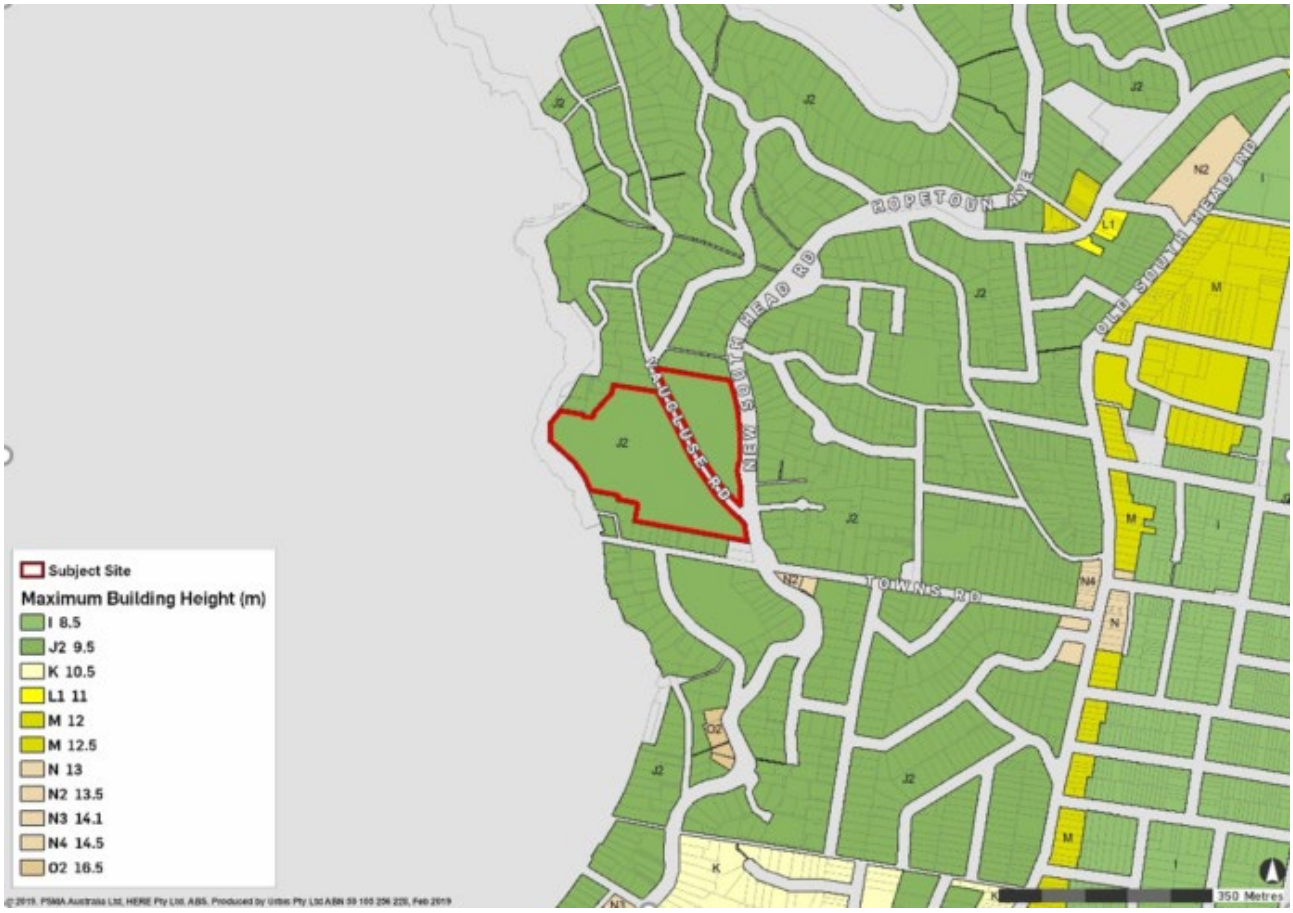
> *"Development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted."*

As such, no Clause 4.6 Variation is required. Notwithstanding this, the proposed building height is acceptable for the following reasons:

- The maximum building height standard relates to the built form of the suburb, which is zoned R2 Low density residential. The 9.5m building height standard is to regulate residential development in the locality.
- The school is zoned SP2 – infrastructure and contains existing institutional type building of a much greater height of 9.5m. Clause 42 of the Education SEPP recognises that educational facilities and school buildings are by virtue generally higher in form.
- It is noted that there are a number of buildings on the campus that already exceed the height limit, demonstrating that there has been historical recognition of the height exceedance.
- The buildings, or parts of buildings that exceed the maximum height limit, when viewed in context with the other existing buildings within the Campus, are acceptable and do not give rise to solar access, privacy, or visual/view impacts.

The potential impacts of the additional height of the various building elements has been assessed in **Section 6.5** of this Report.

Figure 22 Building Height Map



Source: Urbis

5.13.5. Woollahra Development Control Plan 2015

Part F of the *Woollahra Development Control Plan 2015* (WDCP) provides detailed controls for school developments. However, under Clause 11 of *State Environmental Planning Policy (State and Regional Development) 2011*, the application of local development control plans is excluded when assessing DAs for SSD projects. Notwithstanding this, the proposal has been assessed against the key relevant controls of the SDCP in the table below.

Table 19 Woollahra DCP Compliance Table

Control	Proposal	Complies
F2.2 – Building and Urban Design		
C1 Development incorporates a high standard of architectural design, materials and detailing appropriate to the building type and location.	The proposal demonstrates a high standard of architectural design, materials and detailing appropriate to the building type and location, as outlined in **Appendix C** and **Appendix E**.	Yes
C2 The development has a clearly distinguishable street entry point which contributes to the streetscape.	The proposal will continue to maintain clearly distinguishable street entry points which contribute to the streetscape. Further the upgrade to the main school entrance will improve the streetscape by positively addressing the street.	Yes

Control	Proposal	Complies
C3 Development on the boundary provides a sympathetic transition in terms of height, scale, bulk and materials.	The proposal has been designed in order to provide a sympathetic transition in terms of height, scale, bulk and materials to the boundaries, and will largely fit within the existing building envelopes	Yes
C4 Development with a gross floor area of at least 1,000m² achieves a minimum 4-star NABERS rating.	The proposal will achieve a 4-star Green Star rating.	Yes
C5 Development is designed to provide for best practice environmentally sustainable design outcomes.	The proposal has been designed in order to provide for best practice environmentally sustainable design outcomes, refer to **Appendix S.**	Yes
F2.3 – Siting of Development		
C1 Development complies with the street setback controls that apply to the precinct or centre where the centre is proposed. **Front Setback:** The front setback of the building envelope is determined by averaging the three most typical setbacks of the four closest residential buildings that face the same side of the street. **Rear Setback:** The rear setback is a consequence of the site depth, front setback and building depth. **Side Setback:** 23+m = 3.4m	The front setback is located along eastern boundary Parallel to Vaucluse Road. It is not proposed to alter the existing front setback. The rear setback located along the western boundary is also not proposed to be altered. The side setback along the northern boundary between the extended Junior school building and neighbouring residential property is 12,640m, which complies with the required 3.4 metres. The side setback along the southern boundary between the proposed basement car park and neighbouring property is 3.5m, which complies with the required 3.4 metres. It is noted that the southern portion of the site, including the basement car park and bus parking facilities are located at a higher ground level than the adjoining residential property. Furthermore, potential amenity issues related to the revised side setbacks are discussed in **Section 6.5**.	Yes
C2 Non-street fronting rear and side setbacks of the building are setback so that sunlight is provided to adjoining residential properties:	The proposed alterations and additions to the Junior School is setback **12,640m** from the northern boundary. The proposed development to the Senior School is primarily internal, within the	Yes

Control	Proposal	Complies
a) to 50% or 35m² (with minimum dimension 2.5m), whichever is smaller of the main ground level private open space of adjacent properties; and *b) for a minimum of two hours between 9am and 3pm on June 21.*	campus and will have no impact to adjacent properties. The potential overshadowing of the new car and bus parking structure is assed in **Section 6.5** of this Report.	
C3 Where existing buildings overshadow greater than that specified in C2, sunlight access is not further reduced.	As depicted in the shadow diagrams provided at **Appendix E**, sunlight is not further reduced.	N/A
C4 Rear and side setbacks of the building are setback to maintain the amenity of the adjoining development, taking into account privacy and noise generation.	The front setback is located along eastern boundary Parallel to Vaucluse Road. It is not proposed to alter the existing front setback. The rear setback located along the western boundary is also not proposed to be altered. The side setback along the northern boundary between the extended Junior school building and neighbouring residential property is 12,640m, which complies with the required 3.4 metres. The side setback along the southern boundary between the proposed basement car park and neighbouring property is 3.5m, which complies with the required 3.4 metres. It is noted that the southern portion of the site, including the basement car park and bus parking facilities are located at a higher ground level than the adjoining residential property. - Furthermore, potential amenity issues related to the revised side setbacks are discussed in **Section 6.5**.	Yes
C5 Development provides visual privacy to adjoining properties by appropriate design, vegetative screening, window and door offset, location of external areas such as roof top terraces, screening devices, separation distances and the like.	The proposal has been specifically designed and landscaped to be sensitive to the immediately adjoining properties to the north and south of the School, and fits largely within the existing building envelopes	Yes
C6 Development is sited so significant views and vistas from the public domain are maintained.	The proposal has been designed to fit largely within the existing building envelopes to ensure that significant	Yes

Control	Proposal	Complies
	views and vistas from the public domain are maintained.	
C7 Development provides for view sharing from surrounding properties.	The proposal will maintain view sharing principles from surrounding properties.	Yes
F2.4 – Heritage Conservation		
C1 The location and design of development does not detract from a heritage item.	Refer to the Heritage Impact Statement at **Appendix T** and **Section 6.9** for further details	Yes
C2 Siting of new development: *a) when viewed from the public domain— preserves existing views to and from the heritage item.* *b) when viewed from surrounding residences— enables a sharing of views to and from the heritage item.*		
C3 Fences that have heritage significance are conserved. Development in the vicinity of these fences responds to the heritage significance with a sympathetic design and finish		
C4 Development responds sympathetically to the heritage significance of items and heritage conservation areas in terms of architectural style and design, colours, materials, proportions and scale.		
F2.5 – Open Spaces		
C1 Existing open spaces are retained.	Existing open spaces are to be retained.	Yes
C2 Vehicle access and parking is not permitted on any part of the site considered as open space.	Vehicle access and parking will not be proposed to any part of the site considered as open space, with a new basement car parking and at grade parking area provided.	Yes
C3 New educational establishments and major development of existing establishments provide open spaces and maximise the use of existing open spaces, having regard to an overall plan for the siting, amenity impacts, usability and accessibility of such spaces.	The proposal seeks to maximise the use of existing open space.	Yes
C4 Playgrounds are provided on site.	The proposal includes new playground and play areas associated with the upgraded Junior School and ELC.	Yes

Control	Proposal	Complies
C5 Sports fields are provided on site, where possible.	Sports fields are provided in other locations on the site.	Yes
F2.6 – Traffic, Parking and Access		
C1 The educational establishment does not unreasonably impact on the surrounding road network, specifically in relation to pedestrian safety and vehicle traffic. Note: A traffic and pedestrian management plan may be required to demonstrate impacts.	The proposal will improve the surrounding road network, specifically in relation to pedestrian safety and vehicle traffic.	Yes
C2 Pedestrian access is provided to all frontages that adjoin the public domain.	Pedestrian access will continue to be provided to all frontages that adjoin the public domain.	Yes
C3 Pedestrian access is segregated from vehicular access with clearly defined paths.	The proposal will help improve the segregation of vehicular and pedestrian access to the site.	Yes
C4 Equitable access is provided in accordance with Part E of this DCP, Chapter E1 Parking and Access.	Equitable access to the site is to be provided.	Yes
C5 Pedestrian areas are at key entry points to accommodate concentrations of pedestrians, e.g. pick up time.	The proposal will improve pedestrian areas at key entry points to accommodate concentrations of pedestrians, such as at the 'kiss and ride' facility in the internal roadway.	Yes
C6 For a new educational establishment or major development of an existing establishment—an internal driveway for vehicles is provided for picking-up and dropping-off students.	A 'kiss and ride' facility will be provided within the new internal roadway.	Yes
C7 Development complies with the parking requirements in Part E of this DCP, Chapter E1 Parking and Access.	Development complies with the parking requirements of the DCP.	Yes
C8 Provision is made on-site for service and emergency Vehicles	The proposal includes dedicated space on-site for service and emergency vehicles.	Yes
C9 Bicycle parking is provided. *C10 For secondary and tertiary establishments—dedicated secure bicycle parking is provided at the following rates:* *a) 5% of staff numbers.*	The proposed development includes bicycle storage facilities in the existing MTC building. As outlined in the Green Travel Plan included within the TIA (**Appendix R**), due to the school being located on a hill, it is not a suitable location for bike riding. As there is no demand for bicycle facilities it is not	Yes

Control	Proposal	Complies
b) 10% of full time student numbers; at a central location and with associated change rooms and showers.	proposed to increase the existing on-site facilities currently provided by the school.	
F2.7 – Planting, Fencing and Hard Surfaces		
C1 Significant trees on the site are retained.	Refer to **Appendix J** and **Appendix K.**	Yes
C2 Development does not damage significant trees located on land adjoining the site.	No trees on adjoining land will be impacted.	Yes
C3 Landscaping provides shade for play, screening of buildings, an improved microclimate, soil stabilisation, and visual quality	Refer to the Landscape Strategy attached at **Appendix G.**	Yes
C4 The landscape design is coordinated with, or has suitable regard to: *a) the local streetscape;* *b) site conditions;* *c) on-site building design and open spaces; and* *d) type, scale and location of adjoining development*		
C5 Existing vegetated areas which contribute to the public realm are retained. These areas include, but are not limited to: *a) Kincoppal (foreshore bush land);* *b) Vaucluse Public School (open space adjacent to Cambridge Avenue); and* *c) Glenmore Public School (vegetated strip adjacent to Glenmore Road).*		
C6 Planting or fencing does not block significant views or open spaces from adjacent public domain or private property.		
C7 At least 50% of fencing is open to facilitate views and vistas of open spaces from the public domain.		
F2.8 – Community Use		
C1 Buildings are flexibly designed and capable of being used for a variety of purposes.	The proposal has been designed with flexibility in mind to enable capability for a variety of purposes and uses.	Yes
C2 The design of the facility incorporates the principles of Crime Prevention Through Environmental Design.	The proposal has been designed to be consistent with the principles of CPTED.	Yes

Control	Proposal	Complies
C3 Lighting, noise, hours of operation, and intensity of use does not detrimentally impact on adjacent properties.	The lighting, noise, hours of operation, and intensity of use associated with the school will not detrimentally impact on adjacent properties, and will not be intensified from existing practices.	Yes
C4 Pedestrian and vehicular access to the community use does not significantly impact on the surrounding road network.	Vehicular access to the new and existing car parking areas will be maintained via the existing entry points off of New South Head Road and Vaucluse Road. The new driveway off Vaucluse Road will assist in reducing traffic congestion by providing an additional kiss & drop facility. Refer to **Section 6.5** which provides more detail on the traffic impacts.	Yes
C5 Parking and servicing associated with the community use is accommodated on site, and does not unreasonably impact on the adjoining uses.		

5.13.6. Contributions

Woollahra Section 94A Development Contributions Plans applies to the proposal (now a Plan for the purposes of Section 7.12 of the Environmental Planning and Assessment Act (EPAA). This Section 7.12 Plan imposes 1% levy on the basis of the capital investment value (CIV) of the project. Given the CIV of this project is some $49M, this would normally attract a contribution of $490,000 to be paid prior to the release of the construction certificate.

KRB request that the DPIE consider the provisions of Council's Section 94A Plan in relation to deferred payments of contributions, as well as utilise its powers under Section 7.12(2) of the Act to defer payment of this contribution.

Like many schools and institutions in the education sector, KRB has been significantly impacted by various events over the past years, including prolonged drought across many parts of regional NSW and southern Queensland over the past 5 years, the 2019-20 bushfires across NSW and Victoria, and also the more recent financial impact associated with the Covid-19 pandemic. The financial impacts on KRB caused by these events have been exacerbated by the significant boarding school component of the School that draws upon both regional and overseas students, and the reliance upon fees and financial contributions this student cohort provides toward the capital works programs to support the ongoing maintenance growth and learning environments associated with KRB.

The cost of the proposed capital works as detailed in this SSDA are essential to the future and long term growth of the school, and in respect to works associated with the proposed traffic improvements, will also provide benefits to the surrounding residential community. In light of the circumstance described above, KRB are seeking some financial relief from Council and the DPIE by deferring the contribution fees. Such deferral will considerably assist in managing the School's cashflow and assist in providing some economic stability during this difficult period.

Given the above, KRB seeks for the applicable condition in relation to the payment of Section 7.12 to consider and incorporate the following:

- In applying the total contribution amount for this development consent, to only consider the components of the CIV which deal with the detailed development aspects of the proposal for which consent is sought under this application (noting that those matters for concept approval, and hence the ability to levy contributions for those works, can be considered as part of future detailed applications for those stages at a later time); and
- To defer the payment of contributions:
  - In relation to works associated within Precinct A- coinciding with the final occupation certificate for the Junior School works as shown in the construction staging section of this EIS

– In relation to works associated within Precinct B- coinciding with the final occupation certificate for the Senior School works as shown in the construction staging of this EIS

6. KEY ASSESSMENT ISSUES

The Key Issues as per the SEARs have been assessed in addition to other issues deemed relevant, with impacts noted and mitigation measures proposed where necessary in this report. The following matters have been addressed:

- Built Form and urban Design
- Design Excellence
- Environmental Amenity
- Construction Staging
- Transport and Accessibility
- Aboriginal Cultural Heritage
- Ecologically Sustainable Development (ESD)
- Heritage
- Noise and Vibration
- Utilities
- Drainage, Flooding and Coastal Hazards
- Sediment, Erosion and Dust Controls
- Waste Built Form and urban Design

6.1. BUILT FORM

6.1.1. Detailed Development

Precinct A: Junior School

Built Form: The existing Junior School buildings known as the 'Barat-Burn' Building is a three block, brickwork structure located within the north-eastern section of the school grounds to the west of Vaucluse Road. For this current design proposal, the existing built form of Barat-Burn is largely retained with small increases to the overall bulk, and facade upgrades to the two wings on the lower side. The modern style of the original East Wing's 1960's façade is retained, with a sympathetic addition to the top level.

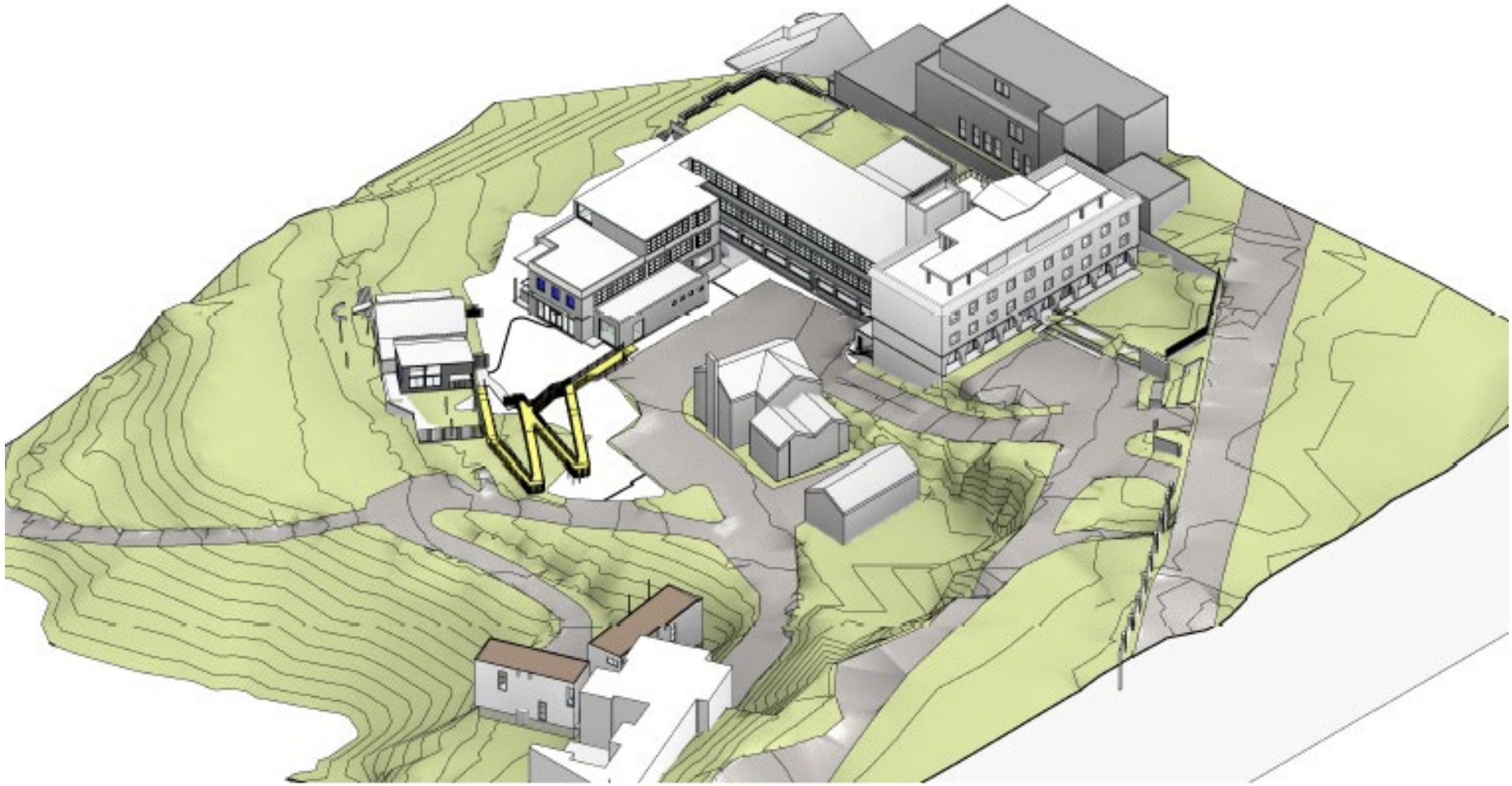
Bulk & Scale: The existing bulk and scale of the three block (wings) structure is retained, with roof top increases to the eastern wing side, and the southern end of the west wing, New vertical stair links and a lift to the central area alter the bulk of the existing circulation structure. There are no major changes to the setting, visual curtilage or landscape of the Junior buildings and the gardens of the School.

Siting: The siting of the building to the north-eastern end of the campus, is separated from the main senior school buildings, with landscaped areas, pedestrian links and the internal driveway network. The Barat-Burn building is well isolated from the main historical core (the original John Horbury Hunt buildings) of the grounds and has almost no visual relationship.

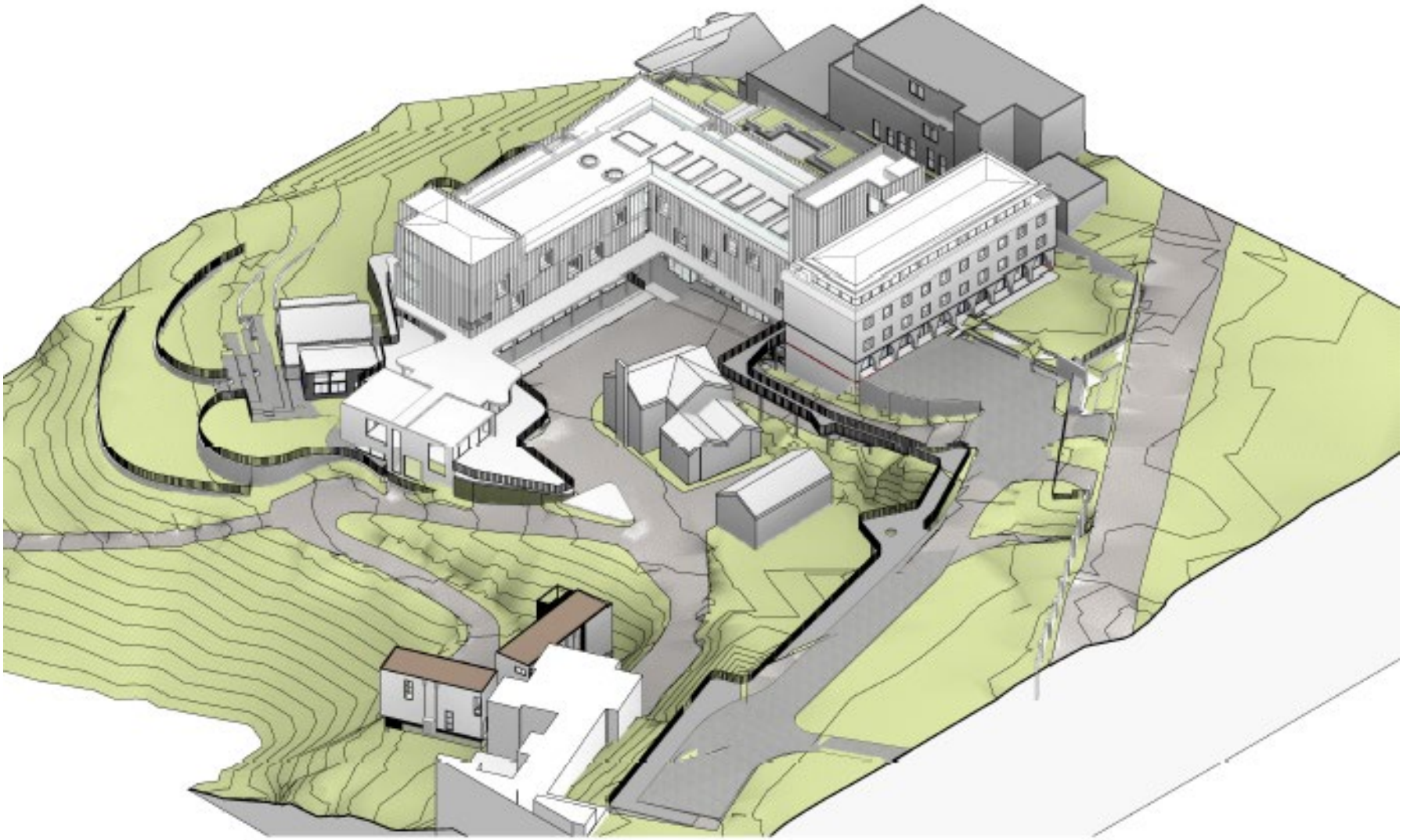
Figure 23 Proposed refurbished Junior School + Trafficable Roof

Source: BVN

Figure 24 Precinct A: Existing and proposed built form



Picture 3 Existing Built Form (south east)

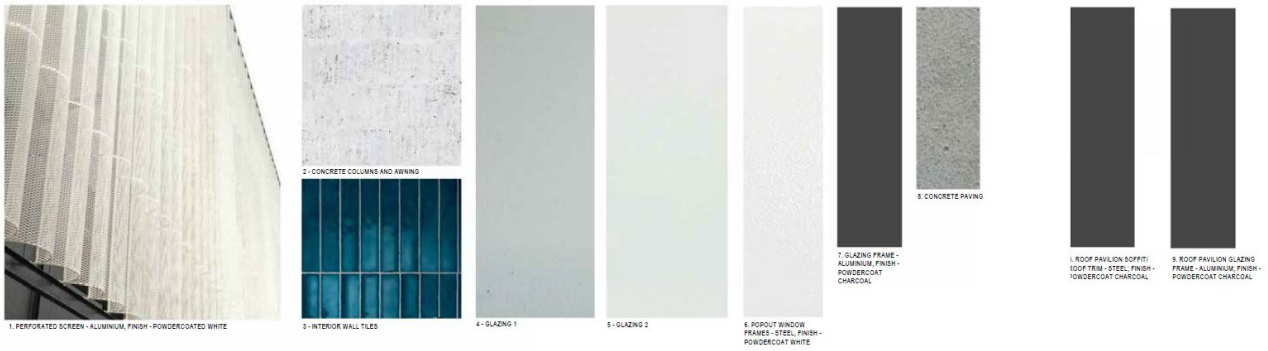


Picture 4 Proposed Built Form (south east)
Source: BVN

Materiality: The proposed works to the exterior of Barat-Burn building are compatible with the building's existing architectural style materials, form and finishes.

Urban Design: The subject design has predominantly come about through extensive re-planning of the interior spaces. creating modern communal flexible learning spaces, with increased access to views, natural daylight and outdoor learning environments. The original structural layout and grid of the existing buildings has been retained and used as a design framework for the re-planning of spaces. Additional rooms, breakout spaces, flexible common areas and amenities bringing it in-line with current education design guidelines have also provided design opportunities for an improved external fabric and façade.

Figure 25 Proposed Materials - Junior School Building



Source: BVN

Precinct A: ELC

Built Form: The proposed ELC extension building complements the existing Sophies Cottage and the upper Junior School Western Wing structures. The Early Learning Centre serves as an important component of the whole Junior School, to help the younger year groups transition to more formal learning environments. It has special place with the lower areas of the Junior school, forming its own identity through built form expression and materiality.

Bulk & Scale: The bulk and scale of the new building is sympathetic to the nearby cottage and recent addition with its placement on the hillside. It also provides a unique outdoor play setting between the two buildings. which expands out towards the harbour down a series of landscaped playground levels, linking back to the Junior School playground along the Western edge of the grounds.

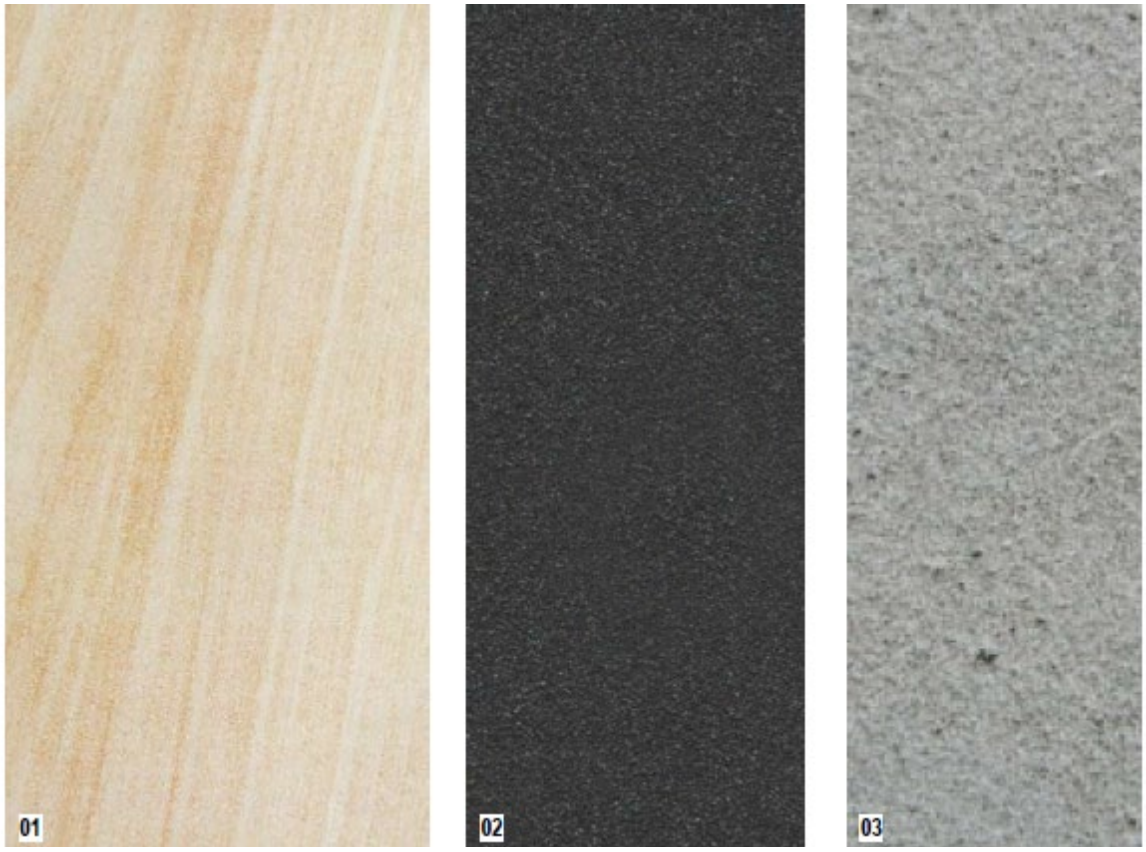
Precinct B: Senior School Front Forecourt

Built Form: The upgrades to the main entry forecourt are an important contribution to the overall impression and welcoming aspects of the school. The built form is unobtrusive, low lying and contributes to the existing sandstone materiality of the three heritage structures surrounding the forecourt.

Siting: The new works and landscape design interventions to and around the existing central planter which enhance the rich heritage fabric of the forecourt.

Materiality: As illustrated in **Figure 26** below, the new senior school front court will be constructed of high quality, complementary materials which are compatible with the existing character of the school.

Figure 26 Senior School – Proposed Forecourt



Picture 5 Materiality – Senior School Forecourt

Picture 6 Artist Impression – new forecourt (south west)

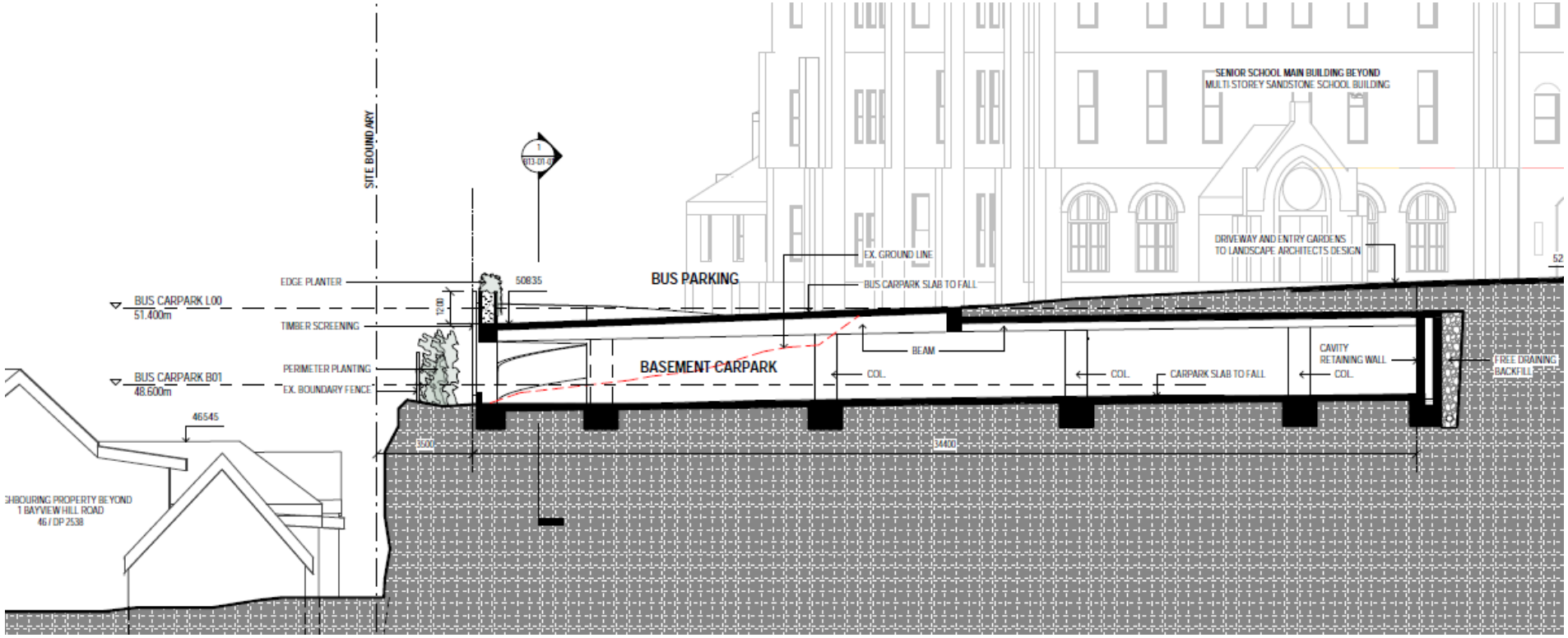
Source: BVN

Precinct B: Car/Bus Parking

Built Form: The new car and bus parking structure serves as an important component of the proposed traffic management plan for the school's operations. The impact to the existing driveway network is minimal and it easily integrates with the new driveway. The new structure is low lying with sub-ground excavation and is visually screened and planted along the Southern boundary, with very minimal impact on surrounding buildings.

Siting: The building is located to the south-eastern end corner of the campus, and is connected to the main entry gate and front driveway network. The building is accessed via the southern driveway corridor, which is discreetly located within the existing terraced open area

Figure 27 Proposed Basement Car Parking



Source: BVN

Figure 28 Proposed Bus Parking Area

Source: BVN

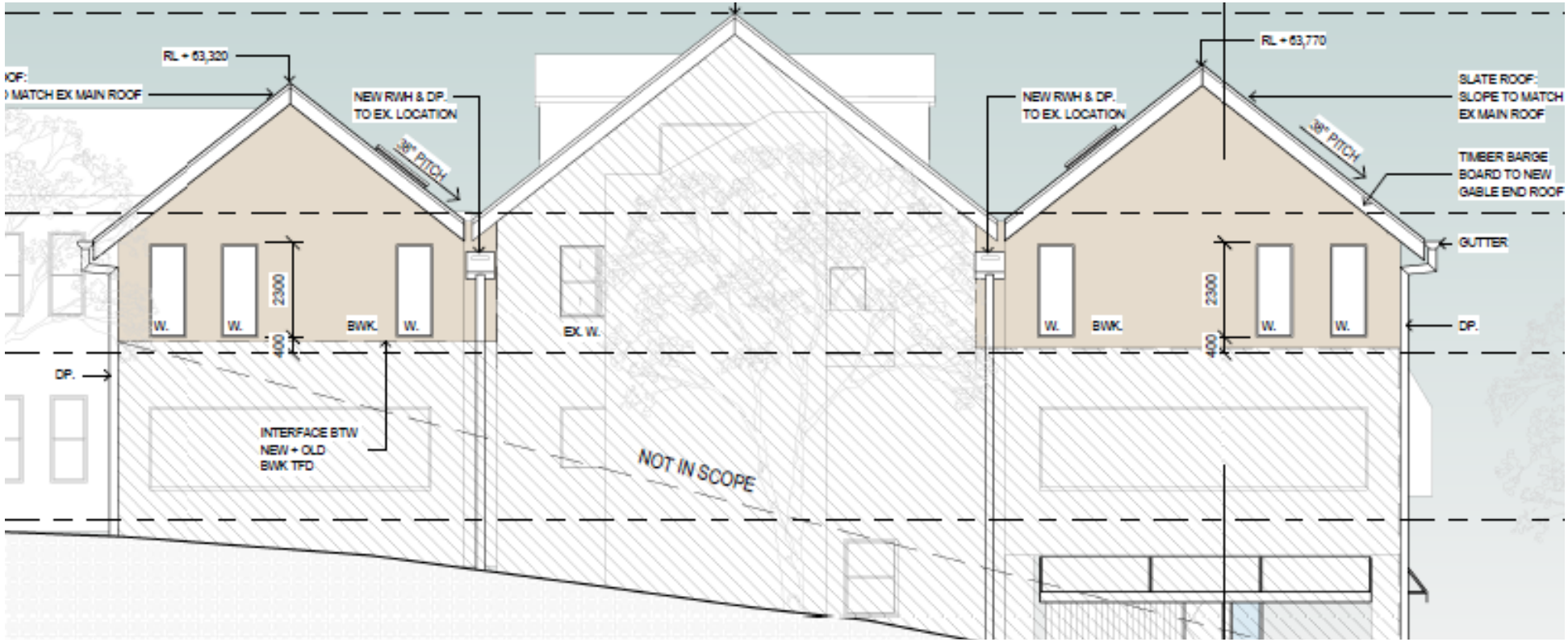
Precinct B: Year 8 Centre (North Wing)

Built Form: Physically, the senior school north wing incorporates numerous segments added to the original structure. Overtime the floor area has increased and several good-sized learning spaces have been developed. There are two gable formed structures, with pitched roofs complementing the built forms of the central gabled heritage building and adjoining Claremont Cottage building behind.

Siting: The current design proposes additional wings to both sides of the north building, located on one level above the existing 1970's flat roof addition.

Materiality: The materials proposed are sensitive to the existing fabric, with matching slate tiled roofs, exposed face brickwork walls and brick of a tone which complements the surrounding sandstone and renders.

Figure 29 Year 8 Centre – North Elevation



Source: BNV

Figure 30 View of Year 8 Centre from Vaucluse Road

Picture 7 Existing

Picture 8 Proposed

Source: BVN

6.1.2. Concept Development

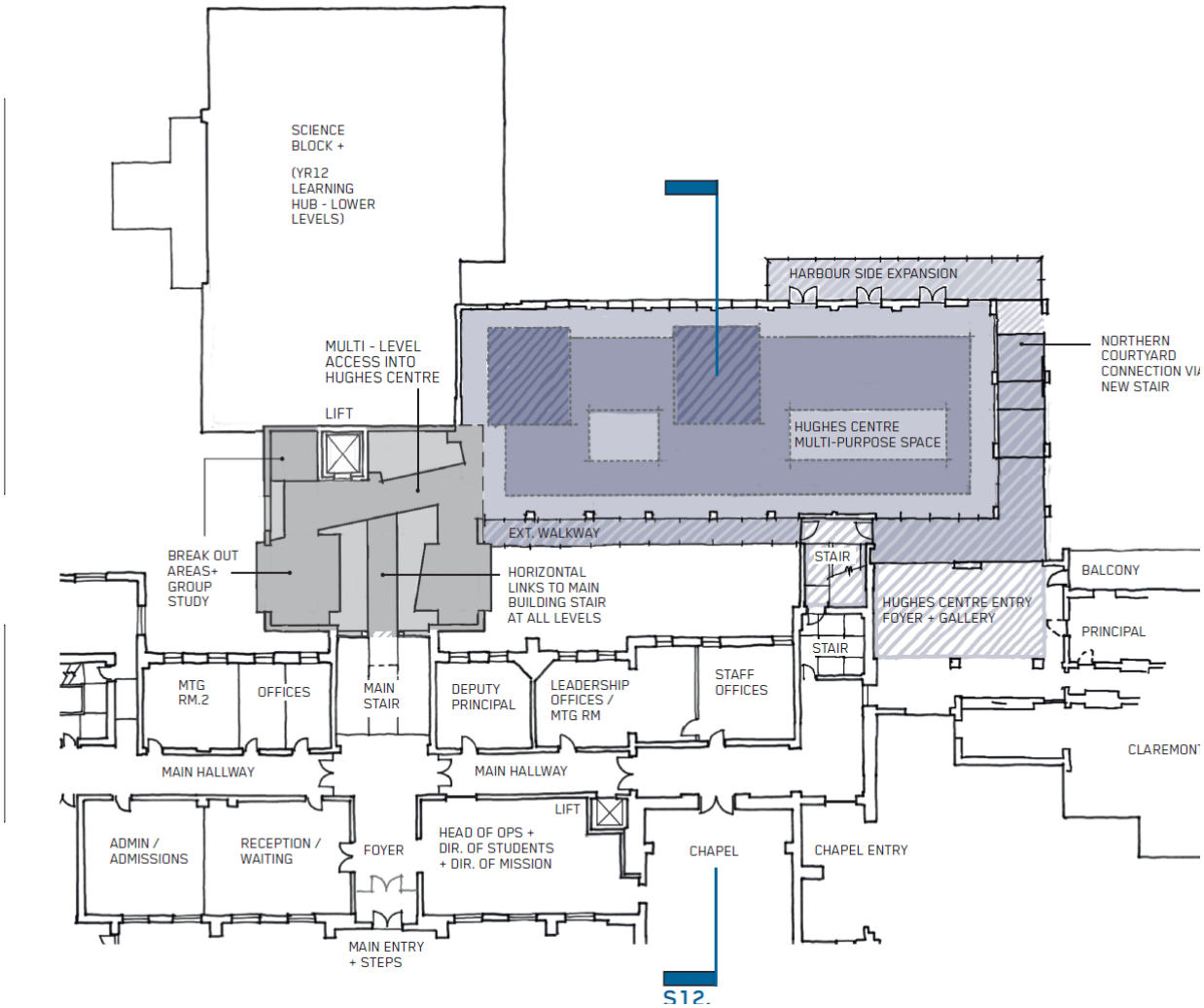
Hughes Centre Expansion

The Hughes Centre forms an integral part of the school, being located at the heart of the Campus. In its current form, the Hughes Centre is underutilised and does not serve a purpose. As such, it is proposed to

revitalise and expand the existing facility to create a new multi-purpose space. It is proposed to extend the building to the east and west to provide for a new multi-purpose space for drama, performing arts, gatherings, music recitals, stage shows, small lectures, junior school assemblies, information evenings, exams, film night dans exhibitions.

As illustrated in **Figure 31**, the alterations and additions will be within the existing building envelope and will not result in any major deviation from the existing built form of the building. It is not proposed to alter the existing bult form but rather reconfigure and connect the Centre to other elements of the campus.

Figure 31 Hughes Centre Extension Envelope – Floor Plan



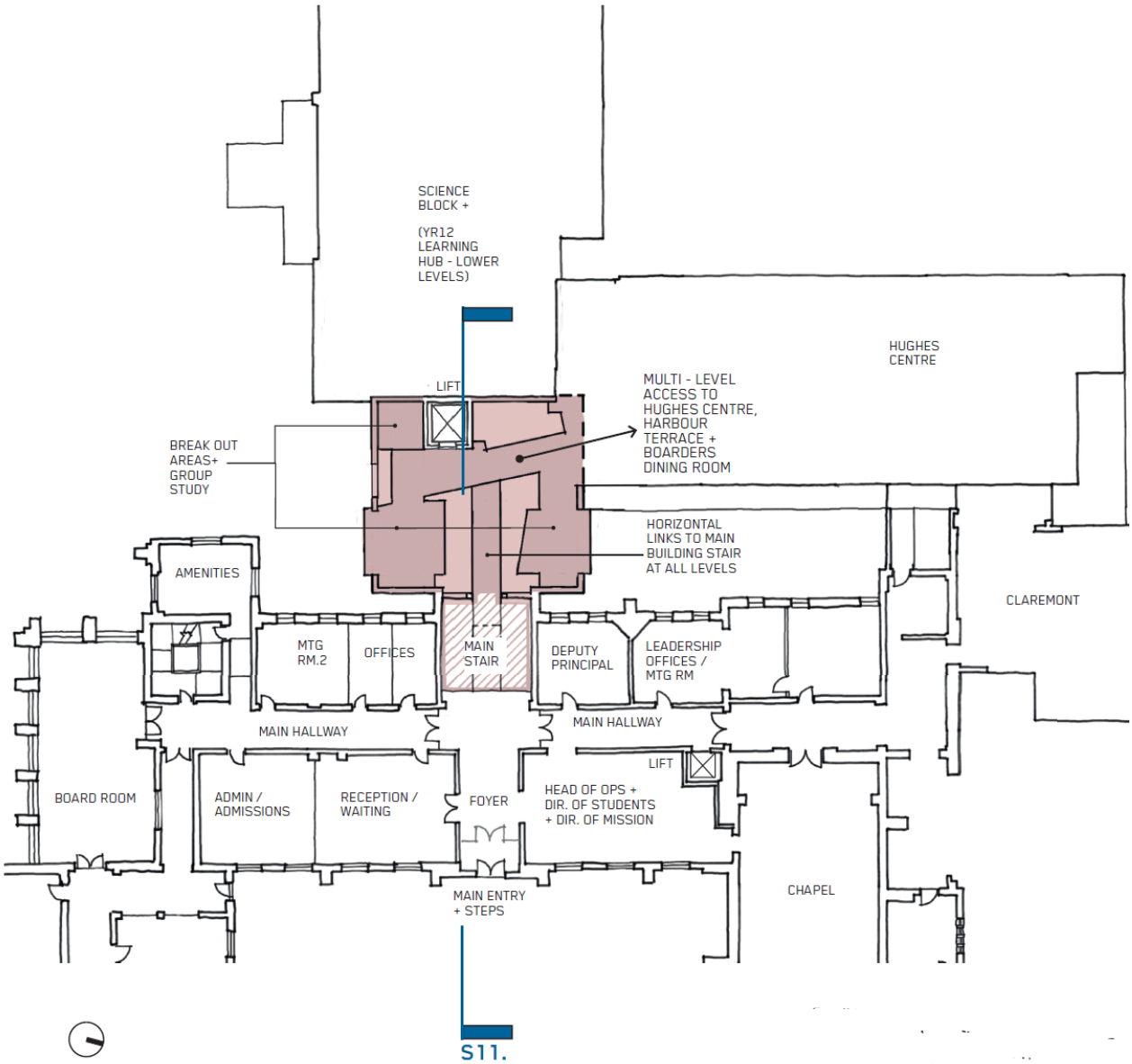
Source: BVN

Senior School Circulation Hub

The circulation hub connects the main senior school building with the Hughes Centre and Science Block. To improve circulation and efficiency of movement within the circulation hub it is proposed to reconfigure the existing building and provide multiple up/down and cross-site connections to the existing accommodation building, the science lab and the proposed multi-purpose Hughes Centre.

As illustrated in **Figure 32** below, the proposed reconfiguration will have no material impact on the existing built form, scale and design of the building.

Figure 32 Circulation Hub Envelope – Floor Plan



Source: BVN

Boarding School Extension

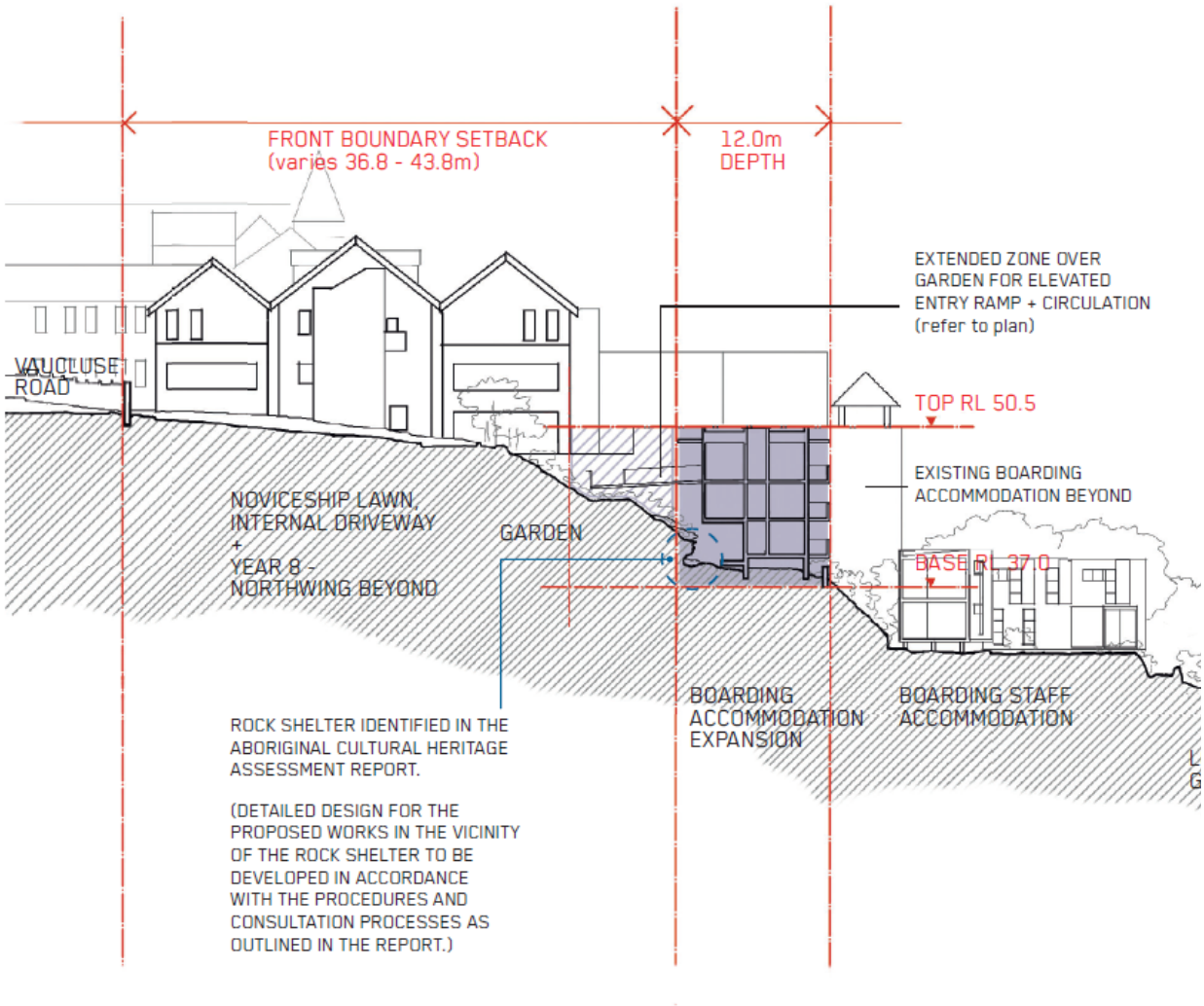
The existing boarding school accommodation is a key component of the KRB Campus. There is a growing demand for additional boarding facilities and as such it is proposed to extend and expand the existing Sheldon House facilities.

A three-storey building envelope is proposed for a new boarding house aligned to the existing Sheldon House building. It is connected to the main school campus via a bridge and pedestrian walkway linking the Senior and Junior campuses. It will be entered on the Eastern side at the upper level via a short bridge across to the main campus pedestrian walkway linking the Senior and Junior campuses. A lower level service entry will be entered via the lower street network that also serves the boarding staff accommodation. Each level will have single bed dormitory rooms with a western outlook to the harbour or eastern back to the inner garden areas. A central common area on each level will serve as a social gathering space providing a homely lounge feel, with bathroom amenities in close proximity.

As shown in **Figure 33**, the proposed extension to Sheldon House is set at and below the main eaves height of the existing building. Further, this extension is set further back from the main Sheldon House alignment

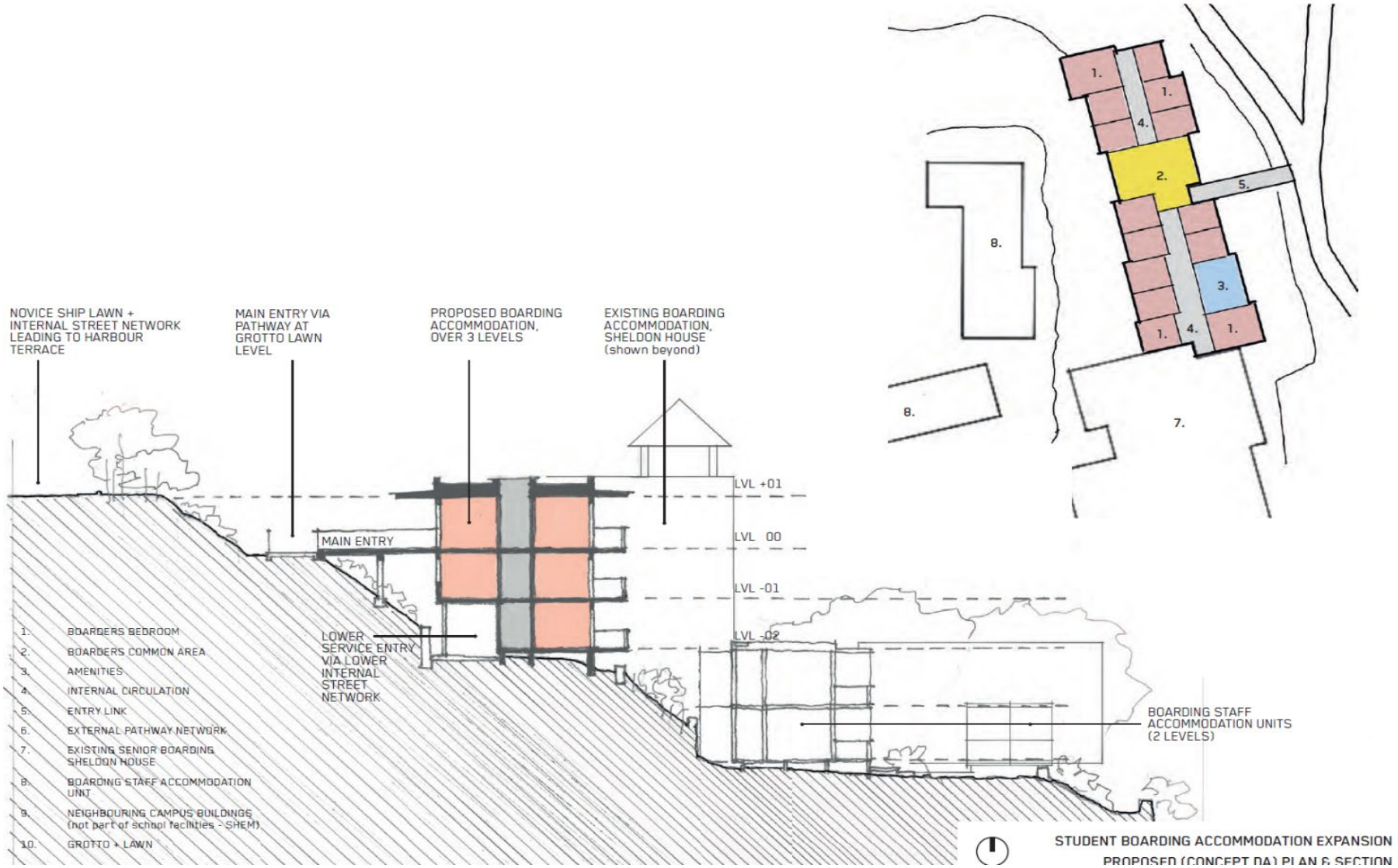
(when viewed from the water from the west) and the roof form sits below the existing rock shelf. This position, together with the contextual surrounding of other existing buildings on the site, existing landscaping and the significant distance from water, all mean that the visual bulk associated with this building extension is acceptable.

Figure 33 Boarding House Envelope – Section Plan 2 of 2



Source: BVN

Figure 34 Boarding House Envelope – Floor Plan



Source: BVN

6.2. DESIGN EXCELLENCE

A Design Excellence Statement has been prepared by BVN and is included within the Architectural Design Report attached at Appendix E. A summary of the Statement is included **Table 20** below.

Table 20 Summary of Design Excellence Statement

Principle	Design Response
Principle 1 – Context, built form and landscape	▪ The proposed developed designs for the precincts of Kincoppal-Rose Bay are a response to the heritage and landscape setting of the existing KRB campus and broader local harbour and hillside residential context. The context is enhanced through the complementary forms and materials of the renovated structures and new building elements. ▪ Landscape is integrated into the building fabric, curtilage and rooftops to mitigate visual impact and improve the quality and amenity of the teaching spaces. ▪ The siting, massing and form of the buildings prioritises view corridors, sightlines and the creation of open spaces.
Principle 2 – Sustainable, efficient but durable	▪ The proposed buildings are responsive to climate with solar shading, natural ventilation, operable windows, mechanical control and monitoring systems. PV's and water tanks are incorporated in the design to minimise the environmental impact of the building. Communal, outdoor learning environments, recreational spaces and building as teacher are elements that support positive social outcomes in the design. ▪ The structure and internal planning of the buildings are highly flexible and regular ensuring future flexibility and reconfigurability of the building as required by changing pedagogy. Robust and efficient materials have been selected in response to the high traffic requirements of students.
Principle 3 – Accessible and inclusive	▪ Highly visible from the Vaucluse Road entrances to the school, accessible paths are provided to the building and wayfinding is clear. Well-lit and open, with large forecourt areas; the buildings are welcoming and inclusive. Lifts and entry ramps and accessible parking provide equitable access across the campus. ▪ The KRB tuckshop CAFÉ 135, MTC swimming pool complex and gymnasium spaces will be used on the weekends by parents and school community, supporting Co-curricular events on MTC playing fields and the rest of the site. ▪ The chapel is also open to students Alumni for Wedding functions and the Schools house boarding facilities are programmed for rental able overnight accommodation during the summer holiday break period.
Principle 4 – Health and Safety	▪ New facade designs optimise access to fresh air and daylight. Pedestrian movement and vehicle movement is kept separate, with cars moved to on-site parking facilities. Large covered areas provide protection from rain and sun. ▪ Toilets have been grouped and designed as capsule toilets to deter bullying and allow for passive surveillance. An external lighting will be designed for surveillance and visibility outside school hours in line with operation report. The outdoor spaces have been shaped to allow for passive surveillance by staff
Principle 5 – Amenity	▪ Landscape integrated into the buildings to maximise play space and amenity. ▪ Flexible learning spaces integrated into the design with access to technology and state of the art facilities ▪ Setback from the busy New South Head Road - Vaucluse Road intersection, acoustic impacts are reduced

Principle	Design Response
	▪ Diversity of types of spaces within the building to provide age appropriate learning spaces. Naturally ventilated teaching spaces, good visual connection to broader campus and scenic school campus.
Principle 6 – Whole of life, flexible and adaptable	▪ The Master planning investigation are supportive of the need for future development when required. The school's history of building development and adaptation over many years is testament to the strategic planning approach taken and how the current planning proposal will continue to develop with the school. ▪ The flexible nature of the campus buildings have allowed for reconfigurability of teaching spaces and will continue to do so. ▪ Large group learning areas, collaboration areas and teacher and student breakout spaces provided to support best practice modern educational design. Learning spaces to cater for a range of learning styles ▪ Considered material selections and Responsive to site conditions and environment.
Principle 7 – Aesthetics	▪ "The physicality of the school is very strong. The schools' long history, its historical buildings, together with its location in Rose Bay overlooking Sydney harbour makes it a "Sydney Icon". ▪ The proposal reflects KRB's and BVN's commitment to and investment in design excellence. The buildings are engaging and welcoming, considerate of context and purposeful in composition. ▪ High quality, robust materials ensure a quality building that will endure. ▪ Services and landscape are integrated into the design in a genuine way, to maximise the learning potential and aesthetic qualities of these elements.

6.3. LANDSCAPING

Landscape Plans have been prepared by CAB Consulting and are attached at **Appendix G**. The proposed landscape design integrates open spaces with appropriately sized built elements to create a landscaped environment which both respects the existing scale of the built environment and the contemporary scale of the architectural nature of the proposed development.

- The landscape design integrates the spatial structure of the open spaces used for both play and learning opportunities for individuals and groups of students together with the creation of built forms of an appropriate scale with a range of vegetation which both respects the existing scale of the built environment and the contemporary scale of the architectural nature of the proposed development
- The proposed planting schedule for the Junior School and ELC, Bus and car parking structure and senior school main entry is contained in **Table 21** and illustrated

- Figure 35 Junior School Proposed Landscaping

Source: BVN

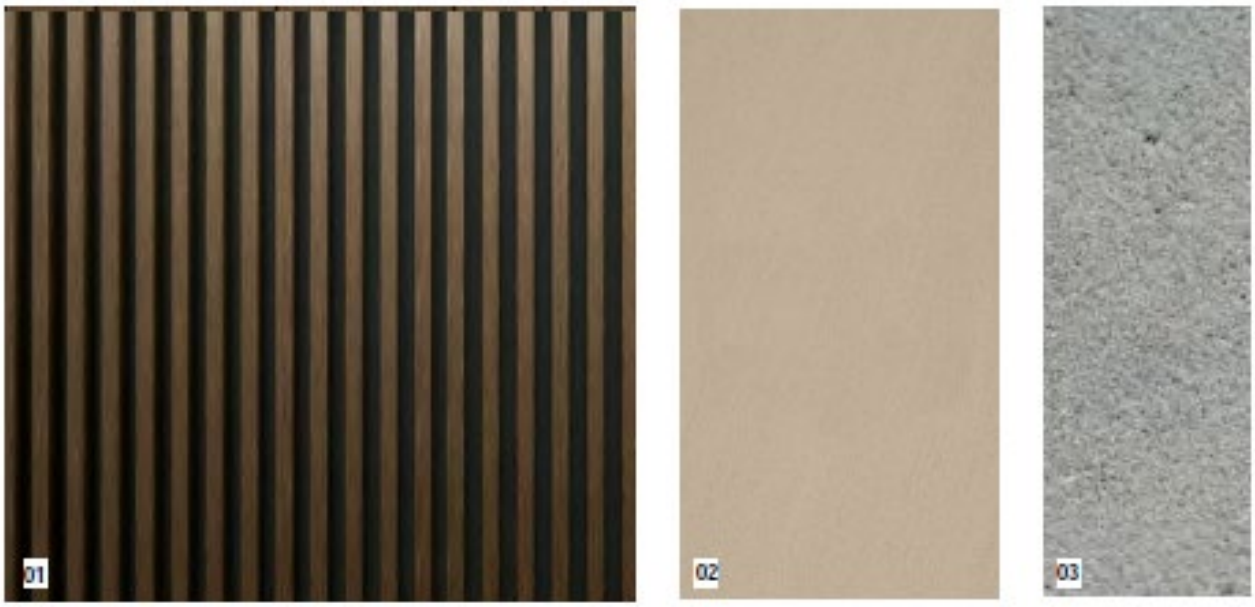
Source: BVN

Figure 36 Junior School Proposed Landscaping

Source: BVN

Source: BVN

Figure 37 Precinct B: Car & Bus parking Structure Proposed Landscaping

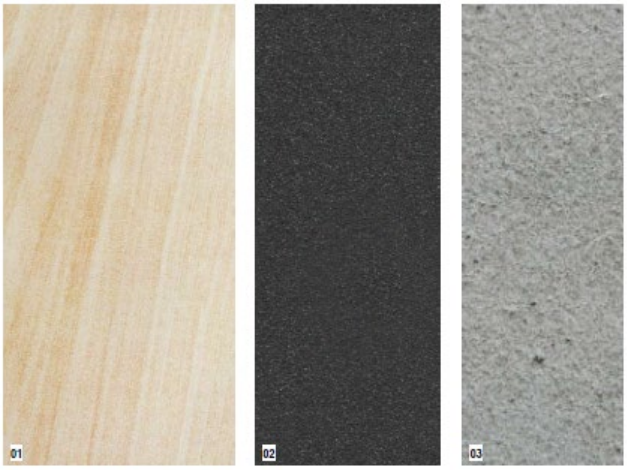


Source: BVN

Source: BVN

Source: BVN

Figure 38 Precinct B Senior School Main Entry Proposed Landscaping



Source: BVN

Source: BVN

Source: BVN

- and Table 21 below.

Table 21 Tree planting Schedule Junior School and ELC

	Tree Type		
#	Junior School & ELC	Precinct B: Bus & Car Parking Structure	Precinct B: Senior school main entry
01	Groundcover: Dianella caerulea	Screen: Composite timber screen, colour – dark brown	Sandstone: ramps, pavings & garden nib walls
02	Lomandra Tanika	Concrete – tinted off-form concrete to match sandstone colour	Printed steel: Fence palings, gates & handrails
03	Groundcover, scramver & climbers: Muehlenbeckia Axillaris	Concrete: Pathways, steps driveway + parking surfaces	Concrete pathways & driveway surfaces
04	Groundcover: Liriope 'Evergreen Giant'	Tree: Angophora costata	Tree: Angophora Costata
05	Groundcover: Ophiopogin ‘black’	Tree: Drepamostachyum Falcatun	Tree: Drepamostachyum Falcatum
06	Climbers: Panthenocissus tricuspidata	Tree: Waterhouse Floriabunda	Tree: Waterhouse Floriabunda
07	Shrub: Camelia japonica ‘Asepasia Macarthur’	Tree: Howea Forsteriana	Tree: Howea Forsteriana
08	Shrub: Acumena ‘Allyn Magic’	Tree: Banksia Integrifolia	Tree: Banksia Integrifolia
09	Shrub: Buxus sempervirencs	TreeL Bambusa Textilis gracilis	Tree: Bambua textilis Gracilis

	Tree Type		
#	Junior School & ELC	Precinct B: Bus & Car Parking Structure	Precinct B: Senior school main entry
10	Shrub: Elaeagnus pungens-hedge	Tree: Callitris RHomboidea	Tree: Callitris rhomboidei
11	Shrub: Syzygium austral ‘Narrow Leaf’	Shrub/Ground cover: Raphiolepis ‘Cosmic white’	Shrub/ground coer: Raphiolepis ‘Cosmis white’
12	Tree: Bambusa Iako	Shrub/ground cover: Buxus sempervirens	Shrub/ground cover: Buxus Sempervirens
13	Tree: Nyssa sylvatica ‘Forum Summer foliage’	Shrub/ground cover: muehlenbeckia axillaris	Shrub/ground cover: Muehlenbeckia Axillaris
14	Tree: Nyssa sylvatica ‘Form’ Autumn folidage	Shrub/ground cover: Lomandra ‘verday’	Shrub/ground cover: Lomandra ‘verday’
15	Tree: Acmena smithii Sublime	Shrub/ground cover: Philotheca Myoprooides	Shrub/ground cover: Philotheca Myoporoides
16	Tree: Cupaniopsis anacardioides	Shrub/Ground cover: Syzygium ‘Hinterland Gold’	Shrub/Groudn cover: Syzygium ‘Hinterlan Gold’
17	Tree: Jacaranda mimosifolia	Shrub/ground cover: Raphiolpus oriental pearl	Shrub/ground cover: Raphiolepis Oriental pearl
18	Tree: Fraxinus pennsylvanica ‘Urbanite’ – Summer foliage	Groudn cover: soft buffalo ‘Sir Walter’	Ground cover: soft buffalo ‘Sir walter’
19	Tree: Fraxinus pennsylvanica ‘Urbanite’ – Autumn foliage		

Figure 35 Junior School Proposed Landscaping

Source: BVN

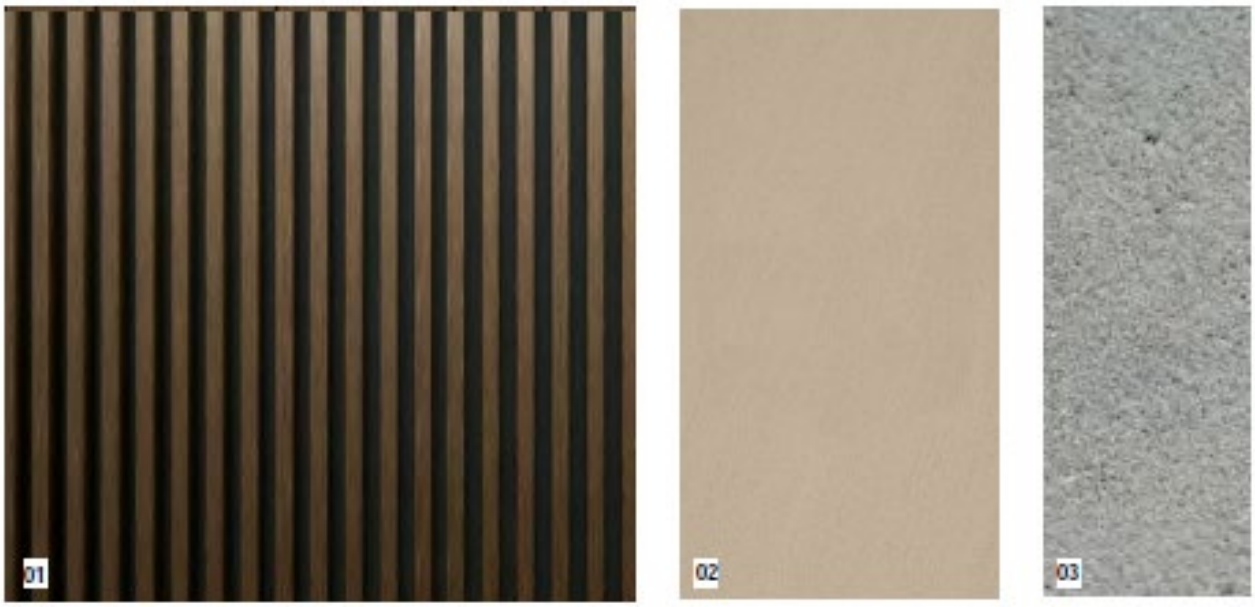
Source: BVN

Figure 36 Junior School Proposed Landscaping

Source: BVN

Source: BVN

Figure 37 Precinct B: Car & Bus parking Structure Proposed Landscaping

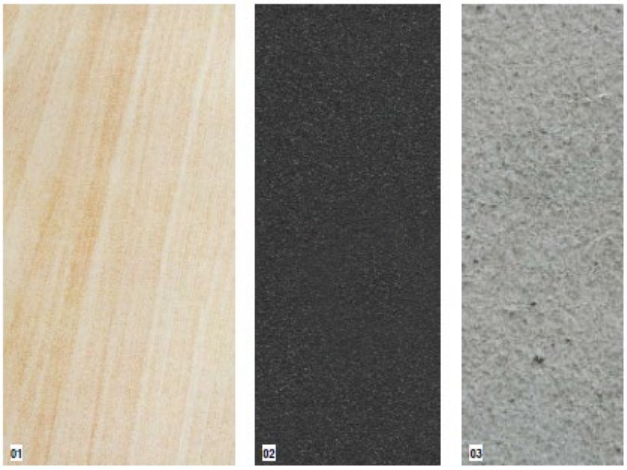


Source: BVN

Source: BVN

Source: BVN

Figure 38 Precinct B Senior School Main Entry Proposed Landscaping



Source: BVN

Source: BVN

Source: BVN

6.4. BIODIVERSITY

6.4.1. Tree Removal

An Arborist Report has been prepared by *Botanics Tree Wise People* and is attached at **Appendix J**.

A total of twenty-six (26) trees have been assessed using Visual Tree Assessment (VTA) criteria and notes. As required under *Clause 2.3.2 of the Australian Standard 4970 (2009)* for the Protection of Trees on Development Sites, each tree has been allocated a Retention Value based on the tree's Useful Life Expectancy and Landscape Significance with consideration to its health, structure, condition and site suitability. All trees have been allocated 1 of 4 Retention Values which are defined as follows:

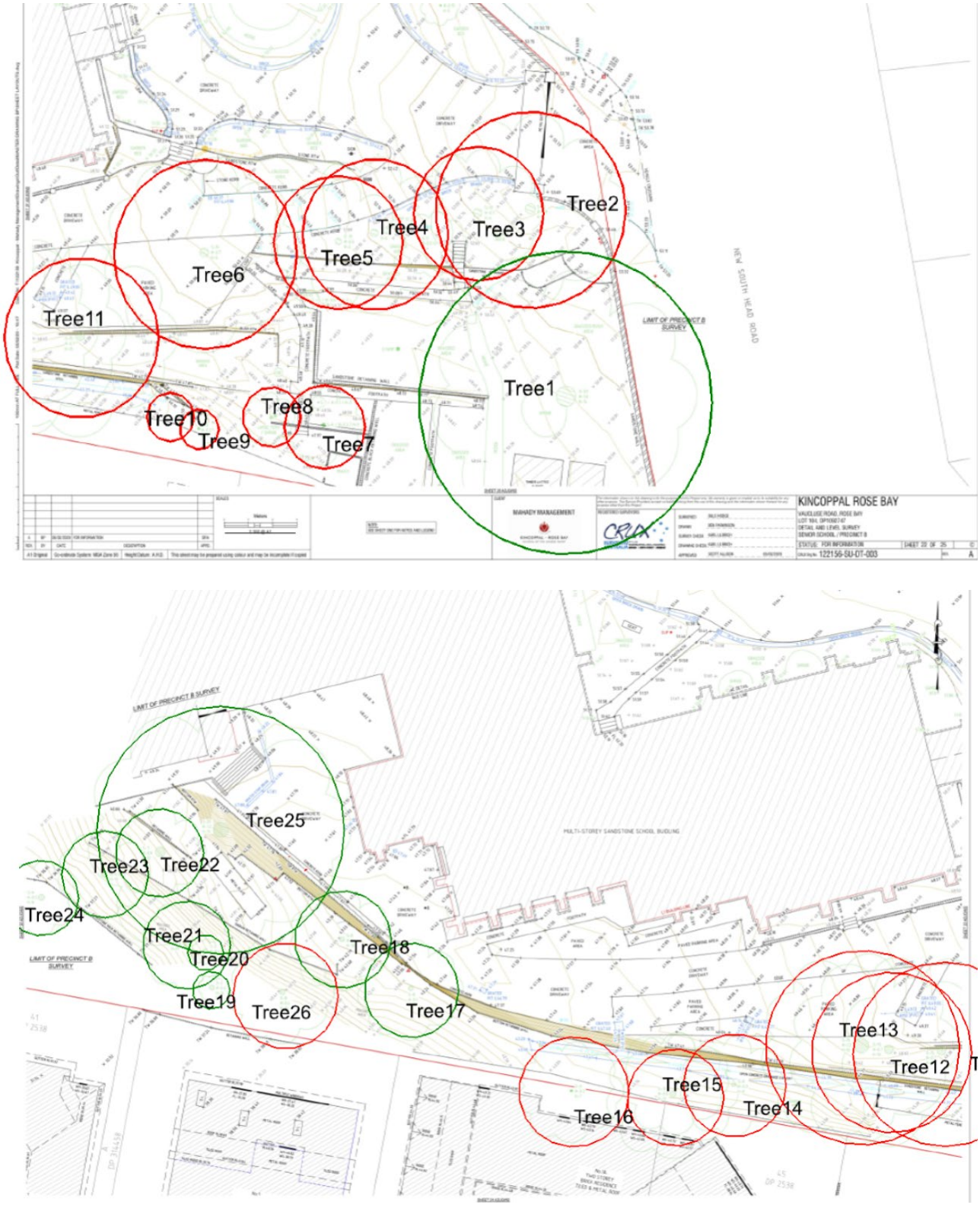
- High value – Priority for Retention
- Moderate Value – Consider for Retention
- Low Value – Consider for Removal
- Remove – Recommended for Removal irrespective of works.

As outlined in **Table 22** below, it is proposed to remove 16 of the 26 trees that have been assessed. None of the trees to be removed have a high value retention value.

Trees 1, 17, 18, 19, 20, 21, 22, 24, 24 and 25 will be retained and protected through the implementation of Tree Protection measures such as the establishment of a Tree Protection Zone (TPZ), construction of tree protection fencing, informative signage and appropriate mulching.

Figure 20 and **Figure 21** below illustrated the trees to be removed and retained. The trees circled in red are to be removed and the trees circled in green are to be retained.

Figure 39 Tree removal - Junior School



Source: Botanics Tree Wise People

Table 22 Tree Removal Schedule

Tree Number	Species	Maturity	Retention Value
#2	Grevillea robusta/Silky Oak	Semi mature-early mature	Moderate
#3	Erythrina x skyesii/Coral Tree	Well established	Low
#4	Podocarpus elatus/Plum Pines	Mature	Moderate
#5			Moderate
#6			Moderate
#7	Celtis sinensis/Hackberry	juvenile	Remove
#8	Howea forsteriana/Kentia Palm	Semi mature	Moderate
#9	Nerium oleander/Oleander	N/A	Remove
#10	Harpephyllum caffrum	small	Low
#11	Harpephyllum caffrum	Well established-mature	Moderate
#12			Moderate
#13			Moderate
#14	Populus alba/Silver Poplars	Dead	Remove
#15		mature	Low
#26	Harpephyllum caffrum	Semi mature	Low

6.4.2. BDAR Waiver

Based on the minor amount of tree removal and that the site is not identified on the Biodiversity Values Map, a BDAR Waiver Request was prepared by Eco Logical Australia (ELA) following the issuance of the SEARs. The request was in relation to the removal of the following vegetation:

The request was prepared in accordance with the Department of Planning and Environment Fact Sheet (2018) and included an assessment of the impacts of the proposed development on biodiversity values. The assessment concluded that the proposal will not have a significant impact on biodiversity values and as such a BDAR Waiver Request should be sought. Following the completion of the assessment the request was submitted to DPIE on 11 May 2020.

On 9th April 2020, DPIE confirmed in a letter (refer **Appendix K**) that the development is not considered to have any significant impact on biodiversity values, and therefore the SSDA is not required to be accompanied by a Biodiversity Development Assessment Report. The letter detailed that DPIE had reviewed the application of the test of significance in accordance with section 1.5 and 7.3 of the BC Act and values 1.4 of the Biodiversity Conservation Regulation 2017 prior to lodgement. It also stated that the delegated Environment Agency Head in the Environment, Energy and Science Group (EESG) has also granted a waiver in a letter dated 13 March 2020. Therefore, the Biodiversity requirement of the SEARs has been waived and a BDAR does not need to be submitted.

6.5. ENVIRONMENTAL AMENITY

6.5.1. Solar Access and Overshadowing

An analysis of the potential overshadowing associated with the proposed built form of the proposal has been undertaken by BVN Architects and is included in the Architectural Design Statement attached at **Appendix E**.

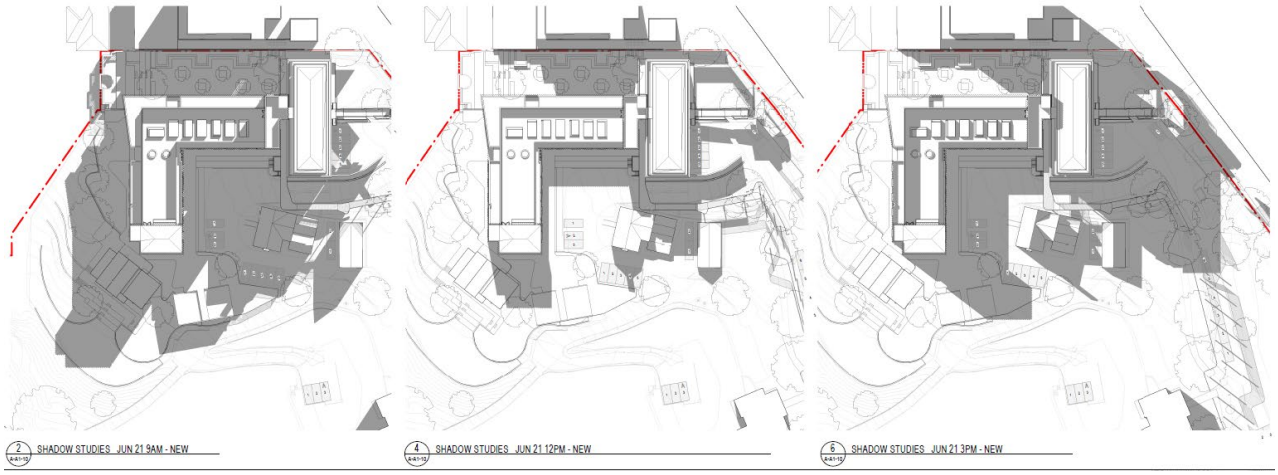
Junior School and ELC

As the buildings associated with the Junior School and ELC sit south of the adjoining residential building on Vaucluse Road, the proposal does not affect shadowing to this property.

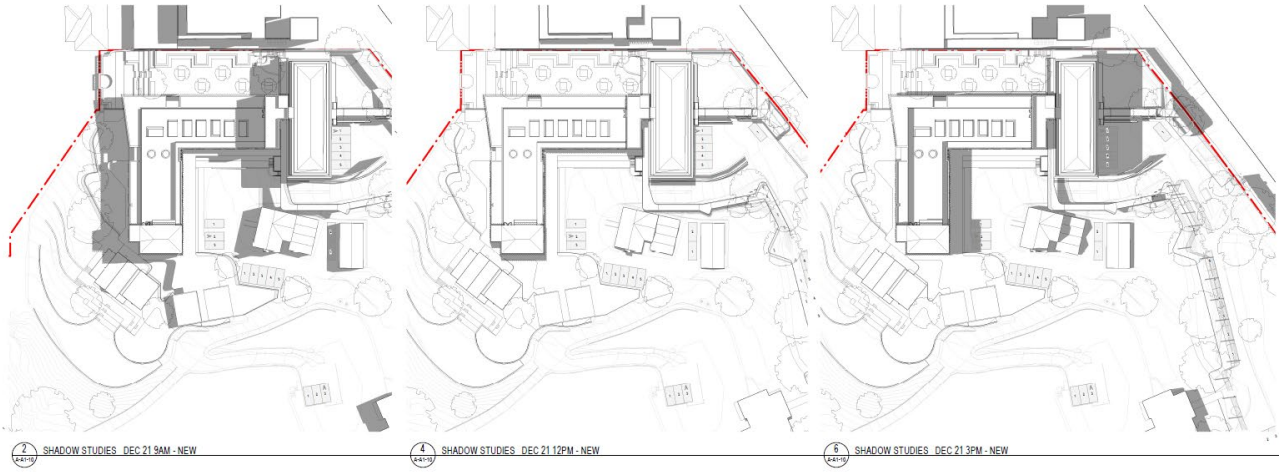
Figure 40 below, illustrates the potential overshadowing of the proposed ELC and Junior school building at key intervals during March June and December. As illustrated in the diagrams below, the ELC building will receive approximately 50% solar access during Winter and will receive minimal shade during Summer. However, the outdoor play area associated with the ELC will receive approximately 20% shade cover during the December months. The new ELC building will have minimal overshadowing impact on the lower ELC Playground area during Winter, however, overall will not have an adverse impact in terms of overshadowing.

As illustrated in **Figure 40** below the addition of the new trafficable roof form on the Junior School Building will have minimal additional overshadowing impacts in comparison to the existing built form. The new roof top will cause sufficient solar access and shade will be provided by built shading areas and awnings.

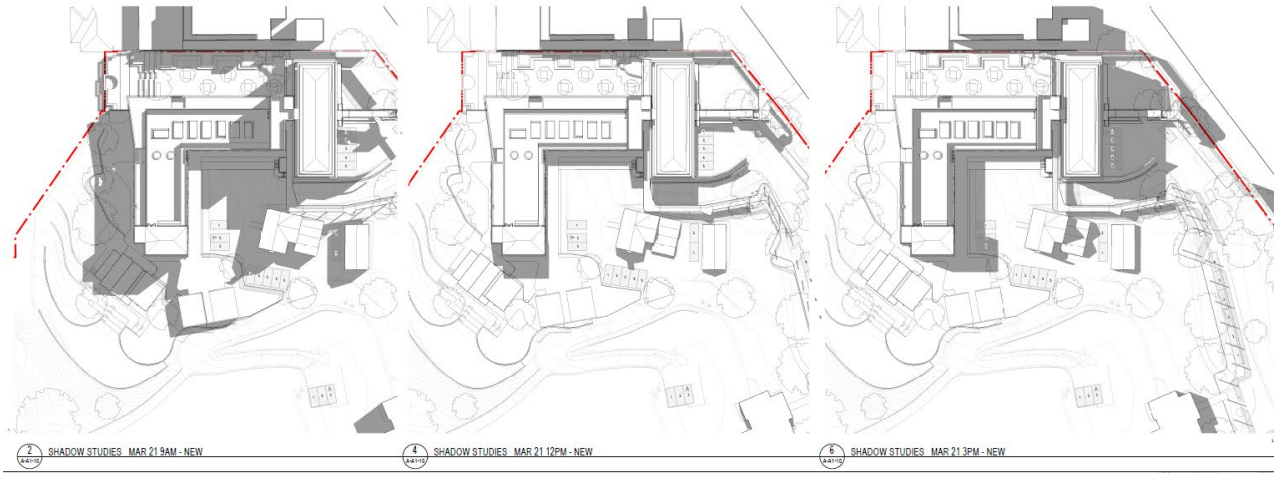
Figure 40 Junior School and ELC Overshadowing Diagrams



Picture 9 June 9AM, 12PM & 3PM



Picture 10 December 9AM, 12PM & 3PM



Picture 11 March 9AM, 12PM & 3PM
Source: BVN

Car & Bus Parking Structure

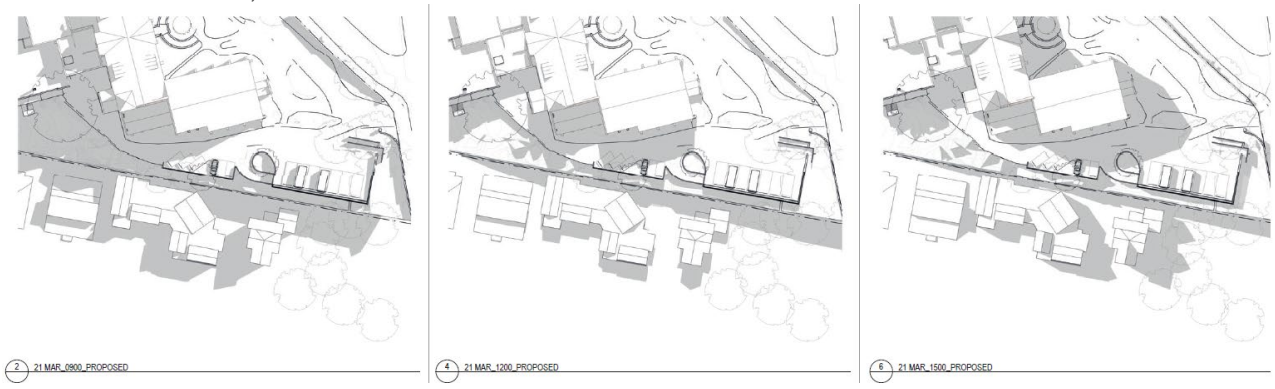
As illustrated in **Figure 41** below, the proposed car and bus parking structure will have the following minor additional overshadowing impacts on the adjoining residential property and Council owned property (Forsyth Park):

- At 9AM in June, a shadow will be cast on the roadway of Bayview Hill Road.
- At 12PM in June, a small shadow will be cast on the existing roof of the adjoining property and on an unused, heavily vegetated portion of Forsyth Park.
- At 3PM in June, a shadow will be cast within the existing school campus property.

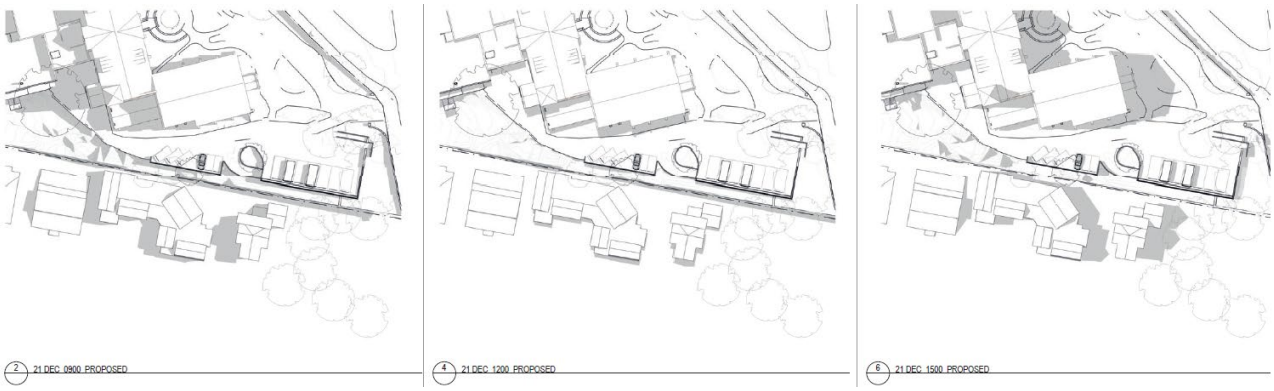
As such, the additional overshadowing caused by the proposed car and bus parking structure is minimal and will have no additional impact on the existing amenity of the surrounding sensitive land uses.

Figure 41 Car & Bus Parking Structure Overshadowing Diagrams

Picture 12 June 9AM, 12PM & 3PM



Picture 13 March 9AM, 12PM & 3PM



Picture 14 December 9AM, 12PM & 3PM
Source: BVN

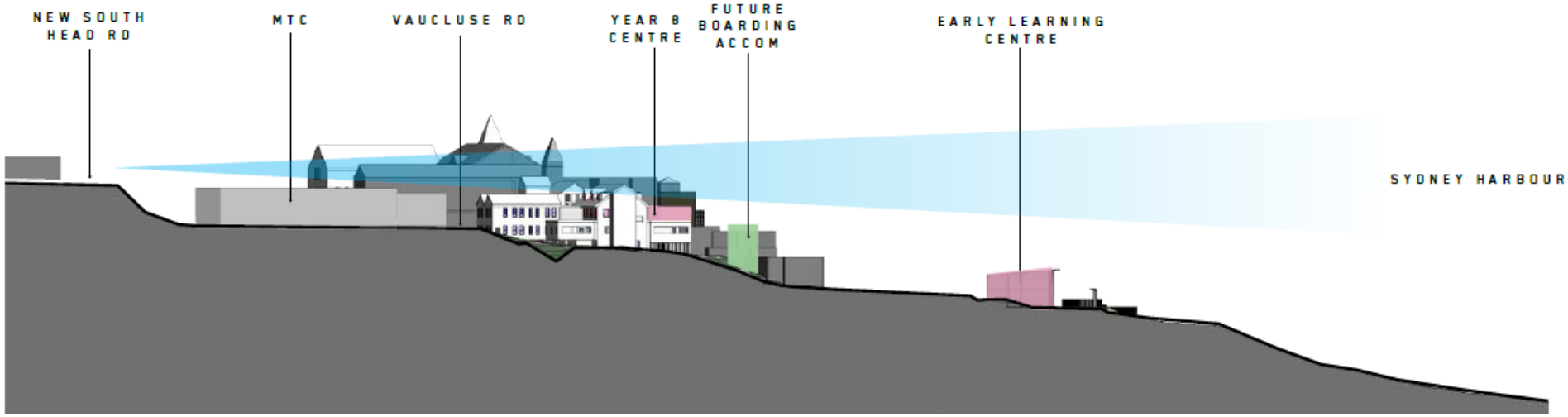
6.5.2. Views and Visual Impact

A Visual Impact Analysis (VIA) has been prepared by BVN and is included within the Architectural Design Statement attached at **Appendix E**. The proposal has been assessed in relation to the potential impacts of the proposal on key views including:

- **From Sydney Harbour**– As illustrated in **Figure 42** below, the proposal will simplify the appearance of building elements visible from Sydney Harbour such as the Junior School, ELC and Senior School.
- **From Southern Residential Boundary** – As illustrated in

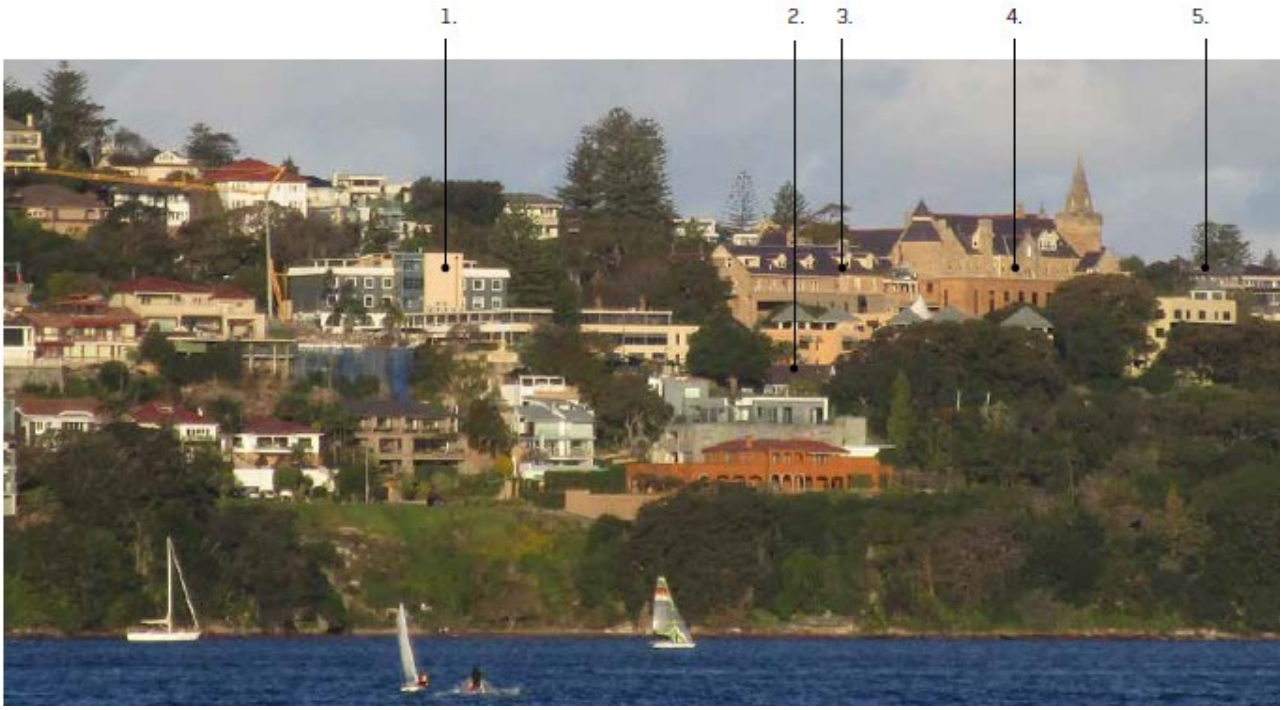
- **Figure** 43 below, the proposed alteration and additions to the Senior School, including the construction of a basement car park and associated bus parking will not alter the existing views of the school from the neighbouring residential property.
- **From Vaucluse Road & Bayview Hill Road –** As illustrated by the minor differences between **Figure 44** and **Figure 45**, the proposal will not alter existing views of the harbour from New South Head Road or Bayview Hill Road. Furthermore, clearly illustrates the anticipated view from New South Head Road to Sydney Harbour. As shown, the new building elements will not interfere with this existing view and will therefore not reduce visual privacy both for the school and surrounding residential properties.

Figure 46 Section of proposed projects – view lines from neighbouring properties

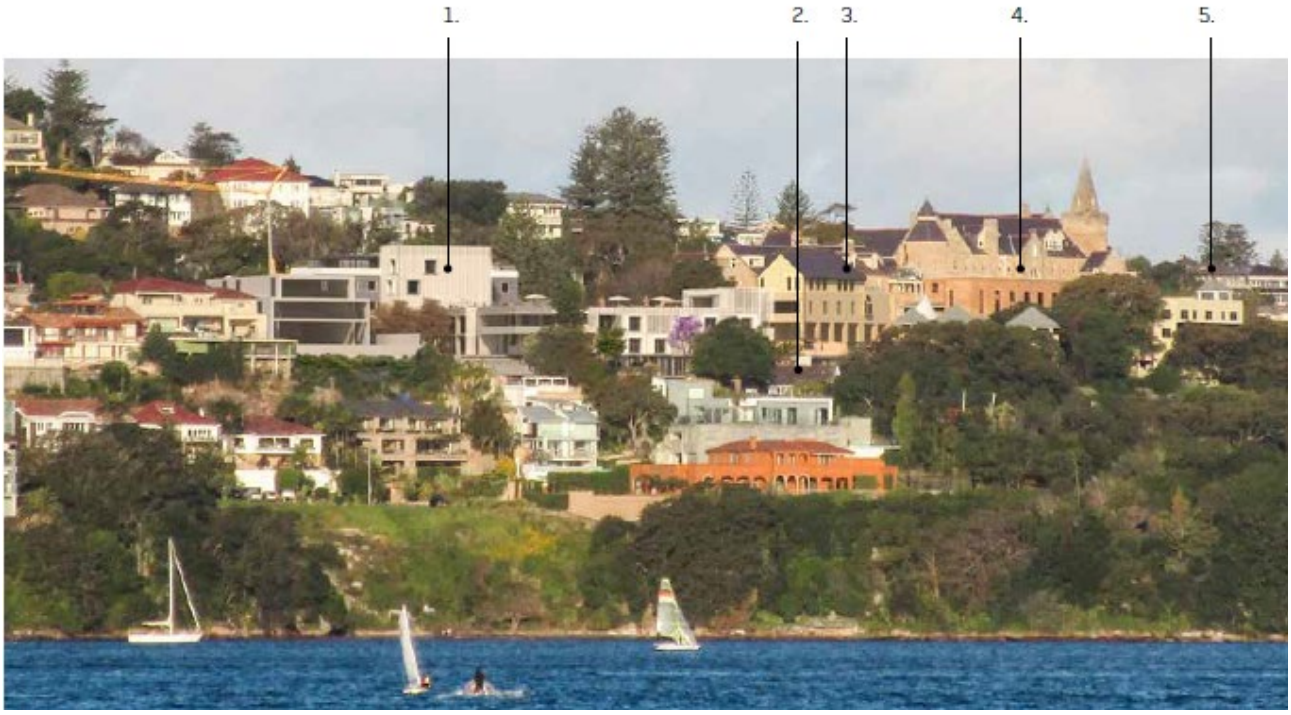


Source: Elton Consulting

Figure 42 View from Harbour



Picture 15 Existing



Picture 16 Proposed
Source: BVN

Figure 43 View from Southern Boundary

Picture 17 Existing

Picture 18 Proposed
Source: BVN

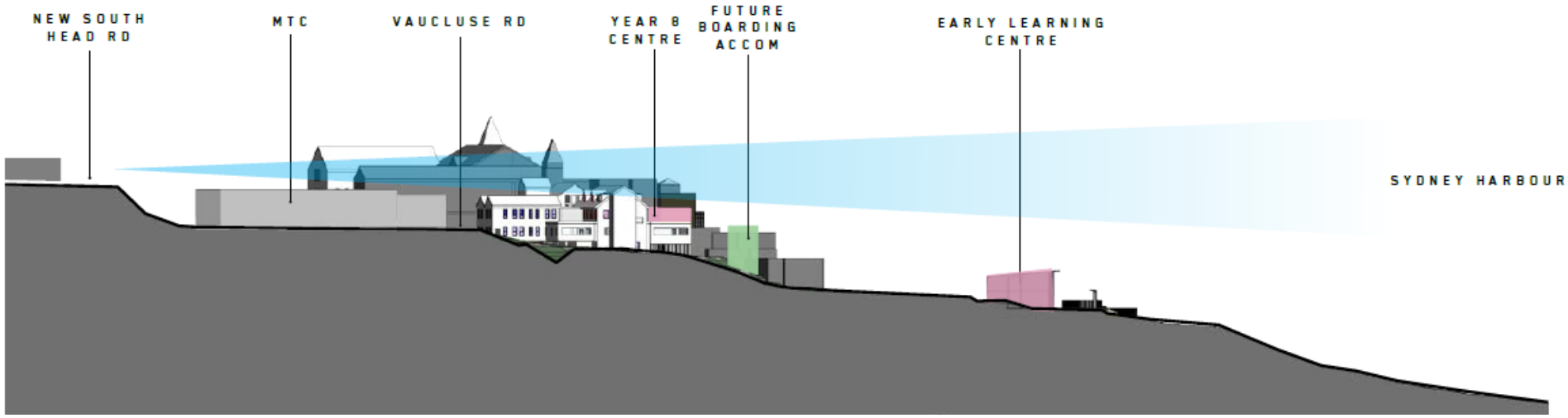
Figure 44 Aerial view of existing school campus

Source: Elton Consulting

Figure 45 Aerial view of school campus showing proposed projects

Source: Elton Consulting

Figure 46 Section of proposed projects – view lines from neighbouring properties



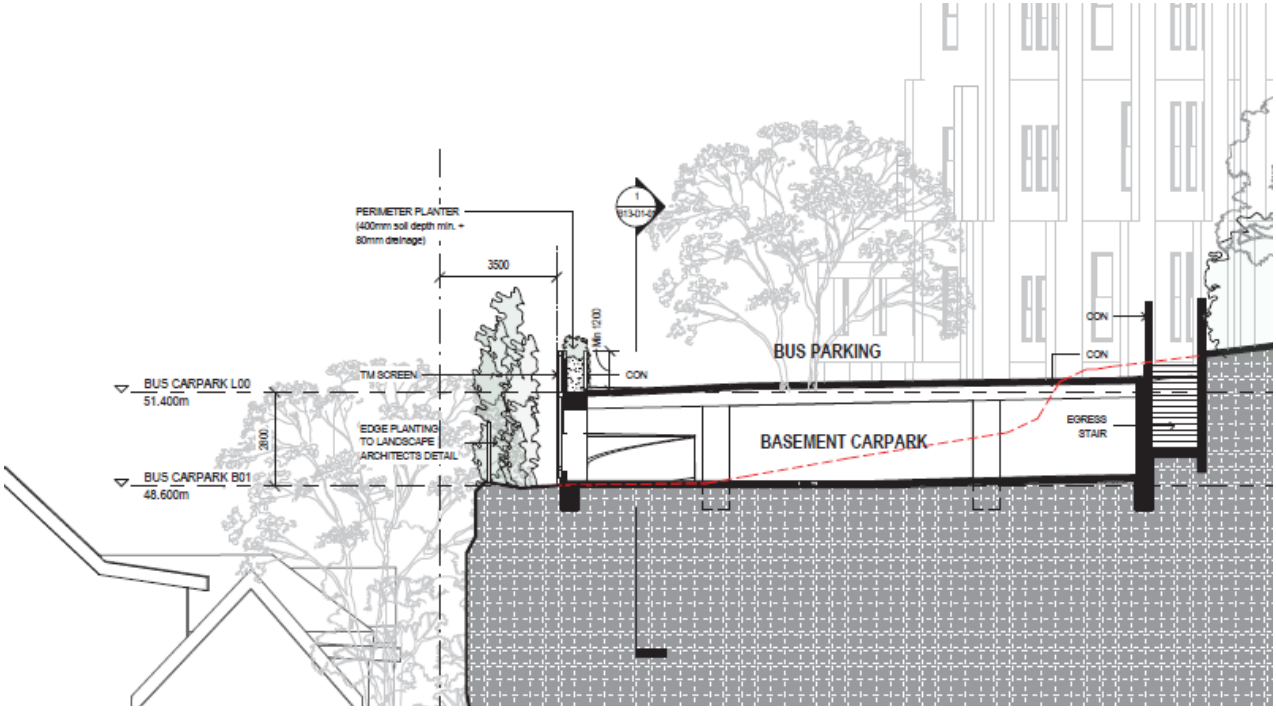
Source: Elton Consulting

6.5.3. Visual Privacy

The proposal has been assessed for impacts on visual privacy from the following four (4) locations:

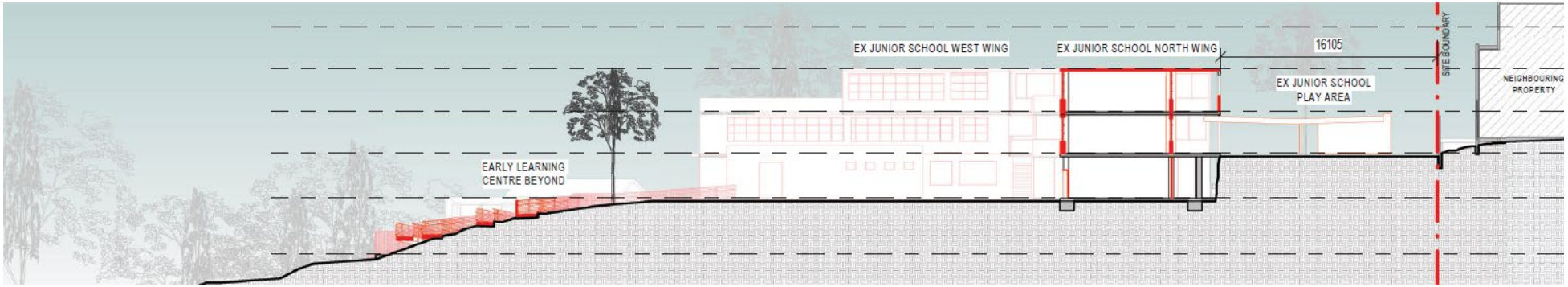
- **Northern Corridor** – The northern corridor has been assessed with consideration of the neighbouring residential properties and the potential impact of the proposed expansion of the Junior School Building. As illustrated in **Figure 48** below and the Architectural Plans attached at **Appendix C**, the proposed extension of the existing building will result in a minor reduction of the existing setback from 16,105m to 12,640m. Despite this reduction, the setback readily complies with the 3.4 metre setback required in accordance with the Woollahra DCP. The space between the junior school building and the residential property is already occupied by an outdoor play area. The proposal does not seek to change or intensify this use. As such, the proposal is not anticipated to generate any additional visual privacy issues. Furthermore, the junior school extension including the proposed rooftop outdoor learning space have been assessed in terms of acoustic privacy and have been determined to not have any additional impact on acoustic amenity of the surrounding residential land uses. Refer to **Section 6.11.2** of this report for a detailed acoustic assessment.
- **Eastern Corridor** -The eastern corridor relates to the front of the school which runs parallel to Vaucluse Road. It is not proposed to alter any existing building setbacks along the eastern corridor. As such, the proposal is considered to have negligible impact on the visual privacy of the eastern corridor.
- **Southern Corridor** – The southern corridor relates to the Senior School building, specifically the proposed basement car park and associated ground level KRB mini bus parking spaces. As illustrated in **Figure 47** below, the proposed structure is located approximately 3 metres above and is setback a minimum of 3.5 metres from the neighbouring residential property located on Bayview Hill Road. As such, the proposed structure will not be visible from the residential property and will have no additional impact in terms of visual amenity. Furthermore, the proposed bus and car parking elements have been assessed for potential acoustic privacy impacts. As the proposed car park is underground and the at-grade bus parking spaces will be screened by a large fence, it is not anticipated to have any additional impact on acoustic amenity.
- **Western Corridor** – The western corridor is located to the rear of the site. The only proposed building elements located near the rear of the site is the additional car parking spaces associated with the ELC building. However, these spaces adjoin a large unoccupied and vegetated area and will therefore have nil visual or acoustic impact.

Figure 47 Proposed Basement Car Park and Bus Parking Section



Source: BVN

Figure 48 Junior School Setback



Picture 19 Existing

Picture 20 Proposed

Source: BVN

6.6. CONSTRUCTION STAGING

A Construction Management Plan(CMP) has been prepared by Mahady Management and is attached at **Appendix X**. The CMP includes a Detailed Staging Plan for the proposal. The Plan is included at **Table 23** below.

Table 23 Staging Plan

Item	Works
Precinct A Staging (stage 1 works)	
Item 9: Traffic Management – New Junior School Site Entry off Vaucluse Road, new Drop-off and Pick-up facilities, and Elevated Foot Bridge	Enhanced vehicular entry/egress capacity Internal vehicle queueing (relieving pressure from Vaucluse Road) Resolved Drop-off & Pick-up arrangement Elevated Foot Bridge – initial stage (separating pedestrian & vehicle traffic)
Item 1: Early learning Centre Extension	New space for ELC (allowing decanting of students from Level -02, Area 2)
Item 2: Junior School Assembly + GLA's + Trafficable Roof	Development across 4 levels utilising empty Level -02 space for decanting
Item 3: Junior School GLA's + Trafficable Roof Space	Development across 4 levels utilising new GLA from Item 2 for decanting
Item 4: Junior School Vertical Circulation Link	New lift & stair facilities Elevated Foot Bridge – final stage (facilitates full separation of pedestrian/traffic movements)
Item 5: Junior School GLA's + Amphitheatre	Development across 4 levels utilising new GLA from Items 2 & 3 for decanting
Precinct B Staging (stage 1 works elements)	
Items 10 & 13: Traffic Management including enhanced Drop-off/Pick-up and Bus & Car parking	New bus parking area Additional carparking Revised road with new Drop-off & Pick-u Temporary pedestrian access arrangements required
Item 8: Redeveloped Year 8 centre (Level 03)	Minor elements of new structure Additional GLA for year 8 Works planned for December/January period – no student/staff decanting required
Item 7: Main entry forecourt, landscaping & accessible entry ramps	External works Temporary pedestrian access arrangements required

Item	Works
Item 6: Main entry reception, foyer, administration + leadership offices (Level 02)	Internal refurbishment works Works planned for December/January period – no student/staff decanting required
Precinct B & C (concept proposal elements)	
Item 12: Senior School Hughes Centre	Internal refurbishment works – no decanting required
Item 11: Senior School Circulation Hub	Internal refurbishment works Temporary pedestrian access arrangements required
Item 14: Boarding Accommodation Extension	New construction Construction area can be isolated No student/staff decanting required

6.7. TRANSPORT AND ACCESSIBILITY

A Traffic and Accessibility Impact Assessment was prepared by Colston Budd Rogers & Kafes and is attached at **Appendix R**. The report identifies that the overall traffic impacts of the proposal are considered acceptable. Key findings of the review and proposed mitigation measures are summarised below.

6.7.1. Existing Traffic Generation

In order to assess the potential impact of the proposed development on the existing road network and traffic conditions a traffic survey was carried out during the weekday morning (before school) and weekday afternoon (after school), at the following intersections:

- New South Head Road/Vaucluse Road;
- Vaucluse Road/Gilliver Avenue;
- Vaucluse Road/senior access;
- Vaucluse Road/junior school access; and
- Vaucluse Road/MTC access.
- The results of the survey are replicated in **Table 24** below. In addition to the intersection counts, traffic counts at the school access driveway on Vaucluse Road found that currently some 155 and 120 vehicles per hour two-way access the junior school access driveway during the morning and afternoon peak periods respectively. Further, some 220 and 130 vehicles per hour used the two-way access to the MTC car park and some 15 vehicles (primarily bus movements) exited from the senior school forecourt exit driveway onto Vaucluse Road during the morning and afternoon peak hour periods.
- The analysis found that the signalised intersection of New South Head Road and Vaucluse Road operates with average delays of less than 25 seconds per vehicle during morning and afternoon peak periods. This represents level B of service, a good level of intersection operation.
- The unsignalised intersection of Vaucluse Road and Gilliver Avenue is operating with average delays, for the movement with the highest average delay, of less than 10 seconds per vehicle during peak periods. This represents level of service A, a good level of intersection operation.

6.7.1.1. Projected Traffic Generation

Based on the results of the mode share study outlined in **Section 2.3** of this report and the traffic survey discussed above, it can be concluded that the increase in student and staff numbers will generate approximately 100 additional vehicles per hour two-way during the morning and afternoon peak periods. As outlined in **Table 24**, the proposal will result in the following changes to the existing traffic generation rates in the surrounding street network:

- Traffic flows on New South Head Road south of Vaucluse Road would increase by some 60 vehicles per hour two-way during the morning and afternoon peak periods. Traffic flows north of Vaucluse Road would increase by some 20 vehicles per hour two-way at peak times;
- Traffic flows on Vaucluse Road between New South Head Road and the new site access driveway would increase by some 80 vehicles per hour two-way during the morning and afternoon peak periods;
- Traffic flows on Vaucluse Road south of Gilliver Avenue and on Gilliver Avenue east of Vaucluse Road would increase by some 20 vehicles per hour two-way during the morning and afternoon peak periods.

In summary, the traffic analysis found that the road network in the vicinity of the site has the capacity to accommodate the additional traffic generated by the school, with adjoining intersection operating at their existing levels of service.

Table 24 Existing and additional peal hour traffic flows

Existing Two-Way (sum of both directions) Peak hour traffic flows				
Road/Location	**Morning Peak Period (Vehicles/Hour)**		**Afternoon Peak Period (Vehicles/Hour)**	
New South Head Road				
- North of Vaucluse Road	1030	+20	1190	+20
- South of Vaucluse Road	1375	+60	1560	+60
Vaucluse Road				
- West of New South Head Rd	440	+80	475	+80
- South of Gilliver Avenue	300	+20	355	+20
- North of Gilliver Avenue	185	-	225	-
Gilliver Avenue				
- East of Vaucluse Road	145	+20	150	+20

6.7.2. Parking

6.7.2.1. Existing Parking Facilities

The school currently provides off-street parking for 90 vehicles. The main parking area within the school is located beneath the sports playing field, adjacent to MTC, providing parking for some 55 vehicles. Other off - street parking areas are located adjacent to the junior school, along the internal access rods within the main school campus and adjacent to the main administration building. Furthermore, there are some 30 unrestricted on-street parking spaces available on the western side of New South Head road, along the school frontage.

6.7.2.2. Proposed Parking Facilities

The proposed alterations and additions to the school will result in an increase in gross floor area of some 150sqm for the ELC and some 1800sqm for the school. As such, the proposal must provide an additional 20

car parking spaces. The proposal provides an additional 28 at-grade parking spaces within the Junior school, 30 additional car parking spaces within the proposed basement car park and 7 at-grade KKRB mini bus spaces above the proposed basement car park.

The new car parking area will be located towards the southern corner of the Senior located adjacent to the main entrance to the school on New South Head Road.

6.7.3. Public Transport

As outlined in **Section 2.7** of this report, the school as existing has good access to public transport services including public bus services, the KRB Mini Bus service and rail and train services. Based on the mode share survey conducted by Colston Budd Rogers & Kafes, the proposed increase in student numbers at school would generate an additional 60 to 70 trips by bus during the morning and afternoon peak periods.

These trips would be spread across the three main bus routes that service the area (which provide an average of 10 buses per hour during peak periods) and the six KRB mini bus services. When these additional trips are spread across these services, it would result in average increases of some 4 passengers per bus. Such an increase would not have noticeable effects on the operation of existing bus services in the area.

6.7.4. Existing Set-Down and Pick-Up Operation

In addition to the observation of key intersections, the existing set-down and pick-up facilities were observed during peak school periods. Surveys were undertaken of the number of cars visiting the school during peak morning and afternoon arrival periods. The survey also identified the number of cars parked to drop off and pick up students during the identified peak periods.

The school currently provides two on-site student set-down/pick-up areas. The first is located adjacent to the junior school, within the main school campus, and the other adjacent to the MTC car park, on the western side of Vaucluse Road.

The set-down and pick-up facilities provide formalised drive through operations. During the afternoon period Kindergarten to Year 2 students (including siblings) are marshalled adjacent to the lower access road, adjacent to the junior school. All other students are marshalled within the MTC basement car park. Vehicles collecting students are required to queue and proceed through the supervised student pick-up areas. When vehicles arrive at the head of the queue, staff escort the students to the waiting vehicle and supervise the student pick-up operation. The majority of students are dropped off and picked up from the designated areas, however some students have been observed to be dropped off and collected on street rom New South Road.

To alleviate congestion associated with the set-down and pick-up operations, the school currently implements a staggered start and finish time for the ELC/pre-school, junior school and senior school.

6.7.5. Mitigation Measures

Staggering Start and Finish Times

The school will continue to stagger start and finish times of the ELC/pre-school, junior school and senior schools.

6.7.6. Additional Set-Down and Pick-Up Area

To further alleviate congestion associated with the school's set-down and pick-up operations, a new set-down and pick-up area will be provided on the northern side of the senior school building. The new area will have capacity for on-site queuing of 12 vehicles. It will improve the efficiency of the existing facilities, particularly during peak morning and afternoon periods, and improve on-road traffic conditions and reduced traffic queues on Vaucluse Road. Students will be distributed between the existing and new pick-up and drop-off facilities according to year groups.

The new pick-up and drop-off facility will be accessed by a new driveway and internal road on Vaucluse Road. The new driveway will only be available for use during the morning and afternoon peak periods.

6.7.7. Green Travel Plan

A Green Travel Plan (GTP) has been prepared by Colston Budd Rogers & Kafes and is included within the TIA attached at **Appendix R.**

Existing sustainable transport measures

The school currently implements number of travel demand management measures to encourage students and staff to use travel modes other than private vehicle. These include:

- encouraging the use of public transport;
- provision of pedestrian facilities;
- provision of KRB mini bus services for students travelling to and from suburbs
- that are not easily accessible by public transport; and
- provision of shuttle bus services for staff to and from Edgecliff Station.

GTP: Objectives

To further encourage sustainable travel modes, the existing measures outlined above will be refined and expanded through the GTP. The objectives of the GTP are as follows:

- encourage the use of more sustainable travel modes
- reduce the number of car trips to and from the school;
- provide facilities for student and staff to commute by sustainable transport modes;
- advise all new students and staff of the available public transport options at the school;
- reduce the environmental footprint of the development; and
- promote the health benefits of active transport and create a more active social culture.

GTP: Additional Sustainable Transport Measures

- The GTP includes the following measures to be further developed in consultation with council and TfNSW:
- encourage the use of public transport, including increasing the frequency of the staff shuttle bus service to/from Edgecliff interchange;
- encourage students to use the KRB mini bus service and review the need for additional routes;
- work with public transport providers to improve services;
- introduce a staff car pool register. This will inform staff of the travel characteristics of other staff members with similar travel destinations. New staff will be advised of the register and encouraged to car pool with other staff;
- develop an online student and parent platform to encourage students to travel in groups with other students that live in the same area;
- encourage parents/carers to allow older students to travel by public transport to and from school;
- introduce a buddy system at the school were younger students are partnered with senior students that live in the same area and can travel together on public transport;
- encourage students and parents to use the school online platform or alternative mobile app, such as ‘Skoolbag’, to provide easily accessible information about the school activities, including the use of the various student set-down/pick-up areas;
- encourage public transport use by staff and visitors through the development of a school transport access guide, which will provide public transport information, maps, car share vehicle locations and public transport timetables;

- provide appropriate on-site parking provision, consistent with the objective of reducing traffic generation; and
- provide appropriate bicycle parking and end of trip facilities for those students and staff who choose to cycle to the school.

The GTP has adopted an initial mode shift target from private car use to other travel modes for students and staff of 5%. This target will be monitored and reviewed. If the target is met, it will be revised and updated to reflect changing circumstances of student and staff travel behaviour. The mode shift target will reduce peak hour traffic flows and is equivalent to a reduction in traffic generation of some 100 vehicles two-way during morning and afternoon peak periods.

6.8. ECOLOGICALLY SUSTAINABLE DEVELOPMENT (ESD)

A Environmentally Sensitive Design (ESD) Report has been prepared by Cundall Consultants and is attached at **Appendix S**. The proposal responds to the ESD principles as follows:

- **Precautionary Principle:** The project will present no threat of serious or irreversible environmental damage. The project will deliver ecological restoration and habitat creation to improve the site, implement climate change adaptation principles, and apply industry best practice ESD initiatives. An appropriate due diligence has been and will continue to be conducted along the development process to ensure the precautionary principle is satisfied. Due diligence includes conducting required studies to address all SEARs environmental requirements and all statutory provisions in all relevant planning instruments, including the Biodiversity Conservation Act 2016, relevant SEPPs and LEPs.
- **Inter-Generational Equity:** The buildings will provide healthy internal and external environments for teaching students today and in the future. The landscaping principles of ecological restoration and habitat creation will deliver benefit to current and future generations. The principle will be addressed by ensuring the development complies with the principles set out in the Government Architect New South Wales Environmental Design in Schools.
- **Conservation of Biological Diversity and Ecological Integrity:** The school includes extensive grounds with the land use by buildings less than 40% of the whole site which maintains nature and local ecology in an urban waterfront location of Sydney. The landscape design will enhance the biological diversity and ecological integrity of the site.
- **Improved Valuation, Pricing and Incentive Mechanisms:** The design and operation of the school will reduce energy and water consumption and greenhouse gas emissions. Life Cycle Costing will be used throughout the design process to justify capital investment and reduce ongoing impacts.

The proposed development is not seeking a formal Green Star rating through the certification procedures of the Green Building Council Australia (GBCA), however it has been benchmarked against a 4 Star Green Design & As Built v1.3 rating.

The proposed development has been designed in accordance with a wide range of ESD goals that pertain to the design, construction, and operational stages of the development. The design of the development will ensure that the building has minimal impact on the environment in the areas of energy, waste and materials.

The building will incorporate external high-performance shading devices and energy efficient passive design features to minimise severe or irreversible environmental damage.

6.9. HERITAGE

6.9.1. Heritage Significance

A Heritage Impact Statement (HIS) has been prepared by Design 5 Architects and is attached at **Appendix T**. The HIS has been prepared in accordance with the principles and processes of the *Australia ICOMOS Burra Charter 2013* and follows the recommended guidelines as outlined in the NSW Heritage Office's *Statements of Heritage Impact 2002 Guidelines.*

The study has identified that a portion of the Kincoppal-Rose Bay School of the Sacred Heart is an item of local environmental significance in accordance with Schedule 5 of the *Woollahra LEP 2014.* The study has also identified a number of locally listed heritage items located in the immediate vicinity of the site. These heritage items and conservation areas are summarised in **Table 25** below. The site is not located within a Conservation Area.

Table 25 Heritage Items in the vicinity of the site

Heritage Type	Item Name	Address	Significance	Item no.
Heritage Item	Kincoppal, Roman Catholic Convent of the Sacred Heart and School – buildings and interiors, grounds, trees, sandstone and wrought iron fence, gateposts and gates	2 Vaucluse Road, Vaucluse	Local	I396
	St Michael's Anglican Church and interiors, grounds, sandstone works, gateposts and iron arch, obelisk	St Michael's Place, Vaucluse	Local	I393
	Hermit Bay Slipway and landing	Hermit Bay, Vaucluse	Local	I365
	Group of remains of wharf, baths and waterfront relics, including former Tivoli Pier and former Thorne's (or Claremont) Wharf	Bayview Hill Road, Rose Bay	Local	I56

6.9.2. Affected Areas of Significance

The HIS has ascertained that the proposed development will have the following impacts on the items of heritage significant located throughout the site:

6.9.2.1. Concept Development

The following section identifies the potential impact of the various built form elements of the concept proposal on items if heritage significance. The recommendations contained within this section and the HIS attached at **Appendix T**, can be incorporated into the detailed design of the concept development. It is understood that the recommendations outlined below may be conditioned as part of this consent to be satisfied as part of any future detailed development for the site.

Senior School integrated circulation hub

Proposed Works:

These works are located wholly within the existing envelope of the Hughes Centre/Science block. While the works will result in a lost opportunity to open up the western elevation of the historic Convent School they will not result in any additional impacts or loss of views of the historic Convent School from the harbour.

Recommendations:

- The significant fabric associated with the main school building is maintained and conserved in particular, the joinery of the main stair.
- A detailed fabric analysis is undertaken of the affected areas prior to development of the proposal.

Internal alterations to the Hughes Centre

Proposed Works:

- New balcony on the northern half of the western elevation, including the modification of three window openings to French door openings.
- Internal alterations to create a new multi-purpose space.

Recommendations:

- There should be no increase to the width of the window openings proposed to be converted to doors.

- Materials for the balcony should be visually recessive.
- Where possible works to the Hughes centre should include opportunities to recover the significance of Claremont, such as the replacement of the decorative iron balustrade on the northern side, so as to ensure that the mid to late nineteenth century presentation of Claremont as the first building on the site is enhanced.

Extension of the existing boarding house (Sheldon House)

Proposed Works:

- The extension to the existing boarding house is proposed to be located to the north of Sheldon House, in an area identified as being of moderate significance. The proposed structure is three storeys, similar in height with the adjacent Sheldon House (Levels -02 to 00). Directly to the east is located the rock shelter, identified as being a potential Aboriginal archaeological site. Above this is a length of the Depression era pathway network, including cut stone steps providing access between the Grotto and the Noviceship Lawn.
- There is limited information regarding the proposed extension to the existing boarding house, including its materiality, detailing, and connections to the existing pathway.

Recommendations:

- Potential impacts on the rock shelter (identified as a potential Aboriginal archaeological site should be managed in accordance with the Aboriginal Cultural Heritage Assessment Report.
- The new structure should be kept as low as possible, and not extend above the height of the existing parapet / balustrade to Sheldon House.
- Access to the roof area above the new structure should not be provided.
- The materiality, detailing and roof forms should be carefully chosen so as to ensure that the new structure does not visually distract from the strong aesthetic cohesiveness of the historic Convent School.
- The 1930s pathways and steps should be retained and any connections to these should be carefully resolved.
- The concept design should be developed in consultation with a heritage architect so as to ensure compliance with the policies of the CMP.

6.9.2.2. Detailed Development

The following section identifies the potential impact of the proposed detailed development on items of heritage significance located within the school. A Heritage Consultant has been engaged throughout the detailed design process and will continue to be engaged throughout the life of the project. A portion of the recommendations outlined below have been adopted into the detailed design of the project, however any future development applications will be required to be prepared in accordance with the strategies and measures outlined within the Conservation Management Plan (CMP) attached at **Appendix U.**

6.9.2.3. PRECINCT A (Junior School and Early Learning Centre)

Early Learning Centre Extension (Sophie's Cottage)

Proposed Works:

- The removal of the existing ramps, stairs and landscaping treatment (steps, fencing, shade structures and artificial turf).
- The construction of a new two-storey classroom building with lift and stair, connected to the adjacent Joigny Centre via a covered walkway. Due to the slope of the land this building presents as a single storey building to the east, and a two-storey building to the west. Materials and finishes include white weatherboard cladding, aluminium framed glazing and a flat roof clad with corrugated steel roofing.
- New landscaping treatment including the creation of a series of grassed terraces formed by sandstone retaining walls to the north, west and south of Sophie's cottage.

There are no works proposed to either the exterior or interior of Sophie's Cottage itself.

Potential Heritage Impact:

The new Early Learning Centre has been deliberately designed so as to take advantage of the slope of the land, such that it will appear as a single storey structure from the east, and a two-storey structure from the west. Its form, with a low flat roof, ensures that it sits low in the landscape and does not dominate views of Sophie's Cottage either from the harbour, or from the Cloister Courtyard and roof terraces over Sheldon House and the O'Neil Library.

The proposed flat roof form and materiality of white weatherboard cladding to walls and soffit ensures that the masonry and slate materiality of Sophie's Cottage remains pronounced in views to the site.

New landscaping proposed for the north, west and south of Sophie's cottage (Early Learning Centre), has been chosen to reflect the aesthetic character of the historic institutional parkland setting, through its use of sandstone, and mix of indigenous and exotic vegetation. This is considered an appropriate response, with no heritage impact.

The platform providing a new play area to the north east of Sophie's Cottage has been cut back to enable the sandstone retaining wall to remain visible below – no heritage impact.

There is insufficient information in the current documentation to determine the level of impact associated with the creation of the three additional car parks for ELC staff along the roadway to the cemetery. This road is presently unpaved, and is a remnant of the former drive from Claremont to the cemetery. Additional carparking may be possible along this road provided that the road and any associated parking remains unpaved, preferably finished with gravel loss or consolidated gravel (as per policy 6.13.4). The design should be developed in consultation with a heritage architect and landscape architect to ensure any impacts are minimised.

Recommendations:

The detailed design for the proposed car parking along the road to the cemetery should be developed in consultation with a heritage architect and landscape architect to ensure compliance with the policies of the CMP and any impacts are minimised.

Barat Burn Junior School and Sundial Lawn/Terrace

Proposed Works to the West Wing:

- Remodelling of the interior of the building to provide new classroom and ancillary spaces including the extension of the building on the northern and western sides.
- Recladding of the building with a perforated and fluted aluminium screen, with feature square bay windows.
- Re-landscaping of the northern courtyard and Sundial Lawn / Terrace to facilitate improve access between the two and provide improved amenity.

Potential Heritage Impact:

- The proposed roof garden does not require an increase to the existing height, and the proposed glazed wind break / balustrade retain key views to and from the roof level of the Barat Burn east wing.
- The proposed increase to the footprint on the western and northern sides of the west wing at Level -01 has been deliberately pulled back so as to minimise the incursion on the footprint of the Sundial Lawn / Terrace.
- The balcony extension over the Sundial Lawn at Level 0 is at a height approximately 5m above the level of the terrace, and will not impact on the understanding of its form and extent.
- Demolition of the toilet block within the northern courtyard will have no adverse impacts.
- New landscaping within the northern courtyard will not have any adverse heritage impacts, provided that the new screen planting along the northern elevation retains visible of the remnant scroll detail from the former Melocco Villa.
- The retention insitu of the sundial, mosaic and Italianate style balustrade of the Sundial Lawn / Terrace is a positive aspect of the proposal. The small garden bed on the northern side is recommended to be removed or modified so as to retain visibility of the full length of the decorative balustrade.

- The proposed wide terraced steps and inclined platform lift between the Sundial Lawn / Terrace and the northern courtyard will generally retain the overall proportion and open space character of the terrace, however will reduce the area of the lawn by approximately one third. Further refinement could explore options to retain a greater area of lawn – minor but acceptable impacts.
- Further refinement and detail is required with regards to the treatment of any new barrier to the existing Italianate style balustrade required for BCA reasons, however this could be resolved during the detailed design phase with careful design and detailing.

Recommendations:

- Explore options to increase the area of lawn retained within the Sundial Lawn / Terrace.
- Delete or modify the proposed garden bed on the northern side of the Sundial Lawn / Terrace to ensure visibility of the full length of the Italianate balustrade.
- Consider a smaller screening plant for the northern boundary of the northern courtyard so as to retain visibility of the Melocco scroll along this elevation.
- The detailed design for modifications to the Italianate style balustrade to meet BCA requirements with respect to the height of barriers to prevent falls, should be prepared in consultation with a heritage architect. Any modifications should retain access to the mosaic and sundial.
- New shade structures or balustrading to the proposed roof terrace should be located and designed so as not clutter or impinge on key views to and from Barat Burn east wing.

Proposed Works to the East Wing:

- Demolition of the existing interior at Levels 1 and 2, and refurbishment of the existing volume, including new GLA's, amenities, storage, wet and quiet areas. At the southern end a new amphitheatre is to be created, extending between Levels 1 and 2.
- Demolition of the existing structures at roof level, and enclosure of roof terrace with new structure. This structure is set back from the existing parapet, and features glazed external walls and flat roof with steel awning.
- Replacement of the vertical circulation core accessing both the east and west wings of the Junior School (constructed in 2000) with a new lift and stair.

Potential Heritage Impact:

- There are no changes proposed to the external facades that adversely impact on the blue / grey face brickwork, rendered parapet, pattern of window openings with rendered architraves and ground level colonnade – no adverse impacts.
- The original aluminium window sets located at Level 1 (west elevation) are proposed to be retained – no adverse impacts.
- The replacement of the vertical circulation hub (lift and stair) will result in a small decrease of visibility of the western façade arising from its larger footprint – minimal but acceptable impacts.
- Internal refurbishment of the building at Level 1 will have moderate impact on the original layout and fabric (aluminium door sets and face brick walls of the original balconies) however this impact has been lessened through the interpretation of the former balcony openings to the eastern and western wing with new frameless glazing in place of the non-original aluminium window sets. Other original/early features are proposed to be retained, including the central stair and original 'aluminised' aluminium windows to the western elevation (Level 1) – positive impact. Options to reopen the original high level windows within the stair could be explored during detailed design.

Recommendations:

- Further refinement during design development should ensure that the internal marble terrazzo architraves to the external window openings are retained and expressed in the new design.
- Options to reopen the original high level windows within the stair could be explored during detailed design.

Junior School Traffic Management Works

Proposed Works:

- Removal of one bay of the existing rendered masonry fence to create a new driveway entry;
- New east-west driveway crossing at the southern end of the Noviceship Lawn;
- Widening of the existing roadway to allow for a new drop off and pick up zone; and
- Construction of a new elevated footbridge providing pedestrian access from Café 135 and the new drop off zone to the Barat Burn Junior School. At the northern end, this footbridge extends past Our Lady of Lourdes Grotto and the northern elevation of the Villa, before crossing the existing internal roadway to access the new vertical circulation zone between the east and west wings of the Barat Burn Junior School.

Potential Heritage Impact:

- The proposed works will have some impact on the significance of the Noviceship Lawn, primarily arising from the new east-west driveway crossing, which cuts across the lawn at its southern end. This impact is mitigated somewhat through the limited use of the roadway for before school drop off and after school pick up, thereby retaining the existing recreational use of the space during the day. The proposed materiality and detailing of this driveway seeks to minimise its visual impact, and careful detailing will be required during the detailed design phase to ensure that visual impacts are minimised.
- There is no change to the current extent of garden beds and plantings, including significant plantings of exception, high and moderate significance – positive aspect of the proposal;
- There are no structures proposed that may impact on the nature of the space as a visual separation between the Senior School and Junior School, or impede on the openness to views or access to the sun – positive aspect of the proposal.
- Removal of the existing bin storage above the Grotto of Our Lady of Lourdes is a positive aspect of the proposal, as this structure had been identified as being intrusive. While the proposed new walkway will be visible above the grotto itself, the potential visual impacts are considered to be minor given that:
  - the walkway is set back further from the edge of the grotto; and
  - the lower height and transparent nature of the walkway will allow views through its structure, compared to the enclosed walls of the present bin enclosure.
- There are no adverse impacts associated with the proposed walkway on the Villa. While the Villa has been identified as of high significance, this affected elevation (north) is not considered a primary one (the building is orientated to the west). Further refinement during detailed design could consider options to provide future access to the Villa.

Recommendations:

Overall the proposed works associated with the Junior School traffic management are considered to be of minor and acceptable impact, with the following recommendations:

- The materiality and detailing of the new driveway crossing should be the detailed design phase to ensure that visual impacts are minimised.
- The proposed walkway should be designed so as to not visually or materially impact on the former quarry face forming the eastern boundary of the lawn in front of the grotto, or the existing cut sandstone steps between the Noviceship Lawn and the grotto.
- Further refinement of the design could consider options to provide future access to the Villa from the proposed elevated walkway.

PRECINCT B (Senior School)

Refurbishment of Senior School Reception including disabled access

Proposed Works:

Internal modification and refurbishment of the existing reception, office and classroom areas at ground level (Level 2) of the Main School Building, as well as the construction of new disabled access ramps to the main entry.

Potential Heritage Impact:

The original internal configuration of the Main School Building, with its central entry and corridor with rooms on either side, is generally retained. Some modification to the arrangement of door openings on either side of the entry foyer is proposed, however the drawings indicate that their current symmetrical arrangement is able to be retained in the new layout. The new partition on the southern side of the entry foyer will require coordination with the existing cedar joinery. Overall, these works will have minor but acceptable impact.

- Removal of a small length of masonry wall on the northern side of the entry foyer to create a new doorway opening to the informal meeting space, and removal and salvage of the existing cedar door case to this wall. Retention and reuse of the salvaged doorcase to the new opening is recommended as this will ensure that this significant piece of joinery remains in use near t its original location. Overall this work is considered to be of minor impact.
- Removal of the later timber screens dating to the main entry foyer – no impact. These works include the removal and salvage of the cedar double doors to the glazed partition to the south of the entry foyer – minor impact.
- Subdivision of the two original large spaces on either side of the entry foyer, being the former refectory (north) and temporary chapel (south). While this will have some adverse impact on the original legibility of these spaces, the proposed glazed partitions will ensure that view through the space will still be possible, thereby enabling an understanding of their former configuration. New partitions will require careful integration with the existing fabric to avoid existing window openings. It is recommended that the partitions within the new administration area (former refectory) be reconfigured to as to retain clear views of the original stone chimney at the northern end.
- Reinstatement of the chimney breast at the centre of the new reception/office space (former third chapel space) requiring the removal and salvage of the existing cedar French doors. This change will reinstate an original/early configuration, and is a positive impact.

Recommendations:

Overall the proposed works to the main entry foyer of the Main School Building are considered to be of minor and acceptable impact, with the following recommendations:

- Further refinement during detailed design should consider the following:
  - installation of the salvaged cedar door case to the new opening on the northern side of the main entry foyer;
  - careful integration of new timber partitioning with the existing cedar joinery on the southern side of the main entry foyer; and
  - realignment of the proposed glazed partitions to ensure the original fireplace remains visible.
- Protect the existing stone landing and steps to the main entry below the new stone elements, to enable their future uncovering and exposure.
- Design development should be undertaken in consultation with a heritage architect to ensure compliance with the policies of the CMP, particularly with regard to any upgrading or modifications to services (lighting, heating / cooling and data) to ensure compliance with the CMP.

Year 8 Centre (North Wing)

Proposed Works:

The proposed Year 8 Centre is proposed to be located at Level 3 of the existing North Wing, also referred to in this report as the 1959 Noviceship Wing additions and 1976 Science Block. It involves the construction of new gabled wings on the roof of the 1976 Science Block, and on either side of the 1959 Noviceship Wing additions. This will require the removal of much of the eastern and wester facades of this wing.

Potential Heritage Impact:

- The Year 8 centre deliberately sits below the existing ridge height of the 1959 Noviceship Wing additions and continues the strong gable roof forms of the historic Convent School, as well as its materiality (slate and masonry). This, as well as its masonry construction and the proportion and verticality of its windows helps to create a cohesive appearance with the historic Convent School in views from the harbour and

along Vaucluse Road, while differentiating it sufficiently to not confuse the historical development of the place.

- The removal of much of the eastern and western facades of the 1959 Noviceship Wing additions. While this will result in the loss of 1959 structure and fabric, the lesser quality of this material (rendered concrete block), will have only minimal impact.
- The proposed internal modifications to create the new Year 8 centre will not result in any adverse impacts. The interior was refurbished in the 1970s to its current form, and none of the 1959 fabric or spaces is affected by the works. The changes support and strengthen the primary use of the place for education purposes and are overall of positive benefit.
- The proposed additional floor level above the western half of the 1976 Science Wing has been deliberately pulled back at the southern end so as to maintain the keys views of the upper floors of Claremont from the west and northwest identified in Figure 3.8 of the CMP.

Recommendations:

No recommendations have been proposed as the proposed the proposed Year 8 Centre is considered to be of minor and acceptable heritage impact.

Senior School Traffic Management works including reconfiguration of Main Entry Forecourt

Proposed Works:

- Removal of parked cars, buses, line markings or other control barriers within the Main Entry Forecourt;
- Construction of a new one way vehicular drive from the Jubilee Gates to the Kincoppal Gates requiring the partial removal of the second roundabout in front of the South Wing; and
- Reinstatement of a landscaped and pedestrian setting of garden beds, grassed areas and paths which interprets the early setting and character of the forecourt.

Potential Heritage Impact:

- Construction of the proposed one way vehicular access and drop off zone along the boundary of Vaucluse Road will require the partial removal of the circular garden bed in front of the South Wing, however its removal is considered acceptable given the considerable benefits of separating vehicles and pedestrians from a safety point of view, and the opportunities to reinstate the historic landscaped character of the Main Entry Forecourt. The impacts are further mitigated by the interpretation of the existing roundabout in the proposal paving detail, as well as retention of the existing flagpoles and garden hedging.
- The removal of all bus and car parking within the Main Entry Forecourt, and the reinstatement of a landscaped setting of garden beds, grassed areas and paths is a positive aspect of the proposal in that it enhances the visual presence of the historic Convent School in its institutional landscape setting. The open nature of the proposed landscape treatment within the forecourt will enable the sandstone buildings of the historic convent school to regain their visual dominance in the setting, without the clutter of parked cars, buses, line markings or other control barriers in front, and is considered an appropriate response given the exceptional significance of the place – positive aspect of the proposal.
- The landscape design for the main entry forecourt reinterprets the early landscape form with a series of winding paths through lawn and low garden paths. The proposed disabled ramps to the main entry have been kept low and are arranged around the circular garden bed in front of the entrance, which is to be retained. The use of sandstone for the ramp, as well as the retention of the circular garden bed is a positive aspect of the proposal, as it retains the early materiality of the forecourt and strengthens and interprets its early arrangement as identified above.

Recommendations:

No recommendations have been proposed as the proposed the proposed Senior School traffic management works are considered to be of minor and acceptable heritage impact.

New onsite bus/car parking

Proposed Works:

The proposed bus / car parking structure is located at the site of the former conservatory at the southern eastern corner of the western campus. The new structure utilises the topography of the land to enable the construction of a two storey structure for the parking of buses at ground level with car parking below. Nonetheless the works will involve some excavation into the site, with the resultant loss of much of 1930s stone walling identified as being of moderate significance. A short length (7m) of the 1888 Hunt retaining wall will also be affected, and two courses of this wall are proposed to be removed and salvaged.

Potential Heritage Impact:

- Some impacts associated with the removal of the 1930s stone walling across the former conservatory site, identified as being of moderate significance.
- Minor impacts associated with the removal of two courses of a short length (7m) of the 1888 Hunt retaining wall. These impacts are mitigated by the salvage of these tones for future use on site. The remainder of the Hunt retaining wall is to be retained and exposed to view which is a positive aspect of the proposal.
- The existing significant Magnolia grandiflora is to be retained – positive aspect of the proposal.
- There are no impacts on the stone boundary walls to Vaucluse Road and Forsyth Park.

These potential impacts have been mitigated by:

- Choosing new soft landscaping and the materiality of the proposed bus / car park structure to create a landscaped foreground, particularly in views to the historic Convent School from Vaucluse Road.
- Reconstructing the existing garden beds at ground level on the northern side in their current arrangement.

Recommendations:

- Screen planting along the southern boundary is chosen so as to ensure no unintended damage to the stone drainage channel along this boundary.
- A Conservation Management Plan (CMP) has been prepared by Design 5 and is attached **Appendix U.** The CMP will act as an overarching heritage assessment framework for all future development applications. The HIS has been prepared in accordance with the recommendations of the HIS.

6.9.3. Archaeological Heritage

A Historical Archaeological Assessment has been prepared by Coast History and Heritage Consultants and is attached at **Appendix AA.**

Based on a review of the documentary evidence and an assessment of the proposed works, the Report concludes that the following works are located within areas identified as having Archaeological significance:

Findings

- **Precinct A**
- Early Learning Centre Extension
  - ▪Privy (1907 - 1990s)
- Traffic management
  - Path from Claremont House to the waterfront (c.1850 - c.1933)
  - Garden shelter (1910 to at least the 1930s)
  - Carpenter's workshop (moved to this location in 1887)
  - Unknown structure (1935-61 until the 1980s or 1990s)
- Barat Burn Junior School
  - The Poplars (1929 - 1960s)

Precinct B

- Main forecourt, traffic management
  - Entrance drive to Claremont House
  - Earlier phases of the forecourt layout
- Bus and car parking
  - Conservatory (1890s: moved in 1932; demolished 1950s)

Precinct C

- Boarding accommodation building
  - Vegetable garden (1930s - 1960s)

Recommendations

- The proposed works are likely to result in the complete removal of any remains. However, it is unlikely that potential historical archaeological remains are of heritage significance, and would therefore not be relics as defined and protected by the Heritage Act. There are no requirements for further historical archaeological investigations prior to the proposed works.
- However, the following recommendations are provided to address the possibility for changes in the development footprint during detailed design, and to address the statutory protection of any unexpected relics that may be found:
- Once detailed design for each element is finalised, and if ground disturbance is required, the potential for historical archaeological impact should be checked against this report:

  a. If the extent of disturbance has been increased, or the location has been altered, the potential for historical archaeological impact should be assessed.

  b. If the extent and location of disturbance is unchanged, no further historical archaeological investigations are required, and the work may proceed with caution.
- Historical archaeological relics within the study area remain protected by the Heritage Act. If any historical archaeological relics, or possible relics, are identified during construction, site workers must:

  a. Not further disturb or move these remains

  b. Immediately cease all work at the location

  c. Seek advice from Heritage NSW and/or an archaeologist with relevant experience

  d. Not recommence any work at the location unless authorised in writing by Heritage NSW.
- Copies of this report should be forwarded to the Heritage Library, Heritage NSW; and to the Woollahra Library Local Studies Collection.

6.10. ABORIGINAL CULTURAL HERITAGE

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Coast History & Heritage Consultants and is attached at **Appendix H.**

6.10.1. Methodology

The ACHAR included a review of the OEH Aboriginal Heritage Information Management System (AHIMS Register) over a 4km x 8km area centred on the study area. This review found that no Aboriginal sites are registered within the study area. However, as illustrated in **Figure 49** below there are 118 sites within the search area which covers the South Head peninsulas and small part of the opposite foreshore.

In addition to the AHIMS search, a survey study was conducted of the whole of the study area (eastern and western campuses), but did not include areas inside or underneath buildings. As illustrated in **Figure 50**, the study area was divided into four survey units which were defined following the current areas of use of the school.

Figure 49 AHIMS Search Results

Source: *Coast History & Heritage Consultants*

Figure 50 Survey Study Areas

Source: *Coast History & Heritage Consultants*

Figure 51 Survey View's

Picture 21 Survey Unit 1: sandstone outcrop being the MTC

Picture 22 Survey Unit 2: Southern boundary of the study area

Picture 23 Survey Unit 3: Northbound view

Picture 24 Survey Unit 4: Southbound view

Source: Coast History & Heritage Consultant

6.10.2. Findings

The study identified one possible Aboriginal archaeological site within the study area. No Middens, rock engravings or surface artefacts were identified in the study area. The details of the archaeological site are summarised in **Table 26** and illustrated in **Figure 52.**

As no items or areas of Aboriginal archaeological significance have been confirmed, only a preliminary assessment of significance can be made at this stage. If the identified Rockshelter is an Aboriginal Archaeological site, containing relatively intact archaeological deposit, it would be of high heritage significance.

Table 26 Summary of identified Aboriginal archaeological sites within the study area

AHIMS No.	Site Name	Location	Site Context	Site features
45-6-3754	KRK Rockshelter	340012E6251770N	Closed	Potential archaeological deposits

Figure 52 View of Rockshelter

Picture 25 South-east view of Rockshelter

Picture 26 North-east view of Rockshelter

Source: Coast History & Heritage Consultant

Impact of Detailed Development

An assessment of the proposed concept and detailed development has been completed and is included within the HIS. The works proposed as part of the detailed development stage have been assessed and identified as having no to moderate potential impact. None of the proposed detailed works have been identified as having high potential impact.

Impact of Concept Development

The proposed concept development works have been assessed and graded in terms of potential impact. All but one of the proposed concept works have been identified as having no potential Impact.

The location of the proposed work that has been identified as having high potential impact is Precinct C. Within Precinct C, the concept development works consist of the construction of a new three-storey boarding accommodation building. The proposed location does not appear to have been subject to substantial levels of previous disturbance, with the exception of the construction of an internal road and carparking for Sheldon House. The potential Aboriginal archaeological site KRB Rockshelter (AHIMS #45-6-3754) is located at the northern end of the proposed building, and the escarpment continues along the eastern side of the building.

Construction of the building is likely to require excavation into the existing escarpment, including KRB Rockshelter (AHIMS #45-6-3754). Although the building will sit at the level of the existing internal road, excavation will be required for construction of footings and installation of subsurface\ services. This has the potential to impact any Aboriginal archaeological deposits that may be present within or in the vicinity of KRB Rockshelter (AHIMS #45-6-3754).

Recommendations

The ACHAR proposed the implementation of the following management measures:

- Aboriginal community consultation.
- Aboriginal heritage management plan.
- Aboriginal heritage induction.
- Archaeological monitoring of works with moderate potential for impact.
- Archaeological investigation and recording of any Aboriginal archaeological sites that will be subject to impact.
- Reporting.
- Aboriginal community consultation.
- Updated impact assessment.
- Aboriginal heritage induction.
- Detailed design to avoid impact to KRB Rockshelter (AHIMS #45-6-3754).
- Archaeological monitoring of works with moderate potential for impact.

6.11. NOISE AND VIBRATION

A Noise Impact Assessment (NIA) has been prepared by Wilkinson Murray and is attached at **Appendix I**. The assessment considered the potential noise impact for the new buildings and the potential noise and vibration impacts at the nearest receivers during the construction phase of development.

As future noise sources cannot be measured prior to construction and operation, a modelling system was used to predict future noise levels and potential impacts of construction associated with the proposed development. The modelling and assessment are based on a worst-case scenario where all fixed plant items are operating simultaneously and noise generating activities occurring in a location most exposed to surrounding residence.

6.11.1. Construction

Methodology

The acoustic modelling addressed the following factors:

- Equipment sound level emissions and location;
- Screening effects from buildings;
- Receiver locations;
- Ground topography;
- Noise attenuation due to geometric spreading;
- Ground absorption; and
- Atmospheric absorption.

The modelling was conducted for four work scenarios including across Areas A and B including:

1. Demolition/Strip out
2. Building Construction Vertical Riser – Lift AREA
3. Façade/Fitout
4. Building Construction New ELC Building

Findings

The assessment found the following:

- Exceedances of noise management levels of up to 14 dBA (Weekdays) and 15 dBA (Saturdays) at residences to the north of the site may be expected during lift shaft construction when major equipment is located on site. This magnitude of exceedance is consistent with similar sites where residences overlook development sites.
- During the demolition and fit out stages, the magnitude of exceedance will reduce due to the nature of construction activities.
- At the Southern End of the site exceedances of up to 8 dBA can be expected for excavation and construction works. During the piling and landscaping stages, no exceedance is predicted.
- Operation of rock breakers and the like generate ground vibration that has the potential to transmit to nearby buildings.
- The highest vibration levels will occur when excavation equipment is located in Area B of the site near residences on the southern boundary.

Mitigation

Based on the assessment conducted, it is clear that without the implementation of mitigation measures, noise levels form construction activities in projected to exceed the noise management levels nominated in the guidelines at some surrounding receivers.

- The following project-specific mitigation measures are recommended:
- Selection of quietest feasible construction equipment.
- Use of rock saws in preference to rock breakers where feasible.
- Localised treatment such as barriers, shrouds, and the like around fixed plant such as pumps, generators, and concrete pumps
- Preparation of a Noise and Vibration Management Plan prior to CC.

6.11.2. Operational

Assessment

The following operational activities/situations were assessed:

- Mechanical services

- Noise emanating from the new KRB Terrace area
- Noise emanating from the new carpark and bus parking area
- School announcements and bells.

Findings

The assessment found that mechanical plant elements such as rooftop exhausts and major plant associated with the development should be assessed at the time of detailed design and selection, having regard to nearby residential and commercial properties surrounding the development, and to future uses in the school area. The assessment also reviewed the following two proposed building elements as they are located in proximity to sensitive receivers:

Junior School: In the case of the proposed terrace area, noise has been assessed and determined to be compliant with the relevant daytime operation criteria.

Basement Car Park & Bus Parking: As the proposed basement car park is underground and will be screened the acoustic impact is not considered to be significant.

Mitigation

To mitigate noise from mechanical plant, attenuators could be incorporated in the outlets of the exhaust fans. Attenuators can be installed to the fans if required. The mechanical plant noise emission would be designed to meet the criteria present in Table 7-2 at the closest receivers. Noise from bells and announcements will be managed by design and adjustment techniques.

6.12. UTILITIES

An Electrical Infrastructure Management Plan has been prepared by Northrop and is attached at **Appendix W** Northrop has completed a preliminary maximum demand calculation based on the proposed architectural plans to determine the required augmentation to utility power services to service the development.

Detailed Development

Junior School Precinct A: The Junior School precinct carries a proposed maximum demand increase over the present-day energy consumption by 246.99 kVA / 357 A/phase. The present-day overhead ABC connection to the Junior School will not be sufficient to carry this uplift in demand.

Subject to an application being undertaken to Ausgrid, a new electrical substation will be required to supply the site. Due to the impending concurrent and long-term developments proposed at the school, it is proposed that an L-Type, 1000 kVA substation is provided in the vicinity of the Junior School site. This substation will supply the new and existing loads at the Junior School, as well as provide additional capacity to support the developments at Precinct B and Precinct C. The project shall be registered with Ausgrid by way of application for connection; detailed design of the infrastructure will be directed by a Design Information Package pertaining to this project.

The provision of a new substation shall be determined by Ausgrid and their confirmation that there is sufficient 11kV HV infrastructure in the vicinity to carry a new substation.

Senior School Precinct: The Senior School precinct carries a proposed maximum demand increase over the present-da energy consumption by 123.93 kVA / 179.61 A/phase. It is estimated that based on the extent of works proposed for Precinct B, the existing padmount substation S.4621, and associated electrical infrastructure, is likely to be sufficient to carry the minor uplift in demand.

Concept Development

Precinct B & C: The Concept precinct carries a proposed maximum demand increase over the present-day energy consumption by 317.38 kVA / 459.97 A/phase It is estimated that based on the extent of works proposed for this part of the Senior School, the existing padmount substation S.4621, and associated electrical infrastructure, will not be sufficient t carry the major uplift in demand.

It is anticipated that the Concept Precinct B & C works will be undertaken following completion of the Junior School Precinct A works. Thus, the new substation allocated to the Junior School should b established. It is anticipated that assuming no further increase in works to the Junior School site, this new 1000 kVA

substation should have sufficient spare capacity to carry the additional load from Concept Precinct B & C as currently proposed.

6.13. DRAINAGE, FLOODING AND COASTAL HAZARDS

A Drainage and Flood Assessment has been prepared by Henry&Hymas and is attached at **Appendix N.**

6.13.1. Flooding

Methodology

The assessment used Hydraulic Modelling to assess the impacts of the proposed development during 5%, 1%, 0.5% and 0.2% AEP Storm Events.

Findings

Vaucluse Road has a constant cross fall from the western side of the road to the kerb and gutter along the eastern side. This makes the north eastern site boundary (for the junior and senior school area) a ridgeline to overland flow path. This changes to a two-way crossfall further north at Vaucluse Rd beyond the northern end of the school sit found that the site is not shown to be flood affected by the major overland flow down New South Head Road. In order to understand whether the overland flow reaches the ridgeline at the boundary to the site (both of pre and post developed), a channel flow calculation was undertaken to determine the flow depth.

Based on the channel flow calculations, the resulting flow depths at the critical section are as outlined in **Table 27**. As illustrated in **Table 27**, the flow depths indicate that runoff down Vaucluse Rd and will not enter the site for all storm events up to and including the 0.2% AEP at the critical section of the senior school driveway. In addition to the above, it is understood that the most critical section is from the junior school's

driveway to Vaucluse Road. The flow depth for the 0.2% AEP year is 161 mm. In order to prevent overland flow from entering the school, it is proposed to

construct a bund at the driveway at a level of RL50.56.

Table 27 Calculated Flow Depths

Storm Event	Flow Depth (mm)
5%	117
1%	150
0.5%	155
0.2%	164

6.13.2. Climate Change

Climate change has the potential to alter flood levels as a result of increased rainfall intensity and increase in receiving water levels (i.e. sea levels). The Rose Bay Flood Study has taken into account possible sea level rise and based off CSIRO modelling, indicate an upper limit rise of 0.91m by 2090 and 2100. This rise puts the tailwater/100year ARI flood level a 1.91mAHD. As the site itself is located above 50mAHD (Figure 10), it is reasonable to say the potential effects of climate change along with the sea level rise will have negligible effect on the site.

In respect to safety emergency measures, the proposal does not adversely affect flooding and impacts of climate change are therefore likely to be minimal. As such, the current school emergency response plan will not need to be amended as a result of the proposed works.

6.13.3. Drainage

Key Issues:

- Stormwater Quantity- The increased impervious surfaces (such as roads, roofs driveways, etc) associated with the development will result in an increase in pea stormwater flows from the site during storm events. In order to cater for the stormwater flow increase, on-site stormwater detention (OSD) tanks have been designed at under the driveway for senior school within the site. The site stormwater system has been designed to safely convey the flows through the site and within the capacity of the downstream system.
- Stormwater Quality - Urban developments have the potential to increase gross pollutants, sediments, hydrocarbons and nutrient concentrations in stormwater runoff. T limit impact on the downstream water quality, water quality measures at source and end of line treatments will be provided. Section 3.3 further describes the specific implementation of these measures for the proposed development.

Mitigation Measures

Proposed Drainage Systems:

The drainage system for the proposed development has been designed to collect concentrated flows from impervious surfaces such as the new driveway for junior school and the internal road for the existing site and from the senior school.

The proposed drainage system includes:

- A network of piped minor drainage system to collect runoff from the site.
- An overland flow path to convey major flows.
- An OSD tank to help reduce the peak discharge from the site due to the increased flows resulting from an increased impervious area.

On-Site Stormwater Detention Tank

The proposed internal road and bus parking bay will generate additional runoff. This will create an additional concentrated flow to the existing stormwater system. The storage/discharge relationship specified in the Council document may not be effective in managing the increased flows. As such the OSD is to be designed to best suit industry practice and to ensure post developed flow do not exceed predeveloped.

The OSD system has been modelled using the DRAINS software and limit the discharge of stormwater flow to the five-year ARI greenfield. For approximately 670 m2 of impervious area, the preliminary OSD size is 11 m3.

Stormwater Quality Management

To limit the impact on the downstream water quality, water quality measures at the source and end of line-treatments will be provided. Water quality treatments have been provided as per Council's Stormwater Management specifications. The additional runoff from the proposed internal driveway and bus parking to the existing stormwater system is to be treated through the use of OceanGuards and Ocean Protect Stormfilter cartridges within the OSD tank.

OceanGuards are to be installed in surface inlet pits areas to prevent any gross pollutants / fine sediments leaving the site via the piped system and remove the hydrocarbons, oil &grease.

Ocean Protect Stormfiler cartridges are to be installed in a chamber built into the OSD tank. This secondary treatment device is used to treat a majority of the nutrients (phosphorus and nitrogen) being generated on site.

6.14. GEOTECHNICAL & HYDROGEOLOGICAL

Geotechnical Investigations have been conducted to assess the subsurface conditions of the site of the proposed development. Three separate reports were prepared for the proposed ELC Building, new elevated walkway and road and new bus parking area. A Preliminary Site Investigation was also conducted to identify any past of present potentially contaminating activities at the site and assess the soil and groundwater contamination conditions.

New ELC Building

Methodology: Auger drilling of four boreholes was conducted on the 28th of January 2020:

Key Findings: The boreholes encountered AC pavements then moderate to deep fill overlying natural sandy soils (BH only) then sandstone bedrock (BH1 and BH3 only). Groundwater was encountered at depth in BH2 only. The fill was assessed to be variably compacted, ranging from poorly to well compacted, which suggests the fill has not been placed and compacted in a controlled manner. Natural silty sand and gravelly sand was encountered below the fill in BH2 and extended to the borehole termination depth.

Key Mitigation Measures:

- Following the completion of the architectural Package, it is recommended that an additional geotechnical investigation including the drilling of cored boreholes be completed to confirm the depth to, and quality of the underlying bedrock.
- Care must be taken during site stripping and subsequent excavation not to undermine or remove support from any structures or landscaping on, or beyond, the footprint of the proposed ELC building.
- Excavation of the soil profile can be completed using buckets on a tracked hydraulic excavator.
- Excavations through the soil profile may be temporarily battered no steeper than 1 Vertical in 1.5 Horizontal, provided all surcharge loads are kept well clear of the crest of these batters and any nearby school buildings are founded on bedrock.
- Structural retaining walls (as opposed to soft landscaping walls) should be supported by piled footings founded in the underlying sandstone bedrock.
- **Note:** Refer to Section 4 of **Appendix O** for a complete list of proposed mitigation measures.

Proposed Elevated Walkway and Road

Methodology: Auger drilling of four boreholes was conducted on the 28th of January and 3rd February 2020:

Key Findings: The boreholes encountered silty sand fill overlying residual silty sands (BH6 and BH7 only) then sandstone bedrock at shallow and moderate depth. Groundwater was not encountered within the maximum 3.2m depth of investigation. The fill was assessed to be poorly to well compacted, which suggests the fill has not been placed and compacted in a controlled manner. A thin layer (0.2m) of residual silty sand of medium dense or dense relative density was encountered below the fill in BH6 and BH7. Sandstone bedrock was encountered or inferred in each borehole at depths ranging from 0.4m (BH7) to 2.4m (BH4).

Key Mitigation Measures:

- Following the completion of the architectural Package, it is recommended that an additional geotechnical investigation including the drilling of cored boreholes be completed to confirm the depth to, and quality of the underlying bedrock.
- The proposed elevated walkway should be uniformly supported by footings founded in the underlying sandstone bedrock.
- All pad footings should be excavated, cleaned out, dewatered, inspected, and poured with minimal delay.
- Following demolition of any existing structures or pavements within the footprint of the proposed road, all vegetation, topsoil, root affected soils and any deleterious or contaminated fill should be stripped from below the footprint.

Note: Refer to Section 4 of **Appendix Q** for a complete list of proposed mitigation measures.

Proposed Bus Parking

Methodology: Auger drilling of three boreholes was conducted on the3rd of February 2020:

Key Findings: The boreholes encountered silty sand fill overlying a thin layer of residual clayey sand (BH8 only) then sandstone bedrock at shallow and moderate depths. Silty sand fill was encountered from the surface of each borehole and extended to depths ranging from 0.45m (BH10) to 1.6m (BH8) below existing surface levels. Deeper fill should be expected behind some of the retaining walls. Inclusions of ironstone and sandstone gravel, concrete fragments and slag were present within the fill. A thin layer (0.2m) of residual clayey sand of very loose relative density was encountered below the fill in BH8. Sandstone bedrock was encountered in BH8 and BH9 at depths of about 2.1m and 0.9m, respectively. In BH10 and DCP10, sandstone bedrock was inferred at about 0.45m depth, based on their refusal depths.

Key Mitigation Measures:

- Following the completion of the architectural Package, it is recommended that an additional geotechnical investigation including the drilling of cored boreholes be completed to confirm the depth to, and quality of the underlying bedrock.
- Care must be taken during site stripping and subsequent excavation not to undermine or remove support from any boundary structures or retaining walls within the site that are to remain.
- Excavations through the fill profile may be temporarily battered no steeper than 1 Vertical in 1.5 Horizontal, provided all surcharge loads are kept well clear of the crest of these batters and any nearby retaining walls are founded on bedrock.
- Appropriate surcharge loads must be taken into account in the design of the retaining walls, and the design should incorporate drainage measures to reduce any pore water pressures.
- The retaining walls must be backfilled with either engineered fill placed, compacted and tested in thin layers, or with a single sized, hard and durable drainage gravel tamped into place in thin layers behind the wall.

Note: Refer to Section 4 of Appendix Q for a complete list of proposed mitigation measures.

Preliminary Site Investigation

A Preliminary Site Investigation was prepared by JK Environments and is attached at **Appendix CC.**

Methodology: The scope of work included a review of historical information, a site inspection, and sampling from 10 boreholes and one groundwater monitoring well. Based on the historical information and site observations, JKE identified the site as being historically used as school grounds including onboarding facilities (accommodation) as well as possibly for religious use. Potential sources of contamination identified within the site included; historical site filling activities; possible use of pesticides; and hazardous building materials within current and former structures on the site.

Key Findings: The investigation identified lead and carcinogenic PAHs contamination in soils in northern and southern parts of the site within the areas of proposed development works. The source of contamination was identified as the fill material historically imported onto the site. The contaminants requiring remediation include: lead contamination hotspot in the northern part of the site where the new ELC building is proposed, carcinogenic PAHs within the southern part of the site area where the new two-storey bus/carpark is proposed, and TRH F3 identified also within northern and southern parts of the site which poses a risk to ecological receptors. These TRH exceedances where co-located with carcinogenic PAHs requiring remediation due to the potential risk to human health. The extent of soil impacted by the contaminants has not been identified and is a data gap which will require addressing as part of the remediation works.

Significant contamination of groundwater was not identified. Elevated concentrations of heavy metal Zinc was detected in the groundwater sample, though were representative of groundwater conditions within an urban environment and considered to be a regional issue. A number of PAH compounds namely: phenanthrene, anthracene, fluoranthene and benzo(a)pyrene were also detected above the ecological and human health SAC in the groundwater sample. However, JKE are of the opinion that slow groundwater recharge and sediment present within the well during sampling may have cause interference with the PAH analysis. In addition, groundwater conditions and quality should be further confirmed during the remediation/validation process.

Key Mitigation Measures: Based on the findings of the assessment, JKE are of the opinion that the site can be made suitable for the proposed development, subject to the implementation of the following recommendations:

- Prepare a Remediation Action Plan (RAP) to address the contamination issues identified at the site. The RAP will include the requirements for addressing the data gaps identified in this assessment and for the preparation of an unexpected find protocol (UFP); and
- Undertake a validation assessment documenting the remediation works.
- In accordance with the recommendations outlined above, a Remediation Action Plan (RAP) has been prepared and is included at **Appendix BB.**

6.15. CPTED

The proposal involves alterations and additions to an existing school campus. The Campus as existing has been designed to ensure a safe and secure environment for all users. The design of the proposed alterations and additions will ensure the safety and security of school is maintained through the implementation of the CPTED deign principle.

Table 28 outlines the design response of the proposal to the relevant CPTED principles.

Table 28 CPTED Design Response

CPTED Principle	Design Response
Surveillance	The existing KRB surveillance systems and strategies are to be maintained and expanded to the areas of new development. Upgrades to the lighting of all public spaces will be carried out as part of the external landscaping, traffic networks and new pedestrian pathway links. Lighting strategies for the new and upgraded external areas will provide light to meet safety, code and accessibility requirements. The existing and proposed footprint of the numerous buildings across the campus allow for clear sightlines across courtyards, lightwells, forecourts, external terraces Internally all GLA's have been designed with open plan arrangements and for the private individual staff offices, each have in-built measures to maintain surveillance through levels of transparency
Access Control	The existing KRB security systems will be maintained and modified to suit the proposed developments. The key masterplan design principle of improved circulation across the campus will help to clarify where people are permitted to go or not go. Physical security measures and barriers such as controlled gates, perimeter fencing, boundary markers, secured internal zones will all be maintained under the ongoing building facilities management and maintenance program. Recent enhancements made to the public spaces across the campus will continue to be developed under this proposal. Thereby creating inviting and pleasant spaces that enable gatherings and activities, which in-turn help to minimise opportunities for crime.
Territorial Reinforcement	Kincoppal-Rose Bay will continue to provide well maintained building and site facilities creating a comfortable and attractive environment for people to visit. Clear design cues through wayfinding measures and planning of departments across the campus allow for occupants to understand the use of spaces
Space Management	Kincoppal-Rose Bay will continue to provide well maintained building and site facilities, through the building facilities maintenance program to ensure that spaces are appropriately utilised and cared for.

▪

6.16. WASTE

6.16.1. Construction Waste Management

A Construction Waste Management (CWMP) has been prepared by Mahady Management and included in the Construction Management Plan attached at **Appendix X**.

The CWMP states that prior to construction, the appointed Head Contractor will be required to:

- •Consider the Waste Minimisation and Management Plan contained within Appendix III
- Review the Conditions of Consent relating to Waste Minimisation and Management
- Undertake appropriate planning and implementation of an effective waste management strategy

6.16.2. Operational Waste Management

6.16.2.1. Existing & Projected Waste Generation

A Waste Management Plan (OWMP) has been prepared for the School and is attached at **Appendix V**. The OWM has been prepared in accordance with the relevant state and local legislation and guidelines.

The proposal will result in an increase of the school population from 1,105 to 1,390 people. This represents a growth of 25%. This planned growth will occur over a 10-year time period. Based on a pro-rate increase in waste, it is predicted that the proposed development will result in an increase in waste as summarised in **Table 29** below.

Table 29 Existing and Projected Waste Generation

Waste Stream	**Bin Size**		**No. of Bins**		**Clearance Frequency**		**Weekly Volume**	
	Existing	**Projected**	**Existing**	**Projected**	**Existing**	**Projected**	**Existing**	**Projected**
Food Organics	240 Litre	240 Litre	3	4	1/week	1/week	720 Litres	960 Litres
Cardboard	1,100 Litre	1,100 Litre	4	3	1/week	2/week	4,400 Litres	6,000 Litres
Mixed Waste	Included in General Waste	1,100 Litre	Included in General Waste	3	Included in General Waste	2/week	Included in General Waste	6,000 Litres
General Waste	16,000 Litre Compactor	10,000 Litre Compactor	1	1	1/fortnight	1/fortnight	8,000 Litres	5,500 Litres

6.16.2.2. Waste Management

The KRB Waste Management currently centres around the Compactor Enclosure which is located inside the Junior School driveway entrance as illustrated in **Figure 53.** The various waste streams are collected around the campus by the maintenance team and transported to this location for removal by the appointed contractors. This system has been in place since 2017. Prior to this time, Waste Management was undertaken on the south side of the Senior School campus. However, this location became inoperable after construction of the Year 12 Hub facility commenced in 2017 – the project requiring construction access along

the southern corridor. As a result, the large 16 m3 compactor solution was chosen to minimise the frequency of removal – noting the location being inside the main Junior School driveway entrance.

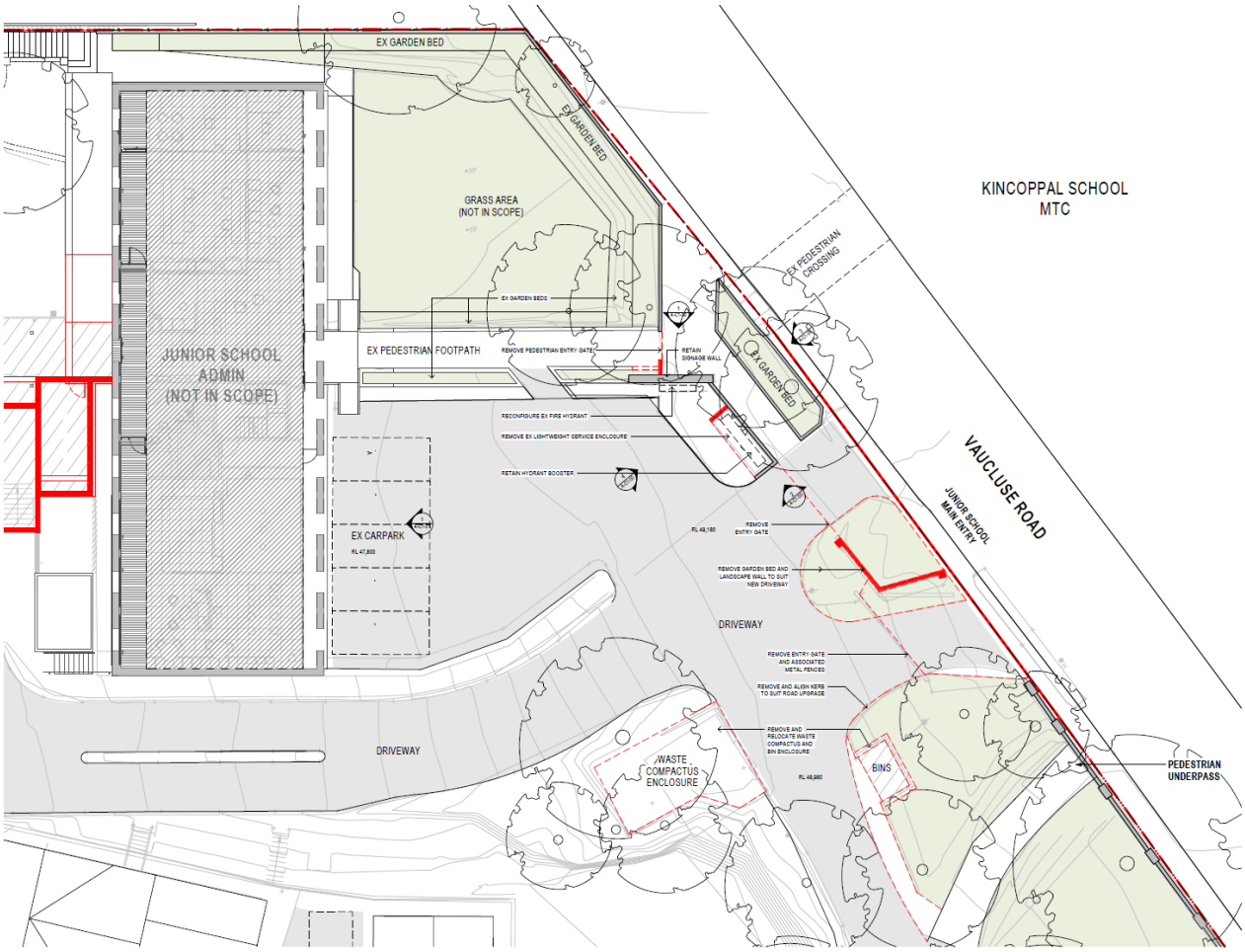
The new Waste Management structure for KRB involves returning the waste storage area to the southern corridor of the Senior School (the original location prior to the Year 12 Hub construction activities). A smaller compactor will be utilised, and Mixed Recyclables and General Waste will be separated. This new location, and the associated access, is remote from the daily staff & student activities. As a result, the frequency of waste removal can be adjusted to suit the developing quantities – and without causing impact to staff & student activities. The details of the proposed new location are illustrated in **Figure 54** below.

Cleaners will be required to demonstrate their approach to managing the obligations of effectively segregating waste materials and depositing in the correct bins. The KRB Campus Manager will be tasked with overseeing quality assurance of both the cleaning contractors and maintenance staff.

A system which allows cleaners to provide feedback and suggestions to better manage waste on the campus will be established. The waste contractor will be required to provide regular feedback to the KRB Campus Manager regarding volumes and frequency of collections. This will allow adjustments to be made to the system as required.

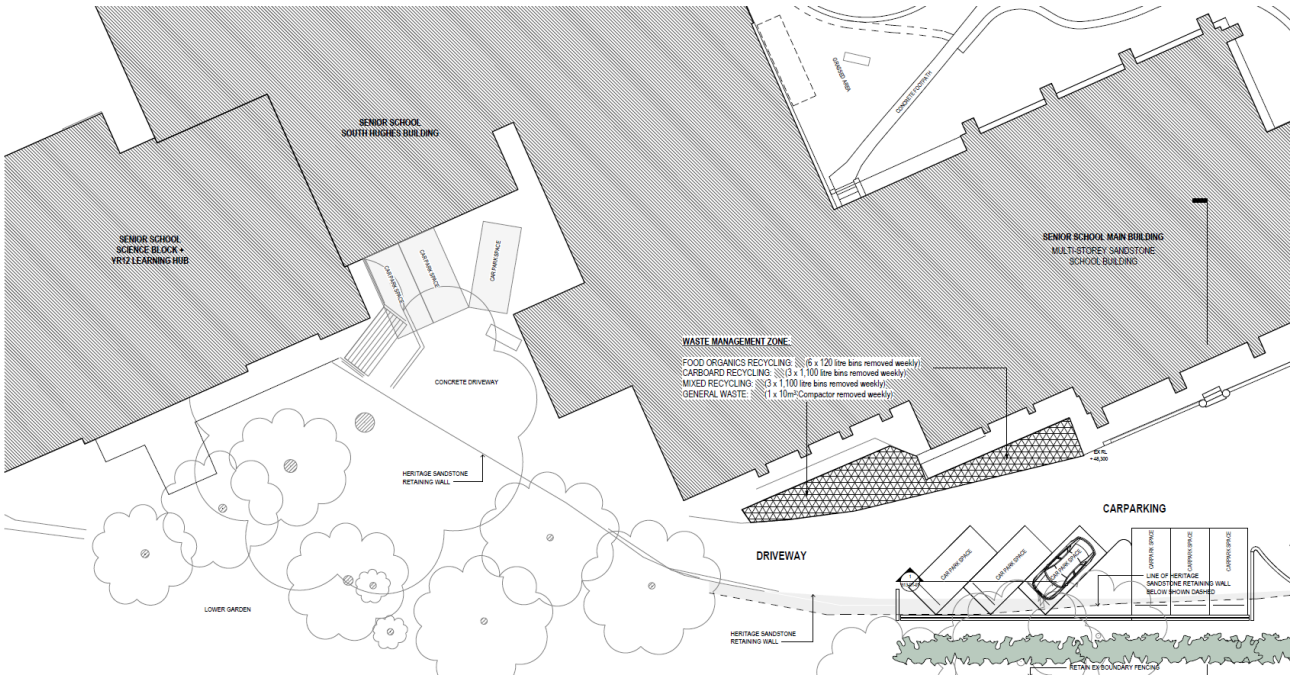
Additionally, staff and students will receive information about the waste management systems in use on the campus and how these systems operate on a day to day basis. As well, staff and students will be briefed on the importance of their compliance with these systems to ensure the system operates as effectively and efficiently as possible.

Figure 53 Existing Waste Management System



Source: Mahady Management

Figure 54 Proposed New Waste Management System



Source: Mahady Management

7. SECTION 4.15 ASSESSMENT SUMMARY

The following assessment has been structured in accordance with section 4.15 of the EP&A Act.

Table 30 Section 4.15 Assessment

Consideration	Comment
Environmental Planning Instrument	State and Local Environmental Planning Instruments have been assessed in **Section 5** of this EIS.
Draft Environmental Planning Instruments	Draft Environmental Planning Instruments are addressed in **Section 5** of this EIS.
Development Control Plans	The proposed development has been assessed against the Woollahra Development Control Plan 2015 in **Section 5.13.5**. Although it is noted that Clause 11 of the *State Environmental Planning Policy (State and Regional Development) 2011* excludes the application of DCPs to SSD.
Any matters prescribed by the regulations	This EIS has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000.*
Likely Impacts of the development	This EIS has been prepared in accordance with Sections 6 and 7, Part 3 in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. The likely impacts and issues have been assessed in **Section 6** of this EIS.
Suitability of the site	The site is considered highly suitable for the proposed development for the following reasons: ▪ The land is zoned SP2 pursuant to RLEP 2014. The proposal is permissible with consent and consistent with the land use objectives of SP2 Infrastructure. ▪ The proposal is consistent with the objectives of all relevant planning controls and achieves a high level of planning policy compliance. ▪ The proposal will provide a state-of-the art educational establishment by redeveloping and expanding on the existing campus and will further utilise what in comparison is an underutilisation of the site. ▪ There are no significant environmental constraints limiting development on the site that are unable to be avoided remedied or mitigated.

Consideration	Comment
	▪ The proposal will improve the existing on-site parking provisions and significantly improve the efficiency of the existing drop-off and pick-up facilities.
Any Submissions made in accordance with the Acts of Regulations Submissions will be considered following exhibition of the application.	Any Submissions made in accordance with the Acts of Regulations Submissions will be considered following exhibition of the application.
The Public Interest	The proposal is in the public interest because: ▪ It has been prepared having regard to Education SEPP 2017 and WLEP 2014 and the works are permissible with consent. ▪ It has been prepared having regard to Council's planning policies and is consistent with the aims and objectives of the controls for the site. ▪ It is suitable for the site as evidenced by the site analysis and various site investigations, including geotechnical, site contamination, flooding and traffic. ▪ It does not have any significant or unreasonable impacts on adjoining or surrounding properties or the public domain in terms of traffic, social and environmental impacts. ▪ Subject to the various mitigation measures recommended by the specialist consultants, it does not have any unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, heritage, social and environmental impacts. ▪ The site is well serviced by public transport and some walking routes. ▪ It will result in a high-quality educational environment for staff and students through. ▪ It will contribute positively to energy efficiency and environmental sustainability. The design has adopted and incorporated many ESD features to reduce energy consumption during the life of the proposed development. As the proposal is in the public interest, NSW Department of Planning, Industry and Environment should approve the development.

8. COMMUNITY AND STAKEHOLDER CONSULTATION

Consultation has commenced on the project and will continue as the assessment of the application progresses and through the entire development of the project. The purpose of the consultation process to date has been to inform and seek feedback from key stakeholders. The Applicant and BVN Architects have worked to ensure relevant issues have been considered during the development of the proposal.

8.1. COMMUNITY CONSULTATION

8.1.1. Objectives

The objectives of the stakeholder and community engagement process for the proposed development are as follows:

- Provide accurate information about the project;
- Deliver a transparent and accountable consultation process;
- Document key feedback to inform ongoing design and planning; and
- Collate feedback to inform the SSDA.

8.1.2. Engagement Activities

The following engagement activities were undertaken to inform and seek feedback from the local community:

- **Website and Email Notification** – Information about the proposal was provided on the School's website including updated factsheets and details of the proposed new facilities.
- **Dedicated Project Email Address** – krkconsultation@elton.com.au was set up for the community to provide direct feedback, ask questions and/or register for project updates
- **Community Postcard** Drops– A postcard was distributed to immediate neighbours of KRB who could potentially be impacted by the proposed plans for KRB. The postcard informed the community about the Campus Masterplan, where we are at in the planning process and how to find more detail through the website, via email or call, registering for updates.
- **Community Information Session –** A community information sessions was held on the 18th of June 2019 between 5.30PM and 7.30PM at the existing Hughes Centre. The purpose of the information session was to inform the community about the project, provide the community with an opportunity to ask question and encouraged community member to register for project updates. A summary od the feedback from this session is included within the first Community Consultation Outcomes Report attached at **Appendix M.**
- **School Community newsletter and communications** – A notification was places in the School's newsletter

Future Consultation:

The community will continue to be updated about the progress of the Campus Masterplan through:

- Website updates.
- Via email (for people registered for community updates).
- Local notification to advise of consultation activities.

The next communication key milestone will be on lodgement of the EIS.

8.1.3. Feedback Summary

Overall, the community provided positive feedback to the proposal and did not raise any concerns regarding the proposed building height, landscaping design, heritage approach, traffic and car parking change and/or timings of the project.

8.2. DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT (DPIE)

Correspondence and liaison have occurred with the Department of Planning, Industry and Environment throughout the preparation of this EIS and SSD documentation.

8.3. WOOLLAHRA COUNCIL

On-going briefings and consultation with Woollahra Council have occurred since the beginning of the project. The applicant and project team consulted with Nick Economou (Manager – Development Control) and the Woollahra Council Project Team on the following Occasions:

- August 2020 – briefing Town Panning Department representatives.
- September 2020 – briefing other department including Planning, Traffic, Heritage, Arborist, Roads and Drainage.

Overall feedback was positive with no specific requirements for any changes to the proposed plans.

8.4. NSW GOVERNMENT ARCHITECT'S OFFICE (GANSW)

KRB and BVN met with the GANSW Office on 8 October 2019 to provide them with a briefing on the project. Arising from this briefing, the following comments were received back from the GANSW's Office:

> ***"ADAPTIVE REUSE***
>
> *The school is characterised by a variety of building types and discernible development periods. We commend the school for choosing to retain, repurpose and upgrade its 1960s and 70s concrete framed buildings. By 're sleeving' and updating this stock the proposal ensures many more decades of useful life for these robust and energy intensive structures.*
>
> ***CIRCULATION***
>
> *The proposal seeks to address the currently disjointed circulation network through the campus and introduces clarity through planning. Vertical and horizontal strategies handle the challenges of the sloping site with clear intent and legibility. Introduction of the proposed Circulation Hub will clarify and streamline movement within the campus while creating a spatial focus connecting disparate spaces and uses.*
>
> ***HERITAGE***
>
> *The team must consult extensively with your heritage advisors to ensure responses to significant heritage are respectful, interpretive and nuanced, avoiding mimicry or faux heritage forms or details.*
>
> ***MAIN ENTRY***
>
> *Additions are proposed to provide an equitable path of travel to the main entry. While we acknowledge there was little detail to discuss at this stage, we encourage the thinking as presented and support a contrasting design approach similar to the AGNSW reference used.*
>
> ***JUNIOR SCHOOL***
>
> *Again, the retention and repurposing of existing building stock is commended. New façade designs should integrate operable sun shading and privacy screens where appropriate to allow variable interior light and outlook conditions. The transparency of the assembly space at ground level on the terminus of the driveway axis is a simple and delightful device.*
>
> ***BUILDING PERFORMANCE and SUSTAINABILITY***
>
> *Schools, generally, are institutions where innovation and leadership on sustainability are considered highly appropriate. Kincoppal is commended for the decision to retain existing buildings and is also encouraged to adopt the highest performance standards possible in all new works. Not only will this benefit the school through reduced energy costs, it will also act as a teaching tool and set an example for the school community".*

As indicated above , these comments are positive in nature. In relation to the advice under the heading 'heritage', BVN have worked in tandem with the heritage architects Design 5. Those recommendations

provided by Design 5 within the HIS (as summarised in Section 6.9 of this EIS) have either already been adopted in the design or otherwise will be incorporated in the design development phase of the project.

Following these comments, the GANSW's Officer confirmed by email on 25 January 2019 that:

> *"Instead of the full SDRP engagement we propose in house reviews to be held here at GA NSW at strategic points along the assessment timeline. I will be your point of contact from now on and will arrange the review meetings with you, assisted by our admin team here. Please let me know when you'd like to come in next and we can schedule a suitable time and room.*
>
> *The attendees will include me as chair, a design advisor from GA NSW, yourself, your architect and any other proponent team members deemed appropriate. The assessing planner within DPE will also be invited. We will allow 90 minutes for each session; We can do more than one in a single day if you have other projects that fall into this 'SDRP Lite' category and time and space is available here'*

Since this time, further preparation of the project has been delayed. More recently, contact was made with the GANSW to seek confirmation of further meetings. Contact was made with the GANSW on two occasions, on 7 September 2020 and again on 15 September 2020, however no confirmation was received. On this basis, the project has been finalised for submission.

8.5. TRANSPORT FOR NSW (TFNSW) AND ROADS AND MARITIME SERVICES (RMS)

Transport for NSW (TfNSW) was contacted by CBRK, requesting input on the Draft Traffic Impact Assessment and Green Travel Plan. Formal feedback was provided by TfNSW to the project team on 1 October 2020 and has been addressed in the final Traffic Impact Assessment attached at **Appendix R**.

8.6. SERVICE PROVIDERS

The Electrical and Mechanical Infrastructure Management Plans have been prepared in consultation with the relevant agencies such as Sydney Water and Ausgrid detailing information on the existing capacity and augmentation requirements of the development for the provision of utilities. The consultation correspondence has been documented and attached within each report.

8.7. ABORIGINAL STAKEHOLDERS

As required by the SEARs, consultation is required in accordance with Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (Department of Environment, Climate Change and Water). Consultation has occurred with Aboriginal stakeholders. This consultation has covered the following:

- Interest in site history and cultural significance of Aboriginal objects and places.
- Aboriginal Cultural Heritage Assessment Report.

Ongoing consultation with Aboriginal stakeholders is to occur to keep all relevant stakeholders informed of the proposal and timeframes.

9. RECOMMENDATIONS AND MITIGATION MEASURES

The potential impacts of the proposed development have been assessed in **Section 6** of this report. The following matters have been assessed and do not require mitigation measures as the proposal will have minimal or no impact on:

- Environmental amenity;
- Environmentally Sustainable Development; and
- CPTED.

Table 31 Mitigation Measures

Matter	Potential Impact	Mitigation Measure/s
Biodiversity	Tree Removal – Protection of preserved trees	Trees 1, 17, 18, 19, 20, 21, 22, 24, 24 and 25 will be retained and protected through the implementation of Tree Protection measures such as the establishment of a Tree Protection Zone (TPZ), construction of tree protection fencing, informative signage and appropriate mulching.
Transport & Accessibility	Impacts on road network during operation phase	To alleviate traffic congestion during peak school periods the school will implement the following mitigation measures: ▪ Continued staggered start and finish times for different cohorts; ▪ Additional set-down and pick-up facilities; and ▪ Implementation of the Green Travel Plan.
Construction	Impacts of Construction on Traffic	A Construction Traffic Management Plan (CTMP) will to be prepared by the Head Contractor in response to Conditions of Development Consent, detailing strategies and methodologies for pedestrian and traffic management to be implemented during each of the various stages of construction works.
Heritage	Impacts on items of heritage significance	To manage the impact of the proposed development on the items of heritage significance located throughout the site, the following mitigation measures will be implemented: ▪ Implementation of design recommendations contained within the Heritage Impact Statement ▪ Ongoing consultation with a heritage architect during construction and concept design development stage ▪ Preparation and implementation of a Conservation Management Plan (CMP)
Aboriginal Heritage	Impacts on items of Aboriginal heritage significance	To manage the impact of the proposed development on the items of heritage significance located throughout the site, the following mitigation measures will be implemented:

Matter	Potential Impact	Mitigation Measure/s
		▪ Implementation of design recommendations contained within the Aboriginal Cultural Heritage Assessment Report. ▪ Continued consultation with the Aboriginal Community prior to finalisation of the Concept Design Development ▪ Preparation and implementation of a Conservation Management Plan (CMP)
Construction Noise and Vibration	Noise generation during the construction of the school.	The following project-specific mitigation measures are recommended to mitigate construction noise and vibration: ▪ Selection of quietest feasible construction equipment. ▪ Use of rock saws in preference to rock breakers where feasible; ▪ Localised treatment such as barriers, shrouds, and the like around fixed plant such as pumps, generators, and concrete pumps; and
	Noise generation during the operation of the school.	The following project-specific mitigation measures are recommended to mitigate operational noise and vibration: ▪ Implementation of attenuators in the outlets of the exhaust fans. Attenuators can be installed to the fans if required. ▪ Design of mechanical plant noise emission to meet the relevant noise criteria. C ▪ Noise from bells and announcements will be managed by design and adjustment techniques.
Utilities	Impact of proposal on existing electrical infrastructure capacity	Subject to an application to Ausgrid, a new electrical substation will be constructed to supply the site.
Drainage & Flooding	Impacts of stormwater runoff on the site and surrounding environment	To mitigate potential stormwater runoff and erosion, the following mitigation measures will be implemented: ▪ A network of piped minor drainage system to collect runoff from the site. ▪ An overland flow path to convey major flows. ▪ An OSD tank to help reduce the peak discharge from the site due to the increased flows resulting from an increased impervious area.
Geotechnical	Impact of proposal on subsurface conditions and potential contamination	The following mitigation measures will be implemented: ▪ Design recommendations outlines in the Preliminary Site Investigation (PSI) and Geotechnical Reports. ▪ Prepare and implement a Remediation Action Plan (RAP). ▪ Following the completion of the architectural Package, an additional geotechnical investigation including the

Matter	Potential Impact	Mitigation Measure/s
		drilling of cored boreholes will be completed to confirm the depth to, and quality of the underlying bedrock
Waste	Disposal of waste generated during the use and operation of the building	A new waste management structure will be implemented, which includes the following: ▪ Returning the waste storage area to the southern corridor of the Senior School (the original location prior to the Year 12 Hub construction activities). ▪ A smaller compactor will be utilised, and Mixed Recyclables and General Waste will be separated ▪ Cleaners will be required to demonstrate their approach to managing the obligations of effectively segregating waste materials and depositing in the correct bins ▪ The KRB Campus Manager will be tasked with overseeing quality assurance of both the cleaning contractors and maintenance staff. ▪ A system which allows cleaners to provide feedback and suggestions to better manage waste on the campus will be established. ▪ The waste contractor will be required to provide regular feedback to the KRB Campus Manager regarding volumes and frequency of collections. This will allow adjustments to be made to the system as required.
	Disposal of waste generated during demolition and construction	To ensure Construction waste is collected and treated responsibly the following measures will be implemented by the Head Contractor: ▪ Implement the recommendations outlined in the Construction Management Plan ▪ Regularly Review the Conditions of Consent relating to Waste Minimisation and Management ▪ Undertake appropriate planning and implementation of an effective waste management strategy

10. CONCLUSION

This EIS has been prepared by Urbis on behalf of Kincoppal-Rose Bay School (**the Applicant**) in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulations 2000*. It relates to SSD-10325 for alterations and additions to the School and the staged increase of the School's student population cap from its current limit of 970 to a maximum of 1,205 over a ten (10) year period. The impacts associated with the proposal are acceptable and the site is suitable in accommodating the proposed development for the following reasons:

- The proposal appropriately satisfies each item within the SEARs.
- The site is zoned SP2 – Infrastructure 'Educational Establishments' which is identified as a 'prescribed zone' under Clause 33 Part 4 of the Education SEPP. Clause 35(1) of the Education SEPP permits development for the purpose of a school to be development with consent within a prescribed zone.
- The proposal is consistent with the objectives of relevant planning controls and achieves a high level of planning policy compliance and design excellence.
- The proposed development is located within the existing school envelope and is far removed from neighbouring development.
- The proposal is compatible in terms of scale and use to those immediate buildings within the School's campus.
- There are no significant environmental constraints limiting development.
- The proposal will relieve pressure off existing schools in the surrounding locality and ensure more children have access to new state of the art school facilities, learning spaces and equipment.
- The proposal will create temporary job opportunities in manufacturing, construction and construction management during the project's construction phase of works, and increased job opportunities in teaching and administration at the project's completion.
- The proposal will provide additional on-site parking on the Campus via the construction of the new car and bus parking structure and will alleviate congestion associated with peak drop off and pick up periods through the implementation of an additional set-down and pick-up facilities. These design and building interventions will improve safety and operation of the local street network as well as on-street parking availability for residents.
- The proposal will result in the development of a high-quality educational facility for staff and students.
- Subject to the various mitigation measures recommended by the specialist consultants, the proposal does not have any unreasonable impacts on adjoining properties or the public domain in terms of traffic, social and environmental impacts.

Considering the above and the content contained in this EIS, it is recommended that the Department approve this SSD Application, subject to appropriate conditions.

11. DISCLAIMER

This report is dated 9 November 2020 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd **(Urbis)** opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Kincoppal-Rose Bay School **(Instructing Party)** for the purpose of EIS **(Purpose)** and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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

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

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

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

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

APPENDIX A SEARS

APPENDIX B COST REPORT

APPENDIX C ARCHITECTURAL PLANS

APPENDIX D SITE PLANS

APPENDIX E ARCHITECTURAL DESIGN REPORT AND SCHEDULE OF MATERIALS & FINISHES

APPENDIX F CIVIL PLANS

APPENDIX G LANDSCAPE PLANS

APPENDIX H ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

APPENDIX I ACOUSTIC REPORT

APPENDIX J ABORIST REPORT

APPENDIX K BIODIVERSITY DEVELOPMENT ASSESSMENT REPORT WAIVER

APPENDIX L COMMUNITY CONSULTATION OUTCOMES REPORT (OCTOBER 2020)

APPENDIX M COMMUNITY CONSULTATION OUTCOMES (JULY 2019)

APPENDIX N CIVIL ENGINEERING REPORT

APPENDIX O GEOTECHNICAL REPORT – ELC BUILDING

APPENDIX P GEOTECHNICAL REPORT – WALKWAY & ROAD

APPENDIX Q GEOTECHNICAL REPORT – BUS & CAR PARKING STRUCTURE

APPENDIX R TRANSPORT AND ACCESSIBILITY IMPACT ASSESSMENT

APPENDIX S ESD REPORT

APPENDIX T HERITAGE IMPACT STATEMENT

APPENDIX U CONSERVATION MANAGEMENT PLAN

APPENDIX V OPERATIONAL WASTE MANAGEMENT PLAN

APPENDIX W ELECTRICAL INFRASTRUCTURE MANAGEMENT PLAN

APPENDIX X CONSTRUCTION MANAGEMENT PLAN

APPENDIX Y INFRASTRUCTURE MANAGEMENT PLAN

APPENDIX Z STRUCTURAL REPORT

APPENDIX AA HISTORICAL ARCHAEOLOGICAL ASSESSMENT

APPENDIX BB REMEDIATION ACTION PLAN

APPENDIX CC PRELIMINARY SITE INVESTIGATION

APPENDIX DD FACILITY OPERATIONS PLAN

APPENDIX EE SEDIMENT & EROSION CONTROL PLANS

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APPENDIX FF SOLAR ACCES STUDY