Environmental Impact Statement

Sydney Olympic Park new high school
(SSD 11802230)

Mecone NSW Pty Limited on behalf of
NSW Department of Education
September 2021

mecone

Project Director

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Revision	Revision Date	Status	Authorised	
			Name	Signature
A	02/09/2021	Draft	G. Sedgmen	
B	17/09/2021	Final	G. Sedgmen	

* This document is for discussion purposes only unless signed and dated by the persons identified. This document has been reviewed by the Project Director.

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Statement of validity

Applicant details

Name: Department of Education c/- Mecone Pty Ltd NSW

Address: Level 2, 3 Horwood Place, Parramatta NSW 2150

Site and proposal details

Site Address: 7, 9, 11 Burroway Road, Wentworth Point

Legal Description: part Lot 202 DP1216628, part Lot 203 DP1216628 and part Lot 204 DP1216628

Proposed Development: Establishment of a Sydney Olympic Park new high school

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Prepared by

Name: Georgia Sedgmen

Qualifications: Master of Planning

Address: Mecone NSW Pty Ltd, Level 2, 3 Horwood Place, Parramatta NSW 2150

Certification

I certify that I have reviewed the content of this EIS and to the best of my knowledge:

- It is in accordance with Part 4 of the Environmental Planning and Assessment Act 1979 and Schedule 2 of the Environmental Planning and Assessment Regulation 2000;
- All available information that is relevant to the environmental assessment of the development to which the statement relates; and
- The information contained in the statement is neither false nor misleading.

Signature:

Date: 17 September 2021

Glossary and abbreviations

Term/acronym	Description
AEP	Annual Exceedance Probability
BCA	Building Code of Australia
BC Act	*Biodiversity Conservation Act 2016*
CTMP	Construction Traffic Management Plan
Council	City of Parramatta Council
CPTED	Crime Prevention through Environmental Design
DA	Development Application
DCP	Development Control Plan
DoE	Department of Education
DPIE	Department of Planning Industry and Environment
DSI	Detailed Site Investigation
EFSG	Educational Facilities Standards & Guidelines
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
ESD	Ecologically Sustainable Development
FSR	Floor Space Ratio
GFA	Gross Floor Area
LEP	Local Environmental Plan
LGA	Local Government Area
Proposal	Establishment of a new Sydney Olympic Park high school
PSI	Preliminary Site Investigation
RAP	Remediation Action Plan

Term/acronym	Description
SAQP	Sampling Analysis Quality Plan
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SSD	State Significant Development
WSUD	Water Sensitive Urban Design

Executive Summary

Purpose of report

This Environmental Impact Statement (EIS) has been prepared on behalf of the NSW Department of Education (DoE) to accompany a State Significant Development Application (SSDA) for a new high school at Sydney Olympic Park. This EIS is submitted to the Minister for Planning pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The proposal is for a new school and is therefore classified as State Significant Development (SSD) in accordance with Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011.

The Secretary's Environmental Assessment Requirements (SEARs) for the project were originally issued by the Department of Planning, Industry and Environment (DPIE) on 23 December 2020. The project was then updated to show a revised site area, and DPIE reissued the SEARs on 19 July 2021. This EIS responds to the reissued SEARs.

Overview of the proposal

The proposed development is for the construction and operation of a school known as Sydney Olympic Park new high school. The school is to be developed in two stages. The SSDA seeks consent for both Stage 1 and Stage 2. While Stage 2 is submitted as part of the SSDA, construction is subject to approval of additional funding.

Stage 1 will provide for a Stream 5 high school catering for up to 850 students. Stage 2 will bring the school up to a Stream 9 school catering for up to 1,530 students.

The design features a six-storey building with two wings, one along the southern boundary and one along the eastern boundary. A two-storey hall building (for sports and performance) is also proposed in the northern portion of the site.

The play space required to meet the needs of the Stage 1 student population can be generally accommodated onsite within the 9,511m^2 available. Additional play space is required for Stage 2. A future playing to the north of the site (not part of this application) forming part the future Wentworth Point Peninsula Park will provide this additional required open space. The field will be subject to a joint use agreement whereby the field will be available for school use during school hours and public use outside of school hours. Discussions regarding the joint use agreement are currently underway. The agreement will be finalised prior to determination of this SSDA.

The adjoining land to the east, which is owned by Transport for NSW (TfNSW), is under review and will be subject to a separate approval process. Redevelopment of this land will include a new road off Burroway Road along the eastern boundary of the subject site. The future new road will provide car parking, drop-off zones and delivery zones for the proposed school.

A planning proposal is currently being prepared for the subject school site, the TfNSW land to the east and the future Peninsula Park to the north. The planning proposal will address the zones and planning controls and will seek to apply an SP2 Infrastructure zoning for the school site with no height or floor space controls.

Objectives of the proposal

The key objectives of the proposal are to:

- Address the significant demand for additional high school student spaces in the area.

- Deliver on the state government's announcement of a new high school in Sydney Olympic Park.
- Provide for a high-quality educational facility that is built for purpose, optimises learning outcomes and integrates with the future Peninsula Park to the north of the site.
- Provide for an accessible school that promotes active, sustainable transport, such as walking and cycling.

Project background

There is a forecast shortfall of 5,755 student spaces within the Strathfield Secondary School Community Group (SCG) by 2036. This overcrowding is not constant across the SCG but is forecast to be heavily concentrated in the western portion of Concord High School's existing live-in catchment. Without intervention there will be 48 students per learning space in Concord High School, contrasting with a forecast of 28 students per learning space in 2026 across the broader SCG.

Due to physical barriers (such as the Parramatta River, the M4 Motorway and the T1 and T2 rail corridor), the growth cannot readily be serviced by only upgrading schools and changing catchment boundaries. There is a need for a new high school close to the areas of demand.

Ultimately, it was determined that a new high school located at Wentworth Point, along with upgrades to a number of schools within the SCG, is required to address the substantial demand within the SCG and forecast shortfall of student spaces.

Alternatives

DoE considered a number of alternatives to the proposal including:

A. Do nothing.

B. Retrofit and expand existing facilities.

C. Establish a new high school in the Sydney Olympic Park area (preferred option).

Option A was discarded because it would not address the student demand and the forecast shortfall in student spaces. Option B was also discarded because it would not fully accommodate future growth. Also, this option would not address long commute times experienced by many students. Option C was identified as the preferred option because it will meet expected growth, encourage walking and other sustainable transport modes, and deliver on the promise of a new high school in the Sydney Olympic Park area.

Consultation

Pre-lodgement consultation was conducted with various stakeholders including Parramatta Council officers; state agencies including Government Architect NSW, TfNSW; the local community; and Aboriginal stakeholders. Comments provided by these stakeholders have been instrumental in the preparation of the EIS. Section 6 of the EIS describes the consultation activities undertaken.

Planning context

The EIS has been prepared in accordance with the relevant legislative requirements of the EP&A Act and Environmental Planning and Assessment Regulation 2000 (EP&A Regulation). Section 5 of the EIS considers all applicable legislation in detail.

Auburn Local Environmental Plan 2010 (ALEP 2010) applies to the site. Under ALEP 2010 the site is zoned part R4 High Density Residential, Part B1 neighbourhood Centre and part RE1 Public Recreation. Schools are permitted with consent in the R4 and B1

zones but prohibited in the RE1 zone. Notwithstanding, consent can be granted to the proposal pursuant to Clause 4.38(2) of the EP&A Act, which allows for consent to be granted to partly prohibited SSD.

The proposal is generally consistent with relevant local controls, with the exception of a minor variation to the height of buildings standard under ALEP 2010. As discussed in detail at section 5.9 of this EIS, the variation will result in no significant adverse environmental impacts. It is noted that the variation is permitted under Clause 42 of the Education SEPP, which enables development consent to be granted for development for the purpose of a school that is SSD even though it would contravene a development standard imposed by an environmental planning instrument.

Environmental impacts and mitigation measures

Sections 7 and 8 of the EIS provide an assessment of the environmental impacts of the proposal in accordance with the SEARs. The key environmental matters considered include:

- Built form and urban design.
- Environmental amenity.
- Transport and accessibility.
- Sustainability.
- Aboriginal and European heritage.
- Noise and vibration.
- Soil and water.
- Contamination.
- Drainage.
- Wind.

An Environmental Risk Assessment and summary of mitigation measures is provided at section 9 of the EIS. The assessment has found that the proposal will result in no significant environmental impacts, subject to implementation of the mitigation measures.

Conclusion

The proposal will also provide for a necessary piece of social infrastructure and has been designed to avoid environmental impacts where possible. The proposal will provide for a moderately scaled built form compatible with the streetscape and high-density context, will add significant landscaping including canopy trees to existing cleared land, will encourage sustainable modes of transport and will result in a remediated site.

The EIS fulfils the requirements of the EP&A Act and EP&A Regulation, addresses all relevant matters for consideration prescribed by the SEARs and demonstrates that the potential impacts of the proposal can be satisfactorily managed or mitigated. Given the evident benefits of the proposal and lack of significant environmental impacts, it is recommended that consent be granted to the application.

1 Introduction

This Environmental Impact Statement (EIS) has been prepared by Mecone NSW Pty Limited on behalf of the NSW Department of Education (DoE) in support of a State Significant Development Application (SSDA) for the establishment of a new high school at Sydney Olympic Park (SSD-11802230) (the proposal).

The proposal is for a new school and is therefore classified as State Significant Development (SSD) in accordance with Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).

This EIS has been prepared in accordance with the requirements of the Environmental Planning and Assessment Act 1970 (EP&A Act), the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation) and the Secretary's Environmental Assessment Requirements (SEARs) issued on 19 July 2021.

1.1 Proposal overview

The proposed development is for the construction and operation of a school known as Sydney Olympic Park new high school. The school is to be developed in two stages. The SSDA seeks consent for both Stage 1 and Stage 2. While Stage 2 is submitted as part of the SSDA, construction is subject to approval of additional funding.

Stage 1 will provide for a Stream 5 high school catering for up to 850 students. Stage 2 will bring the school up to a Stream 9 school catering for up to 1,530 students.

The design features a six-storey building with two wings, one along the southern boundary and one along the eastern boundary. A two-storey hall building (for sports and performance) is also proposed in the northern portion of the site.

The play space required to meet the needs of the Stage 1 student population can be generally accommodated onsite within the 9,511m^2 available. Additional play space is required for Stage 2. A future playing to the north of the site (not part of this application) forming part the future Wentworth Point Peninsula Park will provide this additional required open space. The field will be subject to a joint use agreement whereby the field will be available for school use during school hours and public use outside of school hours. Discussions regarding the joint use agreement are currently underway. The agreement will be finalised prior to determination of this SSDA.

The adjoining land to the east, which is owned by Transport for NSW (TfNSW), is under review and will be subject to a separate approval process. Redevelopment of this land will include a new road off Burroway Road along the eastern boundary of the subject site. The future new road will provide car parking, drop-off zones and delivery zones for the proposed school.

A planning proposal is currently being prepared for the subject school site, the TfNSW land to the east and the future Peninsula Park to the north. The planning proposal will address the zones and planning controls and will seek to apply an SP2 Infrastructure zoning for the school site with no height or floor space controls.

1.2 Proposal objectives

The key objectives of the proposal are to:

- Address the significant demand for additional high school student spaces in the area.

- Deliver on the state government's announcement of a new high school in the Sydney Olympic Park area.
- Provide for a high-quality educational facility that is built for purpose, optimises learning outcomes and integrates with the future Peninsula Park to the north of the site.
- Provide for an accessible school that promotes active, sustainable transport, such as walking and cycling.

1.3 Proposal background and need

As part of the 2019 NSW Budget, the NSW Government announced the investment of a record $6.7 billion over four years to deliver more than 190 new and upgraded schools to support communities throughout the state. These upgrades aim to address issues of overcrowding and to support communities throughout the state, ensuring that all students in NSW are given equal access to quality learning opportunities.

In 2017, a ministerial announcement was made by the Minister Rob Stokes committing $100 million for a new high school at Sydney Olympic Park within the Strathfield Secondary School Community Group (SCG).

The Strathfield Secondary SCG is located in Sydney's west and sits within the Parramatta, Cumberland, Canterbury-Bankstown, Strathfield, Burwood, Inner West and Canada Bay LGAs. The SCG has one of the highest population growth rates in NSW, led by government rezoning and development around Wentworth Point and Sydney Olympic Park. This unprecedented growth has led to substantial student demand and constraints on the availability of learning spaces within the SCG.

Within the Strathfield Secondary SCG there is forecasted to be a shortfall of 5,755 student spaces by 2036. This overcrowding is not constant across the SCG but is forecast to be heavily concentrated in the western portion of Concord High School's existing live-in catchment. Without intervention there will be 48 students per learning space in Concord High School, contrasting with a forecast of 28 students per learning space in 2026 across the entire Strathfield Secondary SCG.

Due to physical barriers (such as the Parramatta River, the M4 Motorway and the T1 and T2 rail corridor), the growth cannot readily be serviced by only upgrading schools and changing catchment boundaries. There is a need for a new high school close to the areas of demand.

From the analysis undertaken by Schools Infrastructure NSW (SINSW), it was determined that a new high school located at Wentworth Point, along with upgrades to a number of schools within the SCG, is required to address the substantial demand within the SCG and forecast shortfall of student spaces.

1.4 Alternatives options considered

DoE undertook a structured approach to assessing the options to determine the optimal outcome to meet the needs as outlined in the proposal background and in accordance with the Education Principles, Education Rationale and the Education Facilities Standards and Guidelines (EFSG). The options considered are outlined below.

Option 1 – Do nothing

Within the Strathfield Secondary SCG it is estimated there will be a shortfall of 5,755 student spaces by 2036. Without appropriate upgrade of existing schools and development of new schools, substantial overcrowding will occur at the existing

schools, and students would be rezoned to schools far away from their existing homes, increasing reliance on car travel.

Option 2 – Retrofit and expand existing facilities

The retrofitting and expansion of existing schools was considered by DoE; however, it was recognised that the expected growth could not be serviced by upgrading existing schools alone. Temporary measures such as demountable learning spaces have already been used to accommodate current student demand, and there is already a need to upgrade existing facilities to meet existing demand.

Additionally, for students living in the high-density growth precinct of Wentworth Point and Sydney Olympic Park, it is difficult to walk or cycle to the school due to the distance and the physical barriers such as the M4 Motorway and rail corridor. Therefore, upgrading Concord High School alone will also not enable a significant travel mode shift for the students in these areas and allow the opportunity for them to walk or cycle to school.

Option 3 – Establish a new High School in Sydney Olympic Park area (preferred option)

After an extensive research of 15 potential sites, SINSW determined that the site at Wentworth Point to be the most suitable for the new high school due to its sufficient size and proximity to open space, which will allow a 1,530-student high school with approximately 10m^2 of play space per student. The site is also located directly adjacent the high-rise developments of Wentworth Point, maximising the opportunity for students to walk or cycle to school, demonstrated by the 866 students predicted to live within a 20-minute walking radius of the school in 2026.

1.5 SEARs

The SEARs for the project were originally issued by DPIE on 23 December 2020. The project was then updated to show a revised site area, and DPIE reissued the SEARs on 19 July 2021 for the updated project. The table below identities where the issued SEARs are addressed within the EIS. A copy of reissued SEARs is provided at Appendix 1.

Table 1-1 SEARs reference table

Requirement	Location in EIS
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).	Throughout EIS
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Section 9
In addition, the EIS must include: an executive summary	Executive summary
a complete description of the development, including: • the need for the development	Section 1.3

Requirement	Location in EIS
• justification for the development. • suitability of the site. • alternatives considered. • likely interactions between the development and existing, approved and • proposed operations in the vicinity of the site. • a description of any proposed building works. • description of existing and proposed operations, including staff and student numbers, hours of operation, and details of any proposed before/after school care services and/or community use of school facilities. • site survey plan, showing existing levels, location and height of existing and adjacent structures / buildings and site boundaries. • a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development. • plans, elevations and sections of the proposed development. • cladding, window and floor details, including external materials. • a site plan which shows all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process). • plans and details of any advertising/business identification signs to be installed, including size, location and finishes. • any staging of the development. • details of construction and decommissioning including timing. • an estimate of the retained and new jobs that would be created during the construction and operational phases of the development along with details of the methodology to determine the figures provided.	Section 1.4 Section 3 Appendix 2 Appendix 3 Appendix 4
a detailed assessment of the key issues identified below, and any other significant issues identified in the risk assessment, including: • a description of the existing environment, using sufficient baseline data and methodology to establish baseline conditions. • an assessment of the potential impacts of all stages of the development on all potentially impacted environments, sensitive receivers, stakeholders and future developments. The assessment must consider any relevant legislation, policies and guidelines. • consideration of the cumulative impacts due to other related development proposed or underway on the site, including development progressed under other assessment pathways and all other developments in the vicinity (completed, underway or proposed). • identification of all proposed monitoring or required changes to existing monitoring programs. • measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment and triggers for each action. • details of alternative measures considered.	Section 7

Requirement	Location in EIS
a consolidated summary of all the proposed environmental management and monitoring measures, identifying all commitments included in the EIS	Section 9
the reasons why the development should be approved and a detailed evaluation of the merits of the development, including consequences of not carrying out the development.	Section 10 Throughout EIS
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.	Submitted under separate cover
Key issues	
The EIS must address the following specific matters:	
1. Statutory Provisions and Strategic Provisions	
Address the statutory provisions contained in all relevant environmental planning instruments, including but not limited to: • State Environmental Planning Policy (State and 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. • Draft State Environmental Planning Policy (Remediation of Land). • Draft State Environmental Planning Policy (Environment). • Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities). • Auburn Local Environmental Plan 2010. Having regard to the relevant environmental planning instruments: • address the permissibility of the development, including the nature and extent of any prohibitions. • identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards. • adequately demonstrate and document how each of the provisions in the listed instruments are addressed, including reference to necessary technical documents. Address the relevant planning provisions, goals and strategic planning objectives in all relevant planning policies including but not limited to the following: • NSW State Priorities	Section 4 Section 5

Requirement	Location in EIS
• State Infrastructure Strategy 2018 – 2038 Building the Momentum • Future Transport Strategy 2056 • Crime Prevention through Environmental Design (CPTED) Principles • Better Placed: An integrated design policy for the built environment of New South Wales (Government Architect NSW (GANSW), 2017) • Healthy Urban Development Checklist (NSW Health, 2009) • Draft Greener Places Design Guide (GANSW) • The Greater Sydney Region Plan - A Metropolis of Three Cities. • Central District Plan. • Greater Parramatta Interim Land Use and Infrastructure Implementation Plan (LUIIP) • Great Parramatta and Olympic Peninsula Place-based Infrastructure Compact Pilot (PIC) • Parramatta River Masterplan. • Wentworth Point Development Control Plan 2014. • Parramatta Local Strategic Planning Statement.	
2. Built Form and Urban Design	
Address: • the height, density, bulk and scale, setbacks and interface of the development in relation to the surrounding development, topography, streetscape and any public open spaces. • design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colour palette. • how Crime Prevention through Environmental Design (CPTED) principles are to be integrated into development. • how good environmental amenity would be provided, including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility. • 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 (GANSW, 2018). • how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development. Provide: • a detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development. • 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.	Section 3.6 Appendix 2 Appendix 3 Appendix 27
3. Trees and Landscaping	

Requirement	Location in EIS
Provide: • where relevant, an arboricultural impact assessment prepared by a Level 5 (Australian Qualifications Framework) Arborist, which details the number, location and condition of trees to be removed and retained, and includes detailed justification for each tree to be removed and details the existing canopy coverage on-site. • a detailed site-wide landscape strategy, that: o details the proposed site planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage. o provides evidence that opportunities to retain significant trees have been explored and/or informs the plan. o considers equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation. o demonstrates how the proposed development would: o contribute to long term landscape setting in respect of the site and the streetscape o mitigate the urban heat island effect and ensure appropriate comfort levels on-site. o contribute to objectives to increase urban tree canopy cover. • A detailed landscape plan prepared by a suitably qualified person Relevant Policies and Guidelines: Australian Standard 4970 Protection of trees on development sites. Draft Greener Places Design Guide (GANSW). Objective 30 of The Greater Sydney Region Plan - A Metropolis of Three Cities. Technical Guidelines for Urban Green Cover in NSW (Office of Environment and Heritage (OEH), 2015).	Section 3.3 Section 3.7 Section 7.2 Appendix 5 Appendix 21
4. Environmental Amenity	
Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing, wind impacts and acoustic impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated. Provide: • shadow diagrams. • a view analysis, where relevant, of the site from key vantage points and streetscape locations and public domain including photomontages or perspectives showing the proposed and likely future development. • an analysis of proposed lighting that identifies lighting on-site that will impact surrounding sensitive receivers and includes mitigation management measures to manage any impacts.	Section 7.3 Section 7.4 Appendix 3 Appendix 17 Appendix 12

Requirement	Location in EIS
• a wind impact assessment, including a wind tunnel study, prepared by a suitably qualified person that considers the impact of the proposed development having regard to the surrounding development and pedestrian amenity and comfort and includes mitigation management measures to manage any impacts. • a view impact assessment that has been prepared in accordance with the established planning principles.	
5. Transport and Accessibility	
Include a transport and accessibility impact assessment, which includes, but is not limited to the following: • analysis of the existing transport network to at least the existing or proposed enrolment boundary, including: o road hierarchy. o pedestrian, cycle and public transport infrastructure. o details of current daily and peak hour vehicle movements based on traffic surveys and / or existing traffic studies relevant to the locality. o existing transport operation for 1hr before and after (existing or proposed) bell times such as span of service, frequency for public transport and school buses, pedestrian phasing for signals. o existing performance levels of nearby intersections utilising appropriate traffic modelling methods (such as SIDRA network modelling). • details of the proposed development, including: o a map of the proposed access which identifies public roads, bus routes, footpaths and cycleways. o pedestrian site access and vehicular access arrangements, including for service and emergency vehicles and loading/unloading, including swept path analysis demonstrating the largest design vehicle entering and leaving the site and moving in each direction through intersections along the proposed transport routes. o car and motorcycle parking, bicycle parking and end-of-trip facilities. o drop-off / pick-zone(s) and arrival/departure bus bay(s). o pedestrian, public transport or road infrastructure improvements or safety measures. • analysis of the impacts due to the operation of the proposed development, including: o proposed modal split for all users of the development including vehicle, pedestrian, bicycle riders, public transport and other sustainable travel modes	Section 7.5 Appendix 6

Requirement	Location in EIS
○ estimated total daily and peak hour vehicular trip generation ○ a clear explanation and justification of the: ▪ assumed growth rate applied ▪ volume and distribution of proposed trips to be generated ▪ type and frequency of design vehicles accessing the site ○ details of performance of nearby intersections with the additional traffic generated by the development both at the commencement of operation and in a 10-year time period (using SIDRA network modelling). ○ cumulative traffic impacts from any surrounding approved development(s). ○ adequacy of pedestrian, bicycle and public transport infrastructure and operations to accommodate the development. ○ adequacy of car and motorcycle parking and bicycle parking provisions when assessed against the relevant car / bicycle parking codes and standards. ○ adequacy of the drop-off / pick-up zone(s) and bus bay(s), including assessment of any related queuing during peak-hour access. ○ adequacy of the existing / proposed pedestrian infrastructure to enable convenient and safe access to and from the site for all users. • measures to ameliorate any adverse traffic and transport impacts due to the development based on the above analysis, including: ○ travel demand management programs to increase sustainable transport (such as a School Transport Plan). ○ arrangements for the Travel Coordinator roles. ○ governance arrangements or relationships with state and local government ○ transport providers to update roads safety. ○ infrastructure improvements, including details of timing and method of delivery • a preliminary operational traffic and access management plan for the site, the drop-off / pick-up zone(s) and bus bay(s) • analysis of the impacts of the traffic generated during construction of the proposed development, including: ○ construction vehicle routes, types and volumes. ○ construction program (duration and milestones).	

Requirement	Location in EIS
○ on-site car parking and access arrangements for construction, emergency and construction worker vehicles. ○ cumulative impacts associated with other construction activities in the locality (if any). ○ road safety at identified intersections near the site due to conflicts between construction vehicles and existing traffic in the locality. ○ measures to mitigate impacts, including to ensure the safety of pedestrian and cyclists during construction. • a preliminary Construction Traffic and Pedestrian Management Plan. Note: Further guidance is provided in the TfNSW advice attached to the SEARs. Relevant Policies and Guidelines: Guide to Traffic Generating Developments (Roads and Maritime Services, 2002). EIS Guidelines - Road and Related Facilities (Department of Urban Affairs and Planning (DUAP), 1996). Cycling Aspects of Austroads Guides. NSW Planning Guidelines for Walking and Cycling (Department of Infrastructure, Planning and Natural Resources (DIPNR), 2004). Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments (Austroads, 2020). Australian Standard 2890.3 Parking facilities, Part 3: Bicycle parking (AS 2890.3).	
6. Ecologically Sustainable Development (ESD)	
Identify: • how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) would be incorporated in the design and ongoing operation phases of the development. • proposed measures to minimise consumption of resources, water (including water sensitive urban design) and energy. • how the future development would 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. • how environmental design will be achieved in accordance with the	Section 7.6 Appendix 7

Requirement	Location in EIS
• GANSW Environmental Design in Schools Manual (GANSW, 2018). Provide: • an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level. • a statement regarding how the design of the development is responsive to the NARCliM projected impacts of climate change. • 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. Relevant Policies and Guidelines: NSW and ACT Government Regional Climate Modelling (NARCliM) climate change projections.	
7. Aboriginal Cultural Heritage	
Provide an Aboriginal Cultural Heritage Assessment Report (ACHAR) that: • identifies and describes the Aboriginal cultural heritage values that exist across the site. • includes surface surveys and test excavations where necessary. • has been prepared in accordance with the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, • 2011) and Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010). • incorporates consultation with Aboriginal people in accordance with Aboriginal Cultural Heritage Consultation Requirements for Proponents (Department of Environment, Climate Change and Water, 2010). • documents the significance of cultural heritage values of Aboriginal people who have a cultural association with the land. • identifies, assesses and documents all impacts on the Aboriginal cultural heritage values. • demonstrates attempts to avoid any impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR and EIS must outline measures proposed to mitigate impacts. • demonstrates attempts to interpret the Aboriginal cultural heritage significance identified into the development. Any Aboriginal objects recorded as part of the Aboriginal Cultural Heritage Assessment Report must be documented and notified to the Aboriginal Heritage Information Management System (AHIMS) within Heritage NSW of the Department of Premier and Cabinet.	Section 7.7 Appendix 9

Requirement	Location in EIS
8. Social Impacts	
Provide a Social Impact Assessment (SIA) prepared in accordance with the draft Social Impact Assessment Guideline 2020. The SIA should consider: • any potential loss of planned public open space as a result of the proposal. • potential impacts on the limited public open space in area having regard to the needs of the school. Note: Further guidance is provided in the Council advice attached to the SEARs. Relevant Policies and Guidelines: Draft Social Impact Assessment Guideline 2020 (Department of Planning, Industry and Environment). Community Infrastructure Strategy (City of Parramatta Council, 2020).	Section 7.8 Appendix 28
9. Noise and Vibration	
Provide a noise and vibration impact assessment that: • includes a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation and construction. • details the proposed construction hours and provide details of, and justification for, instances where it is expected that works would be carried out outside standard construction hours. • includes a quantitative assessment of the main sources of 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. • outlines measures to minimise and mitigate the potential noise impacts on nearby sensitive receivers. • considers sources of external noise intrusion in proximity to the site (including, road rail and aviation operations) and identifies building performance requirements for the proposed development to achieve appropriate internal amenity standards. • demonstrates that the assessment has been prepared in accordance with polices and guidelines relevant to the context of the site and the nature of the proposed development. Relevant Policies and Guidelines: NSW Noise Policy for Industry 2017 (NSW Environment Protection Authority (EPA) Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009).	Section 7.9 Appendix 10

Requirement	Location in EIS
Assessing Vibration: A Technical Guideline 2006 Department of Environment and Conservation, 2006) Australian Standard 2363 Acoustics - Measurement of noise from helicopter operations (AS 2363).	
10. Biodiversity	

• Provide a Biodiversity Development Assessment Report (BDAR), that assesses the biodiversity impacts of the proposed development in accordance with the requirements of the Biodiversity Conservation Act 2016, Biodiversity Conservation Regulation 2017 and Biodiversity Assessment Method, except where a BDAR waiver has been issued in relation to the development or the development is located on biodiversity certified land.
• Where a BDAR is not required, because a BDAR waiver has been issued, in relation to the development, provide:
  o a copy of the BDAR waiver and demonstrate that the proposed development is consistent with that covered in BDAR waiver.
  o an assessment of flora and fauna impacts where significant vegetation or flora and fauna values would be affected by the proposed development.
 	
Note: Further guidance is provided in the Biodiversity and Conservation Division Standard Environmental Assessment Requirements attached to the SEARs.
	Section 7.10
	
	Appendix 11

11. Contributions	
Identify: • any Section 7.11/7.12 Contribution Plans, Voluntary Planning Agreements or Special Infrastructure Contribution Plans that affect land to which the application relates or the proposed development type. • any contributions applicable to the proposed development under the identified plans and/or agreements. Justification is to be provided where it is considered that the proposed development is exempt from making a contribution. • any actions required by a Voluntary Planning Agreement or draft Voluntary Planning Agreement affecting the site or amendments required to a Voluntary Planning Agreement affected by the proposed development.	Section 5.11
12. Staging	
Assess impacts of staging where it is proposed and detail how construction works, and operations would be managed to ensure public safety and amenity on and surrounding the site.	Section 3.2
13. Utilities	

Requirement	Location in EIS
In consultation with relevant service providers: • assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site. • identify any infrastructure upgrades required off-site to facilitate the development and any arrangements to ensure that the upgrades will be implemented on time and be maintained. • provide an infrastructure delivery and staging plan, including a description of how infrastructure requirements would be co-ordinated, funded and delivered to facilitate the development.	Section 7.11 Appendix 15 Appendix 16
14. Stormwater Drainage	
Provide: • a preliminary stormwater management plan for the development that: o is prepared by a suitably qualified person in consultation with Council and any other relevant drainage authority. o details the proposed drainage design for the site including on-site detention facilities, water quality measures and the nominated discharge point. o demonstrates compliance with Council or other drainage authority requirements. • stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties. Where drainage infrastructure works are required that would be handed over to Council, provide full hydraulic details and detailed plans and specifications of proposed works that have been prepared in consultation with Council and comply with Council's relevant standards. Note: Further guidance is provided in the Council advice attached to the SEARs.	Section 7.12 Appendix 13
15. Flooding	
• Identify any flood risk on-site in consultation with Council and having regard to the most recent flood studies for the development area and the potential effects of climate change, sea level rise and an increase in rainfall intensity. • Assess the impacts of the development, including any changes to flood risk onsite or off-site, and detail design solutions to mitigate flood risk where required. Relevant Policies and Guidelines: NSW Floodplain Development Manual (DIPNR, 2005).	Section 7.13 Appendix 13
16. Soil and Water	
Provide:	Section 7.14

Requirement	Location in EIS
• an assessment of potential impacts on surface and groundwater (quality and quantity), soil, related infrastructure and watercourse(s) where relevant. • details of measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles. • an assessment of salinity and acid sulphate soil impacts, including a Salinity Management Plan and/or Acid Sulphate Soils Management Plan, where relevant. Relevant Policies and Guidelines: Managing Urban Stormwater - Soils and Construction Volume 1 (Landcom,2004). Acid Sulfate Soil Manual, (NSW Acid Sulfate Soil Management Advisory Committee, 1998). Acid Sulfate Soils Assessment Guidelines (DoP, 2008). Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008).	Appendix 13 Appendix 19c Appendix 19f
17. Waste	
• Identify, quantify and classify the likely waste streams to be generated during construction and operation. • Provide 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. • Provide a hazardous materials survey of existing aboveground buildings that are proposed to be demolished or altered. Relevant Policies and Guidelines: Waste Classification Guidelines (EPA, 2014).	Section 7.15 Appendix 20
18. 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. This must include the following prepared by certified consultants recognised by the NSW Environment Protection Authority: • Preliminary Site Investigation (PSI). • Detailed Site Investigation (DSI) where recommended in the PSI. • Remediation Action Plan (RAP) where remediation is required. This must specify the proposed remediation strategy. • Preliminary Long-term Environmental Management Plan (LEMP) where containment is proposed on-site.	Section 7.16 Appendix 19a Appendix 19b Appendix 19c Appendix 19d

Requirement	Location in EIS
Relevant Policies and Guidelines: Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP, 1998). Sampling Design Guidelines (EPA, 1995). Consultants Reporting on Contaminated land – Contaminated Land Guidelines (EPA, 2020). National Environment Protection (Assessment of Site Contamination) Measure (National Environment Protection Council, as amended 2013).	
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. Any plans and diagrams included in the EIS must include key dimensions, RLs, scale bar and north point.	Throughout EIS
In addition to the plans and documents required in the General Requirements and Key Issues sections above, the EIS must include the following:	
Section 10.7(2) and (5) Planning Certificates (previously Section 149(2) and (5) Planning Certificate).	Appendix 22
Design report to demonstrate how design quality would 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 to justify the proposed site planning and design approach. • summary of feedback provided by GANSW and NSW State Design Review Panel (SDRP) and responses to this advice. • summary report of consultation with the community and response to any feedback provided.	Appendix 3
Geotechnical and Structural Report	Appendix 14 Appendix 18
Accessibility Report.	Appendix 24
Consultation	
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, relevant special interest groups, including local Aboriginal land councils and registered Aboriginal stakeholders and affected landowners. In particular, you must consult with: • the relevant Council.	Section 6 Appendix 23

Requirement	Location in EIS
• Government Architect NSW (through the NSW SDRP process). • Transport for NSW. Consultation should commence as soon as practicable to inform the scope of investigation and progression of the proposed development. The EIS must describe and include evidence of 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. Targeted consultation in accordance with the draft Social Impact Assessment Guideline 2020 (Department of Planning, Industry and Environment) must also occur where there is a requirement to prepare and submit a Social Impact Assessment.	
Further consultation after 2 years	
If you do not lodge a development application and EIS for the development within two years of the issue date of these SEARs, you must consult further with the Planning Secretary in relation to the preparation of the EIS. If any other significant issues are identified in the risk assessment, that are not identified in this SEARs, the Planning Secretary must be consulted in relation to the preparation of the EIS.	Noted.
References	
The assessment of the key issues listed above must consider, but not be limited to, relevant guidelines, policies, and plans as identified.	Noted.

2 Site analysis

The site is located at 7-11 Burroway Road, Wentworth Park, across parts of three lots, namely Lot 202 DP1216628, Lot 203 DP1216628 and Lot 204 DP1216628.

The site is approximately 9,511m^2 in area and has a frontage of approximately 88m to Burroway Road. The site currently contains vacant land and is mostly cleared of vegetation.

The site forms part of the Wentworth Point Planned Precinct, which was rezoned in 2014 for the purposes of high density residential, public recreation, school and business purposes.

Figure 2-1 Site aerial image
Source: Mecone

2.1 Regional context

The site is located within the Central City District of Greater Sydney, approximately 12.66km west from the Sydney central business district (CBD) and 7km east of the Parramatta CBD. The regional context of the site is shown in Figure 2-2.

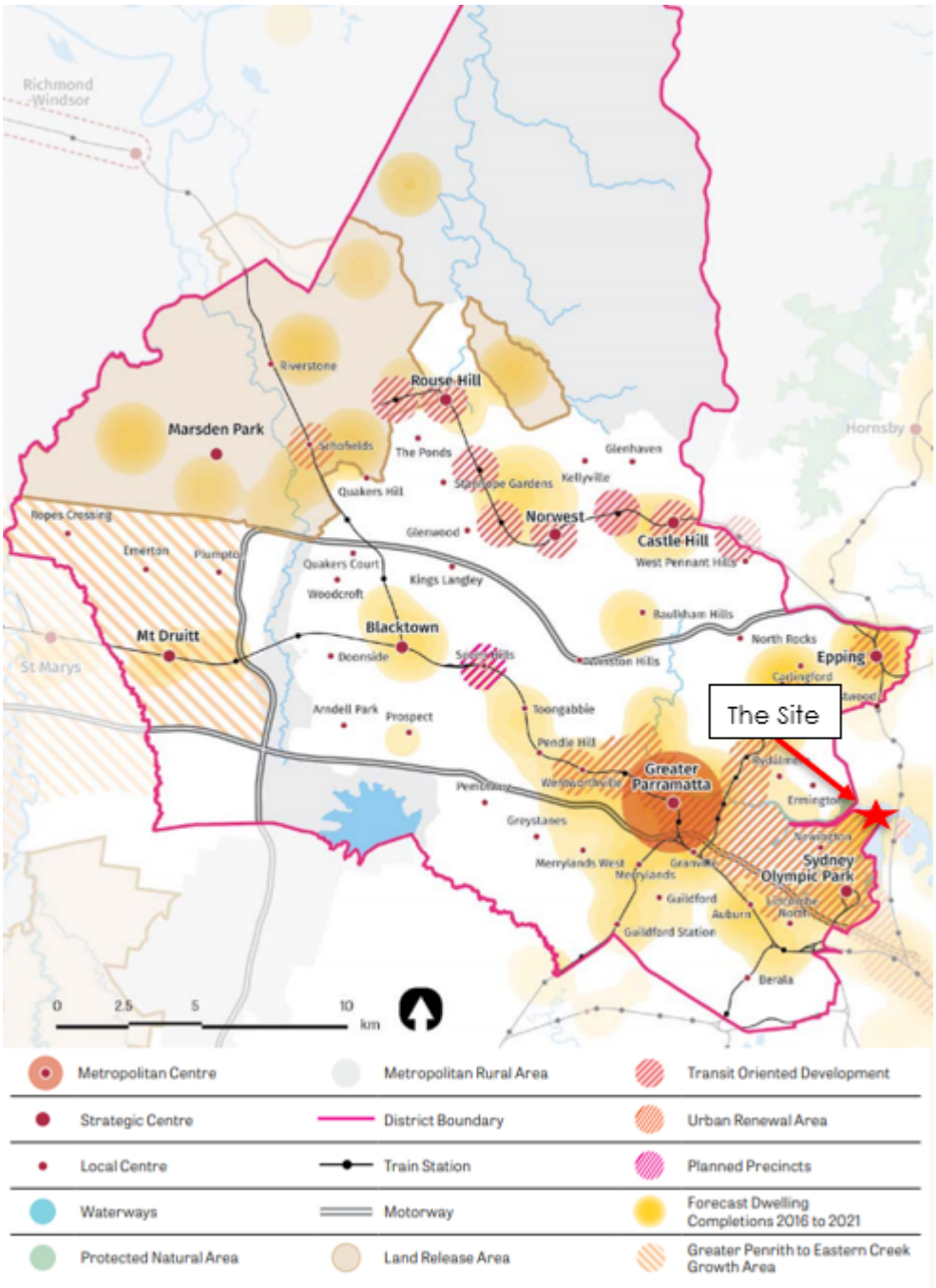

Figure 2-2 Regional context map
Source: Central District Plan, 2018

2.2 Local context and surrounding development

The site is located on the Wentworth Point peninsula within the City of Parramatta LGA. Wentworth Point is characterised by high-density and high-rise residential and mixed-use developments. Surrounding development includes:

- **North**: To the north of the site is the future Wentworth Point Peninsula Park. The portion of the park immediately to the north of the site will comprise a play field and will be subject to a joint use arrangement.

- **South**: To the south of the site, across Burroway Road, is an undeveloped parcel of land known as "Block H". Council staff are currently assessing a proposed development control plan (DCP) amendment and associated voluntary planning agreement (VPA) offer in relation to this land.
- **East**: Immediately to the east of the site is an undeveloped parcel of land owned by TfNSW. This land is planned for high-density mixed use development.
- **West**: Wentworth Point Public School is a primary school located immediately west of site. The primary school opened in January 2018 and has 14 home bases (mainstream) and 4 home bases (special education). A new mixed-use development is located south of the primary school, comprising a supermarket, car parking, specialty shops and 768 residential apartments known as Marina Square. To the northwest of the primary school is Pierside Shopping Centre, which contains a supermarket, car parking, retail outlets and restaurants/cafes. To the south of Pierside Shopping Centre is further mixed-use developments with high density residential apartments located at 2 Burroway Road.

2.3 Vegetation, topography and natural features

The site has been cleared and is generally free of vegetation, with the exception of four groups of trees that have grown in the hardstand cracks across the site.

A substantial volume of fill soil has been used for preliminary construction of a road (Ridge Road) leading from Burroway Road towards the point. The site is otherwise generally level.

2.4 Local infrastructure

2.4.1 Open space

The approved Wentworth Point Peninsula Park is located directly to the north/northeast of the site. A map showing the site's relationship to the future Peninsula Park is shown in the image below.

Additionally, the site is located near the open spaces and reserves of Sydney Olympic Park, Newington Armory and Millennium Parklands.

Figure 2-3 Open space map
Source: Woods Bagot

2.4.2 Road network

The site fronts Burroway Road, a local street that terminates in a cul-de-sac at the Homebush Bay foreshore. The primary road access into Wentworth Point is via Hill Road.

Bennelong Bridge runs across Homebush Bay between Rhodes and Wentworth Point, providing two bus-only lanes as well as a shared cyclist and pedestrian path. The bridge has proved beneficial in providing improved connectivity for pedestrians and cyclists as well as better public transport between Rhodes and Wentworth.

The local road network is shown in the image below.

Figure 2-4 Road network map
Source: Woods Bagot

2.4.3 Public transport

The site can be accessed by trains, ferries and buses, with most of the likely school catchment covered by a 30-minute journey.

The site is located 1.5km from Rhodes Station, which is serviced by the T9 train line towards Hornsby, Central Station and Gordon.

The nearest bus stop is located on Hill Road after Burroway Road, which provides services connecting Wentworth Point to Sydney Olympic Park, Homebush, Canada Bay, North Ryde and Chatswood.

Sydney Metro West has confirmed that a metro station will be located at Sydney Olympic Park near the existing heavy rail station. Construction of Sydney Metro West began in 2020. Operation of this mass transit corridor will lead to increased accessibility to surrounding areas, including the site. Currently, the 533 bus service links the site to Sydney Olympic Park station with a 12-minute bus ride.

Parramatta Light Rail Stage 2, which will run along Hill Road, will also provide a direct connection to the Sydney Olympic Park metro station.

The Sydney Olympic Park Wharf is approximately 300m from the site entrance and services the F3 ferry route, which travels from Parramatta to Circular Quay.

2.5 Existing consents and proposals

DA/875/2017/A

In June 2014, the NSW Government, Landcom (formerly UrbanGrowth NSW) and the former Auburn City Council signed a Precinct Support Scheme agreement allocating $5 million to design and construct a new park at the northern most point of the Wentworth Point peninsula (i.e., the Peninsula Park).

In February 2016, the Joint Regional Planning Panel approved a DA lodged by UrbanGrowth NSW (DA-40/2015). This DA, covering 7-11 Burroway Road, included works associated with the Peninsula Park including site remediation, construction of a sea wall and landscaping of the park.

DA/875/2017/A was then approved in October 2018 for changes to the park and road design and staging of remediation works.

Given the proposed school is located along the approved Ridge Road, the above masterplan will not progress in its current form. The masterplan will be modified to account for the school via an appropriate approval process in the future.

DA/644/2017

This DA was approved on 6 June 2018 for construction of a new marina consisting of wet berths (up to 63 vessels) and dry boat storage (up to 228 vessels) with ancillary parking and retail tenancies and a boat launching channel on the land at 9-11 Burroway Road.

The proposed school will impinge upon the western portion of the approved dry boat facility. If the DA progresses, it will be modified to take into account the proposed school.

Planning proposal

A planning proposal is currently being prepared for the subject school site, the TfNSW land to the east and the future Peninsula Park to the north. The planning proposal will address the zones and planning controls and will seek to apply an SP2 Infrastructure zoning for the school site with no height or floor space controls.

3 Proposal description

3.1 Overview

The table below provides a summary of the key elements of the proposed development. Further detail is provided in the following subsections.

Table 3-1 Summary of proposal

Proposal element	Brief description
Earthworks	Approximately 5,600m^3 of cut and 6,346m^3 of fill
Built form	Two x 6-storey wings, one along the Burroway Road boundary and one along the eastern boundary Double-storey hall building for performance and sports
Staging	Stage 1: 850 students Stage 2: Increase to 1,530 total students
Recreation space	The site itself contains sufficient recreation space for the Stage 1 student population. A future playing field to the north forming part of Peninsula Park will provide additional recreation space for the Stage 2 student population. The playing field is not proposed under this SSDA but will be delivered separately under a separate approval process. The field will be subject to joint use agreement whereby students will use the field during school hours and the public will use the field out of school hours. Discussions regarding the joint use agreement are currently underway. The agreement will be finalised prior to determination of this SSDA.
Gross floor area (GFA) and floor space ratio (FSR)	14,418m^2 1.53:1 FSR based on site area of 9,441m^2 (RE1 land excluded)
Height	Six storeys Roof height: RL 29.200 (approx. 24.65m above existing ground level) Lift shaft: RL 33.200 (approx. 29.5m above existing ground level)
Land use	School (educational establishment)
Vehicular access and servicing	Two road frontages including a main frontage to Burroway Road and a secondary frontage to a future road along the eastern boundary.

Proposal element	Brief description
	The future eastern road is outside of the site and is not being proposed under this SSDA; it is being delivered by others under a separate approval process. The school's primary kiss-and-ride area is located along Burroway Road and a special needs kiss-and-ride is located along the future eastern road. Waste collection and servicing will ultimately occur along the eastern road. In the short term, prior to delivery of the eastern road, waste collection and servicing will occur off Burroway Road.
Pedestrian access	Main access point off Burroway Road and a secondary access point off the future eastern road.
Car parking	30 car parking spaces along the future eastern road 258 bicycle/rideables parking spaces
Jobs	Construction: 500 Operation: 80
Construction hours	Monday to Friday – 7.00am to 5.00pm Saturdays – 8.00am to 1.00pm No work on Sunday and public holidays Note: To support the construction industry during the COVID-19 pandemic, the NSW government currently allows weekday construction hours on weekends and public holidays
Hours of operation	8:00am to 4:00pm Monday to Friday

3.2 Subdivision

The subject school site will form its own separate lot. The subdivision is currently being progressed through a separate approvals process, with the separate lot to be established prior to determination of the SSDA.

3.3 Early works

The following early works are being carried out via a separate approval pathway and are not proposed under this SSDA:

- Demolition of the site's existing hardstand and brick wall. This is to be carried out under Clause 20A (Exempt development carried out by public authorities for purposes in Schedule 1) of State Environmental Planning Policy (Infrastructure) 2007 (ISEPP). The demolition of the hardstand is necessary to conduct further site investigations prior to site validation. (For further discussion on land contamination, refer to section 7.16 of this EIS.)
- Placement of up to 600mm fill over the area of the hardstand to be demolished. This is to be carried under Clause 6.2(2) of ALEP 2010 as

earthworks for which development consent is not required. The purpose of the fill is to seal potential odours. It is noted that the fill will be placed prior to determination of the subject SSDA, and therefore the development's "existing ground level" will change. However, the 600mm of fill is only an interim measure; the development's finished ground levels will be above the 600mm of fill. Therefore, the physical height of the buildings will not change due to the 600mm of fill carried out as early works (i.e., the RL of the buildings will not change).

- Removal of four stands of Swamp She Oak located in gaps in the hardstand. A permit from Council will be obtained for this tree removal.
- Extension/upgrades of utility services and connection to site including electrical, natural gas, potable water and sewer. This is to be carried out as development permitted without consent under various provisions of the ISEPP. The upgrades are generally necessary to make the site suitable for development.

3.4 Staging

The school is to be developed in two stages. The SSDA seeks consent for both Stage 1 and Stage 2. While Stage 2 is submitted as part of the SSDA, construction is subject to approval of additional funding.

Stage 1 will provide for a Stream 5 high school catering for up to 850 students. Stage 2 will bring the school up to a Stream 9 school catering for up to 1,530 students and will involve occupation of an additional 29 General Learning Spaces (GLSs) in the northeastern corner of the school building, as outlined in red in the staging plans below.

The play space requirements of Stage 1 will be met by the play space within the subject site proposed under this SSDA. The additional open space requirements resulting from Stage 2 will be met by the future playing field to the north. Stage 2 will not operate until the northern playing field has been delivered.

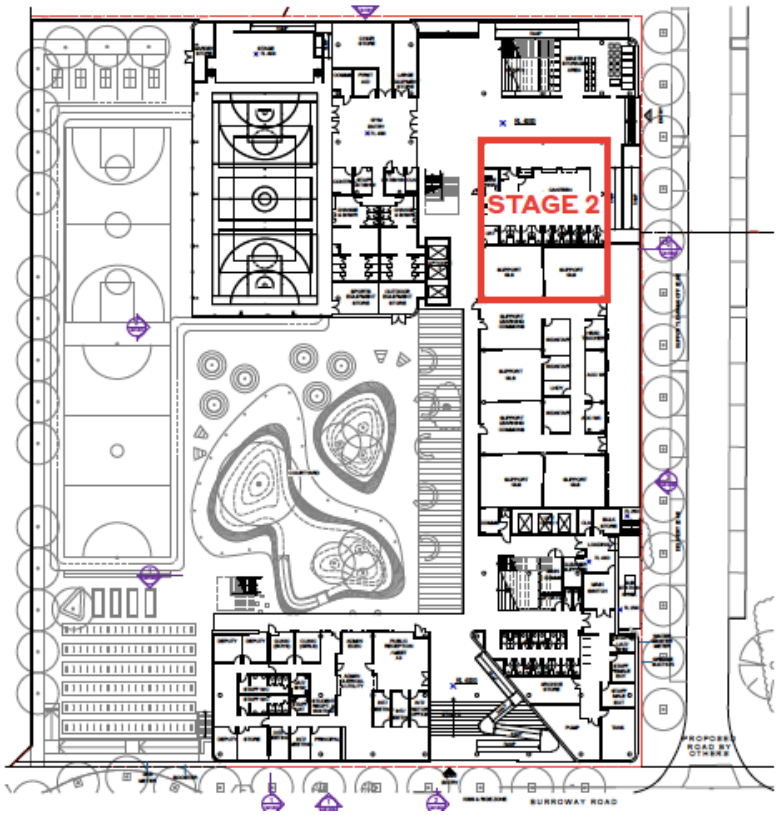

Figure 3-1 Staging plan – ground floor
Source: Wood Bagot

Figure 3-2 Staging plan – Level 1
Source: Wood Bagot

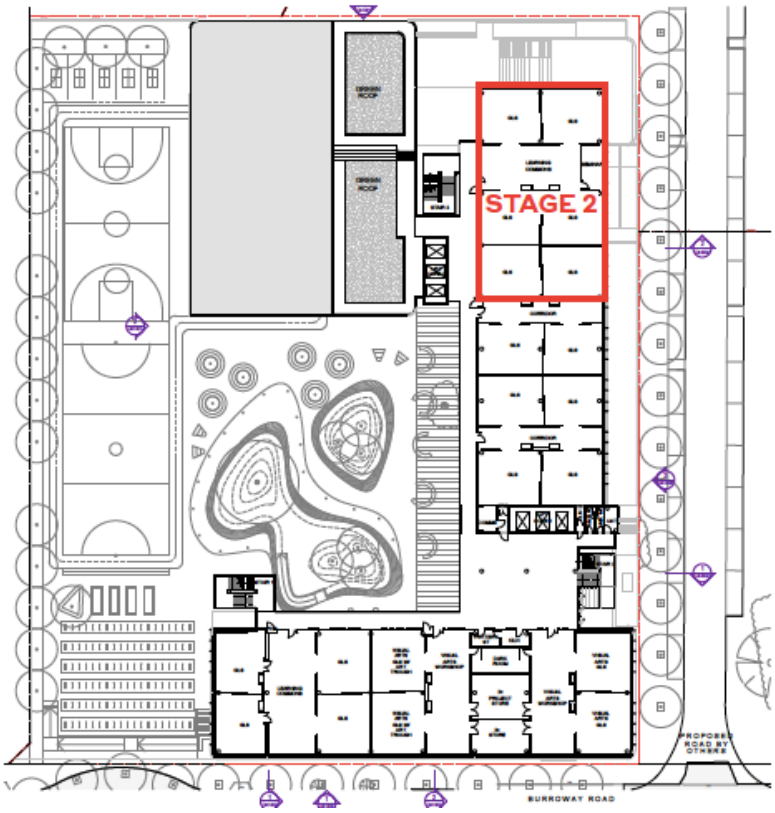

Figure 3-3 Staging plan – Level 2
Source: Wood Bagot

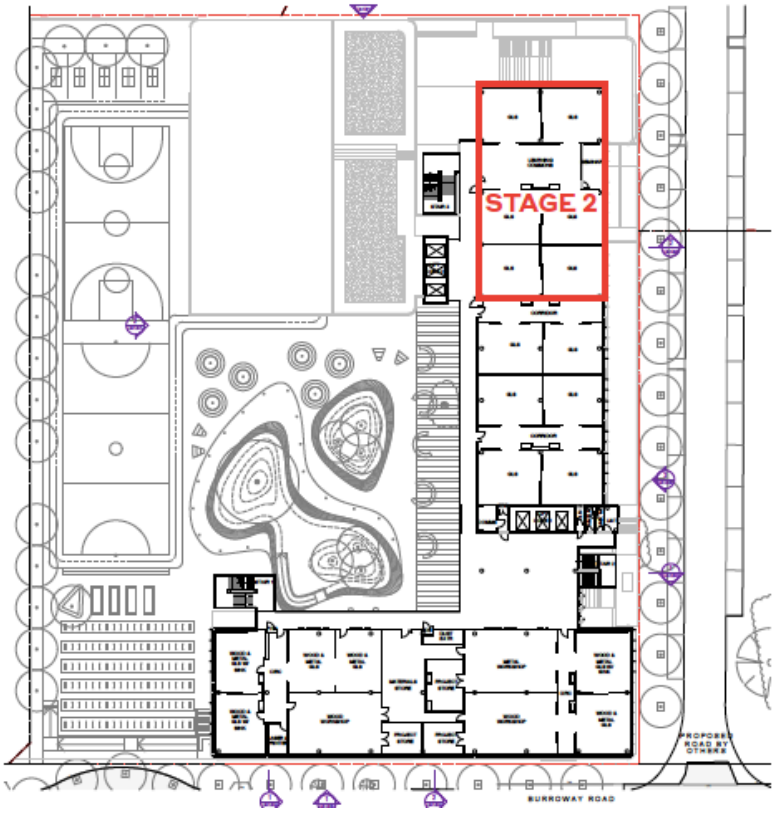

Figure 3-4 Staging plan – Level 3
Source: Wood Bagot

Figure 3-5 Staging plan – Level 4
Source: Wood Bagot

Figure 3-6 Staging plan – Level 5
Source: Wood Bagot

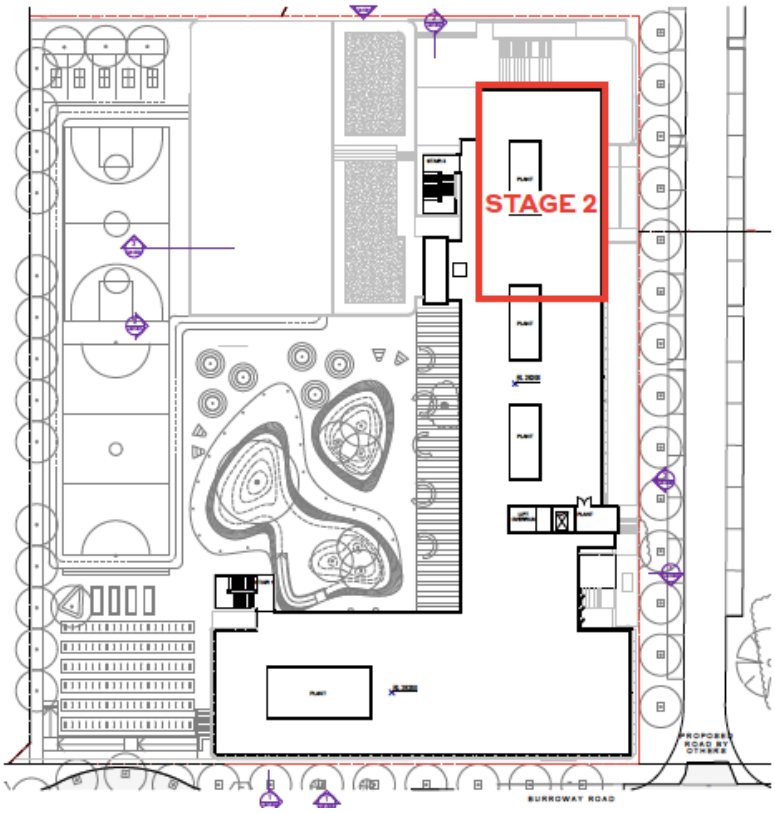

Figure 3-7 Staging plan – Roof
Source: Wood Bagot

3.5 Earthworks

The site features an embankment for the previously proposed Ridge Road. The proposal includes bulk earthworks which will generally be limited to spreading the existing fill from the portion of the embankment on the site over the remainder of the site to achieve a bulk earthworks platform, as shown in the bulk earthworks plan extract below. It is estimated that approximately 5,600m^3 of cut and 6,346m^3 of fill will be required.

Refer to the civil package at Appendix 13 for further detail.

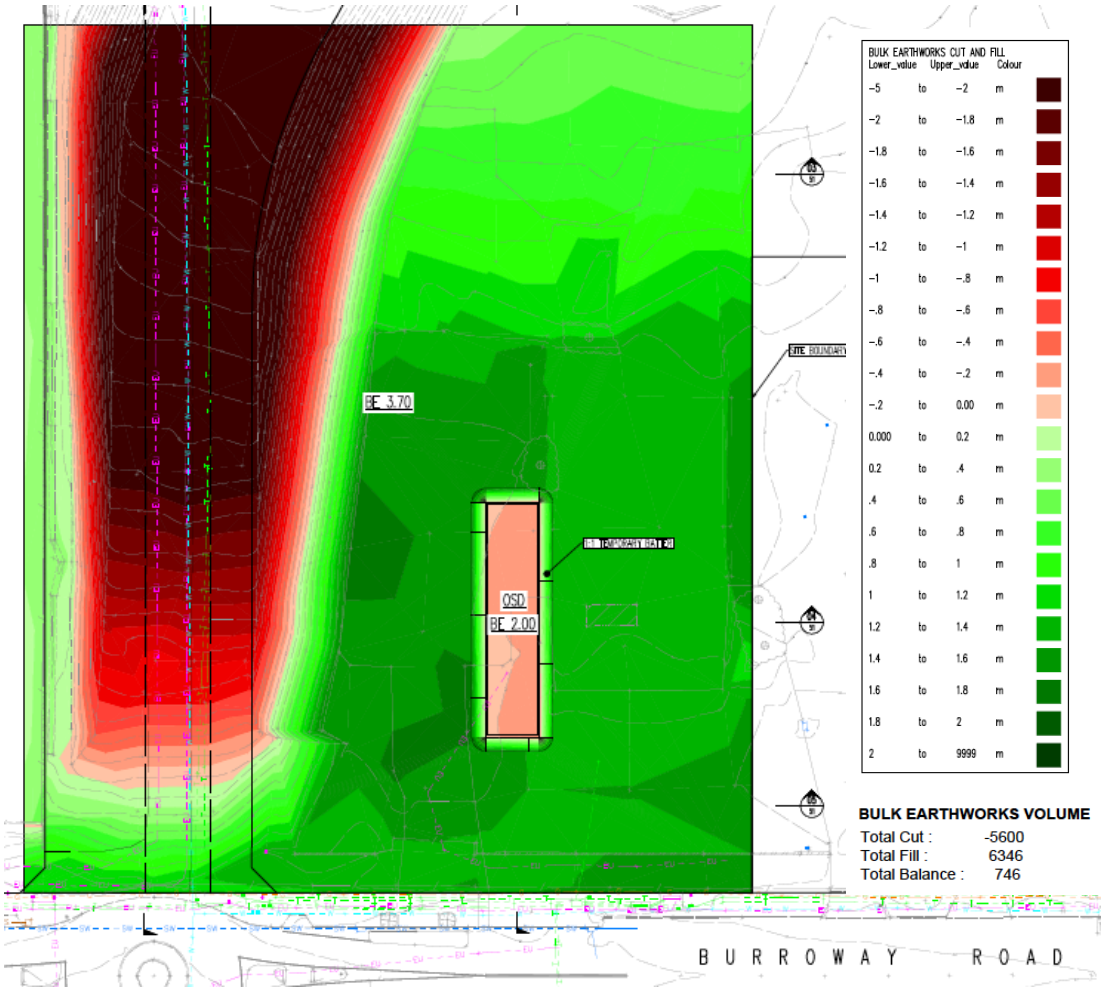

Figure 3-8 Bulk earthworks plan
Source: TTW

3.6 Built form and urban design

Woods Bagot has prepared the design for the proposal. The Architectural Design Report at Appendix 3 describes the design rationale and addresses key design-related principles. Key items from Woods Bagot's statement are outlined below.

3.6.1 Building layout

The proposed buildings are arranged generally in a U- shape around a central courtyard. The six-storey main school building is positioned along the eastern and southern boundaries, while the double-storey hall for performance and sports is positioned along the northern boundary.

The built form along the eastern boundary contains the canteen and Support GLSs at ground level and GLSs on the upper levels. The built form along the southern boundary contains administrative facilities at ground level and GLSs, visual arts rooms and science labs in the upper levels. The double-storey building along the northern boundary contains sports courts, movement studio and other movement-related amenities.

This layout provides a strong street address to Burroway Road and the future eastern road and also allows for excellent solar access to the central play area given the low scale of the double-storey hall. Furthermore, this layout creates a visual

connection between the proposal and the adjacent primary school, and also between the Wentworth Place/Burroway Road intersection and the river foreshore.

A site plan is shown provided below.

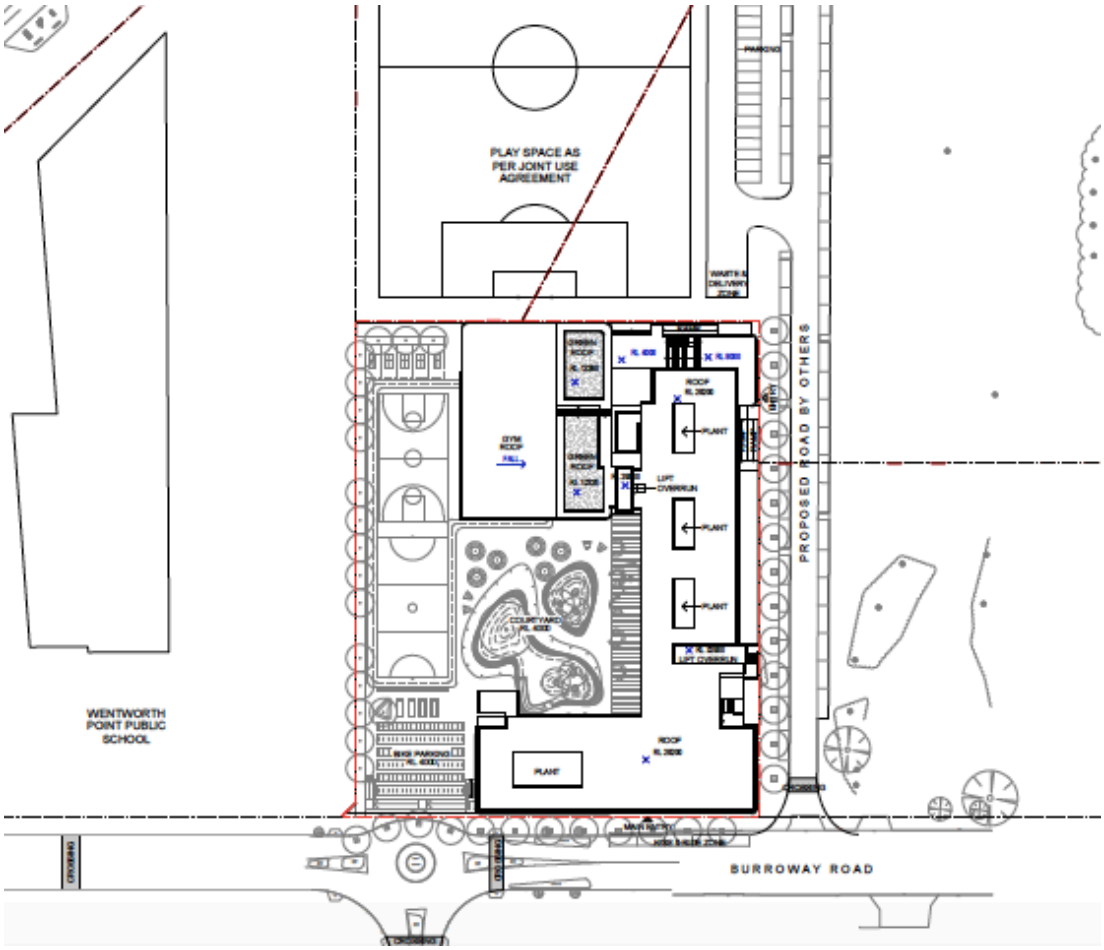

Figure 3-9 Site plan
Source: Woods Bagot

3.6.2 Height, bulk and scale

At a maximum of six storeys, the proposed school buildings are well below the heights of the surrounding development at the northern end of Wentworth Point, which includes 20+-storey towers.

A minor variation is proposed to a portion of the site's height limit, but the proposed heights are, on balance, lower than the heights allowed by ALEP 2010. The variation is discussed in further detail at section 5.9 of the EIS.

The sections below illustrate the proposal in the context of the broader locality. As seen, the proposal's bulk and scale are suitable to the proposed school use and compatible with the high-density development in Wentworth Point.

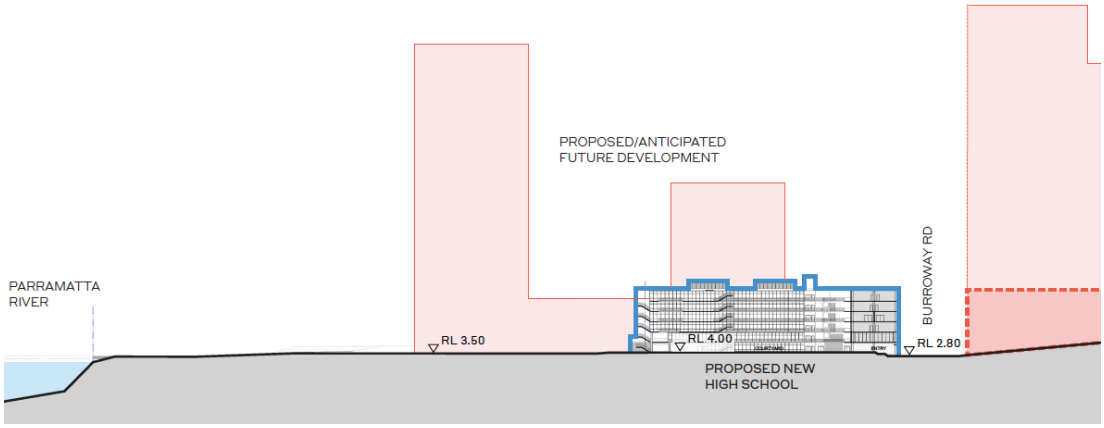

Figure 3-10 Burroway Road elevation
Source: Woods Bagot

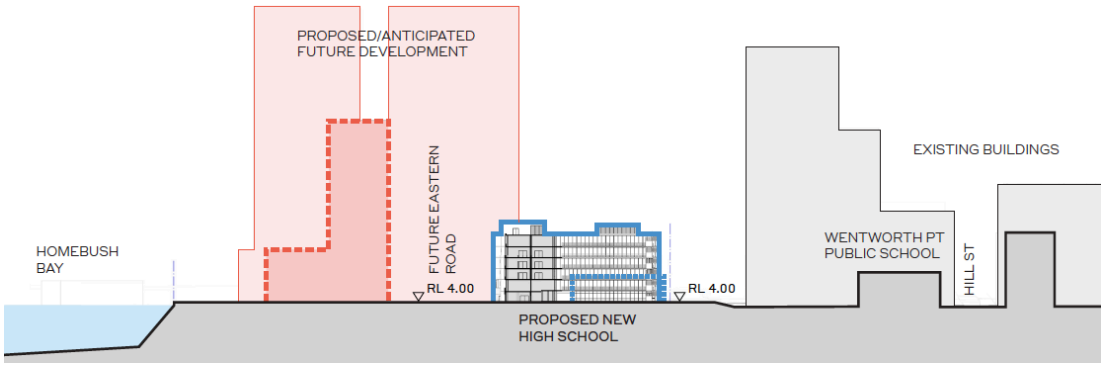

Figure 3-11 View future eastern road
Source: Woods Bagot

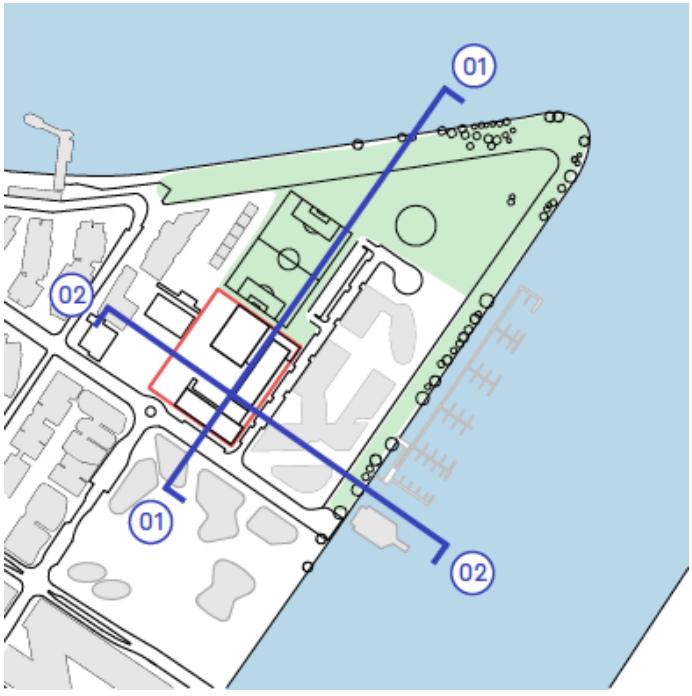

Figure 3-12 Section key
Source: Woods Bagot

3.6.3 Density

The proposed density reflects the required student capacity and is considered appropriate to the high-density context.

The proposed GFA is 14,418m^2. The site has approximately 70m^2 of RE1 land. Given school development is prohibited on the RE1 land, the RE1 land does not count towards the site area for FSR purposes as per the definition of site area in the Standard Instrument. Therefore, based on a site area of 9,441m^2 (9,511m^2 – 70m^2), the proposed FSR is therefore approximately 1.53:1.

3.6.4 Setbacks

The proposal features the following setbacks from the site boundaries:

- **North boundary**: The proposed buildings set back from the northern boundary by 0.7m. This is considered appropriate given the land to the north will form a park and will be utilised by the school for recreation purposes, effectively forming an extension of the school.
- **South boundary** (Burroway Road): The proposed buildings are set back from Burroway Road by 0.7m. This setback, while less than the 5m setback specified in Wentworth Point Precinct DCP 2014, provides a strong street wall appropriate to the high density setting.
- **East boundary**: The main building façade is set back from the eastern boundary (future eastern road) by 0.7m. Similar to the Burroway Road setback, this minimal setback provides a strong street wall suitable to the high density context.
- **West boundary**: The six-storey built form is set back from the western boundary by approximately 26.4m, while the double-storey hall is set back by approximately 23.2m. These large setbacks provide a view corridor extending to the river and allow for outdoor sports courts, a productive garden, bicycle parking and significant plantings.

3.6.5 Façade

As illustrated in the diagram below, the façade is expressed as a curtain wall façade composed of a kit of four module parts that align with the requirements of the differing internal spaces.

The Type A module is solid and is used for façade spaces that do not require windows. The Type B module features clerestory windows and is used for storerooms and workshops. The Type C module features large windows and is used for learning commons, kitchens and labs. Finally, the Type D module provides the largest windows and is used for GLSs.

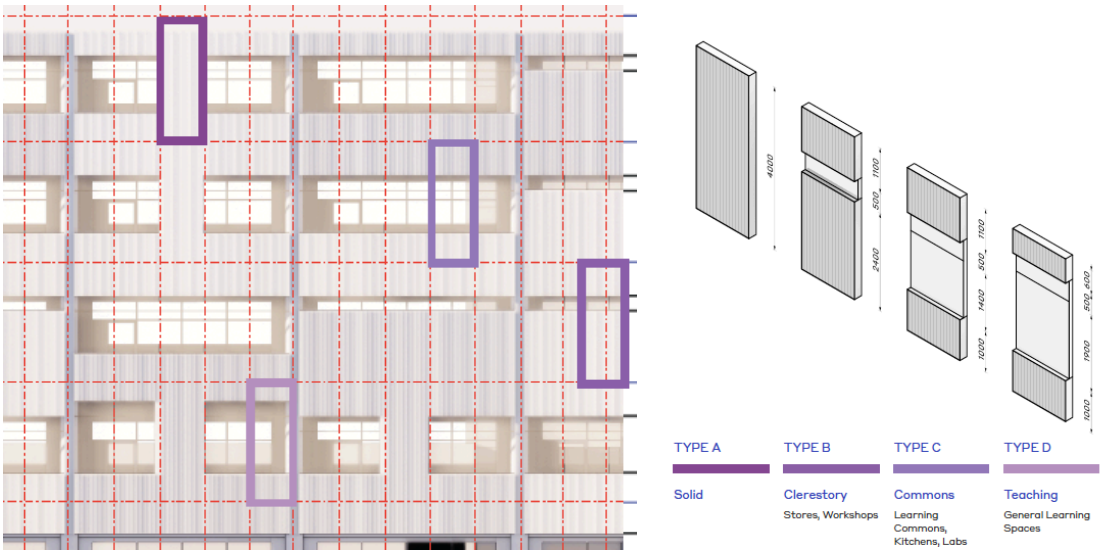

Figure 3-13 Façade modules
Source: Woods Bagot

More generally, the proposal utilises fins, texture, breaks in building form and other elements to create articulated buildings that are visually attractive and compatible with local context.

3.6.6 External materials and finishes

The selected external materials and finishes are durable, high quality and suitable to the local context. The material palette includes a mix of masonry cladding, metal profile cladding, metal sunshade, metal balustrade, plant metal screen, glazing and spandrel, concrete and metal frame.

The building base is clad in brick, providing a robust base that visually and physically locks the school to its site. The bottom of the base features a glazed brick, flush and with a deep green glaze. These tiles have been used traditionally in Sydney to provide robust surfaces that have stood the test of time. The upper section of the base is flush brickwork, with a mix of the earth-tones and varying surface found traditionally in the Bowral commons brick type.

The upper levels of the building feature textured, reflective, light-coloured metal cladding that changes in response to the shifting colours and patterns of the sky.

Sample materials are shown below.

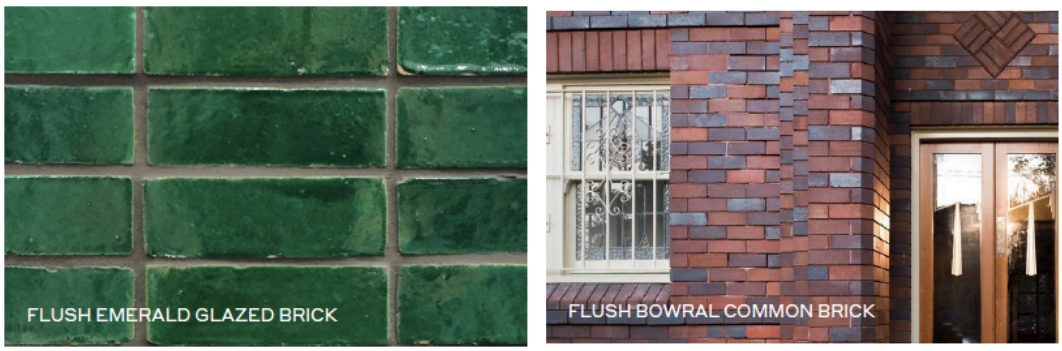

Figure 3-14 Material sample – masonry base
Source: Woods Bagot

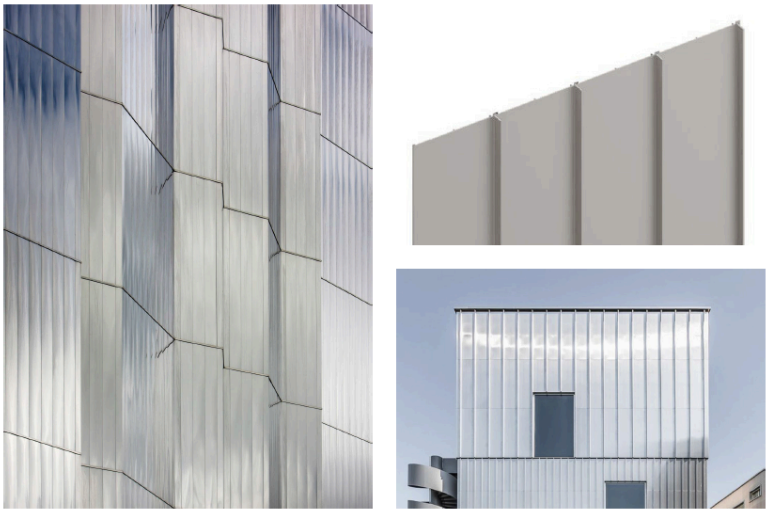

Figure 3-15 Material sample – upper level cladding
Source: Woods Bagot

3.6.7 Relationship to surrounding development, topography and streetscape

Relationship to surrounding development

The position of the buildings responds to surrounding development as follows:

- The proposed buildings positively address, and are aligned with, Burroway Road to the south and the future road to the east.
- The proposal has been designed to achieve a strong relationship to the adjoining primary school to the west. The buildings are positioned with the play area in the central/western portion of the site, mirroring the primary school's play area. This arrangement provides for a strong visual connection between the two schools.
- The proposal has been designed to connect to the future shared use playing field to the north, with a north-south pedestrian connection between Burroway Road and the playing field.

Relationship to topography

The site comprises reclaimed land and therefore does not feature any natural landforms. The site was previously cleared and contains a large soil mount corresponding to the indicative Ridge Road identified in the Wentworth Point DCP. The required building platforms and play areas will be achieved via cut and fill. Refer to section 3.5 for further discussion on the proposed earthworks. The proposed floor level of RL 4.0 corresponds to the floor level of the adjacent primary school.

Relationship to streetscape

The proposal positively addresses Burroway Road and the future eastern road. Multiple pedestrian entries, including a main entry off Burroway Road and secondary entries off the future eastern road, will activate the streetscape while ensuring adequate safety for students. Additionally, new plantings along the boundaries will positively contribute to the streetscape.

3.6.8 Access to daylight, ventilation and acoustic separation

The design utilises a combination of passive and mechanical measures to ensure the amenity and comfort of students and staff.

Learning spaces and common spaces are oriented to achieve high levels of natural daylight and feature appropriate amounts of glazing to allow visual connection to the outdoors. The lower built form is positioned in the north of the site, maximising solar access to the central play area.

In regards to ventilation, a mixed mode strategy will be utilised. When external conditions are favourable, windows can open to facilitate natural ventilation.

In regards to acoustic separation, the buildings have been arranged to provide amenity both for students and neighbouring uses. The U-shaped arrangement of the buildings will serve to shield the central outdoor space from vehicle emissions and noise and will also serve to limit noise emissions from school activities.

3.6.9 Services

Electrical and mechanical services have been considered in the design of the proposal. The Building Services Report at Appendix 29 provides an overview of the electrical and mechanical concept services proposed for the site and outlines the required design parameters.

3.7 Landscaping and open space

3.7.1 Key elements

A Landscape Design Report by Urbis is attached at Appendix 5. The landscape strategy includes the following key elements:

- Central courtyard.
- Sports courts in the western portion of the site.
- First Nations productive garden and kitchen productive garden.
- Outdoor learning areas in the central portion and eastern edge of the site.
- Street tree plantings.
- Ecological planting corridor along the western edge of the site.
- Green roof on the hall building.

Additionally, the school will be able to utilise the future playing field immediately to the north of the site. This is explained in further detail in the following subsection.

The proposed landscape masterplan is shown in the figure below.

Figure 3-16 Landscape masterplan
Source: Urbis

3.7.2 Joint use agreement

A playing field will be located to the north of the site (labelled "14" in the landscape masterplan shown above). This field will be subject to a joint use agreement, with the field available for school use during school hours. This field is not proposed under this application and will be delivered by others under a separate approval process.

Discussions regarding the joint use agreement are currently underway. The agreement will be finalised prior to determination of this SSDA.

As discussed at section 3.2 above, the play space requirements of Stage 1 will be met by the play space within the subject site proposed under this SSDA. The additional play space requirements resulting from Stage 2 will be met by the future playing field to the north. Stage 2 will not operate until the northern playing field has been delivered.

3.8 Site access and parking

3.8.1 Access

Pedestrian access

The school includes two pedestrian access points including a main entry off Burroway Road and a secondary entry off the future eastern road, as shown in the access diagram below. All access points will be controlled by security gates and fencing.

Vehicular access

Vehicular access will occur via Burroway Road and via the future road along the eastern boundary. This eastern road does not form part of this application but will be delivered under a separate approval process. Eight spaces for kiss-and-ride are proposed along Burroway Road.

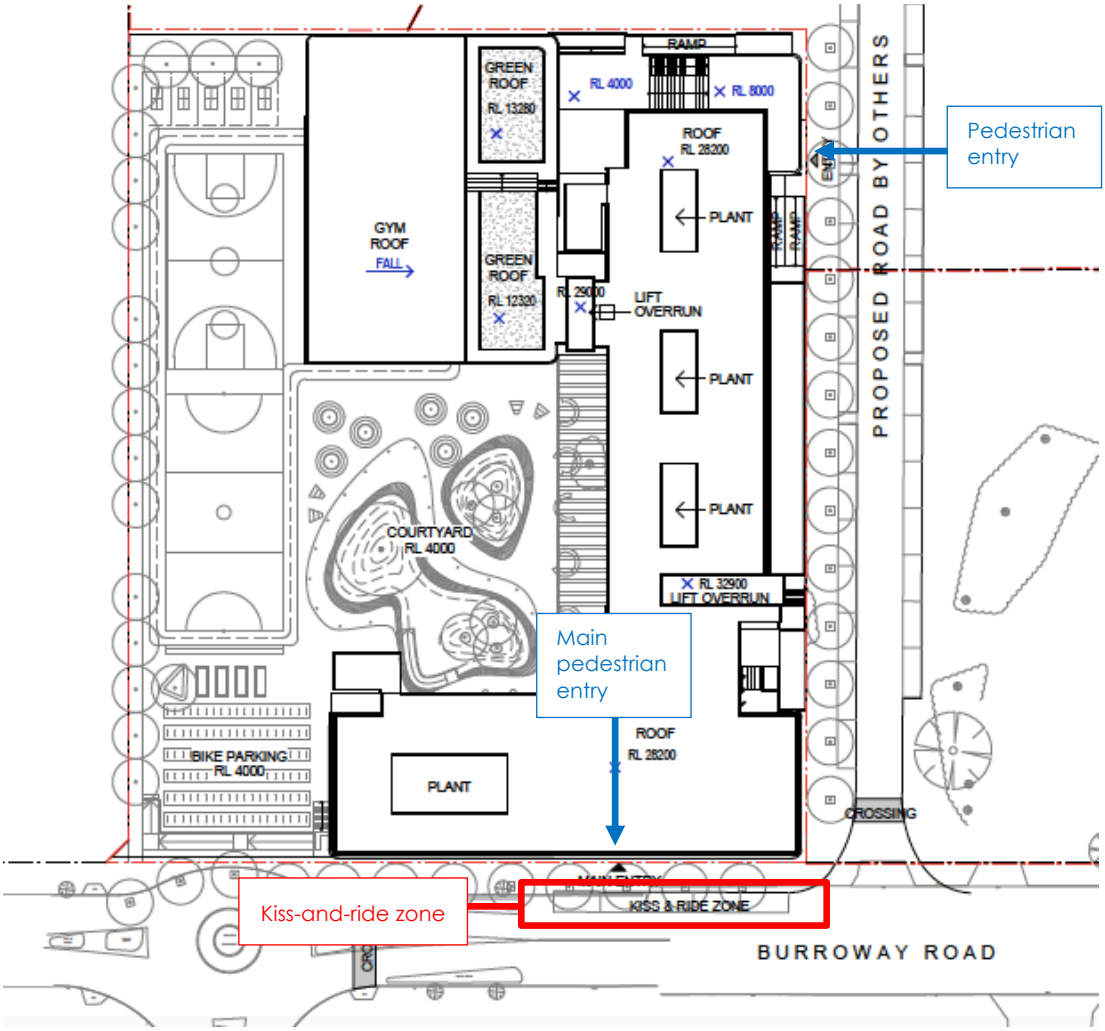

Figure 3-17 Access diagram
Source: Woods Bagot modified by Mecone

Servicing

Servicing and waste collection will occur along the future eastern road (delivered by others) with direct level on-street access to the storerooms. It is expected the eastern road will be completed prior to commencement of school operations. Waste collection is discussed in further detail at section 7.15 of this EIS.

3.8.2 Parking

A total of 30 car parking spaces will be provided along the future eastern road. Staff will utilise the parking spaces during school hours, and the spaces will be available to the public out of school hours. No parking has been provided for students, as it is

expected the majority of students will arrive by public transport or active transport, with a small percentage dropped off at the kiss-and-ride.

As noted above, the future eastern road form does not form part of the application and will be delivered through a separate approval process. The intention is for the road to be delivered prior to opening of the school. However, if the road is not delivered in time, staff will need to use the off-street parking available in nearby commercial car parks on a temporary basis until the 30 parking spaces along the eastern road are delivered. This is discussed in further detail at section 7.5 of this EIS.

Bicycle parking

A total of 258 spaces for bicycles/rideables will be provided in the southwestern corner of the school site, as identified in the image below. An allocation of two-thirds of the space to bicycles and one-third to rideables (e.g., scooters) is proposed to cater for different active transport modes.

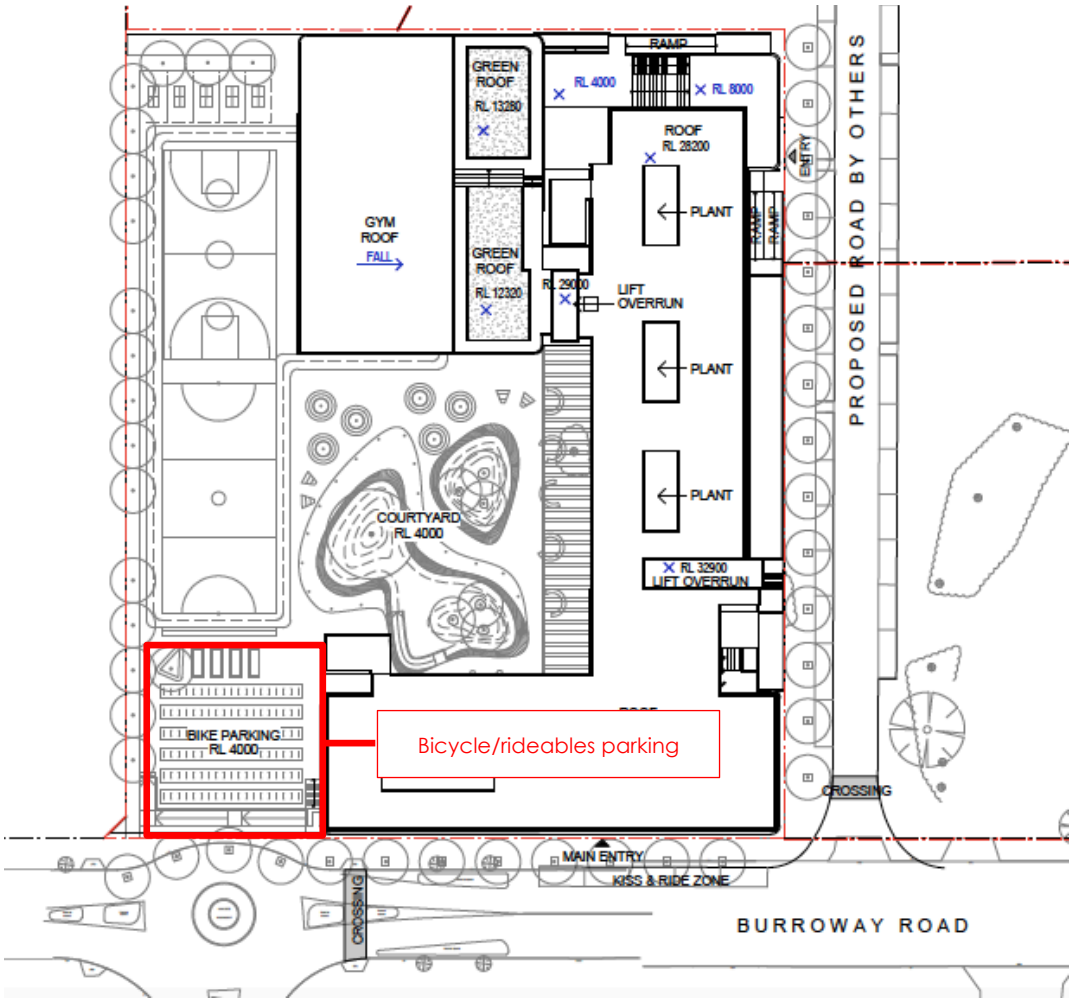

Figure 3-18 Location of bicycle parking
Source: Woods Bagot modified by Mecone

3.9 Construction details

Construction is anticipated to commence in March 2022, with main works completed by March 2023.

Construction will be undertaken during the following standard construction hours:

- Monday to Friday: 7.00am to 5.00pm.

- Saturdays: 8.00am to 1.00pm.
- No work on Sunday and public holidays.

Approximately 500 construction jobs will be required during peak construction time.

3.10 Operation details

The school will be able to accommodate up to 850 students following the competition of Stage 1 and up to 1,530 students following completion of Stage 2.

The school is anticipated to generate 80 jobs including administrative, teaching and support staff.

The proposed operating hours are 8:00am to 4:00pm Monday to Friday.

No community use of school facilities is proposed at this stage.

3.11 Signage

One sign is proposed, namely a wall sign above the main school entry along Burroway Road, as shown in the elevation extract below. The sign will identify the name of the school (to be determined) and will be non-illuminated.

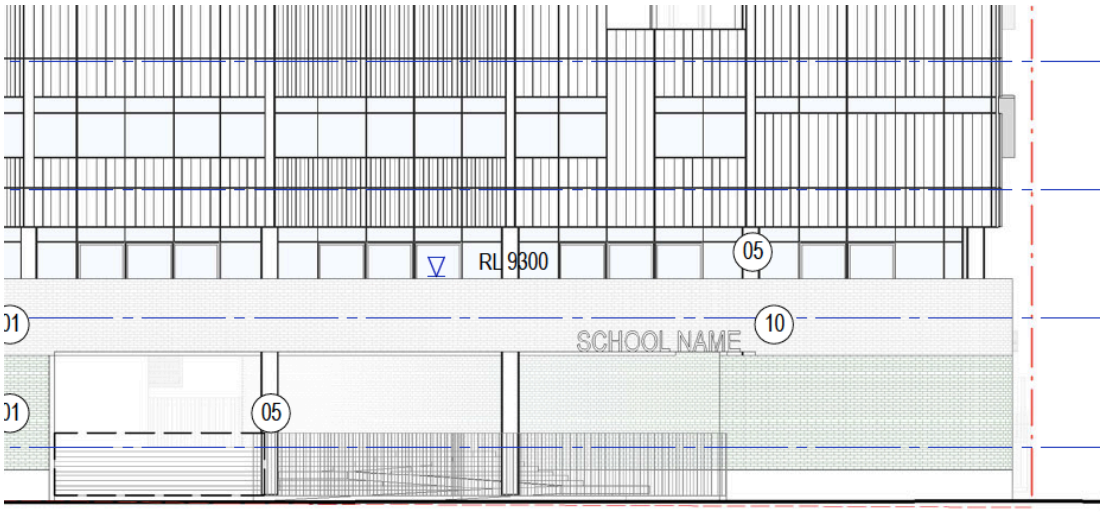

Figure 3-19 South elevation extract showing signage
Source: Woods Bagot

4 Strategic context

The proposal is compatible with the strategic context in the State and region as indicated in the table below.

Table 4-1 Assessment against strategic plans

Strategic Plans	Purpose	Comments
NSW State Priorities	The 14 NSW State Priorities were unveiled in 2019 in order to provide a framework for economic growth, infrastructure delivery, service provision, and community wellbeing and safety across NSW.	The proposal seeks to construct a new high school at Wentworth Point to meet the growing student demand within the Sydney Olympic Park area. Through its provision of important educational services, the proposal supports the priority of "Bumping up education results for children". The other priorities are generally not relevant given the proposal's nature and location.
State Infrastructure Strategy 2018 – 2038 Building the Momentum	The State Infrastructure Strategy is a 20-year infrastructure investment plan for the NSW Government that places strategic fit and economic merit at the centre of investment decisions. The Strategy's strategic objective for health infrastructure is to "Deliver infrastructure to keep pace with student numbers and provide modern, digitally-enabled learning environments for all students". The Strategy seeks to address enrolments in schools which are expected in to increase by about 25% over the next 20 years.	The proposal directly responds to the projected student growth and demand within the SGC. The proposal aligns directly with the strategies response to improve asset utilisation and management by adopting an efficient multi-storey design achieving a bigger school on a smaller site and providing for adaptable teaching and learning spaces for students.
Future Transport Strategy 2056	The Future Transport Strategy 2056 is an update of the NSW Long Term Transport Masterplan. It sets the 40-year vision, directions and outcomes framework for transport customer mobility in NSW. The Strategy will be delivered through a suite of accompanying plans, including Services and Infrastructure Plans and issue-based or placed-based Supporting Plans.	The proposal aligns with the vision for Greater Sydney to become a 30-minute city where people can conveniently access jobs, services and schools within 30 minutes by public or active transport. The site is located in close proximity to high density residential development, maximising the opportunity for students to walk or cycle to school. Infrastructure upgrades proposed will also promote greater mode share of walking and cycling among students and staff.

Strategic Plans	Purpose	Comments
Crime Prevention through Environmental Design (CPTED) Principles	There are four principles that need to be used in the assessment of development applications to minimise the opportunity for crime which include: 1. Surveillance 2. Access control 3. Territorial reinforcement 4. Space management	The proposal has been designed in accordance with the four key principles of CPTED including surveillance, access control, territorial reinforcement and space management. Refer to the CPTED Report at Appendix 27 for further discussion.
Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)	Better Placed is an integrated design policy that seeks to create a clear approach for places we work, live and play. The Policy aims to ensure good design that will deliver the architecture, public places and environments we want to inhabit now and those we make for the future. Inclusiveness, connectivity and diversity is important to provide optimal opportunity and reduce disparity within the design of buildings, places and spaces.	In accordance with the objectives of the Policy, the proposal is sustainable, functional, sensitive to its context and visually distinctive. Notably, the design has been reviewed by the State Design Review Panel, and a response to the panel's comments are provided in the Architectural Design Report at Appendix 3.
Healthy Urban Development Checklist	The purpose of the Checklist is to assist health professionals to provide advice on urban development policies, plans and proposals. Principally, the Checklist is about helping to answer: • What are the health effects of the urban development policy, plan or proposal? • How can it be improved to provide better health outcomes?	The proposal is consistent with the Checklist as it will provide for a new development characterised by well-designed open spaces, quality environment, opportunity for social cohesion, healthy food and high quality learning facilities.
Draft Greener Places Design Guide	The draft Greener Place Design Guide provides information on how to design, plan and implement green infrastructure in urban areas throughout NSW. The draft guide provides strategies, performance criteria and	In accordance with the Guide's guiding principles, the proposal successfully integrates building form and green open space; provides for accessible and connected open space; features multifunctional green space that simultaneously provides environmental performance and enhances facility

Strategic Plans	Purpose	Comments
	recommendations to assist planning authorities, design and development communities to deliver green infrastructure. The Guide is centred around the following four guiding principles: 1. Integration 2. Connectivity 3. Multifunctionality 4. Participation	amenity; and incorporates the needs of various stakeholders including students, staff, community and local Aboriginal stakeholders. Furthermore, the site will benefit from 38 new tree plantings.
The Greater Sydney Region Plan – A Metropolis of Three Cities	A Metropolis of Three Cities sets a 40-year strategic vision and establishes a 20-year plan to manage growth and change for Greater Sydney in the context of social, economic and environmental matters. The Plan is built on a vision of three cities where most residents live within 30 minutes of their jobs, education and health facilities, services and great places.	Wentworth Point is identified within the Greater Parramatta Growth Area which is anticipated to facilitate greater capacity for new homes in the right locations. Accommodating homes needs to be linked to local infrastructure including access to schools. The proposal will ensure a new high school can be delivered to meet Sydney's growing educational needs and take enrolment pressure off existing schools for the future population in Wentworth Point and surrounding localities.
Central District Plan	The Central City District Plan provides a 20-year plan to manage growth and achieve the long-term vision for Greater Sydney. The Central District Plan includes a range of priorities and actions to achieve a liveable, productive and sustainable future for the District.	DoE estimates an extra 89,360 students will need to be accommodated in both government and non-government schools in the Central City District by 2036, with Blacktown and Parramatta Council set to take up to 32% of the District's increase in school-aged children. The Plan identifies Wentworth Point as being in the Greater Parramatta Growth Area, which is a state-led initiative to provide additional housing supply. Planned precincts such as Wentworth Point require investment and infrastructure in essential community infrastructure such as health facilities, schools, open space and roads to meet the growing population needs. The Plan identifies opportunities for increased shared use and more flexible use of under-utilised facilities such as schools and open space facilities which can be used for community, sports, arts, screen,

Strategic Plans	Purpose	Comments
		cultural and recreational use when they are not otherwise required. The proposal will align with the Plan by providing essential community infrastructure within a planned growth area that optimises land use and contributes to the vision of a 30-minute city.
Greater Parramatta Interim Land Use and Infrastructure Implementation Plan (LUIIP)	The Interim Plan identifies how more jobs, homes and essential services will be accommodated in the priority growth area over the next 20 years. It includes a land use framework to guide future redevelopment of the priority growth area, identifies key actions for the short term and allows us and other government agencies to identify and plan for the infrastructure required to unlock its potential.	The Interim Plan identifies a new school as a committed state infrastructure within the priority growth area of Greater Parramatta. The provision of new/upgrading schools and providing access to open spaces are identified as a key action in supporting growth within Greater Parramatta.
Great Parramatta and Olympic Peninsula Place-based Infrastructure Compact Pilot (PIC)	The place-based infrastructure compact (PIC) is a strategic planning model that looks holistically at a place to better align growth with the provision of infrastructure and services and provides a collaborative way for NSW Government agencies, utility providers and local council's to answer critical questions for transforming areas.	The proposal is identified as one of the short-term infrastructure priorities for Greater Parramatta and Olympic Park peninsula required to address demands that have arisen from sustained growth over the past five years and the pipeline of approved development.
Parramatta River Masterplan	The Parramatta River Master Plan outlines a ten-step plan to make the Parramatta River swimmable again with 12 new sites scoped as swimming areas under the master plan.	The proposal proposes to establish a new school in proximity to the Parramatta River. Consideration in minimising impacts caused by stormwater run-off has been incorporated into the design of the school.
Parramatta Local Strategic Planning Statement	The Local Strategic Planning Statement (LSPS) City Plan 2036 sets out a 20-year land use planning vision for the City of Parramatta and is supported by the Local Housing Strategy and Local Employment Strategy. The plan aims to balance the needs for housing and	Wentworth Point is identified as an urban growth precinct forecasted to accommodate an additional 8, 980 dwellings to 2036. The expected growth in the City of Parramatta is recognised to place further stress on existing community infrastructure with the ability to provide additional school capacity particularly challenging. Sydney Olympic Park is

Strategic Plans	Purpose	Comments
	economic growth, whilst ensuring the protection of heritage, local character and housing diversity. Additionally, the Plan aims to protect the City's environmental assets and improve the health and liveability of the City.	identified to undergo a revitalisation of the precinct to include a new town centre, educational facilities, shopping precinct, new homes and jobs. This proposal seeks to provide for a new high school at Sydney Olympic Park as part of a commitment to deliver educational establishments in the area.

5 Statutory context

All relevant Commonwealth, state and local legislative requirements are considered in this section.

5.1 Planning approval pathway

The SRD SEPP nominates certain types of development as either SSD, state significant infrastructure or regionally significant developments.

Under Clause 15(1) of Schedule 1 of SRD SEPP, development for the purpose of a new school, regardless of the capital investment value, is categorised as SSD. The consent authority under Section 4.5 of the EP&A Act is the Minister for Planning and Public Spaces or their delegate. The proposal is for the purposes of a new school and is therefore classified as SSD.

The EP&A Act establishes the assessment framework for the proposal. Section 4.12(8) requires that a development application for an SSD be accompanied by an EIS prepared by or on behalf of the applicant in the form prescribed by Schedule 2 of the Environmental Planning and Assessment Regulation 2000.

SEARs were issued for the proposal on 19 July 2021. A SEARs reference table is provided in section 1.5 of this EIS to show where the requirements have been addressed in the EIS, with the issued SEARs provided at Appendix A.

5.2 Permissibility

The site is zoned part R4 High Density Residential, part B1 Neighbourhood Centre and part RE1 Public Recreation under the Auburn Local Environmental Plan 2010 (ALEP 2010). Educational establishments are permitted with consent in the R4 and B1 zones but prohibited in the RE1 zone. Notwithstanding, consent can be granted to the proposal pursuant to Clause 4.38(2) of the EP&A Act, which allows for consent to be granted to partly prohibited SSD.

Under Section 4.15(1)(a)(i) of the EP&A Act, the consent authority is required to take into consideration any environmental planning instrument, which includes ALEP 2010. Clause 2.3(2) of ALEP 2010 states, "The consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone".

On this basis, it is acknowledged that the consent authority must have regard to the objectives of the zones in which the land is located in its assessment of the application, including the RE1 zone. It is emphasised, however, that the consent authority does not need to be satisfied that the development is consistent with the zoning.

The RE1 zone objectives are as follows:

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To protect open space at riparian and foreshore locations.*

In response to these objectives, it is noted that:

- The RE1 land within the site is extremely minor (approximately 70m^2) as shown in the figure below, and therefore the reduction in public recreation space resulting from the proposal is negligible.
- The RE1 land defined in ALEP 2010 reflects an outmoded masterplan for the peninsula.
- The proposal provides for a use that is compatible and suitably integrated with the future park to the north.
- The site's RE1 land is not currently used for recreational purposes and has no notable ecological value. Accordingly, the proposal will not disrupt any existing recreational activity on the land or harm any flora or fauna habitat.

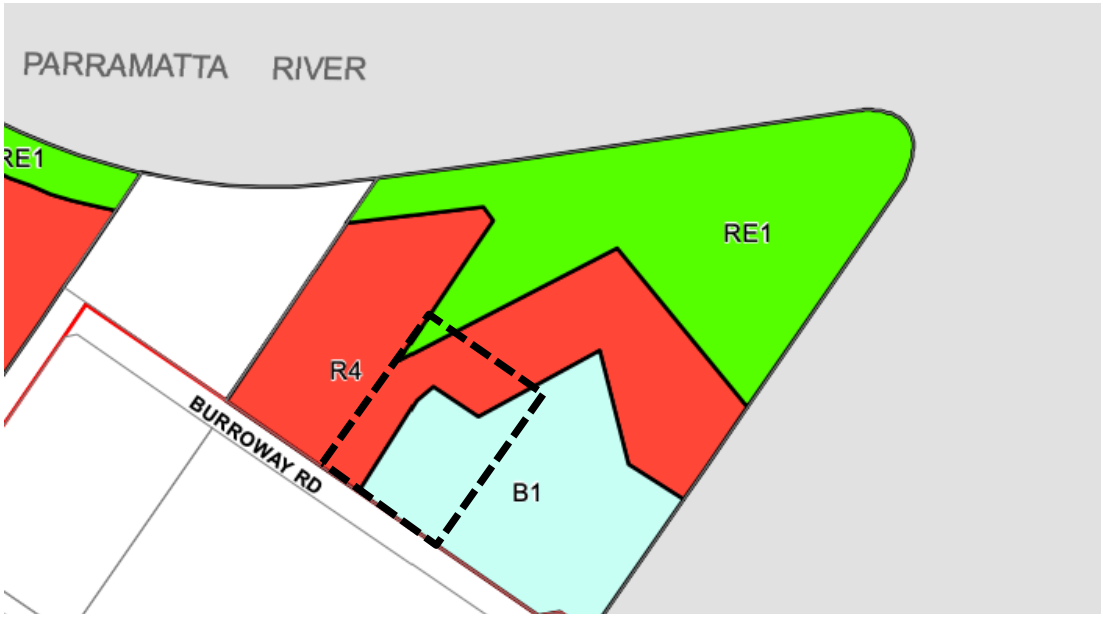

Figure 5-1 Land use map
Source: ALEP 2010

5.3 Additional approvals required

A permit under Section 138 of the Roads Act will be required for various works in the road reserve, such as the kiss-and-ride and delivery zones. It is noted that Section 4.42 of the EP&A Act identifies that a Section 138 permit cannot be refused if it is necessary for carrying out an SSD.

No requirements for other approvals have been identified at this stage. It is noted that Section 4.41 of the EP&A Act identifies a number of approvals that do not apply to SSDAs.

5.4 Environmental Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) is federal legislation which provides a legal framework to protect and manage nationally important flora, fauna, ecological communities and heritage places defined as "matters of national environmental significance" (MNES). A referral must be made to the Australian Government Minister for the Environment for actions that are likely to have a significant impact on MNES.

The proposal is not likely to have a significant impact on MNES, and therefore a referral to the Minister for the Environment is not required.

5.5 EP&A Act

The objects of the EP&A Act have been considered in preparing the EIS and have been summarised in the table below.

Table 5-1 Objects of the EP&A Act

Objects of the EP&A Act	Comments
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources	The proposal provides important social infrastructure in the Wentworth Point area that responds to the growing demands that have arisen from sustained growth over the past five years and the pipeline of approved development.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The development incorporates a number of ESD measures as outlined in section 7.6 and the ESD report at Appendix 7. The proposal is targeting a 4 Star Green Star rating.
(c) to promote the orderly and economic use and development of land	The proposed development has adopted a multi-storey design achieving a bigger school on a smaller site and providing for adaptable teaching and learning spaces for students. The site is located directly adjacent the high-rise developments of Wentworth Point, maximising the opportunity for students to walk or cycle to school.
(d) to promote the delivery and maintenance of affordable housing	This objective is not applicable to this proposal.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats	The proposal has been designed and will operate in a manner that will minimise impacts to the environment. A BDAR waiver has been issued for the proposal in recognition of the proposal's minimal biodiversity impacts.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)	The built and cultural heritage of the site and adjoining properties has been considered as part of this EIS. The ACHAR at Appendix 9 concludes that the proposal will have no adverse impacts on Aboriginal cultural heritage, and the Statement of Heritage Impact at Appendix 8 concludes that the proposal will have no impacts on any heritage items or views. It is further noted that engagement with Aboriginal stakeholders has identified opportunity for Connection to Country to inform the design of the school.

Objects of the EP&A Act	Comments
(g) to promote good design and amenity of the built environment	The proposal features a high quality, purpose-built design that provides high amenity for users.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants	The proposal has been designed in compliance with relevant BCA and DDA standards for building construction.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State	The proposal is the result of consultation with a range of state government agencies and the City of Parramatta Council detailed in section 6 of this EIS.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The local community and other stakeholders were consulted prior to lodgement as discussed in section 6 of this EIS, and the community will be able to provide further input during the formal exhibition process.

5.6 Biodiversity Conservation Act 2016

The Biodiversity Conservation Act 2016 (BC Act) is the key piece of legislation that identifies and protects threatened species, populations and ecological communities within NSW.

Clause 7.9 of the BC Act requires any application for SSD to include a biodiversity development assessment report (BDAR) "unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values".

A request to waive the requirement for a BDAR was submitted to DPIE on 25 July 2021. In recognition of the site's lack of impact on biodiversity values, BDAR waivers were granted by Environment, Energy and Science Group (as the delegated Environment Agency Head) and DPIE (Planning Agency Head) on 7 June 2021 and 23 July 2021, respectively. These waivers are attached at Appendix 11.

5.7 SREP (Sydney Harbour Catchment) 2005

The Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP 2005) covers all the waterways of the harbour, the foreshores and entire catchment. It establishes a set of planning principles to be used by Councils and sets out a range of matters for consideration by consent authorities in assessing development within foreshore and waterway areas.

Under the SREP 2005 mapping, the site is located within the Sydney Harbour Catchment boundary but is not located within a critical habitat area, foreshores and waterways area, heritage area, special purposes area or strategic foreshore.

Clause 13 of the SREP 2005 sets out a number of planning principles for land within the Sydney Harbour Catchment. These principles have been generally considered in the design or the proposal. A key relevant principle, at Clause 13(f), states that "development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour". The proposal will have

acceptable view impacts appropriate to the high-density context, as discussed at section 7.4 of this EIS.

5.8 State Environmental Planning Policies

5.8.1 State Environmental Planning Policy (State and Regional Development) 2011

State Environmental Planning Policy (State and Regional development) 2011(SRD SEPP) 2011 sets out categories of development that will qualify as state or regionally significant development.

Item 15 of Schedule 1 of the SRD SEPP refers to Educational Establishments and states:

> *(1) Development for the purpose of a new school (regardless of the capital investment value).*
>
> *(2) Development that has a capital investment value of more than $20 million for the purpose of alterations or additions to an existing school.*
>
> *(3) Development for the purpose of a tertiary institution (within the meaning of State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017), including associated research facilities, that has a capital investment value of more than $30 million.*

As the proposal is development for the purpose of a new school, the development is required to be assessed as SSD.

It is also noted that Part 2 Clause 11 of the SRD SEPP states that DCPs do not apply to SSD. Nonetheless, the Wentworth Point DCP has been considered as part of this EIS as required by the project SEARs.

5.8.2 State Environmental Planning Policy (Infrastructure) 2007

The State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) aims to facilitate the effective delivery of infrastructure across the state providing improved regulatory certainty and efficiency and providing for consultation with relevant public authorities about certain developments during the assessment process or prior to development commencing.

No clauses of the ISEPP are directly relevant to the proposal. The development is not traffic generating development under Schedule 3 of the ISEPP and does not adjoin a classified road.

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

State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP) aims to facilitate the effective delivery of education establishments and early education and care facilities across the state.

The design quality principles in Schedule 4 of the Education SEPP are addressed in the table below.

Table 5-2 Education SEPP design quality principles

Principle	Architect's comment
Principle 1: Context, built form and landscape	Located towards the northern tip of Wentworth Point, the proposed high school inhabits a site that was once mostly underwater – the shallow mudflats that lined what is now known as Parramatta River. It sits on the traditional lands of the Wann or Wangal people and was a place to visit for hunting and fishing. Following European occupation, the river was dredged to allow the passage of shipping vessels. The mudflats were reclaimed to create a flat tract of land for industrial use, leaving it significantly contaminated. This historical narrative underpins the design of the school. As the first permanent structure to sit on this land, the proposal aspires to regenerate – both physically and spiritually – the contaminated land and provide a civic anchor for the burgeoning Wentworth Point community. A place of gathering, discussion and learning, the school will inspire connections to Country through the re-telling of old stories and the creation of new ones. The building comprises two 60m-long, six-storey wings, lining the southern and eastern boundaries of the site. This configuration ensures maximum solar access to play spaces and forms an internal landscaped courtyard – the heart of the school, onto which all teaching spaces open out. Given the small site area, careful attention has been paid to effectively balancing the conflicting imperatives of minimising building height and maximising play space on ground level. The southern wing, pushed to the site boundary, establishes a confident urban presence along the key local artery of Burroway Rd. The main entry is expressed legibly in the massing as a sculpted recess. The eastern wing sets back along the narrower eastern road to create a landscaped setback and buffer. The western extents of the proposed building maintain an unobstructed viewing corridor that continues the line of Wentworth Place all the way to the River. The architectural expression of the teaching wing derives from the flat terrain, the wide horizon and the big sky – powerfully affective attributes of the site. the lower levels, containing the extroverted, community-inflected spaces, anchor to the ground in heavy masonry. The upper levels, containing the teaching spaces, reach up and out to the sky, their subtly reflective metal cladding a canvas for the shifting sky. The two expressions are distinguished by a protective recess – the horizon line.
Principle 2: Sustainable, efficient and durable	The proposal espouses a multi-dimensional notion of sustainability, incorporating measures to minimise consumption and waste both now and throughout its lifespan. The long-term future of the school will hinge on its ability to become an integral piece of the local community. The building's durable materiality, its openness to potential shared use with the community, its ability to adapt over time and its consciously civic stature will work towards this goal. Factors such as air quality, ventilation, natural lighting, thermal comfort and acoustic performance are known to have profound impacts on teacher and student wellbeing. Creating learning environments that deliver these qualities is a core priority of the design. All teaching spaces are naturally lit yet protected from direct sunlight. To ensure high internal air quality, each teaching space has access to operable windows as part of a mixed-mode approach to ventilation.

Principle	Architect's comment
	Passive design strategies are fundamental to the school's configuration. The majority of façade oriented to the north is protected by the deep, external walkways providing shading during warmer months, while allowing passive heating in winter. Elsewhere, exposed façades are protected by integrated external shading fins. The façade design strives to provide glazing only where required for natural lighting and ventilation. Keeping glazing to a minimum is not only cost-effective but enhances the building's thermal qualities. The materials selected for the project are intended to be robust, durable and suited to the particular challenges of a school environment. The base of the building is clad in masonry – a combination of glazed and dry-pressed bricks. Where the building sits on the site boundary, glazed brickwork up to a certain height provides a resistant, easy-to-clean external surface. External balustrades, handrails and other metal components are made from highly durable galvanised steel. Equally, the durability of internal fixtures and finishes is considered. Materials and systems use are to be tried-and-tested, rather than experimental, to ensure reliability, and there will be an emphasis on supporting local manufacturing and production.
Principle 3: Accessible and inclusive	Acknowledging that schools are vital pieces of social infrastructure, careful attention has been paid to the proposed high school's external appearance and interfaces with the public domain. The southern teaching wing sits confidently along the edge of Burroway Road where it is clearly visible from all approaches. The main entrance is marked by the creation of a deep recess in the brick base that gives access to the school's protected courtyard. Along the eastern road, the brick base juts out to mark a secondary entrance which may also be used by the community to access shared facilities if appropriate. Equal access is considered throughout the building. As Burroway Road sits 1.2m below the ground floor level, ramp access is provided at the main entry and at the bike store adjacent. The eastern road slopes up to meet ground floor level along the eastern wing, allowing level access at the northern entry point. As travel between levels will be an inevitable aspect of students' daily lives in a six-storey building, four large passenger lifts are provided for those who require them. The lifts are clustered in pairs to reduce wait times, and each pair serves a different zone within the building. Movement through the building takes place along linear external walkways – a simple, visible, legible configuration that is replicated at each level. To aid in distinguishing one level from the next, the facades along the external walkways are coloured distinctly: shades of green for ground and level 1, and graduating tones of blue from level 2 to 5. Stairs and entrances to teaching spaces are highlighted in complementary shades of orange and red.
Principle 4: Health and safety	The proposal seeks to provide a healthy, safe learning environment for all students, promoting active lifestyles, social cohesion, privacy and security at all times. The arrangement of the two teaching wings and school hall create a protected courtyard, ensuring privacy from the tall residential towers overlooking the site, and separating the play space and walkways from pollution generated by traffic beyond.

Principle	Architect's comment
	A diversity of places to play and gather are integrated into the building and landscape. Undercroft spaces, pergolas and tree canopies will provide opportunities for shade and protection from the elements. Play space on school grounds may be supplemented by access to the playing field, subject to a joint use agreement. Circulation within the building takes place predominantly along external walkways that line each teaching wing; four staircases and two pairs of lifts allow access between floors. All circulation spaces are configured to promote passive surveillance and easy supervision – walkways are wide and linear, and staircases are clad in transparent metal mesh. The design of toilets and change rooms similarly integrates anti-bullying measures, including preserving sight lines and avoiding dead end corridors. The building is used as the secure line where possible, and elsewhere fencing lines the site perimeter. Though fencing is a necessary security measure, it is anticipated that the style of fencing will permit a sense of transparency and permeability and may be softened by climbing vegetation. Consideration of the school's configuration and secure line allows for multiple modes of operation. During school hours, secure access points are provided at the main entry and bike store which may be closely monitored by the administration offices adjoining them. Facilities that may be used be the community, or in conjunction with the playing field (such as the hall, change rooms, canteen, toilets and studios) are clustered so as to contain out-of-hours access.
Principle 5: Amenity	The proposed high school strives to create a variety of flexible, engaging learning environments that instill a sense of place. To celebrate the school's unique proximity to the Parramatta River, internal teachings spaces offer generous views out, and the ground level play space provides strong visual connections to the playing field and beyond. The landscape design by Urbis integrates generous planting, mature trees, sculpted hummocks, seating and various other features to producing spaces that invite a range of formal and informal uses. The landscape is inherently didactic, reproducing local ecologies and featuring Indigenous plant species and production gardens. Generous, amphitheatre-like stairs adjoining the main entry and to the hall to the north promote informal learning, supplementing the more formal teaching spaces. Similarly, specialist labs and workshops are configured to open out to the open-plan fulcrum space between the two teaching wings, allowing students to work outdoors and showcase their activities to the wider school. The school design maintains and enhances amenity to the public domain. The placement of the southern teaching wing and hall preserves a viewing corridor from Burroway Rd through to the river foreshore, enhancing a sense of proximity to the river and parklands. The teaching wings and hall enclose a protected courtyard, preventing noise generated within the school impacting negatively on neighbours.
Principle 6: Whole of life flexible and adaptive	The design of the proposed high school is closely informed by the SINSW initiative Modern Methods of Construction (MMC): a set of guidelines for school design and construction based on a "kit of parts" approach. The two teaching wings are based on the MMC universal planning grid (7.5 x 9m) – each wing is 60m in length, or 8

Principle	Architect's comment
	planning bays. A reinforced concrete sub-structure aligned to the planning grid permits varied and flexible arrangements of teaching spaces. Overlaid building elements, from internal partitions, fixtures and services to external façade panels, are intended to be modular. In the future, the building will be able to adapt to changing needs – teaching spaces can be refreshed or re-configured as required. Similarly, as building components reach the ends of their lifespans, they may be simply replaced without compromising the overall structure. Should there no longer even be a need for a school in this location, the structural grid is equally suited to commercial, residential and other uses.
Principle 7: Aesthetics	The elemental articulation of the building is based on an interpretation of the site and local landscape. The six-storey teaching wings are broken into three components: a solid brick base, united with the earth, a wide horizon expressed as a sheltering recess, and a metal-clad upper portion reflecting the sky. Breaking up the building in this way creates a pleasing composition of elements that engage the building in a dialogue with its urban and natural context. The inward- and outward-facing elevations are expressed deliberately differently. The southern and eastern facades, facing Burroway Road and the eastern road respectively, are consciously urban in presentation. Arrangements of façade panels that vary based on the needs of different teaching spaces within form a serendipitous composition – an abstraction of the clouds floating beside them – celebrating the different learning activities taking place within. By contrast, the northern facades that are continuously animated by the movement of students along external walkways are distinctly joyful and fun. Here, the window walls are saturated in calming tones of green and blue, with circulation elements and entryways defined in complementary oranges and reds.

Clause 42 of the Education SEPP allows for a school SSD development to contravene a development standard in the LEP. The proposal seeks to contravene a portion of the ALEP 2010's maximum building height standard, and this contravention is permitted under Clause 42 of the Education SEPP. Justification for the contravention is provided in the ALEP 2010 discussion at section 5.9 of the EIS.

Clause 57 of the Education SEPP, which relates to traffic-generating development, is applicable given the proposal will accommodate more than 50 students at a new premise. As such, the proposal is to be referred to TfNSW.

5.8.4 State Environmental Planning Policy No. 64 – Advertising and Signage

One sign is proposed as part of the application, namely a wall sign above the Burroway Road main pedestrian entry. The sign is consistent with the aims of State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64) in that it is compatible with the desired amenity and character of the area, provides effective communication in a suitable location and isof high quality design and finish.

SEPP 64 contains no detailed controls directly applicable to the proposed signage, and consultation with TfNSW is not required given the size and location of the signage.

An assessment against the general criteria in Schedule 1 of SEPP 64 is provided in the table below.

Table 5-3 SEPP 64 Schedule 1 assessment

Provision	Assessment
(1) Character of the area Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located? Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	The proposed sign is located within a mixed use locality which include a number of other business identification signs associated with retail centres (e.g. Marina Square, Pierside) and Wentworth Point Public School with various signage types which vary in form and size. The proposed signage is consistent with surrounding development and compatible with the existing and desired character of the area.
(2) 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 landscapes or residential areas?	The new signage will not detract from the visual amenity or visual quality of identified special areas. There are no sensitive or heritage areas in the vicinity.
(3) Views and vistas Does the proposal obscure or compromise important views? Does the proposal dominate the skyline and reduce the quality of vistas? Does the proposal respect the viewing rights of other advertisers?	The proposed signage will not obscure or compromise any important views nor will it dominate the skyline or quality of vistas.
(4) Streetscape, setting or landscaping Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape? Does the proposal contribute to the visual interest of the streetscape, setting or landscape? Does the proposal reduce clutter by rationalising and simplifying existing advertising? Does the proposal screen unsightliness? Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The scale, proportion and form of the signage will be largely consistent with other signage in the surrounding area and contribute positively to the visual interest of the streetscape. The proposed signage will not require any vegetation management.

Provision	Assessment
Does the proposal require ongoing vegetation management?	
(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? Does the proposal respect important features of the site or building, or both? Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The size, design and materials of proposed signage is compatible with the proposal. The proposal is considered compatible within the public domain and the broader locality.
(6) Associated devices and logos 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?	The proposed signage is not illuminated. Regular checking, maintenance and cleaning will be conducted.
(7) Illumination Would illumination result in unacceptable glare? Would illumination affect safety for pedestrians, vehicles or aircraft? Would illumination detract from the amenity of any residence or other form of accommodation? Can the intensity of the illumination be adjusted, if necessary? Is the illumination subject to a curfew?	The proposed signage is not illuminated.
(8) Safety Would the proposal reduce the safety for any public road? Would the proposal reduce the safety for pedestrians or bicyclists? Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	There will be no change to sightlines as a result of the signage, whether for pedestrians, children or others.

5.8.5 State Environmental Planning Policy No. 55 – Remediation of Land

State Environmental Planning Policy No. 55 Remediation of Land (SEPP 55) aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

Clause 7 of SEPP 55 requires that the consent authority consider whether the land is contaminated and whether it is or can be made suitable for the proposed use.

The site was formerly used for industrial purposes and is contaminated. A Preliminary Site Investigation, Detailed Site Investigation and Remediation Action Plan (RAP) have been prepared accordingly. Provided the actions in the RAP are implemented, the consent authority can be satisfied, in accordance with Clause 7 of SEPP 55, that the site can be made suitable for the proposed school use. Refer to section 7.16 of this EIS for further discussion.

5.8.6 Draft State Environmental Planning Policy (Remediation of Land)

The draft State Environmental Planning Policy (Remediation of Land will retain elements of SEPP 55, and add new provisions to establish a modern approach to the management of contaminated lands. New provisions will be added in the new SEPP to:

- Require all remediation work that is to carried out without development consent, to be reviewed and certified by a certified contaminated land consultant.
- Categorise remediation work based on the scale, risk and complexity of the work.
- Require environmental management plans relating to post-remediation management of sites or ongoing operation, maintenance and management of on-site remediation measures (such as a containment cell) to be provided to council.

The proposal will be able to comply with any future provisions which are to be added to the new SEPP as required.

5.8.7 Draft State Environmental Planning Policy (Environment)

The draft State Environmental Planning Policy (Environment) consolidates and simplifies seven existing SEPPs. The Explanation of Intended Effect (EIE) for the draft Environment SEPP was on exhibition from 31 October 2017 until 31 January 2018. None of the SEPPs to be consolidated are applicable to the proposal. The site is not identified to be located within any urban bushland, waterways or protected areas.

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

DPIE is currently conducting a review of Education SEPP and recently sought feedback on proposed amendments to further streamline planning processes and ensure consistency in the delivery of schools, child-care, TAFEs and universities.

The proposed amendments aim to streamline the approval processes and proposes other changes related to tertiary and child-care centres and other existing policy anomalies.

Whilst the proposed amendments will enable more streamlined approval processes to build new facilities in the future, the proposal for a new high school will still require approval via an SSD application pathway. It is expected that the proposed school will be able to comply with any future provisions which may relate to the site.

5.9 Auburn Local Environmental Plan 2010

The Auburn Local Environmental Plan 2010 (ALEP 2010) is the relevant local environmental planning instrument applying to the site. The table below addresses key sections of the LEP.

Table 5-4 Auburn LEP 2010 assessment

Clause	Details	Comment
Land Use Table	The site is zoned part R4 High Density Residential, part B1 Neighbourhood Centre and part RE1 Public Recreation.	Educational establishments are permitted with consent in the R4 and B1 zones but prohibited in the RE1 zone. Notwithstanding, consent can be granted to the proposal pursuant to Clause 4.38(2) of the EP&A Act, which allows for consent to be granted to partly prohibited SSD. Refer to further discussion below the table.
4.1 Minimum subdivision lot size	No minimum lot size control applies to the site.	Not applicable.
4.3 Height of buildings	The site is subject to a maximum height of part nil, part 19m, part 25m and part 88m. The 19m control applies to a portion of the R4 land; the 25m control applies to the B1 land and a portion of the R4 land; the 88m control applies to a portion of the R4 land; and no height control applies to the RE1 land.	The proposed maximum height of 29.45m (lift shaft) contravenes the 25m height standard. The contravention is allowed under Clause 42 of the Education SEPP. Refer to section 5.9.1 below the table for further discussion.
4.4 Floor space ratio	The site's B1 and R4 land is subject to an FSR of 1.25:1. The site's RE1 land has no FSR control.	The proposed GFA is 14,418m^2, resulting in an FSR of approximately 1.53:1. The contravention is allowed under Clause 42 of the Education SEPP. Refer to section 5.9.3 below the table for further discussion.
5.1 Relevant acquisition authority	The site's RE1 land is identified as being land reserved for public purposes (local open space), with Council the relevant acquisition authority.	The RE1 land within the site is no longer required for purposes of local open space, and therefore it is expected that the Land Reservation Acquisition Map will be updated as part of a future housekeeping amendment to ALEP 2010 to reflect the proposed school.
5.10 Heritage conservation	The site is not a heritage item, does not adjoin a heritage	Not applicable.

Clause	Details	Comment
	item and is not located within a heritage conservation area.	
6.1 Acid sulfate soils	The site is classified as Class 2 acid sulfate soils.	An Acid Sulfate Soils Management Plan has been prepared as part of this EIS (refer to Appendix 19f).
6.3 Flood planning	LEP mapping does not identify the site as flood planning land.	Not applicable.
6.10 Development on certain land at Wentworth Point	A portion of the site is included in the Wentworth Point Maritime Precinct.	This clause is not relevant because boat building and repair facilities, boat launching ramps, boat sheds or marinas are not proposed.
7.5 Foreshore Building Line	LEP mapping does not identify any part of the site as being within the Foreshore Building Line.	Not applicable.
6.5 Essential services	The site is serviced by all essential infrastructure. including water, electricity and sewage.	Refer to the Electrical and Communications Infrastructure Report at Appendix 15 and the Sewer, Water and Gas Infrastructure Report at Appendix 16 for details.

5.9.1 Land use

Educational establishments are permitted with consent in the R4 and B1 zones but prohibited in the RE1 zone. Notwithstanding, consent can be granted to the proposal pursuant to clause 4.38(2) of the EP&A Act, which allows for consent to be granted to partly prohibited SSD. This is discussed in further detail at section 5.2 above.

5.9.2 Height of buildings

The proposal is subject to a height limit of part nil, part 18m, part 25m and part 88m as shown in the ALEP 2010 mapping below.

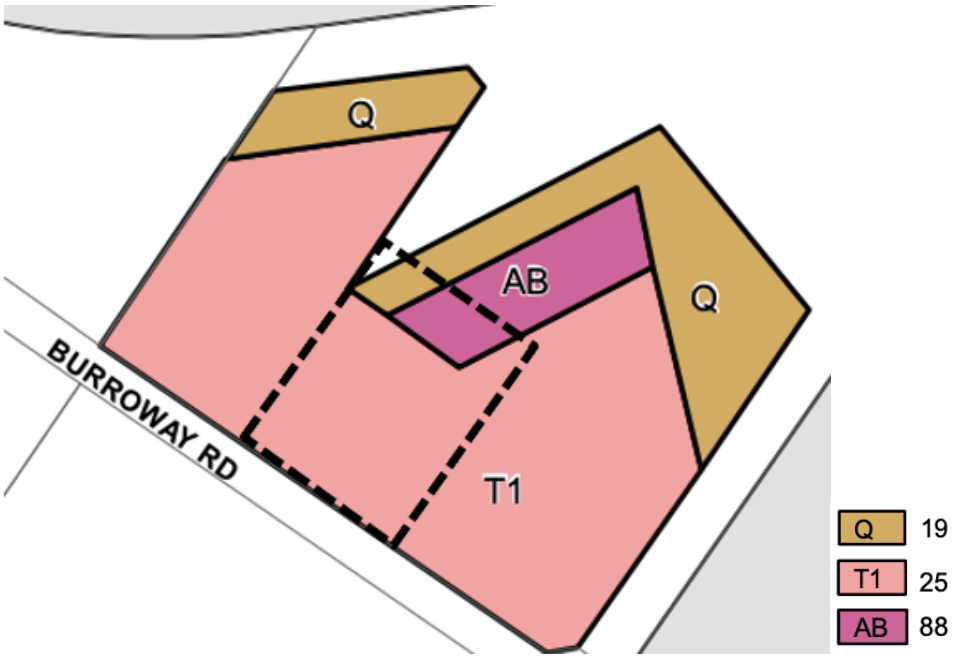

Figure 5-2 Height of buildings map
Source: ALEP 2010

The proposed main building exceeds the 25m height limit. The exceedance occurs at a minor portion of the parapet/façade, rooftop plant enclosures, tops of staircases providing access to the roof, and lift shafts. The highest exceedance occurs at the central lift shaft, which extends approximately 29.45m above existing ground level, which is approximately 4.45m (or 18%) above the 25m standard.

The proposal is compliant in the other height limit areas (i.e., nil, 19m and 88m areas).

The diagram below illustrates the height breaches.

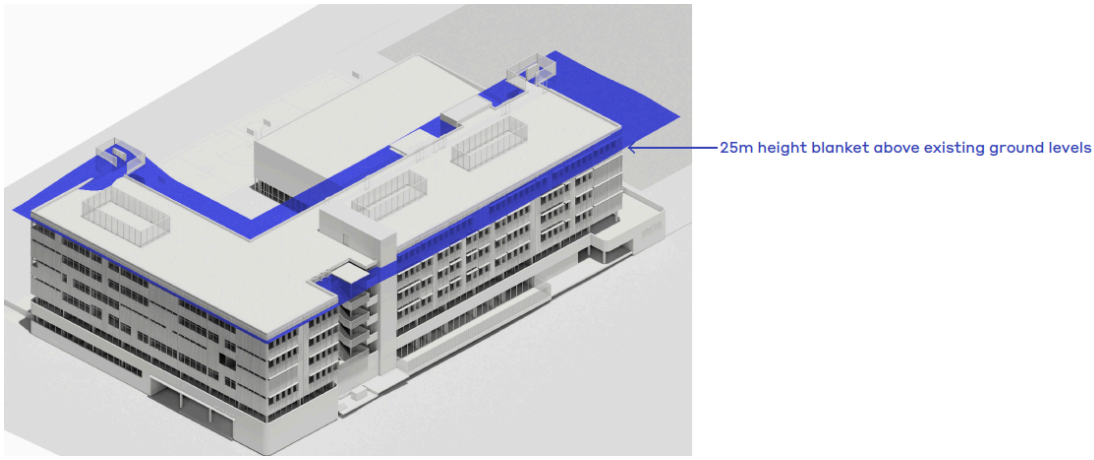

Figure 5-3 3D height plane diagram
Source: Woods Bagot

The height exceedance is permitted under Clause 42 of the Education SEPP, which enables development consent to be granted for development for the purpose of a school that is SSD even though it would contravene a development standard imposed by an environmental planning instrument.

The proposed height contravention is acceptable for the following reasons:

- Despite the contravention, the proposal is consistent with the objectives of the height of buildings clause under ALEP 2010, in particular:

    - The proposal achieves an appropriate development density, reflective of its location at the northernmost end of the high-density Wentworth Point Peninsula. The proposal will provide for a moderate-scaled urban form that functions as a suitable transition between the towers to the south and the foreshore park and river to the north.
    - The proposed height is compatible with the character of the locality, which generally consists of high-density mixed-use development.

- The proposal redistributes building height across the site and generally provides for an overall net reduction in height compared to what is allowed by ALEP 2010. As shown at Figure 5-2 above, the height map allows for a tall tower (up to 88m) surrounded by low- to medium-scale built form (19m and 25m), while the proposal provides for a maximum of six storeys. Compared to a compliant scheme, the proposal includes no tower component, and therefore overall impacts associated with height, including overshadowing and view impacts, are generally reduced.
- The additional height will have no unreasonable impacts on views. The proposed building will appear compatible with the surrounding context, providing a low- to moderate-scaled form that provides an appropriate transition from the high-density towers to the south down to the foreshore. The proposal will also maintain a view corridor to the foreshore along the western boundary of the site. Refer to section 7.4 of this EIS for further discussion.
- The additional height is compatible with the character of the locality, which consists mostly of high-density residential and mixed-use developments of eight storeys or higher.

It is further noted that a planning proposal is currently being prepared for the subject school site, the TfNSW land to the east and the future Peninsula Park to the north. The planning proposal will address zoning and planning controls and will seek to apply an SP2 Infrastructure zoning for the school site with no height or floor space controls. While the changes to the controls are not imminent and certain at this stage, the planning proposal provides important context when assessing the proposed height contravention.

5.9.3 Floor space ratio

The site is subject to a maximum FSR of part 1.25:1 and part nil as shown in the ALEP 2010 mapping below.

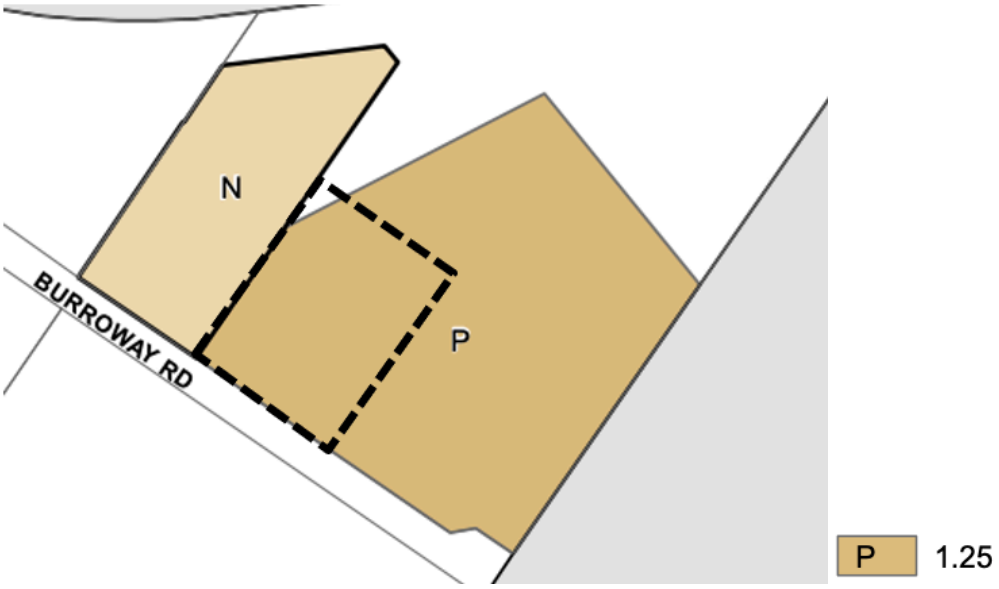

Figure 5-4 Floor space ratio map
Source: ALEP 2010

The proposed GFA is 14,418m^2. The site has approximately 70m^2 of RE1 land. Given school development is prohibited on the RE1 land, the RE1 land does not count towards the site area for FSR purposes as per the definition of "site area" in ALEP 2010. Therefore, based on a site area of 9,441m^2 (9,511m^2 – 70m^2), the proposed FSR is approximately 1.53:1, which is slightly above the 1.25:1 minimum standard.

Similar to the proposed minor height contravention, the proposed FSR contravention is permitted under Clause 42 of the Education SEPP, which enables development consent to be granted for development for the purpose of a school that is SSD even though it would contravene a development standard imposed by an environmental planning instrument.

The contravention is considered acceptable for the following reasons:

- Despite the contravention, the proposal is consistent with the objectives of the floor space ratio standard under ALEP 2010, in particular:
    - The proposal achieves an appropriate development density, reflective of its location at the northernmost end of the high-density Wentworth Point Peninsula. The proposal will provide for a moderate-scaled urban form that functions as a suitable transition between the towers to the south and the foreshore park and river to the north.
    - The proposal's intensity reflects the Wentworth Point locality, which generally consists of high-density mixed-use developments. The proposal will provide for low- to medium-scale transitional form between the tall towers to the south and the foreshore to the north.
- The additional GFA enables the school to accommodate the required student capacity.
- The proposal's bulk and scale are compatible with the locality as illustrated in the view analysis at section 7.4 and the Architectural Design Report at Appendix 3 of the EIS. The proposed building will appear compatible with the surrounding context and will maintain a view corridor to the foreshore along the western boundary of the site.
- The building has been carefully designed to minimise bulk and break down scale. The building features carefully selected tactical materials and a

variety of façade panel types that reflect the usage behind them. The entries along Burroway Road and the future eastern road also serve to break up the building form. Additionally, a recess at Level 1 helps to break down the scale and separates the ground-anchoring brick at ground floor from the metal panelling of the upper levels.

Also, as noted above, a planning proposal is currently being prepared for the subject school site, the TfNSW land to the east and the future Peninsula Park to the north. The planning proposal will address the zones and planning controls and will seek to apply an SP2 Infrastructure zoning for the school site with no height or floor space controls. While the changes to the controls are not imminent and certain at this stage, the planning proposal provides important context when assessing the proposed FSR contravention.

5.10 Wentworth Point Precinct Development Control Plan 2014

Part 2, Clause 11 of the SRD SEPP states that development control plans (DCPs) do not apply to SSD. Notwithstanding, the DCP controls provide a useful guide for informing design expectations. As such, the Wentworth Point DCP 2014 has been considered as part of this EIS in the Table 5-5 below.

Table 5-5 Wentworth Point Precinct DCP provisions

Provision	Comment
2.0 Vision, Principles and Indicative Structure	
2.1 Vision	The proposal is generally consistent with the vision in that it provides an important social infrastructure that supports the high-density sustainable living of the community.
2.2 Development Principles	The proposal has incorporated the development principles into the design. The multi-storey design enables a high-density school that will service the needs of the wider Wentworth Point community. Overall, the design responds positively to the urban context, supporting the precinct's compact, walkable urban form.
2.3 Indicative Structure Plan	The proposal is inconsistent with the indicative structure plan developed in 2014, which nominates the site for residential development. Notwithstanding, the proposal has considerable planning merit. Further discussion is provided below the table.
3.0 Public Domain	
3.1 Street Network Design	The proposal will generally not be consistent with the street network pattern outlined in the DCP due to the location of the proposal over the proposed Ridge Road. However, as discussed above, the proposal has considerable strategic merit, and the variation to the indicative structure plan and street network design is appropriate.
3.2 Pedestrian and Cycle network	The proposal is inconsistent with the indicative on-road cycle path outlined in the DCP due to the location of the proposal over the proposed Ridge Road. However, as discussed above, the proposal has considerable strategic merit and the variation to the indicative structure plan and street network design is appropriate.

Provision	Comment
3.3 Landform and Contamination	Contamination is addressed in section 7.15.2 and Appendices, 19a, 19b, 19c and 19d of this EIS.
3.4 Open Space Network	The proposal is generally consistent with the Open Space Network identified in the DCP. The school's northern open space area, which will be subject to a joint use agreement, forms part of the open space area identified for the peninsula park.
4.0 Private domain	
4.1 Land use and Floor Space Distribution	The proposal is inconsistent with the distribution of land uses identified in the indicative structure plan. However, as discussed, the site demonstrates significant merit and provides important social infrastructure for the Wentworth Point community.
4.2 Building Height and Form	The proposal is consistent with the maximum building height for the site, which identifies a building height for the site being a maximum of seven storeys. The proposal is generally consistent with the principles for taller buildings as addressed in section 7.1 and Appendix 3 of this EIS.
4.3 Setbacks and Public Domain Interface	The proposal is generally consistent with the controls regarding setbacks and public domain interface as addressed in section 7.1 and Appendix 3 of this EIS.
4.5 Deep Soil Zones/Landscaping	The proposal is generally consistent with the objectives and controls regarding deep soil and landscaping as addressed in section 7.2 and Appendix 3 of this EIS.
4.6 Building Design and Materials	The proposal is generally consistent with the objectives and controls regarding building design and materials as addressed in section 7.1 and Appendix 3 of this EIS.
4.7 Wind Effects	The proposal Is not greater than seven storeys, and therefore a wind effects report is not required by the DCP. Nonetheless, a wind report has been provided in response to the project SEARs as addressed in section 7.3.4 and Appendix 12 of this EIS.
4.8 Vehicular Access and Car Parking	The proposal is generally consistent with the objectives and controls regarding transport and accessibility as addressed in section 7.5 and Appendix 6 of this EIS.
4.9 Safety and Security	The proposal is generally consistent with the objectives and controls regarding the principles of Crime Prevention Through Environmental Design (CPTED) as addressed at Appendix 27.
5.0 Sustainability and Environmental Management	
5.1 Sustainability	The proposal is generally consistent with the objectives sand controls regarding sustainable development measures as addressed in section 7.6 and Appendix 7 of this EIS.

Provision	Comment
5.2 Water Management	The proposal is generally consistent with the objectives and controls regarding water sensitive urban design as addressed in section 7.6 and Appendix 7 of this EIS. The proposal is generally consistent with the objectives and controls regarding stormwater management as addressed in section 7.12 and Appendix 13 of this EIS. The proposal is generally consistent with the objectives and controls regarding flooding as addressed in section 7.13 and Appendix 13 of this EIS.
5.3 Ecology	The proposal is generally consistent with the objectives and controls regarding biodiversity as addressed in section 7.10 of this EIS.

As noted in the table above, the proposal is inconsistent with the structure plan in Wentworth Point Precinct DCP 2014. As shown in the extract below, the structure plan nominates the site primarily for residential purposes and identifies an east-west local road and north-south primary road (Ridge Road) running through the site.

This inconsistency is considered acceptable given that the proposal will provide for a distinct community benefit that will meet significant demand for a new high school in the area. Furthermore, the proposal is suitably located given it is adjacent to a primary school and is easily accessible by sustainable transport modes, being within the walking catchment of surrounding high-density residential development.

While the proposal will remove Ridge Road, a new north-south road will be provided along the site's eastern boundary, providing access to the future Peninsula Park. This road does not form part of this application but will be delivered via a separate approval process.

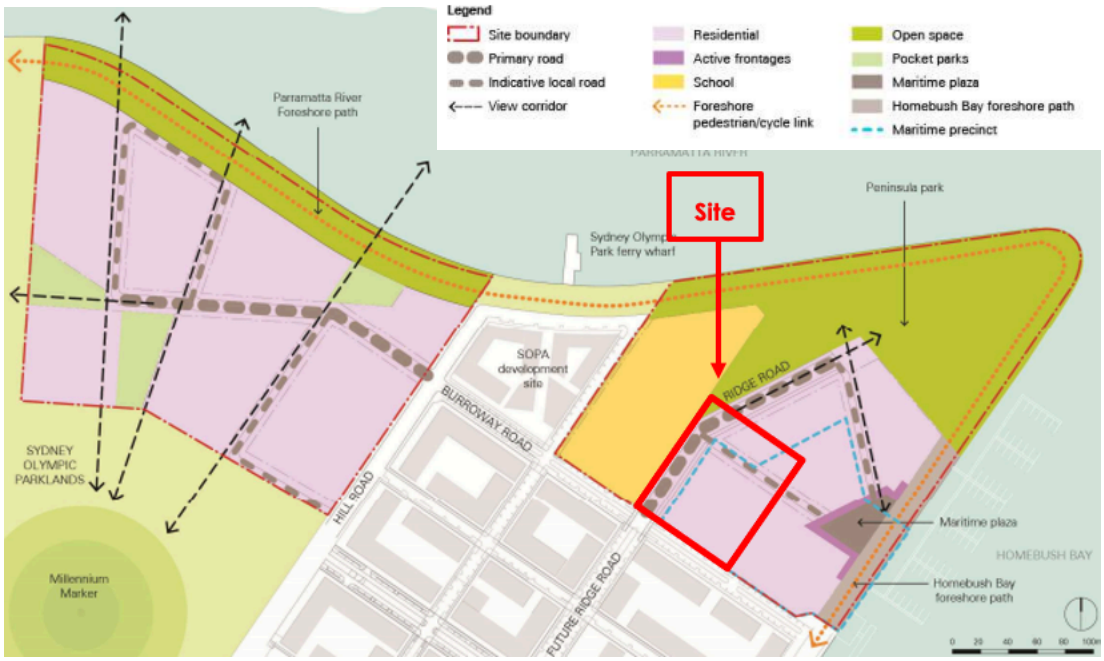

Figure 5-5 Indicative structure plan
Source: Wentworth Point Precinct DCP 2014

5.11 Development contribution plans

The site is covered by the Auburn Development Contributions Plan 2007, which, under Part F, identifies a levy of 1% of the total cost of the development for non-residential development with a cost of works greater than $200,00.

However, the contributions plan states that payment exemptions may be considered for "development by or for non-profit organisations which provide a distinct community benefit including but not limited to: the provision of childcare services, libraries, community or educational facilities, places of worship, outreach services or the like, on a cooperative or not-for-profit basis". The proposal will deliver the distinct community benefit of an education facility (high school) and therefore should be exempt from development contributions.

This is consistent with the advice from DPIE in Circular D6, which notes that a development application from a Crown authority for "educational services" is not subject to the levying of contributions for open space, community facilities, parking, or general local and main roads.

6 Consultation

Consultation has been undertaken in accordance with the DoE's consultation policy (Planning and Delivery School Infrastructure NSW Public Consultation Policy), which provides a framework to actively engage the community and other stakeholders in relation to the planning of major projects.

A Consultation Summary Report detailing the pre-lodgement consultation activities conducted is attached Appendix 23. Key items from the report are outlined below.

6.1 Community engagement

DoE started community consultation prior to preparing the scoping report. During the preparation of the EIS the following consultation activities were undertaken:

- Site announcement and release of a Planning Update.
- Virtual community information session held between 23 March and 1 April 2021.

Copies of the communications material issued is appended to the consultation report.

The key issues raised during the virtual information session are addressed in the table below.

Table 6-1 Community engagement key issues

Key issue	Project response
Location of the high school	Concord High School is the only existing government high school that includes Wentworth Point within its catchment, and many students experience long travel times. Enrolment data from the Australian Curriculum, Assessment and Reporting Authority indicates that Concord High School has experienced a steady growth in enrolment numbers over the past five years and currently has 1,286 students. In 2020, the school had 15 demountables to accommodate this growth. Additional high school facilities in the area needed. A comprehensive site search was undertaken and a suitable site identified on Burroway Road in Wentworth Point. This site search addressed factors such as the availability and location of land, location relative to student demand and intake area needs, suitability and servicing of the land itself, and transport and access considerations. The site is adjacent to Wentworth Point Public School and directly connects to the proposed Peninsula Park.
Impacts on traffic and transport infrastructure	Long term congestion is expected to reduce as a result of the many students in the area who currently ride in private vehicles to schools outside the peninsula (estimated 70% of students and staff) will instead be able to walk, cycle, and use public transport. For the 30% of students and staff that are expected to travel to the school via car, this travel is opposite to the peak flow that is currently causing congestion in this area.

Key issue	Project response
	The key intersections in the vicinity are expected to continue operating at Level of Service A (highest rating) following development of the school.
Open space at the high school	The new site and adjoining play space have adequate space for a high school that will accommodate 1,530 students. This includes space for a sports oval, multi-purpose courts, gymnasium, covered outdoor learning areas, landscaped recreation areas and walkways between buildings, as well as the playing field. The size of building footprints and play spaces are determined in accordance with NSW Department of Education guidelines. Outdoor space allocations meet NSW Department of Education requirements for a high school this size.
Availability of open space for community	The proposed adjoining play space comprises an area of around 8,800m^2, and will be subject to a joint use agreement and available for public use outside school hours. The future Wentworth Point Peninsula Park will result in an open space area of approximately 4.1ha.
Capacity for school to meet future growth	The school will accommodate up to 1,530 students, which will meet projected demand. DoE monitors population and development trends so that it can plan to meet enrolment needs in schools across NSW. DPIE issues population projections and housing forecasts within the NSW Common Planning Assumptions to be used by all government agencies as a consistent basis for infrastructure planning. These inform DoE's enrolment projections within a planning timeframe to 2036. Other factors relating to demand may include demographic change, government share and market trends. DoE also liaises regularly with DPIE, local councils and developers in relation to planning and development proposals. The department is a government stakeholder for consultation relating to development plans for the Wentworth Point Peninsula and has taken dwellings proposed into consideration in its planning projections.
The intake area (catchment) for the new high school	The intake will be confirmed closer to the school opening and will be based on the most up to date demographic data on the number of school aged children living in the local area at the time the school opens, along with consideration of suitable active and public transport options and enrolment trends at surrounding schools. Intake area boundaries are updated regularly to ensure every child in NSW has a well-resourced local public school to attend. Adjustments are used to balance enrolment numbers between local schools. Adjustments are also made to accommodate a new school into a local network, and this typically takes place around 6-12 months before the new school opens, to ensure the community is well informed in advance of enrolment periods and the school can prepare for anticipated student numbers.

Key issue	Project response
Noise (in operation and during construction)	Noise impacts during construction will be managed through implementation of a construction noise and vibration management plan. Noise impacts during operation are not expected to be an issue. Plant equipment will be selected and positioned to achieve the required noise levels.
Property price and investment impacts	Impact on property prices is generally not a matter for assessment under Part 4 of the EP&A Act and therefore has not been considered during preparation of the EIS for the project. In regards to general economic impacts, it is noted that the proposal is anticipated to have positive economic impacts including approximately 500 jobs during the construction phase 80 jobs during the operation phase.
Process and timing for informing residents and receiving feedback	The project follows the SINSW Consultation Approach. The SSDA process includes a public consultation phase which provides the community with further opportunity to comment on the proposed works. The project will be supported by a Community Communications Strategy, prepared as part of the SSD.
Views for residents nearby	Planning for the new mid-rise high school considers the current Local Environmental Plan (LEP) for the area, which prescribes height limits of 25-88m. Given its modest six-storey form, the proposal is not expected to have any significant view impacts. Some views in the lower levels of existing buildings looking towards the river may be partially obstructed, but this is considered reasonable given the high-density context.
Start date for new high school	It is expected the high school will open in 2024.

6.2 Public authority engagement

Consultation with multiple the government stakeholders during the preparation of the development application, including Parramatta Council, TfNSW and Government Architect NSW.

6.2.1 Government Architect NSW

The proposal was presented to the SDRP on 31 March 2021 and 25 August 2021. The SDRP's comments on both presentations are addressed in the tables below and in the Architectural Design Report at Appendix 3.

Table 6-2 Response to SDRP comments (first round)

Key issue	Project response
Master planning	

Key issue	Project response
The river foreshore – provide clear north-south visual and pedestrian connections from the playing field to the foreshore's public open space and clear east-west connections to the foreshore. Provide a comprehensive landscape and ecological response that includes level transitions/equitable access, resilience for flooding and relationship to the waterline.	The playing field and its interface with the foreshore now falls outside the scope of the project.
The building's public interfaces- optimise activation, interaction and engaging connections to community, including: locate shared school or shared community uses at the ground floor within proximity to entrances	The proposal creates a cluster of community-oriented facilities in close proximity to a secondary entrance along the proposed eastern road. The hall, change rooms, canteen, toilets, as well as movement studio, performance and fitness workshops on level 01, may all be accessed from this entrance, while the rest of the school remains secure.
balance and optimise security considerations with place qualities at the Burroway Road and COLA entrances, utilizing the building as the secure line where possible, minimizing fences and providing large access gates	The southern teaching wing is positioned on the boundary of Burroway Rd where it forms the secure line at ground level. A sculpted recess – the main entry to the school – is secured by large sliding gates. The southern wing holds the corner of Burroway Rd and the eastern road, while the eastern teaching wing sets back to form a landscaped buffer along the narrower street. The waste store to the north steps out again, forming the secure line. The hall is located along the site boundary to the playing field, flanked by sliding gates to the east and fencing to the west. This configuration allows the building to form a secure barrier where possible.
the northern ground floor façade should provide visual connections and passive surveillance of the playing field - full height solid walls lack visual permeability and are not supported	On ground level, two wide corridors create visual and physical links between the school and the playing field; one along the viewing corridor to the west, and one between the eastern teaching wing and hall. A large terrace on level 01 overlooks the playing field, further strengthening visual connections and promoting passive surveillance. The hall is configured so that it opens out on three sides to the courtyard play space within the school, and towards the eastern road entrance. The hall's more opaque facade, behind which is located the stage and various store rooms, presents to the playing field. Given that this façade is likely to be located directly behind a football goal, it was considered sensible for it be well protected and durable.

Key issue	Project response
North-south visual corridor - Minimise visual barriers and obstructions, including obstructive planting layouts, screens, minor structures, etc	Noted. Items and planting located in this zone are consistent with maintaining a clear visual corridor.
1.8-meter-high perimeter fencing - Provide building edges in lieu of fencing as much as possible. Provide large and inviting connections between the playing field/shared community facilities and the public domain.	See response above.
Traffic and transport	
The project's traffic and transport strategy anticipates a reduction in congestion due to student travel principally contained within Wentworth Point combined with reduced car reliance/walkability. Provide transport and traffic modelling to support this assumption.	Refer to the Transport Access Impact Assessment at Appendix 6.
Landscape and shared community facilities	
Planting palettes -provide a palette that represents a living connection to Country, for example including species from the local salt marsh ecology. Incorporate this palette at active and passive outdoor learning spaces.	Refer to the landscape plans at Appendix 5.
Facade planting – incorporate measures for long-term viability and resilience into the façade's plant selections and general landscape design. Demonstrate the resolution of façade planting with provision of solar access and daylighting.	Façade planting is no longer included in the project design.
Shared facilities – provide a project strategy to enable a comprehensive range of community uses that support integrated social connections. Identify shared facilities across the site and include considerations for multifunctionality, arrival, car parking, pedestrian movement and security.	As outlined above, the proposal integrates a coherent cluster of community-oriented facilities accessed by the entrance from the proposed eastern road. They can be secured from the rest of the school, containing any use out-of-hours. An undercroft space, running east-west from the eastern road entry to the hall, provides generous area for assembly and movement to and between the various facilities and amenities. The spaces included in the aforementioned cluster include: • a large hall gymnasium with associated stage and store rooms.

Key issue	Project response
	• a canteen that may double as food preparation and service during events. • a bank of unisex toilets, including an accessible unit. • two pairs of changing rooms . • a large movement studio and two large workshops. Though the design of these facilities relates directly to the EFSG, It is considered that they, individually and collectively, support a wide range of potential community uses, including musical/dramatic performances, rehearsals of differently sized ensembles, sporting events (hosted in the hall and neighbouring playing field), fitness classes, public gatherings and forums, and more.
Façade treatments and architectural expression	
Optimise the northern facade – provide fenestration opening sizes and sunshading that better respond to the aspect's solar access and significant views.	There are two façade types within the proposal that are oriented towards the north: one that is protected by the deep external walkways, and one that is "exposed". This latter façade type – which amounts to approximately 25% of the façade area exposed to northern sun – incorporates vertical and horizontal shading fins to protect the spaces within from direct sunlight and solar gain, without compromising expansive views to the urban and riverside context beyond.
Material selection - use materials that are sympathetic to the natural landscape, to better enable a contextual fit and clear architectural expression for the buildings.	The materials that define the external expression of the proposed school buildings are drawn from an understanding of the site's urban, historical and environmental context. The brick base anchors the building to the ground, with red-browns evoking the deep earth and shimmering glossy greens picking up the hues of the natural environment. Bricks, sized to suit the human hand, help to provide a human scale to the building's public interfaces. The upper levels, clad in textured, subtly reflective anodised aluminium, serve to abstract, mirror and engage in a dialogue with the expansive sky that is characteristic of the location. Gradations of blue and green on the courtyard-facing facades further enmesh the building in its natural landscape.
Differing facades – provide a material palette and façade treatments that	The school buildings can be understood as double-sided, with the facades overlooking

Key issue	Project response
respond to differing solar orientations and urban conditions, including the built-form edge – south, the river – north and the Primary School – west.	the public roads presenting distinctly from the facades oriented to the internal courtyard. The "urban" facades present an appearance of solidity at their base, creating a strong urban presence and defining the street edge. The upper levels comprise four façade panel modules arranged to reflect the activities taking place within, offering exciting glimpses to teaching spaces and creating an interesting formal composition. The inward facing facades, characterised by the presence of external walkways, are more attuned to the scale and activities of students. The window walls are coloured brightly to assist wayfinding.
Country and ecology	
Ecological healing and restoration – these ambitions are not evident in the concept design. Integrate ecological aspirations with a project-wide approach to connecting with Country. The following opportunities are recommended for their capacity to make manifest the attributes of Country: - plant species that support and restore local biodiversity and ecology - the site's use and treatment of water.	Refer to landscape plans at Appendix 5.
Engagement with traditional owners – Engagement with traditional owners as part of the design process should be undertaken as soon as possible to meaningfully inform an understanding of place and the project's response to Country. Avoid relying on select information from a singular Aboriginal Heritage and Culture consultant.	Noted. During the bid stage, the project team worked closely with Balarinji to learn about the place, Country and its stories, and to investigate how these understandings might inform the design process. During the ECI phase, we have consulted with the AECG whose stories, perspectives and recommendations have further informed the process and design.
Sustainability	
The following initiatives are recommended and should be clarified: PV cells to roofs.	There will be a large PV array situated on the roof of the eastern teaching wing, with potential to be expanded onto areas of roof elsewhere.
Green roofs – to improve the thermal properties of the building envelope and provide shared landscape amenity for	The proposal incorporates a green roof to the hall.

Key issue	Project response
adjacent buildings which look down onto the school.	
Materials that optimise the thermal properties of the building envelope and assist 'mised mode' operation.	Noted.
Sun-shading to the western façade that balances views and daylighting with the impacts of solar heat gain.	Noted. See responses above.
Solar-gain control to the northern façade to improve passive solar design.	Noted. See responses above.
Water handling, storage and reuse - initiatives appropriate to the riverside context, including WSUD and reuse of water for landscaping and playing field irrigation.	Noted. The proposal incorporates measures for water collection, storage and reuse.

Table 6-3 Response to SDRP comments (second round)

Key issue	Project response
Country	
Whole-project approach - Think of Connecting with Country as a whole of site and whole of project approach. Consider additional features that articulate narratives about Country aurally, through art, pedagogy, wayfinding, and always that come from engagement with Indigenous peoples.	The project team worked closely with Balarinji, an Indigenous Design consultant, to learn about the place, Country and its stories, and to investigate how these understandings might inform the design process. Further, the team consulted with the AECG whose stories, perspectives and recommendations have further informed the process and design. Throughout the Architectural Design Report and Landscape Design Report, commentary is given about incorporation of gathering spaces and indigenous planting, and how the building has used tactile and natural materials that reflect the place – the sky and the horizon.
Planting - Expand the use of endemic Indigenous plants beyond the single First Nations productive garden to be throughout the site. This is an opportunity for the landscape to be part of the pedagogy.	Refer to Landscape Design Report at Appendix 5.
Green roof - Integrate endemic and Indigenous plants into the green roof and consider enabling monitored access to this area so that it can become part of the school.	Refer to Landscape Design Report at Appendix 5.

Key issue	Project response
Landscape Strategy	
Communal courtyard – The practicality of using movable tree planters to create spatial flexibility is questioned and the creation of a sufficiently large outdoor gathering space is recommended.	Refer to Landscape Design Report at Appendix 5.
Tree cover - Provide detail on the proposed canopy cover percentage to provide comfort in relation to heat and other biophilic benefits.	Refer to Landscape Design Report at Appendix 5. The proposed tree canopy cover is approximately 10%.
Planting palette – Provide more detail on plant selection at the next review.	Refer to Landscape Design Report at Appendix 5.
Streetscape & Urban Context	
Civic presence – The size and scale of this public building produces an expanded responsibility to produce good outcomes for its emergent urban context. There is currently insufficient detail to evaluate whether the building is fulfilling its civic promise and value to the community. Provide detailed elevations, detailed sections of the buildings' interface with the public domain, material selections and renders in context at follow up meetings.	Since the SDRP review, renderings, elevations, explanatory diagrams and sections have been added to the report for evaluation. Careful selection of tactile materials and a breaking down of scale allow the building to deal with the level changes and provide an anchoring of the building into the streetscape. The scheme seeks to break the typical street edge treatment of the area, which uses setbacks, and instead meets the boundary edge with a tactile brick material. Setbacks are also provided to give variety and relief. The edge is permeated with entrances on three sides, inviting the community to participate in the school when the security fences and gates are opened.
Length of block – Consider the 60m of the long north-south edge and how this may be further articulated through interfaces, circulation, entries, courtyards, façade treatment, or planting.	The school block is arranged to allow for maximum flexibility through a regular grid system. In order to achieve learning units (science, wood and metal, etc.), these units are best arranged in blocks of 8-9 to keep all the classrooms and labs together. The scale of the building is broken down by a variety of façade panel types that reflect the usage behind them and also by penetrating the façade with the entrance on Burroway Road and the setback and secondary entrance on the eastern road. A recess at level 1 helps to break down the scale and separates the ground-anchoring brick at ground floor from the metal panelling of the upper levels.
Public Primary School – Recommned the inclusion of a strategy to enable long-term	The masterplan of the high school has been arranged to create an enclosure through a courtyard that captures both public school

Key issue	Project response
connections with the adjacent public school.	and high school play spaces. For the foreseeable future, these will remain separate through tree planting and a fence line between the two schools. However, the opportunity to join or connect the schools can be easily achieved through the configuration provided.
Community space – The fence and gateway entry to the community spaces appear unwelcoming. Recommend further design development to make this visually and functionally welcoming for community members.	Security during school hours and community access after hours is a careful balance. The scheme has created openings in the eastern façade to allow access to the gym, canteen and performance spaces at level 1. It is announced by the building stepping out to the boundary giving a point of difference in comparison to the rest of the eastern façade which sets back away from the boundary. A large sliding gate will create a wide opening on school entry time and after hours. The space that is entered is an outdoor covered space that is serviced by the canteen but also creates wind-down and ante-space for the gym that can be serviced by the canteen. On the northern boundary, there is community access, again, through sliding gates to allow ease of access to change room, canteen and the gym. The spaces feature amphitheatre seating adding great character and highly engaging facilities for the community to enjoy.
Entry & Movement	
Undercroft entry – The current proposal for the entry undercroft is considered too low, narrow, and tight and is not supported. Explore options to optimise amenity of access, acoustics, and visual connection by making this less compressed and more generous both horizontally and vertically.	The material finish to the entrance soffit will be a perforated metal with mirror finish in a wavy or corrugated profile. The reflective surface will help to bring natural light deep into the recess and contribute to a sense of height and depth and wonder at the interesting material. The tapered opening is directive and creates the drama of aperture, whereby the entrant is greeted by the opening up of the courtyard space and the double-high pergola that runs through the courtyard
Pinch points - Review the space allocated to critical areas of movement on the ground plane including near the canteen and lift areas as they appear insufficient at present.	The pinch points create control points where gates are added to prevent community from entering the courtyard space. During school hours, these gates are open, leaving a 4-5m width, which is generous for ease of circulation.
Façade Treatments & Architectural Expressions	

Key issue	Project response
Aluminium cladding – The use of aluminium cladding, its longevity and visual appearance over time is problematic in this coastal environment and requires reconsideration. Illustrate an alternate design approach or provide evidence to back up the design intent.	Anodising is an electro-chemical process used to create a protective film of aluminium oxide on the surface of aluminium extrusions or sheet. As the aluminium oxide film is created from the aluminium itself, it is integral to the underlying aluminium and cannot crack, peel, flake or pit, unlike paint or powder coatings. The oxide coating is translucent, giving the aluminium an extremely durable, deep metallic lustre. The oxide layer is extremely hard and can be applied up to 25 microns in thickness, making it ideal for more severe building environments such as ocean and harbour frontages. Natural anodising enhances the base aluminium colour, while a range of other colours can be achieved through various methods, the most durable of these being integral, electrolytic and interference colouring. Anodised products have an extremely long life span and offer significant economic advantages through maintenance and operating savings. The final anodised finish is chemically stable, will not decompose and is non-toxic. Because the anodising process is a reinforcement of a naturally occurring oxide process, recycling of anodised aluminium is also more efficient and cost-effective than that of paint and powder coated products and is almost "recycle-neutral" with minimal use of VOCs and heavy metals.
Courtyard facades – Ensure the interior elevations are appropriately scaled and have a softer edge in relation to human scale and material selection, incorporating the use of narrative and art to inform these spaces.	The façade along the external walkways consists of a modular window wall system, acting as a threshold between circulation and teaching spaces. At each level, this façade is brought to life by constant movement and activity of students inside and out. Generous windows (many operable) and doorways provide strong visual connections when desired, allowing classrooms and corridors to animate each other. The window wall panels – colourback glass, others perforated metal – are coloured in bold and subtle hues of graduating blues and greens. This colour scheme assists in wayfinding and constitutes a joyful expression of the building's relationships to its natural environment and to Country. Cable trays, doorways and other key elements are highlighted in complementary tones of orange, adding to a sense of both playfulness and legibility. A visualisation from the school's inner courtyard, looking

Key issue	Project response
	east towards the eastern teaching wing, provides some clarity as to the window wall's expression.
Southern edges – Include sunshading considerations in the development of the southern façade, noting the need to mitigate strong and low sunlight for morning classes.	Shading elements are incorporated into all building facades except the southern façade overlooking Burroway Road. This facade is oriented almost due south. In response to concerns of direct sunlight exposure to this façade during the late afternoon, solar analysis indicates that it does not receive any direct sunlight during school hours (i.e., to 3.30pm). In addition, the presence of tall neighbouring buildings to the west, combined with the deep reveals of the façade's section profile, combine to effectively protect and shield the façade at later times during the afternoon.
Sustainability	
Green Star - The goal of 4-star Green rating is low considering the advantages of the site and association with Sydney Olympic Park. Consider implementing further sustainability strategies in line with a 6-star rating.	The project's baseline goal set by SINSW is to achieve 4-star Green Star accreditation.
Green roofs – Consider the wider application of green roofs for the scheme, with particular focus on the increased efficacy of solar panels when combined with green roofs.	Increasing the area of green roof is constrained due to the additional costs that would be involved in construction and ongoing maintenance. The distribution of the project's budgetary resources prioritises the spaces with which students will have direct contact. The green roof on the gym block is now arranged to be accessible by students and features endemic and indigenous species as described within the Landscape Design Report. As the green roof is restricted in size, priority has been given to the plants over solar panels. Solar panels remain on the main roof, which is inaccessible by students, and therefore no green roof is planned for the main roof.

6.2.2 Transport for NSW

TfNSW issued comments for inclusion in the SEARs for the proposed development. Following issuing of the SEARs, the project team has held ongoing discussions (20 meetings) with TfNSW (the owner of the site) to discuss matters relating to the proposed school and broader Wentworth Point peninsula, including access for non-intrusive work and site investigations, land transfer, ownership of sports field, creation of school site, and progress and timing of designs and planning applications.

These discussions resolved matters relating to:

- Site access for non-intrusive works and site investigations.
- Site area, ownership structure and joint use agreement.
- Subdivision to create school site.

6.2.3 City of Parramatta

Meetings with Parramatta Council officers were held on 31 March, 16 April and 3 May 2021. The key issues discussed at these meetings included specifications for the playing field, joint use agreement, planning pathway and general project timelines. Refer to the Consultation Summary Report at Appendix 23 for further detail.

6.2.4 Parramatta Transport Working Group

A meeting was held with the Parramatta Transport Working Group (PTWG) on 31 March 2021. Items of discussion included walking catchment size, mode share, bus routes, walking infrastructure, pedestrian entry points, kiss-and-ride locations, car parking, and bike and scooter parking. PTWG's input has been instrumental in the design of the school. Refer to the Consultation Summary Report at Appendix 23 for further detail.

7 Assessment of key issues

7.1 Built form and urban design

An SSDA Architectural Design Report prepared by Woods Bagot is attached at Appendix 3. The report explains the proposal's design rationale based on analysis of the site and context, and provides comment on the proposal's consistency with relevant guidelines and principles. Key points from the report are outlined below.

It is noted that section 3.6 of this EIS contains a description of the proposal's layout, height; bulk and scale; density; setbacks; facade and articulation; external finishes and materials; relationship to surrounding development, topography and streetscape; and access to daylight, ventilation and acoustic separation.

7.1.1 Existing environment

The Wentworth Point locality is generally characterised by high-density and high-rise residential and mixed-use developments. The site is directly south west of the Wentworth Point Peninsula Park and immediately east of Wentworth Point Public School. Residential towers are located to the south of the site across Burroway Road, and the adjoining site to the east will likely be developed for the purposes of high-density mixed-use development.

7.1.2 Impacts

The proposal will contribute positively to the built form of the area in the following manner:

- The proposal features a high-quality contemporary design that is fit for purpose and complementary to the high-density mixed-use nature of the area.
- The proposed six-storey form is compatible with the surrounding high-rise development and adjoining low-rise primary school.
- The proposal's façade is well articulated and will contribute positively to the streetscape.
- The material and finishes complement the landscape and are based on a pale coloured palette, reflecting the tones of the surrounding landscape.
- The landscape design acknowledges the history and the local site context as an integral part of the site planning. It provides spaces that encourage interaction between learning areas and equal access to all areas of the site.

7.2 Tree removal

An Arboricultural Impact Assessment prepared by tree iQ is provided at Appendix 21. The report assesses the proposal's impacts on trees within and near the site. Key findings from the report are outlined below.

Note: Tree removal is not proposed under the subject SSDA but will be carried out under a separate approval process (permit from Council). Nonetheless, tree removal has been considered as part of this EIS given the proposed building layout relies upon tree removal.

7.2.1 Existing trees

Four trees/tree groups are located within the site boundaries (Trees 13-16 in the arboricultural assessment), namely:

- Tree 13 forms a stand of four mature Casuarina glauca (Swamp She Oak) in the southern portion of the site, which are in good health and fair structural condition. This stand is of low landscape significance and has been allocated a retention value of "consider for removal".
- Tree 14 forms a stand of eight semi-mature Casuarina glauca (Swamp She Oak) in the southern portion of the site, which are in good health and structural condition. This stand is of low landscape significance and has been allocated a retention value of "consider for removal".
- Tree 15 forms a stand of six young Casuarina glauca (Swamp She Oak) in the central portion of the site, which are in good health and structural condition. This stand is of low landscape significance and has been allocated a retention value of "consider for removal".
- Tree 16 forms a stand of four young Casuarina glauca (Swamp She Oak) in the central portion of the site, which are in good health and structural condition. This stand is of low landscape significance and has been allocated a retention value of "consider for removal".

A photograph of a typical stand of the Swamp She Oaks is provided below.

Figure 7-1 Typical stand of Swamp She Oaks on site
Source: tree iQ

7.2.2 Impacts

The proposed building layout requires removal of the site's four Swamp She Oak stands. The tree removal is considered acceptable for the following reasons:

- All of the trees are of low landscape significance and have a low retention value. The trees have grown within the gaps of existing hardstand areas and do not notably contribute to the visual amenity of the site or surrounding area.
- The proposed building layout is the result of careful site analysis and consideration of school needs. Placing the built form along the southern and eastern boundaries provides for a strong public address, convenient access, and visual and physical connection to the adjacent primary school.
- New advanced tree plantings can replace the loss of amenity within a short timeframe.

No works are proposed in the tree protection zones (TPZs) of trees on neighbouring land.

7.2.3 Mitigation measures

The arboricultural report recommends the following:

- Site fencing should be established along the site boundaries so that the installation of TPZs for trees outside of the site is not required.
- No over-excavation, battering or benching should be undertaken in the TPZ areas of the Trees 4-10 (on the neighbouring site to the east). (Note: As shown in the bulk earthworks plan at Appendix 13, no earthworks are proposed in the TPZ areas of Trees 4-10.)
- Replacement trees should be planted to help off-set the loss of amenity and canopy cover from tree removal. (Note: The proposed tree plantings are detailed in the landscape plan at Appendix 5 of the EIS.)

7.3 Environmental amenity

7.3.1 Overshadowing

As seen in the mid-winter (worst-case) shadow diagrams below, the proposal will cause some overshadowing to surrounding land. From 9am to 12pm, the proposal will cause minor overshadowing to the land to the south, which will likely be developed for high-density mixed-use purposes. From 12pm onwards, the proposal will cause overshadowing to the neighbouring land to the east, which will also likely be developed for high-density mixed-use purposes.

The amount of overshadowing to the neighbouring land is not considered significant in the high-density context. The affected land to the south and east will still receive more than three hours of sunlight between 9am and 3pm, and therefore the proposal will not prevent future apartments on the neighbouring land from achieving two hours of solar access as required by the Apartment Design Guide.

The proposal will cause no overshadowing of public open space or the neighbouring primary school.

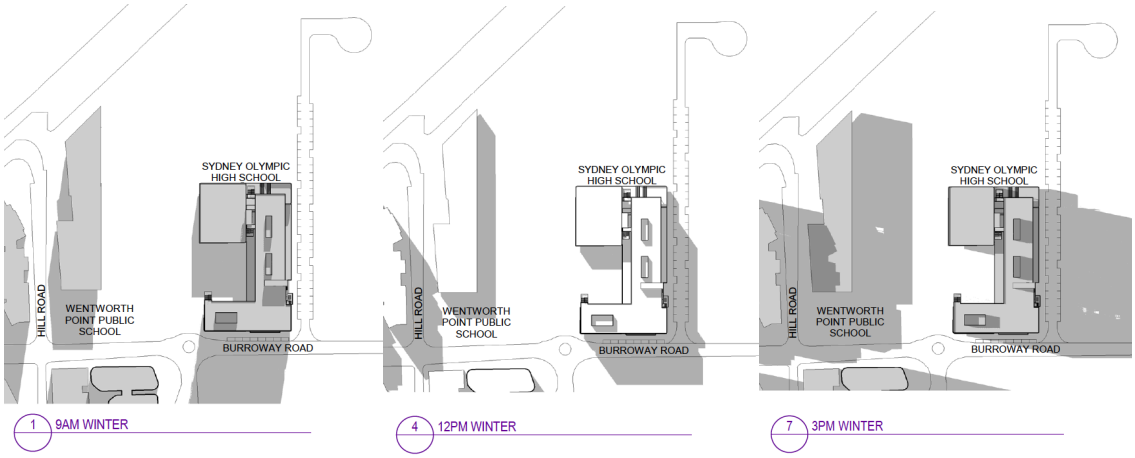

Figure 7-2 22 June shadow diagrams
Source: Woods Bagot

7.3.2 Visual privacy

The proposal will result in no adverse privacy impacts on surrounding land. The proposal adjoins roads to the south and east, a park to the north, and a primary school to the west. None of the surrounding uses, therefore, are sensitive to overlooking by a school.

Surrounding high-rise development will be able to overlook the school to some degree, but the level of impact is considered acceptable. The future tower immediately to the south of the site as well as any future towers to the east will be separated from the site by roads, which will help mitigate overlooking. Additionally, the U-shape arrangement of the buildings will help to provide a visual buffer to students in the outdoor play area.

7.3.3 Lighting

The proposed external lighting design for the new school will be in line with the existing lightning systems installed in the surrounding area and will include:

- Pole mounted luminaires for the carpark/road area.
- Pole mounted luminaires for the external play area(requirements to be confirmed).
- Wall-mounted/ceiling-mounted luminaires along undercover pathways between buildings.
- Bollard mounted luminaires for external pathways.
- Wall mounted luminaires along the general building perimeters,

The lighting design, luminaire selection and lighting calculations will be completed during the detailed design stage of the project. The lighting design will be completed in consultation with the architect and DoE stakeholders to ensure that the aesthetic and performance requirements of each area are met.

For further detail, refer to the Lighting Impact Assessment Report prepared by WSP at Appendix 17 of the EIS.

7.3.4 Wind

An Environmental Wind Assessment by Arup is attached at Appendix 12. The report provides a quantitative assessment of the impact of the proposal on the pedestrian level wind comfort.

Wind tunnel testing was carried out in accordance with the requirements of AWES (2019). Measures were taken at 51 test locations in and around the site. Testing was conducted without landscaping as landscaping may not be relied on during extreme events.

Note: The wind tunnel testing was based on a previous design iteration prepared by Group GSA. Arup has prepared a covering letter to the wind assessment that discusses the differences between the Group GSA design and the proposed Woods Bagot design. The covering letter concludes that the results in the wind report remain applicable to the current Woods Bagot design.

Existing environment

Arup's assessment has utilised the wind frequency and direction information measured by the Bureau of Meteorology anemometer at a standard height of 10m at Bankstown Airport from 1995 to present (July, 2021).

Cold and hot winds tend to come from the west and east quadrants, respectively. Typically, mornings tend to have lighter winds increasing in intensity through the day. The corrected mean wind speed at a height of 10m is approximately 3.8 m/s, and the 5% exceedance mean wind speed is 8.2m/s.

Impacts

In general, from a comfort perspective, wind conditions at ground level are predicted to be suitable for their intended use. The majority of locations are predicted to be suitable for pedestrian sitting. Some locations are predicted to be suitable for pedestrian standing; these locations are typically adjacent to building corners or the main entrance walkways.

Location 5, at the south-western boundary, is the only location categorised as suitable for walking, which is appropriate for its location, being in a transient area at the front of the school.

On level 5, wind comfort conditions in the walkways are predicted to be suitable for pedestrian standing and sitting, with no concerns regarding their intended circulation usage.

All locations meet the target comfort criterion of pedestrian standing inside the school and pedestrian walking on main thoroughfares.

There are no safety concerns, with all locations meeting the safety criterion.

As noted in Arup's covering letter, the above assessment remains applicable to the proposed Woods Bagot design given there is little difference between it and the previous design by Group GSA.

Mitigation measures

In its covering letter, Arup notes that the proposed Woods Bagot scheme would potentially benefit from local amelioration strategies, such as vertical blockage to the east, vegetation and/or section seating areas on the upper levels. These measures can be explored during detailed design.

Otherwise, Arup has identified no required mitigation measures.

7.4 View impacts

Assessment of view impacts has been undertaken by Mecone supported by 3D views of the proposal prepared by the architect.

The assessment considers the NSW Land and Environment Court's planning principle regarding impacts on public domain views as set out in Rose Bay Marina Pty Limited v Woollahra Municipal Council and Anr [2013] NSWLEC 1046.

The assessment has not undertaken an analysis of impacts on private views as set out in Tenacity Consulting v Warringah Council [2004] NSWLEC 140 given that the key views in question are views to and from the public domain. Private views are considered in section 7.4.4; however, the significance of the views is considered insufficient to warrant a full assessment under the Tenacity principles.

7.4.1 Existing environment

The first stage of assessment set out in the Rose Bay planning principles is a factual inquiry whose purpose is to identify the nature and extent of existing views.

The key views to consider in the assessment of this application are the views set out in Wentworth Point Precinct DCP 2014. As shown in the DCP diagram below, the key view corridors (shown in black dotted arrowed lines) consist of views to the water and views between the water and Millennium Marker. There is an identified view corridor running along the diagonal portion of the indicative Ridge Road. This corridor commences at the joint of the road and looks northeast to the water; it does not facilitate views between the water and Millennium Marker but rather runs in a single northeast direction to the water. Ridge Road is an indicative road only; it is not an established road with existing significant views enjoyed by the public.

Apart from the Ridge Rod corridor, there are no other identified views to, from or through the site.

All of the identified view corridors in the area extend along the built and indicative future street network, meaning the corridors are largely free of obstruction and are intended to be enjoyed by road/footpath users.

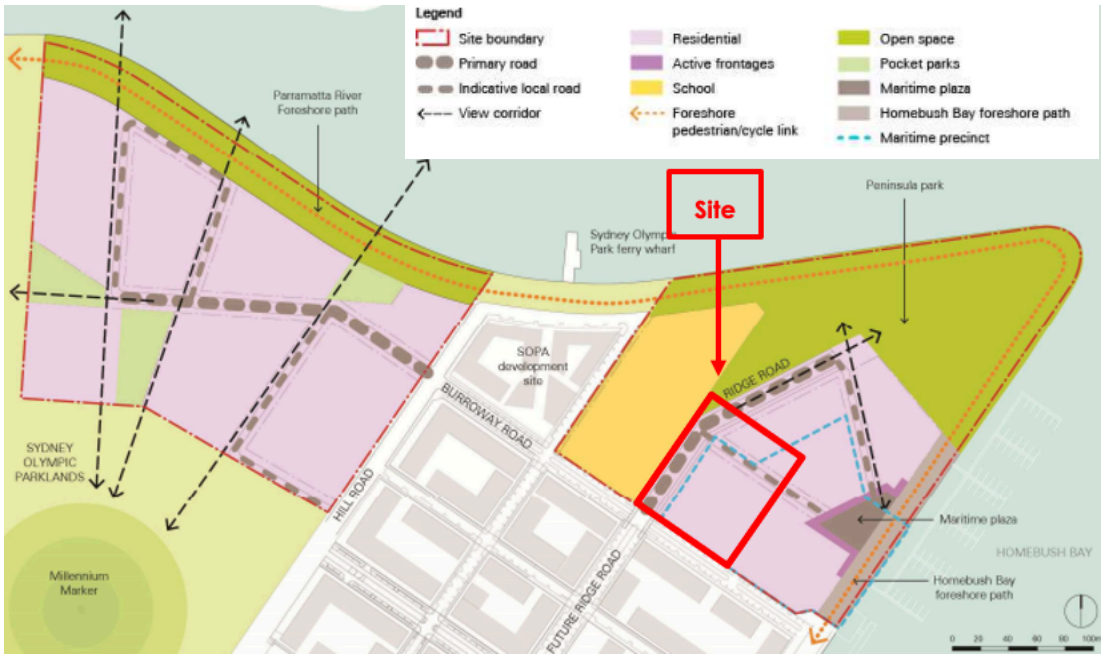

Figure 7-3 Indicative structure plan
Source: Wentworth Point Precinct DCP 2014

7.4.2 Impacts on the Ridge Road view corridor

The second stage under the Rose Bay case is analysis of the impacts. Analysis requires quantitative and qualitative analysis.

Quantitatively speaking, the proposal will obscure the physical area of the Ridge Road view corridor by only a small percentage. The proposed six-storey built form is located along the eastern and southern boundaries of the site, well outside of the corridor, meaning it will cause zero obstruction. The northwest corner of the double-hall may extend into the corridor sightly, but the impact will be minor.

Qualitatively speaking, the Ridge Road corridor will be effectively removed as a public view corridor because the proposal does not include construction of Ridge Road. The DCP envisions a public road with an unobstructed view to the water, while the proposal instead provides school grounds and some minor built form in the area of the indicative road. This variation from the DCP, however, is considered acceptable. Ridge Road is an indicative road only; it is not an established road with existing significant views enjoyed by the public. Instead of providing a view corridor to the water along a road, the proposal will provide a view corridor along the site's western boundary leading from Burroway Road to Peninsula Park and the water. It is considered that this corridor provides an acceptable alternative to the one identified in the DCP.

It is also important to note that the proposal will more generally open up views to the water (compared to the DCP's envisioned masterplan) by providing moderately scaled six-storey built form rather than a tall tower as allowed by the planning controls.

7.4.3 Impacts on other views from the public domain

The architect has prepared 3D renders from multiple public domain viewpoints across the local area. These are shown and discussed below. Larger versions of the renders are provided in the Architectural Design Report at Appendix 3.

(Note: The Rose Bay principle has not been applied in this section given the assessed views are not identified significant views.)

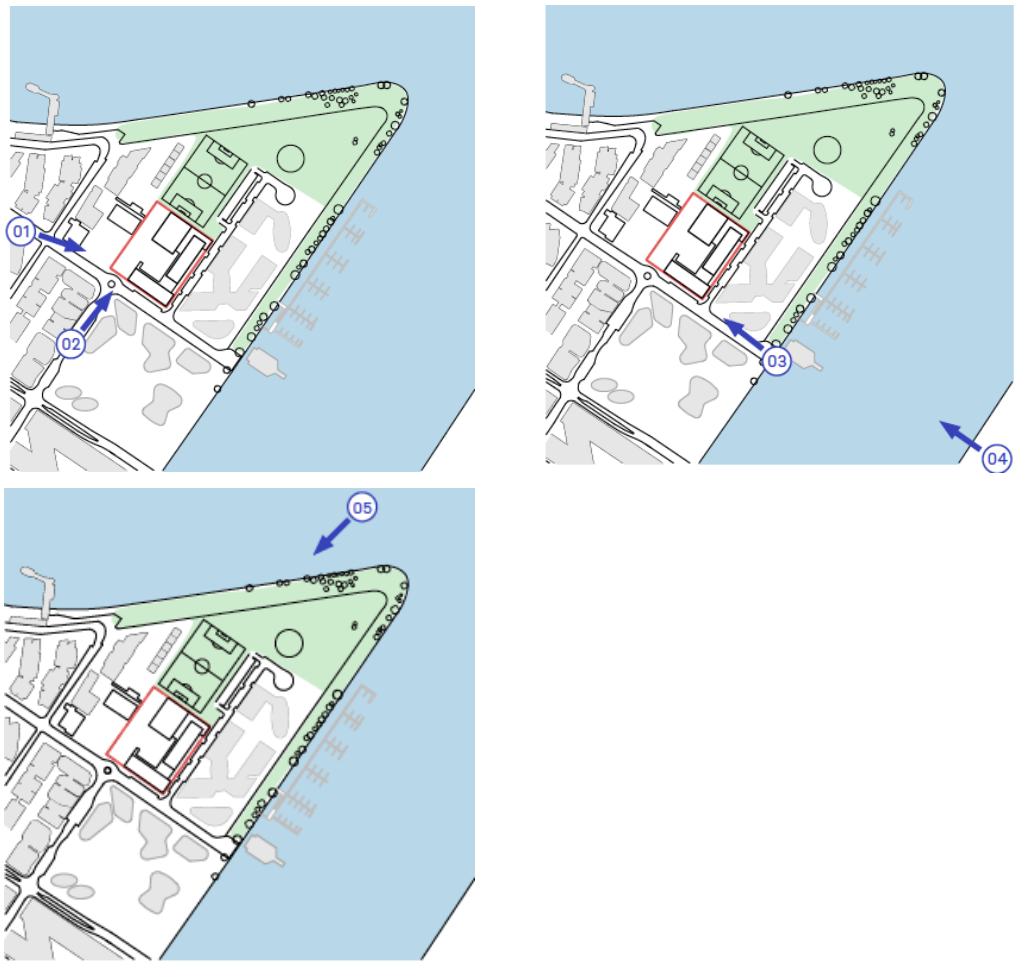

Figure 7-4 View location keys
Source: Woods Bagot

Table 7-1 View assessment

Existing	Proposed
View 1: Looking E from intersection of Waterways St and Burroway Rd	
	
Comment on View 1: The proposal appears compatible with the context, providing a moderately scaled built form that frames the streetscape and provides for a strong street wall.	

Existing	Proposed
This view also demonstrates a suitable relationship between the primary school and proposed high school, with significant separation between the two schools. The proposal does not obstruct any significant view from this viewpoint.	
View 2: Looking N from Wentworth Pl	
	
Comment on View 2: The proposal introduces new high-quality built form to the streetscape. A view corridor to Peninsula Park and the water is maintained along the western edge of the site.	
View 3: Looking W from eastern end of Burroway Rd	
	
Comment on View 3: The proposal appears compatible with surrounding context, providing a moderately scaled built form that frames the streetscape and provides for a suitable front setback. The school building provides an articulated façade, minimising the apparent bulk. The proposal does not obstruct any significant view from this viewpoint.	
View 4: Looking W across Homebush Bay from Rhodes	

Existing	Proposed
	
Comment on View 4: The proposal introduces new built form at the northern end of the Wentworth Point peninsula. The proposal appears low to moderate in scale when seen in the context of the surrounding development and will provide a suitable transition in form from the neighbouring high-rise development down to the foreshore. The proposal generally continues scale and setbacks of other development on the northern side of Burroway Road.	
View 5: View from Parramatta River along typical ferry route	
	
Comment on View 5: The proposal introduces new built form at the northern end of the Wentworth Point peninsula. The proposal appears low to moderate in scale when seen in the context of the surrounding development. The scale of the proposal generally mirrors that of the adjacent primary school and residential development along the foreshore to the west.	

7.4.4 Impacts on private views

There are a number of high-rise residential towers to the southeast of the site, with the 20-storey tower at 17 Wentworth Place (part of the Marina Square development) being the closest and most relevant for the purposes of this assessment.

The proposal will cause some obstruction to views to the water currently enjoyed by residents in the lower levels of the tower. These impacts, however, are considered acceptable for the following reasons:

- At six storeys in height, the proposal will only affect a limited number of apartments in the lower levels of the building, and these lower apartments do not benefit from sweeping views given their low heights. The higher apartments will retain their more sweeping views.

- Related to the above point, it is unreasonable to expect, in a high-density context, that apartments in the lower levels of a building will retain views to the water, particularly when the apartment building is not located on the final development parcel before water.
- The private views to the water are desirable but cannot be considered iconic or worthy of absolute retention, particularly in a high-density context.
- The planning controls envision development on the site, and the proposal is generally in accordance with the planning. A height variation is proposed (as discussed in section 5.9 of this EIS), but this variation is minor, being limited to the shaft and roof plant, and is not expected to have any notable additional impacts on views. Also, as noted above, compared to a fully height-compliant scheme, the proposal will in fact open up views to the water by providing moderately scaled six-storey built form rather than an 88m tower as allowed by the planning controls.
- The proposed U-shaped layout minimises impacts on views by positioning the largest building mass generally along a north-south axis along the future eastern boundary road, thereby helping to retain views to the water.
- The proposal maintains a view corridor free of built form that runs from the Burroway Road/Wentworth Place intersection to the water.

It is noted that future residential towers on Block H to the south will be similarly affected, but the impact is considered acceptable for the reasons described above.

7.5 Traffic and transport

A Transport Access Impact Assessment prepared by SCT Consulting is attached at Appendix 6. The report analyses the existing transport network; assesses the potential traffic impacts associated with the proposed development during the construction and operation phases; assesses the suitability of the development's access, internal circulation and servicing arrangements; and recommends measures to ameliorate any adverse impacts.

7.5.1 Existing environment

Existing access and surrounding road network

The site fronts Burroway Road, a local street that terminates in a cul-de-sac at the Homebush Bay foreshore. The primary road access into Wentworth Point is via Hill Road.

Bennelong Bridge runs across Homebush Bay between Rhodes and Wentworth Point, providing two bus-only lanes as well as a shared cyclist and pedestrian path. The bridge has proved beneficial in providing improved connectivity for pedestrians and cyclists as well as better public transport between Rhodes and Wentworth.

A map of the surrounding road network is provided at Figure 2-4 above.

Existing traffic conditions

Traffic count surveys were undertaken on 30 March 2021 from 8am to 9am and from 3pm to 4pm at the following four intersections near the site:

- Hill Road/Burroway Road.
- Burroway Road/Wharf Circuit/Waterways Street.
- Burroway Road pedestrian crossing east of Waterways Street.

- Burroway Road/Wentworth Place.

SIDRA analysis has shown that the existing level of service (LoS) at these intersections is Level A (good operation).

Existing public transport

Trains, ferries and buses are available in the area, with most of the proposed school catchment covered by a 30-minute journey.

The site is located 1.5km from Rhodes Station, which services the T9 train line towards Hornsby, Central Station and Gordon. The nearest bus stop is located on Hill Road after Burroway Road, which provides services connecting Wentworth Point to Sydney Olympic Park, Homebush, Canada Bay, North Ryde and Chatswood.

Sydney Metro West has confirmed that a metro station will be located at Sydney Olympic Park near the existing heavy rail station. Construction begins in 2020, and the operation of this mass transit corridor will lead to increased accessibility to surrounding areas, including the site. Currently, the 533 bus service links the site to Sydney Olympic Park station with a 12-minute bus ride. Parramatta Light Rail Stage 2 would also provide a direct connection to the Sydney Olympic Park metro station.

7.5.2 Traffic impacts

Traffic generation

It is expected that the proposal will reduce private vehicle trips and replace them with more sustainable and efficient modes. At present, high school students in the peninsula must leave to find a school, namely being Strathfield South High School (as an out of area enrolment) or Concord High School (in-area). Travel to these locations is highly dependent on private vehicle given the long travel distances and limited public transport offerings. Therefore, delivery of a new high school in the peninsula will result in a net reduction in traffic leaving the peninsula.

It is expected that there will be an increase in traffic around the vicinity of the site due to kiss-and-ride movements. Further away from the site, however, traffic will decrease.

Vehicle trips to the high school were determined for the full capacity scenario (i.e. Stage 2 operational) to assess end-state intersection performance. As is typical for school planning, an assumption of 1.7 students per car was used, leading to a school-specific trip generation of 112 vehicles in the peak hours. Each trip was added both as inbound and outbound trips, with 80% of students arriving during the peak school hours.

Intersection performance

Traffic impacts have been modelled using SIDRA to determine the proposal's potential impacts on the surrounding intersections. The results show that all intersections and zebra crossing approaches in the near vicinity will operate at Level of Service (LoS) A (highest rating) under the future 2031 scenario after the school is built and fully occupied, inclusive of background growth.

7.5.3 Mode share

The base mode share and target mode shares for travel to the school are outlined in the table below.

Table 7-2 School travel mode share

Base case mode share		Target mode share	
Walk	45%	Walk	56%
Bicycle/scoot	15%	Bicycle/scoot	17%
Public transport	10%	Public transport	14%
Kiss-and-ride	30%	Kiss-and-ride	13%

The base case assumes that no additional infrastructure is delivered to the walking network, the remainder of the infrastructure identified in the Wentworth Point DCP is not delivered, and no additional bus frequency/services are added to the network.

The target case assumes the provision of the following infrastructure:

- 4 x raised zebra crossings and 258 bicycle/radeables parking spaces (to be delivered by SINSW in collaboration with Council).
- Modification of bus services to bring Carter Street development into the 30-minute catchment (TfNSW responsibility).
- 144 bicycle parking spaces for Stage 1 and an additional 114 bicycle spaces for Stage 2 (to be delivered as part of the proposal).
- Delivery of infrastructure identified in Wentworth Point DCP (Council responsibility).

As noted, the investments required for the target case are the responsibility of a number of stakeholders, including Parramatta Council, SINSW, TfNSW and other landowners. The certainty of delivery of these items, however, is high.

Additionally, a number of transport encouragement programs are recommended to help achieve the target mode share, as outlined in the School Travel Plan section below.

7.5.4 Parking and access

Kiss-and-ride

All students that arrive by car are expected to be passengers, with no student parking on site. Eight primary kiss-and-ride spaces are proposed along Burroway Road. The provision of eight spaces is considered an appropriate balance between servicing the expected number of cars and encouraging the use of sustainable alternative modes of transport. The eight kiss-and-ride spaces will be able to accommodate the 190 students forecast based on the mode share within the typical 30-minute window. This requires average pick-up time of two minutes per car, which is reasonable for a high school population for both pick-up and drop-off.

Car parking

Thirty off-street shared use parking spaces will be provided along the future eastern road (delivered by others). These spaces will be used by staff during the day and by the public outside of school hours. This gives a staff-to- car-park ratio of 1:0.45 for Stage 1 and 1:0.25 for Stage 2.

Wentworth Point DCP refers to Auburn DCP 2010 for parking rates. Auburn DCP 2010 identifies a minimum parking requirement of one space per 20 Year 12 students plus

one space per two staff. This results in a requirement of 74 total parking spaces, being 13 spaces for Year 12 students and 61 spaces for teachers.

The reduced parking is considered appropriate for this specific school and context. Restricted parking supply is one of the strategies employed to encourage the use of more sustainable transport modes. Also, in the likely catchment area, families almost exclusively live in high-density residential apartments. Unlike a lower density suburb, this will translate to lower car use and ownership. It is not necessary that parking be supplied for Year 12 students as they are unlikely to have access to vehicles. The abundance of public transport services means that there is no need for students to drive to school.

Furthermore, the staged occupation of the school generally aligns with delivery of Sydney Metro West. The proposed Stage 1 staff-to-car-park ratio of 1:0.45 is generally consistent with the DCP's requirement for teachers. The Stage 2 ratio is notably lower than the DCP's requirement for teachers, but it is expected that the Metro will be in operation around the time that the school is in the Stage 2 expansion. The Metro will supply a significant increase in public transport access in conjunction with the likely bus operations that would be delivered around any station precinct.

Car parking – potential short-term scenario

The intention is for the future eastern road and 30 parking spaces to be delivered prior to opening of the school. If, however, the road and parking spaces are not delivered in time, staff will need to use the off-street parking available in nearby commercial car parks on a short term basis. These car parks offer three hours of free parking, providing an alternative for visitor parking to the school and will also provide extra parking capacity for staff during weekdays. These options include Pierside (100 parking space approximately 150m from the site) and Marina Square (495 spaces 70m from the site).

Bicycle parking

A total of 258 parking spaces for bicycles and other rideables (e.g., scooters) will be provided in the southwestern corner of the school site as shown in Figure 3-18 above. An allocation of two-thirds of the space to bicycles and one-third to rideables is proposed to cater for different active transport modes.

7.5.5 Servicing

The new high school will be serviced via the kerbside from a delivery zone located on the future eastern road close to lifts and stores. The waste storage is at the northern end of the site, with waste servicing expected to occur off-road from the carpark adjacent to the playing field.

The delivery of the eastern road is expected to be completed in time for school operations to commence in 2024.

DoE as the future school operator will need to engage a waste contractor who is willing to access the waste in the storage location nominated within the site and transport as required to the collection point (anticipated to be in the carpark adjacent to the playing field).

7.5.6 School Travel Plan

A Draft School Transport Plan (STP) is included at section 5 of the traffic report. The STP propose a number of methods to help drive modal share towards active and public transport and achieve mode share targets, including:

- Green Travel Plan Committee.

- Transport information on the website.
- Bicycle check -up.
- Walk Safety to School Day and/or National Ride Day.
- Provision of Travel Access Guide.
- NSW Personal Development Health and Physical Education (PDHPE) syllabus.
- Communications plan.
- Ongoing data collection and monitoring.
- Advocate TfNSW to improve public transport services in response to increased development.
- Promote use of public transport for students with a rewards scheme.
- Liaise and discuss with TfNSW the feasibility of providing bus services for students outside of the 2.3km driving distance from the school.
- Potentially introduce and enforce of parking restrictions around the school. This is to be discussed and implemented in collaboration with Council's road safety officer.
- Manage kiss-and-ride area so that vehicles stay a maximum of two minutes.

In addition to the above, the PSTP makes reference to a variety of key infrastructure changes in the locale relating to the provision of bus services, as well as the inclusion of key pedestrian crossings to improve site connectivity and amenity.

7.5.7 Construction traffic management

A preliminary construction traffic management approach is provided at section 4.1.1 of the traffic report. The contractor responsible for delivery will prepare a detailed construction traffic management plan (CTMP).

As the vehicles delivering parts to the site are expected to be oversized, delivery will need to be outside of peak periods, both to minimise impacts to the broader road network and also to reduce the risk of damage to parts.

Traffic management will require approval from Council. It is expected that traffic management measures will only be required within the Wentworth Point suburb, which contains only local and community title roads.

Final construction vehicle numbers are still being confirmed. However, as a preliminary estimate, it is expected that 20 heavy vehicle truck movements will occur on a typical construction day.

The Design for Manufacture Assembly approach for the school construction (see Architectural Design Report at Appendix 3 is expected to require traffic management measures such as full/partial road closures. Closure would be short compared with traditional construction approaches.

The peak workforce is estimated to be 300 workers on the basis that Stages 1 and 2 are built concurrently. Workers are expected to use light vehicles.

Potential road network impacts by worker traffic to the site will be mitigated by the construction workers generally starting earlier and finishing earlier than the commuter peak periods and would likely not coincide with the school or road network peak periods. Construction workers will be encouraged to carpool, further reducing the impact on the road network and local parking demands.

So as not to adversely impact upon on-street parking during the construction period, construction worker parking is expected to be managed as follows:

- Construction workers to be encouraged to use Marina Square and Pierside parking lots which have affordable paid parking options.
- Potential to use TfNSW land to the east, being the balance of DP1216628 Lots 203 and 204 for worker parking, subject to landowner's consent.

These mitigations could reduce the impacts of worker parking on the availability of on-street parking spaces. Should the TfNSW site not be available for worker parking, there is sufficient capacity in both the Pierside and Marina Square parking. A total of 595 parking spaces are available between the two shopping centres, which are between 70m and 150m from the future construction site. This is more than sufficient for the maximum number of workers on site given that workers will share vehicles and may also be able to take public transport to site.

7.5.8 Mitigation measures

A detailed CTMP will be prepared by the contractor to help manage traffic and pedestrian impacts associated with construction.

A School Travel Plan will be prepared and implemented to help encourage sustainable transport and achieve mode share targets.

7.6 Ecologically sustainable development

A Sustainable Development Plan prepared by Stantec is attached at Appendix 7. The report explains how the project has addressed the SEARs requirements and summarises the ESD initiatives adopted for the project. Key items from the report are outlined below.

7.6.1 Principles of ESD

There are four ESD principles defined by Clause 7(4) of Schedule 2 of the EP&A Regulation that must be considered in the assessment of the proposal. These are addressed in the table below. The Green Star report card at Appendix A of the ESD report also identifies where specific project initiatives align with the four principles.

Table 7-3 Assessment against principles of ESD

Principle	Comment
Precautionary principle: The precautionary principle says that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.	The proposed buildings will be located reclaimed land within an established urban area. The risk of creating environmental damage to aspects such as waterways, water table, native habitat, and other biological features is considered low. If the ESD principles set out in the applicable regulatory policies, plans, controls and Australian best-practice guidelines are considered, supported and acted upon to satisfy their objective, serious or irreversible environmental damage is not foreseen.

Principle	Comment
Inter-generational equity: The principle of intergenerational equity says that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.	The proposal approaches inter-generational equity by minimising the consumption of resources while providing both an education facility and workplace that will ensure the health and wellbeing of students, staff and visitors into the future. The project has objectives that place lower demand on resources (energy, water, materials) in construction and operation, when compared to standard practice, by introducing Australian best-practice energy, water and materials conservation measures. These objectives and corresponding initiatives set out to use today's resources in a manner that enables future generations to meet their own needs using equivalent resources.
Conservation of biological diversity and ecological integrity: This principle says that conservation of biological diversity and ecological integrity should be a fundamental concern.	Because the proposed development is situated on reclaimed land it can be assumed there is limited biological diversity present. However, the sustainability targets to be set for the project will aim to improve conservation of resources, meaning that the proposal is likely to have a smaller gross biological and ecological footprint than equivalent projects in standard practice.
Improved valuation, pricing and incentive mechanisms: This principle says that environmental factors should be included in the valuation of assets and services.	Contractors will be requested to provide and abide by an Environmental Management Plan and Environmental Management System which are in accordance with NSW Environmental Management Systems Guidelines or a similar standard. This places a value on environmentally responsible building practices and places a form of "polluter pays" onto the contractors to ensure they are held responsible for the environmental management of the building site as they complete their work. The costs associated with the construction waste will be borne by the project team. They will be required to target 90% recycling of construction waste. This may have a greater financial cost to the project; however, it provides a more accurate reflection of the full life cycle costs of the materials which were on the site, and the waste from the new materials as a result of the construction. The costs of producing sewage, landfill waste, and CO2 emissions are partially borne by the project team and accounted for in the project's sustainability initiatives.

Principle	Comment
	The project has voluntarily elected to: • Improve water consumption efficiency, thereby paying to reduce production of sewage. • Reduce energy consumption, which means solutions to reducing CO2 emissions will be paid to be investigated during the design phase. • Recycle waste streams in the construction and operation of the project, which will cost more than standard practice where all material waste is directed to landfill.

7.6.2 Accredited rating system

The proposal seeks to implement two complementary sustainability frameworks:

- Star Green Star certification in line with Green Star Design and As Built v1.3 rating tool.
- ESD principles outlined in the EFSG.

The two frameworks have similar ESD goals and therefore overlap in several categories and initiatives. Where variances occur between the two frameworks in terms of the rigor and benchmarks detailed, the most stringent one shall take place.

Provisional Green Star matrix and EFSG pathway demonstrating the projects ability to achieve the minimum 4 Star Green Star outcome is included in Appendix A Stantec's report.

7.6.3 ESD initiatives

The table below summaries the ESD initiatives for the project. These initiatives are required to achieve the 4 Star Green Star rated outcome or fulfill EFSG requirements noted in the subsection above.

Table 7-4 Project ESD measures

Imitative	Description
Energy and carbon	• Passive design strategy including building fabric compliance with Section J 2019 without reliance on PV systems offset, low window to wall ratio, and appropriate shading and high performing thermal materials. • Building at least 10% more efficient than full compliance with NCC. • Efficient lighting. • Efficient HVAC systems. • Onsite renewable energy – PV system • Off-site renewable energy – GreenPower.

Imitative	Description
	• Efficient appliances and equipment. • Building air tightness.
Water management	• Efficient water fixtures. • Rainwater reuse for irrigation and toilet flushing. • Air-cooled heat rejection systems. • Fire test water reuse. • Stormwater management consistent with Green Star pollution reduction targets. • Landscape design featuring locally indigenous drought-tolerant species. • Report on water use.
Health and wellbeing	• Low volatile organic compound (VOC) and formaldehyde materials. • Enhanced air quality, with sources of pollutants (e.g., printing, photocopying and cooking) compliant with minimum emissions standards or exhausted directly to outside. • Access to daylight and views. • Lighting comfort. • Acoustic comfort. • Thermal comfort. • Active transport facilities.
Resilience	• Climate change adaptation plan to be undertaken to ensure the design allows for suitable provisions for the predicted impact of climate chance. • Reduction in heat island effect, with 75% of the site area comprising elements to reduce the effect (e.g., vegetation, light-coloured roof and shading).
Materials	• Reducing whole of life environment impacts. • Use of responsible materials including steel sourced from a responsible steel maker, FSC certified timber and best practice PVC plastics. • Waste management, with a target of 90% of construction and demolition waste diverted from landfill.

7.6.4 NARCliM-projected impacts

The table below summarises how the proposal is response to NARCliM future climate projections for the Metropolitan Sydney.

Table 7-5 Design response to NARCliM projections

Projection	Response
Temperature: 2020-2039 Mean temperatures are projected to rise by 0.7 °C by 2030. 2060-2079 Mean temperatures are projected to rise by 1.9 °C by 2070.	**Building envelope:** Provide a mixture of high-performance glazed façade systems, external shading device and minimise east/west orientation. Façade to assist with reduced air-conditioning energy consumption and promote thermal comfort to inhabitable spaces. **Project design:** • Consider the provision of outdoor refuge with adequate horizontal shadings for outdoor occupants and visitors for adequate shading and blocking summer sun, while allowing winter sunlight underneath. • Add landscaping and trees with drinking water fountains in multiple external spots around development. • Use of light-coloured roof. • Reduce hard surfaces and increase landscaping. **Mechanical:** • Size air-conditioning systems to be enough with spare capacities for efficient operation whilst providing thermal comfort to conditioned spaces. • Amend building comfort expectations (temperature bands) during peak temperature days and educate occupants for tolerance the wider temperature bands. • Position systems in well shaded, insulated areas. • Include heat recovery in system. • Provide the appropriate design such as insulation to keep mechanical plant efficient.
Heat: (Units are the change in number of days a year maximum temperate >35 °C) 2020-2039 +3.9 days, mostly to occur in summer. Hots days are projected to increase across the region by an average of 4 days per year by 2030. 2060-79 +10.4 days, mostly to occur in summer, but also hot days in spring. Hots days are projected to increase across the region by an average of 11 days per year by 2070.	
Rainfall: 2020-2039 By 2030 there is little change in annual rainfall. Rainfall is projected to increase across the region during autumn with the largest increase seen north of Wiseman's Ferry. Rainfall is variable across the region during the other seasons.	**Water conservation:** • Design air-conditioning system with waterless /hybrid towers. • Use of drought tolerant and native plants (over 40%). • Provide subsoil irrigation system to improve watering effectiveness. • Design rainwater tanks for rainwater reuse for landscape irrigation.

Projection	Response
The projected annual rainfall increase for the region is +1.7% 2060-2079 Annual rainfall is projected to increase by 2070. Increases are projected across the whole region for summer and autumn. Winter and spring rainfall is more variable, with a slight decrease in rainfall in the Blue Mountains during winter. The projected annual rainfall increase for the region is +8.9%	• Provide multiple alternative water sources, e.g., greywater and rainwater. • Water efficient appliances. **Flood mitigation:** • Provide safer access routes that are above the peak flood levels. • Provide multiple access routes to the site. • Provide early warning system for a risk of a flood. • Design stormwater system to cope with extreme rain events over 20-year. • Design above ground stormwater system to cope with 100-year extreme rainfall. • Incorporate best practice maintenance strategies for stormwater system with considering the worst scenario for 2070. • Install additional power sources such as back-up generators or battery storage located above the PMF heights, to ensure they are not flood-affected and capable of power provision to the development under extreme flood events. • Use of permeable paving.
Fire Forest Fire Danger Index (FFDI) is used in NSW to quantify fire weather. The FFDI combines observations of temperature, humidity, and wind speed. Fire weather is classified as severe when the FFDI is above 50 2020-2039 +0 change in number of days a year FFDI > 50. By 2030, severe fire weather is projected to have a slight increase in summer and along the Blue Mountains during spring. Decreases are projected during autumn and across the Sydney Basin in spring. Declines during Autumn are likely due to increases in rainfall. These increases are seen during the peak fire risk season (summer). 2060-79 +0.6 change in number of days a year FFDI > 50. Severe fire weather is projected to increase during summer and spring by	Provide additional filtration for carbon filters and smoke removal. Provisions of compliant fire and life safety design of the building to protect fire and life safety strategy (e.g., provisions of exits and egress, fire sprinkler and hydrant systems, smoke hazard management, etc.) Provide multiple access routes to the site.

Projection	Response
2070. Declines are projected for autumn and winter. These increases are being seen during the peak prescribed burning season (spring) and peak fire risk season (summer).	

7.7 Aboriginal cultural heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared by Comber Consultants is attached at **Appendix 9.** The ACHAR has been prepared in accordance with Heritage NSW's Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) and Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010).

The project must also address the Draft Connection to Country Framework through the SDRP process.

7.7.1 Environmental context

The site is located on the southern bank of the Parramatta River within the Cumberland Plain across an area of reclaimed land. This portion of Wentworth Point consists of a flat terrain that is subject to flooding.

Land reclamation was undertaken using contaminated fill from the nearby petroleum storage infrastructure (Wentworth Point DCP 2014:15) and completed by 1943.

As the study area consists entirely of land fill, no in situ soil deposits, watercourses or geological formations are located across the site.

The site is currently vacant with cement slabs located across the site from previous industrial use. A large mound, sparse trees and vegetation regrowth and introduced gravels are located within the site.

To date, archaeological investigations within the immediate vicinity of the study area have been limited. This is likely due to the study area being located within reclaimed land and the lack of archaeological potential. Archaeological investigations have been undertaken within areas of natural landscapes in the Homebush and Sydney Olympic Park region, with registered Aboriginal sites located in the wider region.

A search was undertaken of the AHIMS on 03/03/2021.The search revealed 24 registered Aboriginal sites within a 3km radius of the study area but no known sites within the land reclamation area. As the study area is located on reclaimed land containing contaminated fill, the potential for any unrecorded Aboriginal sites to be present within the study area is nil.

7.7.2 Aboriginal archaeological assessment

The study area was inspected on foot on 19 January 2021 and covered all exposed areas. No *in situ* soil profiles were identified during the site visit. As the study area is located within an area of reclaimed land, there is nil potential for Aboriginal sites or places to be located within the site.

7.7.3 Consultation

Consultation was carried out in four stages in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010:

1. Notification of project proposal and registration of interests:

   In accordance with consultation guidelines, relevant bodies and known Aboriginal stakeholders were notified of the development, requesting registration of interest in the project. Additionally, a public notice was placed in the digital edition of the Inner West Courier from 24th December 202 to 28th January 2021. A total of 21 Aboriginal stakeholders registered their interest.

2. Presentation of information about the proposed project:

   All registered Aboriginal parties (RAPs) were invited to a consultation meeting to explain the project, ascertain significance, and discuss proposed methodology. No RAPs attended the meeting.

3. Gathering information about cultural significance:

   The proposed methodology was sent with the invitations to the meeting. All RAPs were given 28 days to respond. One response was received agreeing with the methodology.

4. Review of draft cultural heritage assessment report

   The draft ACHAR was sent to RAPs on 10/03/2021 with the review period ending 09/04/2021. Four responses were received, with three of the four expressing support. The other response requested that Aboriginal cultural interpretation be included in the development.

7.7.4 Statement of significance

The study area sits within the boundaries of the Wann and the broader Aboriginal landscape of the Sydney Basin. However, the land on which the study area is located was reclaimed in the 1930s. Prior to this, the study area would have consisted of mudflats that were submerged below water. Due to this, evidence of Aboriginal occupation is not predicted to be present on site.

To address Connection to Country requirements for SSDA projects, additional engagement with the AECG was completed. Opportunities to reflect broader Connection to Country in the design of the school are being explored and will be finalised prior to detailed design completion.

7.7.5 Impact

As the study area is reclaimed land without the potential to contain Aboriginal sites, there will be no impacts to Aboriginal sites, and therefore specific mitigation measures are not required.

7.7.6 Mitigation measures

The following recommendations were made by the ACHAR:

- Aboriginal community consultation in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 should continue for the remainder of the project, including input into the design principles of the new high school.

- As subsurface Aboriginal objects are not predicted to exist within the study area, no further Aboriginal archaeological assessment is required. This report satisfies Key Issue 7 'Aboriginal Cultural Heritage' of the SEARs.

Additionally, opportunities to reflect Country in the design are being explored with the AECG and will inform detailed design.

7.8 Social impacts

A Social Impact Assessment (SIA) has been undertaken by Urbis and is attached at Appendix 28. The assessment identifies and analyses the potential positive and negative social impacts associated with the proposal. The assessment was prepared using the following methodology:

- Background review of surrounding land uses, relevant state and local polices and analysis of relevant data.
- Review of site plans, technical assessments and community consultation outcomes.
- Consultation with key stakeholders to identify potential impacts.
- Identification of impacted groups.
- Assessment of significant impacts considering management measures.
- Provision of recommendations to enhance positive impacts, reduce negative impacts and monitor ongoing impacts.

7.8.1 Social baseline

The site is located in in the Wentworth Point peninsula, which has experienced considerable urban development since it was rezoned from industrial to residential use in 2014. Most industrial sites in the peninsula have been redeveloped as high density mixed use development.

Key characteristics of the community include:

- Close to 60% of Wentworth Point residents are aged between 20 and 39 years, which is a significantly higher proportion than in the LGA (36%) and Greater Sydney (31%).
- Wentworth Point is one of the most densely populated suburbs in NSW, with a population density of 199.43 persons/ha. Almost all residents live in a flat or apartment (99%) and are renting (61%).
- The suburb is in the top 10% of NSW suburbs for socio economic advantage.
- By 2036, the population in Wentworth Point is expected to increase by 66% to 18,828 people. The proportion of children aged 10 to 19 years is also forecast to grow and is expected to total 1,062 by 2036.

Concord High School is the only existing government high school that includes Wentworth Point within its catchment. Concord High School is a co-educational secondary school located approximately 9km from the site. Enrolment data from the Australian Curriculum, Assessment and Reporting Authority indicates that Concord High School has experienced a steady growth in enrolment numbers over the past five years and currently has 1,286 students. In 2020, the school had 15 demountables to accommodate this growth.

7.8.2 Engagement

Engagement was undertaken with several agencies and community groups to inform them of the project and provide an opportunity for feedback on the proposal. This engagement has been documented at section 4.4 of Urbis' report.

7.8.3 Social impact assessment

The following section provides an overview of potential social impacts resulting from the proposal. Refer to section 6 of the SIA for a detailed assessment of the significant social impacts.

Table 7-6 Social impact assessment summary

Impact category	Potential social impact	Assessment
Neutral to low impacts		
Livelihoods	Potential for increased employment opportunities during construction and operation	The development of a new school in Wentworth Point is likely to create increased employment opportunities for the region. This includes potential job creation for the construction and building industry, as well as additional full time teaching roles.
Moderate to high impact		
Culture	Engagement and integration with Aboriginal culture	As identified in Council's LSPS and by the Government Architect of NSW, it is important for people to work closely with Aboriginal communities to ensure Aboriginal cultural and heritage values are recognised and protected during development. The proposal has engaged with Aboriginal community members through the ACHAR process and through Connection to Country discussions. Opportunities to inform the design with Country are being explored and will be finalised in the detailed design.
Community Way of life	Improved access to education	There are currently no high schools in Wentworth Point, with secondary students typically required to travel to Concord to access school. Consultation indicates that some students are experiencing long travel times, and the capacity of local school network is declining. The provision of a new high school in Wentworth Point will help meet this demand and is expected to have a positive impact on the community.
Accessibility Way of life	Traffic generation	Wentworth Point has existing traffic constraints due to its location on a peninsula. The location of the new school has therefore caused concern in the

Impact category	Potential social impact	Assessment
		community that the proposal will exacerbate existing traffic congestion in the area. Indicative traffic modelling suggests the school will not impact on traffic congestion and represents an opportunity to reduce vehicle movements by enabling more students to walk and/or cycle to school.
Health and wellbeing	Access to open space for students	It is essential for all school sites to provide play areas and open spaces for student use. The proposal will provide a range on open space areas on site to support a diversity of recreational activities. Community consultation on the proposal indicates there is concern the proposed school will have insufficient open space for students given the size of the site.
Community Health and wellbeing	Access to public open space	There is an existing deficit of open space in Wentworth Point. Since 2014, there have been plans to build Peninsula Park for the benefit of the Wentworth Point community. The new school will be located directly adjacent to the planned park. Community consultation on the proposal indicates there is concern the proposal will block access and encroach on the park area, potentially impacting on the amount of public open space available to the community. While this is unlikely to occur as part of this SSD, this impact has been included for further analysis due to the high level of community concern.
Community Health and wellbeing	Access to community facilities	The provision of schools and community facilities is essential to the development of liveable communities. There is a current deficit of community facility space in Wentworth Point. As a new school in a growing area, the proposal represents a valuable opportunity to increase potential community access to social infrastructure through shared use arrangements.
Health and wellbeing Surroundings	Noise and amenity	The proposal will result in a new school in Wentworth Point being constructed in close proximity to other potential development and also to a considerable number of apartments. Community and stakeholder consultation on the proposal indicates there is concern the school will generate increased noise impacts to residents, both during construction and operation of the school. This concern is heightened by the existing and planned construction works occurring around the site.

Overall, the SIA identified two key impacts that are likely to be felt by the community, namely access to open space for students and increased noise during construction.

7.8.4 Mitigation measures

The SIA provides the following mitigation measures to manage the potential impacts from the proposal:

- Implement the recommendations of the Aboriginal Cultural Heritage Assessment. This includes ensuring consultation is undertaken with Aboriginal communities to provide input into the design principles for the new school.
- Continue to meet and implement the advice provided by the AECG, as it relates to the school design.
- Maintain consultation with Aboriginal and Torres Strait Islander communities to keep them informed of the final design and to allow for further opportunities for input as the proposal progresses.
- Aim for the catchment area for the new school to encompass the entire suburbs of Wentworth Point and Sydney Olympic Park. The catchment area should be developed and refined in line with existing DoE processes.
- Clearly communicate the catchment area to all existing and prospective families in the broader Wentworth Point and Sydney Olympic Park, as well as the expected contingency plans around enrolment capacity. This should be undertaken throughout the planning, design and construction stages, as details are confirmed.
- Implement the management measures and recommendations outlined in the TAIA, including those to support the delivery of the School Transport Plan.
- Continue to communicate with the community around the expected vehicle and pedestrian movements around the school, and the way in which these will be accommodated.
- Communicate clearly about the proposed joint use arrangements and on-site open space areas to ensure the community remains informed about the campus design and carrying capacity.
- Advocate for the construction of the new play space on the adjacent site as soon as possible.
- Open Stage 2 of the school to incoming students only when the new play space is constructed and a joint use agreement secured.
- Continue to clearly communicate the high school's site boundary to the Wentworth Point community.
- Enable the joint use of the school's on-site recreational facilities for community use outside school use. Given the existing deficit of recreational facilities in Wentworth Point, priority should be given to use of the indoor and outdoor courts for broader community use.
- Continue to communicate with TfNSW and Council throughout the design process to ensure the site interface with the Peninsula Park boundary is of a high visual amenity.
- Work with Council to develop a shared use arrangement for community use of school buildings and facilities outside hours, aligned with DoE policy.

Priority should be given to facilities which are easily accessible and adaptable, such the hall.

- Consider ways to invite the community on site to help support community connections and interactions. This could include measures such as holding and open day when the school commences operation and inviting the public to school events. It could also include prioritising use of school facilities for activities which target at-risk groups or key social needs in the local area.
- Implement the management measures and recommendations outlined in the Noise Impact Assessment.
- Ensure the community is regularly informed about the expected construction schedule and the construction impacts they are likely to experience.
- Consider ways to reduce the intensity of cumulative construction impacts on the community. This may involve various measures, such as coordinating invasive construction activities with surrounding development sites and factoring in time for reprieve.
- Consider ways to streamline and integrate the construction process for Stages 1 and 2 of the proposal, if approved. Emphasis should be placed on avoiding protracted construction timelines and looking at ways to construct parts of the stages simultaneously, as appropriate.

7.9 Noise and vibration

An Acoustics Report prepared by Norman Disney & Young (NDY) is attached at Appendix 10. The report assesses the impacts associated with noise emissions from the site during the operational and construction phases as well as noise intrusion to the site from surrounding noise sources.

7.9.1 Existing conditions

Surrounding noise-sensitive receivers include:

- Wentworth Point Public School immediately to the west.
- 17 Wentworth Place, an existing residential apartment complex to the south.
- Future residential development to the east.
- Future Peninsula Park to the north.

An unattended noise survey was conducted between 20 April and 3 May 2021 to establish the existing background noise level at the site. The noise logger was positioned at the Burroway Road boundary of the site as shown in the figure below.

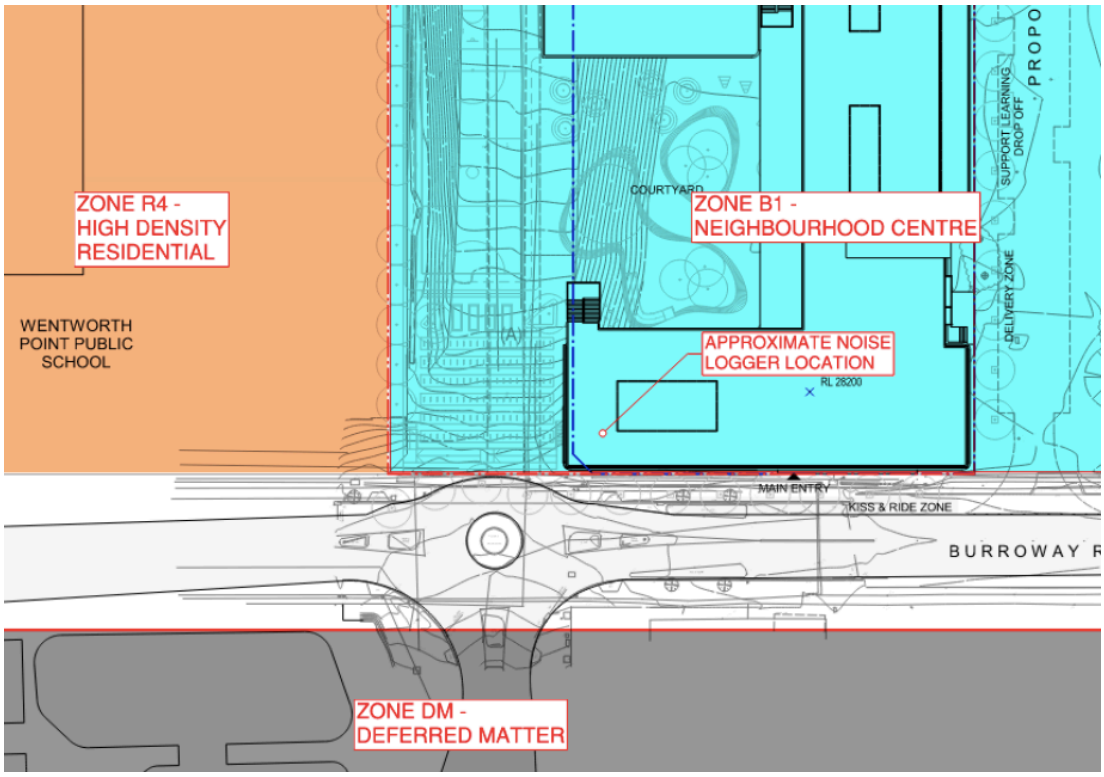

Figure 7-5 Noise monitoring location
Source: Norman, Disney & Young

The baseline data obtained from the monitoring was used to determine the project noise trigger levels shown in the table below.

Table 7-7 Project noise trigger levels

Period	Urban amenity criteria*	Intrusiveness criteria	Project trigger levels
Day (0700-1800)	58 dB(A)	51 dB(A)	**51 dB(A)**
Evening (1800-2200)	48 dB(A)	53 dB(A)	**58 dB(A)**
Night (2200-0700)	43 dB(A)	45 dB(A)	**43 dB(A)**
*Determined from NSW Noise Policy for Industry Table 2.1.			

7.9.2 Noise emission from school

Operational noise

Key sources of noise emissions from operation of the future school include rooftop plant (e.g., chillers and cooling towers), public address (PA) system, school bell, mechanical services, outdoor activities and additional traffic noise.

Regarding the rooftop plant, the predicted noise levels for typical worst-case scenario are compliant with the noise criteria at the receiver boundaries given the sound attenuation by distance between the outdoor plant and the receivers.

Regarding the bell and PA system, appropriate design and commissioning controls will be implemented to minimise noise spill to sensitive receivers. These measures will be developed by the design team during the detailed design stage but may include:

- The PA system to be used for voice announcements only (no music).
- Speakers to be located away from the school boundary.
- PA system use to be limited to school hours only.

The PA system and bell should be installed and adjusted such that the project trigger levels during school hours are met at the noise sensitive receivers.

Construction noise

Predicted noise levels from construction activities have been calculated, and the results are provided at Table 4-3 of the acoustic report. The results show that noise levels during both excavation and structural works are predicted to exceed 75 dB(A). Under the Interim Construction Noise Guideline, this requires construction noise to be managed as part of a construction noise and vibration management plan.

Fit out works are expected to have much less noise impact.

Construction vibration

Compliance with vibration limits is expected to be achieved by ensuring ground compacting equipment is selected to adhere to minimum safe working distances set out in the RMS Construction Noise and Vibration Guideline.

7.9.3 Noise intrusion into school spaces

The primary potential sources of noise intrusion into the school are road traffic, rail and aircraft.

Road traffic noise mainly emanates from Burroway Road. A preliminary traffic noise assessment has been carried out to inform initial allowances for façade glazing. The recommendations are provided in section 5.3.1 of the acoustic report. It is expected that internal noise levels can be met subject to implementation of the recommended glazing. It is noted that the recommendations are only an example of one solution and that the internal noise levels may be met through other similar solutions.

Regarding rail noise, the Main Northern Railway line runs north-south across Parramatta River, approximately 600m to the east of the site. Given this distance and the shielding provided by intervening buildings, rail noise is not expected to be a concern for this project.

Regarding aircraft noise, the closest airports to the site are the Sydney Airport and Bankstown Airport. The proposed school is located well outside of the ANEF 20 contour both airports. Aircraft noise is therefore not expected to be a concern for this project.

7.9.4 Mitigation measures

Façade and glazing systems must be designed to achieve the required internal noise levels, with indicative recommendations provided at section 5.3.1 of the acoustic report.

Selection and design of rooftop plant equipment should consider the following:

- Low noise units.
- Strategic location of equipment away from the most sensitive receivers.
- Building shielding.
- Distance attenuation.
- Duct internal acoustic lining (where appropriate).
- Acoustic louvres.
- Acoustic barriers (where required).

Construction noise is to be managed through feasible and reasonable noise mitigation measures as outlined in the NSW Interim Construction Noise Guideline and Australian Standards 2436-2010. Additionally, section 6.2.1.1 to section 6.2.1.5 of NDY's report outline site and noise management practices for guidance purposes.

7.10 Biodiversity

EESG and DPIE granted BDAR waivers on 7 June 2021 and 23 July 2021, respectively, on the basis that the development is not likely to have any significant impacts on biodiversity values (refer to Appendix 11).

No significant vegetation or flora and fauna values will be affected by the proposal. The site is highly disturbed and contains very low biodiversity values. No threatened ecological communities and no threatened flora or fauna species listed under the BC Act or the EPBC Act have been recorded on the site or are likely to occur.

Given the above, no mitigation measures regarding biodiversity impacts are required.

7.11 Utilities

An Infrastructure Management Plan – Sewer Water & Natural Gas Services by Warren Smith Consulting Engineers and an Electrical and Communication Site Infrastructure Report by WSP are attached at Appendix 16 and Appendix 15, respectively. These reports detail the site's existing utilities and the need for any upgrades. The table below provides a summary of utilities and required upgrades.

As noted in section 3.3 of this EIS, the utilities upgrades and connections to the site will be carried out as early works via a separate approvals process.

Table 7-8 Utilities upgrades

Utility	Existing	Required upgrades
Potable water	The site has access to a Sydney Water water main that runs along the northern side of Burroway Road.	The existing water main can service the proposed development for the required domestic supply. The main is also capable of providing the requirements for firefighting purposes.
Sewer	The site has access to a Sydney Water existing pressure sewer in Burroway Road.	The existing sewer has sufficient capacity for the proposed flows. An extension of approximately 40m along Burroway Road will be required

Utility	Existing	Required upgrades
		to service the proposed development.
Natural gas	The site does not have access to a Jemena natural gas main, but there is a gas main in Burroway Road.	If natural gas is required for the school, an extension of the gas main in Burroway Road will need to be negotiated with Jemena.
Electricity	Existing Ausgrid electrical infrastructure is located along Burroway Road. Two Ausgrid pillars along Burroway Road appear to be connected to the site.	It is understood that the two Ausgrid pillars will be removed by Ausgrid. Alteration works may also be required to facilitate construction of the kiss-and-ride zone. It is anticipated that a new Ausgrid kiosk substation will be required on site to meet the school's power requirements. An application for connection has been submitted to Ausgrid to identify what augmentation works are required to the Ausgrid network to provide power to the new high school. Ausgrid's response is pending.
NBN	There are existing NBN services installed on Burroway Road.	New lead in conduits will be provided from the existing manhole on Burroway Road to the new school campus distribution room/main communications room.
Telstra	It is understood that Telstra does not own the pit and pipe infrastructure installed within the area. It is understood that this infrastructure is NBN-owned.	Telstra drawings indicate that there are some existing connections to the site that appear to originate from the NBN manhole on Burroway Road. These connections are redundant and will need to be removed.

7.12 Stormwater management

A Civil Engineering Report prepared by TTW is attached at Appendix 13, and concept stormwater management plans are appended to TTW's report.

Stormwater will be captured by a series of pits and pipes then treated by water quality controls prior to discharge to the stormwater system in Burroway Road. In accordance with the EFSG, the pits and pipes have been designed to cater for the minor storm event (20 -ear Annual Recurrence Interval (ARI) storm).

Also in accordance with the EFSG, overland flow paths have been designed within the site to allow for the major storm event (100-year ARI storm). The overland path through the site has been designed to direct overland flow towards Burroway Road. Based on DRAINS modelling, there will be a minor increase in overland flows during the 100-year ARI event. However, these flows will be contained within the road reserve and have small depth x velocity values and are therefore considered safe and in accordance with Council's requirements.

The proposed water quality system treatment train consists of a 30kL rainwater tank for rainwater capture and reuse, OceanProtect OceanGuard pit litter baskets and OceanProtect Stormfilter cartridges prior to discharge from the site. Based on MUSIC modelling, the proposed treatment train achieves Council's target pollutant removal rates (i.e., 90%, 85%, 60% and 45% reductions in the post development mean annual loads of gross pollutants, total suspended solids, total phosphorous and total nitrogen, respectively).

The site falls within zone 8 under Section 5.1 D1 of Auburn DCP 2010 and is therefore not required to provide on-site detention (OSD) tank. However, assessment using DRAINS software has determined that the proposed development will impact downstream properties by increasing overland flows in Burroway Road in the minor storm event. As such, the development will provide OSD in order to maintain the current downstream drainage regime. The proposed OSD tank was modelled in DRAINS software and included in the model of the wider Council drainage network. The detention volume and discharge rate from the site was assessed against having a non-worsening scenario on the downstream properties and drainage network. It was determined that a discharge rate of 70L/s and detention volume of 300kL would satisfy the 20-year ARI event.

7.13 Flooding

Flooding is addressed in TTW's Civil Engineering Report at Appendix 13.

A comprehensive flood study and assessment has been completed by Sinclair Knight Merz (SKM) on behalf of Parramatta City Council for the lower Parramatta Catchment and is summarised in the Lower Parramatta River Flood Risk Management Study and Plan (2005). This document has been used to determine the site flood conditions and flood levels.

SKM's study indicates that the 1% Annual Exceedance Probability (AEP) and Probably Maximum Flood (PMF) events in the development area are 1.42m Australian Height Datum (AHD) and 2.42m AHD, respectively. In accordance with Auburn DCP 2010, the habitable floor level is required to meet the 1% AEP level plus 500mm freeboard. In this case, therefore, the flood planning level is 1.92m AHD.

The minimum finished floor level (FFL) for the proposed buildings is 4m AHD, which is well above the 1.92m flood planning level and PMF level.

The proposal's FFL is also above the extreme worst-case flood level of 3.26m AHD, which takes into consideration future potential sea level rise to 2090 based on data from CSIRO and the Bureau of Meteorology.

7.14 Soil and water

7.14.1 Groundwater

Groundwater is considered in the Detailed Site Investigation (DSI) prepared by Greencap at Appendix 19c. One groundwater well was sampled as part of the investigations.

The groundwater assessment identified ammonia and copper concentrations at the single location sampled that exceeded the groundwater investigation criteria levels. These detections are likely due to organic matter in the soil strata and/or the off-site up-gradient sources and dissolved urban contamination associated with the region's history of contamination.

Groundwater monitoring results did not indicate the presence of any other contamination in the assessed perched aquifer beneath the site at the single location sampled.

Greencap recommends further investigation of the underground storage tank near monitoring well GG5 to assess potential for leaching of contaminants into groundwater. A plan for further investigation is included in the RAP at Appendix 19d of this EIS.

7.14.2 Sediment and erosion control

Sediment and erosion control measures will be applied prior to the commencement of construction and maintained throughout construction. The measures will be in accordance with Council's requirements and the NSW Department of Housing Manual, "Managing Urban Stormwater Soil & Construction" 2004 (Blue Book). Refer to the sediment and erosion control plan in the Civil Engineering Report at Appendix 13 for further detail. Provided that these measures are in place prior to construction, no adverse sediment and erosion impacts are anticipated.

7.14.3 Salinity

Salinity is considered in the Report on Geotechnical Investigations by Douglas Partners at Appendix 17. The salinity hazard map indicates that the "moderate" salinity potential category is relevant for the site. Soil sampling conducted by Douglas Partners showed classifications varying from Non-Saline to High Saline. Douglas Partners notes that, assuming standard good building practices are employed, it is likely that impacts from saline soils will be limited to the design of piles and inground structure. The design of all piles and inground structures should consider the recommendations of the relevant standard with respect to saline and aggressive soils.

7.14.4 Acid sulfate soils

Acid sulfate soils were identified during site investigations as detailed in the Detailed Site Investigation by Greencap at Appendix 19c. Accordingly, an Acid Sulfate Soils Management Plan has been prepared by Greencap and is attached at Appendix 19f. The plan provides an overview of the proposed excavation works that may disturb acid sulfate soils, provides a summary of previous investigation works to identify the depth of acid sulfate soils, outlines procedures for additional investigations to further assess the presence/absence of acid sulfate soils, and provides management strategies to be implemented where acid sulfate soils are identified including procedures for how excavated soil and sediment materials shoal be managed. Provided the recommended investigations and strategies are implemented, no adverse acid sulfate soils impacts are anticipated.

7.15 Waste

A Waste Management Plan prepared by Dickens Solutions is attached at Appendix 20. The plan considers construction and ongoing waste. Key items from the plan are outlined below.

7.15.1 Construction waste

The table below outlines the estimated waste generated during the construction stage and any proposed reuse.

Table 7-9 Construction waste generation

Type	Quantity generated	Onsite reuse	Percentage reused or recycled
Concrete	20m³ / 24 tonnes	Existing driveway to be retained during construction – crushed, and used as aggregate and drainage backfill.	60% - 70%
Timber	5m³ / 7 tonnes	Reuse for formwork and studwork and for landscaping.	65% - 90%
Plasterboard and fibro	5m³ / 3 tonnes	Nil – all material to be processed off site	To be determined
Metals / steel / guttering / downpipes	6m³ / 1.5 tonne	Nil – all material to be processed off site	60% - 90%
Roof tiles / tiles	4m³ / 3 tonnes	Broken up and used as fill	80% - 90%
Plastics	5m³ / 1 tonne	Nil – all material to be processed off site	80% - 95%
Glass, electrical and light fittings, PC items	3m³ / 2 tonnes	Nil – all material to be processed off site	70% - 90%
Fixture and fittings	3m³ / 1 tonne	Broken up and used as fill	80% - 90%
Pallets	5m³ / 2.5 tonnes	Nil – all material to be processed off site	90% - 100%
Residual waste	350m³ / 350 tonnes	Nil – all material to be processed off site	NA

7.15.2 Ongoing waste

The proposal's predicted waste generation and bin requirements are outlined in the table below.

Table 7-10 Ongoing waste generation

Type	Weekly volume	Required bins	Collection frequency
Waste	15,300L	7 x 1100L bins	2 per week
Recycling	7,650L	4 x 1100L bins	2 per week

The waste storage area is located along the future access road, enabling easy access by collection vehicles. The area has seen sized to accommodate the required quantity of bins outlined in the table above.

Waste collection will occur kerbside along the future eastern road (delivered by others). It is expected the eastern road will be completed prior to commencement of school operations.

7.16 Contamination

Contamination reporting, including a Preliminary Site Investigation (PSI), Sampling and Analysis Quality Plan (SAQP), Detailed Site Investigation (DSI), Remediation Action Plan (RAP) and Preliminary Long Term Environmental Management Plan (LTEMP) have been prepared by Greencap to support the application. Refer to Appendix 19a, Appendix 19b, Appendix 19c, Appendix 19d, Appendix 19e, respectively. Key findings from the reports are outlined below.

7.16.1 Preliminary site investigation

The PSI comprised a desktop review of historical information and a site inspection to evaluate potential contamination.

The site is situated on reclaimed land, and extensive filling has occurred in the past. Desktop data and a former RAP (Parsons Brinckerhoff 2015) indicated the site has a history of contamination associated with petroleumhydrocarbons, poly-cyclic aromatic hydrocarbons (PAH), heavy metals, asbestos in fill (bonded and friable), and ground gas. Former potentially contaminating activities identified included legacy landfilling, industrial operations (e.g., waste recycling and timber production) and legacy demolition activities.

Given the site's history of contamination, the PSI recommended further investigation to close out data gaps.

7.16.2 Sampling and analysis quality plan

Greencap prepared a SAQP with objective of establishing a plan to undertake the DSI in accordance with:

- National Environment Protection (Assessment of Site Contamination) Measures (NEPC 2013).
- NSW EPA Guidelines on Assessment and Management of Hazardous Ground Gases (NSW EPA 2020).

- Consultants Reporting on Contaminated Land (NSW EPA 2020).
- SEPP 55.

The DSI was subsequently undertaken in accordance with the SAQP as discussed below.

7.16.3 Detailed site investigation

The objectives of DSI were to:

- Obtain sample analysis data to assess the site suitability for the proposed land use.
- Close out the data gaps specified in the PSI Report and SAQP.
- Collect the necessary data and information for improving the conceptual site model (CSM) and risk assessment and planning further investigations and/or remedial actions.

To achieve the above objectives, soil, ground gas, soil vapor and groundwater investigations were conducted on site. Chemical results obtained from these investigations were assessed against applicable human health, ecological criteria and regulatory threshold levels for further investigation and corrective action.

The DSI identified ground gas impact at a level that would require physical gas protection measures for the proposed school development. Methane and carbon dioxide were identified which exceeded the trigger levels for further investigation and/or corrective action at multiple locations at the planned building footprints.

The semi-quantitative risk assessment conducted as part of the DSI, with two rounds of monitoring data (a limited data set and short monitoring timeframe), indicated the site potentially may be classified as "Low Risk" of ground gas, though additional monitoring is required to confirm this classification.

Soil contamination assessment identified localised elevated concentrations of contaminants in soil samples including some exceedances of the Health-based Investigation Levels (HIL-C – public open space). These exceedances included lead at borehole 4 (BH4) (870 mg/kg) and BH15 (880 mg/kg), Benzo(a)pyrene TEQ at BH4 (3.5 mg/kg), GG8 (6.2 mg/kg) and BH17 (3.6 mg/kg), TRH F2 at GG8 (2400 mg/kg).

The 95% upper confidence limit average concentrations across the site (excluding the soil mound area), were all below the criteria. These results indicate the soils sampled within the school boundary are suitable for the proposed land use. However, some further assessment of soils not yet sampled (mound soils if retained, areas below the mound and concrete slabs and underground storage tank areas) is required prior to site validation.

Bonded asbestos on the ground surface was observed at two locations.

Acid sulphate soil was identified on site at depths ranging between 2.0-4.6 m, and an acid sulfate soils management plan is required for site redevelopment works.

Groundwater assessment identified ammonia and copper concentrations, at the single location sampled, that exceeded the groundwater investigation criteria levels. Groundwater monitoring results did not indicate the presence of any other contamination in the assessed perched aquifer beneath the site at the single location sampled.

One legacy underground storage tank (potentially an oil sump) was identified in the southeast section of the site. Another potential legacy underground tank location, not yet investigated, was marked up on a figure attached to the former RAP

(Parsons Brinckerhoff 2015), which noted "this area was inaccessible for investigation due to the soil mound and concrete slab".

The DSI concluded that the site can be made suitable for the proposed development with appropriate remediation and gas mitigation measures.

7.16.4 Remediation action plan

Based on the findings of the DSI, Greencap has prepared a RAP to ensure the site contamination risk and hazardous gas risk are remediated to a level that is suitable for the proposed high school use. The RAP includes details regarding:

- Further investigation plan.
- Capping design.
- Remediation work program.
- Underground storage tank decommissioning.
- Validation plan.
- Contingency plan.
- Legislative requirements.
- Site management during construction.
- Environmental control measures.
- Asbestos Management Plan.
- Waste management.
- Workplace health and safety.
- Emergency procedures and response.
- Validation reporting.
- Ongoing site management.

Provided the actions of the RAP are implemented, it is expected that the site will be suitable for the purpose of the proposed high school.

7.16.5 Preliminary Long Term Environmental Management Plan

A Preliminary LTEMP has been prepared for initial stakeholder review. Remediation on-site is yet to be undertaken, and a validation report needs to be prepared and approved by the auditor before a LTEMP can be finalised and put in place. Therefore, some sections in the Preliminary LTEMP (particularly ones referring to a completed remediation and validation) are not yet valid and must not be relied upon.

In accordance with the EP&A Act and NSW EPA guidelines, the LTEMP is required for long -term and ongoing management and monitoring of the future remediated land, specifically the management of the ground gas mitigation system and soil capping layer barrier/containment system to ensure sustainable operation of the ground gas mitigation and ventilation system and to prevent disturbance, dispersal or exposure of contaminated soils in future.

8 Assessment of other issues

8.1 Heritage

A Statement of Heritage Impact prepared by Comber Consultants is attached at Appendix 8. The statement assesses the impact of the proposal in the (non-Aboriginal) heritage significance of the site and surrounding area.

Key findings from the report are outlined below:

- The site is not a heritage item and is not located in a heritage conservation area. There are no local- or state-listed heritage sites located within Wentworth Point.
- The site does not contain any evidence of prior structure due to the land being reclaimed and therefore does not contain any historical archaeological potential.
- The site is a former industrial site on reclaimed land and is not a cultural landscape.
- Given the above, no further heritage assessment is required.

8.2 BCA

An SSDA Stage BCA Review by BCA Logic is attached at Appendix 25. The report provides a high level independent review of the SSDA architectural documentation against the relevant access requirements of the Building Code of Australia 2019 Volume One Amendment 1 (the BCA), excluding access requirements. The review has identified various features of the building design that will require further consideration to ensure compliance with the relevant building requirements can be met. It is anticipated these features can be addressed at the detailed design stage without causing significant changes to the building design.

8.3 Accessibility

An SSDA Stage Access Review by BCA Logic is attached Appendix 25. The report provides a high level independent review of the SSDA architectural documentation against the relevant access requirements of Part D3 and Clauses E3.6, F2.4 and F2.9 of the BCA, the Disability (Access to Premises – Buildings) Standards 2010 and associated Australian Standards AS1428.1-2009, AS1428.4.1 and AS2890.6-2009. The review has identified various features of the building design that will require further consideration to ensure compliance with the relevant access requirements can be met. It is anticipated these features can be addressed at the detailed design stage without causing significant changes to the building design.

8.4 Fire engineering

A letter by the fire engineering consultant Core Engineering Group is attached at Appendix 26. The letter outlines the fire engineering strategy for the proposal and concludes that the proposed design will not comprise the fire safety strategy or compromise conformance with building regulations. In other words, the fire safety strategy will have immaterial impact on the building design presented in the submitted architectural drawings.

8.5 Structural engineering

An SSDA Structural Report by enstruct is attached at Appendix 14. The report outlines the relevant standards and criteria with which the building design will comply and confirms that the structural design can be completed without significant impact on the proposed building design.

9 Risk assessment and mitigation measures

The table below provides a summary risk assessment of the proposal's potential environmental impacts as well as any recommended mitigation measures.

Table 9-1 Risk assessment and mitigation measures

Item	Potential impact	Level of impact	Mitigation measures	Residual Impact
Transport and accessibility	Construction: Approximately 20 heavy delivery movements will occur each day during construction. Works will utilise on-street parking in the area.	Low	A detailed construction traffic management plan will be prepared and implemented. Large deliveries should be scheduled generally outside of peak work and school hours. Workers will be encouraged to use public transport/carpool.	Low
	Operation: The school will generate approximately 112 vehicle trips in the peak hours. SIDRA modelling shows that the surrounding intersections will continue to operate at LoS A.	Low	A School Transport Plan will be implemented to encourage sustainable transport modes. Infrastructure will be provided that supports and promotes walking and cycling for students and staff.	Low
Noise and vibration	Construction: Surrounding receivers will experience noise over 75dB(A) during construction.	High	A construction noise management plan is to be implemented. Noise is to be managed through feasible and reasonable noise mitigation measures as outlined in the NSW Interim Construction Noise Guideline and Australian Standards 2436-2010.	Medium
	Operation: Rooftop plant is expected to achieve required noise levels.	Low	Rooftop plant should be selected and positioned to achieve the required noise levels outlined in the acoustic report.	Low
Aboriginal cultural heritage	Construction: The ACHAR has identified that the site has no potential for Aboriginal cultural heritage sites	Nil	No unexpected finds protocol or further investigation is required.	Nil

Item	Potential impact	Level of impact	Mitigation measures	Residual Impact
	given the land is reclaimed.			
	The proposal seeks to incorporate Aboriginal cultural heritage into the design.	Low	Aboriginal community consultation in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 should continue for the remainder of the project. Opportunities to inform deign with Country will feature in the final detailed design.	Low
Wind	All areas of the school are expected to be suitable for their intended use. Upper level areas would potentially benefit from local amelioration strategies.	Low	Investigate local amelioration strategies (e.g., vertical blockage, vegetation, section seating areas) for upper levels during detailed design.	Low
Contamination	The site is contaminated from previous industrial activities.	High	Further investigation, remediation and long term management are to be implemented in accordance with the RAP.	Low
Acid sulfate soils	Acid sulfate soils have been identified during site investigations.	Medium	Further investigation and management are to be implemented in accordance with the Acid Sulfate Soils Management Plan.	Low
Sediment and erosion	Construction activities have the potential to cause sediment and erosion impacts.	Medium	Standard sediment and erosion control measures to be implemented in accordance with the Sediment and Erosion Control Plan.	Low
Social impacts	Noise impacts during construction	High	Implement the recommendations in the acoustic report including preparation of a construction noise management plan.	Medium
	Student access to open space	High	Ensure Stage 2 enrolment does not proceed until the playing field to the north is	Low

Item	Potential impact	Level of impact	Mitigation measures	Residual Impact
			delivered and a joint use agreement is secured.	

10 Conclusion and justification

This EIS is submitted to the Minister for Planning to accompany an SSDA for establishment of a Sydney Olympic Park new high school.

This EIS has considered the relevant statutory instruments and strategic documents and provided an assessment of the potential impacts of the proposal on the built and natural environments as well as an assessment of social impacts.

This EIS fulfils the requirements of the EP&A Act and Regulation, addresses all relevant matters prescribed by the SEARs and demonstrates that the potential impacts of the proposal can be satisfactorily managed or mitigated.

In summary, the development should be approved for the following reasons:

- The proposal will meet identified demand and deliver on the announcement of a new high school at Sydney Olympic Park.
- The proposal will provide for a contemporary, purpose-built facility that will optimise educational outcomes.
- The proposal will generate jobs, both short-term and ongoing.
- The proposal's design is the result of detailed analysis of the site and consultation with the community, Aboriginal stakeholders, DoE, GANSW, Council and TfNSW.
- The proposed school is easily accessible and supports active, sustainable transport.
- The potential environmental impacts of the proposal can be satisfactorily mitigated subject to the recommendations of the technical supporting documentation accompanying this EIS.
- The site is suitable for the proposal.
- The proposal is in the public interest.

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