NSW Department of Education

# Review of Environmental Factors

## New high school for Schofields and Tallawong

Document version: Revision 9

Date: 28/02/2025

NSW GOVERNMENT

# Acknowledgement of Country

The NSW Department of Education acknowledges the Dharug the traditional custodians of the land on which the new high school for Schofields and Tallawong is proposed.

We pay our respects to their Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of Australia.

The NSW Department of Education is committed to honouring Aboriginal peoples' cultural and spiritual connections to the land, waters and seas and their rich contribution to society.

The NSW Department of Education recognises that by acknowledging our past, we are laying the groundwork for a future that embraces all Australians; a future based on mutual respect and shared responsibility.

# Declaration

This Review of Environmental Factors (**REF**) has been prepared by Urbis Ltd on behalf of the NSW Department of Education (**department**) and assesses the potential environmental impacts which could arise from the construction and operation of a new high school for Schofields and Tallawong at part 201 Guntawong Road, Tallawong.

This REF has been prepared in accordance with the *Guidelines for Division 5.1 Assessments* and any relevant addendum (the **Guidelines**), and the relevant provisions of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**), the *Environmental Planning and Assessment Regulation 2021* (**EP&A Regulation**) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (**TI SEPP**).

This REF provides a true and fair review of the activity in relation to its likely impact on the environment and the information it contains is neither false nor misleading. It addresses to the fullest extent possible all the factors listed in Section 3 of the Guidelines, the EP&A Regulation and the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (**EPBC Act**).

In preparing the REF I have declared any possible conflict of interests (real, potential or perceived) and I do not consider I have any personal interests that would affect my professional judgement.

| | |
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| **26** | Groundwater Impact Assessment prepared by Water Technology |
| **27** | Aboriginal Cultural Heritage Assessment (**ACHA**) Report prepared by Biosis |
| **28** | Arboricultural Impact Assessment prepared by Arborsaw |
| **29** | Flood Risk Emergency Assessment prepared by TTW Consulting |
| **30** | Section 10.7(2)(5) Planning Certificate issued by Blacktown City Council |
| **31** | Archaeological Report prepared by Biosis |

# Abbreviations

| Abbreviation | Description |
|---|---|
| **AHD** | Australian Height Datum |
| **AHIP** | Aboriginal Heritage Impact Permit |
| **AHIMS** | Aboriginal Heritage Information Management System |
| **APZ** | Asset Protection Zone |
| **BC Act 2016** | *Biodiversity Conservation Act 2016* |
| **BC Regulation** | Biodiversity Conservation Regulation 2017 |
| **BAM** | Biodiversity Assessment Method |
| **BCA** | Building Code of Australia |
| **BDAR** | Biodiversity Development Assessment Report |
| **Central River City SEPP** | *State Environmental Planning Policy (Precincts – Central River City) 2021* |
| **CA** | Certifying Authority |
| **CM Act** | *Coastal Management Act 2016* |
| **CEMP** | Construction Environmental Management Plan |
| **CNVMP** | Construction Noise and Vibration Management Plan |
| **CTMP** | Construction Traffic Management Plan |
| **CWC** | Connecting with Country |
| **The department** | NSW Department of Education |
| **DCCEEW** | Department of Climate Change, Energy, the Environment and Water |
| **DPC** | Department of Premier and Cabinet |
| **DPHI** | Department of Planning, Housing and Infrastructure |
| **Design Guide** | *Design Guide for Schools* published by the Government Architect in May 2018 |
| **EIS** | Environmental Impact Statement |
| **EMP** | Environmental Management Plan |
| **EPA** | Environment Protection Authority |
| **EP&A Act** | *Environmental Planning and Assessment Act 1979* |
| **EP&A Regulation** | *Environmental Planning and Assessment Regulation 2021* |
| **EPBC Act** | *Environment Protection and Biodiversity Conservation Act 1999* |
| **EPI** | Environmental Planning Instrument |
| **EPL** | Environment Protection License |
| **ESD** | Ecologically Sustainable Development |
| **FM Act** | *Fisheries Management Act 1994* |
| **GBCA** | Green Building Council of Australia |
| **Ha** | Hectares |
| **ILP** | Indicative Layout Plan |
| **LEP** | Local Environmental Plan |

| Abbreviation | Description |
|---|---|
| **LGA** | Local Government Area |
| **MNES** | Matters of National Environmental Significance |
| **NCC** | National Construction Code |
| **NorBE** | Neutral or Beneficial Effect on Water Quality Assessment Guideline (2022) |
| **NPW Act** | *National Parks and Wildlife Act 1974* |
| **NPW Regulation** | National Parks and Wildlife Regulation 2009 |
| **NPWS** | National Parks and Wildlife Service (part of EES) |
| **NSW RFS** | NSW Rural Fire Service |
| **NT Act (Cth)** | *Commonwealth Native Title Act 1993* |
| **OEH** | (Former) Office of Environment and Heritage |
| **Planning Systems SEPP** | State Environmental Planning Policy (Planning Systems) 2021 |
| **PMF** | Probable Maximum Flood |
| **PTS** | Permanent teaching spaces |
| **POEO Act** | *Protection of the Environment Operations Act 1997* |
| **Proponent** | NSW Department of Education |
| **REF** | Review of Environmental Factors |
| **RF Act** | *Rural Fires Act 1997* |
| **Resilience and Hazards SEPP** | State Environmental Planning Policy (Resilience and Hazards) 2021 |
| **Roads Act** | *Roads Act 1993* |
| **SCPP DoE** | *Stakeholder and community participation plan,* published by the NSW Department of Education October 2024 |
| **SCPP DPHI** | *Stakeholder and community participation for new health services facilities and schools* published by the Department of Planning, Housing and Infrastructure October 2024 |
| **SDRP** | School Design Review Panel |
| **SEPP** | State Environmental Planning Policy |
| **SIS** | Species Impact Statement |
| **STS** | Support teaching space |
| **TI SEPP** | State Environmental Planning Policy (Transport and Infrastructure) 2021 |
| **WM Act** | *Water Management Act 2000* |

# Executive Summary

## The Proposal

The proposal relates to the construction and operation of a new high school in Schofields and Tallawong at part 201 Guntawong Road, Tallawong (the **site**). The new high school will accommodate up to 1,000 students and 80 staff. The school will provide 49 permanent teaching spaces (**PTS**), and three support teaching spaces (**STS**) across three buildings. The buildings will be three-storey in height and will include teaching spaces, specialist learning hubs, a library, administrative areas and a staff hub. Additional core facilities are also proposed including a standalone school hall, a carpark, a kiss and drop zone along Nirmal Street, three sports courts and a sports field.

Specifically, the proposal involves the following:

- Three learning hubs (three-storeys in height) accommodating 49 PTS and three STS.
- Other core facilities including amenities, library, staff hub and administrative areas.
- Two storey standalone school hall.
- On-site staff carpark with 72 spaces.
- Kiss and drop zone along Nirmal Street.
- Open play space including sports courts and sports field.
- Public domain.
- Associated utilities and services.
- Main pedestrian access point from corner of Nirmal Street and Guntawong Road.
- Separate vehicular access located on Nirmal Street for loading and vehicle parking.
- Removal of 267 trees.

The site is approximately four hectares in size and legally identified as part of Lot 1 in Deposited Plan (**DP**) 1283186 within the Blacktown Local Government Area (**LGA**). It forms part of the Riverstone East Precinct and has been previously used for light agricultural purposes. The site consists of grassland with several patches of remnant native vegetation particularly within the northern portion of the site. An overland flow path runs north-south through the northern area, while an ephemeral creek crosses west-east in the southern portion. The site is not bushfire-prone and is on biodiversity certified land under the *Biodiversity and Conservation Act 2016* (**BC Act**).

## Planning Pathway

The proposal involves the development of a new government school by the NSW Department of Education (the **department**) (a **public authority**) on land that does not contain an existing or approved school and is in a prescribed zone. Accordingly, pursuant to Sections 3.37A of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (**TI SEPP**), the proposed works are classified as development which may be carried out without consent.

Therefore, the proposal is considered an ‘activity’ for the purposes of Part 5 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**) and is subject to an environmental assessment. For the purposes of this proposal, the department is the proponent and the determining authority,

and the required environmental assessment is in the form of a Review of Environmental Factors (**REF**).

The REF has been prepared in the accordance with the *Guidelines for Division 5.1 Assessments* (DPE, June 2022) and the *Guidelines for Division 5.1 assessments - consideration of environmental factors for hospital and school activities Addendum* (DPHI, October 2024).

### Consultation

Consultation will be undertaken with in accordance with statutory requirements under the TI SEPP and having regard to the *Stakeholder and community participation plan for new health services facilities and schools* (Department of Planning Housing and Infrastructure (**DPHI**), October 2024) (**SCPP DPHI**) and the Stakeholder and *Community participation plan For new schools and major school upgrade projects undertaken under Division 5.1 of the EP&A Act 1979* (Department of Education, October 2024) (**SCPP DoE**).

Comments received will be carefully considered and responded to. In addition, non-statutory consultation has been undertaken with a range of community and government stakeholders throughout the design process.

### Environmental Impacts

This REF is supported by a series of technical reports that evaluate and propose measures to mitigate any environmental impacts arising from the proposed activity. These reports have identified several potential impacts, all of which can be effectively managed through adoption of the required mitigation measures. The key issues assessed are as follows:

- **Traffic and Access**: The proposed activity includes a new school where three local roads are planned to traverse the site in the Indicative Layout Plan (**ILP**) for the Riverstone East Precinct. These roads were exclusively intended to serve the low- and medium-density residential development within the site and did not extend beyond its boundaries. As a result, its removal will not cause any adverse impacts.

  The current road infrastructure and access points are adequate to support vehicle movements during the construction phase. However, the surrounding road network is insufficient to handle the vehicle movements and operational needs of the proposed school. To address school related traffic and access, upgrades to Nirmal Street, Guntawong Road and Marchant Street are required.

  Nirmal Street: The REF includes off-site works to Nirmal Street, including construction of a 19m-wide carriageway along the school frontage and a 3.5m shared path on the western side prior to the operation of the school. Other works on Nirmal Street proposed as part of this REF and to be construction prior to the operation of the school include, a wombat crossing on Nirmal Street and a kiss and drop zone accommodating a total of 15 spaces.

  Guntawong Road: Works along Guntawong Road, outside the school boundary, will be subject to separate approval and are not included in this REF. This includes construction of a 3.5m shared path along the school frontage on Guntawong Road and the provision of two indented bus bays and zebra crossing.

  Marchant Street: The southern half of Marchant Street is required to be constructed from Nirmal Street to Tallawong Road and dedicated to the Council as a public road prior to the operation of the school. Marchant Street, from Nirmal Street to Tallawong Road, falls within

Lot 43 DP301086 and will be delivered as part of the Bathla Group subdivision development consent (DA-23-00128). Completion is anticipated by mid-2025.

The works to Guntawong Road and Marchant Street are essential to the operation of the high school and are integral to mitigating the environmental (traffic and transport) impacts of the proposed activity. However, these works do not form part of the proposed activity as they rely on delivery by third parties and will be the subject of separate approval pathways. Mitigation measures have been implemented to ensure the works are completed prior to the operation of the school.

Traffic modelling by SCT Consulting confirms that these changes (including the works to be delivered by third parties) will have a negligible impact on the surrounding traffic network, even under full development conditions for the locality. Therefore, the proposed activity is expected to have minimal effects on the surrounding traffic environment.

- **Noise** (**Construction and Operational**): Noise modelling conducted by Acoustic Studio has assessed the potential construction and operational noise impacts of the proposed activity on **nearby** sensitive receivers. The assessment found that most operational noise sources are expected to remain below the relevant noise emission criteria, with the exception of outdoor play area during school break periods which is forecasted to exceed the project noise trigger level by one decibel. The assessment concluded that the exceedance is acceptable and would have minimal impacts on sensitive receivers. No mitigation measures are required for the use of outdoor play areas. Construction noise emissions are anticipated to exceed the noise emission criteria at the nearest sensitive receivers, with some periods predicted to surpass the "highly affected" noise level at all receiver locations. To address these potential adverse impacts, mitigation measures have been proposed, as detailed in **Section 7.2** of this REF.
- **Aboriginal Heritage**: The site is situated within a nominated Aboriginal Place *Nanagamay Ngurra* that holds high cultural significance for the local Aboriginal community. The Aboriginal place is made up of a complex of archaeological sites and was used as a men's site, ceremonial grounds and burial place. Two registered Aboriginal Heritage Information Management Systems (**AHIMS**) sites exist within the site, AHIMS 45-5-5766/Guntawong Road 2 and AHIMS 45-5-5821/Guntawong Road 4, comprising low to moderate density artefact scatters. As detailed in **Section 7.6**, mitigation measures are proposed to address potential impacts to aboriginal cultural heritage, including the requirement to apply for an Aboriginal Heritage Impact Permit, the Fencing of AHIMS 45-5-5766, the implementation of an unexpected finds protocol and of an Aboriginal Cultural Heritage Management Plan.
- **Ecology**: The site is mapped as Biodiversity Certified land in accordance with the *Biodiversity Conservation Act 2016* **(BC Act)**. Section 8.4 of the BC Act states that activities under Part 5 of the EP&A Act to be undertaken on Biodiversity Certified land is not likely to significantly affect any threatened species or ecological community under this Act, or its habitat, in relation to that land. A Flora and Fauna Report has been prepared as part of this REF that details the Biodiversity Certification and also identifies patches of remnant Cumberland Plain Woodland, which is a critically endangered ecological community under the BC Act. The Flora and Fauna Report acknowledges that the presence of this vegetation indicates potential habitat for protected fauna species and outlines mitigation measures to minimise impacts on habitats of protected animals, including retaining mature trees where

possible, planting endemic species to enhance habitat, and implementing water-sensitive urban design.

Other impacts have been considered as detailed in this REF.

### Justification and Conclusion

Based on the environmental assessment undertaken as part of this REF, it has been determined that the proposal will not result in any significant or long-term detrimental impacts. The potential impacts identified can be reasonably mitigated and where necessary managed through the adoption of suitable site practices and adherence to accepted industry standards.

The environmental impacts of the proposal are not likely to be significant. Therefore, it is not necessary for an Environmental Impact Statement (**EIS**) to be prepared and approval to be sought for the proposal from the Minister for Planning and Public Spaces under Part 5.1 of the EP&A Act. The proposed activity will not have any effect on Matters of National Environmental Significance and approval of the Activity under the Commonwealth EPBC Act is not required.

On this basis, it is recommended that the department determine the proposed activity in accordance with Part 5 of the EP&A Act and subject to the adoption and implementation of mitigation measures identified within this report.

# 1. Introduction

The NSW Department of Education (the **department**) proposes to construct and operate a new high school (the **activity**) located at part 201 Guntawong Road, Tallawong NSW 2762 (the **site**).

The proposal to provide a new high school in Schofields and Tallawong is consistent with the State Government's plan to expand public education in Western Sydney. The 2024-2025 budget is aiming to deliver record education funding including $3.6 billion for new and upgraded schools in Western Sydney. The focus is on ensuring that the growing communities are receiving access to world class public education. The proposed activity will provide integral social infrastructure in an emerging urban environment experiencing significant population growth. The proposed activity is the direct result of the NSW Government commitment to deliver public education in Western Sydney.

This Review of Environmental Factors (**REF**) has been prepared by Urbis Ltd on behalf of the department to determine the environmental impacts of the proposed new high school at part 201 Guntawong Road, Tallawong. For the purposes of these works, the department is the proponent and the determining authority under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**).

The purpose of this REF is to describe the proposal, examine and take into account all matters affecting or likely to affect the environment and to detail mitigation measures to be implemented to manage impacts.

The potential environmental impacts have been assessed in the accordance with the *Guidelines for Division 5.1 Assessments* (DPE, June 2022), Guidelines for Division 5.1 assessments - consideration of environmental factors for hospital and school activities Addendum (DPHI, October 2024), EP&A Act, the *Environmental Planning and Assessment Regulation 2021*, and the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**).

The assessment contained within the REF has been prepared having regard to:

- Whether the proposed activity is likely to have a significant impact on the environment and therefore the necessity for an Environmental Impact Statement (**EIS**) to be prepared and approval to be sought from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act; and
- The potential for the proposal to significantly impact *Matters of National Environmental Significance* (**MNES**) on Commonwealth land and the need to make a referral to the Australian Government Department of Environment and Energy for a decision by the Commonwealth Minister for the Environment on whether assessment and approval is required under the EPBC Act.

# 2. Site Analysis

## 2.1 Site Description

The site is known as part 201 Guntawong Road, Tallawong, NSW, 2762 (the **site**), and is legally described as part of Lot 1 in Deposited Plan 1283186. The site is located at the corner of Guntawong Road and Clarke Street, Tallawong and is approximately 4 hectares in area. The site has an approximately 100-metre-long frontage to Guntawong Road along its northern boundary. Nirmal Street provides a partial frontage along the eastern boundary of the site. At present, there are no footpaths on Guntawong Road and Nirmal Street.

The proposed activity includes plans to extend Nirmal Street to provide a future connection to Guntawong Road and to accommodate vehicle access to the staff car park

The site consists of grassland with several patches of remnant native vegetation particularly within the northern portion of the site. First Ponds Creek is situated to the west of the site. Tributaries and ephemeral drainage lines feeding into First Ponds Creek were identified in the southern and northwestern areas of the site. Additionally, two surface water dams are located along the drainage line in the southern portion of the site. The site is located approximately 1.5km to the north-west of Tallawong Metro Station and is also serviced by an existing bus stop along Guntawong Road. As a result of precinct wide rezonings, the surrounding locality is currently transitioning from a semi-rural residential area to a highly urbanised area with new low to medium density residential development.

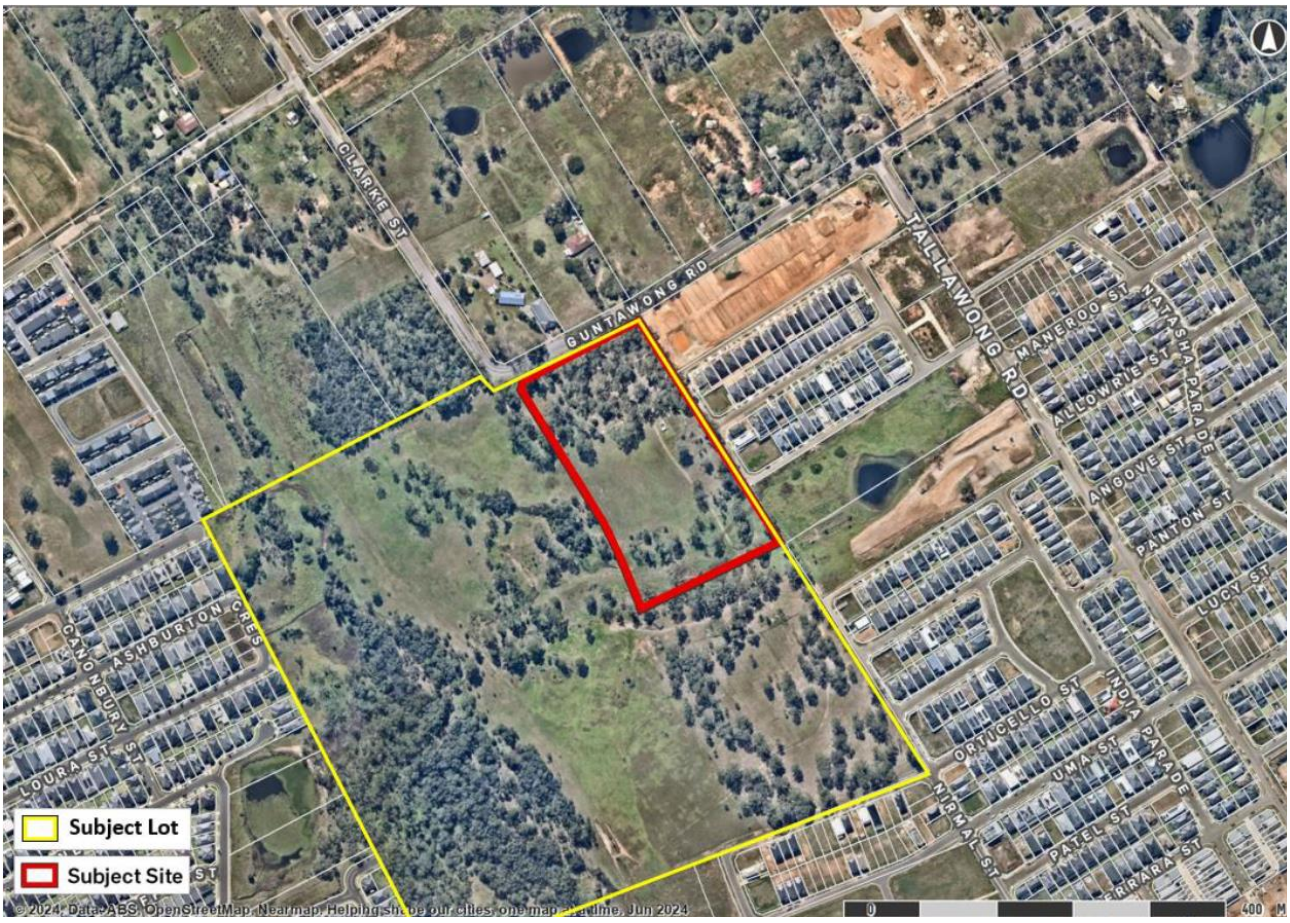
The location and configuration of the site is shown in **Figure 1** and **Figure 2**.

**Table 1: Site Details**

| Site characteristics | Description |
|---|---|
| Site address | Part 201 Guntawong Road, Tallawong, NSW, 2762 |
| Legal description | Lot 1 in Deposited Plan 1283186 |
| Site area | 4 hectares |
| Local government area | Blacktown City Council |
| Site ownership | The site is currently owned by the Office of Strategic Lands (**OSL**) |
| Easements | An easement to drain water exists within the south east corner of the site. |
| Existing use / structures | There are no existing buildings, but the site includes fencing and stockpiles. The site consists predominantly of grassland with patches of remnant native vegetation, particularly in the northern portion. |
| Topography | The topography is generally sloping, with a 9-meter fall from northeast to southwest, and includes an overland flow path and an ephemeral creek. |
| Vehicle / site access | Existing vehicle access to the site is limited, with informal access points provided via Guntawong Road along the northern boundary and Nirmal Street along the eastern |

| Site characteristics | Description |
|---|---|
| | boundary. Nirmal Street currently provides partial frontage and is planned for future extension to connect with Guntawong Road.<br>Guntawong Road is a local road, connecting to Windsor Road in the east and Clarke Street in the west. Guntawong Road is expected to be extended to the west over First Ponds Creek to connect with Kensington Park Road in the future. Nirmal Street is a local street that runs along the eastern boundary of the site. Currently, there is no connection between Blarneystone Avenue and Marchant Street. The completed sections of Nirmal Street provide access to Tallawong Road via Marchant Street in the north and Terrara Street in the south. |

**Figure 1 Site Aerial**




*Source: Urbis, 2024*

## Figure 2 Locality Plan


*Source: Urbis, 2024*

## Figure 3 Site Photos

*Photo 1 Looking south from Guntawong Road*

*Photo 2 Looking north from Nirmal Street*

*Photo 3 Existing site structures*

*Photo 4 Existing site vegetation*

*Source: Yerrabingin and Google Maps, 2024*

## 2.2 Locality Context

The surrounding locality is predominantly characterised by low-density residential uses, as follows:

- **North**: Land to the north of the site comprises existing semi-rural residential properties, with portions approved for subdivision to accommodate future low-density residential development.
- **East**: Land to the east of the site comprises low-density residential subdivisions with recently constructed detached houses serviced by new road networks. A large area northeast of the site has been cleared for additional residential lots.
- **West**: Land to the west is vacant. Further west established residential areas exist within the suburbs of Tallawong and Riverstone.
- **South**: Low-density residential subdivisions are located south of the site. Further south of the site is Tallawong Metro Station.

The site is not in proximity to any licensed premises, sex-service establishments, or potentially hazardous land uses such as petrol stations.

**Figure 4 Locality Photographs**

*Photo 5 Rural properties to the site's north*

*Photo 6 Low density residential development east of the site*

*Photo 7 Existing vegetation on the south-west portion of the broader site*

*Photo 8 Low density residential development west of the site*

*Source: Google Maps, 2024*

## 2.3 Riverstone East Precinct

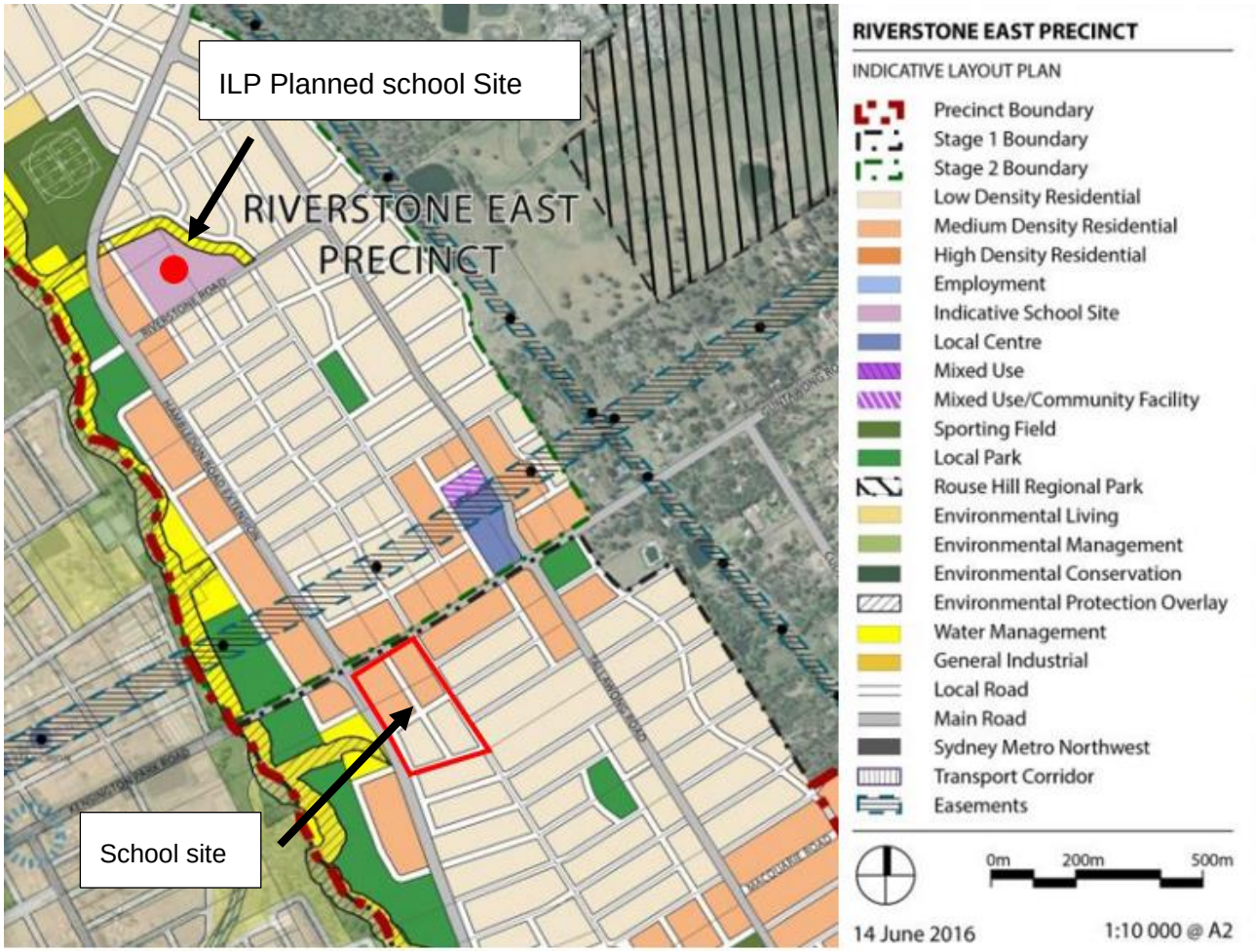
The site is located within Stage 1 of the Riverstone East Precinct. The Riverstone East Precinct was released in 2013 and aims to deliver 5,300 homes over three stages. Stage 1 and Stage 2 of the precinct were finalised and rezoned in August 2016.

Following the finalisation of Stages 1 and 2, an Indicative Layout Plan (**ILP**) and Development Control Plan (**DCP**) were prepared to guide future development within the Precinct. The ILP designated the site for low- to medium-density residential development, including several internal roads, and proposed a school site further north along Riverstone Road.

This proposed school is located on land that is identified as residential use in the ILP, as shown in **Figure 5**. The impacts of the proposed change in use from residential to educational establishment are considered in **Section 7** of this REF.

Land to the west includes a road corridor planned as part of the Riverstone East Precinct Plan for the construction of Hambledon Road separating the proposed school site from future residential development.

**Figure 5 Riverstone East Precinct ILP**




*Source: NSW Department of Planning, Infrastructure and Housing, 2024*

## 2.4 Site Constraints and Opportunities

Consideration of site constraints has been undertaken through a review of the Section 10.7 (2 & 5) Planning Certificate (No. PL2024/12244) dated 25 September 2024, mapping under relevant Environmental Planning Instruments (**EPIs**), and a review of specialist consultant reports and other desktop assessments. Key site constraints include:

### 2.4.1 Site Constraints

- **Topography**: The site has a substantial slope, with a 9-meter fall from the northeastern boundary to the southwestern boundary. This requires careful design to manage grading and minimise excessive cut-and-fill operations. The topography influences building

placement and drainage solutions, necessitating innovative design responses to ensure accessibility and integration with the natural terrain.

- **Flooding**: The site is impacted by overland flow paths that direct water toward First Ponds Creek. Although only partially affected by flooding, it requires effective stormwater management. To divert flow paths from upstream catchments and protect against floodwaters, the proposed activity includes constructing on-site detention basins and a temporary retaining wall along the southern boundary. This wall will direct flows from the school to a temporary open tail-out channel south of the site. It will remain in place at the edge of the carpark until permanent stormwater facilities are completed along future Road 4. The tail-out channel, not included in the REF, is associated with the adjacent residential development and the Nirmal Street stormwater design, and will be delivered by Bathla under a separate DA. A mitigation measure in the REF ensures the channel's completion before the school begins operation. Upon construction of the future road to the south, the channel will be removed, and upstream flows will be rerouted through concrete culverts below this new road.
- **Bushfire Risk**: Whilst the site is not bushfire prone land, proximity to bushfire-prone areas necessitates compliance with bushfire mitigation measures, including establishing Asset Protection Zones (**APZs**), using fire-resistant building materials, and adhering to bushfire safety regulations.
- **Vegetation and Biodiversity**: The site is Biodiversity Certified and is not mapped as containing any biodiversity values. The site does however include several areas of remnant Cumberland Plain Woodlands which is designated as a threatened ecological community. The retention of mature trees has been prioritised to maintain local biodiversity.
- **Traffic and Access Management**: The current road infrastructure and access points are adequate to support vehicle movements during the construction phase. However, the surrounding road network is insufficient to handle the vehicle movements and operational needs of the proposed school. The existing traffic and access would need upgrades to accommodate future operational needs, including a kiss and drop zone, staff and visitor parking, and connections to public transport. In particular, Nirmal Street would require upgrade to support increased traffic and pedestrian safety.
- **Aboriginal Cultural Heritage**: The site is situated within a nominated Aboriginal Place Nanagamay Ngurra that holds high cultural significance for the local Aboriginal community. In addition, two registered AHIMS sites exist within the site.
- **Site Boundaries and Setbacks**: Existing residential uses are located to the north and east of the site. Adequate setback from the site boundary and thoughtful building layout would minimise visual bulk and impact on the residences.

A summary of the key site considerations and constraints as per the Planning Certificate is provided in **Table 2.**

**Table 2: Review of Section 10.7 Planning Certificate**

| Affectation | Yes | No |
|---|---|---|
| Critical habitat | ☐ | ☒ |

| Affectation | Yes | No |
|---|---|---|
| Conservation area | ☐ | ☒ |
| Item of environmental heritage | ☐ | ☒ |
| Affected by coastal hazards | ☐ | ☒ |
| Proclaimed to be in a mine subsidence district | ☐ | ☒ |
| Affected by a road widening or road realignment | ☐ | ☒ |
| Affected by a planning agreement | ☐ | ☒ |
| Affected by a policy that restricts development of land due to the likelihood of landslip | ☐ | ☒ |
| Affected by bushfire, tidal inundation, subsidence, acid sulfate or any other risk | ☐ | ☒ |
| Affected by any acquisition of land provision | ☐ | ☒ |
| Biodiversity certified land or subject to any biobanking agreement or property vegetation plan. | ☒ | ☐ |
| Significantly contaminated | ☐ | ☒ |
| Subject to flood related development controls | ☒ | ☐ |

## 2.4.2 Site Opportunities

The site offers a range of opportunities including:

- **Strategic Location**: The site is near Tallawong Metro Station and local bus routes and has excellent public transport connectivity. There are opportunities to encourage green travel options such as walking, cycling, and public transportation. The site is also in a rapidly urbanising area with low- and medium-density residential developments that would align the school with future community needs.
- **Natural Features**: The site is adjacent to First Ponds Creek Reserve, providing opportunities to enhance connections to natural landscapes through outdoor learning areas, recreational spaces, and visual corridors.
- **Generous Site Area**: The site is approximately 4 hectares, including flexibility for functional layouts of school buildings, sports facilities, and open play spaces. This allows for optimised use while maintaining significant green and landscaped areas.
- **Sustainability Potential**: The generous size of the site and the layout of proposed buildings allow for the integration of sustainable design principles, including rainwater harvesting, renewable energy systems (e.g., photovoltaic panels), and water-sensitive urban design (**WSUD**) measures like detention basins.

- **Community Integration and Shared Use**: The site is in a rapidly urbanising area. There is opportunity to provide community-accessible facilities to cater to future community demands, including hall and sports areas. This fosters a sense of ownership and engagement with the broader community.
- **Urban Growth Context**: Located within the North West Growth Area, the site aligns with broader urban planning goals, supporting new residential developments and meeting the increasing demand for educational infrastructure.
- **Environmental Integration**: Retention of existing mature trees and the addition of native landscaping promote biodiversity and create a visually appealing transition between urban and natural areas.
- **Futureproofing**: The flexible site layout and modular building designs allow for potential future expansion to accommodate changing community and educational needs.

## 2.5 Land Ownership

The site is legally identified as part Lot 1 in DP 1283186 and is owned by OSL. Landowners consent for the proposed activity has not been obtained, and will be obtained prior to the approval of this REF. The department has been in continuous discussions with the OSL and has informed OSL about the project and the submission of the REF for their land.

## 2.6 Development Consents

A request for all development consents applying to the site was submitted to Blacktown City Council under the *Government Information (Public Access) Act 2009* (**GIPA Act**). The GIPA request was responded to on 10 December 2024 and a single development consent applying to the site was provided.

**Table 3: Previous development consents**

| DA Reference | Development Description | Status |
|---|---|---|
| DA-04-3208 | Demolition of existing structures | Approved – 22/09/2004 |

## 2.7 Related Applications

The below table outlines the approved and likely future developments which may be relevant to the cumulative impact assessment of the proposed activity.

**Table 4: Nearby development activity**

| DA Reference | Development Description | Current Status | Distance from Site | Address |
|---|---|---|---|---|
| SSD-9472 | Sikh Grammar School – Construction of a new school for students from Kindergarten to Year 12. | Approved – 25/02/2021 | 50m East | 151-161 Tallawong Road, Rouse Hill |
| SSD- | New public school for | Approved – | 840m | Lot 2 Macquarie |

| DA Reference | Development Description | Current Status | Distance from Site | Address |
|---|---|---|---|---|
| 51046975 | Kindergarten to Year 6 students and support unit. | 30/10/2024 | South-East | Road, Rouse Hill and 100 Tallawong Road, Rouse Hill |
| DA-18-02215 | Construction of a residential flat building comprising of 88 apartments and associated works. | LEC Approved - 06/05/2020 | 450m North-East | 140 Guntawong Road, Rouse Hill |
| DA-19-01136 | Construction of three residential flat buildings consisting of 100 dwellings. | LEC Approved - 07/01/2021 | 400m North-East | 150 Guntawong Road, Rouse Hill |
| DA-21-01954 | Subdivision to create 44 residential lots, construction of new road, and construction of 36 two-storey dwellings. | Approved 11/11/2022 – Under construction | 900m South-East | 74 Tallawong Road, Rouse Hill |
| DA-22-00916 | Subdivision to create 80 residential lots and one super lot, including associated works. | LEC Approved – 26/03/2024 | 100m North | 194 Guntawong Road, Rouse Hill |
| DA-23-00022 | Subdivision into two super lots, construction of public roads, tree removal, stormwater drainage, and associated site works. | LEC Approved - 18/06/2024 | 1.3km South-East | 58 Tallawong Road, Rouse Hill |
| DA-21-01395 | Torrens title residential subdivision of one lot into 61 lots including demolition, tree removal, new roads, and construction of 50 dwellings | LEC Approved – 26/09/2023 | 50m East | 165 Guntawong Road, Rouse Hill |
| DA-23-00128 | Subdivision into 116 residential lots over two stages including construction of public roads including the full width of Marchant Street, tree removal and associated site works. | LEC Approved - 19/01/2024 | 50m East | 151-161 Tallawong Road, Rouse Hill. Same address as SSD-9472. |
| SPP-21-00013 | Construction of nine Residential flat buildings over six stages comprising 914 apartments, two retail premises, a public plaza, and construction of internal roads. | Approved – 17/10/2022 | 1.35km – South-East | 34 Tallawong Road, Tallawong |

# 3. Proposed Activity

## 3.1 Overview

The proposed activity is for the construction and operation of a new high school and will accommodate up to 1,000 students and 80 staff. The school will provide 49 permanent teaching spaces (**PTS**), and three support teaching spaces (**STS**) across three buildings, three storeys in height.

The buildings will also include a library, administrative areas and a staff hub. Additional core facilities are also proposed including a standalone school hall, three sports courts and a sports field, a staff carpark and a kiss and drop zone along Nirmal Street.

Specifically, the proposed activity includes the following:

- Three learning hubs (three-storeys in height) accommodating 49 PTS and three STS.
- Other core facilities including amenities, library, staff hub and administrative areas.
- Two storey standalone school hall.
- On-site staff carpark with 72 spaces.
- Kiss and drop zone along Nirmal Street.
- Open play space including sports courts and sports field.
- Public domain works.
- Associated utilities and services.
- Main pedestrian access point from corner of Nirmal Street and Guntawong Road.
- Separate vehicular access located on Nirmal Street for loading and vehicle parking.
- Removal of 267 trees.

**Table 5** provides a summary of key aspects of the activity.

**Table 5: Summary of the activity**

| Project Element | Description |
|---|---|
| **Site Area** | Approximately 4 hectares |
| **Project Name** | New high school for Schofields and Tallawong |
| **Project Summary** | The proposed activity will involve the construction of a new high school including three learning hubs which will accommodate up to 1,000 students. The buildings will be three storeys in height and will include teaching spaces, specialist learning hubs, a library, administrative areas and a staff hub. Additional core facilities are also proposed including a two-storey standalone school hall, three sports courts and a sports field, a staff car park and a kiss and drop zone along Nirmal Street. |
| **Use** | Educational establishment |
| **Student and Staff Numbers** | 1,000 students and 80 staff |
| **Car and Bicycle Parking** | Car parking spaces: 72 |

| Project Element | Description |
|---|---|
| **Spaces** | Bicycle parking spaces: 98 |
| **Height** | Building A 13.7m, RL 57.60, three-storeys<br>Building B 13.3m, RL 57.43, three-storeys<br>Building C 16.6 metres, RL 57.65, three-storeys<br>Building D 10.9 metres, RL 50.88, two-storeys |
| **Gross Floor Area** | Total GFA: 17,439m$^2$<br>FSR (Approx.): 0.44:1 |
| **Play Space** | 10,000m$^2$ (10m$^2$ per student) |
| **Tree Removal** | 267 trees |
| **Canopy Cover** | 5,615.55m$^2$ (14.64% of site area) |
| **Off Site Works** | The proposed activity will involve a range of off-site works on Nirma Street, summarised below:<br>• Upgrades to Nirmal Street within the site boundary to a carriageway width of 19m from Guntawong Road along the full extent of the school frontage and dedicate it to Council.<br>• Construction of a 3.5m shared path along school frontage on Nirmal Street on the school frontage side only (western).<br>• Provision of a kiss and drop zone along Nirmal Street.<br>• Construction of a wombat crossing on Nirmal Street. |

## 3.2 Related works subject to separate approval

### Guntawong Road Upgrade

Upgrades to Guntawong Road are also required however these works are not part of this REF and will require separate approval. However, as they are essential for the school's operation, mitigation measures have been implemented to ensure their completion before the school becomes operational.

The works include a zebra crossing and construction of two indented bus bays on Guntawong Road able to each accommodate two buses:

- Eastbound bus bay: 40 metres long
- Westbound bus bay: 60 metres long

In addition, a 3.5m shared path will be constructed along school frontage on Guntawong Road along the school frontage and on the northern side of Guntawong Road from the bus stop to the zebra crossing prior to operation.

As these works are essential for the school to operate, mitigation measures are included to ensure that all of these works are delivered prior to operation of the school.

### Marchant Street Upgrade

The southern half of Marchant Street is required to be constructed from Nirmal Street to Tallawong Road and dedicated to the Council as a public road prior to operation. Marchant Street, from Nirmal Street to Tallawong Road, falls within Lot 43 DP301086 and will be delivered as part of the Bathla Group subdivision development application (DA-23-00128). Completion is anticipated by mid-2025.

### Temporary Tail-Out Channel

The construction of a temporary open tail-out channel south of the site is required to divert flows but is not included in this REF. This channel, which is part of the associated works for the adjacent residential development and the Nirmal Street stormwater design, will be delivered by Bathla under a separate DA. A mitigation measure mandates its completion before the school begins operation. Once the future road to the south is built, the channel will be dismantled, and upstream flows will be redirected through concrete culverts beneath this new road.

**Figure 6 Render of new school – Aerial View**


*Source: DJRD Architects, 2024*

**Figure 7 Render of new school – School Entrance as viewed from corner of Guntawong Road and Nirmal Street**

*Source: DJRD Architects, 2024*

**Figure 8 Render of new school – Main School Entry as viewed from Guntawong Road**


*Source: DJRD Architects, 2024*

## 3.3 Design Development

The proposed built form for the new high school at Schofields and Tallawong comprises three, three-story buildings designed to align with the existing and future surrounding low- and medium-density residential area. The buildings are stepped along the natural topography of the site to minimise its visual bulk as viewed from the street level. The setback area between the proposed buildings and Nirmal Street and Guntawong Road are proposed to be landscaped to further soften visual impact from the public domain. External facades have been articulated with shading devices to create visual interested from the street.

The proposed layout has been designed to provide clear sightlines for teacher supervision including strategic siting of the sports field, multiple sports courts, and open play areas, with. The proposed standalone hall has been designed to accommodate community use, including direct access from Nirmal Street.

The design incorporates sustainability measures, targeting a 5-star Green Star Certification under the Green Star Buildings v1 framework. Key initiatives include the installation of photovoltaic panels, rainwater harvesting systems, and water-sensitive urban design elements. The landscape design prioritises tree retention and planting, contributing to shade provision and reduced heat retention across the site.

Additional measures such as natural ventilation, optimised solar access, and strategically designed landscaping contribute to a functional, efficient, and environmentally sustainable educational facility.

### 3.3.1 Design Guide and Design Quality Principles

The built form of the proposed high school responds effectively to the design quality principles outlined in Schedule 8 of the TI SEPP and the associated Design Guide as follows:

**Table 6: Response to Design Quality Principles in Schedule 8 of TI SEPP**

| Design quality principle | Response |
|---|---|
| **1. Context, Built Form, and Landscape** | The design integrates with its urban and natural surroundings, addressing the transitioning context of the area from semi-rural to urban. The three-story buildings are appropriately scaled relative to the surrounding low- and medium-density residential developments. Generous landscaped setbacks, angled building alignments, and facade articulation reduce the visual bulk and ensure a sympathetic relationship with adjacent properties. Retained and additional endemic vegetation enhances biodiversity and softens the built form. |
| **2. Sustainable, Efficient, and Durable** | The project incorporates environmentally sustainable design features, targeting 5-star Green Star Certification under the Green Star Buildings v1 framework. These include photovoltaic arrays, rainwater harvesting, water-sensitive urban design measures, and tree retention to mitigate the heat island effect. Durable materials are selected for longevity, with shading devices and orientation strategies minimising energy consumption and ensuring thermal comfort. |
| **3. Accessible and Inclusive** | The campus design prioritises inclusivity and accessibility, with lift access to all floors, covered walkways connecting buildings, and pathways designed for universal access. The main pedestrian entry is strategically located for |

| Design quality principle | Response |
|---|---|
| | connectivity with public transport and the surrounding neighbourhood. The hall, designed for after-hours community use, ensures seamless access for both school users and the broader community. |
| **4. Health and Safety** | The layout incorporates clear sightlines, passive surveillance, and well-lit pathways to enhance safety. A secure perimeter 2.1m high fence and controlled entry points ensure a safe environment for students and staff. The design minimises exposure to external hazards, and noise mitigation measures ensure a high level of internal acoustic comfort. |
| **5. Amenity** | The site provides a variety of indoor and outdoor learning spaces, including sports fields, multi-sports courts, and landscaped play areas. The design ensures good solar access, natural ventilation, and visual privacy for all learning and recreational spaces. Shade is provided through tree planting and architectural features, enhancing outdoor comfort. |
| **6. Whole of Life, Flexible, and Adaptive** | The modular grid design allows for adaptability, with spaces easily reconfigured to accommodate future needs. The robust material palette ensures long-term durability, while sustainability measures, such as rainwater harvesting and energy generation, support ongoing efficiency and resilience. |
| **7. Aesthetics** | The architectural design achieves a balanced composition with articulated facades and contextual material selection. The buildings present a refined and cohesive visual identity that aligns with the surrounding residential character. Landscaping complements the built form, integrating the school into its urban and natural environment. |

This comprehensive response ensures the built form meets the TI SEPP's principles and the Design Guide's requirements, creating a high-quality, functional, and sustainable educational facility.

### 3.3.2 State Design Review Panel

The project was reviewed by the School Design Review Panel (**SDRP**) on October 23, 2024, as part of the design process. Feedback from the SDRP and the corresponding design responses are outlined below:

**Table 7: Response to considerations raised during SDRP**

| Consideration Raised | Response |
|---|---|
| **1. Urban Context and Integration** | **SDRP Comment:** The design should respond to the site's transitioning context, moving from semi-rural to urban, while establishing a strong street presence and integrating with surrounding residential development.<br>**Design Response:** The buildings have been positioned to address both Nirmal Street and Guntawong Road, creating a clear interface with the public domain. Generous landscaped setbacks along these streets ensure the built form integrates seamlessly with the surrounding low- and medium-density residential developments. The main school entry is framed with landscaping and open spaces, enhancing the sense of arrival and reinforcing community engagement. The retained and additional tree plantings soften the visual impact of the built form and strengthens the connection to the natural environment. |

| Consideration Raised | Response |
|---|---|
| **2. Building Placement and Circulation** | **SDRP Comment:** Ensure that the placement of buildings minimises disruption caused by topography and enhances site circulation.<br>**Design Response**: Building placements were refined to align more effectively with the site's natural slope, minimising the extent of earthworks and retaining a significant portion of high-value vegetation. The reconfigured layout also ensures smoother transitions between levels, with well-placed ramps, covered walkways, and vertical circulation (e.g., stairs and lifts). This approach reduces the need for complex grading while maintaining accessibility for all users. Pathways are strategically located to connect key facilities efficiently, including teaching spaces, the sports fields, and the standalone hall. |
| **3. Sustainability and Environmental Integration** | **SDRP Comment:** Strengthen sustainability measures to achieve high environmental outcomes and ensure alignment with Green Star Certification targets.<br>**Response**: The design incorporates advanced sustainability features, including:<br>• A 99kW photovoltaic array on Building C to generate renewable energy.<br>• Rainwater harvesting systems for irrigation and on-site use, reducing dependency on mains water.<br>• Water-sensitive urban design elements, such as bioswales and permeable surfaces, to manage stormwater runoff effectively.<br>• Extensive tree retention and new endemic planting to enhance biodiversity, provide natural shade, and mitigate the heat island effect.<br>These measures are complemented by passive design strategies, including optimised building orientation for natural ventilation and solar access, reducing energy demand. |
| **4. Community Engagement and Access** | **SDRP Comment:** Create spaces that support community use while maintaining secure operations during school hours.<br>**Design Response:** The hall has been designed with a dedicated after-hours entry from Nirmal Street, separate from the school's primary operations. This design ensures the hall can be accessed safely and independently for community events without compromising school security. The kiss and drop zone and pedestrian access points are positioned to improve connectivity and manage peak-hour traffic efficiently. |
| **5. Built Form, Scale, and Streetscape** | **SDRP Comment:** Address the perceived bulk and scale of the buildings to ensure compatibility with the residential character of the area.<br>**Design Response:** The three-story buildings are designed with articulated facades and a mix of materials to break down their mass and reduce visual impact. Features such as shading devices, varied rooflines, and angled building alignments reduce perceived bulk and scale and create a visually appealing streetscape. The use of landscaping, including mature tree retention, further softens the visual bulk and integrates the school into the surrounding context. The stepped building forms also respond to the site's sloping topography, ensuring the structures sit comfortably within the landscape. |
| **6. Safety, Passive** | **SDRP Comment:** Enhance passive surveillance opportunities and ensure safe circulation for students, staff, and visitors. |

| Consideration Raised | Response |
|---|---|
| **Surveillance, and Security** | **Design Response:** Clear sightlines have been prioritised throughout the campus, particularly in play areas, circulation routes, and at building entries. Pathways are well-lit, with safe lighting at key access points. The layout avoids dead-end corridors, and external stairs are located in areas with good supervision. Controlled access points, including a secure 2.1m high perimeter fence and video intercoms at entry gates, ensure student and staff safety. Toilet facilities incorporate open-air “airline style” cubicles with individual basins to improve visibility and reduce the risk of bullying. |
| **7. Indoor-Outdoor Learning and Play Spaces** | **SDRP Comment:** Foster a strong relationship between indoor and outdoor spaces to create a cohesive learning environment.<br>**Design Response:** Outdoor play areas, including sports courts and the main sports field, are centrally located to ensure supervision and accessibility. Landscaped spaces provide areas for passive recreation, while dedicated learning environments, such as sensory gardens near the SLU and kitchen gardens adjacent to the Food Technology hub, integrate outdoor learning opportunities. Covered walkways connect these spaces, ensuring seamless indoor-outdoor transitions and protection from weather conditions. |
| **8. Adaptability and Whole-of-Life Considerations** | **SDRP Comment:** Ensure the design is flexible and adaptable to meet future requirements and optimise long-term value.<br>**Design Response:** The modular grid design allows internal spaces to be reconfigured easily to adapt to changing needs over time. For example, teaching hubs are designed with movable partitions, enabling spaces to transition from smaller classrooms to larger group learning areas. Durable materials and low-maintenance finishes have been selected to extend the lifespan of the facilities, reducing long-term operating costs. The layout also accommodates potential future expansions, with provisions for additional buildings and infrastructure. |
| **9. Aesthetic Integration** | **SDRP Comment:** Ensure the built form contributes positively to the visual identity of the neighbourhood.<br>**Design Response:** The buildings present a modern aesthetic, with facades articulated by patterns, materials, and colours reflective of the site’s local context and "Connecting with Country" principles. The design balances functionality with visual appeal, contributing to the identity of the neighbourhood and aligning with the broader objectives of the North West Growth Centre. |

For a more detailed response to comments from the SDRP, refer to the Architectural and Landscape Design Report.

### 3.3.3 Connecting with Country

The Connecting with Country (**CWC**) Report prepared by Yerrabingin details the findings and design recommendations from a collaborative process aimed at embedding CWC principles into the proposed high school at Schofields Tallawong. Key activities included a "How Might We" session to align project goals, a site visit on 15 October 2024 with First Nations community members, and a final design workshop.

The design reflects a commitment to Dharug cultural values, environmental stewardship, and inclusive education by incorporating cultural, ecological, and educational elements.

Recommendations from this process have been integrated into the project, as summarised in **Table 8.**

**Table 8: Response to considerations raised during Connecting with Country process**

| Consideration Raised | Response |
|---|---|
| **Cultural Integration and Identity** | The design incorporates Dharug cultural values and narratives throughout the site. Consultation with Dharug knowledge holders informed the integration of local stories, art, and motifs into the built form and landscape. For example, shaded entry canopies, outdoor classrooms, and gathering spaces reflect the connection to Dharug cosmology, including Sky Country and seasonal cycles. These elements provide opportunities for cultural education and connection, ensuring the school serves as a place for learning and storytelling that honours the custodianship of Country. |
| **Ecological and Landscape Design** | The project incorporates the natural features of the site, including its proximity to First Ponds Creek and the critically endangered Cumberland Plain Woodland, as key drivers of the design. WSUD elements manage stormwater, improve water quality, and highlight water's cultural and ecological significance under the principle of "Water is Our Healer." Retained and newly planted endemic vegetation enhances biodiversity and fosters habitats for "Non-Human Kin," such as birds and insects, creating opportunities for students and staff to engage directly with the natural environment. |
| **Sustainability and Legacy** | The design aims to leave a legacy of environmental sustainability and cultural stewardship. Sustainability measures include the retention of mature trees, minimisation of engineered water channels, and strategies to mitigate the urban heat island effect. The use of renewable materials and technologies supports long-term environmental resilience, reflecting Dharug philosophies of care and custodianship. Outdoor classrooms and sensory gardens provide immersive learning opportunities that teach students about sustainable practices and the interdependence of humans and the environment. |
| **Outdoor Learning and Connection** | Outdoor spaces are integral to the design, enabling students to learn directly from the land. Sensory gardens, kitchen gardens, and outdoor classrooms are placed strategically to foster a deep connection with Country. These spaces are designed to facilitate passive and active learning opportunities, emphasising the ecological relationships between flora, fauna, and the seasonal changes of Country. Students are encouraged to explore the cultural uses of plants and develop an understanding of natural systems. |
| **Community and Cultural Collaboration** | The design has been shaped through a collaborative process, including "Walk on Country" sessions and workshops with Dharug community members, ensuring the school reflects the values and significance of the land. Community spaces, such as the hall and landscaped areas, provide opportunities for ongoing cultural engagement and education. This collaboration ensures the project is respectful of Aboriginal cultural heritage while fostering a strong sense of identity and belonging for all users. |
| **Built Form Response** | The built form is carefully integrated into the landscape, responding to the site's topography and natural features. Building alignments and materials are informed by Dharug cultural principles, creating a harmonious connection between the built and natural environments. Facade treatments use colours and materials inspired by the site, blending the buildings into the landscape. Biomimicry and sustainable design practices further enhance the eco-centric approach. |

By embedding the principles of CWC the project achieves a design that respects Dharug cultural heritage, fosters environmental stewardship, and creates an inclusive, sustainable learning environment. It stands as a benchmark for culturally responsive and ecologically integrated educational design.

### 3.3.4 Sustainability

The proposed high school incorporates a range of Environmental Sustainability Design (**ESD**) measures to align with sustainability principles and meet relevant environmental performance targets. Key measures include:

- A photovoltaic (solar) array is proposed to reduce reliance on grid electricity, contributing to a reduction in carbon emissions and long-term operational costs.
- The installation of rainwater harvesting systems will support irrigation and potentially non-potable uses, reducing mains water consumption.
- The inclusion of EV charging stations supports the transition to sustainable transport, ensuring the school is prepared for increased EV use in the community.
- The use of durable, low-maintenance materials minimises the environmental footprint associated with the construction and operation of the school.
- Native and endemic species are prioritised to reduce irrigation needs, enhance biodiversity, and create shaded areas that mitigate the urban heat island effect.

These measures demonstrate a holistic approach to environmental sustainability by addressing energy, water, and ecological impacts.

The project targets a 5-Star Green Star rating under the Green Star Buildings v1 framework, which signifies "Australian Excellence." This is consistent with the requirements for projects exceeding $10 million in estimated development costs (**EDC**) and more than 1000m² of Gross Floor Area (**GFA**). Key initiatives contributing to this target include:

- Integration of renewable energy systems (e.g., solar panels).
- WSUD strategies.
- Sustainable material sourcing.
- Optimisation of indoor air quality and thermal comfort to enhance the learning environment.

The Green Star framework ensures that sustainability considerations are embedded throughout the design, construction, and operational phases of the school. The project also seeks to meet NABERS energy and water performance benchmarks for schools. Proposed targets include:

- **Energy Rating**: A 5-star NABERS Energy rating, achieved through solar energy generation, high-efficiency HVAC systems, LED lighting, and optimised building orientation for passive heating and cooling.
- **Water Rating**: A 4.5-star NABERS Water rating, supported by rainwater harvesting, water-efficient fixtures, and landscaping that minimises irrigation needs.

These measures ensure the school operates efficiently and minimises its environmental impact.

The School Transport Plan (**STP**) prepared for the new school and attached at **Appendix 24** aligns with ESD principles by promoting sustainable transport options to reduce the carbon footprint of the school community. Measures include:

- Provision of secure bike racks and pedestrian pathways to encourage walking and cycling.
- Improved connectivity to local bus and metro services, reducing dependence on private vehicles.
- Installation of EV chargers in the car park to support electric vehicle use among staff and the broader community.
- Encouraging carpooling to reduce vehicle congestion and emissions during peak school hours.

These measures reflect a commitment to sustainable transport options and align with the broader ESD goals for the development.

### 3.3.5 Climate Change

The proposed high school has been designed to address exposure to extreme climate events, incorporating insights from historical data, environmental mapping, and NARCLiM climate projections. Key risks identified include heatwaves, intense rainfall, localised flooding, storms, and potential bushfire exposure.

The design mitigates heatwave impacts through high-performance insulation, reflective roofing, and passive cooling strategies, supported by tree planting and shaded outdoor spaces to reduce the urban heat island effect.

To manage flood risks, buildings are positioned outside flood-prone areas, and water-sensitive urban design features such as detention tanks and bioswales control stormwater runoff and reduce overland flow impacts. The built form is designed to withstand high wind events, using reinforced structures and impact-resistant materials, while vegetation is selected to enhance resilience to both storms and bushfire risks.

Emergency management plans and real-time weather monitoring systems further enhance resilience, ensuring the school is well-prepared for current and future climate challenges. These measures reflect a proactive, integrated approach to creating a climate-adaptive and sustainable educational facility.

## 3.4 Site Planning and Layout

The location and orientation of the proposed buildings have been carefully planned to respond to the site's surrounding context and existing natural and built constraints. **Figure 9** includes an extract of the proposed site plan. Buildings are positioned in the north-east portion of the site to minimise impacts from flood-prone areas and reduce exposure to traffic noise from the future Hambledon Road extension. The site's north-south orientation was a key factor in its selection, offering significant advantages for maximising solar access to classrooms and promoting energy efficiency. Further details on the rationale for site selection are provided in **Section 4.**

## Figure 9 Site Plan


*Source: DJRD Architects, 2024*

**Figure 10 Render of new school - Aerial View of Assembly and Play Fields from north west**

*Source: DJRD Architects, 2024*

### 3.4.1 Learning Hubs

The proposed activity includes the construction of three learning hubs (three storeys in height) which will accommodate 49 PTS and three STS. The internal layouts of the teaching spaces are designed in accordance with the Education Facilities Standards and Guidelines (**EFSG**), ensuring they meet the operational requirements of the school and maintain consistency across the NSW Department of Education portfolio. Each teaching space will provide flexible learning spaces for students and staff, with the following key facilities:

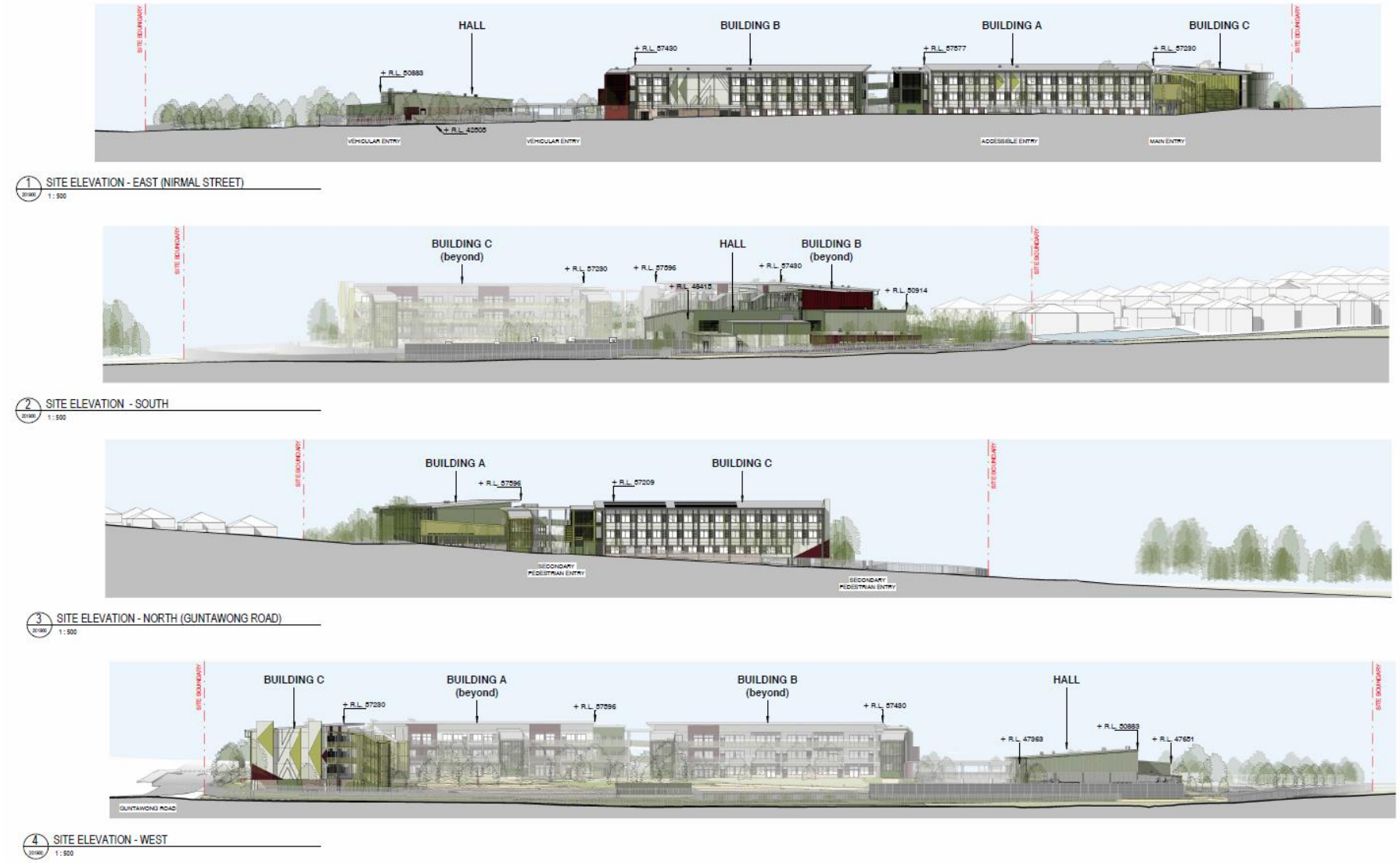
- **Building A**: General learning spaces, learning common rooms, staff amenities, library, PE fitness facilities, and performing arts spaces.
- **Building B**: General learning spaces, woodwork and metalwork workshops, outdoor covered workshop, learning common rooms, visual arts, media rooms, flexible spaces, and a staff lounge.
- **Building C**: Food technology rooms with semi-commercial kitchens, general learning spaces, and multi-purpose spaces.

To enhance site connectivity and accessibility, the learning hubs are linked by elevated walkways, promoting permeability and ease of movement throughout the campus. Detailed plans, elevations, and sections of the learning hubs are provided within the Architectural Plans in **Appendix 2.**

The external design of the learning hubs reflects the local built and natural context to help to soften the visual impact of the buildings as viewed from the public domain. The façade materials and colour palette were selected to integrate harmoniously with the bushland setting while ensuring the buildings retain a distinct and modern appearance. The proposed building materials predominantly include brickwork in varied tones, CFC cladding, and metal sheet roofing. These high-quality materials, combined with locally responsive colours.

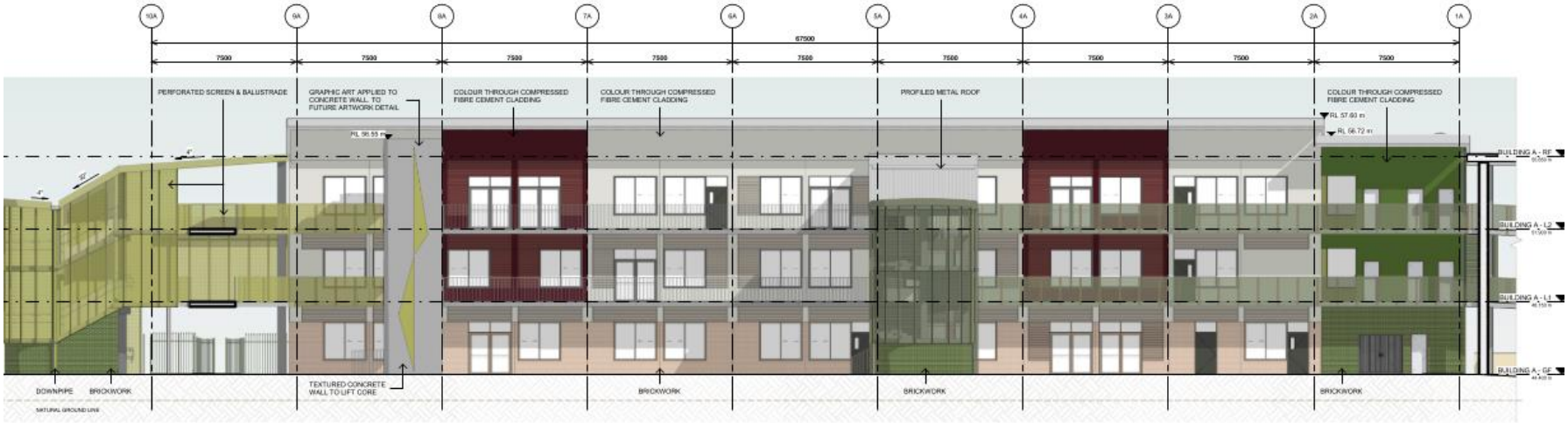
The learning hubs are set back a minimum of 4.7 metres from the site boundary and approximately 26 metres from the nearest residential dwelling, ensuring an appropriate buffer between the school and its surroundings. Extracts of the proposed elevations can be found in **Figure 11** and **Figure 12**.

## Figure 11 Site Elevations

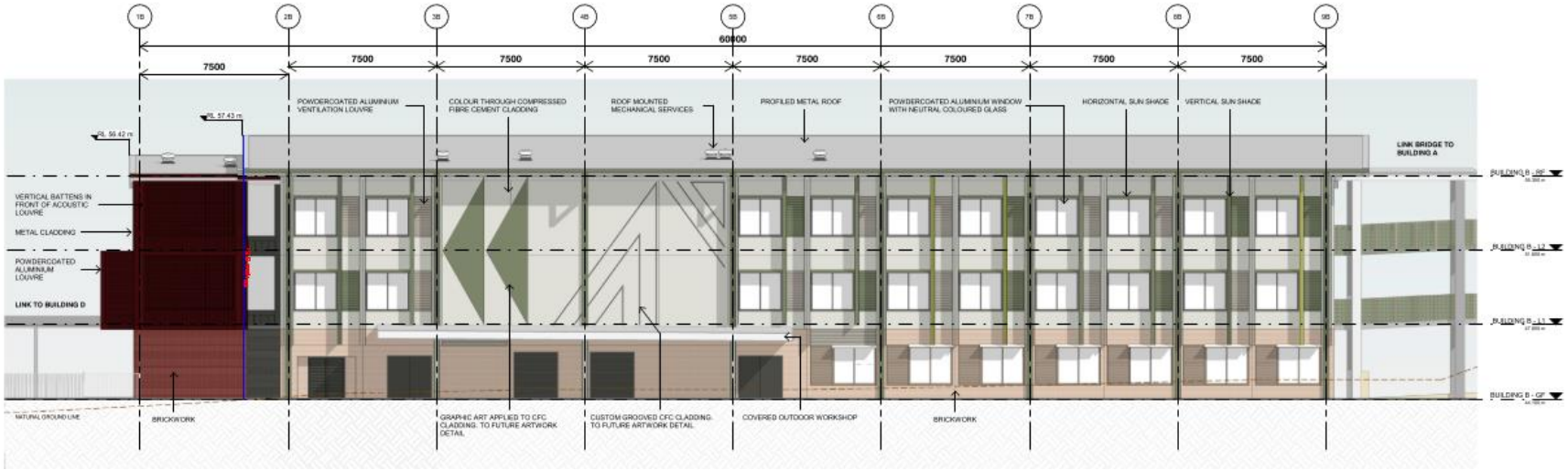



*Source: DJRD Architects, 2024*

## Figure 12 Learning Hub Elevations




*Picture 9 Building A West Elevation*




*Picture 10 Building B East Elevation*


*Picture 11 Building C South Elevation*

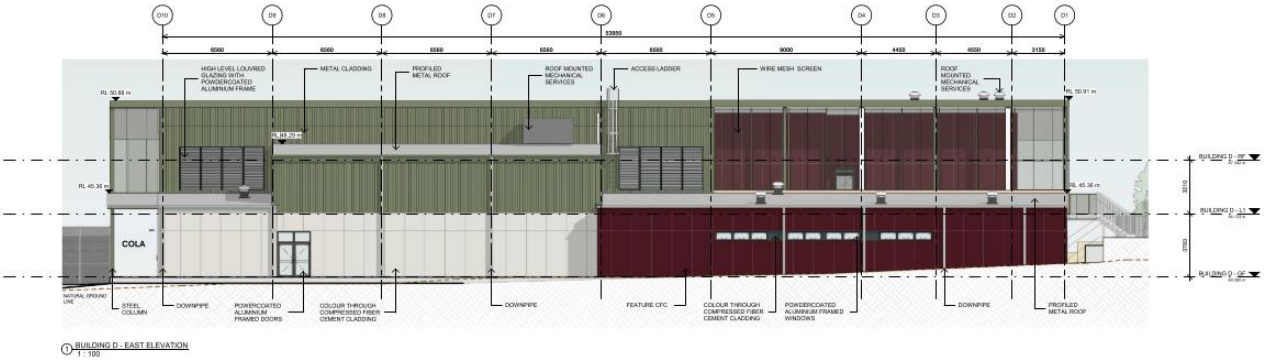
*Source: DJRD Architects, 2024*

## 3.4.2 School Hall

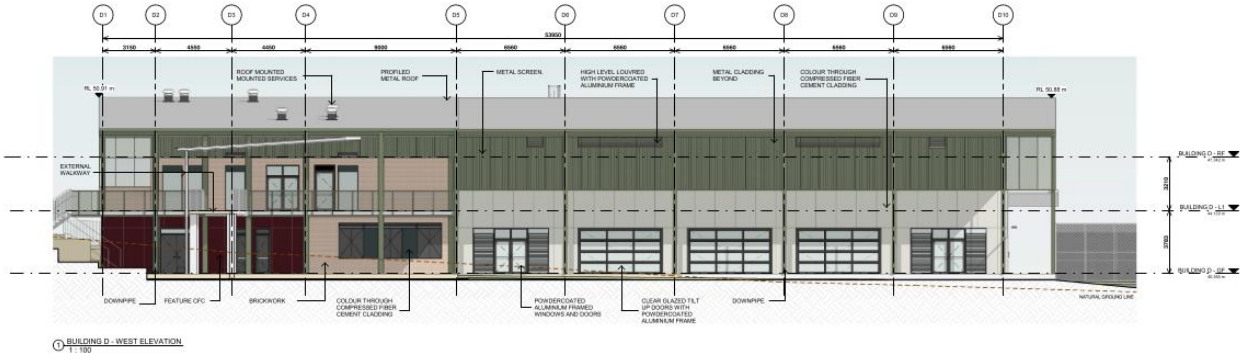
The school hall (‘**Building D’**) is situated in the south-eastern corner of the site, fronting Nirmal Street. This two-storey building features a double-height void designed to house the internal multi-sport court. Building D is a multifunctional facility accommodating a variety of uses, including indoor sports, a stage for performances and assemblies, a school canteen, a movement studio, a lecture theatre, and several amenities and storage rooms.

The external design of Building D aligns with the aesthetic of the learning hubs, utilising a palette of locally responsive colours and materials to integrate with the surrounding natural environment. This approach ensures visual cohesion across the site while maintaining a distinct and functional design for the hall.

**Figure 13 Building D Elevations**




*Picture 12 East Elevation*




*Picture 13 West Elevation*

*Source: DJRD Architects, 2024*

## 3.4.3 Landscaping

The new high school at will be sited carefully considering topography, existing trees and the newly built urban context. The undulating site, while posing design challenges, have created opportunities for a highly amenable landscape and to Design with Country.

Respecting the site’s existing hydrology and enhancing it, has been a key driver to the landscape design and the broader siting of buildings. The main entry to the school is proposed on the corner of Nirmal Street and Guntawong Road flanked by existing Eucalypts. Additionally, an existing watercourse will be rehabilitated and replanted with native species, following the CWC process.

The building layout has been designed to create a partially enclosed area that integrates large assembly spaces, seating, sports facilities, and outdoor learning areas. The placement of buildings along the street edge responds to the surrounding built environment, while a visual and physical connection is proposed between the centre of the school and the First Pond Creek on the southern boundary. Centrally located outdoor play spaces, including the field and games courts, have been designed with clear sightlines to facilitate effective supervision.

In total, 159 new trees are proposed as per the landscape plan, incorporating species from the Cumberland Plain Woodland species assemblage found on the site. These new plantings will contribute to the site's biodiversity while offering critical shade amenities. As shown in **Figure 14**, canopy cover has been developed to maximise tree planting and shading to hardstand areas, in particular to the assembly and sports courts. Overall, a canopy coverage of 14.64% will be achieved. Importantly, the canopy coverage cannot exceed 15% of the site area as the site is to be maintained as an inner protection zone.

The planting schedule and species selection are informed by local ecological communities, including the Cumberland Plain Woodland and the Cumberland Red Gum Riverflat Forest, as well as the CWC process. Using locally endemic species supports biodiversity by creating habitats for native fauna and minimising ecological impacts.

An extract of the landscape master plan is provided at **Figure 15**. Further details on the proposed landscape design are provided in the Landscape Plans in **Appendix 17**.

**Figure 14 Tree Canopy Coverage**


*Source: DJRD Architects, 2024*

## Figure 15 Landscape Master Plan


*Source: Site Image, 2024*

### 3.4.4 School Signage

The proposed activity will involve the erection of a range of school signage throughout the school site, as shown in the signage site plan at **Figure 16**. The school signage will comprise of:

- School identification signage located at the entry plaza above the awning
- CWC sign feature within the entry plaza
- Wayfinding and building identification signage
- Main entry digital electronic school sign
- Public domain signage (kiss and drop, school parking hours)
- Waste and service vehicle entry and exit signs
- Staff carpark signage
- NSW Department of Education signage and EFSG signage for every room.

**Figure 16 Signage Site Plan**


*Source: DJRD Architects, 2024*

**Figure 17 Entry Plaza elevation - North (Guntawong Road)**


*Source: DJRD Architects, 2024*

## 3.4.5 Access and Parking

### Pedestrian Access

As shown in **Figure 18**, the proposed activity includes several pedestrian access points, located on the Guntawong Road and Nirmal Street frontages. The primary pedestrian access will be located on the corner of Guntawong Road and Nirmal Street to provide a strong street presence and arrival plaza. Secondary pedestrian access points are located on Nirmal Street and Guntawong Road. The pedestrian access points have been adequately separated from the vehicular access points to minimise vehicle and pedestrian conflicts.

A range of off-site works are also proposed to ensure safe pedestrian access into the site, including:

- Provision of a kiss and drop zone along Nirmal Street.
- 3.5m shared path along school frontage on Nirmal Street on the school frontage side only (western).
- A wombat crossing on Nirmal Street.

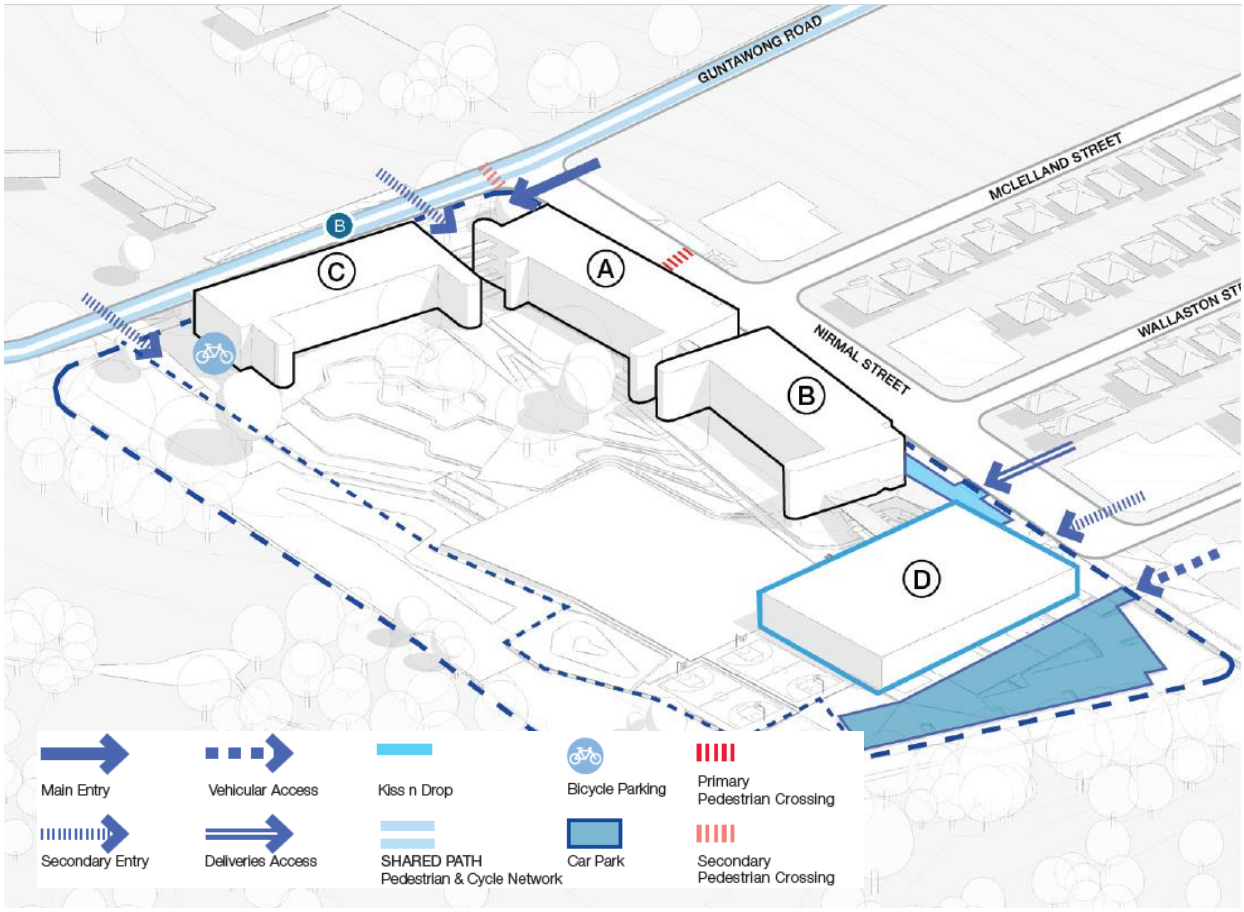
The proposed activity also includes bicycle parking located in Building C to accommodate 98 bicycle parking spaces. Access to the bicycle parking will be provided through a secondary pedestrian access point located on Guntawong Road.

As outlined in **Section 3.2**, works on Guntawong Road and Marchant Street outside the school boundary do not form part of this REF and will require separate approval. Works along Guntawong Road include construction of 3.5m wide shared path two bus bays and a zebra crossing. As these works are essential for the school's operation, mitigation measures have been incorporated to ensure their completion before the school opens.

Further, the southern half of Marchant Street is required to be constructed from Nirmal Street to Tallawong Road for the school to operate. Marchant Street from Nirmal Street to Tallawong Road is within Lot 43 DP301086 and subject of Bathla Group subdivision DA (DA-23-00128), which is

understood to be in the delivery phase with an expected completion by mid-2025. A mitigation measure is included in the REF to ensure that the Marchant Street works will be complete before commencement of operation of the school.

**Figure 18 Proposed Access and Circulation**




*Source: DJRD Architects, 2024*

## Vehicle Access and Parking

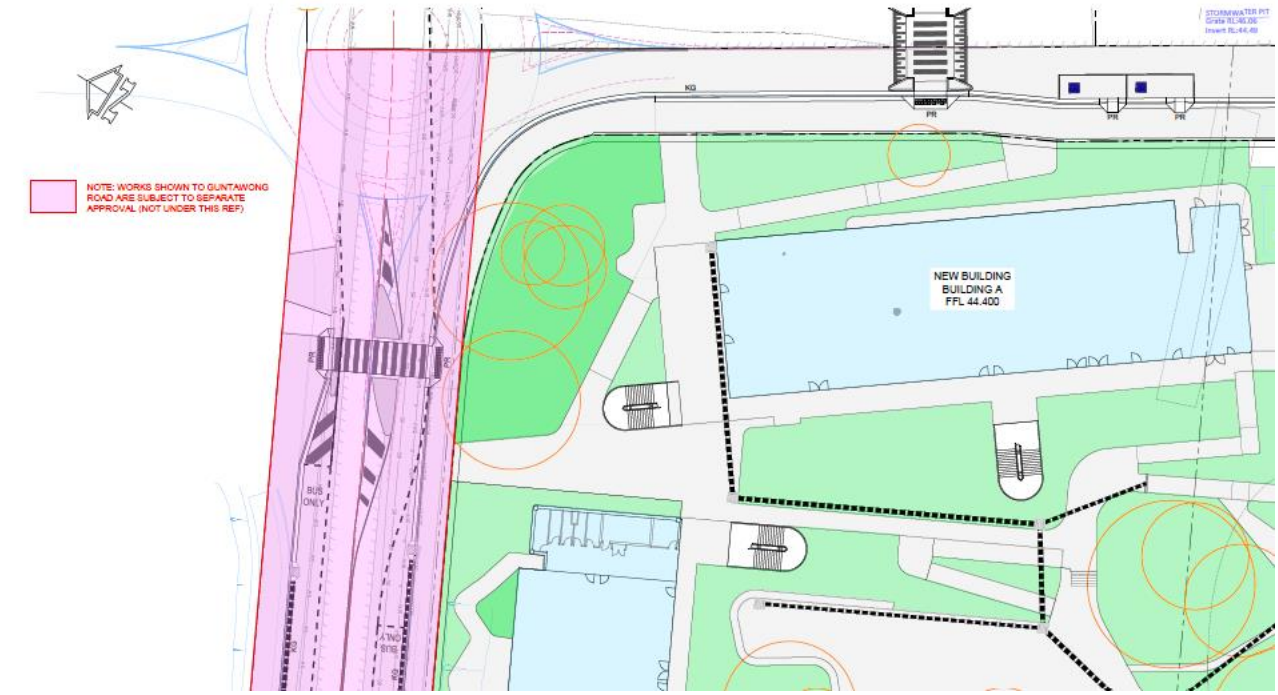
A private vehicle access will be provided from Nirmal Street to the proposed staff carpark. The carpark will provide 72 car parking spaces, including two accessible spaces. The accessible parking spaces are located near the school hall entrance.

The carpark will include a range of landscaped parking bays to ensure that the urban heat island effect is reduced, and a high level of amenity is achieved on the site.

As shown in **Figure 20** a secondary vehicular access point is proposed from Nirmal Street to a hardstand area and loading dock for delivery and waste collection with hardstand and loading dock provided.

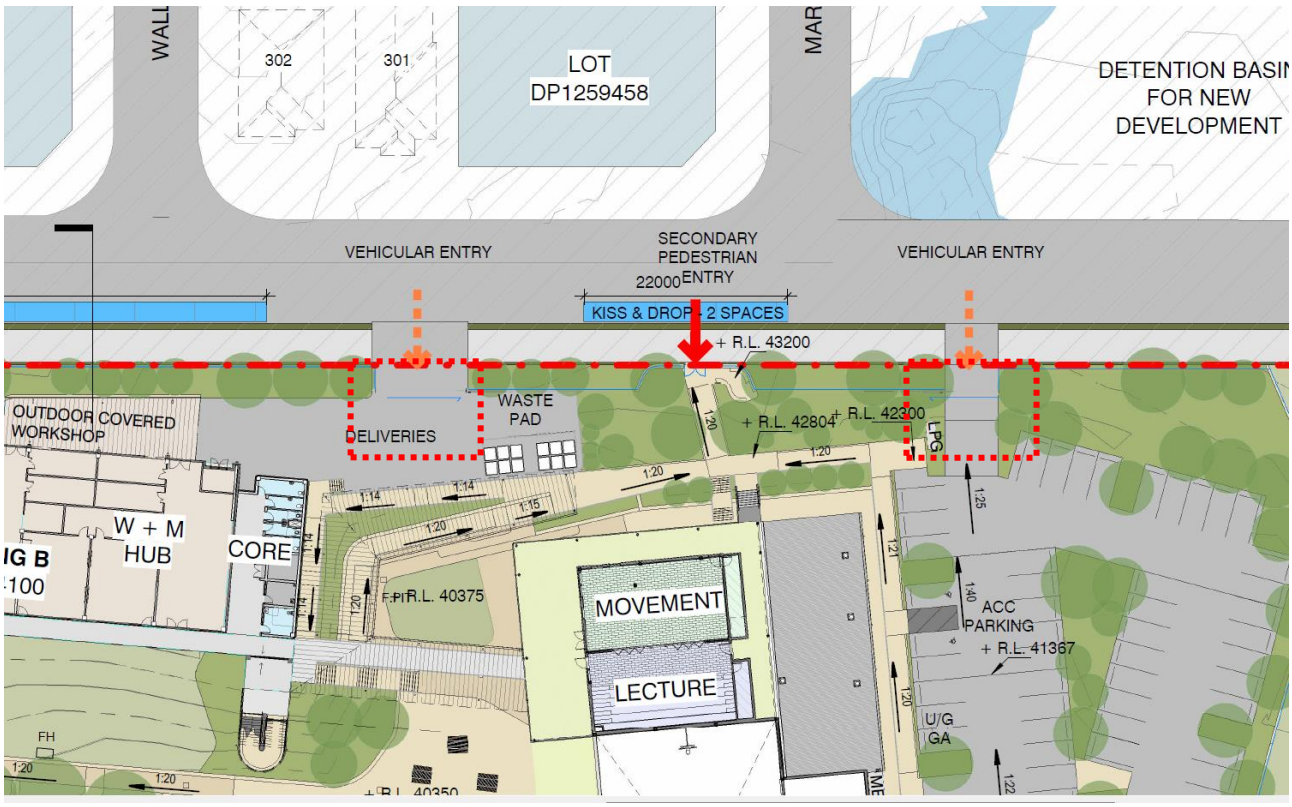
Emergency vehicles will be permitted to park in any location deemed appropriate under the road rules. Nirmal Street provides on-street parking, which is a no parking zone during the morning and afternoon peaks and therefore could be utilised.

**Figure 19 Proposed Pedestrian Crossings**




*Source: TTW, 2024*

**Figure 20 Vehicle Access Points**




*Source: DJRD Architects, 2024*

## Bus Parking and Kiss and Drop

As shown in **Figure 21** upgrades to the existing bus bays on Guntawong Road is required to accommodate a 60m and a 40m-long bus bay on the southern and northern sides of Guntawong Road, respectively. Each bus bay will be able to accommodate two buses. These works do not

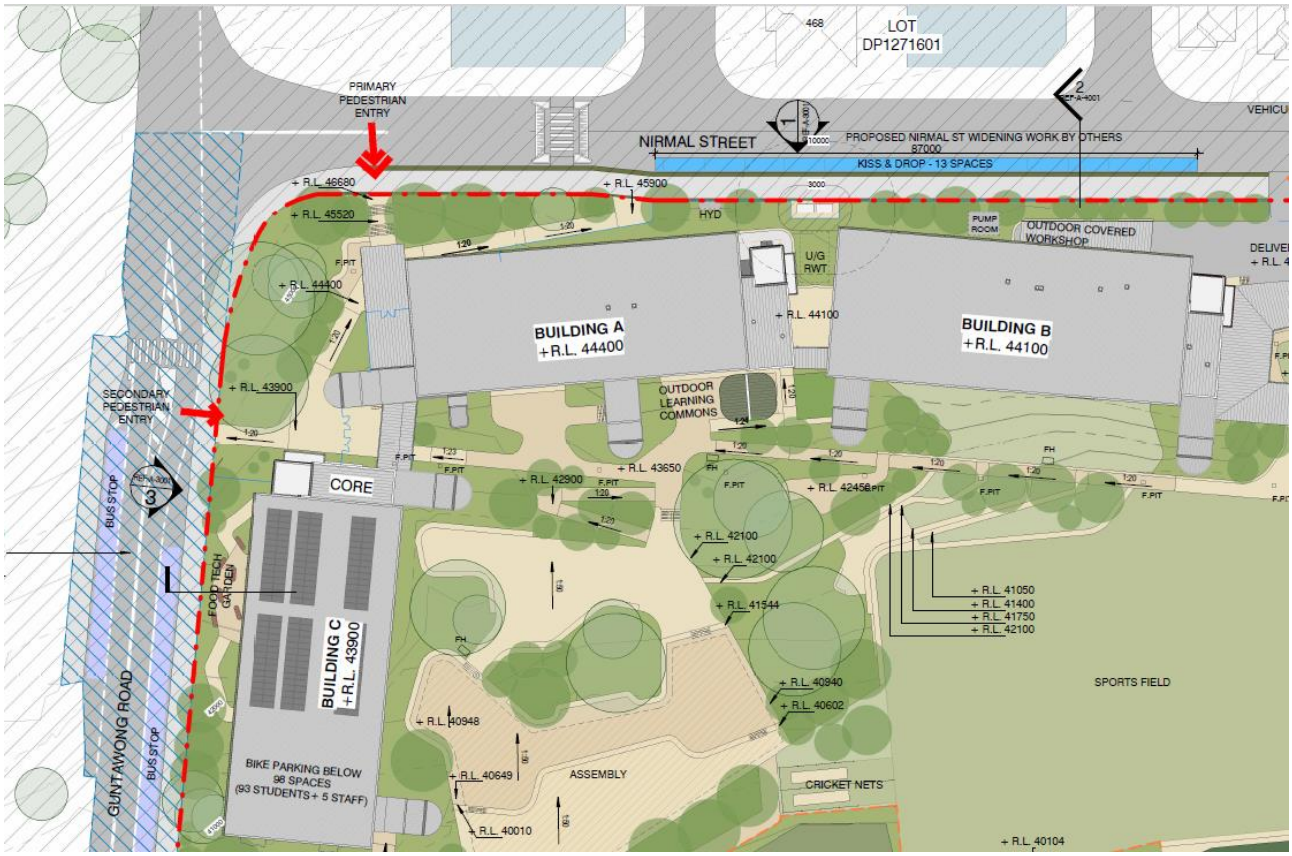
form part of the REF and will be subject to separate approval. However, as they are essential for the school's operation, mitigation measures have been implemented to ensure their completion before the school becomes operational.

To accommodate the expected demand for bus services from students, an additional 19 bus services will be required, including 4 additional public bus services. As TfNSW regularly monitors and revised bus frequencies as needed, the appropriate number of buses will be provided to meet the bus demands.

The proposed kiss and drop area will be located on the western side of Nirmal Street along the site's eastern boundary. The kiss and drop areas will be 100m-long to accommodate up to 15 car spaces. Vehicles are expected to access the kiss and drop via Marchant Street and exit via the intersection of Guntawong Road and Nirmal Street. Two additional accessible spaces are proposed further north on Nirmal Street to provide equitable access to the primary pedestrian access.

Marchant Street from Nirmal Street to Tallawong Road is within Lot 43 DP301086 and subject of Bathla Group subdivision DA (DA-23-00128), which is understood to be in the delivery phase with an expected completion by mid-2025. A mitigation measure is included in the REF to ensure that the Marchant Street works will be complete before commencement of operation of the school.

**Figure 21 Proposed bus parking and kiss and drop**



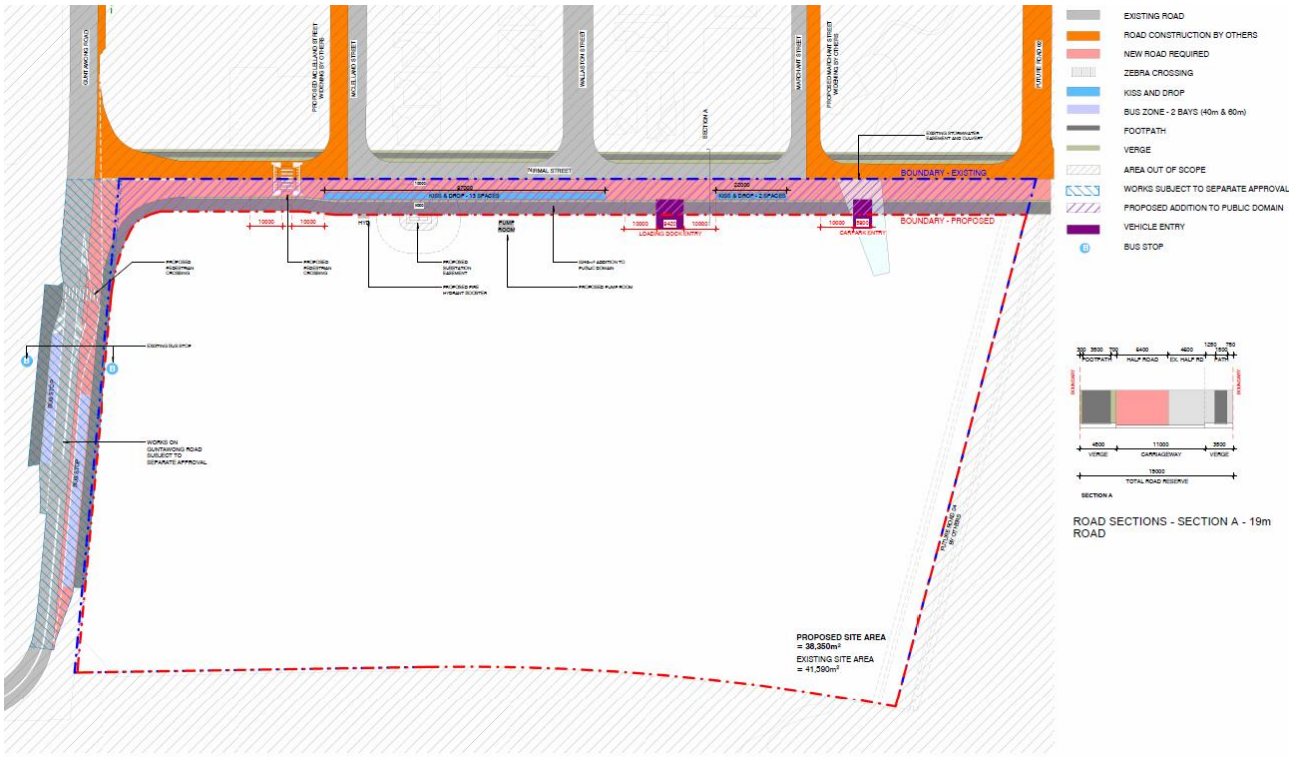

*Source: DJRD Architects, 2024*

## Nirmal Street Upgrade

Nirmal Street requires upgrade to accommodate the proposed school access points, adequate space for bus turnarounds and the kiss and drop zone and to minimise the traffic impacts of the school operation on the surrounding locality. Accordingly, the proposed activity includes upgrades

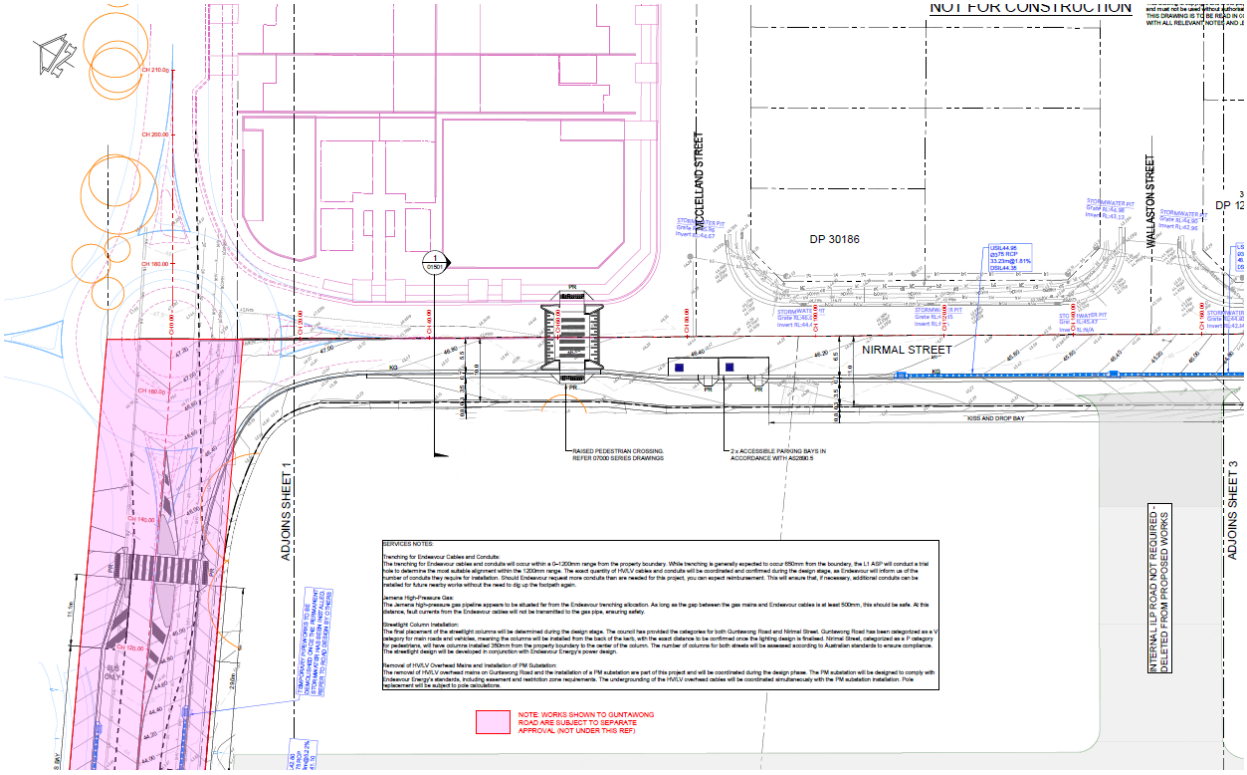
to Nirmal Street including the widening of the road to a width of 19m and the extension of the road from Guntawong Road along the full extent of the school frontage. As shown in **Figure 22** to accommodate the proposed Nirmal Street widening, the site boundary will be adjusted to provide adequate road space. Consultation with the relevant landowners and authorities is ongoing and will continue following the lodgement of this REF to the department. An extract of the Nirmal Street civil plans is provided at **Figure 23.**

**Figure 22 Boundary Adjustment Plan**

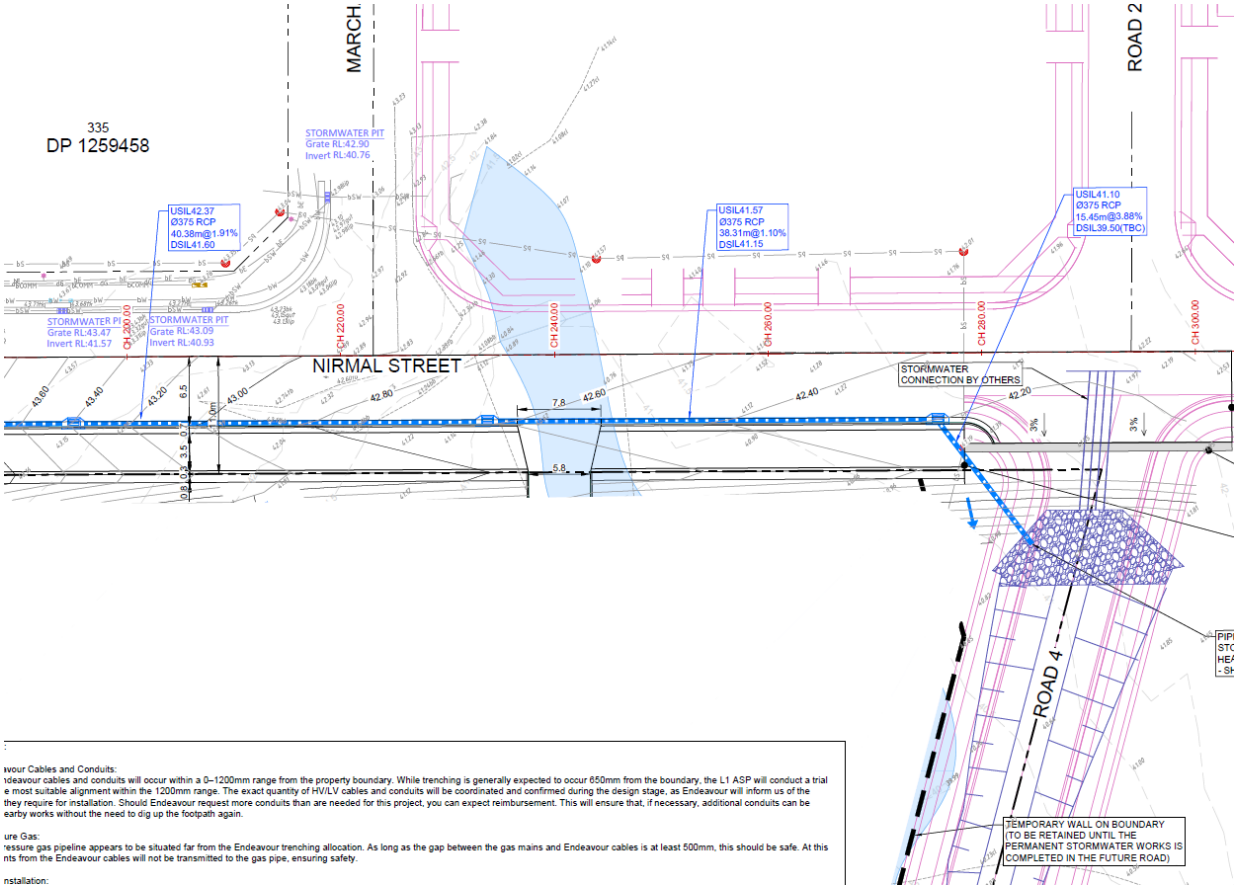



*Source: DJRD Architects, 2024*

## Figure 23 Nirmal Street Civil Plan




*Picture 14 Nirmal Street Plan Part 1*




*Picture 15 Nirmal Street Plan Part 2*

*Source: TTW, 2024*

### 3.4.6 Construction Activities

The proposed construction hours will be as follows:

- 7:00am to 6:00pm, Monday to Friday
- 8:00am to 1:00pm, Saturday
- No work without prior approval on Sundays and Public Holidays

The construction of the proposed activity is anticipated to require 300 construction workers, along with the use of excavators and cranes during construction.

The current approximate construction program milestones of the proposal are provided in the below table. A detailed construction program for the proposal will be developed by the Main Works Contractor.

**Table 9: Construction Program**

| Milestone | Start | Finish |
|---|---|---|
| Construction contract award | June 2025 | June 2025 |
| Site establishment works | June 2025 | July 2025 |
| Civil and bulk excavation works | September 2026 | December 2026 |
| Main construction works | November 2025 | November 2026 |
| Site demobilisation | December 2026 | December 2026 |

### 3.4.7 Demolition and Tree Removal

As shown in **Figure 24** the site does not contain any existing buildings and includes some existing structures, such as fencing and stockpiles. The proposed activity includes the demolition and removal of existing agricultural structures, such as fencing, and removal of existing stockpiles located in the north-east portion of the site. The proposed activity also includes the removal of 267 trees.32 trees are proposed to be retained.

**Figure 24 Demolition and Tree Removal Plan**


*Source: DJRD Architects, 2024*

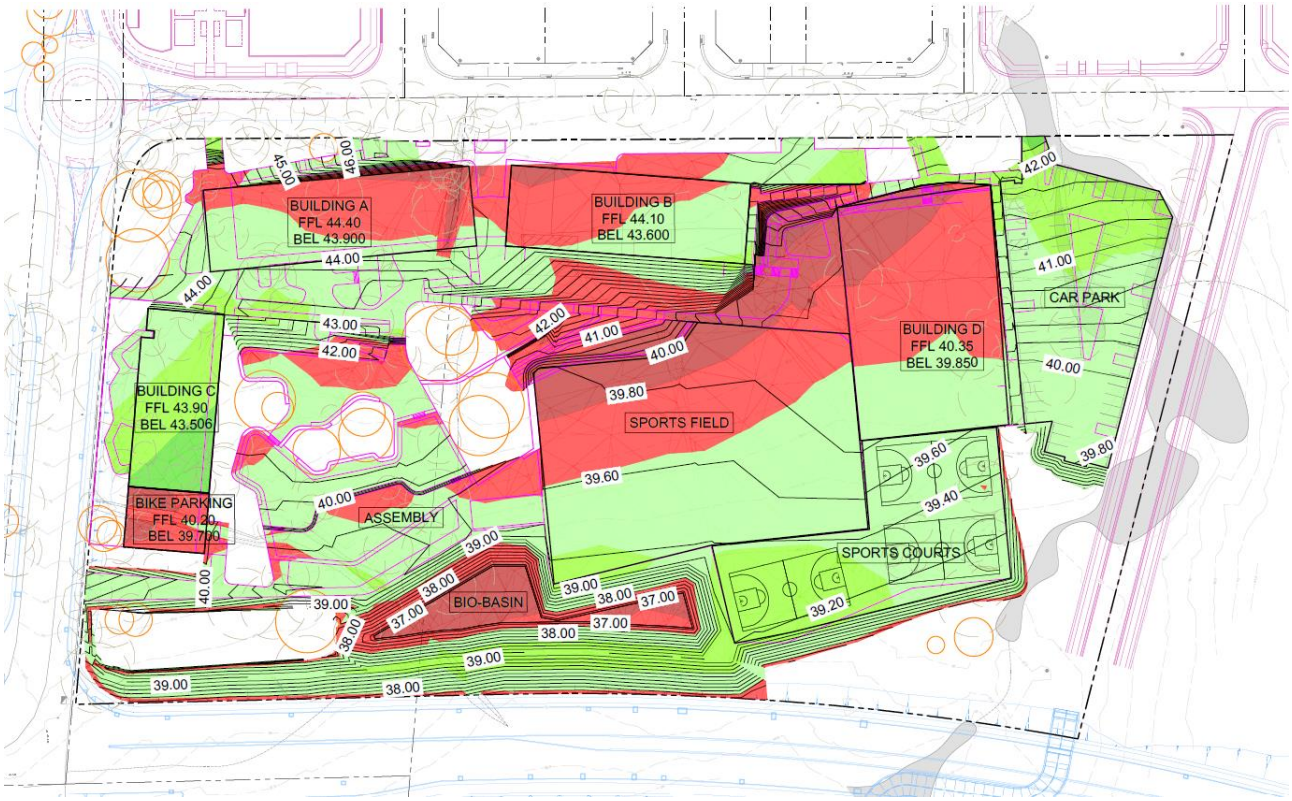
## 3.4.8 Earthworks

The natural site topography includes a minor fall in gradient from east to west. Bulk earthworks are required to accommodate the proposed educational establishment. An extract of the proposed cut and fill plan is provided at **Figure 25** and a summary of the proposed quantities are provided in **Table 10**.

**Table 10: Cut and Fill Quantities**

| Earthwork Type | Volume required ($m^3$) |
|---|---|
| Cut | 6,723$m^3$ |
| Fill | 12,446$m^3$ |
| Total | Net fill 5,723$m^3$ |

**Figure 25 Cut and Fill Diagram**




*Source: TTW, 2024*

## 3.5 Remediation

The Detailed Site Investigation (**DSI**) conducted for the site has confirmed the need for a Remedial Action Plan (**RAP**) to address several identified Contaminants of Potential Concern (**CoPC**). In response, a RAP has been prepared outlining the following remediation works:

- Removal of Asbestos-Containing Material (**ACM**) co-located with waste materials, with disposal at an approved off-site facility.
- Manual collection (emu-picking) of bonded ACM in surface soil (less than 100mm depth) where ACM is not co-located with waste materials.
- Excavation and emu-picking of bonded ACM in fill at depths greater than 100mm where ACM is not co-located with waste materials.

These measures will ensure the site is made safe prior to the commencement of operation.

## 3.6 Utilities and Services

The following new utility connection works are proposed, and will be subject to the necessary approvals:

- Water connection to an existing 100mm Sydney Water owned main along Nirmal Street.
- Sewerage connection to an existing 225mm Sydney Water owned main that reticulates through the southern portion of the site.

- Provision of a single 1500kVA kiosk transformer to satisfy the anticipated maximum demand (location subject to future investigations).
- Connection to existing NBN assets located nearby to the site.

## 3.7 Waste Management

The proposed operational waste management procedures will involve the private collection of waste and recycling bins per an agreed schedule which is yet to be finalised. The proposed collections will be undertaken in accordance with the department's contracts with a private waste collection service.

It has been assumed that general waste and recycling will be collected three times weekly, approximately every 2 days. On collection days, a private waste collection vehicle will enter the site from Nirmal Street and park in the loading bay. Once the waste is collected, the private waste collection vehicle will exit the site onto Nirmal Street in a forward direction.

Construction waste will be disposed of in accordance with the Construction and Demolition Waste Management Plan (**CWDMP**) provided at **Appendix 20**.

## 3.8 Operations

The new school will accommodate up to 1,000 students and 80 staff. The school is not proposed to be used for community use outside of school hours. The anticipated school hours are outlined in **Table 11**.

**Table 11: School Hours of Operation**

| Activity | Hours of Operation |
|---|---|
| School Hours | 8:30am – 3:30pm, Monday – Friday |
| Recess and Lunch | Staggered throughout the school day. |
| Administration | 8:00am – 6:00pm |
| After School Hours | 4:00pm – 6:00pm (Hall, Library, Lecture and Movement Studio), Monday – Friday |
| After Hours Communal Use of Hall | 8:00am – 6:00pm, Monday – Friday<br>8:00am – 6:00pm, Saturday<br>8:00am – 6:00pm, Sunday<br>Occasional use of Hall 10:00pm to Midnight |
| Waste Collection | Proposed outside of school hours Monday to Friday |
| Cleaning | 5:30am to 6:00pm, Monday to Friday |

Out of school hours care (**OOSH**) is not proposed under this REF and any future OOSH uses will be carried out using the following exempt development provision in the TI SEPP once the site becomes an operating school.

*Section 3.39 (i) the use of existing facilities or buildings for the physical, social, cultural or intellectual development or welfare of the community, whether or not it is a commercial use of the establishment,*

# 4. Proposal Need and Alternatives

## 4.1 Proposal Need

The proposal to provide a new high school for Schofields and Tallawong is consistent with the State Government's plan to rebuild public education in Western Sydney. The 2024-2025 budget is aiming to deliver record education funding including $3.6 billion for new and upgraded schools in Western Sydney. The focus is on ensuring that the growing communities are receiving access to world class public education.

The proposed activity will provide integral social infrastructure in an emerging urban environment experiencing significant population growth. The proposed activity is the direct result of the NSW Government commitment to deliver public education in Western Sydney.

## 4.2 Alternatives

The proposed activity has been developed following a consideration of options and alternatives to address the need identified above. A summary of the options considered is provided in **Table 12**.

**Table 12: Assessment of Options and Alternatives**

| Option | Discussion | Preferred Option |
|---|---|---|
| **Option 1: Do Nothing** | If the project was not to proceed, the following consequences are likely to occur:<br>• A significant shortfall of secondary school infrastructure within the locality required to support the enrolment needs of the rapidly growing population in the Western Sydney area.<br>• A "Do nothing" approach would result in the failure of the department to provide education services within the nominated catchment, which is not an option. As part of the NSW plan to rebuild essential services, the 2024-2025 Budget seeks to deliver $3.6 billion for new and upgrades schools in Western Sydney. | Option 1 is not preferred as it would result in a significant shortfall of secondary educational establishments, and not achieve the intended outcomes of the NSW plan to rebuilding essential services, including the development of schools in Western Sydney. |
| **Option 2: Alternative Sites** | Two other sites were initially investigated during due diligence investigations for a future high school in the area. These other two site were discounted for the following reasons:<br>• An available land parcel located in the area was | Option 2 is **not preferred** as the proposed school site is already connected to existing services such as water and sewer infrastructure and provides for a site layout and orientation that will optimise solar access, cross |

| Option | Discussion | Preferred Option |
|---|---|---|
| | discounted as it was located near an active abattoir and in an area where precinct development of critical infrastructure (roads and services) and land rezoning requirements would not be available in time to allow the school to be developed in time to address the service need.<br>• An available land parcel in the area was discounted as it was too close to an existing high school (approximately 500m away from Rouse Hill High School). In addition, the land parcel was zoned for future government housing supply initiatives and has an on-site water detention basin which would have significantly impeded construction and operation of a school on the land. | ventilation and open space opportunities.<br>While the ILP identifies the site for medium- and low-density residential development and local roads, it is important to note that the internal roads were originally intended to serve the now-discontinued residential development. Consequently, the variation to the ILP road network is not expected to cause any additional traffic impacts.<br>This REF includes a Transport Access Impact Assessment (**Appendix 24**), which confirms that the proposed school will have a negligible impact on the surrounding road network. |
| **Option 3: Alternative Design** | The project team has evaluated several design options for the delivery of the new school at this site.<br>The initial option served as a foundation for developing the final masterplan, with minimal changes to the site's spatial layouts. However, as the understanding of surrounding infrastructure proposals and on-site conditions (such as high-value existing trees and topography) improved, certain design elements were re-evaluated.<br>Key considerations included the placement of the courts and field, the proposal to position the lecture unit beneath the Hall, and the setback of Buildings A and B from Nirmal Street. | Option 3 is **not preferred** as the alternative design option explored, including building layout and site access, did not optimise tree retention, site access and internal arrangements to provide outdoor play areas with sufficient space and high amenity. The initial option also did not efficiently integrate with the required off-site works. |
| **Option 4: Proposed activity as described in this report** | Ultimately, the proposed activity as described in this report was informed by the shortcomings and opportunities identified in the options above. This ensured that the identified need for the high school within Schofields Tallawong was met and achieved with negligible environmental impacts.<br>The final concept design significantly | Option 4 is the **preferred option** as it will ensure that the ambitions of the NSW government are achieved, a high level of amenity is achieved, and that connections to necessary infrastructure are readily achieved. |

| Option | Discussion | Preferred Option |
|---|---|---|
| | improved tree retention and reduced the extent of earthworks. Minor adjustments to the locations and orientations of Buildings A, B, and D also helped to manage level transitions between the street or boundary and the building bench levels.<br>Improvements made during the schematic design phase, guided largely by the SDRP review, included:<br>• Adjustments to the courts and field locations and orientation.<br>• Refinements to the car parking layout.<br>• Enhanced stormwater overland flow and on-site detention (**OSD**) management. | |

# 5. Statutory and Strategic Framework

## 5.1 Permissibility and Planning Approval Pathway

*State Environmental Planning Policy (Transport and Infrastructure) 2021* (**TI SEPP**) aims to facilitate the effective delivery of infrastructure and educational establishments across the state and provides that various developments for the purposes of a government school are permitted without consent. The proposed activity is development permitted without consent as outlined at **Table 13**.

**Table 13: Description of Proposed Activities under the TI SEPP**

| Division and Section within TI SEPP | Description of Works |
|---|---|
| **Division 17 Roads and traffic**<br>**Section 2.109 Development permitted without consent—general** | The proposed activity comprises the widening and extension of Nirmal Street by or on behalf of a public authority without consent on any land. |
| **Section 3.37A – New government schools—**<br>**Development permitted without consent** | The proposed activity comprises development for the purposes of a new government school on behalf of a public authority on land which does not contain an existing or approved school on land zoned R2 Low Density Residential and R3 Medium Density Residential which are both prescribed zones under the TI SEPP.<br>The proposed activity involves the construction of buildings with a maximum height of three storeys which is less than four storeys in height which complies with the provisions of the TI SEPP.<br>The Design Quality Principles set out in Schedule 8 of the TI SEPP and the Design Principles set out in the Design Guide for Schools have been considered as set out in **Section 3.3.1** of this REF. |

Activities permissible without consent require environmental impact assessment in accordance with Division 5.1 of the EP&A Act and are assessed and determined by a public authority, referred to as the determining authority. The department is the proponent and determining authority for the proposed works.

Section 5.7 of the EP&A Act states that an activity that is likely to significantly affect the environment must be subject of an Environmental Impact Statement rather than an REF. The effects of the activity on the environment are considered in **Section 7** and have been assessed as a less than significant impact and can therefore proceed under an REF assessment.

Section 171(1) of the EP&A Regulation notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the guidelines that apply to the activity.

The *Guidelines for Division 5.1 Assessments* (DPE June 2022) and the *Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools Addendum* (DPHI, October 2024) provide a list of environmental factors that must be taken into account for an environmental assessment of the activity under Division 5.1 of the EP&A Act. These factors are considered in detail at **Section 7**.

## 5.2 Environmental Protection and Biodiversity Conservation Act 1999

The provisions of the EPBC Act do not apply to the proposed activity as it is not development that takes place on or affects Commonwealth land or waters. Further, it is not development carried out by a Commonwealth agency or development on Commonwealth land, nor does the proposed activity affect any matters of national significance. An assessment against the EPBC Act checklist is provided at **Table 14**.

**Table 14: EPBC Act Checklist**

| Consideration | Yes/No |
|---|---|
| Will the activity have, or likely to have, a significant impact on a declared World Heritage Property? | No |
| Will the activity have, or likely to have, a significant impact on a National Heritage place? | No |
| Will the activity have, or likely to have, a significant impact on a declared Ramsar wetland? | No |
| Will the activity have, or likely to have, a significant impact on Commonwealth listed threatened species or endangered community? | No |
| Will the activity have, or likely to have, a significant impact on listed migratory species? | No |
| Will the activity involve any nuclear actions? | No |
| Will the activity have, or likely to have, a significant impact on Commonwealth marine areas? | No |
| Will the activity have any significant impact on Commonwealth land? | No |
| Would the activity affect a water resource, with respect to a coal seam gas development or large coal mining development? | No |

## 5.3 Other Approvals and Legislation

**Table 15** identifies any additional approvals that may be required for the proposed activity.

**Table** 16 identifies the SEPPs that are applicable to the proposed activity.

**Table 15: Consideration of State legislation and other approvals**

| Legislation | Relevant? | Approval Required? | Applicability |
|---|---|---|---|
| *National Parks and Wildlife Act 1974* | Yes | Yes | Two registered AHIMS sites exist within the site, AHIMS 45-5-5766/Guntawong Road 2 and AHIMS 45-5-5821/Guntawong Road 4 which consist of low to moderate density artefact scatters. If avoidance through redesign is unable to occur, DoE will be required to apply for an Aboriginal Heritage Impact Permit (**AHIP**) to destroy the listed Aboriginal sites within the study area which are currently protected under the NPW Act. |
| *Rural Fires* | No | No | The site is not bushfire prone land, and no approvals |

| Legislation | Relevant? | Approval Required? | Applicability |
|---|---|---|---|
| *Act 1997* | | | or licences are required for the activity in relation to the RF Act. |
| *Water Management Act 2000* | Yes | No | As the site is within 40m of a waterway A Controlled Activity Approval is usually required under the WM Act. However, as the DoE is a public authority it is exempt from a requiring a Controlled Activity Approval. No dams exist within the site and there dewatering is not required. |
| *Biodiversity Conservation Act 2016* | Yes | No | Under the BC Act the effect of biodiversity certification is that development carried out under Part 5 of the EP&A Act on certified land is exempt from requiring an impact assessment on biodiversity. Section 8.4 of the BC Act states:<br>*(4) Activities under Part 5 of the Planning Act: An activity to which Part 5 of the Environmental Planning and Assessment Act 1979 applies that is carried out or proposed to be carried out on biodiversity-certified land is taken, for the purposes of Part 5 of that Act, to be an activity that is not likely to significantly affect any threatened species or ecological community under this Act, or its habitat, in relation to that land."*<br>This provision means that if an activity falls under Part 5 of the EP&A Act and occurs on biodiversity-certified land, it is deemed, for the purposes of Part 5, not to have a significant impact on any threatened species, ecological communities, or their habitats on that land. Accordingly, no further assessments regarding biodiversity impacts are required as the certification process has already addressed these impacts.<br>Further, under Section 7.8 of the BC Act, the following is outlined:<br>*(1) This section applies to environmental assessment under Part 5 of the Environmental Planning and Assessment Act 1979.*<br>*(2) For the purposes of Part 5 of the Environmental Planning and Assessment Act 1979, an activity is to be regarded as an activity likely to significantly affect the environment if it is likely to significantly affect threatened species.*<br>*(3) In that case, the environmental impact statement under Part 5 of the Environmental Planning and Assessment Act 1979 is to include or be accompanied by—*<br>*(a) a species impact statement, or*<br>*(b) if the proponent so elects—a biodiversity development assessment report.* |

| Legislation | Relevant? | Approval Required? | Applicability |
|---|---|---|---|
| | | | It notes that a SIS or BDAR is only required for Part 5 projects where the activity is likely to significantly affect the environment if it is likely to significantly affect threatened species. Given that Section 8.4(4) of the BC Act outlines that an activity on biodiversity certified land is 'an activity that is not likely to significantly affect any threatened species, neither a SIS nor a BDAR is required. |
| *Pesticides Act 1999* | No | No | The proposal will not require the use of large quantities of dangerous pesticides and therefore approval under the Pesticides Act is not required. |
| *Heritage Act 1977* | No | No | The site does not include any heritage items and is not located within a heritage conservation area. The Heritage Act is not relevant as the proposed activity does not materially affect any local or State heritage items. |
| *Fisheries Management Act 1994* | No | No | The FM Act applies in relation to all waters that are within the limits of the State and needs to be addressed for development in proximity to or which could have impact on any aquatic flora and fauna. The FM Act is not relevant as the works activity will not impact aquatic flora or fauna. |
| *Contaminated Lands Management Act 1997* | No | No | This REF is supported by a DSI and a RAP which confirm that the site can be remediated to meet suitability requirements for its intended use. Additionally, no approval is required under the CLM Act. Furthermore, the Section 10.7 Planning Certificate does not indicate that the site is significantly contaminated or that any approvals under the CLM Act are required. |
| *Protection of the Environment Operations Act 1997* | No | No | The proposed activity will not result in significant air, noise, water or waste pollution and therefore an approval under the POEO Act is not required. The proposed activity relates to the construction of a new high school and therefore a licence under Sections 47, 48, 49 or 122 of the POEO Act is not required. |
| *Roads Act 1993* | Yes | Yes | The proposed activity involves the widening and extension of Nirmal Street. Accordingly, approval will be required under Section 138 of the Roads Act for these works. |
| *Local Government Act 1993* | Yes | Yes | An approval under Section 68 of the LG Act will be required as the proposed activity includes the carrying out of sewerage work and stormwater drainage work that connects to Council's systems. |
| *Mine Subsidence Compensation Act 1961* | No | No | The site is not located within a mine subsidence district and therefore this Act does not apply. |
| *Crown Land* | No | No | The proposed activity is located on land currently |

| Legislation | Relevant? | Approval Required? | Applicability |
|---|---|---|---|
| *Management Act 2016* | | | owned by OSL. The land is proposed to be transferred into ownership of the department. As the land is currently not owned by Council, the CLM Act is not relevant. |
| *Coastal Management Act 2016* | No | No | The CM Act is not relevant as the site is not within a coastal zone or coastal area. |
| *Heritage Act 1977* | No | No | The Heritage Act is not relevant as the proposed works do not materially affect any local or State heritage items. |
| *Environmental Planning and Assessment Regulation 2021 (Section 171A* | Yes | No | The proposed activity is located within the Hawkesbury-Nepean Catchment. Consideration of the impacts of the proposed activity on water quality are provided in **Section 7**. |

**Table 16: Consideration of relevant SEPPs**

| Legislation | Relevant? | Applicability |
|---|---|---|
| *State Environmental Planning Policy (Planning Systems) 2021* | No | Although the Planning Systems SEPP allows new educational establishments to be classified as State Significant Development (**SSD**) if the EDC exceeds $20 million, the proposed activity is being carried out under Section 3.37A of the TI SEPP as development without consent. |
| *State Environmental Planning Policy (Sustainable Buildings) 2022* | Yes | The provisions of Chapter 3 of the SB SEPP apply to the proposed activity as it involves the erection of a new building with an EDC greater than $5 million. This REF is accompanied by a Net Zero Statement and ESD Report which outline the strategies to resolve operational and construction emissions as well as committing to Net Zero operational emissions by 2050. An Embodied Emissions Report is required to be prepared as a mitigation measure. |
| *State Environmental Planning Policy (Resilience and Hazards) 2021* | Yes | The site is identified as containing CoPCs that will require remediation prior to the construction of the educational establishment. **Section 7** of this REF outlines the proposed remediation approach to ensure compliance with Chapter 4 of the RH SEPP. |
| *State Environmental Planning Policy (Industry and Employment) 2021* | Yes | The proposed school signage is ancillary to the proposed activity for the construction of a school. An assessment against the relevant signage provisions of the IE SEPP is provided in **Table 17.** |
| *State Environmental Planning Policy (Precincts –* | Yes | *State Environmental Planning Policy (Precincts – Central River City) 2021* (**Central River City SEPP**) is the primary EPI applying to the site.<br>Zoning: Part R2 Low Density Residential, Part R3 Medium |

| Legislation | Relevant? | Applicability |
|---|---|---|
| *Central River City) 2021* | | Density Residential<br>The site is zoned Part R2 Low Density Residential and Part R3 Medium Density Residential. While the TI SEPP removes the requirement to seek consent under the provisions of the Central River City SEPP the proposal is consistent with the relevant objectives of the R2 and R3 zone as follows:<br>• The proposed activity enhances the provision of educational establishments within the locality; a land use which provides services to meet the day-to-day needs of residents.<br>• The proposed activity will support the general well-being of the community by enabling the construction of an educational establishment whilst being compatible with the amenity of the low-density residential environment.<br>Height of Buildings: Part 12 metres, Part 9 metres<br>The R3-zoned portion of the site is subject to a 12-metre height limit. The R2-zoned portion is subject to a 9-metre height limit. Although the proposed activity will exceed these height limits, Section 3.37A(2) of the TI SEPP permits development without consent to exceed the maximum height where the proposal is four storeys or less. As the proposed activity is limited to a maximum of three storeys, it complies with the relevant height control under the SEPP.<br>Floor Space Ratio (**FSR**): N/A<br>The site is not subject to a FSR control.<br>Land Acquisition:<br>The school site is not identified for acquisition, however land adjoining the western boundary of the site is mapped under the Land Reservation Acquisition Map for road acquisition by TfNSW.<br>Flood Planning:<br>The site is partially identified as flood-prone land. **Section 7** of this REF outlines the potential flooding impacts associated with the proposed activity and details the mitigation measures required to minimise these impacts.<br>Development Controls – Native vegetation retention area:<br>The site is not mapped as being within the Native Vegetation Protection Map or the Riparian Protection Area Map. |

**Table 17** below provides an assessment of the proposed new signage against the relevant design criteria provided in Schedule 5 of the Industry and Employment SEPP.

**Table 17: Industry and Employment SEPP Schedule 5 assessment**

| Criteria | Complies | Proposal |
|---|---|---|
| ***Character of the area*** | | |
| **Is the proposal compatible with the** | Yes | The proposed signage for the school is compatible with the existing and desired future character of the |

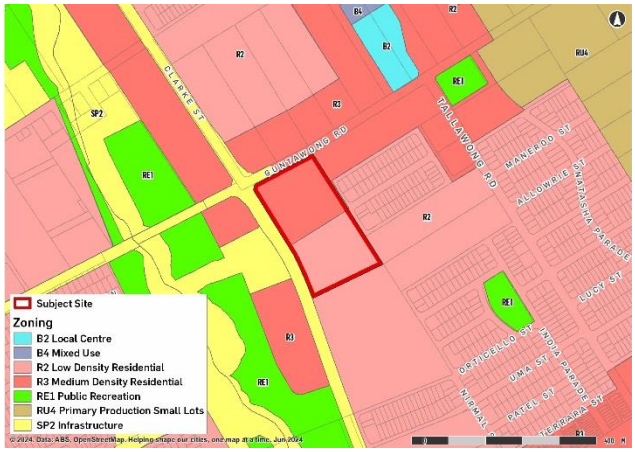
| Criteria | Complies | Proposal |
|---|---|---|
| **existing or desired future character of the area or locality in which it is proposed to be located?** | | area. A new individual letter school signage is proposed in the main entry awning, creating a strong school identity. A secondary school entry signage is proposed to be digital electronic LED sign.<br>The signage is designed to be clear, functional, and integrated within the architectural and landscape elements of the school, ensuring minimal visual intrusion. The entry signage, wayfinding elements, and identification signs are appropriately scaled to maintain a cohesive streetscape presence while respecting the low-density residential and educational setting. The materials and colour palette align with the school's architectural theme, reinforcing a contemporary and contextually responsive design. |
| **Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?** | Yes | The signage is commensurate with signage locations and dimensions for other school signage within the area. The scale and location of the signage is consistent with the scale of similar schools in the area. |
| ***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?** | Yes | The proposed signage does not detract from the amenity or visual quality of any environmentally sensitive areas, natural or other conservation areas, open space area, waterways or rural landscapes. The proposed signage will not adversely impede the visibility of other signage within the surrounding area. An ‘Acknowledge of Country’ sign will be incorporated into a co-designed art piece. |
| ***Views and vistas*** | | |
| **Does the proposal obscure or compromise important views?**<br>**Does the proposal dominate the skyline and reduce the quality of vistas?**<br>**Does the proposal respect the viewing rights of other advertisers?** | Yes | Signage will be placed at the school’s entrances and on the exterior facades of its buildings. The main school sign, featuring individual lettering, will be positioned on the upper level of Building A’s external façade without extending above the structure. Additionally, the digital electronic sign will be set back from Guntawong Road, ensuring it does not dominate the skyline or obstruct any views |
| ***Streetscape, setting or landscape*** | | |

| Criteria | Complies | Proposal |
|---|---|---|
| **Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?**<br>**Does the proposal contribute to the visual interest of the streetscape, setting or landscape?**<br>**Does the proposal reduce clutter by rationalising and simplifying existing advertising?**<br>**Does the proposal screen unsightliness?**<br>**Does the proposal protrude above buildings, structures or tree canopies in the area or locality?**<br>**Does the proposal require ongoing vegetation management?** | Yes | The proposed signage is compatible with the scale of the proposed streetscape and setting. The proposed signage will incorporate quality materials and finishes and provide a coherent and integrated colour scheme based on the logo and colours of the school. The proposal will appropriately reflect the future design and character of the school and will not present visual clutter. The proposed signage will not protrude above any buildings or tree canopies or require ongoing vegetation management. |
| ***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?**<br>**Does the proposal respect important features of the site or building, or both?**<br>**Does the proposal show innovation and imagination in its relationship to the site or building, or both?** | Yes | The signage will be appropriately scaled and designed for its intended purpose, occupying only a small portion of the buildings' external façades. It will remain below the roofline and will not be a dominant visual feature. Strategically positioned at school entrances and on building elevations, the signage will clearly identify the school and the names of the buildings on-site. |
| ***Associated devices and logos with advertisements and advertising structures*** | | |
| **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?** | Yes | A secondary school entry signage is proposed to be digital electronic LED sign. The signage will display the school’s name and logo. Illumination devices are integrated into the design of the signage. |

| Criteria | Complies | Proposal |
|---|---|---|
| ***Illumination*** | | |
| ***Would illumination result in unacceptable glare?***<br>***Would illumination result in unacceptable glare?***<br>***Would illumination detract from the amenity of any residence or other form of accommodation?***<br>***Can the intensity of the illumination be adjusted, if necessary?***<br>***Is the illumination subject to a curfew?*** | Yes | The illuminated signage is not anticipated to have any negative impacts in terms of glare |
| ***Safety*** | | |
| ***Would the proposal reduce the safety for any public road?***<br>***Would the proposal reduce the safety for pedestrians or bicyclists?***<br>***Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?*** | Yes | The proposed signage will not distract motorists. The signage will not be in motorist line of sight while driving. No safety implications for pedestrians or vehicular users are envisaged. |

As demonstrated above, the proposed signage is consistent with the relevant matters contained in the applicable SEPP.

## Figure 26 Central River City SEPP Maps

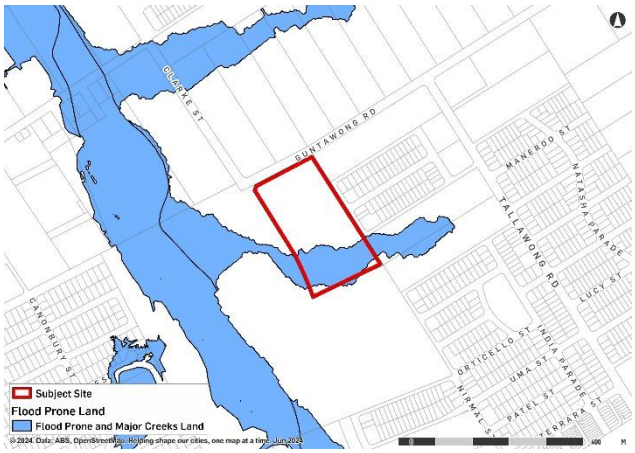



*Picture 16 Land Zoning Map*


*Picture 17 Height of Buildings Map*


*Picture 18 Floor Space Ratio Map*


*Picture 19 Lot Size Map*




*Picture 20 Flooding Map*


*Picture 21 Vegetation Map*

*Source: Urbis, 2024*

## 5.4 Blacktown City Council Growth Centre Precincts Development Control Plan 2010

The site is subject to the provisions of the Blacktown City Council Growth Centre Precincts Development Control Plan 2010 (**BDCP 2010**). Key relevant sections of the BDCP 2010 have been assessed in **Table 18** below. Refer to the relevant technical report where further detail is required.

**Table 18: Blacktown City Council Growth Centre Precincts DCP 2010**

| Provision | Assessment | Complies? (Yes/No) |
|---|---|---|
| **Section 2.2 The Indicative Layout Plan** | | |
| **2.2.2 Controls**<br>All development applications are to be generally in accordance with the Indicative Layout Plan. | The proposed activity will result in a departure to the ILP as the location of the proposed school is within an area identified for future medium and low-density residential development and local roads in accordance with the ILP.<br>The ILP proposed a school site in an alternative location to the proposed activity. However, given the constraints with the other sites as outlined in **Section 4**, the proposed site is the most suitable. The proposed activity will ensure that an educational establishment is provided to service the future needs of the residents, in accordance with the vision of the ILP.<br>The proposed site offers significant advantages over the originally identified school site in Stage 1 of the Riverstone East Precinct. It is closer to major transport links, including the Tallawong Metro Station and Guntawong Road bus routes, ensuring convenient access for students, staff, and visitors. The location reduces potential traffic congestion on smaller local roads and aligns with planned road upgrades, such as the Nirmal Street extension and widened access points. For families in the rapidly growing nearby residential areas, the site shortens travel distances, reducing vehicle trips and associated traffic impacts. Additionally, it provides opportunities for well-designed access points, such as a dedicated kiss and drop zone and bus bays, enhancing traffic safety and minimising conflicts between vehicles and pedestrians. Its integration with planned transport upgrades further ensures a smoother flow of traffic, avoiding the need for substantial modifications to surrounding infrastructure.<br>The proposed road layout better accommodates the operational requirements of the school, including safe and efficient access points for vehicles, buses, and pedestrians, as well as space for a dedicated kiss and drop zone. By | Yes. |

| Provision | Assessment | Complies? (Yes/No) |
|---|---|---|
| | removing the ILP-planned local roads through the site, the departure eliminates potential conflicts between school traffic and residential traffic, enhancing overall safety and efficiency. The removed roads were primarily intended for local residential access within the site and did not connect to the broader network. The removal of these roads has negligible impact on overall connectivity within the precinct. The adjusted hierarchy simplifies the surrounding road network, focusing traffic flows along Guntawong Road and Nirmal Street, which are more suitable for handling increased school-related traffic volumes. | |
| **Section 4.4.3 Educational establishment and places of worship** | | |
| **4.4.3.2 Controls**<br>Places of public worship and educational establishments are preferably to be located on land with frontage to a collector road. Corner sites are preferred. | The proposed activity complies with this control as the site is located on land with a frontage to a collector road and is corner site. | Yes. |
| A traffic and transport report/statement are to accompany the Development Application addressing the impact of the proposed activity on the local road system and defining car parking requirements. | This REF is accompanied by a Transport Access Impact Assessment which addresses the impact of the proposed activity on the local road system and car parking requirements. | Yes. |
| A landscape plan and associated documentation is to be submitted with the Development Application identifying existing vegetation and community plant species and/or existing design elements of the site layout, and the proposed landscaping treatment of the development. | This REF is accompanied by Landscape Plans which identify the existing species and plant community types and site layout to inform the proposed landscape treatment. | Yes. |
| Car parking spaces shall be provided on site in accordance with the below rates:<br><u>Primary and secondary schools:</u><br>1 space per staff member + 1 space per 100 students.<br><u>Senior high school</u>:<br>1 space per staff member + 1 | The BDCP 2010 specifies a minimum parking requirement of 124 spaces for the new school. However, the proposal provides a car park with 72 spaces designated for staff use, which the Transport and Accessibility Impact Assessment (**TAIA**) provided at **Appendix 24** has found to be sufficient for the school's operational needs. No parking spaces are allocated for students, as student access will be facilitated by the availability of nearby public transport and walking | No. Non-compliance is further justified in **Section 7.1.** |

| Provision | Assessment | Complies? (Yes/No) |
|---|---|---|
| space per 5 students in Year 12. | facilities.<br>In line with TfNSW and School Infrastructure's commitment to promoting sustainable travel for new schools, staff are encouraged to reduce reliance on private vehicles. It is expected that 10% of staff will commute to the school using public transport. This approach aligns with similar school projects, supporting the broader goal of fostering more sustainable travel behaviours. | |
| Development must be designed to minimise the possibility of noise disturbance to the occupants of adjoining or neighbouring dwellings. | The proposed activity has been designed to minimise the possibility of noise disturbance through locating outdoor play space within the central portion of the site; furthest from nearby sensitive receivers. The noise emitted from the outdoor play space marginally exceeds the relevant noise criteria. Given the limited duration of the exceedance during school break periods, the expected noise characteristics, and being of comparable volume to the ambient noise levels, the noise from outdoor play areas is not considered offensive. Subject to the adoption of mitigation measures outlined in **Section 7.2** of this REF, the noise emitted from the proposed woodwork and metalwork workshops will be below the relevant noise criteria. | Yes. |
| Where it is likely that a development may cause an adverse noise impact on nearby residential areas, an acoustic report will be required to be submitted to council with the Development application, | This REF is accompanied by a Noise and Vibration Impact Assessment prepared by an acoustic consultant at **Appendix 18**. | Yes. |
| Where appropriate buffers should be put in place to limit noise impacts on the surrounding area. | As described above, the areas expected to generate the most noise have been located centrally within the site and lined with built form to minimise noise intrusion to sensitive receivers. These measures have been confirmed as adequate within the Noise and Vibration Impact Assessment. | Yes. |
| Sources of noise such as garbage collection, machinery, parking areas and air conditioning plants are sited away from adjoining properties and screened/ insulated by walls or other acoustic treatment. Noise levels are not to exceed specified limits at the most affected point of the property | The Noise and Vibration Assessment confirms that the noise emitted by plant equipment, parking areas, and machinery during the school's operations will not exceed the specified limits at the most affected sensitive receiver. | Yes. |

| Provision | Assessment | Complies? (Yes/No) |
|---|---|---|
| boundary. | | |
| The general hours of operation for places of public worship and educational establishments are between 7am and 9pm | The proposed activity will operate between 8:30am – 6pm, Monday to Friday. The Noise and Vibration Impact Assessment confirms that the likely noise intrusion during those periods is within the relevant noise emission criteria.<br>OOSH and community use are not proposed under this REF and any future OOSH and community uses will be carried out using exempt development provisions under the T&I SEPP once the site becomes an operating school. | Yes. |
| **Schedule 8 Riverstone East Precinct** | | |
| This section of the BDCP 2010 outlines the structure and design of the Riverstone East Precinct. Generally, this section does not include specific controls, but rather uses the ILP mapping to depict the future desired character and layout of the precinct. | | |
| **Section 4 General Precinct Controls** | | |
| 4.1 Residential Structure | The ILP identifies the site is to accommodate medium and low-density residential development and local roads. The proposed school site is in Stage 1 of the Riverstone East Precinct, approximately 850 metres south of the ILP nominated school site. The proposed location of the school represents a departure to the ILP. The departure to the structure plan can be justified for the following reasons:<br>• The proposed site is closer than the identified school site in Stage 1 of the Riverstone East Precinct to major transport links, including the Tallawong Metro Station and bus routes along Guntawong Road, ensuring convenient access for students, staff, and visitors.<br>• Locating the school at the proposed site minimises potential traffic congestion on smaller local roads and aligns better with planned road upgrades, such as the Nirmal Street extension and widened access points.<br>• For families in the rapidly growing residential areas nearby, the proposed site offers shorter travel distances, reducing overall vehicle trips and associated traffic impacts.<br>• The site provides opportunities for well-designed access points, including a dedicated kiss and drop zone and bus bays, enhancing traffic safety and minimising conflicts between vehicles and | No. Non-compliance is justified. |

| Provision | Assessment | Complies? (Yes/No) |
|---|---|---|
| | pedestrians.<br>• The site's location allows for integration with planned transport upgrades in the precinct, ensuring a smoother flow of traffic compared to the originally nominated site, which may have required more substantial modifications to surrounding infrastructure. | |
| 4.2 Road Hierarchy | Related to the departure of the school's location in the ILP, the proposed road hierarchy identifies several local streets within the site to support future residential development. The departure to the ILP road hierarchy plan can be justified for the following reasons:<br>• The proposed road layout better accommodates the operational requirements of the school, including safe and efficient access points for vehicles, buses, and pedestrians, as well as space for a dedicated kiss and drop zone.<br>• By removing the ILP-planned local roads through the site, the departure eliminates potential conflicts between school traffic and residential traffic, enhancing overall safety and efficiency.<br>• The removed roads were primarily intended for local residential access within the site and did not connect to the broader network. Their removal has negligible impact on overall connectivity within the precinct.<br>• The adjusted hierarchy simplifies the surrounding road network, focusing traffic flows along Guntawong Road and Nirmal Street, which are more suitable for handling increased school-related traffic volumes. | No. Non-compliance is justified. |

## 5.5 Strategic Plans

**Table 19** considers strategic plans that are relevant to the proposed activity.

**Table 19: Consideration of applicable Strategic Plans**

| Strategic Plan | Assessment |
|---|---|
| *Greater Sydney Region Plan – A Metropolis of Three Cities 2056* | The Greater Sydney Region Plan (Region Plan) provides the overarching strategic plan for growth and change in Sydney. It is a 20-year plan with a 40-year vision that seeks to transform Greater Sydney into a metropolis of three cities - the Western Parkland City, Central River City and Eastern Harbour City. It identifies key challenges facing Sydney |

| Strategic Plan | Assessment |
|---|---|
| | including increasing the population to eight million by 2056, 817,000 new jobs and a requirement of 725,000 new homes by 2036.<br>The Region Plan includes the following matters of relevance to the proposed activity:<br>• **Objective 1: Infrastructure supports the three cities.**<br>Schools are essential local infrastructure. The proposal will deliver a vital piece of educational infrastructure in Western Sydney that will service the emerging community of Tallawong, Schofields and Riverstone.<br>• **Objective 2: Infrastructure aligns with forecast growth – growth infrastructure compact.**<br>The Riverstone Stage 1 and 2 Precincts and the surrounding area is forecast to experience significant residential and employment growth. The proposed school will provide educational services which accommodate the educational needs of the growing student population. The new school will provide contemporary facilities to meet future educational standards and increased employment opportunities within the precinct.<br>• **Objective 6: Services and infrastructure meet communities' changing needs.**<br>Schools are essential local infrastructure, and the department estimates that an extra 270,000 students will need to be accommodated in government and non-government schools in Greater Sydney by 2036. The proposal provides a school in an area experiencing significant growth to service the educational demands of the community. |
| *The Six Cities Region Discussion Paper* | The Six Cities Region Discussion Paper seeks to stimulate conversation about the most suitable way to plan the Six Cities Region, prior to the development of the Greater Cities Commissions' Region Plan for the Six Cities. As the Six Cities Region Discussion Paper considers strategic spatial planning at the macroregional scale, it does not include objectives related to the provision of secondary educational establishments. Notwithstanding, the paper recognises the importance of establishing and improving educational establishments within growing centres and regions. |
| *Central City District Plan* | The Central City District Plan (**District Plan**) is a 20-year plan to manage growth in the context of economic, social and environmental matters to implement the objectives of the Greater Sydney Region Plan. The intent of the District Plan is to inform local strategic planning statements and local environmental plans, guiding the planning and support for growth and change across the district.<br>The District Plan contains strategic directions, planning priorities and actions that seek to implement the objectives |

| Strategic Plan | Assessment |
|---|---|
| | and strategies within the Region Plan at the district-level. The Structure Plan identifies the key centres, economic and employment locations, land release and urban renewal areas and existing and future transport infrastructure to deliver growth aspirations.<br>The District Plan sets out 22 directions under the following 5 goals: 1) Infrastructure and collaboration, 2) Liveability, 3) Productivity, 4) Sustainability, and 5) Implementation. The Project will support the priorities and objectives of the District Plan by providing for improved and new infrastructure within the Central Sydney District, to support the social needs of the rapidly growing population. In particular, it satisfies the following:<br>• Under 'Planning Priority N1 – Planning for a city supported by infrastructure', it is stated that "Planning decisions need to support new infrastructure in each city – including cultural, education, health, community and water infrastructure".<br>• 'Planning Priority N17 – Delivering high quality open space' identifies the main objective of public space as being accessible, protected and enhanced. Some actions identified by the plan for this priority include:<br>– delivering shared and co-located sports and recreational facilities including shared school grounds.<br>In accordance with the above Planning Priorities, the development of the site for the purposes of an educational establishment is consistent with the District Plan. |
| *Blacktown Local Strategic Planning Statement* | The Blacktown Local Strategic Planning Statement 2020 (**LSPS**) identifies that population of the Blacktown LGA is anticipated to exceed 600,000 people by 2041. The LSPS states that expected growth in the LGA is expected to place further stress on community infrastructure and the ability to provide additional school capacity is particularly challenging.<br>The LSPS identifies that Council seeks to work with the department to identify school sites and has a role to deliver and seek to advocate on behalf of the community. The LSPS also outlines that the Metro provides connectivity between the business, health and education nodes between Tallawong Station to the Sydney CBD. Additionally, the provision of a new high school seeks to address Local Planning Priority 3 which seeks to provide services and social infrastructure to meet peoples changing needs. |
| Riverstone East Precinct Stage 1 Indicative Layout Plan. | As outlined earlier in this REF, the proposed activity is located on a site currently designated for low- and medium-density residential development. While the proposed activity involves a departure to the ILP, the sites originally identified for a school within the ILP were deemed unsuitable for the reasons detailed in **Section 4** of this REF.<br>The proposed activity aligns with the broader objectives of the ILP by ensuring that population and housing growth is |

| Strategic Plan | Assessment |
|---|---|
| | supported by essential social infrastructure, such as schools, to meet the needs of the growing community. Whilst it is acknowledged that the proposed activity may result in a perceived loss of housing due to the proposed ILP departure, ultimately the site's change of use has minimal impact on overall housing targets for the area, and broader housing supply objectives will still be met through other developments in the region.<br>The new school is critical to serving the growing population in the area and will alleviate enrolment pressures on existing schools in the locality. The importance of balancing residential growth with necessary infrastructure, such as schools, is critical to create a sustainable and liveable community. The school will provide long-term benefits to the community, such as better education facilities, local employment opportunities, and improved access to amenities like open spaces and recreational facilities. |

# 6. Consultation

## 6.1 Early Stakeholder Engagement

**Table 20** provides a summary of early stakeholder (non-statutory) consultation undertaken to inform project development and preparation of the REF.

**Table 20: Summary of Early Stakeholder Engagement**

| Stakeholder | Engagement |
|---|---|
| Blacktown City Council | **26th September 2024**: TSA Riley, through urban planners Urbis, submitted a Pre-Development Application (**PAM**) to Blacktown City Council, including a consultation scoping report and preliminary architectural drawings for the proposed high school.<br>**18th October 2024**: Council met with the department and project team online, raising queries regarding stormwater connections, on-site detention, timing of public road delivery and funding via Section 7.11 contributions, potential contamination, and impacts on neighbouring dwellings. A response to the specific matters raised by Council is provided in **Table 21.**<br>Engagement with the Council is ongoing. |
| Transport for NSW (**TfNSW**) | **18th June 2024** - TfNSW representatives met with the project team traffic consultants (Stantec), architects (DJRD) and Blacktown Council traffic engineers and discussed mode share, evolution of facilities as student number grow over time, carparking ratios, roundabout provisions, bus stops and timing of the delivery of surrounding roads.<br>**8th October 2024** – A second meeting was held discussing design solutions around mode sharing, speed zone jurisdiction of TfNSW, uncertainty of Marchant Street delivery, width of Nirmal Street, potential need to upgrade Guntawong Road (funded by anticipated section 7.11 contributions), uncertainty of road upgrades surrounding the site and the position of pedestrian refuge crossings.<br>**5th November 2024** – A third meeting was held discussing bus bay widths, roundabout construction, staging of construction and Guntawong Road upgrades.<br>Engagement with TfNSW is ongoing. |
| State Emergency Services (**SES**) | **18th October 2024** - TSA Riley contacted SES through multiple phone calls and emails, submitting a consultation scoping report for the proposed high school. SES responded positively, expressing interest in meeting and receiving more information<br>**31st October 2024** - An online agency consultation meeting was held, where key issues discussed included the SES Flood Evacuation Modelling Report, evacuation strategies, and surrounding road flooding impacts.<br>**5th November 2024** - Following the meeting, TSA Riley sent the presentation and meeting minutes to SES and is awaiting |

| Stakeholder | Engagement |
|---|---|
| | written feedback. SES later requested a site-specific Flood Impact and Risk Assessment (**FIRA**) after which it could provide further feedback.<br>Engagement with the SES is ongoing. |
| Aboriginal stakeholders | The CWC Report prepared by Yerrabingin details the findings and design recommendations from a collaborative process aimed at embedding CWC principles into the proposed high school at Schofields Tallawong. Key activities included a "How Might We" session to align project goals, a site visit on 15th October 2024 with First Nations community members, and a final design workshop. A response to the matters raised during the CWC process is provided in **Table 8.**<br>The Aboriginal Cultural Heritage Assessment (**ACHA**) Report outlines the feedback received from the statutory consultation with various Registered Aboriginal Parties (**RAPs**). Engagement with aboriginal stakeholders is ongoing. |
| NSW Government Architect (**GANSW**) | **23rd September 2024** – The department and project team, led by architects DJRD, met with GANSW for a SDRP session.<br>**1st November 2024** - GANSW responded with a summary of advice and recommendations. A response to the matters raised by GANSW is provided in **Table 7.** |
| Sydney Water | TSA Riley contacted Sydney Water via phone and email, submitting a consultation scoping report for the proposed high schools. Sydney Water recommended that a registered water services coordinator lodge a feasibility study for the proposal to receive high-level advice. Engagement with Sydney Water is ongoing. |
| Department of Climate Change, Energy, the Environment and Water (**DCCEW**) | TSA Riley reached out to DCCEEW via multiple phone calls and emails, providing a consultation scoping report for the proposed high school. DCCEEW responded, indicating that they were unable to review the documentation due to their current workload. The DoE informed TSA Riley that further correspondence from DCCEEW would be expected at a later date. Engagement with DCCEEW is ongoing. |
| Rural Fire Service (**RFS**) | TSA Riley has contacted RFS through multiple phone calls and emails, submitting a consultation scoping report for the proposed high school. RFS acknowledged receipt of the proposal and advised that a response would be provided within the usual two-week turnaround. TSA Riley also coordinated with the bushfire consultant to gather relevant information for the school. Engagement with the RFS is ongoing. |

As outlined above, the project team met with Blacktown City Council to discuss the proposal on 18 October 2024. The below table provides a summary of the responses made to comments raised by Council.

**Table 21: Responses to Council's Feedback During Early Engagement**

| Consideration Raised | Response | Mitigation Measures |
|---|---|---|
| Activity staging | **Comment**: Council requested that the complete whole of site masterplan be provided in the REF documentation to ensure that the planning and design for Stage 1 has considered the future development of the site.<br>**Response**: The proposed activity relates to construction of a new school with an initial capacity of 1,000 students. Timing for a future expansion is uncertain and is likely to occur post 2041. Notwithstanding the proposed layout has been designed to accommodate a potential future expansion. | No measures required. |
| Flooding and drainage | **Comment**: The site and proposed development area are identified on flood prone land and affected by semi-overland flow path. A flood study and modelling prepared by a suitably qualified consultant are required to accompany the application.<br>**Response**: This REF is accompanied by a Flood Impact and Risk Assessment at **Appendix 13** which includes modelling and confirms that potential impacts can be appropriately mitigated or managed to ensure that there is minimal effect on the locality and community. Mitigation measures to address risk associated with flooding are provided within **Section 7.4** of this REF. | F1. Prepare a detailed Flood Emergency Response Plan (**FERP**).<br>F2. Construct an open tail out channel to the south of the site as part of associated works for the adjacent residential development and Nirmal Street stormwater design. This is to be delivered by Bathla as part of separate DA, outside of the site. |
| Road design and contributions | **Comment**: The developer is responsible for the half-road construction for each of the full street frontages of the development site/area. The roads must be constructed and operational before the school can commence operation.<br>**Response**: The new school will require upgrades to Nirmal Street and Guntawong Road for the school to operate efficiently. As outlined in this REF, the proposed activity does not include the necessary upgrades to Guntawong Road, which will be subject to a separate approval. To address this, a series of mitigation measures have been proposed to ensure these upgrades are completed before the school commences operations. Refer to **Section 7.1** for further detail.<br>The REF is accompanied by Civil Engineering Plans at **Appendix 8** which provide detailed plans of all required road designs and related off-site works. | Note that the below mitigation measures relate to works that will be subject to a separate planning pathway. The below mitigation measures have been proposed as part of this REF to ensure that the works, regardless of being under a separate planning pathway, are completed before the school commences operations.<br>TT4. Construct two indented bus bays on Guntawong Road able to each accommodate two buses:<br>- Eastbound bus bay: 40 metres long<br>– Westbound bus |

| Consideration Raised | Response | Mitigation Measures |
|---|---|---|
| | | bay: 60 metres long<br>In the sections of Guntawong Road comprising four lanes the cross section of Guntawong road should match with the end-state cross section of Guntawong Road where possible and appropriate.<br>The intersection of Guntawong Road and Nirmal Street should be designed as a “Give Way’ intersection with one lane on each approach. The design should provision for the future roundabout at Guntawong Road and Nirmal Street where possible and appropriate.<br>TT5. Construct Nirmal Street within the site boundary to a carriageway width of 19m from Guntawong Road along the full extent of the school frontage and dedicate it to Council prior to occupancy.<br>TT6. The southern half of Marchant Street needs to be constructed from Nirmal Street to Tallawong Road and dedicated to the Council as a public road prior to occupancy.<br>*Note: Marchant Street, from Nirmal Street to Tallawong Road, falls within Lot 43 DP301086 and is part of the Bathla Group subdivision development application (DA-23-00128). Completion is anticipated by mid-2025. |
| Departure to ILP road pattern | **Comment**: The ILP road pattern for Riverstone East (Stage 1 & 2) precinct indicates internal roads over the proposed development area. The proponent will need to | No measures required. |

| Consideration Raised | Response | Mitigation Measures |
|---|---|---|
| | address and provide a comprehensive justification for the proposed deletion of internal ILP roads.<br>**Response**: The proposed internal roads identified on the ILP impacted by the proposed activity were not identified to connect with the future Hambledon Road extension, apart from Road 04 to the south of the subject site. The internal roads were only intended to service the future residential development on the site, which is no longer proposed, and therefore the departure to the ILP road network is not anticipated to result in any additional impacts from a traffic perspective.<br>This REF is accompanied by a Transport Access Impact Assessment at **Appendix 24** which confirms the proposed school will have a negligible impact on the surrounding road network. | |
| Traffic, access and car parking | **Comment**: Demonstrate that the roundabout/intersection, particularly at Guntawong Road and Nirmal Street, can adequately and safely accommodate bus manoeuvring and turning. Where greater road width is needed for the roundabout in which land from the school site would need to be dedicated as part of the road reserve, then this must be shown on the plans including the indentation and footpath.<br>**Response**: The proposed activity does not include construction of the roundabout at the intersection of Guntawong Road and Nirmal Street. Council is responsible for designing and delivering the roundabout, which will be funded through Section 7.11 contributions.<br>The new school will require upgrades to Nirmal Street and Guntawong Road for the school to operate efficiently. As such, a series of mitigation measures are proposed to ensure these works are undertaken prior to the commencement of operations. Refer to **Section 7.1** for further detail. | Note that the below mitigation measure relate to works that will be subject to a separate planning pathway. The below mitigation measure has been proposed as part of this REF to ensure that the works, regardless of being under a separate planning pathway, are completed before the school commences operations.<br><br>TT4. Construct two indented bus bays on Guntawong Road able to each accommodate two buses:<br>- Eastbound bus bay: 40 metres long<br>- Westbound bus bay: 60 metres long<br>In the sections of Guntawong Road comprising four lanes the cross section of Guntawong road should match with the end-state |

| Consideration Raised | Response | Mitigation Measures |
|---|---|---|
| | | cross section of Guntawong Road where possible and appropriate.<br>The intersection of Guntawong Road and Nirmal Street should be designed as a “Give Way’ intersection with one lane on each approach. The design should provision for the future roundabout at Guntawong Road and Nirmal Street where possible and appropriate. |
| Traffic, access and car parking | **Comment**: Provide vehicle swept/turning path analysis based on standard sized buses showing how they negotiate the roundabout and to demonstrate how the intersection is suitable (or how it will be made suitable) for their movements to enter/exit the bus bay and bus parking areas.<br>**Response**: See comment above. | TT4 – as above. |
| Traffic, access and car parking | **Comment**: The pedestrian/wombat crossings are to be shown on the plans and must be located at a safe distance away from the kerb line of intersection/ roundabout.<br>**Response**: The proposed wombat crossings are shown on the Architectural Plans and Civil Engineering Plans provided at **Appendix 2** and **Appendix 8** respectively. The proposed wombat crossings are located a safe distance away from the intersections. The wombat crossing on Guntawong Road will be delivered via a separate planning approval. | TT1. Construct a zebra crossing on Guntawong Road and a wombat crossing on Nirmal Street prior to operation. |
| Traffic, access and car parking | **Comment**: The location and design of the “kiss and drop” zone (at Stage 1) must be capable of being able to adequately cater for the final capacity of the development.<br>**Response**: The proposed activity is for a new school accommodating up to 1,000 students. The proposed kiss and drop area will be 100m in length, equating to approximately 15 spaces (assuming a parking bay length of 6.5m). This will be sufficient for a student population of up to 1,000, of which 300 students could be expected to arrive by private vehicles, assuming typical occupancy of 1.5 students per car, average dwell time of 2 minutes. Timing for a future expansion of the school is uncertain and is likely to occur post 2040. Greater demand for the kiss and drop can be | TT9. Within the first 12 months of operation appoint a School Travel Coordinator, establish a School Transport Committee, and prepare a Travel Access Guide. |

| Consideration Raised | Response | Mitigation Measures |
|---|---|---|
| | accommodate along Nirmal Street when required. | |
| Traffic, access and car parking | **Comment**: Demonstrate compliance with the car parking rate for educational establishments specified in Blacktown City Council Growth Centre Precincts Development Control Plan 2010, which requires:<br>• Primary and secondary schools: 1 space per staff member plus 1 space per 100 students<br>• Senior high school: 1 space per staff member, 1 space per 5 students in Year 12<br>No variation to the minimum required car parking will be supported.<br>**Response**: The required parking provision as per BDCP 2010 requirements is 124 spaces. The proposal provides a car park of 72 spaces for staff use, which equates to 90% full time employment. This is consistent with other school projects where the intention is to encourage more sustainable travel. No parking spaces will be provided for students as access to the school will be supported by public transport and walking facilities in its vicinity. Additionally, the Department does not encourage students to use their private vehicles for trips to and from school.<br>Staff are encouraged to shift from using private vehicles, with 10% of staff expecting to travel to school by public transport (bus, train and metro), cycle to school or car pool with other teachers. Implementation of the STP will also promote travel to school via alternative means, so excess cars do not rely on on-street parking.<br>The carpark will be designed according to the requirements laid out in AS2890 car park requirements as per the BDCP 2010 and the EFSG. Delivery and waste collection will take place on site via a separate driveway on Nirmal Street. This driveway leads to an independent service area that is separate from the staff carpark, which complies with the BDCP 2010. | TT7. Construct a carpark with 72 spaces and a separate loading facility according to Australian standard AS2890.1, AS2890.2 and AS2890.6.<br>TT9. Within the first 12 months of operation appoint a School Travel Coordinator, establish a School Transport Committee, and prepare a Travel Access Guide<br>TT10. Update the School Transport Plan annually for the first two years. |
| Traffic, access and car parking | **Comment**: The car parking area should be suitably landscaped with substantial tree planting incorporated among the parking bays to reduce the effects of heat generation and glare from open space hard paved areas, provide adequate shade for parked vehicles, | TT7. Construct a carpark with 72 spaces and a separate loading facility according to Australian standard AS2890.1, AS2890.2 and AS2890.6. |

| Consideration Raised | Response | Mitigation Measures |
|---|---|---|
| | and improve amenity.<br>**Response**: As shown in the Landscape Plans provided at **Appendix 17**, the proposed car park includes significant tree plantings which will reduce heat effects and provide shade. | |
| Bulk and scale, and potential amenity impacts | **Comment**: There is concern about the bulk and scale of the proposed three storey development and its compatibility within the low-medium density residential context. A visual impact assessment prepared by a suitably qualified consultant is required to accompany the application. It should show views lines from surrounding properties.<br>**Response**: The new three-storey buildings are an appropriate scale to the surrounding area, considering existing and future two-storey freestanding houses. The built form and bulk are softened by generous landscaped setbacks and cranked building alignments. Selection of materials and finishes are considered to provide façade articulation and reduce perceived bulk and scale. Buildings are sited lower than Nirmal Street levels and front setback varies in order to break up the bulk and height impact on surrounding future major residential development. Bulk and scale and potential amenity impacts is further discussed in **Section 7.9** of this REF. | No measures required. |
| Bulk and scale, and potential amenity impacts | **Comment**: There is concern about potential overlooking and privacy impacts on adjacent residential properties across from the development area. The issue of overlooking/privacy is to be taken into consideration in the design of the buildings to avoid and mitigate impacts. This includes careful consideration of location of classrooms and windows, and incorporation of angled louvres to prevent direct view lines.<br>**Response**: The design response has been considered to ensure that there are no adverse visual and environmental impacts on adjoining properties. Shadow diagrams are included within the Architectural Plans which demonstrate that the shadows generated by the proposed buildings do not result in overshadowing on neighbouring properties. Central play areas including assembly will have good direct solar access except early in the morning and later in the afternoons.<br>The buildings are placed on site facing the internal courtyard, play spaces and green open areas creating a pleasant environment | No measures required. |

| Consideration Raised | Response | Mitigation Measures |
|---|---|---|
| | for the school community, a variety of outdoor spaces and expansive views without compromising the visual privacy of adjoining residential dwellings. | |
| Bulk and scale, and potential amenity impacts | **Comment**: There is concern about potential noise issues arising from the development where the proposed school buildings are within close proximity of residential properties. Where there are any windows of classrooms which face the housing development area, and where they would need to be open for ventilation reasons and to minimise heat impacts on students (i.e. such during summer) if there is no air conditioning to be provided in the buildings, then the required acoustic assessment report will need to base its acoustic testing on the windows of the school buildings in an open state. In addition, where the school hall is likely to be used for events outside of school hours (e.g. including after-hours use for any music events/gathering) then this is to be addressed in the acoustic assessment report.<br>**Response**: The proposed layout of the built form ensures that noise sources are concentrated towards the centre of the site. The nearest classrooms to residential dwellings are located approximately 28 metres away. A Noise and Vibration Impact Assessment is provided at **Appendix 18** includes several mitigation measures to ensure that doors and windows are kept closed at certain times to ensure impacts to residential properties are minimised. | NV13. Workshops will require windows and doors to be closed for noisy activities.<br>NV14. Public Address Systems must be limited to 7am to 6pm and incorporate good practice design and set at the lowest level practical whilst still achieving intelligibility requirements.<br>NV15. Doors and windows to the school hall must be kept closed during out of hours use. |
| Site contamination | **Comment**: Site contamination will need to be investigated and addressed. A DSI report prepared by a suitably qualified environmental consultant is required to accompany the application. The report must confirm that the site is suitable for use as an educational establishment/school.<br>**Response**: This REF is accompanied by a DSI and RAP at **Appendix 9** and **Appendix 21** respectively. The RAP confirms that the site is suitable for use as an educational establishment/school following remediation and subject to the adoption of mitigation measures. | CH3. Implementation of the RAP prepared by JBS&G to address identified contamination and unexpected finds.<br>CH4. A Site Remediation and Validation Report must be prepared in accordance with the relevant sections of the NSW EPA guidelines to validate the remediation process.<br>CH5. Prepare a Long-Term Environmental Management Plan (**LTEMP**). |

| Consideration Raised | Response | Mitigation Measures |
|---|---|---|
| Potential odour issues | **Comment**: Take into consideration air quality and potential odour issues impacting the site, particularly arising from the AJ Bush and Sons meat rendering plant located at 1106 Windsor Road, Rouse Hill.<br>**Response**: The proposed school site is located in excess of 1.3km away from the AJ Bush and Sons meat rendering plant. Given the large distance and the level of development currently under construction between this meat rendering plant and the site, odour issues are not anticipated. The meat processing plant is located north east of the school site and given prevailing winds from the south, south west and south east, it is unlikely that odour from the facility will impact on the school. | No measures required. |
| Wastewater servicing | **Comment**: The site is identified within an area affected by Sydney Water wastewater capacity issues impacting wastewater servicing and connections for new developments. Please refer to the Sydney Water fact sheet attachment “Sydney Water SP1154 fact sheet Nov2024 v1”. The proponent is advised to directly liaise with Sydney Water regarding this matter.<br>**Response**: The site connections to nearby sewerage mains and Sydney Water assets will be undertaken during the Section 73 Compliance Certificate stage. | SS1. An accredited Water Services Coordinator is required to carry out the liaison and with Sydney Water and lodge any Section 73 applications. |
| Wastewater servicing | **Comment**: A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained (prior to Subdivision Certificate or Occupational Certificate stage).<br>**Response**: Noted, a Section 73 Compliance Certificate will be pursued. | SS1. An accredited Water Services Coordinator is required to carry out the liaison and with Sydney Water and lodge any Section 73 applications. |
| Community consultation | **Comment**: The proponent is strongly recommended to carry out community/ neighbour consultation for the proposed development prior to lodging the application.<br>**Response**: A Community Information Session was held on 17 December 2024 with adjoining landowners/developers. Additional consultation will be undertaken during the formal exhibition of the REF. | No measures required. |
| Other matters | **Comment**: The plans show 3 large water tanks presenting to the street frontages of Guntawong Road and Nirmal Street. They must be suitably screened by vegetation screening walls to improve visual appearance | No measures required. |

| Consideration Raised | Response | Mitigation Measures |
|---|---|---|
| | of the streetscape. During the meeting the proponent indicated that the water tanks will be relocated underground. This is to be shown on the plans.<br>**Response**: The tanks have been redesigned as 2 x 20,000L below ground tanks. One of the tanks is located adjacent to Nirmal Steet between Building A and B and the other between the courts and car park. | |
| Other matters | **Comment**: Stage 1 of the development includes one lift to service the three buildings. Additional lifts should be provided in case of breakdown or maintenance of the single elevator, and also for practical reasons given the large number of students ultimately proposed.<br>**Response**: The proposed activity will accommodate one lift to service the three buildings. This is compliant with the necessary requirements of the Building Code of Australia (**BCA**) and *Disability Discrimination Ac 1992t* (**DDA**) as determined within the BCA Report and Accessibility Report at **Appendix 4** and **Appendix 5** respectively. | No measures required. |

## 6.2 Statutory Consultation

Consultation will be undertaken with in accordance with statutory requirements under the TI SEPP and having regard to the SCPP DPHI and the SCPP DoE. This includes:

- sending notices to adjoining neighbours, owners and occupiers inviting comments within 21 days
- sending notices to the local council and relevant state and commonwealth government agencies and service providers inviting comments within 28 days
- placing an advertisement in the local newspaper
- making the REF publicly available on the Planning Portal throughout the consultation period.

Comments received will be carefully considered and responded to.

# 7. Environmental Impact Assessment

## 7.1 Traffic, Access and Parking

A Transport and Accessibility Impact Assessment (**TAIA**) has been prepared by a transport consultant and is included at **Appendix 24**. The TAIA has been prepared to address the traffic and transport impacts during the operational and construction stages of the proposed activity. The report also outlines the proposed mitigation measures for the development to minimise any adverse impacts, where required.

### Methodology

The TAIA provides a comprehensive analysis of both existing and predicted traffic conditions resulting from the proposed activity. The assessment was conducted using the following methods:

- Analysis of the local and regional planning policies and frameworks to ensure alignment with strategic goals. This includes reviewing the BDCP 2010, TfNSW Active Transport Strategy, and Future Transport Strategy
- Evaluation of the existing transport network, including walking, cycling, public transport, and road infrastructure. Traffic volumes and intersection performance were measured using data collected in October 2024 to understand current capacity and constraints. This included:
    - Intersection turning counts and queue length surveys were carried out on 15 October 2024 during the following peak periods:
        - Morning: 7:30am–9:30am
        - Afternoon: 2:30pm–5:30pm
    - Surveys were conducted at the following intersections:
        - Guntawong Road / Tallawong Road
        - Tallawong Road / Marchant Street
        - Clarke Road / Riverstone Road
- A detailed assessment was conducted using the accessibility-propensity method, which estimates future student travel mode shares by considering factors such as proximity to the school, availability of transport infrastructure, and expected travel behaviour. The analysis used Rouse Hill High School as a benchmark, given its similar transport environment and location, to provide a reliable basis for projecting travel patterns for the proposed school.
- Modelling future traffic conditions with the proposed school development to evaluate its impact on local road network performance under different scenarios.
    - Three future scenarios were modelled within the TAIA:
        - Base Case: No additional offsite upgrades beyond the current infrastructure.
        - Moderate Case: Includes proposed mitigation measures such as zebra and wombat crossings, 3.5m shared paths, and upgraded bus stops to be delivered by DoE.

    - Stretch Case: Assumes broader infrastructure improvements delivered by other entities.

- Development of strategies to minimise transport-related impacts, including infrastructure upgrades and operational adjustments like the construction of crossings and shared paths, bus stop enhancements, and car park provisions.
- Engagement with local stakeholders, including Blacktown City Council and Transport for NSW, through technical working group (**TWG**) meetings to refine and agree on measures.

### Existing Environment

The site does not currently feature any vehicular entry or exit points. It has frontages to Guntawong Road to the north and Nirmal Street to the east, both of which presently lack pedestrian footpaths.

As shown in **Figure 27**, the surrounding regional road network includes:

- **Schofields Road**: Classified as a state road, it provides access to the Rouse Hill Town Centre from Marsden Park via Schofields train station and Tallawong Metro station.
- **Hambledon Road**: A major north-south corridor connecting local developments around Schofields, The Ponds, and Stanhope Gardens to Quakers Hill and the M7 in the south. It currently terminates at Schofields Road and functions as a four-lane, two-way local road, transitioning to a regional road south of Stanhope Parkway. The proposed Hambledon Road extension to be delivered by TfNSW (timing unknown), will border the site's western boundary upon completion, and will feature a four-lane, two-way classified road.
- **Tallawong Road**: A north-south local road that connects Schofields Road in the south to Guntawong Road in the north.
- **Guntawong Road**: A two-lane local road, connecting to Windsor Road in the east and Clarke Street in the west. It is a two-way single-carriageway road with a 60km/hr sign posted speed limit, providing access to some private properties and residential streets. Clarke Street is a continuation of Guntawong Road and is also classified as a local two-way road providing a connection to Garfield Road East, north of the subject site. No footpath or walking facility is available along Clarke Street and Guntawong Road. Guntawong Road is expected to be extended to the west over First Ponds Creek to connect with Kensington Park Road in the future.
- **Nirmal Street**: A two-lane local street that runs along the eastern boundary of the site. It has a speed limit of 50km/hr and is constructed in sections servicing the adjacent subdivisions. Currently, there is no connection between Blarneystone Avenue and Marchant Street. The completed sections of Nirmal Street provide access to Tallawong Road via Marchant Street in the north and Terrara Street in the south.

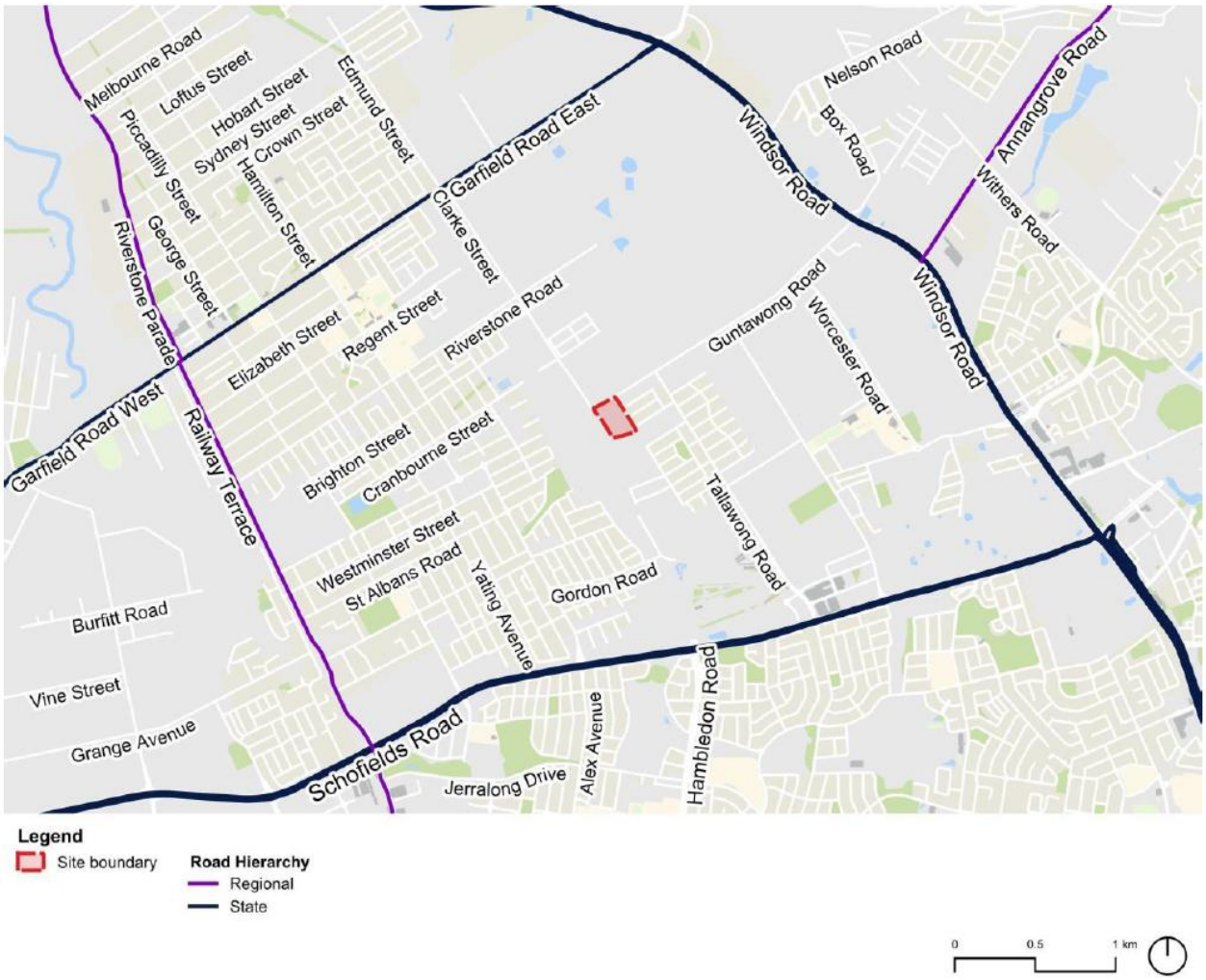
The site is located approximately 1.5km northwest of the Tallawong Metro Station, equating to a 25-minute walk. While this distance exceeds the typical walking range, the 742-bus route, with stops on Guntawong Road adjacent to the site's northern boundary, provides connections to Marsden Park and Rouse Hill via Tallawong Metro Station.

The existing cycling infrastructure is limited. The nearest shared path is located approximately 1km west of the site, with additional shared paths further south near the Tallawong Metro Station. Proposed cycling links to be delivered by Council, such as the east-west connection along Rouse Road (from Windsor Road to Tallawong Road) and a cycling link along Garfield Road East (from

Riverstone Station to Windsor Road), are yet to be complete and the timing for completion unknown.

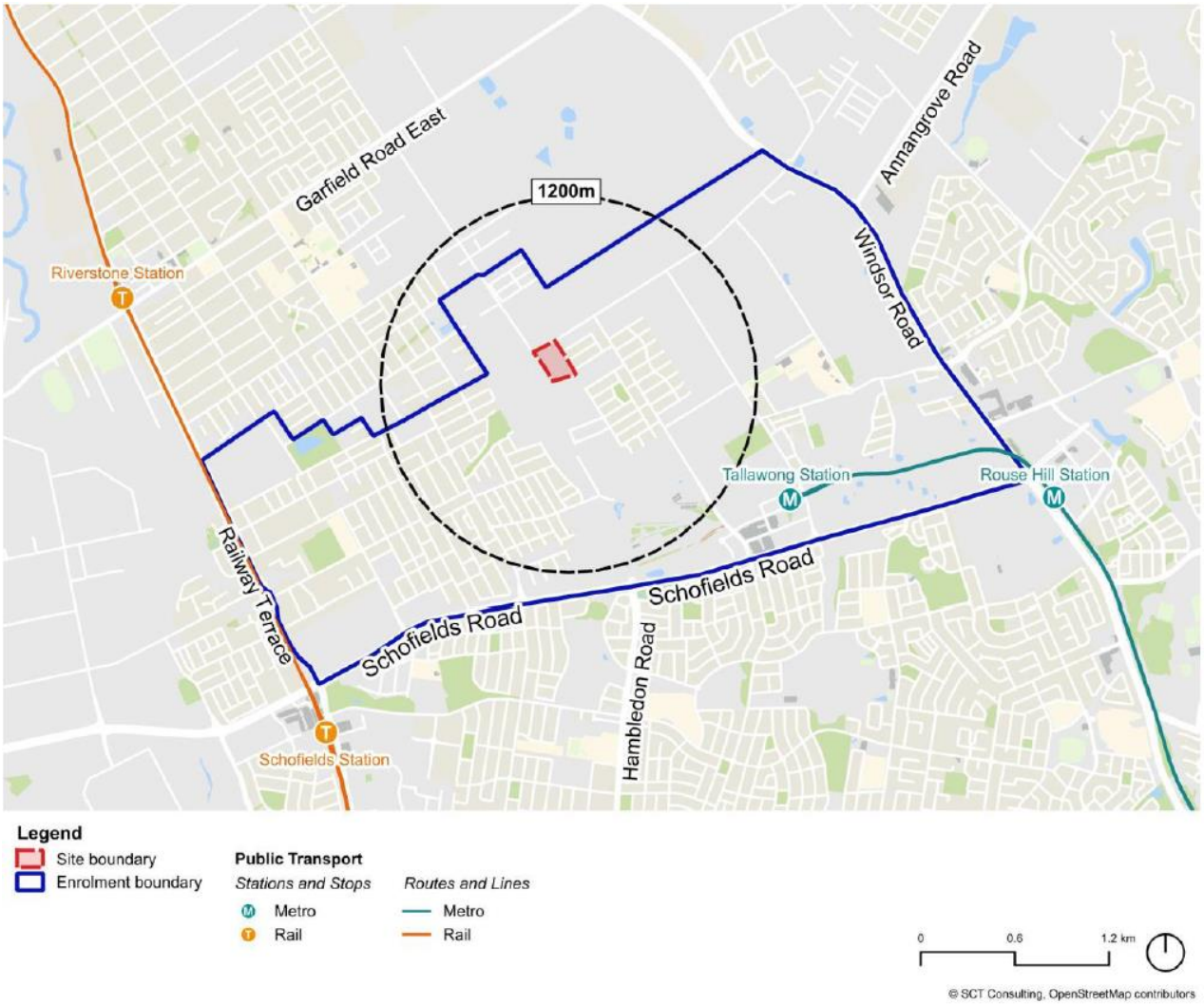
The proposal requires the delivery of new 3.5m shared paths along the school frontages at Guntawong Road and Nirmal Street as well as safe crossing connections with the nearby bus stops to improve walkability to and from the school and surrounding bus stops. As identified throughout this REF, the works along Nirmal Street form part of the REF, however, works along Guntawong Road and Marchant Street do not form part of the REF and will be subject to separate approval. Accordingly, mitigation measures have been implemented to ensure these works are undertaken prior to the operation of the new school.

**Figure 27 Regional Road Network**




*Source: SCT Consulting, 2024*

**Figure 28 Public Transport Network**




*Source: SCT Consulting, 2024*

## Assessment

Traffic Modelling Results

Traffic modelling was conducted using the SIDRA Intersection tool to evaluate the performance of key intersections around the proposed school site under future conditions, accounting for a 1,000-student population. The results indicate:

- Most intersections in the vicinity are expected to maintain acceptable levels of service (**LOS** A or B) during peak periods, even with the additional traffic generated by the school.
- The results show that the Clarke Street and Riverstone Road intersection requires significant upgrades by 2040 regardless of whether the school is delivered at this location. With proper road infrastructure improvements, delays will decrease to acceptable levels (LOS B or better).
- Under the "moderate" scenario, delays at intersections are minor, increasing by less than three seconds on average. This suggests the proposed road upgrades and mitigation measures outlined in the TAIA will sufficiently accommodate additional traffic from the school.

Local Travel Demand

As shown in **Figure 29** students attending the new high school are expected to come primarily from nearby residential areas within Tallawong, Schofields, Riverstone, and parts of Rouse Hill. The majority will travel from:

- Eastern Catchment: High-density residential areas near Tallawong Metro Station and Tallawong Road (1.5–2 km walking/cycling radius).
- Northern and Western Catchments: New housing developments along Guntawong Road and Clarke Street, with limited connectivity across First Ponds Creek.
- Southern Catchment: Students from Schofields Road and Hambledon Road will likely use buses or cars due to longer distances.

Bus coverage within the enrolment boundary is limited and will need expansion to meet the mode share targets for the school. The two existing bus stops are required to be upgraded to improve the quality and safety for future students to travel to school by buses in order to achieve the 50-55% bus mode share targets.

Footpath and active transport infrastructure is limited in the vicinity of the proposed school site and therefore the school will require new 3.5m wide shared footpaths along the school frontages at Guntawong Road and Nirmal Street, and safe crossing connections with the nearby bus stops.

Based on the anticipated student travel patterns, the following works are necessary and are included as part of the proposed activity:

- Upgrades to Nirmal Street within the site boundary to a carriageway width of 19m from Guntawong Road along the full extent of the school frontage and dedicate it to Council.
- Construction of a 3.5m shared path along school frontage on Nirmal Street on the school frontage side only (western) prior to occupancy.
- Provision of a kiss and drop zone along Nirmal Street.
- Construction of a wombat crossing on Nirmal Street.

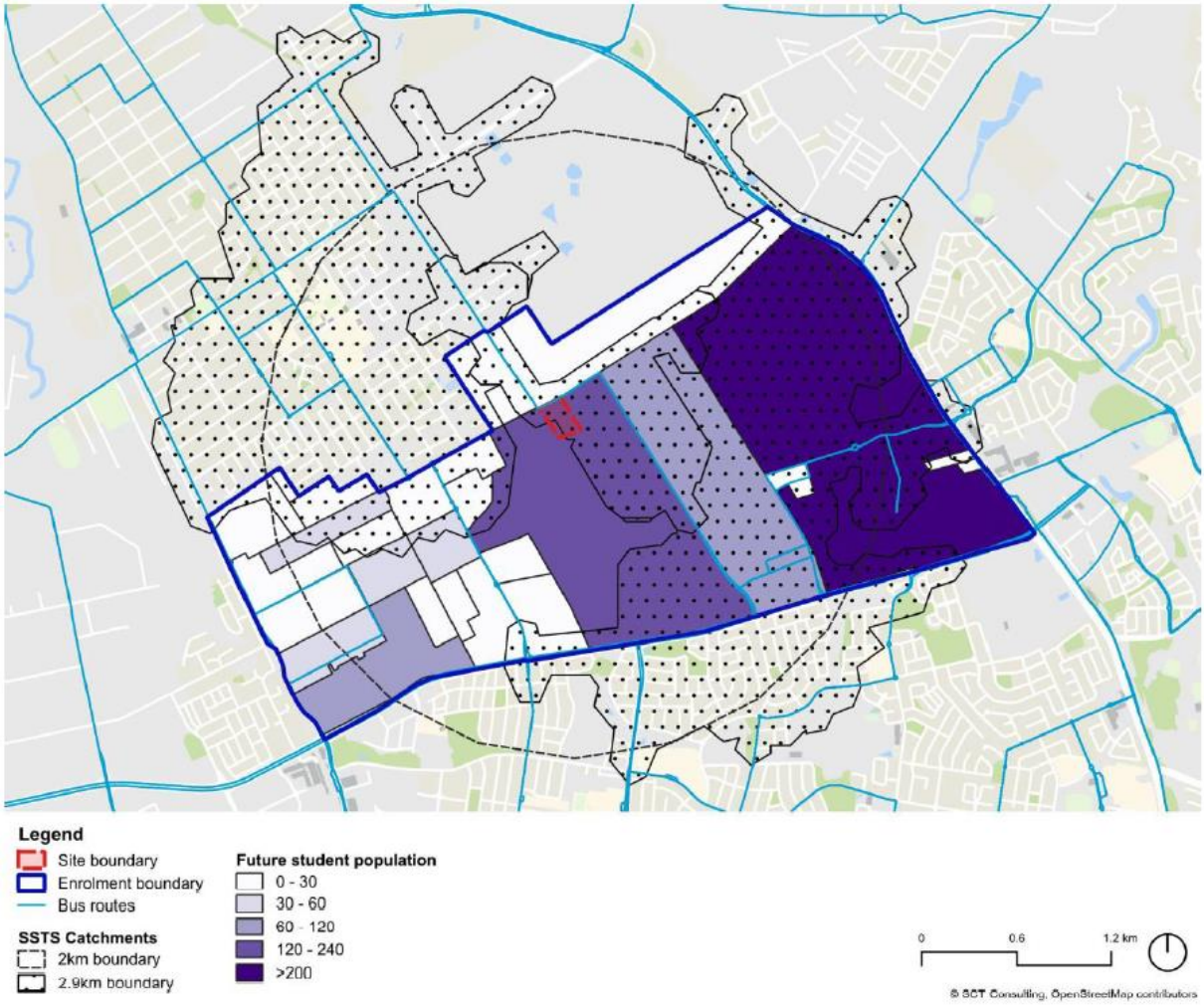
In addition to the above, the following required works along Guntawong Road, located outside the school's boundary, will be delivered by a third party and are not included in this REF:

- Construction of a 3.5m shared path along school frontage on Guntawong Road along the school frontage and on the northern side of Guntawong Road from the bus stop to the zebra crossing prior to occupancy.
- Construction of two indented bus bays on Guntawong Road able to each accommodate two buses:
    - Eastbound bus bay: 40 metres long
    - Westbound bus bay: 60 metres long

Furthermore, the southern half of Marchant Street is required to be constructed from Nirmal Street to Tallawong Road and dedicated to the Council as a public road prior to operation. Marchant Street, from Nirmal Street to Tallawong Road, falls within Lot 43 DP301086 and will be delivered as part of the Bathla Group subdivision development application (DA-23-00128). Completion is anticipated by mid-2025.

As these works are essential for the school to operate, mitigation measures are included to ensure that the works are delivered prior to operation of the school. The proposed measures would resolve connectivity, safety, and infrastructure needs identified in the TAIA and will ensure students can travel efficiently while promoting sustainable transport modes.

**Figure 29 Forecasted locations of school students**




*Source: SCT Consulting, 2024*

Mode Share Targets / Trip Generation

Mode shares for the future school were benchmarked from Rouse Hill High School mode share surveys, which suggested a baseline mode share of 39% car, 50% public transport, 8% walk, 3% bicycle. Rouse Hill High School is a suitable benchmark as it is located only about 5km east of the site and has a similar transport environment in a growth residential area.

Travel mode share targets were developed based on existing patterns observed at Rouse Hill High School and adjusted for local conditions, future infrastructure, and expected residential growth:

- Base Case: 50% bus, 39% car, 8% walking, 3% cycling.
- Moderate Case: 55% bus, 30% car, 10% walking, 5% cycling.
- Stretch Case: 55% bus, 20% car, 15% walking, 10% cycling.

The moderate case was adopted, emphasising sustainable travel modes supported by:

- The 55% bus mode share aligns with Rouse Hill High School patterns, supported by upgraded bus facilities and school-specific services.
- Increased walking and cycling shares result from improved active transport infrastructure, such as crossings and shared paths.
- Car usage is expected to reduce from 39% to 30% due to these interventions, along with behaviour change programs.

The likely trip generation for the proposed high school has been estimated based on standard trip generation rates for educational facilities, adjusted for the unique characteristics of the site, expected enrolment, and mode share targets.

Based on the above mode share targets, the future moderate case made the following assumptions in the TAIA:

- 1.5 students per car for kiss and drop vehicle200 cars per pick up/drop off session, being a total of 300 students. Of the 200 students being picked-up / dropped-off, 80% of these students would arrive during the peak hour.
- 20% of students and all staff will arrive outside the peak hour.

This results in an overall peak period traffic generation of 165 vehicles in the peak hour and a total daily traffic generation of 400 drop-off / pick-up trips.

Operation of the kiss and drop zone

The proposed kiss and drop zone will be located on the western side of Nirmal Street, along the eastern frontage of the site. Measuring 100m in length, it will provide approximately 15 car spaces based on a parking bay length of 6.5m as specified in AS2890.5 (On-street Parking).

This capacity is sufficient for the moderate mode share scenario of which 300 students are expected to be picked up and dropped with a typical occupancy of 1.5 students per car and average dwell time of 2 minutes.

Vehicles will access the kiss and drop spaces via Marchant Street or the new east-west road to be delivered through the Bathla Group development south of Marchant Street (timing unknown at this stage). Egress will occur at the intersection of Nirmal Street and Guntawong Road, with a proposed right-turn ban from Guntawong Road into Nirmal Street to direct traffic flow through Marchant Street.

Additionally, two accessible spaces are planned immediately south of the raised wombat crossing, near the school's main access point on Nirmal Street, ensuring convenient access for individuals with mobility needs. This configuration is designed to improve traffic flow and ensure safety for all users.

Staff Parking

The proposed activity includes a 72-space staff car park that caters for 90% of staff to drive to work. While this does not meet the BDCP 2010 guideline of one space per full-time staff member (plus 5–10% for visitors, requiring 95–99 spaces in total), it is considered appropriate for the following reasons:

- The STP anticipates that 20% of staff will use alternative modes of transport, such as public transport (bus, train, or metro), cycling, or carpooling, reducing parking demand by

approximately 18 spaces. This aligns with efforts to encourage sustainable travel and the site's proximity to Tallawong Metro Station.

- Visitor parking demand will be staggered throughout the day, minimising overlap with staff parking needs. Additionally, the car park includes designated areas for deliveries and waste collection, ensuring operational activities do not interfere with parking availability.
- The car park complies with Australian Standards (AS2890.1) and includes accessible spaces for individuals with disabilities, meeting the requirements of AS2890.6. The layout ensures safe pedestrian access to school buildings.
- This level of parking provision aligns with other schools recently delivered in the Blacktown LGA, such as Melonba High School in Marsden Park. It reflects the broader shift towards reducing reliance on private vehicles and promoting sustainable transport practices, consistent with the goals of TfNSW and School Infrastructure.
- Nearby streets, including Nirmal Street, can accommodate occasional visitor overflow without disrupting residential areas or traffic flow.

While the proposed parking provision is below the BDCP 2010 requirement, it aligns with sustainable transport objectives and comparable developments. The design ensures that operational needs are met while encouraging a shift towards alternative travel modes. This approach is both practical and aligned with broader strategic goals for sustainable school development in the area.

Summary of Operational Impacts

The assessment indicates that the local road network can accommodate a student population of 1,000, provided road upgrades are implemented over time to manage both background and school-generated traffic. Travel behaviour is expected to shift towards bus and active transport modes as private vehicle travel times increase with the growth in student numbers.

The operational impacts of the new high school have been comprehensively evaluated and can be effectively mitigated through the measures outlined below. Traffic modelling confirms that the network can handle the additional demand with minimal delays under the moderate scenario. The travel mode share targets are achievable, supported by infrastructure improvements and programs promoting sustainable transport.

The kiss and drop zone is designed to efficiently manage peak student pick-ups and drop-offs, while the staff parking provision adequately meets demand without impacting surrounding streets. These measures collectively minimise disruptions and facilitate the school’s seamless integration into the community.

Construction Traffic

The construction of the proposed new high school will generate temporary traffic impacts on the local road network due to the movement of heavy vehicles, material deliveries, and workforce commuting. These impacts will be concentrated on Guntawong Road and Nirmal Street, both of which currently have limited capacity and insufficient pedestrian and cycling infrastructure. Increased traffic volumes during construction may lead to localised congestion, particularly during peak hours, and pose safety risks for road users, including pedestrians and cyclists, due to interactions with heavy vehicles.

The existing roads can accommodate construction vehicle movement and access however construction activities may reduce on-street parking availability, particularly on Nirmal Street and adjoining roads under construction. Construction workers will be actively discouraged from parking in residential areas, with Guntawong Road unavailable for on-street parking.

It is assumed that 100% of the construction workforce, comprising 300 full-time equivalent workers, will arrive by private vehicle, with an average occupancy of two workers per vehicle. This would result in approximately 150 light vehicles per day. Additionally, 10 heavy vehicles are anticipated to enter and exit the site daily for construction purposes. Workers will park on-site or on surrounding road networks, and most work will occur outside of commuter or school peak periods to further reduce potential conflicts.

It is assumed that the 150 light vehicles generated can park on site (outside of school operating hours), or on-street on the surrounding road networks. The contractors will confirm the maximum number of car parking can be provided on site to minimise the impacts of on-street parking on the surrounding local residential streets. Most work will occur outside of school hours and workers would generally start earlier and end earlier than the commuter peak periods and would likely not coincide with the school or road network periods.

Workers with heavy tools can drop them off at a work zone/loading zone before parking longer term on the recommended street. Final construction vehicle numbers are still being confirmed. At the submission of this draft, a preliminary estimate of 10 heavy vehicle truck movements is anticipated on a typical day.

The 150 light vehicle trips are less than the traffic generation when the school is in operations (165 peak hour trips) and hence this level of traffic increase during the peak construction periods is expected to have negligible impacts on the surrounding street network.

There are two potential haulage routes from the state road network to the site (refer to **Figure 30**).

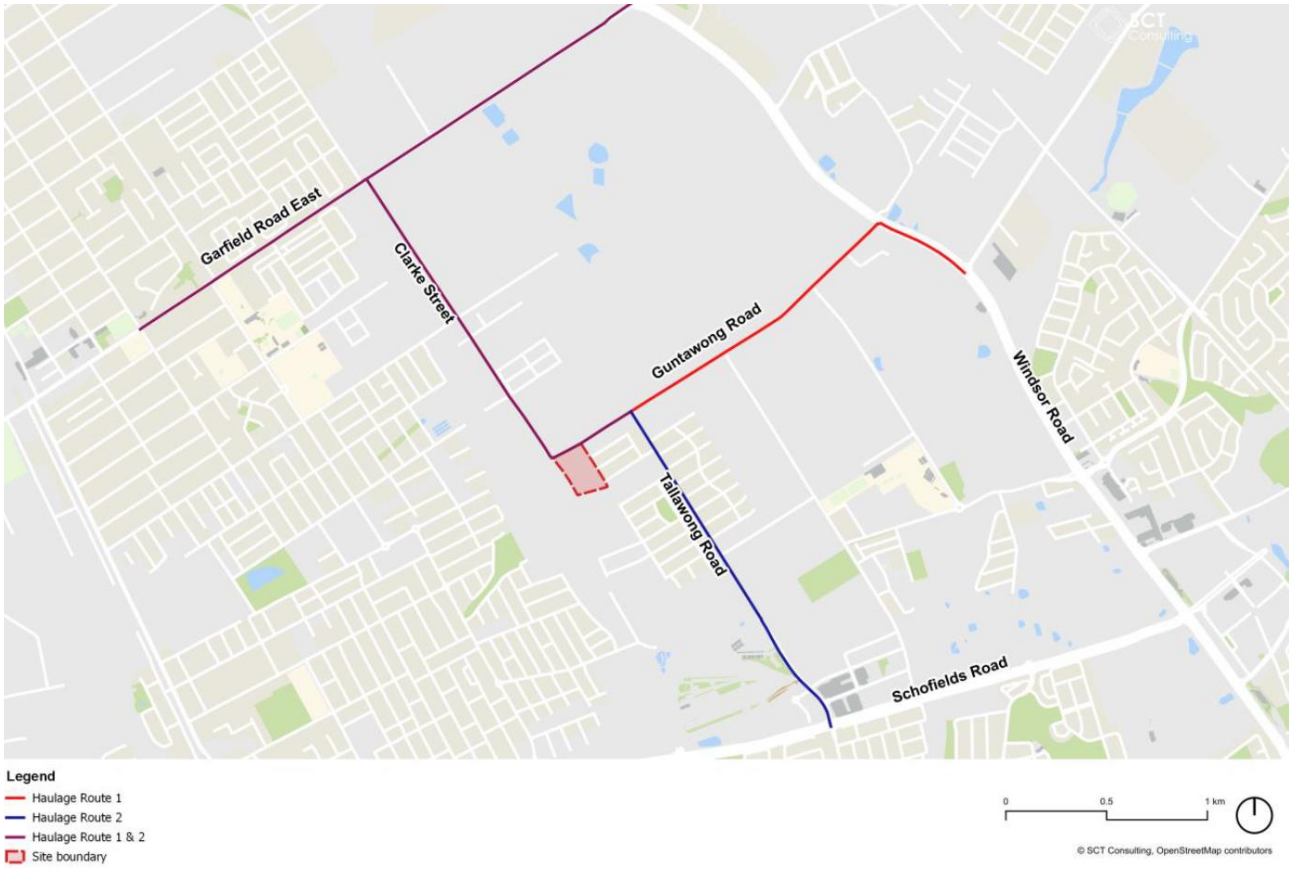
- Windsor Road > Guntawong Road > Clarke Street > Garfield Road East (Route 1)
- Schofields Road > Tallawong Road > Guntawong Road > Windsor Road (Route 2).

Oversized deliveries will be scheduled outside peak hours to minimise disruption to the broader traffic network. Traffic controllers will be deployed to manage interactions between construction vehicles and general traffic, ensuring vehicles enter and exit the site in a forward direction wherever possible. Temporary diversions will be implemented for footpaths or walking paths to maintain safe pedestrian crossings and reduce vehicle-pedestrian conflicts.

Additional road safety measures, such as temporary signage and clear sightlines, will be adopted to ensure safe and efficient operations. Ongoing consultation with Blacktown City Council and TfNSW will ensure that adopted traffic management measures align with broader transport and infrastructure planning.

To mitigate temporary construction impacts, a detailed Construction Traffic Management Plan (**CTMP**) will be implemented to minimise disruptions, maintain safety for all road users, and ensure construction activities proceed efficiently and safely.

**Figure 30 Haulage Routes**




*Source: SCT Consulting, 2024*

## Mitigation Measures

The following mitigation measures are to be implemented to ensure pedestrian and vehicle safety during the school's construction and operation. Note that the works on Nirmal Street form part of this REF. Works on Guntawong Road and Marchant Street do not form part of this REF and are subject to a separate planning pathway, however, are included as mitigation measures in this REF because it is acknowledged that the works would be required for operation of the school.

| # | Impact | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| TT1 | To ensure that students can cross the road safely. | Construct a zebra crossing on Guntawong Road and a wombat crossing on Nirmal Street prior to occupancy. | Pre-operation | Not significant |
| TT2 | To ensure that students and the local community can safely walk along the footpaths. | Construct a 3.5m shared path along school frontage on Nirmal Street on the school frontage side only (western) prior to occupancy. | Pre-operation | Not significant |
| TT3 | To ensure that students | Construct a 3.5m | Pre- | Not significant |

| # | Impact | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | and the local community can safely walk along the footpaths. | shared path along school frontage on Guntawong Road along the school frontage and on the northern side of Guntawong Road from the bus stop to the zebra crossing prior to occupancy. | operation | |
| TT4 | To ensure that Guntawong Road is wide enough for both the bus stops and through traffic. | Construct two indented bus bays on Guntawong Road able to each accommodate two buses:<br>– Eastbound bus bay: 40 metres long<br>– Westbound bus bay: 60 metres long<br>In the sections of Guntawong Road comprising four lanes the cross section of Guntawong road should match with the end-state cross section of Guntawong Road where possible and appropriate.<br>The intersection of Guntawong Road and Nirmal Street should be designed as a "Give Way' intersection with one lane on each approach. The design should provision for the future roundabout at Guntawong Road and Nirmal Street where possible and appropriate. | Pre-operation | Not significant |
| TT5 | Nirmal Street is an incomplete road, with travel in the southbound direction only. With only this road infrastructure, there would be significant | Construct Nirmal Street within the site boundary to a carriageway width of 19m from Guntawong Road along the full | Pre-operation | Not significant |

| # | Impact | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | congestion and impacts on other road users. | extent of the school frontage and dedicate it to Council prior to occupancy.<br>**Note: The eastern half road of Nirmal Street from Marchant Street to the southern frontage of the school is within Lot 43 DP301086 and subject of Bathla Group subdivision DA (DA-23-00128), which is understood to be in the delivery phase with an expected completion by mid-2025. The eastern half road of Nirmal Street from Guntawong Road to McClelland Street is within Lot 1 DP1300811 and subject of Metro DA*. | | |
| TT6 | Marchant Street is an incomplete road, with travel in the southbound direction only. With only this road infrastructure, there would be significant congestion and impacts on other road users. | The southern half of Marchant Street needs to be constructed from Nirmal Street to Tallawong Road and dedicated to the Council as a public road prior to occupancy.<br>**Note: Marchant Street from Nirmal Street to Tallawong Road is within Lot 43 DP301086 and subject of Bathla Group subdivision DA (DA-23-00128), which is understood to be in the delivery phase with an expected completion by mid-2025.* | Pre-operation | Not significant |
| TT7 | To ensure adequate car parking facilities for staff | Construct a carpark with 72 spaces and a | Construction | Not significant |

| # | Impact | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | and loading facilities for the school. | separate loading facility according to Australian standard AS2890.1, AS2890.2 and AS2890.6. | | |
| TT8 | To ensure the safety of students and staff. | Prior to the commencement of operation, all required School Zone signage, speed management signage and associated pavement markings must be installed, inspected by TfNSW and handed over to TfNSW. | Pre-operation | Not significant |
| TT9 | Students prefer arriving by private vehicle, resulting in congestion and delays to other road users. | Within the first 12 months of operation appoint a School Travel Coordinator, establish a School Transport Committee, and prepare a Travel Access Guide | Within 12 months of the of operation | Not significant |
| TT10 | Students prefer arriving by private vehicle, resulting in congestion and delays to other road users. | Update the School Transport Plan annually for the first two years | Operation | Not significant |
| TT11 | To manage traffic impacts during construction. | Prior to construction commencing, prepare a Construction Traffic Management Plan (**CTMP**) to the satisfaction of Blacktown Council, including preparation of traffic guidance schemes where required. | Pre-construction | Not significant |
| TT12 | To manage parking and traffic impacts during construction. | The contractor must operate a shuttle bus to the station for use by workers for the duration of construction. | Constructio n | Not significant |
| TT13 | To ensure compliance with accessibility requirements. | The two spaces at the south of the school are inaccessible. These spaces to be widened to 3.6m as | Pre-construction | Not significant |

| # | Impact | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | | they are at the end of a blind aisle – AS2890.1 Fig 2.3 | | |

## 7.2 Noise and Vibration

A Noise and Vibration Assessment (**NVA**) has been prepared by an acoustic consultant and included in **Appendix 18**, has been conducted in accordance with NSW EPA guidelines. The report evaluates the potential noise and vibration impacts associated with the proposed activity, covering both the construction and operational phases of the educational establishment.

### Methodology

The noise and vibration assessment methodology for the proposed Schofields-Tallawong High School includes the following key steps:

- Identification of Noise Sensitive Receivers: Key residential, recreational, and educational receivers surrounding the site were identified, with their proximity to construction and operational activities noted.
- Establishing Noise and Vibration Criteria: Criteria were developed based on relevant guidelines, including the *NSW Noise Policy for Industry* (**NPI**), *Interim Construction Noise Guideline* (**ICNG**), and *Assessing Vibration: A Technical Guideline*.
- Baseline Noise Monitoring: Long-term unattended and short-term attended monitoring were conducted at representative locations to establish ambient and background noise levels.
- Noise Prediction and Assessment:
    - Noise level predictions were made using typical construction equipment and activity sound power levels, accounting for distance attenuation, shielding, and reflections.
    - Scenarios for operational noise, including building services and traffic, were modelled to ensure compliance with criteria.
- Vibration Assessment: Potential vibration impacts were evaluated for construction equipment, with recommendations for detailed site-specific assessments during project execution.
- Mitigation Measures: A Construction Noise and Vibration Management Plan (**CNVMP**) will be prepared to outline measures such as scheduling, use of quieter equipment, and community consultation to minimise impacts. An Operational Noise and Vibration Management Plan (**ONVMP**) will also be developed to manage ongoing noise impacts from the school during operations.

### Existing Environment

The existing noise environment around the proposed new high school site is relatively quiet, reflecting suburban conditions.

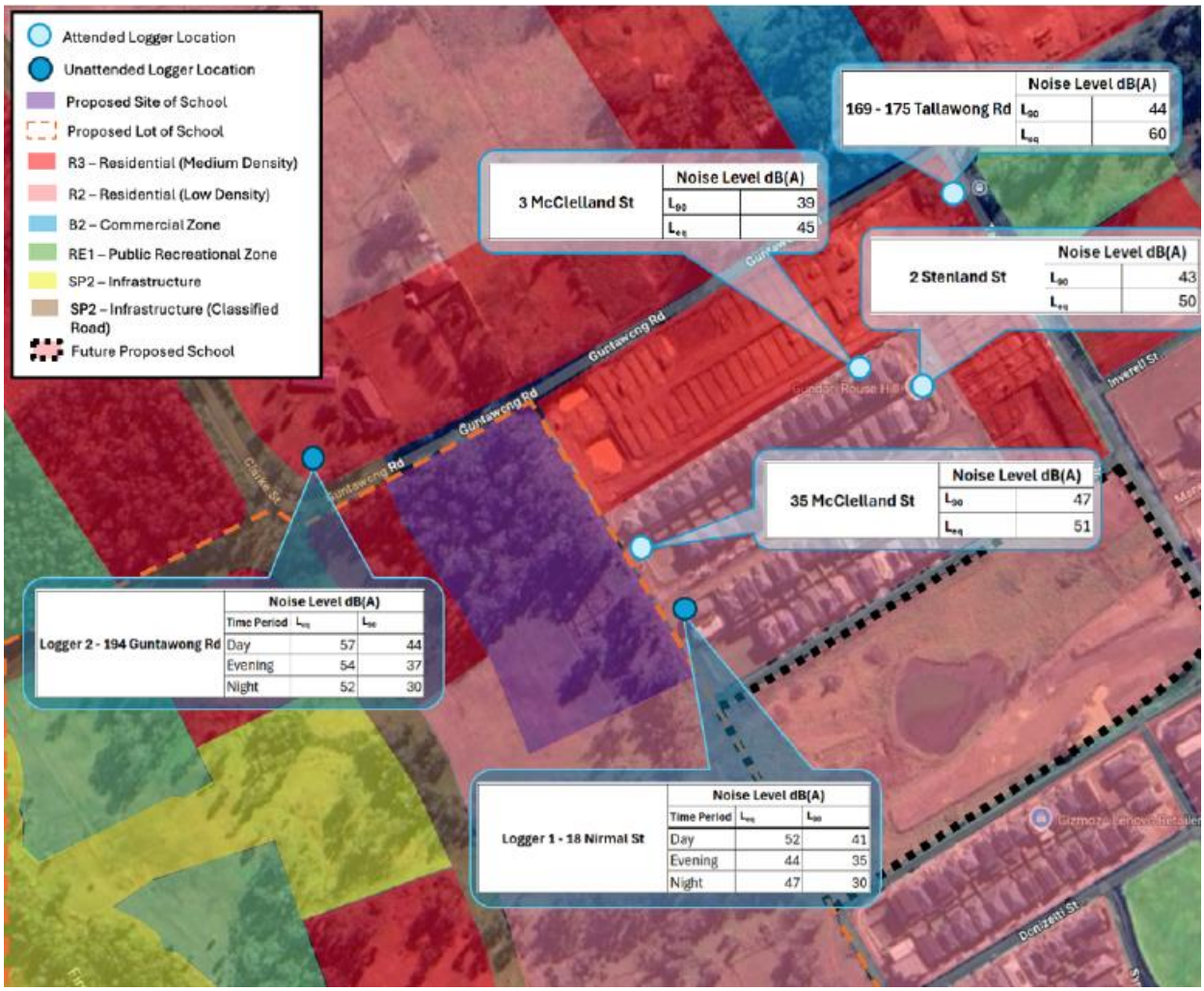
As shown in **Figure 31**, residential properties along Nirmal Street (east of the site) and Guntawong Road (north of the site) are identified as the most affected receivers. Long-term unattended noise

monitoring recorded background levels of 41 dB(A) in the east and west areas and 44 dB(A) in the north, reflecting relatively quiet suburban conditions.

The primary noise sources in the area include vehicular traffic along Guntawong Road and Nirmal Street, occasional construction activities in nearby developments, and natural ambient sounds typical of semi-urban environments.

External noise from rail and aircraft is minimal, with no significant noise intrusion identified at this stage. Monitoring was conducted at two key locations - 18 Nirmal Street and 194 Guntawong Road. Noise loggers recorded data over a two-week period, which informed the development of project-specific noise criteria. Noise Management Levels (**NMLs**) for the construction phase were set at 51–54 dB(A) during standard hours.

**Figure 31 Noise Logger Locations and Sensitive Receivers**




*Source: Acoustic Studio, 2024*

## Assessment

Construction Noise and Vibration

Noise during construction will be generated by machinery and equipment such as excavators, trucks, and compactors. Activities with the highest noise levels include earthworks, concrete pouring, and material deliveries.

Based on modelling, noise levels at nearby sensitive receivers, such as residential properties on Nirmal Street and Guntawong Road, are predicted to exceed NMLs during certain activities, especially if mitigation measures are not implemented. Predicted noise levels during standard construction hours range from 55 to 65 dB(A) at the closest residences, which exceed the NMLs of 51–54 dB(A). Exceedances are most likely during high-intensity phases, such as demolition and site preparation.

Vibration will primarily result from activities such as compaction, piling, and heavy vehicle movements. These activities may impact both building structures and human comfort. Structures within 50 metres of heavy equipment may experience vibration above human comfort levels, while sensitive heritage structures or poorly maintained buildings could require additional monitoring. Vibration levels are expected to remain below the structural damage threshold for residential buildings (5 mm/s) but could occasionally exceed the human comfort threshold of 0.3 mm/s for nearby properties.

Construction noise and vibration impacts are expected to be manageable with proper mitigation measures in place. Noise levels may exceed thresholds at times, but scheduling, equipment selection, and engagement with the community will minimise disruptions. Vibration impacts are not anticipated to cause structural damage but may require monitoring to address human comfort concerns. The preparation of a CNVMP will be critical to ensuring compliance and minimising impacts throughout the construction phase.

Operational Noise - Summary

The main sources of operational noise associated the proposed activity is expected to be generated from mechanical plant, and the operation of the proposed school (specifically, classroom noise and noise from outdoor play areas).

The assessment of operational noise associated with the proposed activity is informed by the background noise data modelling and identification of noise sensitive receivers outlined above.

Operational Noise - Internal Classroom and Administration Areas

Noise generated by classroom activities includes general student interactions, windows or doors left open, and use of public address systems. The NPI requires operational noise from schools to not exceed 55 dB(A) during daytime hours at residential boundaries.

Noise levels were assessed during the day and evening periods (7am to 6pm). The results indicated that predicted noise levels at sensitive receivers were below 40 dB(A), well within the target range of 46–49 dB(A).

The assessment concluded that classroom noise would comply with target levels even with windows open, and noise levels would be significantly lower during structured learning activities. With windows closed, noise levels would further decrease, remaining well within the relevant criteria.

Operational Noise - Workshops

An assessment of noise emissions from workshop areas, including the wood and metal teaching space, was conducted. The evaluation assumed scenarios with windows and doors closed and considered the impact on nearby residential areas approximately 30m away.

Noise levels were assessed during the day and evening period (7am to 6pm). The results indicated that predicted noise levels at sensitive receivers were 40 dB(A), meeting the target level of 46 dB(A). The assessment confirmed that workshop noise would comply with the relevant criteria.

Operational Noise - School Hall

An assessment of noise emissions from the school hall was conducted for both school hours (7am to 6pm) and evening use (6pm to 10pm).

During school hours, noise levels from internal gymnasium activities such as learning, presentations, sports, and music are expected to reach up to 75 dB(A). The assessment assumes that windows, roller doors, and high-level louvres are open for natural ventilation. Predicted noise levels at residential areas to the east are 35 dB(A), which comply with the noise target of 46 dB(A). For residential areas to the west, the predicted noise levels are below 30 dB(A), also complying with the target of 49 dB(A).

During evening use, noise levels from activities such as night school, presentations, performances, sports, and music are expected to range between 85–90 dB(A). The assessment considers scenarios where windows and doors are open or closed for natural ventilation. For residential areas to the east, approximately 40 metres away across Nirmal Street, the predicted noise levels with windows open are 45–50 dB(A), which exceeds the target of 40 dB(A).

However, with windows closed, noise levels are predicted to drop to below 35 dB(A), complying with the target. For residential areas to the north, approximately 180 metres away along Guntawong Road, predicted noise levels with windows open are below 40 dB(A), meeting the target of 42 dB(A), while with windows closed, levels decrease to below 35 dB(A), remaining within acceptable limits.

To ensure compliance with Project Noise Trigger Levels (**PNTL**) during evening use, doors and windows are to remain closed. This measure will mitigate noise impacts on nearby residential areas and ensure noise levels remain within acceptable limits.

Operational Noise - Outdoor Play Areas

An assessment of noise emissions from outdoor play areas as shown in **Figure 32**, including active play (sports field and court areas) and passive play (assembly and open space areas), has been conducted. The play areas are illustrated in the relevant figures. The assessment assumes that play activities are restricted to daytime hours (7am to 6pm).

To minimise noise impacts, good practice design measures have been incorporated, including the use of directional speakers oriented inwards towards the school, away from residential areas, and focused on the required coverage zones. Noise levels are set and limited to the lowest effective level while remaining audible and intelligible for the designated coverage areas, as defined by EFSG Section DG64 (Communications). Additionally, the design strategically locates playground areas away from site boundaries facing noise-sensitive receivers, with shielding provided by the layout of buildings.

While there are no clearly defined criteria for school playground noise, the AAAC Guideline for Child Centre Assessment has been adopted as the industry best practice for evaluating playground noise. Predictions confirm that noise levels from the playground areas remain within the recommended limits under the AAAC guidelines.

**Figure 32 Outdoor play areas shown in red**


*Source: Acoustic Studio, 2024*

**Table 22** below predicts the noise intrusion levels from the proposed activity to nearby sensitive receivers.

**Table 22: Predicted outdoor play area noise from the proposed activity**

| Sensitive Receiver | Predicted Noise Level dB(A) | Play Noise Screening Target dB(A) |
|---|---|---|
| Residential (East) | 42 | 41 |
| Residential (North) | 43 | 44 |

The assessment confirms that noise intrusion to receivers to the north of the site are within the required noise management levels, whilst receivers to the site's east will marginally exceed the required levels. However, Acoustic Studio have conducted an assessment of the marginal exceedance against the NSW EPA '*Noise Guide for Local Government'* offensive noise checklist. Given the limited duration of the exceedance during school break periods, the expected noise characteristics, and being of comparable volume to the ambient noise levels, the noise from outdoor play areas is not considered offensive.

Operational Noise - Plant Equipment and Services

As the detailed design for plant, services, and equipment is yet to be finalised, a comprehensive assessment of noise impacts from mechanical plant has not been conducted at this stage. However, noise emissions can be effectively managed and controlled through the implementation of appropriate mitigation measures during and after the design process. The adoption of these

measures will ensure that noise emissions from mechanical plant remain effectively managed and fully compliant with relevant guidelines once the design is finalised and operational.

Operational Noise - Traffic Noise Generation

An assessment of the on-site and off-site traffic noise generated by the proposed activity has been undertaken. The assessment of on-site traffic noise is limited to the proposed car park and loading bay areas, with the off-site traffic noise assessment considering truck movements, kiss and drop, proposed bus parking, and the traffic generated on the surrounding road network.

At the location of the nearest sensitive receiver, the expected noise intrusion level is 36dB(A), which complies with the required 40 – 46dB(A). The car park will be used generally for daytime hours only and may include controls such as gate access to limit public/after-hours usage. Further, speed limits will reduce the noise emissions from vehicles accessing/navigating the car park. The noise generated by the loading bay is unknown at this stage, given the limited information available. However, the number of expected truck movements are low and unlikely to exceed the required noise intrusion levels.

As the proposed activity will generate additional traffic including light vehicles (**LV**), heavy vehicles (**HV**) and busses on the surrounding road network, plus kiss and ride zones, an assessment of off-site noise impacts was conducted. Based on an assessment of the likely number of truck movements, kiss and drop noise, and noise periods, the assessment has confirmed an estimated noise intrusion level of 40dB(A), which complies with the required 55dB(A).

### Mitigation Measures

The following mitigation measures are to be implemented to manage noise and vibration impacts during construction and operation.

| # | Impact | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| NV1 | To manage the expected noise impacts during school operations | Rooftop condenser plant areas must incorporate acoustic screening and louvres. | Detailed Design | Not significant |
| NV2 | To manage the expected noise impacts during school operations | In-duct attenuation will be allowed for equipment terminating at the façade. | Detailed Design | Not significant |
| NV3 | To manage noise and vibration impacts during construction. | Prepare a Construction Noise and Vibration Management Plan (**CNVMP**) in line with the Interim Construction Noise Guideline (**ICNG**) and other relevant standards. | Pre-construction | Not significant |
| NV4 | To manage noise and vibration impacts during construction. | Install temporary acoustic barriers around high-noise activities or along the boundaries of sensitive receivers. | Pre-construction / construction | Not significant |

| # | Impact | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| NV5 | To manage noise and vibration impacts during construction. | Conduct pre-condition surveys of structures within 50 metres of vibration-intensive activities. | Pre-construction | Not significant |
| NV6 | To manage noise and vibration impacts during construction. | Limit high-noise activities to standard construction hours (Monday to Friday, 7:00am to 6:00pm; Saturday, 8:00am to 1:00pm). | Construction | Not significant |
| NV7 | To manage noise and vibration impacts during construction. | Use equipment fitted with noise-reduction features, such as mufflers or enclosures. | Construction | Not significant |
| NV8 | To manage noise and vibration impacts during construction. | Ensure all construction machinery and equipment are regularly maintained to minimise noise emissions. | Construction | Not significant |
| NV9 | To address community concerns about construction noise or vibration. | Provide advance notice to nearby residents regarding noisy activities and establish hotline to address community concerns. | Construction | Not significant |
| NV10 | To manage noise and vibration impacts during construction. | Utilise equipment (where possible) designed to minimise vibration emissions (e.g., bored piling instead of driven piling). | Construction | Not significant |
| NV11 | To manage noise and vibration impacts during construction. | Implement real-time vibration monitoring to ensure compliance with thresholds. | Construction | Not significant |
| NV12 | To manage ongoing noise impacts from the school. | Prepare an Operational Noise and Vibration Management Plan (**ONVMP**) to manage ongoing noise impacts from the school. | Pre-operation | Not significant |
| NV13 | To manage the expected noise impacts during school operations | Workshops will require windows and doors to be closed for noisy activities. | Operation | Not significant |
| NV14 | To manage the expected noise impacts during school operations | Public Address Systems must be limited to 7am to 6pm and incorporate | Operation | Not significant |

| # | Impact | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | | good practice design and set at the lowest level practical whilst still achieving intelligibility requirements. | | |
| NV15 | To manage the expected noise impacts during school operations | Doors and windows to the school hall must be kept closed during out of hours use. | Operation | Not significant |
| NV16 | To manage the expected noise impacts during school operations | Where cleaning activities occur between 5:30-7am, ensure windows and doors are closed to limit noise emissions. | Operation | Not significant |

## 7.3 Contamination and Hazardous Materials

A DSI has been prepared by an environmental consultant and is included in **Appendix 9**. The DSI assesses and quantifies any soil and groundwater contamination at the site and confirms that the site can be made suitable to accommodate the proposed high school, provided that the recommended remediation works, and mitigation measures are implemented.

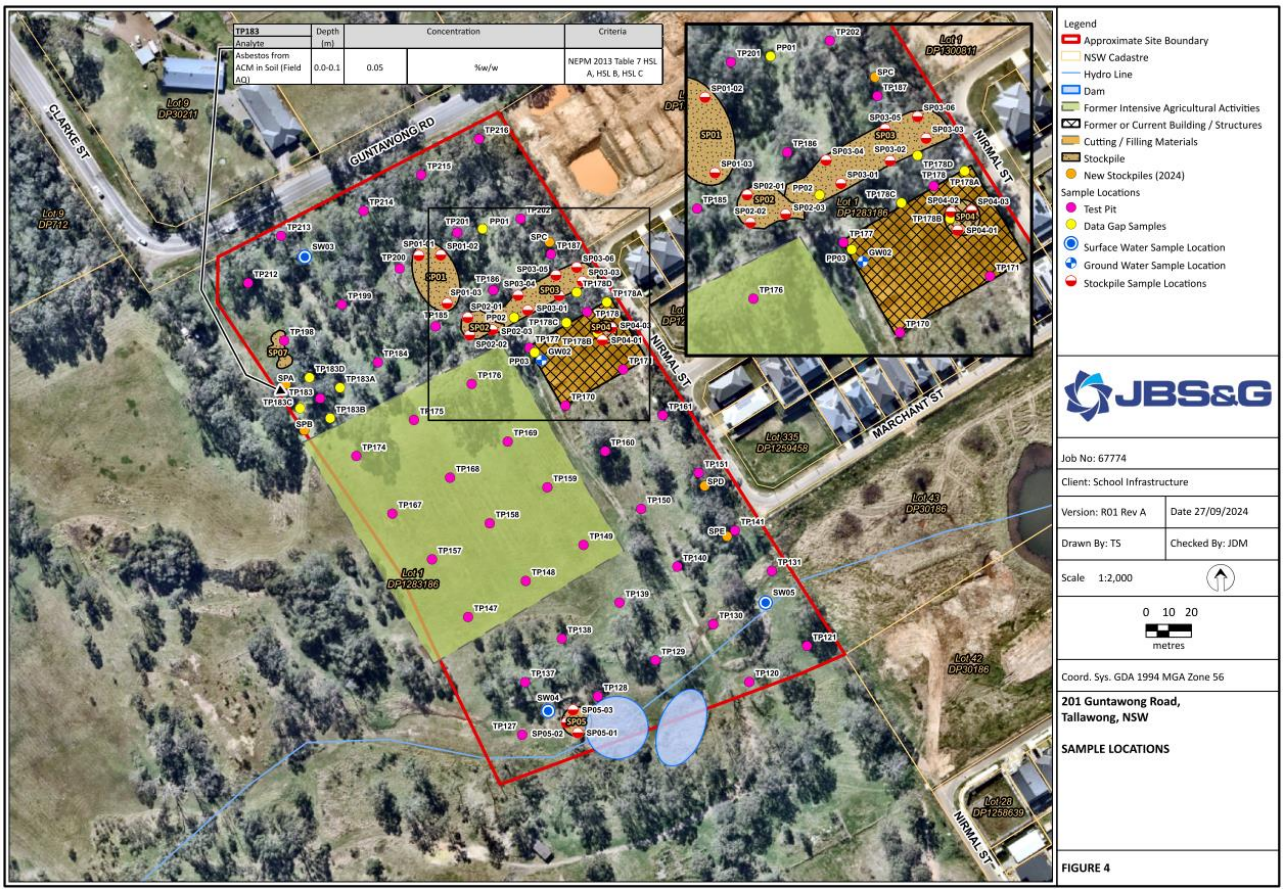
### Methodology

JBS&G previously completed a preliminary site investigation (**PSI**), DSI and subsequent data gap assessment (**DGA**) of the broader site area, of which the subject site comprises. The sampling and data analysis completed in DSI and DGA for the broader site have been used to prepare the current DSI.

The methodology to complete this DSI included the following:

- Completion of an intrusive investigation program comprising:
    - Advancement of 56 test pits and collection of representative soil samples;
    - Collection of 18 samples from five stockpiles present on site;
    - Installation of one groundwater monitoring well and completion of a groundwater monitoring event;
    - Collection of three surface water samples from surface water features at the site including dams and surface water channels;
- Laboratory analysis of selected samples for a range of contaminants of potential concern (**CoPC**);
- Comparison of collected data against EPA published and / or relevant endorsed criteria to confirm land use suitability.
- Preparation of a DSI report in accordance with the relevant guidelines.

**Figure 33 DSI Sample Locations**




*Source: JBS&G, 2024*

## Assessment

The DSI concluded with the following:

- Bonded asbestos containing material (**ACM**) impacts are identified in the fill profile at TP183, TP183B, TP183C and TP183D, which represent a potentially unacceptable risk to human health. The identified asbestos impacts require remediation/management prior to development of the site.
- Waste materials in fill identified in TP183B will require removal and off-site disposal.
- Aesthetic impacts associated with anthropogenic material in limited in-situ fill at test pits TP183 and in stockpiles SP01-SP04 may require management during redevelopment of the site, should the fill material be exposed following completion of development works.
- Groundwater assessment has identified copper in a concentration exceeding adopted criteria protective of 95% of species in freshwater were detected in groundwater, however, the concentrations are considered to most likely reflect background conditions within the hydrogeological setting of the site.
- A comparison of surface water analytical results with the adopted health screening and recreational criteria adopted has not identified the occurrence of surface water impacts presenting a significant risk to future site users. It is considered that the heavy metal concentrations within the surface water do not pose a health risk, and the water can likely be irrigated or used for dust suppression on the site.

Based on the findings of the DSI, it was considered that the site can be made suitable for the proposed high school use subject to preparation and successful implementation of an appropriate RAP to address the areas of concern outlined above.

### Remedial Action Plan

In accordance with the recommendations of the DSI, a RAP has been prepared by an environmental consultant and is provided at **Appendix 21**. The RAP outlines how site remediation can be achieved on the site to a condition suitable for the proposed use as an educational establishment. A data gap assessment has also been included to evaluate the presence of CoPCs near the areas identified in the DSI. The assessment confirms the extent of CoPCs across the site.

The RAP is based on an updated review of the site and its surrounding environmental context, a desktop analysis of historical aerial photographs, and findings from prior site investigations. Site inspections were conducted on 26 August 2022 and 19 September 2024.

The RAP outlines a remediation strategy to address identified contamination, including the removal and management of asbestos-impacted soils, waste materials, and aesthetically unsuitable stockpiles. The remediation process will include pre-remediation inspections, excavation of impacted materials, offsite disposal, validation testing, and the implementation of an asbestos management plan.

The RAP addresses the assumed extent of contamination at the site, as identified by JBS&G in **Table 23**. The proposed remedial approach for ACM includes the following:

- Excavation and off-site disposal where ACM is co-located with waste materials.
- On-site treatment of bonded ACM-impacted surface soil (<100 mm) through emu-picking, where ACM is not co-located with waste materials.
- On-site treatment of bonded ACM-impacted fill at depth (>100 mm) via excavation and emu-picking, where ACM is not co-located with waste materials.

As a contingency, if unexpected CoPCs are identified, if the preferred remedial options are not feasible, or if validation fails, alternative approaches may be implemented.

The objective of the remediation is to address identified land contamination risks by reducing them to levels that pose no unacceptable exposure risk to human health or the environment, in alignment with the proposed land use scenario for the site.

The RAP has been prepared in accordance with all relevant regulations and legislation, including Chapter 4 of the Resilience and Hazards SEPP. By implementing the recommended site remediation works outlined in the RAP, the site will be deemed suitable for the proposed activity.

### Interim Audit Advice

The Interim Audit Advice (**IAA**) prepared by a site auditor and included at **Appendix 22** provides an independent review of the RAP developed by JBS&G. The Auditor has confirmed that the RAP complies with NSW EPA guidelines and considers the site capable of being made suitable for the high school use, provided the RAP is implemented and validated.

**Table 23: Potential sources of contamination**

| Remediation Area | CoPC | Potential sources | Indicative contaminated volume |
|---|---|---|---|
| TP183, TP183B, TP183C, TP183D | Asbestos | Hazardous building materials associated with the demolition of former site structures.<br>Waste materials in potential waste burial pit also identified in TP183B. | 725m$^3$ |
| Stockpiles<br>SP01, SP02, SP03, SP04 | Aesthetics | Stockpiled fill material of unknown origin | 1,000m$^3$ |

### Mitigation Measures

The following mitigation measures are to be implemented to manage risk from potential contamination and hazardous materials.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| CH1 | To ensure that the site is capable of being made suitable for the proposed high school use, subject to the implementation of the RAP and associated validation works. | Conduct independent audit of RAP to confirm remedial approach conforms to all appropriate regulations, standards and guidelines and is suitable based on the site history and the proposed land use. | Pre-construction | Not significant |
| CH2 | To manage unidentified contamination risks. | Develop an unexpected finds protocol for unidentified asbestos or underground storage tanks. | Pre-construction | Not significant |
| CH3 | To ensure the site is suitable for the proposed use. | Implementation of the RAP prepared by JBS&G to address identified contamination and unexpected finds. | Construction | Not significant |
| CH4 | To appropriately demonstrate that the remedial/management works have been completed in accordance with the RAP. | A Site Remediation and Validation Report must be prepared in accordance with the relevant sections of the NSW EPA guidelines to validate the remediation process. | Post Construction | Not significant |
| CH5 | To ensure the ongoing suitability of the site for its proposed use. | Prepare a Long-Term Environmental Management Plan (**LTEMP**). | Pre-operation | Not significant |

Subject to the implementation of the measures outlined in the RAP and the proposed remedial approach, JBS&G confirm that the site can be made suitable for the proposed activity.

## 7.4 Flooding

A Flood Impact and Risk Assessment (**FIRA**) has been prepared by a flood consultant and is included at **Appendix 13**. The report outlines the existing flooding constraints on the site and provide an assessment into the likely impacts of the proposed activity in post-development conditions. Design solutions and operation procedures required to mitigate flood risk have also been identified where required.

### Methodology

In order to assess the site's potential flood risk, TUFLOW software was utilised the model the existing and proposed flood characteristics of the site and surrounding area. Blacktown City Council provided the project flood consultant with the First Ponds Creek Flood Study and Model. This has been confirmed by Council as suitable to use for this proposed activity and has therefore been used as the basis of the flood modelling completed as part of the assessment.

The TUFLOW model was updated with 2019 LiDAR data to display the ultimate developed scenario of the locality. Additionally, the TUFLOW model was updated to include topographical survey data of the wider site lot collected by Project Surveyors in 2022.

When combined, a site-specific flood model has been developed to provide additional detail of the site following construction of the new high school.

### Existing Environment

The southern portion of the site is identified as flood prone land based on Council's available flood mapping. It is acknowledged however that the flood prone land mapping indicates the extent of flood prone land based on existing conditions at the time of precinct planning and does not consider the changes resulting from subsequent development or infrastructure works.

### Assessment

The proposed floor levels have been assessed against the relevant flood level criteria. An analysis of the existing conditions at the proposed site for the new high school has found that the southern portion of the site is flood-affected in events as frequent as the 20% AEP event. This is due to the presence of a first-order creek which conveys overland flow towards the nearby First Ponds Creek. As a result, the proposal includes a temporary retaining wall to contain water up to the Probable Maximum Flood (**PMF**) event until Road 4 and associated stormwater system is constructed.

The temporary retaining wall will divert flows to an off-site temporary tail out channel to the south of the site. The tail out channel does not form part of the REF and is part of associated works for the adjacent residential development and Nirmal Street stormwater design. This is to be delivered by Bathla as part of separate DA. A mitigation measure has been included in the REF to ensure that the temporary tail out channel is delivered prior to the operation of the school. When the future road to the south of the site is constructed, the channel is to be removed, and upstream flows will be captured and conveyed via concrete culverts below the proposed road along the southern boundary.

Modelling of the post-construction scenario, including mitigation measures in the form of a tail out channel and a retaining wall, indicates that the site is only partially impacted by overland flow at its

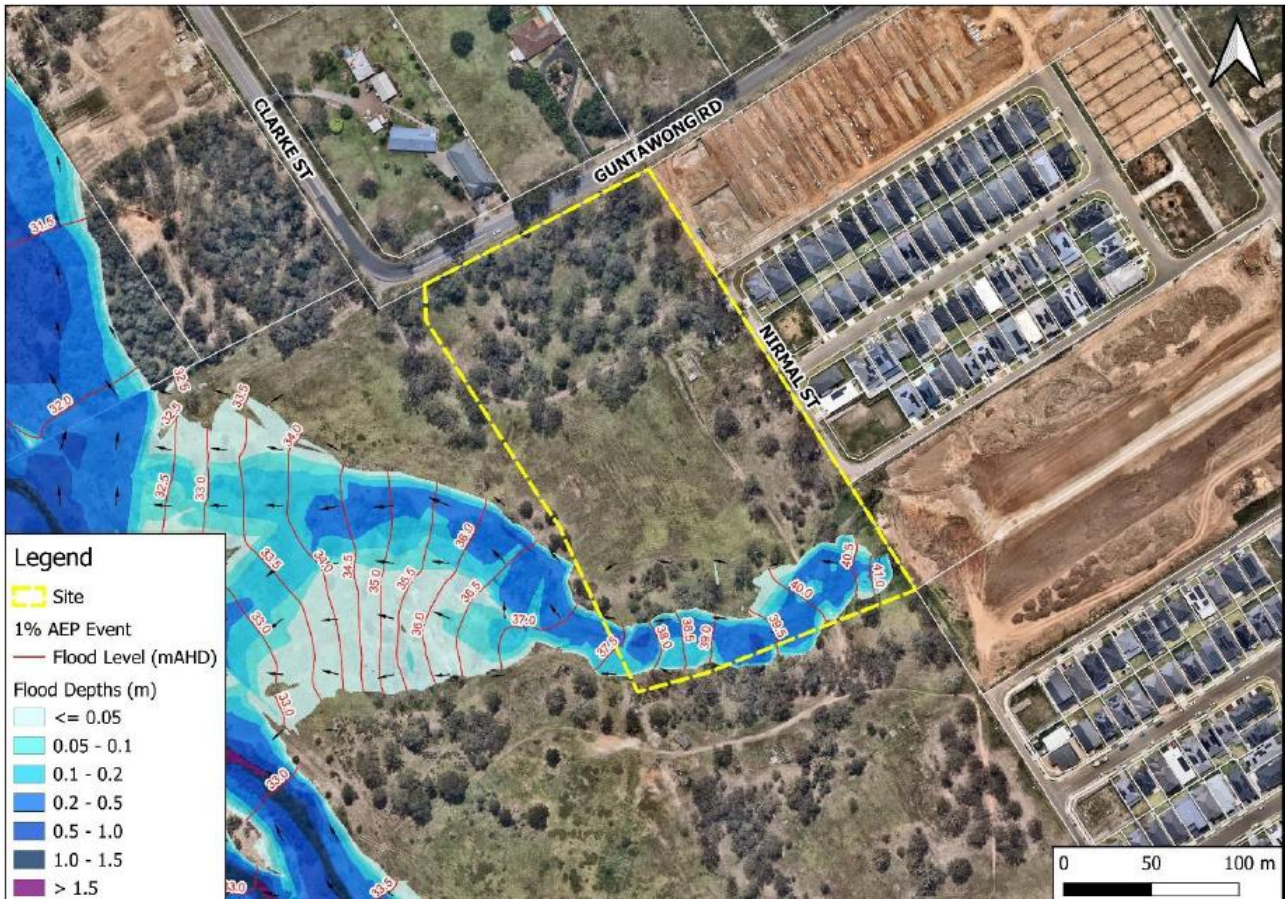
southern boundary, with the open channel directing flow towards the western First Ponds Creek and away from the site.

The post-construction scenario found that floodwaters do not reach either the carpark or the proposed school buildings in the PMF, with a peak flood level of 41.62m AHD at the southeastern corner of the site. With the proposed buildings set between 43.9m AHD – 44.4m AHD, the buildings are therefore well above the PMF peak flood level.

Offsite, there is largely no change to flood level, although there is a small portion west of the site boundary with a minor increase of approximately 25mm in the 1% AEP event, the 1% AEP event with climate change and the PMF event. This localised increase is not considered significant as it does not affect adjacent properties, and it is mainly located within the existing waterway corridor immediately downstream of the site, in which future development would not be permitted.

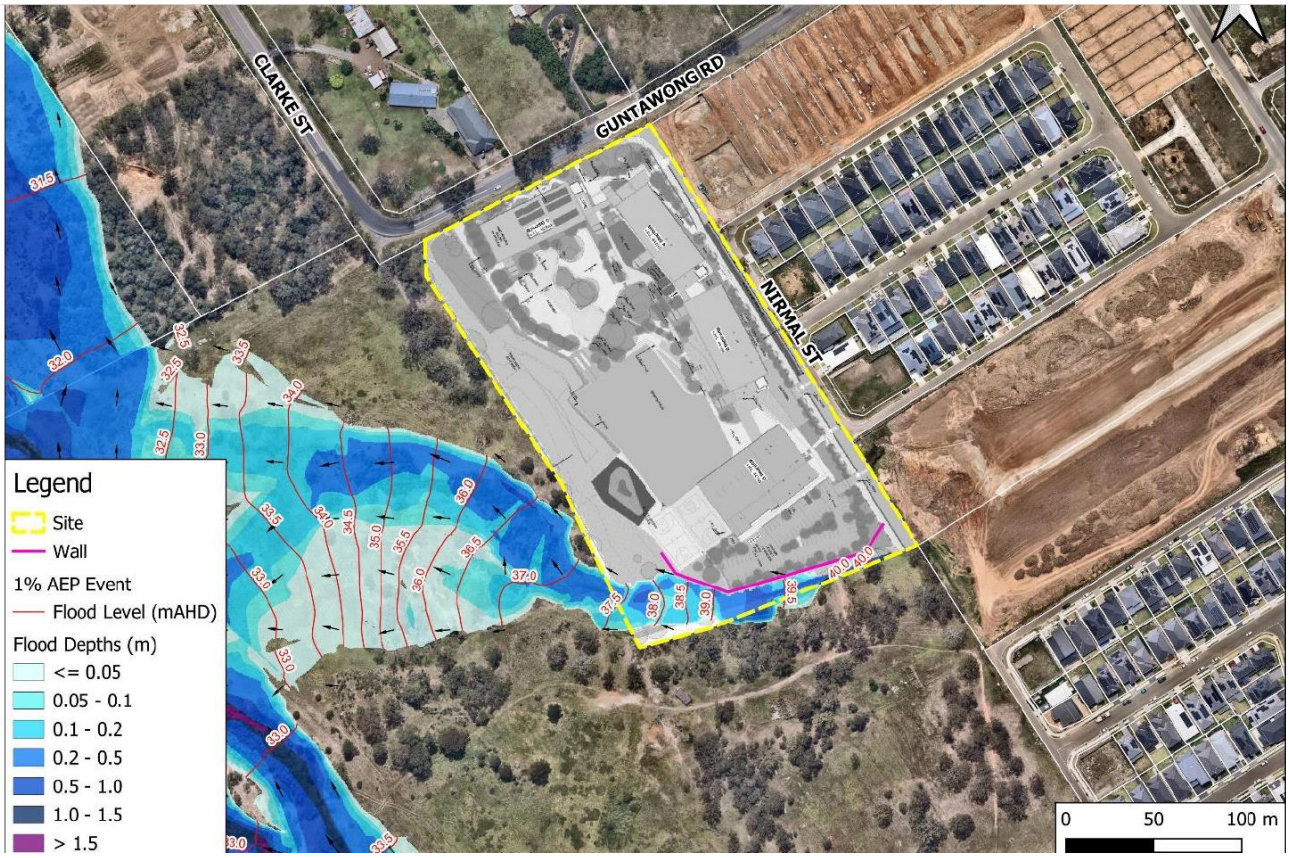
Further, the results show that the estimated flood hazard for the areas immediately downstream of the site in the 1% AEP event assessed remained generally unchanged (refer to **Figure 34** and **Figure 35** for the 1% AEP event flood hazard mapping of the existing and post scenarios, respectively).

**Figure 34 Existing scenario - peak flood levels and depths at the site in the 1% AEP event**




*Source: TTW, 2024*

**Figure 35 Post scenario - peak flood levels and depth at the site in the 1% AEP event**




*Source: TTW, 2024*

The flood impact assessment for the 1% AEP event and the 1% AEP with climate change event confirms that changes to offsite flood levels are generally within +/- 10mm, and while there are some higher than 10mm of flood level increases estimated for the PMF event, these impacted areas are generally located within existing waterway corridor. Therefore, the proposed activity is considered to result in negligible offsite impacts and will not have significant adverse effects on the locality, community and the environment.

Potential impacts can be appropriately mitigated or managed to ensure that there is minimal effect on the locality, community through recommended measures, as outlined in the following section.

### Flood Emergency Response Plan

A preliminary FERP has been produced within the Flood Risk Emergency Assessment (TTW, 2025) and is submitted at **Appendix 29** this REF.

The FERP identified that in the critical duration of a PMF event (15 minutes):

- Within 10 minutes the surrounding roads would be inundated, so all routes out of the site would be cut off
- The northern portion of the site remain mostly unaffected
- The site would be isolated up to 30 minutes (or two hours in a long storm event of 70 minutes)
- After 30 minutes of the on-site of the storm event, evacuation is possible using the following flood-free routes:

- south via Tallawong Road, then
- east onto Macquarie Road, then
- continuing south towards Schofields Road via Cudgegong Road.

The FERP outlines strategies to manage flood risks. The site is designed with all buildings elevated above the PMF level, ensuring no above-floor inundation, though access may be temporarily restricted during extreme events. The FERP includes the following strategies to respond in a flood emergency:

- preference to close the school before the start of the school day where advanced warning can be received or a sever event is forecasted several hours in advance
- where there is not enough time for pre-emptive closure of the school, shelter-in-place is proposed.

The FERP states that the proposed shelter-in-place is complies with the Shelter-in-place guideline (Department of Planning and Environment 2025), including that all proposed buildings are above the PMF level and will not experience above-floor inundation and that the site can accommodate shelter-in-place for up to 2,200 people, well above the proposed 1,000 student capacity and 80 staff.

The FERP also identified that flood warnings from the Bureau of Meteorology and NSW SES will guide response actions, supported by communication systems such as PA announcements and SMS alerts. Designated staff roles and responsibilities, regular drills, and a maintained Flood Emergency Kit ensure preparedness. Long-term measures, including periodic plan reviews and community education, support safety and compliance with flood risk management guidelines. The FERP prioritises the safety of students and staff while mitigating operational disruptions during flood events.

### Mitigation Measures

The following mitigation measures are to be implemented to manage risk from flooding.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| F1 | To reduce the flood risk to people on site during a flood event.<br>A preliminary FERP has been produced within the Flood Risk Emergency Assessment (TTW, 2025) and is submitted at **Appendix 29** this REF. | Prepare a detailed Flood Emergency Response Plan (**FERP**). | Pre-construction | Not significant |
| F2 | To manage incoming flows from the upstream catchment.<br>Flows will be conveyed across the site via an open channel along the southern boundary of the site. When the future road to the south of the site is constructed, the channel is to be removed, and upstream | Construct an open tail out channel to the south of the site as part of associated works for the adjacent residential development and Nirmal Street stormwater design. This is to be delivered by Bathla as | Construction | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | flows will be captured and conveyed via concrete culverts below the proposed road along the southern boundary. | part of separate DA, outside of the site. | | |
| F3 | To enhance preparedness for a flood event. | Install signage and provide information to the school community pertaining to flood risks | Pre-operation | Not significant |
| F4 | To ensure that supplies within the kit are sufficient and in working condition. | A Flood Emergency Kit must be prepared. | Pre-operation | Not significant |
| F5 | To ensure all staff are aware of their specific roles and associated flood response actions. | Staff must be delegated responsibilities as per the FERP. | Operation | Not significant |
| F6 | To ensure that information is up to date and procedures are updated regularly. | The FERP must be reviewed and updated regularly. | Operation | Not significant |
| F7 | To ensure all staff workers and students are familiar with the sound of the alert and their subsequent flood response actions. | Flood drills are to be held by staff annually. | Operation | Not significant |

## 7.5 Integrated Water Management

A Civil Engineering Design Report has been prepared by a civil engineering consultant (refer to **Appendix 7**) which sets out the proposed drainage design for the site, reuse and detention facilities, water quality measures and the nominated discharge points.

### Existing Environment

The proposed school site is vacant land and features a gentle slope draining westward toward First Ponds Creek. For stormwater assessment purposes, the site is 100% pervious. No formal stormwater pit and pipe network exists within the site, and stormwater currently flows overland toward the creek.

A survey investigation identified two existing easements for drainage to First Ponds Creek. The first easement, 4.4m wide and located adjacent to Ashburton Crescent, lies west of the site and does not impact the proposed school. The second easement, positioned just south of the Nirmal and Marchant Street intersection, permits surface water from upstream catchments to discharge onto the school site, continuing as overland flow toward First Ponds Creek.

### Assessment

The proposed stormwater design can be separated into two categories; roof stormwater and surface stormwater. The key elements of the stormwater design are summarised below:

- All stormwater from the roof will be collected through the use of gutters and downpipes and directed to a series of rainwater tanks. The overflow from the rainwater tanks is to be conveyed to the in-ground systems.
- In-ground pipes shall convey stormwater to cater for the minor 20% AEP and major 1% AEP storm events as per EFSG. Where pipe capacity is exceeded, overland flow paths will convey the anticipated flows in the 1% AEP storm event.
- Construction of a temporary OSD system until the precinct wide permanent stormwater provisions have been constructed. Clarification has been requested from Council to confirm the proposed timeframe.
- Stormwater runoff on site is proposed to be treated by a raingarden/bioretention basin. Surface runoff from external areas will be captured and directed to the bioretention before it is detained in the temporary OSD basin.
- The MUSIC modelling has confirmed that the proposed activity will meet and exceed Council's requirements for pollutant reduction based on the proposed treatment train consisting of rainwater reuse, pit-insert filter baskets, and filter cartridges.

The proposed activity includes measures to divert stormwater overland flow from upstream around the school facilities.

### Mitigation Measures

The following mitigation measures are to be implemented to manage stormwater, run off and sediment control.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| SW1 | To ensure protection of downstream drainage lines, assets, ecosystems, or existing hydrological systems from silt, waste and sediment from the site. | Implementation of the Erosion and Sediment Control Plan - drawing no. STHS-TTW-01-00-DR-C-02101. | Construction | Not significant |
| SW2 | To divert the flow path from upstream catchments away from the school facility and to ensure that the site is protected against floodwaters for all events, including the PMF event. | Construct a temporary wall at the southern boundary of the carpark until the permanent stormwater works are completed as part of the delivery of future Road 4. | Construction | Not significant |
| SW3 | To ensure stormwater flows for all events up to and including the 1% ARI from the high school site will have no adverse impact upon the downstream properties and existing waterbodies. | Construct temporary OSD, in accordance with Council's OSD spreadsheet, until the precinct-wide permanent stormwater provisions have been constructed. | Construction | Not significant |
| SW4 | To ensure the proposed activity meets Council's | The proposed activity must include provision of | Construction | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | requirements for pollutant reduction. | water quality treatment measures as part of a water-sensitive urban design as documented in the Civil Engineering Design Report and Civil Engineering Plans prepared by TTW attached at **Appendix 7** and **Appendix 8** respectively.<br>Refer to Hydraulic documentation for rainwater tank sizing and reuse strategy. | | |

## 7.6 Aboriginal Heritage

An Aboriginal Cultural Heritage Assessment (**ACHA**) Report and supplementary Archaeological Report have been prepared by a heritage consultant and is included at **Appendix 27** and **Appendix 31** respectively. The reports evaluate and document the presence of Aboriginal cultural heritage sites within the study area. The purpose of the reports are to identify, assess, and manage potential impacts on these sites, ensuring compliance with cultural heritage protection laws. The reports include a review of background research, field investigations, and recommendations for mitigating harm to any identified heritage sites.

### Assessment

The ACHA conducted comprehensive background research for the proposed study area. Key findings from the research include:

- The study area is located within the designated Aboriginal Place of *Nanagamay Ngurra*, which holds significant cultural value for the local Aboriginal community. This site encompasses a complex of archaeological sites and has been historically used as a men's site, ceremonial grounds, and a burial place.
- A review of the historical aerials indicates that the study area has experienced some degree of disturbance, primarily due to residential development and past vegetation clearance activities. Certain portions of the area have undergone moderate ground disturbance through vegetation clearing, livestock grazing, and the establishment of associated infrastructure.
- Two registered Aboriginal Heritage Information Management System (**AHIMS**) sites exist within the study area: AHIMS 45-5-5766 (Guntawong Road 2) and AHIMS 45-5-5821 (Guntawong Road 4). These sites consist of low to moderate-density artefact scatters, identified through subsurface testing conducted by KNC in 2024.
- During the field investigation, one previously unrecorded AHIMS site was identified: AHIMS 45-5-5913 (201 Guntawong Rd, Hammerstone 1), which consists of a single isolated

artefact. This artefact was found along an established dirt track and is not believed to have been found in situ.

- The AHIMS register lists 83 Aboriginal cultural heritage sites within a 1.25-kilometre radius of the study area, with artefact sites being the predominant site type in this zone.

On 23 October 2023, Biosis conducted a field investigation, observing visible disturbances such as access tracks, stockyards, and cut-and-fill earthworks. However, additional disturbances were not discernible due to extensive grass cover. During this investigation, the previously unrecorded site (AHIMS 45-5-5913, Hammerstone 1) was identified. The artefact was located on an established dirt track and is not considered to be in situ.

The DoE confirms that, following Aboriginal cultural heritage investigations, the impact on the archaeological site AHIMS 45-5-5766 (Guntawong Road 2) has been mitigated through redesign. The majority of AHIMS 45-5-5766 within the school development area will now be preserved and protected from harm, as it lies within a natural drainage overflow zone. The impacted area will be avoided and designated as a no-harm zone, which will be fenced to ensure its protection.

As outlined in **Section 4**, the department assessed two other potential sites for the development of the school to accommodate current and future demand for public high school services in the area. The selection of the sites was constrained by the high forecasted demographic growth and the limited number of available land parcels within the service area.

### Mitigation Measures

The following mitigation measures are to be implemented to manage potential impacts to aboriginal cultural heritage.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| A1 | To ensure compliance with consultation requirements. | Continued consultation with the Registered Aboriginal Parties (**RAPs**) is required to inform these groups about the management of Aboriginal cultural heritage sites within the study area throughout the life of the project. | Throughout life of the project | Not significant |
| A2 | If avoidance through redesign is unable to occur, DoE must apply to Heritage NSW for an AHIP to destroy the listed Aboriginal sites within the study area which are currently protected under the NPW Act. The AHIP should be for a term of five years. | An AHIP is required to be obtained from Heritage NSW, NSW Department of Climate change, Energy, the Environment and Water to impact AHIMS 45-5-5821/Guntawong Road 4 and AHIMS 45-5-5913/201 Guntawong Rd Hammerstone 1. Surface stone artefacts associated with AHIMS 45-5-5913/201 Guntawong Rd Hammerstone 1 is to be collected prior to construction. | Pre-construction | Not significant |
| A3 | To ensure AHIMS 45-5- | AHIMS 45-5-5766/Guntawong | Pre- | Not |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | 5766/Guntawong Road 2 is conserved and protected. | Road 2 and the area of moderate archaeological potential are to be conserved and must be clearly fenced. Fencing must remain in place over the lifespan of the construction phase.<br>Should future development works propose to impact upon AHIMS 45-5-5766/Guntawong Road 2 then an AHIP will be required. | construction | significant |
| A4 | To ensure protection of Aboriginal objects and Places. | No further archaeological work required in the area of low potential once AHIP obtained from Heritage NSW. | Construction | Not significant |
| A5 | To ensure protection of Aboriginal objects and Places. | All Aboriginal objects and Places are protected under the NPW Act. It is an offence to disturb an Aboriginal site without a consent permit issued by Heritage NSW. Should any unanticipated Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. If the find is determined to be an Aboriginal object the archaeologist will provide further recommendations. These may include notifying Heritage NSW and Aboriginal stakeholders. | Construction | Not significant |
| A6 | To ensure protection of unanticipated historical relics. | Relics are historical archaeological resources of local or State significance and are protected in NSW under the Heritage Act 1977. Relics cannot be disturbed except with a permit or exception/exemption notification.<br>Should unanticipated relics be discovered during the course of the project, work in the vicinity must cease and an archaeologist contacted to | Construction | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | | make a preliminary assessment of the find. The Heritage Council will require notification if the find is assessed as a relic. | | |
| A7 | To address the unlikely discovery of human remains. | If any suspected human remains are discovered during any activity, you must:<br>1. Immediately cease all work at that location and not further move or disturb the remains.<br>2. Notify the NSW Police and Heritage NSW Environmental Line on 131 555 as soon as practicable and provide details of the remains and their location.<br>3. Not recommence work at that location unless authorised in writing by Heritage NSW. | Construction | Not significant |
| A8 | To manage Aboriginal cultural heritage impacts | It is recommended an Aboriginal Cultural Heritage Management Plan (**ACHMP**) be developed to appropriately manage Aboriginal cultural heritage identified within the study area. An ACHMP sets out specific guidelines and protocols for the management of Aboriginal heritage across the life of the project inclusive of construction and operational use. This should be inclusive of unanticipated finds protocols, the requirement for heritage inductions to be undertaken by the site personnel prior to works, and long-term care and control of Aboriginal archaeological materials. The ACHMP must be prepared by a suitably qualified archaeologist in consultation with the RAPs for the project. | Throughout life of project | Not significant |
| A9 | To manage Aboriginal cultural heritage impacts | Given the significance of the region to Aboriginal people, there is an opportunity for heritage interpretation as part of the design. Heritage interpretation is an innovative | Throughout life of project | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | | way to integrate culture into design and can not only honour the deep-rooted connection to the land but also ensure that Aboriginal cultural heritage remains present in the daily operations of the proposed high school. As such, it is recommended that a Heritage Interpretation Plan be prepared by a suitably qualified heritage consultant following the NSW Heritage Council's Interpreting Heritage Places and Items Guidelines. Biosis understands that this recommendation has been captured within the Connecting with Country program undertaken by DoE. | | |

## 7.7 Ecology

The subject site is located within the North-West Growth Area and is certified under biodiversity legislation, which exempts it from further biodiversity impact assessments

Under the BC Act the effect of biodiversity certification is that development carried out under Part 5 of the EP&A Act on certified land is exempt from requiring an impact assessment on biodiversity. Section 8.4 of the BC Act states:

> *(4) Activities under Part 5 of the Planning Act: An activity to which Part 5 of the Environmental Planning and Assessment Act 1979 applies that is carried out or proposed to be carried out on biodiversity-certified land is taken, for the purposes of Part 5 of that Act, to be an activity that is not likely to significantly affect any threatened species or ecological community under this Act, or its habitat, in relation to that land."*

This provision means that if an activity falls under Part 5 of the EP&A Act and occurs on biodiversity-certified land, it is deemed, for the purposes of Part 5, not to have a significant impact on any threatened species, ecological communities, or their habitats on that land. Accordingly, no further assessments regarding biodiversity impacts are required as the certification process has already addressed these impacts.

Further, under Section 7.8 of the BC Act, the following is outlined:

> *(1) This section applies to environmental assessment under Part 5 of the Environmental Planning and Assessment Act 1979.*
>
> *(2) For the purposes of Part 5 of the Environmental Planning and Assessment Act 1979, an activity is to be regarded as an activity likely to significantly affect the environment if it is likely to significantly affect threatened species.*
>
> *(3) In that case, the environmental impact statement under Part 5 of the Environmental Planning and Assessment Act 1979 is to include or be accompanied by—*

*(a) a species impact statement, or*

*(b) if the proponent so elects—a biodiversity development assessment report.*

It notes that a SIS or BDAR is only required for Part 5 projects where the activity is likely to significantly affect the environment if it is likely to significantly affect threatened species. Given that Section 8.4(4) of the BC Act outlines that an activity on biodiversity certified land is 'an activity that is not likely to significantly affect any threatened species, neither a SIS nor a BDAR is required.

Notwithstanding the above legislative requirements, the department, acting as a responsible proponent, commissioned an ecologist to conduct a Flora and Fauna Assessment (**FFA**), which is included at **Appendix 14**.

### Existing Environment

The site features a mix of grassland and patches of remnant native vegetation, including Cumberland Plains Shale Woodland, which is classified as a Critically Endangered Ecological Community under state and Commonwealth biodiversity laws. While desktop assessments and site visits identified the potential for threatened species such as the Juniper-leaved Grevillea and fauna like the Little Lorikeet and Little Eagle to inhabit the site, no direct sightings of these species were recorded during surveys.

The site contains important habitat features, including tree hollows, crevices, and logs, which provide potential shelter and nesting opportunities for wildlife. A summary of the existing habitat features of the site observed is provided in **Figure 36.**

A drainage line runs through the site toward the First Ponds waterway, contributing to its ecological significance, particularly in retaining water after rainfall events.

The area is transitioning from semi-rural to urban use, with some contamination, such as asbestos and dumped rubbish, present on-site. While the site is biodiversity certified as part of the North-West Growth Area, which exempts it from offsetting requirements, the presence of significant vegetation and habitat necessitates careful management to minimise environmental impacts during development.

### Assessment

The potential impacts of the proposed activity are moderate and will likely have an impact on the locality, community, and environment. However, these impacts can be effectively mitigated through a combination of avoidance strategies, conservation commitments, and management controls designed to minimise effects on native vegetation and biodiversity.

While the proposed activity is likely to affect threatened species or ecological communities, its location on biodiversity certified land (refer to **Figure 38**, along with the outlined conservation commitments and mitigation measures, exempts it from requiring a SIS or a BDAR.

The FFA outlines a series of conservation commitments and undertakings aimed at mitigating the impact of urban development on matters of national environmental significance. These commitments are closely tied to the Biodiversity Certification granted for the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (**Growth Centres SEPP**) under the NSW *Threatened Species Conservation Act 1995* (**TSC Act**).

Biodiversity values were recognised on-site, and there is a moderate likelihood of the Juniper-leaved Grevillea (Grevillea juniperina subsp. juniperina) occurring. However, the terrestrial flora and fauna survey was limited to less than one hour and focused only on the area impacted by the

proposed works. Despite this limitation, faunal habitat remains abundant within the site. Relocation of this species (if found) was recommended to be a suitable mitigation measure.

**Figure 36 Existing habitat features of the site**


*Source: Water Technology, 2024*

Many of the faunal species likely to inhabit the project area are cryptic and/or nocturnal, or may only visit the site occasionally, making their detection unlikely even during seasonal surveys. As a result, the fauna assessment largely evaluates the potential of the project site as habitat for various fauna species. It is crucial to adopt the precautionary principle, assuming that threatened species may be present if suitable habitat exists. If any trees and habitats are to be removed, a qualified ecologist or fauna specialist must be on-site to carry out pre-clearance assessments and fauna retrieval during vegetation clearance.

Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest were identified on-site, both of which are listed as a Threatened Ecological Community (**TEC**) and are classified as Critically Endangered under both the BC and EPBC Acts. As a TEC was present, a Test of Significance was conducted and is summarised in the FFA.

The Test of Significance indicates that in the case of a threatened species such as the Juniper-leaved Grevillea (Grevillea juniperina subsp. juniperina), the proposed activity could potentially have an adverse effect on its life cycle. Accordingly, the mitigation measures outlined in the FFA should be implemented to avoid or minimise such risks to ensure the species' survival on site.

Further, in the case of an endangered ecological community or critically endangered ecological community, the proposed activity is likely to impact the critically endangered ecological community (PCT 3320 – Cumberland Shale Plains Woodland) and would result in the removal or modification of a substantial portion of the remaining PCT 3320 habitat within the locality. This loss would reduce the already limited extent of this critically endangered ecological community, further compromising its ecological integrity and ability to support associated flora and fauna species.

Notwithstanding the above, as shown in **Figure 37**, under the original ILP, the site would have been subject to high-density residential development and associated road infrastructure, leading to substantial biodiversity loss and the fragmentation of remaining natural habitats. In contrast, the proposed school development presents a significantly lower environmental impact, as it:

- Retains a greater proportion of existing vegetation, reducing overall habitat loss.
- Preserves connectivity between remaining green spaces, improving ecological function.
- Includes open space provisions that help maintain biodiversity within the development footprint.

A comparison of the proposed school development with the original ILP for residential and road infrastructure is provided below and highlights the significant difference in biodiversity impact.

**Table 24: Comparison of Biodiversity Impact (Original ILP v School)**

| Important factor | Original ILP (Residential and Roads) | Proposed School |
|---|---|---|
| Vegetation removal | High – extensive clearing would be required for roads and housing | Lower – the proposed high school retains more native vegetation |
| Biodiversity impact | Severe – fragmentation of habitat due to dense urbanisation | Moderate – more continuous green spaces retained |
| Habitat connectivity | Low – high risk of habitat fragmentation. | Higher – open space and significant tree canopy help retain corridors. |
| Mitigation potential | Limited – harder to integrate conservation measures in urban settings. | Higher – incorporates specific ecological mitigation strategies. |

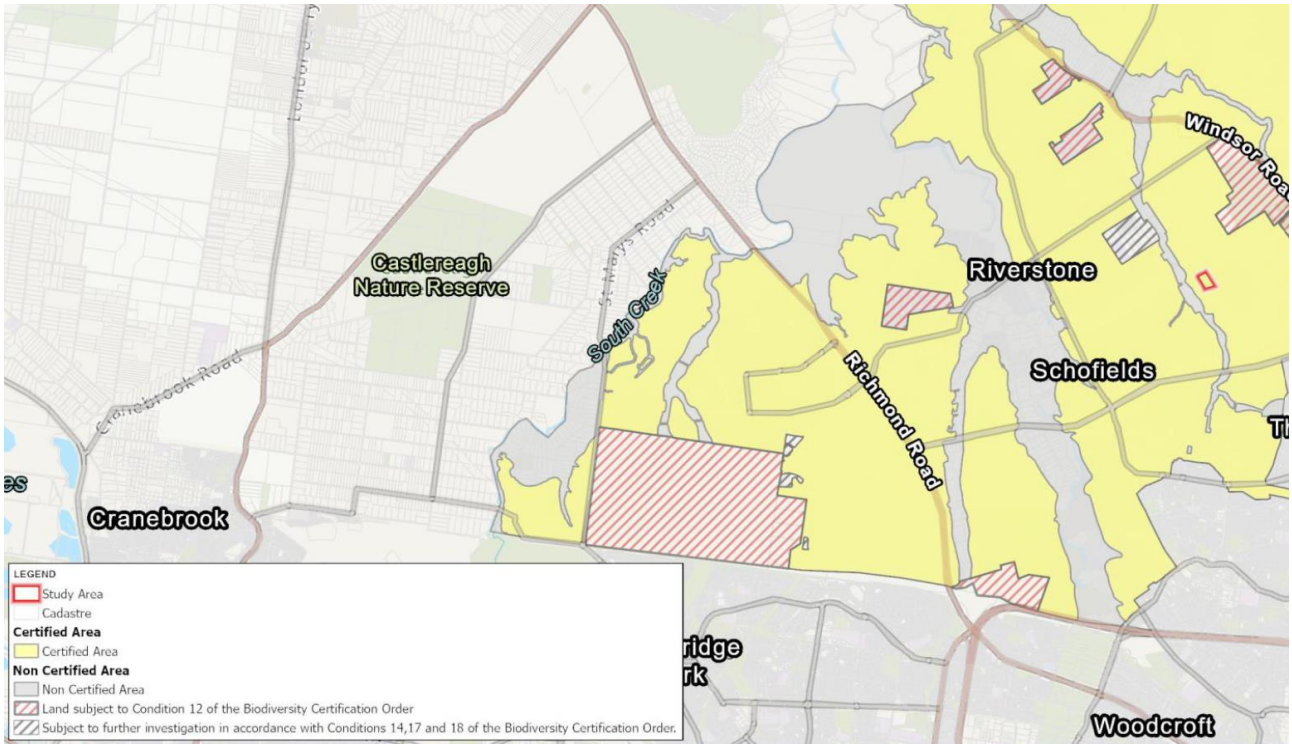
While some impact on biodiversity and vegetation is unavoidable, on balance the proposed school development represents a far lower environmental footprint than the previously envisioned urban development comprising high density residential development and road infrastructure. The proposed school includes continuous areas of open space, retention of significant vegetation areas where possible, targeted mitigation strategies, and ongoing ecological management measures to ensure minimise impact as much as possible while meeting legislative requirements.

By implementing the conservation commitments outlined in the FFA, alongside pre-clearance assessments, habitat protection efforts, and ecological monitoring, the project aligns with best practices for responsible environmental management while facilitating necessary development.

**Figure 37 School location within ILP**


*Source: Urbis, 2025*

**Figure 38 North West Growth Centre – Biodiversity Certification Order**




*Source: Water Technology, 2024*

### Mitigation Measures

The following mitigation measures are to be implemented to manage potential impacts to flora and fauna and biodiversity.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| EC1 | To reduce harm to a threatened species. | A targeted survey for Juniper-leaved Grevillea (Grevillea juniperina subsp. juniperina) to be undertaken by a qualified ecologist. | Pre-construction | Not significant |
| EC2 | To reduce harm to fauna and preserve habitat elements when removing trees with important ecological features. | Soft felling techniques with ecologist guidance is required for removing trees with habitat features to minimise disturbance to fauna and potentially salvage habitat element. | Pre-construction | Not significant |
| EC3 | To ensure comprehensive management and protection of trees throughout the project lifecycle. | A Tree Management Plan (**TMP**) must be developed and implemented. This plan should be prepared by a Consulting Arborist with a minimum qualification of AQF Level 5. | Pre-construction | Not significant |
| EC4 | To clearly define and preserve the tree protection zones (**TPZs**) for retained trees. | All trees to be protected shall be clearly identified and all TPZs surveyed. | Pre-construction | Not significant |
| EC5 | To physically protect trees and TPZs from construction activities. | Protective fencing around existing trees and within TPZs must be installed before any site work begins. The fence must be 1800mm high chain wire mesh fixed to galvanised steel posts, enclosing an area to prevent damage as defined in the Tree Protection Plan. | Pre-construction | Not significant |
| EC6 | To clearly communicate protection requirements and restrictions to all workers and contractors. | Tree protection signage must be attached to TPZs before works begin. Signs should be displayed prominently and repeated at 10m intervals or closer when | Pre-construction | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | | the fence changes direction. | | |
| EC7 | To protect any fauna and ensure the safe relocation of species prior to tree removal. | Inspect all trees for hollows and nests. If fauna is discovered, an ecologist may be required to remove and relocate any fauna if the tree or vegetation is to be removed. | Pre-construction | Not significant |
| EC8 | To raise awareness and ensure staff follow necessary ecological protection protocols. | Induction of all contractors and staff outlining the ecological sensitivity of the site, no-go areas, the need to minimise ecological impact, and all other required mitigation measures is to be undertaken. | Pre-construction | Not significant |
| EC9 | To repurpose habitat trees and maintain ecological value within the development area. | Explore the reuse of habitat tree logs in ecologically sensitive areas or fauna exhibits. | Construction | Not significant |
| EC10 | To minimise disturbance to the fauna foraging behaviour and maintain food resource availability. | Limit construction activities in areas identified as sensitive to fauna foraging, especially near trees observed to host roosting individuals. | Construction | Not significant |
| EC11 | To ensure tree protection and prevent damage to retained trees during construction. | No materials, mixing, parking, disposal, repairs, refuelling, fires, stockpiling, or backfilling is allowed near TPZs. | Construction | Not significant |
| EC12 | To provide a sustainable method of tree protection that complies with standards. | Use AS 4454 leaf mulch with 90% recycled content for tree protection fencing. Chip trees marked for removal and use mulch 100mm deep. Avoid soil, weeds, sticks, and stones. Comply with AS 4454 (1999) and AS 4419 (1998). | Construction | Not significant |
| EC13 | To ensure safe and qualified handling of tree works and compliance with | All tree works must be performed by qualified tree workers (minimum | Construction | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | legal standards. | AQF Level 2) under the supervision of the Consulting Arborist, adhering to the NSW Workcover Code of Practice for the Amenity Tree Industry (1998) | | |
| EC14 | To ensure the ongoing health and protection of trees throughout the construction process. | The Consulting Arborist will conduct regular site inspections to monitor the health and stability of retained trees, ensuring compliance with the TMP. Any signs of stress or damage will be promptly addressed with appropriate remedial actions. | Construction | Not significant |
| EC15 | To prevent damage to mature trees and their root systems during construction. | TPZs will be maintained around vegetation to be retained. TPZs will be maintained in accordance with Australian Standard 4970 (2009) Protection of Trees on Development Sites (AS-4970). No activities are to take place within the Structural Root Zones (SRZs) of mature trees. | Construction | Not significant |
| EC16 | To avoid damaging tree roots through excavation within the protection zones. | Trenching is not allowed in TPZs or tree protection fencing. Approval needed for trenching, must be done by hand with arborist supervision. | Construction | Not significant |

## 7.8 Tree Removal

An Arboricultural Impact Assessment (**AIA**) has been prepared by a qualified arborist and is included in **Appendix 28**. The AIA evaluate the proposed activity's impact on trees, assessing their condition and retention value. It outlines necessary tree protection measures and justifies tree removals, ensuring compliance with relevant environmental standards and minimising ecological disruption during construction.

### Assessment

The assessment identified the following tree retention values:

- 34 High (A) Retention Value trees
- 120 Medium (B) Retention Value trees
- 96 Low (C) Retention Value trees
- 49 (R) Remove trees in very poor or dead condition

Additionally, 16 trees were observed to contain habitat features such as stick nests, cracks, and hollows.

Of the 299 trees assessed, 285 trees are located within the site boundary, 13 trees are on the Guntawong Road verge, and one tree (Tree 353) is located on neighbouring residential land (194 Guntawong Road).

The proposal will require the removal of 267 trees, including 254 trees within the site boundary and 13 trees on the Guntawong Road verge. 32 trees within the site are designated for retention and will be protected throughout the construction process. A Tree Retention Plan is provided as an appendix to the AIA.

Mitigation measures to ensure their protection and viability during and after construction are provided below and include engaging a project arborist, installing tree protection fencing and signage, implementing sensitive construction techniques, restricting activities within TPZs, and conducting regular compliance inspections.

In addition, 159 new trees are proposed as per the landscape plan, incorporating species from the Cumberland Plain Woodland species assemblage found on the site.

### Mitigation Measures

The following mitigation measures are to be implemented to ensure tree protection.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| TR1 | To protect trees for retention from unnecessary damage. | All trees shown on all plans and listed in the data sheet as being retained must be retained and protected. | Pre-Construction and Construction | Not significant |
| TR2 | To protect trees for retention from unnecessary damage. | Protect all trees for retention with Tree Protection fencing compliant with AS4970:2009 | Pre-Construction | Not significant |
| TR3 | To protect trees for retention from unnecessary damage. | Protect all trees for retention with Tree Protection signage compliant with AS4970:2009 | Pre-Construction | Not significant |
| TR4 | To protect trees for retention from unnecessary damage. | An official “Project Arborist” must be commissioned to oversee the tree protection, any activity within the TPZ’s | Construction | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | | and complete compliance certification. | | |
| T R5 | To protect trees for retention from unnecessary damage. | An ecologist must supervise any works to trees with habitat features. | Construction | Not significant |
| T R6 | To protect trees for retention from unnecessary damage. | Project Arborist to supervise any earthwork or service installation the TPZ's of trees to be retained. | Construction | Not significant |
| T R7 | To protect trees for retention from unnecessary damage. | Construction Manager to ensure activities listed in Section 11.7 of the AIA do not occur in the TPZ of trees to be retained. | Construction | Not significant |
| T R8 | To protect trees for retention from unnecessary damage. | The Project Arborist is to complete monthly site visits and record photographic evidence to ensure compliance with mitigation measures | Construction | Not significant |
| T R9 | To reduce the impact of 267 removed trees and introduce a new tree population for the future. | 159 New trees to be planted in the site as per the Landscape Plans by Site Image, Issue 3, dated 20/01/2025. | Pre-operation | Not significant |
| T R10 | To ensure trees for retention were protected and will remain viable post construction. | Project Arborist to inspect and report on the condition of trees for retention and quality of tree new plantings. | Within 12 months of commencement of operations | Not significant |

## 7.9 Visual Amenity

Considering the site's interface with nearby residential properties, the proposed activity has been designed to minimise its visual appearance and limit the opportunity for privacy impacts; on adjoining properties and site occupants.

### Visual Impact

The proposal demonstrates a well-thought-out approach to minimising visual impact, effectively balancing integration with the surrounding urban and natural landscapes. The design leverages setbacks, massing, and landscaping to reduce the perceived bulk of the development while preserving key natural views and enhancing the area's overall visual character.

The proposed 3-storey buildings are thoughtfully positioned along the streetscape with setbacks that ensure visual harmony with nearby residential areas. Articulated facades, neutral colours, and extensive landscaping work together to reduce the visual scale of the three-story structures. These

design choices soften the building's impact and create a cohesive relationship with the surrounding context.

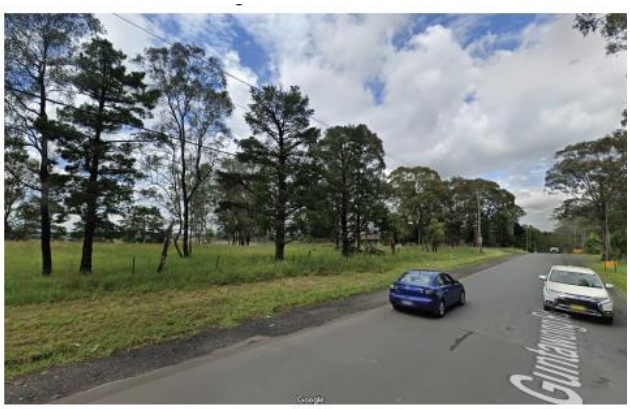
As depicted in **Figure 39,** the school hall features a generous front setback that not only enhances the aesthetic appeal but also provides unobstructed views of the First Ponds Creek Reserve. This open frontage emphasises the connection to the natural environment, fostering a sense of openness and community engagement.

The positioning of the buildings below the level of Nirmal Street further mitigates the height and bulk impact on the streetscape. The inclusion of an entry forecourt and a central courtyard increases the setback from Guntawong Road and future residential developments, reducing the visual prominence of the proposed structures and creating an inviting campus atmosphere.

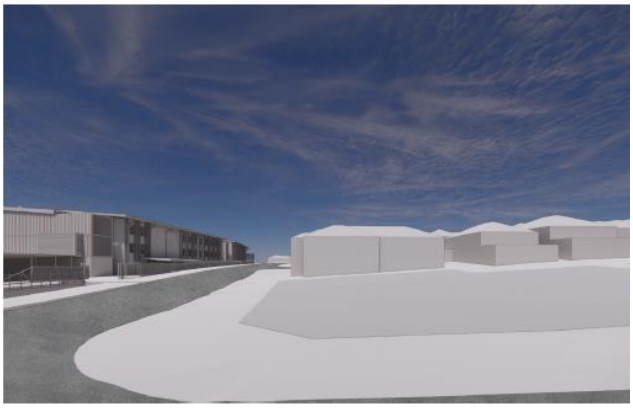
The design prioritises the preservation of views towards the First Ponds Creek Reserve, with generous setbacks and native landscaping enhancing these vistas. The retention of mature trees, along with significant additional native plantings along the site's edges and within its grounds, will ensure a smooth visual transition from the urban streetscape to the adjacent natural environment. These measures will not only soften the overall visual impact but also enrich the site's ecological and aesthetic value.

By distributing the teaching spaces and the school hall across four separate buildings, the design minimises the perception of bulk and allows for better integration with the surrounding built environment. The stepped design follows the natural topography, further reducing the development's visual prominence.

**Figure 39 Visual Impact**



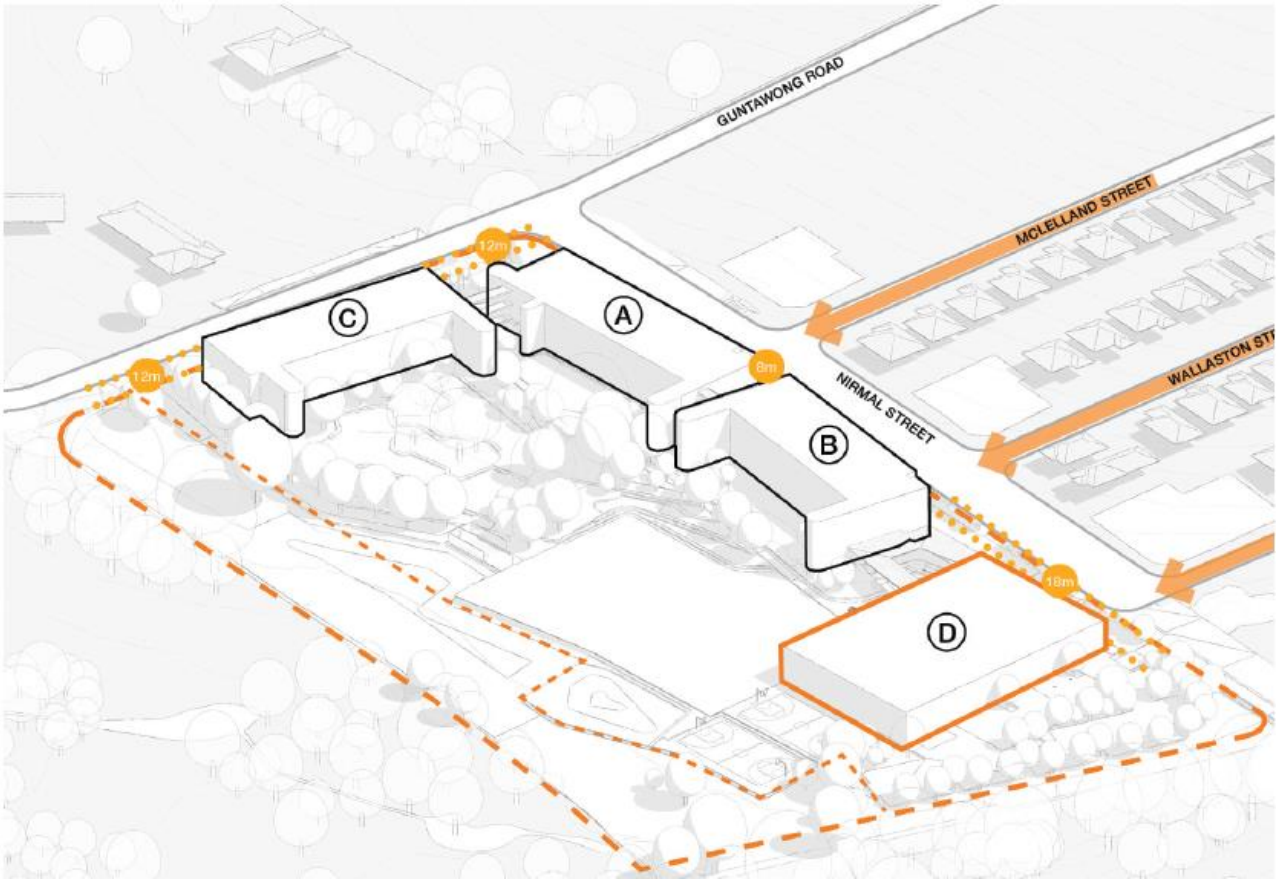

*Picture 22 View A from Guntawong Road*

*Picture 23 View B from Nirmal Street*

*Source: DJRD Architects, 2024*

**Figure 40 Urban and Built Form**




*Source: DJRD Architects, 2024*

### Privacy and Overlooking

The design effectively addresses privacy and overlooking concerns through careful site planning, building orientation, and landscaping. Generous setbacks from neighbouring properties and streets reduce the potential for overlooking while maintaining privacy for both the school and adjacent residential areas. Buildings are oriented to focus views inward, toward internal courtyards, play areas, and the First Ponds Creek Reserve, rather than toward neighbouring properties.

The inclusion of trees and native plantings along the boundaries provides natural screening, enhancing privacy and softening the transition between the school and its surroundings. Additionally, the articulated facades and strategic window placements limit sightlines into nearby properties, balancing natural light and ventilation with privacy considerations. These measures ensure the development integrates harmoniously with the surrounding environment while respecting the privacy of its neighbours.

### Overshadowing

The proposal has been designed to minimise overshadowing impacts. The placement and orientation of the three-story buildings, combined with generous setbacks, ensure that shadows primarily fall within the site boundaries. Shadow diagrams provided at **Figure 41**, indicate that neighbouring properties retain access to natural sunlight, with no significant overshadowing of residential areas or public spaces.

Within the school site, key outdoor areas such as play spaces, sports courts, and assembly zones are positioned to maximise sunlight during key times of usage. The design ensures that these

spaces remain functional and comfortable throughout the day, fostering a positive environment for learning and recreation. By carefully considering building massing, height, and orientation, the proposal effectively balances the needs of the school with the preservation of sunlight access for both the site and its surrounding context.

**Figure 41 Shadow Diagrams – Mid Winter**

*Picture 24 9am*

*Picture 25 12pm*

*Picture 26 3pm*

*Source: DJRD Architects, 2024*

## 7.10 Security and CPTED

The school's main entry and forecourt will feature a welcoming, landscaped area designed to enhance the school's connection with the public domain and establish a civic presence. Beyond this entry area, the school site will be secured by a 2.1m high perimeter palisade fence with access-controlled gates to ensure safety and controlled entry.

The primary entrance to the school is located at the intersection of Nirmal Street and Guntawong Road, conveniently positioned near the pedestrian crossing. This entry point is highly secure, incorporating a video intercom system linked to the administration for controlled access.

Additional entrances from surrounding roads will operate during peak arrival and departure times but remain closed during school hours. After-hours access is provided through a secondary entrance situated near the hall and staff car park.

The school features multiple access points, each designed with clear sightlines and enhanced with safe lighting to ensure security and accessibility. The design also incorporates Crime Prevention Through Environmental Design (**CPTED**) principles, including:

- The entry forecourt offers unobstructed sightlines from both Nirmal Street and Guntawong Road.
- The new reception is strategically positioned with clear sightlines to the main entry, enabling effective passive surveillance.
- Pathways and entry points are equipped with safe lighting, with increased illumination at the main and after-hours entrances.
- Circulation routes are streamlined, featuring wide, open corridors that connect directly to vertical circulation nodes or external staircases.
- The use of constrained, dead-end corridors is minimised to improve movement and safety.

- Student amenities are designed to maintain passive surveillance, ensuring safe use for individuals of different age groups and genders.
- All staircases are external, providing clear supervision of stairwells. These stairs serve dual purposes, accommodating both egress and general circulation.

## 7.11 Social Impact

A Social Impact Assessment (**SIA**) has been prepared by a community planning consultant and is provided in **Appendix 23**. The assessment evaluates the potential positive and negative social impacts of the proposed activity.

Social impacts are considered before and after implementation of mitigation measures, which are to be incorporated in the planning, construction, and operation of the project.

The assessment is informed by a review of the relevant State and local planning policies, and an assessment of the community profile including age structure, population change, median income, cultural diversity, household composition and tenure type.

### Assessment

The social impacts associated with the proposed activity are summarised as follows:

- A very high (positive) impact due to the improved access to secondary education for future students and their families.
- A high (positive) impact through the provision of new community infrastructure which can be used by the surrounding community.
- A high (positive) impact due to education and knowledge sharing through Connection to Country programs and landscape design which has the potential to improve students understandings of the locality through an Aboriginal cultural lens.
- A high (positive) impact through the development of education infrastructure which prioritises active and public transport use. This will have the impact of improving the health and wellbeing of students whilst reducing private vehicle dependency and vehicular traffic.
- A high (negative) impact associated with disruption to the locality during the construction of the new high school. This may be causes by increase construction traffic, noise, dust, odour and vibration.
- A high (negative) impact through increasing demand on the road network throughout the locality during school drop-off and pick-up periods.

### Mitigation Measures

The following mitigation measures are to be implemented to address potential negative social impacts.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| SI1 | To cater for the provision of additional facilities when required. | The use of the Expandable School Model plans for the growth of a school based on projected figures and enrolments. | Throughout life of the project | Not significant |
| SI2 | To promote understanding of First Nations culture | Include an Acknowledgement of Country within the design in prominent position. | Detailed Design | Not significant |
| SI3 | To effectively communicate and engage with the surrounding community to minimise disruption during construction works. | Prepare a Construction and Environmental Management Plan (**CEMP**). | Pre-construction | Not significant |
| SI4 | To manage and mitigate noise and vibration impacts. | Prepare a Construction Noise and Vibration Management Plan (**CNVMP**). | Pre-construction | Not significant |
| SI5 | To foster community use of the proposed school grounds and foster community cohesion. | Promote the availability of shared-use and the SINSW Share my school program. | Operation | Not significant |
| SI6 | To promote understanding of First Nations culture | Promote regular education and knowledge sharing programs in partnership with the Darug people (e.g., working with the Darug Custodian Aboriginal Corporation). | Operation | Not significant |
| SI7 | To encourage the use of public and active transport. | Implementation of School Travel Plan (**STP**), to encourage walking, cycling and the use of public transport. | Operation | Not significant |
| SI8 | To reduce the risk of bushfire to people on site during a bushfire event. | Prepare a Bushfire Emergency Management and Evacuation Plan. | Pre-operation | Not significant |
| SI9 | To reduce the risk of flooding to people on site during a flood event. | Prepare a detailed Flood Emergency Response Plan (**FERP**). | Pre-operation | Not significant |

## 7.12 Bushfire

A Bushfire Assessment Report (**BAR**) has been prepared by a bushfire consultant and is included at **Appendix 6**. As shown in **Figure 42**, the site and adjoining land is not classified as bushfire-prone land (**BPL**). Notwithstanding, the bushfire assessment has been prepared as a precautionary measure to assess and manage potential bushfire risks because land to the north, south and west have yet to be developed in accordance with the ILP and includes vegetation that may be a bushfire hazard. This is in recognition of the proposed activity being a Special Fire Protection Purpose (**SFPP**) facility, which includes schools, and involves vulnerable occupants who may be at greater risk during a bushfire event. A summary of the assessment is provided below.

### Vegetation Assessment

The landscape risk assessment conducted for the site confirmed that the vegetation within and surrounding the site has been extensively cleared. Within the site, the mid-story vegetation has been removed, and trees have been thinned for prior agricultural practices. The ground story vegetation is regularly slashed and predominantly consists of grass with some shrubs. As a result of these vegetation management practices, the bushfire risk within and surrounding the site is negligible. The vegetation on site will be managed as an APZ.

### Slope Assessment

The *Rural Fires Regulation 2022* requires an assessment of the slope of the land and surrounding properties within 100m of the site. The slopes surrounding the site are between 4.0- and 2.8-degrees downslope, which is within the 5.0-degree category prescribed by the PBP 2019 guidelines. Therefore, the slope assessment confirmed that the slope of the site and surrounding areas will not generate bushfire risk for the site or proposed activity.

### Asset Protection Zones

APZs are required to the north, south and west of the site as a result of the proposed activity being classified as a SFPP. Using the above vegetation and slope assessment, the bushfire consultant has recommended the following APZ distances:

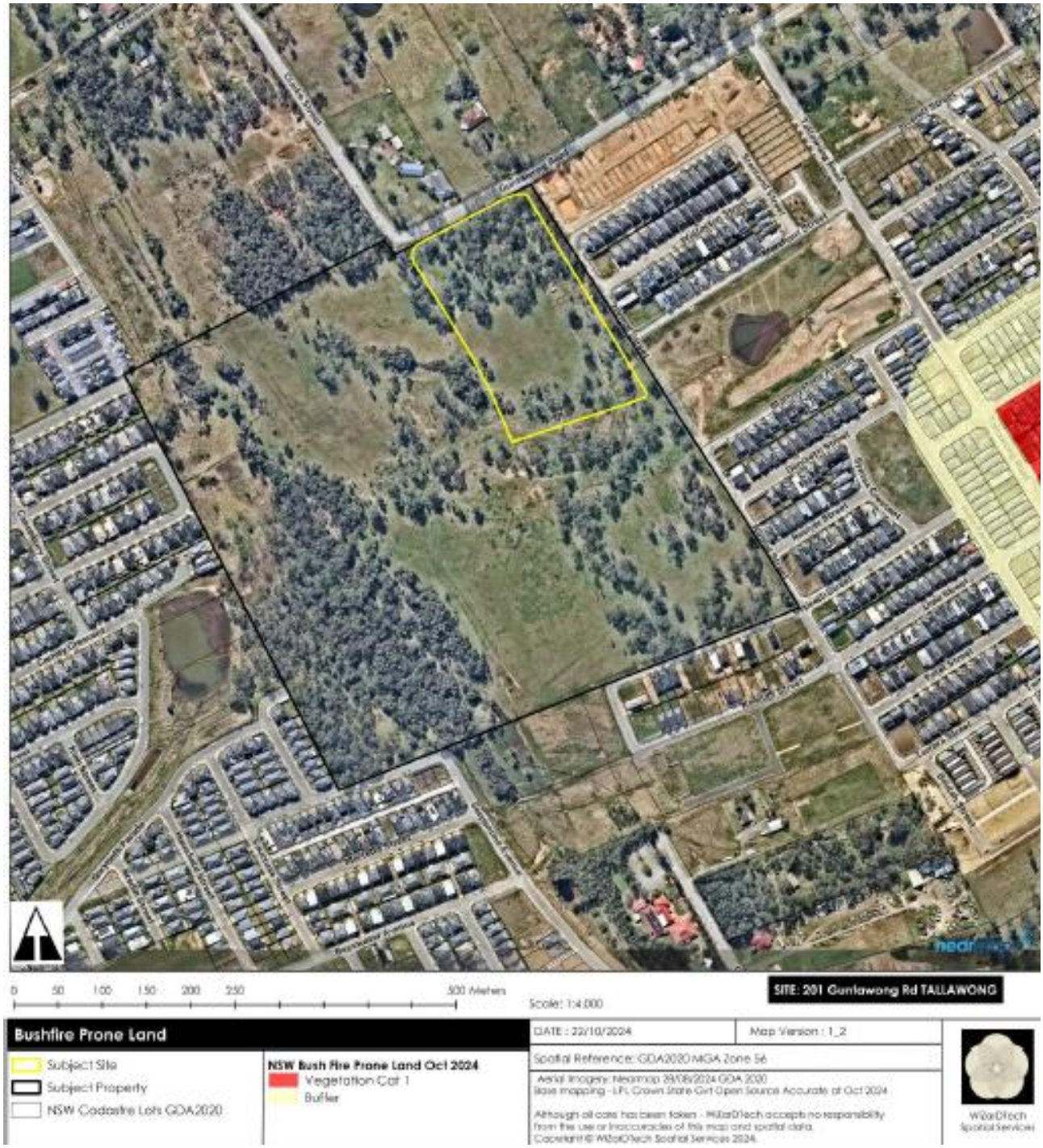
- North: 36m
- East: Not required
- South: 50m
- West: 50m.

**Figure 43** displays these APZ distances overlayed with the proposed site plan.

Small areas of APZ extent into adjoining land to the west and south. The department have advised the bushfire consultant that the APZ easement agreement is already in progress with OSL and is a temporary measure until the area is developed.

The 100m APZ removes bushfire considerations as land that is greater than 100m from Category 1 vegetation or 50m from Category 2 and Category 3 Bushfire Prone Land is low hazard and no bushfire specifications or requirements apply to the buildings. As the proposed activity is not being carried out on designated BPL, the activity is not subject to Specification 43 or *Planning for Bushfire Protection 2019.*

## Figure 42 Bushfire Prone Land Map




*Source: BlackAsh Consulting, 2024*

**Figure 43 APZ from site boundary to be exempt from Specification 43**


*Source: BlackAsh Consulting, 2024*

### Mitigation Measures

The following mitigation measures are to be implemented to address potential bushfire impacts.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| BF1 | Afford buildings and their occupants protection from exposure to a bushfire. Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings. | The identified APZs are to be established and maintained in perpetuity or until surrounding land is developed to specifications detailed in Appendix 2 of the BAR. | Throughout the life of the project | Not significant |
| BF2 | The proposed building can withstand bushfire attack in the form of wind, embers, radiant heat and flame contact. | The department is to ensure that the buildings are designed and constructed to the relevant NCC requirements including BAL-19 in accordance with AS 3959-2018 additional ember provisions detailed in Section 7.5 of PBP 2019. | Pre-operation | Not significant |
| BF3 | Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings. | Landscaping is to be designed and managed in accordance with Appendix 4 of PBP 2019. | Throughout the life of the project | Not significant |
| BF4 | To ensure that appropriate operational access and egress for emergency service personnel and occupants is available. | The performance solution outlined in Table 9 of the BAR is to address the PBP requirements. | Pre-operation | Not significant |
| BF5 | To ensure that utility services are adequate to meet the needs of firefighters. | Fire hydrants are to be provided in accordance with AS2419:2021 | Pre-operation | Not significant |
| BF6 | To ensure that utility services are adequate to meet the needs of firefighters. | Gas services are to be installed and maintained in accordance with AS/NZS 1596:2014 | Pre-operation | Not significant |
| BF7 | To ensure emergency evacuation procedures and management which provides for the special characteristics and needs of occupants. | A Bushfire Emergency Management and Evacuation Plan is to be prepared in accordance with the NSW Rural Fire Service document ‘A Guide to Developing a Bushfire Emergency | Pre-operation | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| | | Management and Evacuation Plan'. | | |

## 7.13 Soils and Geology

A Geotechnical Assessment has been prepared by an environmental consultant (refer **Appendix 15**) to provide an assessment of the existing subsurface ground conditions and other geological conditions at the site and also assess the potential impacts on surface and groundwater resources as a result of the proposed activity.

### Methodology

The Geotechnical Assessment builds upon the previous geotechnical investigations undertaken in 2022 by PSM Consulting. When combined, the 2022 and 2024 fieldwork investigated the following:

- 10 boreholes drilled to depths between 0.7m and 11.1m below existing ground level. The boreholes were drilled using a rotary auger drill until practical refusal.
- Installation of piezometers in three boreholes: BH06, BH08 and BH09.
- Excavation of 15 test pits to depths between 0.65m and 3.0m using a 5-tonne excavator.
- Dynamic Cone Penetrometer testings at the majority of the borehole and test pit locations.

The soil samples collected during the investigations were sent to geotechnical laboratories for relevant testing. Further, the geotechnical assessment conducted a desktop analysis of the prevailing geological setting, as well as an assessment of the surface conditions during the investigative works.

### Assessment

The key findings and recommendations of the Geotechnical Assessment is summarised below:

- All soil samples on the site were non-saline. Based on the results obtained from the site assessment, it is anticipated that the site area does not contain saline soils. Therefore, further assessment or mitigation measures for salinity management are not required to accommodate the proposed activity.
- Existing fill as uncontrolled fill was observed to be highly localised and variable across the site with maximum depth of 2.0m. The existing fill will need to be addressed as part of the subgrade preparation works.
- The natural clay is observed to have poor trafficability during and following periods of wet weather. Track mounted plant would be expected to be able to traffic the site under most conditions. Should large pilling rigs be proposed, these would need specific assessment depending on the plant type, track geometries and required bearing capacities. It is possible that in some areas, a working platform may be required to provide consistent all weather accessible surface. For initial planning and estimating purposes a working platform comprising 100mm to 300mm of Sandstone fill should be allowed for.

- Excavation of the topsoil, existing fill, natural soil and bedrock units should be achievable using conventional earth moving equipment with some rock breaking using rippers or impact hammers possibly required in the bedrock unit.
- Groundwater seepage is likely to occur through joints/defects in the bedrock during excavation. Further, inflow may occur through the soil units in transient conditions. Based on our experience with projects in a similar geological environment such seepage should be able to be controllable during construction by conventional sump and pump systems.

Based on this assessment and the geotechnical conditions encountered during the site investigation, there are not considered to be any significant or unusual geotechnical concerns that would preclude the construction of the proposed activity.

### Mitigation Measures

The following mitigation measures are to be implemented to address potential soil impacts.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| SG1 | To reduce uncertainties during site preparation and construction risk. | Site preparation and associated earthworks works shall be undertaken in accordance with PSM DRAFT Earthwork Specification PSM4693-013S. | Construction | Not significant |
| SG2 | To reduce geotechnical uncertainty and construction risk. | Treatment of existing fill shall be undertaken in accordance with the PSM DRAFT Earthwork Specification PSM4693-013S. | Construction | Not significant |
| SG3 | To identify and remove hazardous materials to eliminate the risk of exposure to workers and the surrounding environment. | Demolition works should be undertaken by licenced contractors with appropriate asbestos removal accreditation. If the building is demolished a site clearance certificate must be provided on completion of the works. | Construction | Not significant |
| SG4 | To ensure compliance with environmental regulations set by the NSW EPA and to contribute to sustainable land and construction uses. This also prevents environmental harm by ensuring the soils are free from contaminants. | Material exported off site should be assessed in accordance with EPA guidelines for Excavated Natural Material (**ENM**) and Virgin Excavated Natural Material (**VENM**). | Construction | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| SG5 | To control groundwater inflow and assess the impact of groundwater resources | Continued monitoring of the groundwater is required in the piezometers to confirm design groundwater levels and inform long term inflows should a drained basement be adopted. | Construction and operation | Not significant |

## 7.14 Waste Generation

### Operational Waste

An Operational Waste Management Plan (**OWMP**) has been prepared by a waste consultant (refer **Appendix 19**) to promote responsible source separation, ensure adequate waste provisions and robust procedures, and to outline compliance with all relevant regulatory requirements during the operational phase of the school.

The estimated total waste generated by the school during operations is outlined in **Table 25** below.

**Table 25: Operational Waste Generation Rates**

| Waste Stream | Litres / Week |
|---|---|
| General Waste | 40,000 |
| Recycling | 30,000 |

Based on the expected generation and collection frequency, the number of bins required are outlined in **Table 26**.

**Table 26: Required Bins**

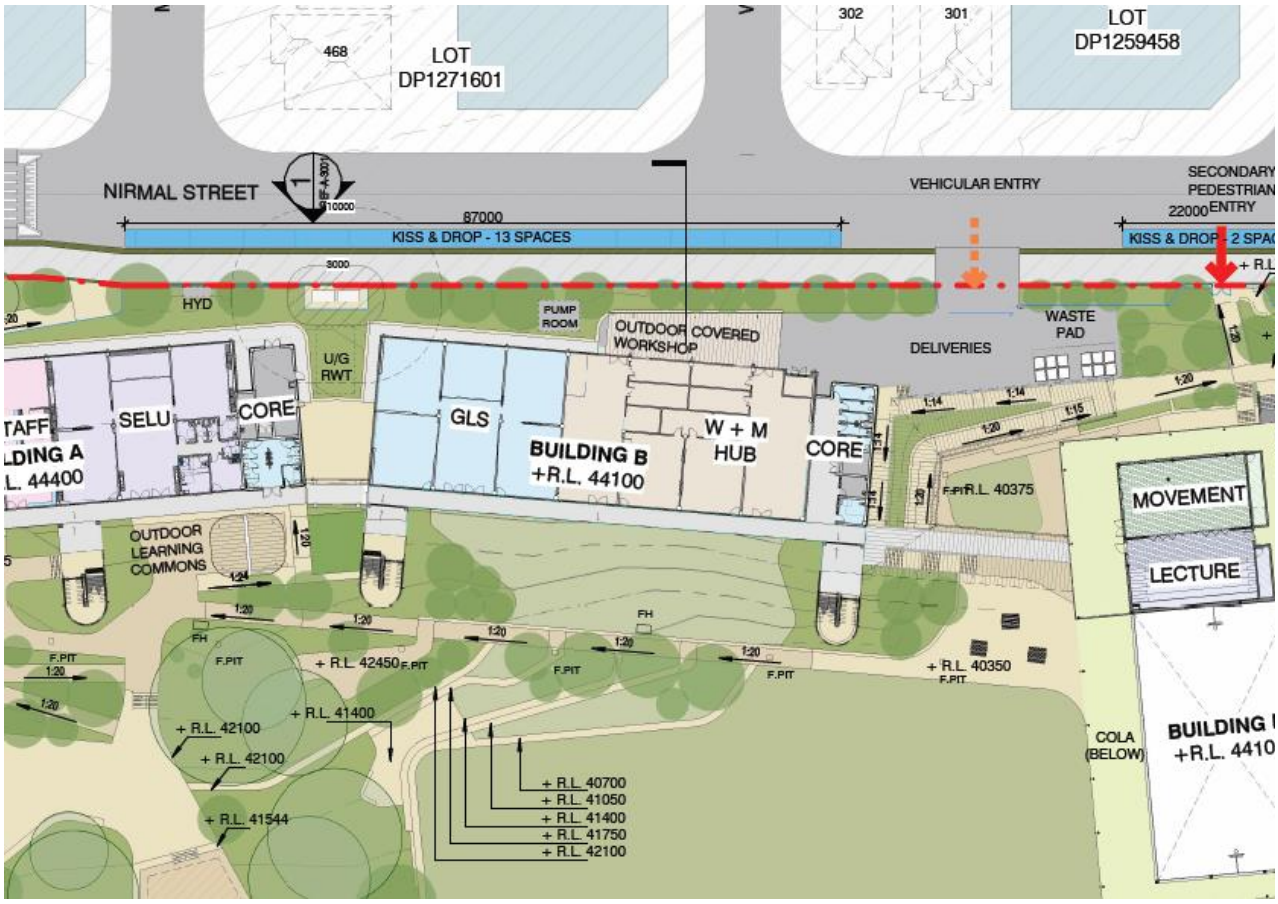
| Waste Stream | Bins Required |
|---|---|
| General Waste | 10 x 1100L |
| Recycling | 10 x 1100L |

The OWMP confirms that the proposed waste storage areas and bin capacity are of sufficient size and type to accommodate the estimates waste generated by the proposed activity. Waste is proposed to be collected by a private contractor on Nirmal Street with the specified locations and the nominated path of access for users and collection vehicles. The storage area for waste is identified in **Figure 44**.

Bulky and problem waste, such as e-Waste, will be stored in a shared location. This waste will be collected by private waste contractor as necessary to maintain the availability of the storage space.

Ultimately, the proposed operational waste management procedures and allocated space will ensure the suitable disposal of waste generated by the proposed activity.

**Figure 44 Proposed Waste Bin Area**




*Source: Elephants Foot Consulting, 2024*

## Construction Waste

A Construction and Demolition Waste Management Plan (**CDWMP**) has been prepared by a waste consultant (refer **Appendix 20**) to encourage responsible waste separation, establish sufficient waste management provisions and procedures, and ensure compliance with all applicable regulatory requirements during the construction phase of the school.

The estimated total construction waste volumes are outlined in **Table 27** and **Table 27.**

**Table 27 Demolition Waste Volumes**

| Type of Material | Tonnes | Approximate Percentage Recovered | Proposed Management |
|---|---|---|---|
| Excavation Material | 3132 | 99.8% | Reuse on site, recycle and landfill |
| Green Waste | 4256 | 80% | Reuse on site, recycle and landfill |

**Table 28 Construction Waste Volumes**

| Type of Material | Tonnes | Approximate Percentage Recovered | Proposed Management |
|---|---|---|---|
| Bricks | 2.7 | 100% | Reuse on site and recycle. |
| Tiles | 0.5 | 100% | Recycle |
| Concrete | 429.5 | 100% | Reuse on site and recycle. |
| Timber | 0.8 | 33% | Recycle and landfill |
| Plasterboard | 1.9 | 50% | Recycle and landfill |
| Metals | 12.5 | 100% | Recycle |
| **Total** | 447.9 tonnes | | |

The frequency of waste removal from site will be determined by the volume of materials deposited into the dedicated skip bins. Skip bins will be monitored on a daily basis by the Site Manager to ensure they do not overflow. All waste collection for construction works will be conducted between approved hours as per Council requirements (typically between 7am and 6pm Monday to Friday, and between 8am and 1pm on Saturdays). All waste generated on site will be transported to an approved and appropriately licensed resource recovery facility and/or landfill site.

### Mitigation Measures

The following mitigation measures are to be implemented to address potential waste impacts.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| W1 | Reducing waste at the source minimises the volume of waste generated. | Encourage practices that reduce waste generation at the source, such as using fewer materials or opting for less packaging. | Construction and operation | Not significant |
| W2 | Recycling conserves natural resources, reduces energy consumption, and lowers greenhouse gas emissions, helping to create a circular economy. | Implement recycling programs to recover valuable materials from waste. | Construction and operation | Not significant |
| W3 | Increasing public awareness leads to better waste sorting, reduces contamination in recycling streams. | Conduct campaigns to inform the community about proper waste disposal and the benefits of reducing waste. | Construction and operation | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| W4 | Effective waste management minimises environmental contamination. | Ensure proper management and disposal of all waste streams. | Construction and operation | Not significant |
| W5 | Monitoring provides insights into waste generation patterns, helping identify areas for improvement and ensuring compliance with regulations. | Implement data collection and reporting systems for waste management activities. | Construction and operation | Not significant |
| W6 | Compliance with regulations ensures that waste management practices are environmentally responsible. | Regularly review and update waste management plans to comply with environmental regulations. | Construction and operation | Not significant |

## 7.15 Construction Impacts

A preliminary Construction & Environmental Management Plan (**CEMP**) has been developed by the project managers (TSA Management) and is provided at **Appendix 10**. The CEMP serves as a critical document to guide the construction phase of the project, ensuring that environmental, safety, and community impacts are effectively managed,

### Assessment

A summary of the potential impacts during the construction phase of the project is provided below:

- **Noise and Vibration**: Noise from machinery, vehicles, and construction activities may disturb nearby residents and sensitive areas, particularly during peak activity periods. Vibration caused by excavation and heavy equipment could impact adjacent properties if not carefully managed.
- **Air Quality and Dust**: Dust generated from excavation, material handling, and vehicular movement on unsealed surfaces could degrade air quality. Diesel emissions from machinery and vehicles may also contribute to temporary air pollution.
- **Traffic and Access**: Increased construction traffic, including heavy vehicles, could lead to congestion and disruptions on local roads. Construction vehicle movements may also pose safety concerns for pedestrians in the vicinity.
- **Waste Generation**: The demolition of existing features and construction activities will generate significant waste, including recyclable materials and hazardous substances, requiring responsible management and disposal.
- **Erosion and Sedimentation**: Earthworks and excavation activities could result in sediment runoff, potentially contaminating local waterways and stormwater systems if not adequately controlled.

- **Visual and Aesthetic Impact**: Temporary changes to the site's appearance, such as hoardings, stockpiles, and heavy equipment, could detract from the visual amenity of the area.
- **Community Disruption**: Construction activities may lead to temporary inconveniences for nearby residents, including noise, dust, and restricted access.

### Mitigation Measures

The following mitigation measures are to be implemented to address potential construction impacts.

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| CI1 | To prevent access of authorised personnel on site, protect public safety and ensure only authorised personnel are on site, reducing the risk of accidents or exposure to hazardous conditions. | Construction site fencing is to be installed around the construction site. Construction vehicle and pedestrian access points to the construction site are to be clearly designated, signposted and controlled for authorised access only. | Pre-construction | Not significant |
| CI2 | To ensure safe storage, handling and use of hazardous materials and dangerous goods and to ensure compliance with relevant regulatory requirements. | The use and storage of hazardous materials and dangerous goods, including petroleum, distillate and other chemicals, shall be in accordance with the relevant legislation. | Construction | Not significant |
| CI3 | To ensure compliance with relevant regulation to ensure prevention of contamination of the surrounding environment including pollution of drains or watercourses. | All materials must be wholly contained within the construction site. The requirements of the Protection of the Environment Operations Act 1997 are to be complied with when placing and stockpiling construction and waste materials, when disposing of waste products and during any other works likely to pollute drains or watercourses. | Construction | Not significant |

| # | Reason for mitigation measure | Mitigation measure | Timing | Significance after mitigation |
|---|---|---|---|---|
| CI4 | To prevent environmental impacts as a result of construction activities. | Building operations such as brick cutting, mixing mortar and the washing of tools, paint brushes, form-work and concrete trucks shall be undertaken in the construction site in a location so as to prevent air, land or water pollution. | Construction | Not significant |
| CI5 | To prevent access and subsequent vandalism of machinery and equipment by authorised personnel on site. | All equipment and machinery shall be secured to prevent against vandalism outside of construction hours. | Construction | Not significant |
| CI6 | To ensure the safety and wellbeing of all site personnel and prevent environmental pollution and contamination as a result of the hazardous materials. | A spill containment kit will be available at all times. All personnel will be made aware of the location of the kit and trained in its effective deployment. | Construction | Not significant |
| CI7 | To ensure regulatory compliance and transparency | A copy of the approved and certified plans, specifications and technical documentation shall be kept on site at all times and shall be available for perusal by any authorised regulatory authority. | Throughout the life of the project | Not significant |
| CI8 | To ensure regulatory compliance and prevent legal disputes | All contractors must meet all workplace safety legislation and requirements. | Construction | Not significant |
| CI9 | To ensure the work site is clean and safe, preventing pollution and deterring vermin. | The work site is to be left tidy and rubbish free each day prior to leaving the site and at the completion of works. | Construction | Not significant |
| CI10 | To prevent disruption to the surrounding residence. | All construction lighting shall not cause a nuisance to adjoining neighbours. | Construction | Not significant |

## 7.16 Site Services

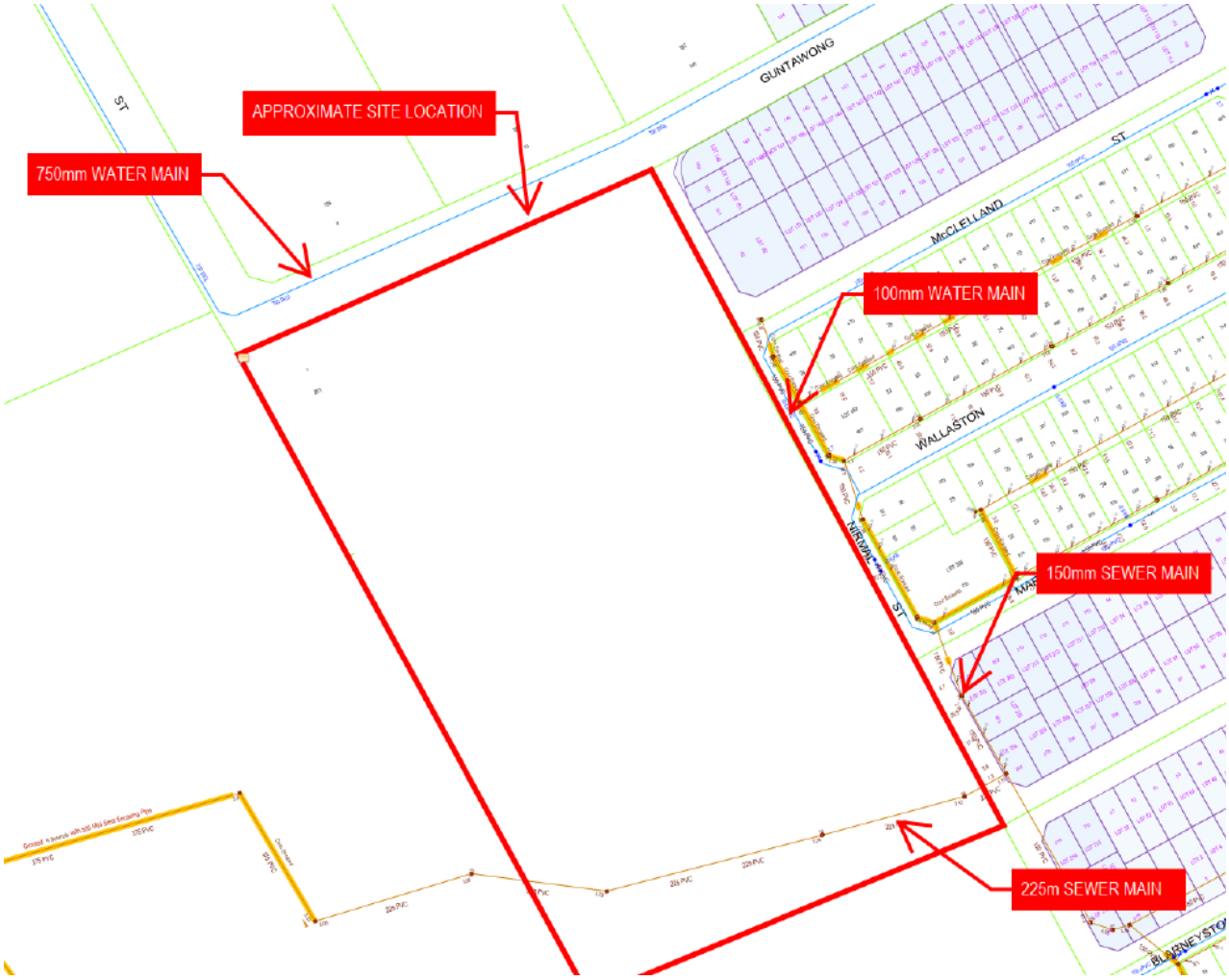
### Water and Hydraulic Services

A Hydraulic Services Utility Report has been prepared by a hydraulic services consultant (refer **Appendix 16**) which identifies the existing utility mains that surround the site and proposed servicing strategies as well as preliminary load assessments based on the proposed activity.

The anticipated hydraulic services demand was sourced from the Sydney Water 'Average Daily Water Use by Property Type". It is expected that 20kL of water will be required to service the proposed activity daily. Based on an assessment of the NSW Water Directorate for sewer discharges rates, it is expected that 12kL of sewer water will be discharged daily from the proposed activity.

The site has access to multiple Sydney Water owned utility mains as identified in **Figure 45**. There has been no formal correspondence with Sydney Water regarding the capacity of their water assets at the time of writing this REF. An accredited Water Services Coordinator is required to carry out the liaison and with Sydney Water and lodge any Section 73 applications.

**Figure 45 Existing Sydney Water mains**




*Source: WSce Engineering, 2024*

It is proposed to connect to the 100mm diameter water main asset in Nirmal Street. It has been identified that this main is sufficient to supply the proposed activity from a hydraulic and fire services perspective, although it is to be confirmed through the Sydney Water Section 73 process.

It is proposed to connect to the 225mm diameter sewer main asset that reticulates through the site, due to the natural landform of the site. It has been identified that this main is sufficient to supply the proposed activity from a sewerage perspective, although it is to be confirmed through the Sydney Water Section 73 process.

To ensure the successful connection with necessary hydraulic services, WSce recommends the following:

- Coordinate the water services connection with Sydney Water to ensure it can be constructed in a risk-free manner and also that the proposed activity does not negatively impact their system.
- Coordinate the sewer services connection with Sydney Water to ensure it can be constructed in a risk-free manner and also that the proposed activity does not negatively impact their system.

### Electrical and Telecommunications Services

An Electrical and Telecommunications Utility Infrastructure Assessment has been prepared by a electrical services consultant (refer **Appendix 12**) to identify the availability of electrical and telecommunications infrastructure to service the site.

Steensen Varming have completed a desktop study of incoming power supply options for the proposed activity and have submitted an application for connection to Endeavour Energy. Endeavour Energy have not indicated that there would be difficulty in providing the required power provisions to the proposed activity. The proposed activity will be provided with a 1500kVA kiosk transformer to satisfy the anticipated maximum demand.

A desktop study for the telecommunications access of the site has been completed by Telstra which has confirmed that the site has existing NBN access. The study has also confirmed the necessary requirements to service the proposed activity which are outlined in **Appendix B** of the Electrical and Telecommunications Utility Infrastructure Assessment.

## 7.17 Cumulative Impact

As described in **Section 2.7,** there are several projects recently approved and within 500 metres of the site. However, this is expected given the level of change occurring within the locality. Therefore, the cumulative impact from the proposed activity and the following nearby known and relevant future projects (approved and to be constructed) have been considered in this REF:

- 140 Guntawong Road, Rouse Hill – Approved residential flat building comprising 88 dwellings – (DA-18-02215)
- 150 Guntawong Road, Rouse Hill – Approved residential flat building comprising 100 dwellings – (DA-19-01136)
- 194 Guntawong Road, Rouse Hill – Subdivision to create 80 residential lots and 1 super lot – (DA-22-00916)

- 151-161 Tallawong Road, Rouse Hill – Subdivision into 116 residential lots over 2 stages – (DA-23-00128)

Not every matter has a cumulative impact. Therefore, the cumulative impact has been assessed for the following key matters:

- Traffic (construction and operational)
- Construction noise

### Cumulative Traffic Assessment

**Operational Impacts**

The TAIA has assessed the traffic impacts of the proposed activity during the fully developed scenario of the locality and confirmed that the traffic impacts generated by the proposed activity would be negligible.

**Construction Impacts**

The simultaneous construction of the proposed activity and nearby development will increase the volume and frequency of HRVs and LRVs on the local and regional road network. SCT Consulting have reviewed the construction traffic management approaches of surrounding developments to assess the likely number of truck movements. However, the preliminary CTMP confirms that the construction of the proposed activity is not likely to coincide with any other significant construction activities in the locality. The final CTMP should be updated to ensure that this remains the case at the time of construction.

### Cumulative Construction Noise Assessment

The Noise and Vibration Impact Assessment has assessed the cumulative impacts of construction noise in the locality. The assessment confirmed that there is likely to be some cumulative construction noise during the construction of the proposed activity, and a CNVMP must be prepared and include the following:

- Coordination with timing of construction works on adjacent sites where cumulative impact needs to be considered. and managed against Noise Management Levels / vibration limits.
- Predictions of noise impact from concurrent works.
- Coordination with other construction work sites (if identified) and respite periods.
- Coordination of traffic routes to minimise impact.
- Coordination of community consultation.

Overall, however the cumulative construction noise is not expected to generate any significant environmental impacts.

## 7.18 Consideration of Environmental Factors

Section 171(1) of the EP&A Regulation notes that when considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the guidelines that apply to the activity.

The assessment provided in the sections above has been prepared to provide a detailed consideration of the factors that must be taken into account for an assessment under Division 5.1

of the EP&A Act. These factors are summarised at **Table 29** and where mitigation measures have been proposed in response to the factor, these have been identified.

Section 171A of the EP&A Regulation sets out additional matters to take into account when considering the likely impact of an activity on the environment in a regulated catchment.

The site is located within the Hawkesbury - Nepean Catchment and the s171A matters are summarised at **Table 30**. Where mitigation measures have been proposed in response to the factor, these have been identified.

**Table 29: Environmental Factors considered**

| Environmental Factor | Consideration | Mitigation Measure Reference |
|---|---|---|
| Any environmental impact on a community? | The proposed activity involves the construction of a new educational facility, thoughtfully designed to balance functionality with environmental and community considerations. The building footprints are proportionate to the overall site area and consistent with the scale of development envisioned for the location. By positioning the outdoor play spaces centrally within the site, the design minimises potential noise impacts on neighbouring properties, ensuring that operational activities are managed without disruption to the surrounding community.<br>The façade design has been carefully developed to address privacy concerns, with reduced glazing on the eastern frontages and appropriate setback distances to prevent overlooking and maintain the privacy of nearby residents. This attention to detail ensures that the school integrates seamlessly into its surroundings while respecting the existing locality.<br>During the construction phase, temporary environmental impacts such as increased traffic, noise, and dust may arise. These impacts, however, are expected to be minor and will be effectively mitigated through the implementation of management strategies outlined in this REF. These measures include dust suppression, traffic control, and noise management plans to ensure minimal disruption to the community.<br>Overall, the proposed activity is designed to prevent long-term adverse impacts on the surrounding environment and community. By addressing both immediate construction-related concerns and long-term operational considerations, the development achieves a balance between functionality and environmental stewardship, contributing positively to the local area. | TT11. Prepare a Construction Traffic Management Plan<br>SI3. Prepare a Construction and Environmental Management Plan<br>SI14. Prepare a Construction Noise and Vibration Management Plan<br>N12. Prepare an Operational Noise and Vibration Management Plan<br>SI17. Implementation of School Travel Plan<br>F1. Prepare a detailed Flood Emergency Response Plan |
| Any transformation of a locality? | The proposed activity will have a positive transformational impact on the locality. Once operational, the educational establishment will provide a positive significant benefit to the wider community through providing necessary educational facilities for students and employment for staff. | N/A |
| Any environmental impact on the ecosystems of the | The proposed activity does involve environmental impacts on local ecosystems. The site includes remnant Cumberland Plain Woodland, a threatened ecological community, and while some tree removal is planned, | A8. Prepare an Aboriginal Cultural Heritage Management Plan.<br>A9. Prepare a Heritage Interpretation |

| Environmental Factor | Consideration | Mitigation Measure Reference |
|---|---|---|
| locality? | mitigation efforts focus on retaining mature trees and using endemic species to enhance biodiversity. Additionally, the site's hydrological features, such as overland flow paths and an ephemeral creek, necessitate stormwater management solutions like detention basins to minimise disruption to local water systems. The area also holds significant Aboriginal cultural heritage, with identified sites requiring careful management and protective measures. These potential impacts have been addressed in the REF, which outlines strategies to mitigate and manage them effectively. | Plan.<br>A2. An AHIP is required to impact AHIMS 45-5-5821/Guntawong Road 4 and AHIMS 45-5-5913/201 Guntawong Rd Hammerstone 1.<br>A3. AHIMS 45-5-5766/Guntawong Road 2 is to be conserved and protected.<br>TR1. All works to comply with tree retention plans<br>TR9. 159 new trees to be planted<br>SW3. Construct OSD<br>EC1. Targeted survey for Juniper-leaved Grevillea<br>SW1. Implementation of the Erosion and Sediment Control Plan |
| Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality? | The proposed activity is situated on a site previously designated for medium- and low-density residential development. The construction of two- to three-story buildings aligns closely with the scale and character of the development originally envisioned for the area. The design thoughtfully considers the local context by incorporating a harmonious colour palette and material selection, as well as appropriate setback distances, to reduce visual bulk and maintain compatibility with the surrounding built environment.<br>By integrating these design elements, the proposed activity ensures that it does not detract from the aesthetic, recreational, scientific, or other environmental qualities of the locality. Instead, the development complements the existing character of the area, resulting in a project that is both contextually appropriate and environmentally considerate. | N/A |
| Any effect on locality, place or building having aesthetic, | The proposed activity impacts elements of the locality that have anthropological, archaeological, cultural, and historical significance. The site holds high cultural value for the local Aboriginal community, being part of a | A8. Prepare an Aboriginal Cultural Heritage Management Plan.<br>A9. Prepare a Heritage Interpretation |

| Environmental Factor | Consideration | Mitigation Measure Reference |
|---|---|---|
| anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations? | nominated Aboriginal Place, Nanagamay Ngurra. This area includes archaeological sites and has been utilised historically as ceremonial grounds and a burial place. Two registered AHIMS sites are located within the area.<br>The proposal integrates specific measures to mitigate these impacts, including the requirement for an AHIP, fencing of significant areas, the implementation of an unexpected finds protocol, and the development of an Aboriginal Cultural Heritage Management Plan. These measures aim to balance the site's development with the preservation of its cultural and historical significance for present and future generations.<br>Additionally, the design incorporates cultural narratives and principles from the "Connecting with Country" process, embedding Dharug cultural values and ecological elements into the school environment to honour and reflect its significance. | Plan.<br>A2. An AHIP is required to impact AHIMS 45-5-5821/Guntawong Road 4 and AHIMS 45-5-5913/201 Guntawong Rd Hammerstone 1.<br>A3. AHIMS 45-5-5766/Guntawong Road 2 is to be conserved and protected. |
| Any impact on the habitat of protected animals, within the meaning of the *Biodiversity Conservation Act 2016*? | The proposed activity occurs on a site that includes patches of remnant Cumberland Plain Woodland, which is a critically endangered ecological community under the BC Act. While the site is biodiversity certified, meaning it has been assessed for compliance with conservation requirements, the presence of this vegetation indicates potential habitat for protected fauna species.<br>The REF outlines mitigation measures, including retaining mature trees where possible, planting endemic species to enhance habitat, and implementing water-sensitive urban design to maintain ecological balance. These actions aim to minimise impacts on habitats of protected animals and maintain ecological connectivity within the area.<br>The activity's compliance with biodiversity certification means that significant impacts on protected animal habitats have been assessed and addressed through the planning and mitigation strategies. | TR1. All works to comply with tree retention plans<br>TR9. 159 new trees to be planted |
| Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air? | The proposed activity has the potential to impact species associated with the remnant Cumberland Plain Woodland, a critically endangered ecological community. This vegetation may provide habitat for various species, including potentially endangered fauna and flora that depend on this ecosystem. However, the site is biodiversity certified under the BC Act, meaning it has | TR1. All works to comply with tree retention plans<br>TR9. 159 new trees to be planted<br>SW1. Implementation of the Erosion and Sediment Control Plan |

| Environmental Factor | Consideration | Mitigation Measure Reference |
|---|---|---|
| | undergone prior assessment, and measures to manage and offset impacts on biodiversity have been incorporated into planning.<br>To mitigate these risks, the proposal includes retaining significant trees, planting endemic species, and incorporating ecological design elements like water-sensitive urban designs. These efforts aim to prevent endangering local species and maintain ecological functionality. As outlined in the REF, these measures are expected to minimise the likelihood of significant adverse impacts on any species. | SW4. The proposed activity must include provision of WSUD as documented in the REF |
| Any long-term effects on the environment? | The proposed activity may result in some long-term environmental effects, though these are mitigated through the strategies outlined in the REF. The removal of remnant Cumberland Plain Woodland, a critically endangered ecological community, could lead to a reduction in local biodiversity. However, efforts such as retaining mature trees, planting native species, and incorporating endemic landscaping aim to minimise this impact. The construction and development may also alter natural water flow patterns, potentially affecting nearby ecosystems, but water-sensitive urban design features like bioswales and detention basins have been integrated to manage stormwater and mitigate flooding risks.<br>Additionally, the site holds significant Aboriginal cultural heritage, and while protective measures are planned, the development could subtly alter the cultural landscape over time. Increased urbanisation from the project might contribute to localised warming, but this is addressed through tree retention, additional plantings, and shading strategies. Habitat modifications could also affect the survival of some species in the long term, though biodiversity certification and targeted habitat enhancements are intended to mitigate this risk. With the proper implementation of mitigation measures, these long-term effects are expected to be minimal and effectively managed to align with sustainability goals. | All mitigation measures |
| Any degradation of the quality of the environment? | No degradation of the quality of the environment will occur from the proposed activity. | N/A |
| Any risk to the safety of | The proposed activity has been designed with careful consideration of the | F1. Prepare a FERP |

| Environmental Factor | Consideration | Mitigation Measure Reference |
|---|---|---|
| the environment? | site's existing risks, particularly flooding and bushfire hazards. According to the Flood Assessment Report, the proposed activity will have a negligible impact on the flood characteristics of the surrounding area, with all buildings strategically positioned above the PMF level. This ensures that the project is resilient to potential flood events and does not exacerbate flood risks in the locality.<br>Bushfire risks have also been comprehensively addressed through mitigation measures detailed in the Bushfire Assessment Report. These measures include the implementation of APZs and adherence to specific building design and construction standards to enhance safety and resilience against bushfire threats.<br>As a result, the proposed activity is not expected to pose any significant risk to the safety of the environment or the surrounding community, with robust strategies in place to manage and mitigate the identified risks effectively. | BF1. APZs to be established and maintained in perpetuity |
| Any reduction in the range of beneficial uses of the environment? | The proposed activity relates to a new school located on a current vacant land and will not limit or reduce the range of beneficial uses of the environment. | N/A |
| Any pollution of the environment? | The risk of noise and vibration, air, water, soil and light pollution arising from carrying out the works will be mitigated by the implementation of the CEMP. | SI3. Prepare a Construction and Environmental Management Plan |
| Any environmental problems associated with the disposal of waste? | Waste generated by the proposed activity will be managed in compliance with the provisions outlined in the OWMP and CDWMP. These plans ensure that all waste is handled, recycled, and disposed of responsibly, preventing any environmental issues associated with waste disposal. | W1 – W6 |
| Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply? | The activity will not increase the demand for resources that are or are likely to become in short supply. | N/A |
| Any cumulative | As outlined in **Section 7.15** of this REF, there will be negligible cumulative | SI3. Prepare a Construction and |

| Environmental Factor | Consideration | Mitigation Measure Reference |
|---|---|---|
| environmental effects with other existing or likely future activities? | environmental impacts. All construction works associated with the proposal will be undertaken in accordance with the CEMP. | Environmental Management Plan |
| Any impact on coastal processes and coastal hazards, including those under projected climate change conditions? | The proposed activity will not have any impact on coastal processes or hazards and is not within proximity to any coastal areas. | N/A |
| Applicable local strategic planning statement, regional strategic plan or district strategic plan made under Division 3.1 of the Act? | The activity is consistent with the strategic policies identified in **Section 5.5** of this REF | N/A |
| Any other relevant environmental factors? | There are no other relevant environmental factors which require consideration for the proposed activity. | N/A |

**Table 30: Section 171A Assessment**

| Provision | Assessment | Complies? (Yes/No) |
|---|---|---|
| **Section 6.6 Water Quality** | The proposed activity is supported by stormwater management plans designed to assess and mitigate its impact on local water quality. This plan outlines comprehensive measures to manage water quality, control erosion, and prevent sedimentation, ensuring that the surrounding environment is protected. Detailed information on these management strategies can be found in **Section 7.5** of this report and within the stormwater management plans. | Yes. |

| Provision | Assessment | Complies? (Yes/No) |
|---|---|---|
| **Section 6.7 Aquatic Ecology** | The proposed activity does not directly involve significant aquatic ecosystems but has some potential to impact aquatic ecology indirectly through stormwater management and changes in water flow patterns. The site includes overland flow paths and an ephemeral creek, which are key hydrological features that could affect aquatic ecosystems downstream.<br>To mitigate potential impacts, the proposal incorporates water-sensitive urban design measures, such as bioswales and detention basins, to manage stormwater runoff and control water quality. These measures aim to prevent sedimentation, pollution, and hydrological changes that could negatively impact aquatic ecology in nearby watercourses. By implementing these strategies, the proposed activity minimises the risk of adverse effects on aquatic environments, ensuring compliance with environmental guidelines and sustainability principles. | Yes. |
| **Section 6.8 Flooding** | The proposed activity will not impede the natural retreat of floodwaters into wetlands or riverine ecosystems. As part of the development, a bioswale will be constructed to manage and consolidate the existing overland flow path located in the southern portion of the site. Importantly, this overland flow path does not connect to any natural wetland systems, ensuring that the activity does not disrupt existing hydrological processes or impact nearby ecosystems. | Yes. |
| **Section 6.9 Recreation and public access** | The proposed activity is not located on land that is currently used for public recreation, nor will it impede on access to existing waterways for recreational purposes. | Yes. |

# 8. Justification and Conclusion

The proposed new high school at part 201 Guntawong Road, Tallawong is subject to assessment under Division 5.1 of the EP&A Act. The REF has examined and taken into account to the fullest extent possible all matters affecting, or likely to affect, the environment by reason of the proposed activity.

As outlined in this REF, the proposed activity can be justified on the following grounds:

- It responds to an existing need within the community;
- It generally complies with, or is consistent with all relevant legislation, plans and policies;
- It has minimal environmental impacts; and
- Adequate mitigation measures have been proposed to address these impacts.

The activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats, and therefore it is not necessary for a SIS and/or a BDAR to be prepared. The environmental impacts of the proposal are not likely to be significant.

Therefore, it is not necessary for an EIS to be prepared and approval to be sought for the proposal from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act. On this basis, it is recommended that the department determine the proposed activity in accordance with Division 5.1 of the EP&A Act subject to the implementation of mitigation measures identified within this report.