NSW Department of Education

# Review of Environmental Factors

## Austral Public School Upgrade

Document version: Final

Date: 12/03/2025

NSW GOVERNMENT

# Acknowledgement of Country

The NSW Department of Education acknowledges the Dharug People, the traditional custodians of the land on which the upgrade to the Austral Public School 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 Gyde Consulting on behalf of the NSW Department of Education (the Department) and assesses the potential environmental impacts from the Austral Public School upgrade at 205 Edmondson Avenue, Austral.

This REF has been prepared in accordance with the *Guidelines for Division 5.1 Assessments* and any relevant addendum (the Guidelines), 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 – Environmental factors, 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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This REF has been prepared by Gyde Consulting with input from a number of other expert consultants. To the best of our knowledge, the information contained herein is neither false nor misleading and the contents are based on information and facts that were correct at the time of writing. Gyde Consulting accepts no responsibility or liability for any errors, omissions or resultant consequences including any loss or damage arising from reliance in information in this publication.

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| **3** | Architectural Plans | Pedovali Architects |
| **4** | Relevant Map Extracts | Gyde Consulting |
| **5** | Certificates of Title | Direct Info |
| **6** | Flood Impact Assessment (FIA) | Stantec |
| **7** | Arboricultural Impact Assessment Report | Allied Tree Consultancy |
| **8** | Biodiversity Assessment Report | ERM |
| **9** | AHIMS Search | Aboriginal Heritage Information Management System (AHIMS) Web Services |
| **10** | Statement of Heritage Impact Report | EMM |
| **11** | Section 10.7 Planning Certificates | Liverpool City Council |
| **12** | Detailed Site Investigation | SMEC |
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# Abbreviations

| Abbreviation | Description |
|---|---|
| **ACM** | Asbestos containing material |
| **AEP** | Annual Exceedance Probability |
| **AHD** | Australian Height Datum |
| **AHIMS** | Aboriginal Heritage Information Management System |
| **AMP** | Asbestos Management Plan |
| **BC Act 2016** | *Biodiversity Conservation Act 2016* |
| **BCA** | Building Code of Australia |
| **BDAR** | Biodiversity Development Assessment Report |
| **CEMP** | Construction Environmental Management Plan |
| **CNVMP** | Construction Noise & Vibration Management Plan |
| **COLA** | Covered Outdoor Learning Area |
| **CPTED** | Crime Prevention through Environmental Design |
| **CTMP** | Construction Traffic Management Plan |
| **CWC** | Connecting with Country |
| **DBH** | Diameter at breast height |
| **The Department** | NSW Department of Education |
| **DPHI** | Department of Planning, Housing and Infrastructure |
| **Design Guide** | *Design Guide for Schools* published by the Government Architect in May 2018 |
| **DSI** | Detailed Site Investigation |
| **EIS** | Environmental Impact Statement |
| **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 |
| **ESD** | Ecologically Sustainable Development |
| **FM Act** | *Fisheries Management Act 1994* |
| **FERP** | Flood Emergency Response Plan |
| **FSR** | Floor Space Ratio |
| **FTE** | Full time equivalent |
| **GIPA** | Government Information Public Access |
| **Ha** | Hectares |
| **HRV** | Heavy Rigid vehicles |
| **ILP** | Indicative Layout Plan |
| **LCC** | Liverpool City Council |
| **LEP** | Local Environmental Plan |

| Abbreviation | Description |
|---|---|
| **LGA** | Local Government Area |
| **LTC** | Leppington Town Centre |
| **MNES** | Matters of National Environmental Significance |
| **MRV** | Medium Rigid vehicles |
| **NCC** | National Construction Code |
| **NPI** | Noise Policy for Industry |
| **NPW Act** | *National Parks and Wildlife Act 1974* |
| **OLS** | Obstacle Limitation Surface |
| **OSD** | On-Site Stormwater Detention |
| **PCEMP** | Preliminary Construction Environmental Management Plan |
| **PFAS** | Per- and Poly-Fluoroalkyl Substances |
| **Planning Systems SEPP** | *State Environmental Planning Policy (Planning Systems) 2021* |
| **PMF** | Probable Maximum Flood |
| **Precincts SEPP** | *State Environmental Planning Policy (Precincts—Western Parkland City) 2021* |
| **Proponent** | NSW Department of Education |
| **PTS** | Primary Teaching Spaces |
| **RAP** | Remedial Action Plan |
| **REF** | Review of Environmental Factors |
| **RF Act** | *Rural Fires Act 1997* |
| **RFS** | Rural Fire Service |
| **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 |
| **SDP** | Sustainable Development Plan |
| **SEPP** | State Environmental Planning Policy |
| **SIS** | Species Impact Statement |
| **SSAMP** | Site-Specific Asbestos Management Plan |
| **STP** | School Transport Plan |
| **STS** | Specialist Teaching Spaces |
| **TEC** | Threatened Ecological Community |
| **TfNSW** | Transport for NSW |
| **TI SEPP** | *State Environmental Planning Policy (Transport and Infrastructure) 2021* |
| **TPZ** | Tree Protection Zone |
| **TWG** | Transport Working Groups |

| Abbreviation | Description |
|---|---|
| **WM Act** | *Water Management Act 2000* |
| **WSUD** | Water Sensitive Urban Design |

# Executive Summary

This Review of Environmental Factors (REF) has been prepared by Gyde Consulting (Gyde) for the NSW Department of Education (the Department). The Department is proposing to upgrade the existing Austral Public School (APS) located at 205 Edmondson Avenue, Austral.

The proposal is defined as an activity pursuant to Section 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This REF has considered the activity and its environmental impacts in accordance with the provisions of Part 5 of the EP&A Act and the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation), and other relevant statutory requirements. In accordance with Section 5.5 of the EP&A Act, this 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 activity. In particular, the REF has taken into account the factors set out in Section 171 of the EP&A Regulation.

**The Site**

As noted above, the proposed activity will be undertaken at the existing APS. The site has frontages to Edmondson Avenue (west) and Tenth Avenue (north) and comprises existing buildings and facilities for the primary school. In terms of site characteristics, we note the following:

- There is a small gully in the south-west which contains a vegetated area of “Cumberland Plains Woodland”. Arboricultural investigations of the site have identified a mix of low, medium and high rated trees (in terms of significance).
- The site slopes by a gentle gradient towards Edmondson Avenue from east to west and features a gradual fall towards the southern part of the site that is vegetated.
- The site is subject to biodiversity certification which means separate assessment and approval for development under the BC Act or the EPBC Act is not required.
- A small portion of the western boundary of the site is mapped as comprising bushfire prone land (vegetation buffer).
- The site has frontages to Tenth Avenue to the north and Edmondson Avenue to the west.
- The site comprises existing primary educational facilities, open space, parking areas, and scattered vegetation.
- It is zoned SP2 Educational Establishment under the State Environmental Planning Policy (Precincts—Western Parkland City) 2021, consistent with its use for educational purposes.
- Edmondson Avenue is a Regional classified road.
- The site is within the catchment of Bonds Creek and is affected by local overland flooding from the upstream catchment.
- The site has been identified as being severely affected by salinity.
- There is contamination, Per- and Poly-Fluoroalkyl Substances, (PFAS) located on the southern boundary of the site which has resulted from former activities on the adjacent site immediately south (currently owned by Liverpool City Council (LCC) and formerly leased by the RFS).
- Hazardous materials including asbestos were observed on the site in various locations.
- The site is well serviced by existing bus services. Transport for NSW (TfNSW) will enhance future bus services to service the new school population in both the north and south catchment areas of APS.
- The site is located approximately 670m from the Central Trunk Main and Eastern Gas Pipeline.

- The site does not contain any heritage items (Aboriginal or non-Aboriginal). Heritage items in the vicinity on Edmondson Avenue are well separated from the site.
- The site has a low archaeological sensitivity and potential.
- The site is located within an area that is transitioning from greenfield rural land to residential subdivisions, reflecting ongoing urban growth in the region.

Further details about the site characteristics are provided in Section 2.1 of this REF.

**The Proposed Activity**

The proposed activity involves alterations and additions to the existing APS to modernise facilities and increase capacity. The works include the removal of existing structures, including the basketball court, retaining walls, a redundant LPG tank, kerb stone, grates, and the demountable homebase building as well as 21 trees. Additional works include site preparation, along with the construction of a new three-storey building containing 20 permanent teaching spaces and 3 support teaching spaces. Building I will be refurbished and repurposed from classrooms to a library. The activity also includes the provision of 57 new at-grade parking spaces, including one accessible space, and a new driveway and access gate from Edmondson Avenue.

Additional works involve:

- Upgrade of the sports field, installation of a substation on the northern boundary, new internal pedestrian pathways, upgrade of utilities, and associated infrastructure.
- Off-site improvements will upgrade the existing Kiss & Drop area and provide a temporary pedestrian crossing on Tenth Avenue.
- Remediation. Refer to “planning approval pathway” below for further detail on the planning pathway for this scope item.

The intent of the proposed activity is to align the school with the Educational Facilities Standards and Guidelines (EFSG) for a CORE 35 primary school. The upgrades will increase the school’s capacity from 681 students and 40 full time equivalent (FTE) teachers to 734 students and 64 FTE teachers, with 30 places allocated for support class students within the expanded capacity.

**Planning Approval Pathway**

The proposal involves works by the Department (a public authority), generally within the boundaries of the existing APS. Accordingly, pursuant to Section 3.37 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. It should be noted that the proposed remediation works will be undertaken as Category 2 (work not needing consent) under the State Environmental Planning Policy (Resilience and Hazards) 2021. Nevertheless, for transparency and to enable a robust assessment, the remediation works have been considered and assessed as part of this REF.

The proposed activity also involves ancillary works associated with the upgrades. Some of these works are minor, and in isolation, are categorised as exempt development under the TI SEPP (such as, landscaping, walking paths). However, for the purpose of this REF, they have been considered as ancillary to the activity and therefore, assessed as development permitted without consent. The off-site transport improvements are also ancillary to the activity, but not strictly within the boundaries of the APS site. Similar to the on-site works, there are discreet components of the off-site works that may be classified as exempt development (under Section 2.113 of the TI SEPP), such as footpaths and line markings, if they were to be considered in isolation. However, the

broader holistic package of off-site works can be classified as being associated with a road and therefore, are permitted without consent (and can therefore be included in this REF) under Section 2.109.

The only exception to the above are the minor internal refurbishment works to existing Building B, which are explicitly excluded from the scope of this REF, as outlined in the architectural plans accompanying this REF.

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). This REF has been prepared in the accordance with the *Guidelines for Division 5.1 Assessments* and the *Guidelines for Division 5.1 assessments - consideration of environmental factors for health services facilities and school activities Addendum* (Department of Planning Housing and Infrastructure (DPHI), October 2024).

**Consultation**

Consultation will be undertaken 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* ( (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* (the Department) October 2024) (SCPP DoE).

Comments received will be carefully considered and responded to in either an updated REF or a separate response to submissions document, prior to determination of the activity.

In addition, non-statutory consultation has been undertaken with a range of community and government stakeholders throughout the design process. Further details are in Section 5.1 of this REF.

**Environmental Impacts**

The proposed activity includes new school facilities, but also, key improvements to parking, transportation, and site management at APS. A total of 57 new staff parking spaces and 17 "Kiss and Drop" bays will alleviate on-street parking and improve traffic flow, with bicycle and scooter parking and planned off-road cycle paths (planned by LCC, in accordance with LCC's DCP) encouraging sustainable travel. Public transportation impacts will be managed through amended bus services (in consultation with Transport for NSW (TfNSW)) and implementation of an updated School Transport Plan. Noise impacts from construction and operations can be ameliorated through the recommended mitigation measures, including acoustic barriers and compliance with noise standards, ensuring minimal disturbance to surrounding areas.

Environmental considerations include the removal of 21 low-value trees, offset by the planting of 64 trees and shrubs, enhancing biodiversity on the site. Generous landscaping will integrate existing and new vegetation for a net gain in ecological value. Contamination risks, including PFAS and asbestos, will be mitigated through remediation and management plans, with works coordinated alongside LCC initiatives. A flood impact assessment confirms no significant increase in flood risk. Flood risk is effectively managed with engineering designs maintaining safe access and reducing hazards. Overall, the activity has been designed to improve functionality, sustainability, and safety while minimising environmental and community impacts.

Other impacts have been considered as detailed in this REF.

All potential environmental impacts are either minor or capable of being managed or ameliorated through the measures identified 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 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 REF.

# 1. Introduction

The Department proposes the upgrade of APS (the activity) at 205 Edmondson Avenue, Austral (the site).

The upgrade to APS is essential to address the current and anticipated future demand for student enrolments in the Austral and Leppington precincts; areas experiencing some of the highest population growth in NSW due to government rezoning and greenfield housing development. Existing facilities are insufficient, with many classrooms failing to meet contemporary learning standards and a reliance on six temporary teaching spaces that are due for replacement.

Additionally, the condition of core infrastructure limits the school's ability to operate efficiently, with significant deficiencies in facilities for exhibitions, performances, and specialist teaching areas. As the local population continues to grow, the demand for dedicated support classrooms for students with special needs becomes increasingly urgent. The planned upgrade will address these challenges by increasing the school's capacity, improving the quality of teaching spaces, and introducing vital support services, ensuring the school is equipped to meet the evolving educational needs of the community.  The scope of the activity also involves improvements to the existing kiss and drop for the school, to enhance functionality of the day-to-day school operations.

This REF has been prepared by Gyde on behalf of the Department to determine the environmental impacts of the proposed upgrade to APS. For the purpose of these works, the Department is the proponent and the determining authority under Division 5.1 of the 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 protective measures to be implemented to manage impacts.

The description of the proposed activity and associated environmental impacts have been undertaken in the accordance with the Guidelines for Division 5.1 Assessments (DPHI June 2022), Guidelines for Division 5.1 assessments - consideration of environmental factors for hospital and school activities Addendum (DPHI October 2024), the EP&A Act, the EP&A Regulation, and the 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 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 Climate Change, Energy, the Environment and Water for a decision by the commonwealth minister for the Environment on whether assessment and approval is required under the EPBC Act.

The REF addresses the requirements of Section 5.5 of the EP&A Act, which requires the DoE to examine, and take into account to the fullest extent possible, all matters affecting, or likely to affect, the environment by reason of the proposed activity.

# 2. The Proposed Activity

## 2.1 The Site

### 2.1.1 Site Description

APS is located at 205 Edmondson Avenue, Austral on the south-eastern corner of the intersection between Edmondson Avenue and Tenth Avenue. Edmondson Avenue is situated along the site's western boundary, which is approximately 260m long. The Tenth Avenue boundary, north of the site, is approximately 81m long. The site is comprised of six allotments, legally described as:

- Lot 1 DP 398105
- Lot 1 DP 398106
- Lot 1 DP 509613
- Lot 1 DP 512119
- Lot 2 DP 509613
- Lot 865 DP2475

These allotments comprise a total site area of 2.986 hectares based on the Survey Plans which are provided as **Appendix 2**. A site location plan is below.

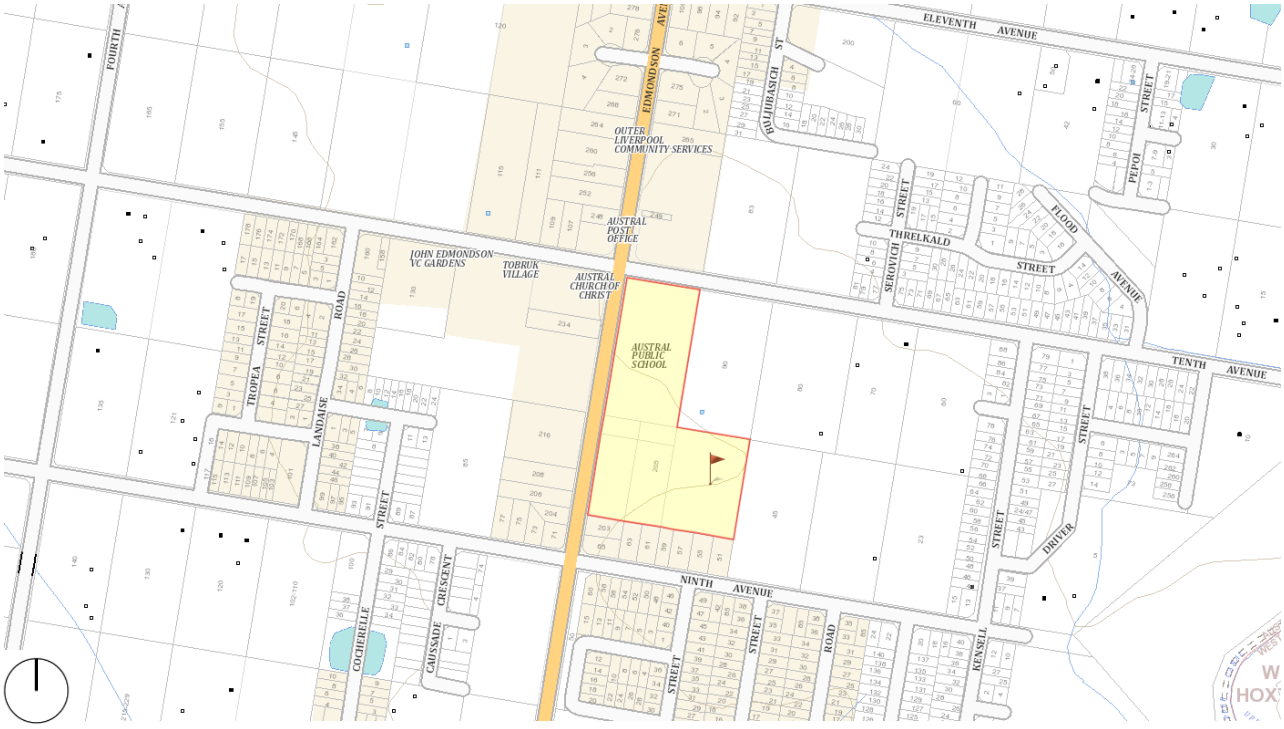



**Figure 1: Site Location Plan, Site outlined in red (Source: SIX Maps)**

The Department is the landowner of the site. The site currently comprises an existing co-educational primary (K-6) public school with:

- 8 permanent buildings,
- 14 demountable structures,

- interconnected paths,
- covered walkways,
- play areas (including a basketball court), and
- at-grade parking.

The Austral Community Pre-school (Building D) is also located within the site. Buildings for the pre-school are clustered in the northern part of the site, ranging between one to two storeys in height. There is a sports oval in the south-eastern portion of the site, and a densely vegetated informal play area located in the south-west. The site plan as shown in the architectural plans (**Appendix 3**) below provides an overview of the existing buildings/structures on the site.

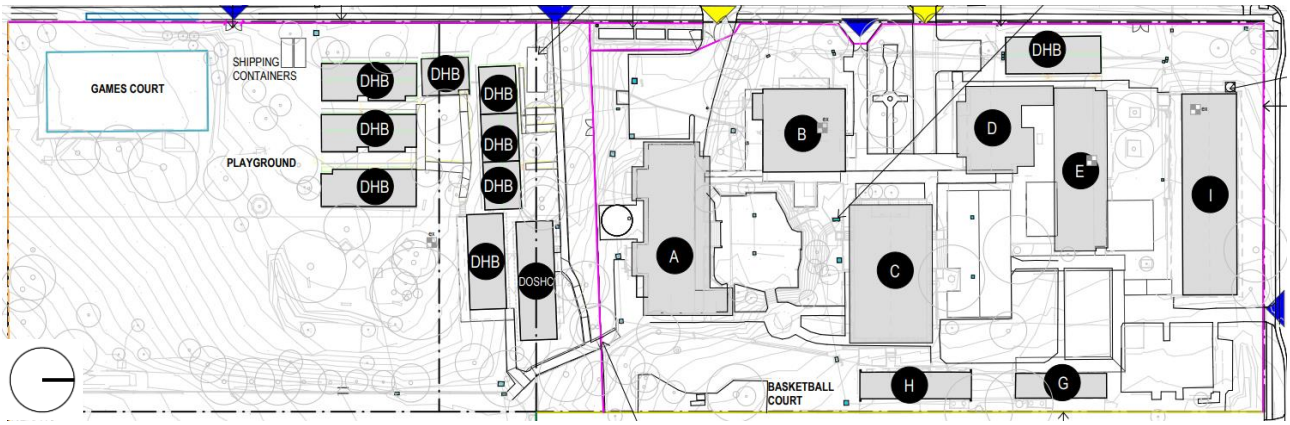



**Figure 2: Site Plan with Exsting Conditions and buildings, noting that the site plan does not show the eastern most portion of the site, which is currently vacant (Source: Pedavoli Architects)**

Photos of the site can be seen in **Figures 4-13** overleaf (following **Figure 3**). These photos were taken during a site visit by Gyde on 27 June 2022. Whilst the site visit was taken some time ago, we have been advised by the project managers that the site conditions have not changed since this time. An aerial view of the site is shown below:

**Figure 3: Aerial view of the site highlighted in red (Source: Nearmap)**

**Figure 4: Building D (Source: Gyde)**

**Figure 5: Building C (Source: Gyde)**

**Figure 6: Building G (Source: Gyde)**

**Figure 7: Building I (Source: Gyde)**

**Figure 8: Play area in the northeast corner of site (Source: Gyde)**

**Figure 9: Entrance footpath in the north of the site (Source: Gyde)**

**Figure 10: View looking west onto Edmondson Avenue (Source: Gyde)**

**Figure 11: Building B (Source: Gyde)**

**Figure 12: View west along demountable D17006 (Source: Gyde)**

**Figure 13: Entrance to the site along Edmondson Avenue (Source: Gyde)**

## 2.1.2 Site Characteristics and Constraints

Review of site constraints has been undertaken through a review of Section 10.7 (2 & 5) Planning Certificates dated 27 November 2023, mapping under relevant Environmental Planning Instruments (EPIs), and a review of specialist consultant reports and other desktop assessments.

The site presents several constraints, which have required careful consideration during planning and development of the proposed upgrades. A summary of the identified constraints has been provided in **Table 1**, with relevant map extracts at **Appendix 4**.

**Table 1: Site considerations and constraints**

| Consideration | Impacted / Relevant | Source | Description |
|---|---|---|---|
| **Easements** | No | Survey Plans at **Appendix 2, Certificates of Title at Appendix 5** | The Survey Plans and Certificates of Title do not identify any easements, restrictions or the like on the site. |
| **Hydrology Flooding** | Yes | Flood Impact Assessment at **Appendix 6.** | The site is only affected by 'local overland flooding', which is inundation by local stormwater run-off on its way to a waterway, rather than overbank flow from a waterway. The site is not affected by any floodway associated with mainstream flooding identified in the Liverpool Overland Flood Study adopted by Council LCC for the site catchment. |
| **Drinking Water Catchment** | No | NSW Planning Portal Spatial Viewer | N/A |
| **Land Reservation** | Yes | Precincts SEPP | The site is reserved for acquisition by the Department for the purpose of an educational establishment. Notwithstanding, the site is already owned by the Minister for Education and Early Learning. |
| **Topography** | N/A | Survey Plans (**Appendix 2)**, Arboricultural Impact Assessment Report (**Appendix 7**) and Biodiversity Assessment Report (**Appendix 8**). | The site slopes by a gentle gradient towards Edmondson Avenue from east to west and features a gradual fall towards the southern part of the site that is vegetated. There is a small gully in the south-west, which contains a vegetated area of biodiversity, identified as 'Cumberland Plains Woodland' in the Arboricultural Impact Assessment Report (**Appendix 6**) and the Biodiversity Assessment Report (**Appendix 7).**<br>The high point of the site is at RL 84.00, within the north-eastern corner and adjoining the future recreation reserve (zoned RE1 Public Recreation). The existing ground level along the Edmondson Avenue frontage (western boundary) varies from RL 82.0 within the northern part to RL 78.0 (the low point of the site). |
| **Aboriginal Cultural and Non-Aboriginal Heritage** | No | AHIMS Search (**Appendix 9**) and Statement of Heritage Impact Report (**Appendix 10**). | There is no identified heritage listed buildings or known items of potential Aboriginal heritage value within the boundaries of the site. There are heritage items in the vicinity of the site on Edmondson Avenue, to the north and to the south, but these are well separated from the subject site so as to not cause any constraint to the site and future development.<br>An AHIMS search was conducted on 5 February 2024, followed by an updated search on 21 January 2025. |

| Consideration | Impacted / Relevant | Source | Description |
|---|---|---|---|
| | | | The updated search identified 58 Aboriginal sites and no Aboriginal Places within the search area. While there are no AHIMS sites recorded within the Project Area itself, 25 sites are recorded within one kilometre of it. The closest of these is an isolated stone artefact located approximately 356 metres north.<br>One restricted site was identified 1.9 kilometres west of the Project Area; however, it will not be impacted by the proposed works. |
| **Acid Sulfate Soils** | No | Section 10.7 Certificate (**Appendix 11**) | The site is not mapped as being affected by Acid Sulfate Soils. |
| **Salinity** | Yes | Geotechnical Interpretive Report (**Appendix 13**) | Salinity assessment, based on NSW guidelines, found residual clay soils to be non-saline to slightly saline. Before any ground disturbance, a visual inspection will be conducted to identify potential saline areas. If salinity is detected, further testing will be carried out as needed, and any confirmed saline soils will be managed according to best practice guidelines to prevent environmental impacts. |
| **Geotechnical Conditions** | Yes | Geotechnical Interpretive Report (**Appendix 13)** | The site's ground profile consists of topsoil (sandy clay), fill (sandy gravelly clay), residual soil (silty clay with sand), and weathered rock (inferred Bringelly Shale) of varying strength. The soil is classified as M (moderate) for reactivity, indicating potential for moderate ground movement due to moisture changes. No groundwater was encountered during fieldwork. |
| **Groundwater Conditions** | Yes | DSI (**Appendix 12**) | Standing groundwater was encountered at the site withing monitoring wells GW4 and GW5 (located within the southern portion of the Site) at depths ranging between 3.7-4.3m bgl and 8.05 and 8.02m bgl. |
| **Bushfire** | Yes | Bushfire Advice (**Appendix 14**) | The western boundary of the site is partly impacted by the 30-meter buffer zone associated with the Category 3 Vegetation (Grassland) to the western aspect. However, the footprint of the proposal is not located on designated/mapped bushfire prone land. |
| **Site Contamination** | Yes | DSI (**Appendix 12**) | The site, currently used as a school, has contamination issues primarily from PFAS compounds exceeding human health and ecological criteria in two test pits near the southern boundary, caused by stormwater runoff from the adjacent RFS site. Temporary fencing has been installed to limit access, and improvement works by LCC and the RFS are planned to address PFAS contamination. A 2023 health risk assessment found PFAS and asbestos exposure risks to be low. |

| Consideration | Impacted / Relevant | Source | Description |
|---|---|---|---|
| | | | Suspected bonded asbestos containing material (ACM) was also identified near a children's play area, with surface soils cleared as an interim measure and the finding added to the school's management plan. Further contamination assessments are limited by existing structures. |
| **Asbestos and Hazardous Materials** | Yes | DSI (**Appendix 12**) and Schools Asbestos Management Plan (**Appendix 15**). | Multiple fragments of suspected bonded ACM fragments were observed within a test pit located adjacent the children's play area in the southern portion of the Site at an approximate depth of 0.4-0.6m bgl. |
| **Aviation** | Yes | Precincts SEPP | The site is within an Obstacle Limitation Surface (OLS) area set for Western Sydney Airport. The applicable OLS is penetrated by structures higher than RL 230.5m AHD. The proposed activity does not penetrate the OLS. |
| **Vegetation and Biodiversity** | Yes (vegetation)<br>No (biodiversity values) | Arboricultural Impact Assessment Report (**Appendix 7**) and Biodiversity Assessment Report (**Appendix 8**). | The Site Analysis Diagram at **Appendix 3** indicates the location of existing mature trees, graded using a traffic light system: low constraint biodiversity in green, medium in yellow, and significant in red. The trees are scattered throughout the site, with clusters evident in the central part of the eastern boundary where the native garden is located and within the southern part of the western boundary. The site comprises Cumberland Plain Woodland Threatened Ecological Community (TEC); however, existing legal mechanisms, including the Cumberland Plain Conservation Plan, provide biodiversity certification under Part 8 of the BC Act. As such, no further assessment or development approvals are required under the BC Act or EPBC Act. The activity will not affect threatened flora, fauna, or critical habitats. |
| **Infrastructure – Transport** | Yes | Transport Impact Assessment (**Appendix 16**) | Currently, the site has limited on-site parking and no formal 'Kiss and Drop' areas. Public transport is accessible with several bus services nearby, and there are no bike lanes around the site at present. |
| **Infrastructure – Services** | Yes | Hydraulic Services Report (**Appendix 17**) and Electrical Services Report (**Appendix 18**) | <u>Sewer drainage</u><br>The site currently drains to an existing septic sewer system located near the western boundary near Edmondson Ave. This system is pumped out on a regular basis and has been found to be overflowing in rainfall events. This septic tank is proposed to be replaced with a new underground tank with sufficient capacity for the proposed activity.<br><br><u>Water</u><br>The 250mm CICL Sydney Water water main, located in Edmondson Ave will be able to |

| Consideration | Impacted / Relevant | Source | Description |
|---|---|---|---|
| | | | cater for the proposed potable water and fire services demand of the site.<br><br>Gas<br>Gas is not proposed to be provided to the site, and the existing LPG storage tank is to be decommissioned.<br><br>Electrical<br>The site is currently supplied via an existing overhead service cable from pole PL857624. The overhead service main terminates onto a private pole within the school's boundary. |

### 2.1.3 Site Locality

The site is located in the suburb of Austral, within the Liverpool LGA and the south-west growth area of Sydney.

Austral is an area experiencing a period of significant change following prior rezoning by the NSW Government. Further change in the broader area (beyond the site) is anticipated given the nearby Leppington Town Centre (LTC) will again be rezoned. The APS is located approximately 750 metres to the north of the Leppington Town Centre boundary, as can be seen in **Figure 14** below. The town centre is subject to an active Planning Proposal. Should it proceed, the character and context of the surrounding area is expected to change significantly.

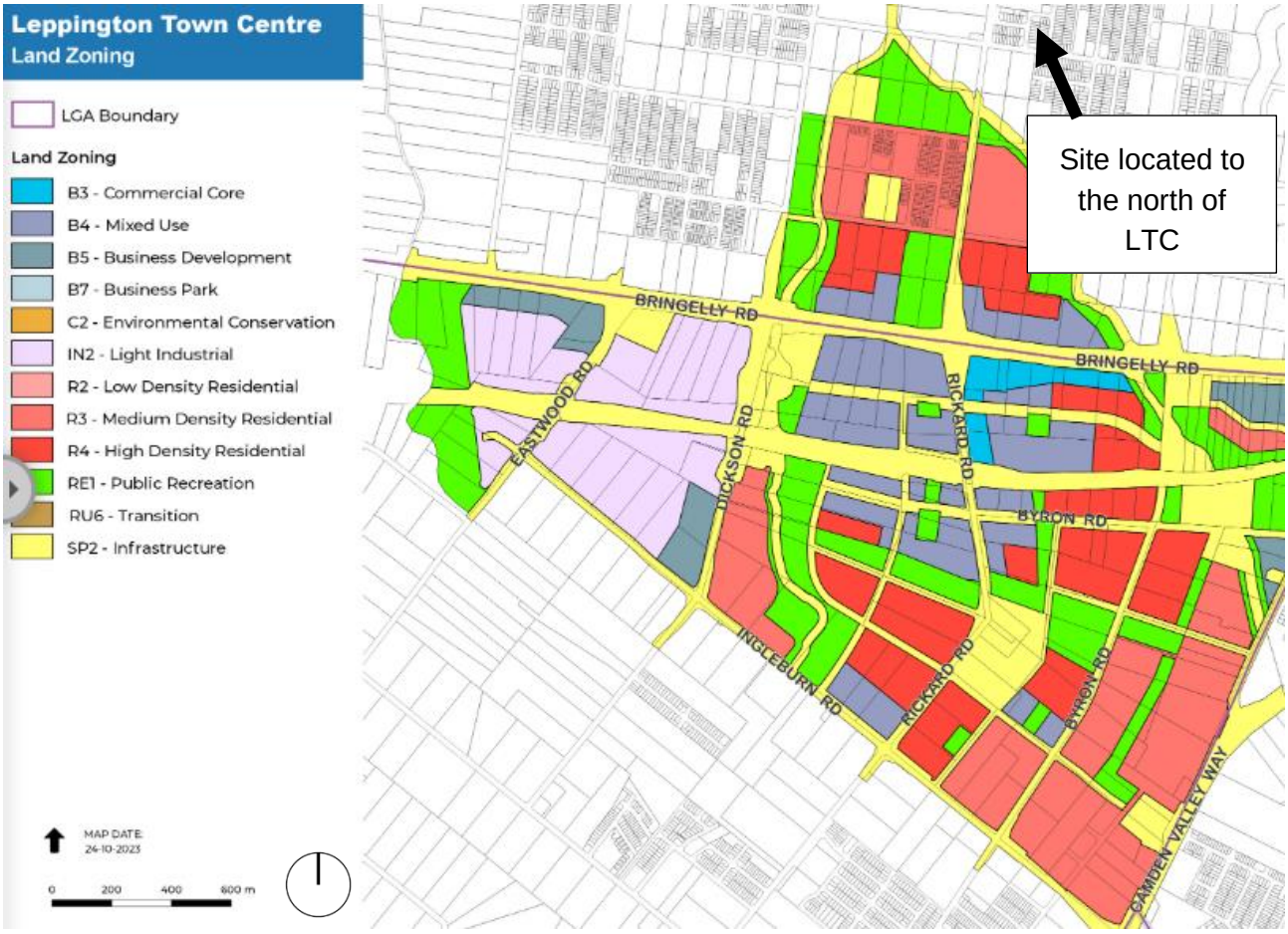



**Figure 14: Land zoning proposed under the LTC Planning Proposal (Source: Leppington Town Centre | Your Voice Camden, nsw.gov.au)**

As previously stated, the surrounding locality comprises a mix of uses and is currently undergoing transformation. The following section provides an analysis of the current land uses adjoining to, and in the vicinity of, the site.

**North**

The Austral Neighbourhood Centre is located on the northern side of Tenth Avenue, on both sides of the intersection with Edmondson Avenue. Properties on the opposite side of Tenth Avenue predominantly comprise of small-scale retail and businesses. There are some light industrial uses, for example at no. 83-85 Tenth Avenue. Beyond the Austral Neighbourhood Centre, other development consists of low density residential detached dwellings. **Figures 15-16** below show examples of the developments opposite the northern boundary.

**Figure 15: Small retail and business units located on the northern side of the road opposite the site (Source: Google Maps)**


**Figure 16: A commercial mechanics services unit on the northern side of the road opposite the site (Source: Google Maps)**

### South

Immediately south of the site are single storey detached dwelling houses. The Austral Rural Fire Brigade, formerly the Rural Fire Station, is also immediately south of the site, located at no. 59 Ninth Avenue, Austral. Refer to **Figure 17** below.

**Figure 17: The Austral Rural Fire Brigade on the boundary of the site (Source: Google Maps)**

### West

Edmondson Avenue is located immediately west of the site and is classified as a Regional Road (reference number: 0002126). Development on the western side of Edmondson Avenue comprises low density detached dwelling houses and the Austral Church of Christ. Vacant land also lies west of the site, noting it is expected to be developed into medium density residential, based on its zoning (of a similar scale to the independent living accommodation at 120 Tenth Avenue).

**Figure 18: A zebra crossing located on the western boundary. Austral Church of Christ is visible on the left-hand side of the image. (Source: Google Maps)**

**Figure 19: The vacant land across the road and immediately opposite the western boundary of the site. (Source: Google Maps)**

### East

The eastern site interface is bound by no. 90 Tenth Avenue (Lot 866 DP 2475), which until the end of 2023 comprised a residential dwelling (adjoining the site) and outbuildings consistent with an agricultural use. Aerial photography shows that the buildings have since been demolished and site preparation works appear to have commenced. The site has been zoned for public recreation (land use zone of RE1 Public Recreation) under the Precincts SEPP. The site is also bounded by 45 Ninth Avenue to the south east of the site which comprises residential land containing a house and agricultural uses.

**Figure 20: Adjoining 45 Ninth Avenue to the south east of the site (Source: Google Maps)**

## 2.2 The Proposed Activity

### 2.2.1 Overview of the Activity

The proposed activity involves alterations and additions to upgrade the existing APS, including the following:

- Demolition of existing structures, including the existing basketball court, retaining walls, a redundant LPG tank, kerb stone, grates, and the existing demountable homebase building and the removal of 21 trees, as well as other ancillary site preparation works;
- The erection of a new three-storey building comprising teaching spaces with 20 permanent teaching spaces and three support teaching spaces;
- Refurbishment and change of school function of Building I from classrooms to a Library; and
- Erection of a substation within the site on the northern boundary.

Ancillary to the activity, the Department will be undertaking a suite of public domain and other transport improvements in the immediate vicinity of the site. If these works were considered in isolation, for the most part, they could be classified as exempt development under Chapter 2 Section 2.113 of the TI SEPP. This would also apply to other minor, low impact works on the site (if considered in isolation), that would be exempt development under Chapter 3. Nevertheless, for transparency and to enable a robust assessment, the full scope of these works has been assessed under this REF, including:

- At-grade parking (57 new spaces, including one accessible space);
- New driveway and access gate from Edmondson Road;
- Landscaping;
- Upgrade of the sports field;
- Internal pathways and associated works; and
- Off-site public domain improvements including retention and upgrade of the Kiss & Drop area and a temporary pedestrian road crossing on Tenth Avenue.

As noted earlier, the only exception to the above are the minor internal upgrades to Building B, which are exempt development and explicitly excluded from the scope of this REF as a separate, self-contained component of the upgrades.

The intent of the activity is to allow for upgrades to APS that will provide a CORE 35 primary school compliant with the EFSG. The works will increase the capacity of the school from 681 students and 40 Full Time Equivalent (FTE) teachers to 734 students and 64 FTE teachers, respectively. Furthermore, provision within the expanded 734 student capacity will be made to enable provision for 30 support class student places.

**Table 2** provides a summary of key aspects of the activity.

**Table 2: Summary of the activity**

| Project Element | Description |
|---|---|
| **Site Area** | 2.96 ha |
| **Project Name** | Austral Public School Upgrade |
| **Project Summary** | Upgrade of an existing government school, including partial demolition, new buildings and structures, landscaping, at grade car parking, sport and play spaces, and associated supporting infrastructure. |
| **Use** | Educational establishment |
| **Student and Staff Numbers** | 734 students (increase of 53 students)<br>64 FTE teachers (increase of 24 FTE teachers) |
| **Car Parking and Bicycle Spaces** | 57 car parking spaces (including one accessible place)<br>100 bicycle parking spaces (two for staff and 98 for students) |
| **Building Height (Maximum)** | • RL 94.433<br>• 14.78m<br>• Three-storeys |
| **Tree Removal** | • 21 trees |
| **Landscaped Area (including play areas)** | 10,108 sqm |
| **Canopy Cover** | • Existing Tree Canopy retained is 6,183sqm<br>• Existing Tree Canopy removed is 776sqm<br>• New / Proposed Tree Canopy (at maturity) is 1,340sqm<br><br>Total Canopy Cover = 6,747 sqm |
| **Off Site Works** | Off-site public domain improvements including retention and upgrade of the Kiss & Drop area and a temporary pedestrian road crossing on Tenth Avenue. The Kiss and Drop area consists of nine bays on Edmondson Avenue and eight bays on Tenth Avenue. |

The key features of the proposed activity are shown in **Figure 21**.

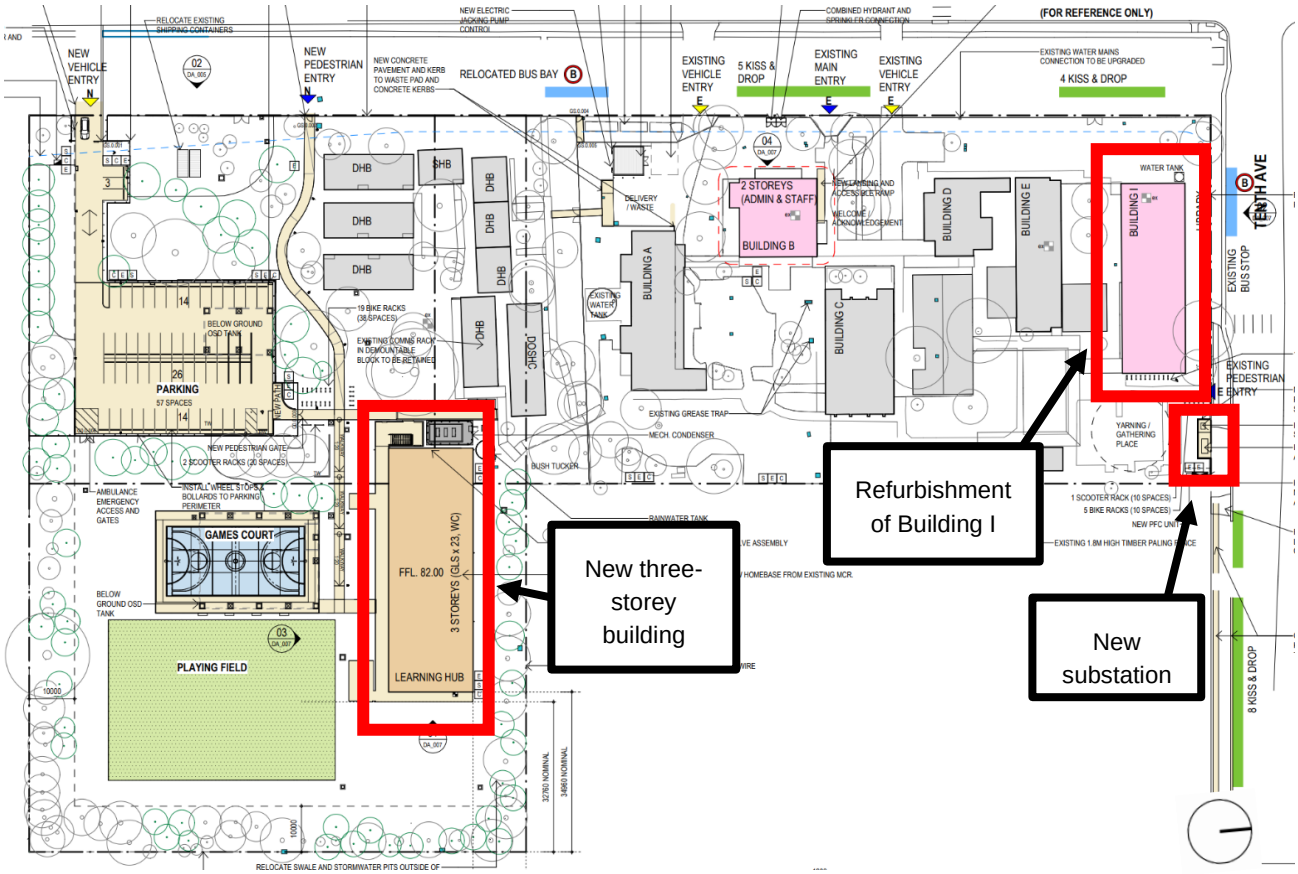



**Figure 21: Proposed indicative site layout (Source: Pedavoli Architects, markup by Gyde)**

## 2.2.2 Design development

### Background

The master planning process for APS focused on maximising space efficiency, enhancing student movement flow, increasing green spaces, and creating modern teaching environments. While the initial project brief and Functional Design Brief envisioned a master plan aligned with a large-scale primary school, budget constraints required the project to prioritise partial delivery. The planning process considered a spectrum of options, ranging from minimal upgrades to existing facilities to more comprehensive plans involving new construction. This approach ensured the school's immediate and long-term needs were addressed within the available budget.

The architects and project team conducted extensive research, engaged with stakeholders, and employed strategic visioning exercises to develop a range of master plan options. These plans incorporated innovative design principles and practical considerations, focusing on site-specific constraints, building codes, and budgetary limitations. Key elements of the planning process included improving site circulation, conserving trees, integrating community-use spaces, creating outdoor learning zones, and accommodating future expansion. By aligning these priorities, the team ensured the master plan balanced immediate functionality with future adaptability.

During the concept design phase, the team advanced a refined plan that optimised the use of existing spaces through phased refurbishments and targeted new construction. This approach minimised disruption while achieving the desired improvements.

### Proposed new building

The proposal comprises the erection of a new 3-storey building that will facilitate an increased number of teaching spaces at APS. The highest point of the new building's ridge line is RL 94.443. There are elements of the building that exceed the maximum height development standard under the Precincts SEPP, however it is below the maximum four-storey building height permitted under the TI SEPP.

The new building is a rectangular shape, with a small plant room, measuring 14.45 metres in height situated 1.50 metres forward of the west elevation on the new building. Externally, the building will feature two staircases: one projecting from the west elevation and the other projecting from the south elevation. The south elevation will also feature a lift for additional access to the building. The roof of the building will also contain photovoltaic solar panels.

The detailed elevations are shown in the 3D render and architectural plans extracted below.

**Figure 22: 3D Renders, with pink signalling height limit (Source: Pedavoli Architects)**

Internally, the building will feature new general learning spaces, support hubs, toilets, and services. These provisions are proposed across the ground, first and second floors. The particulars of each

floor and the roof are detailed in the plans below.


**Figure 23: Proposed ground floor plan (Source: Pedavoli Architects)**

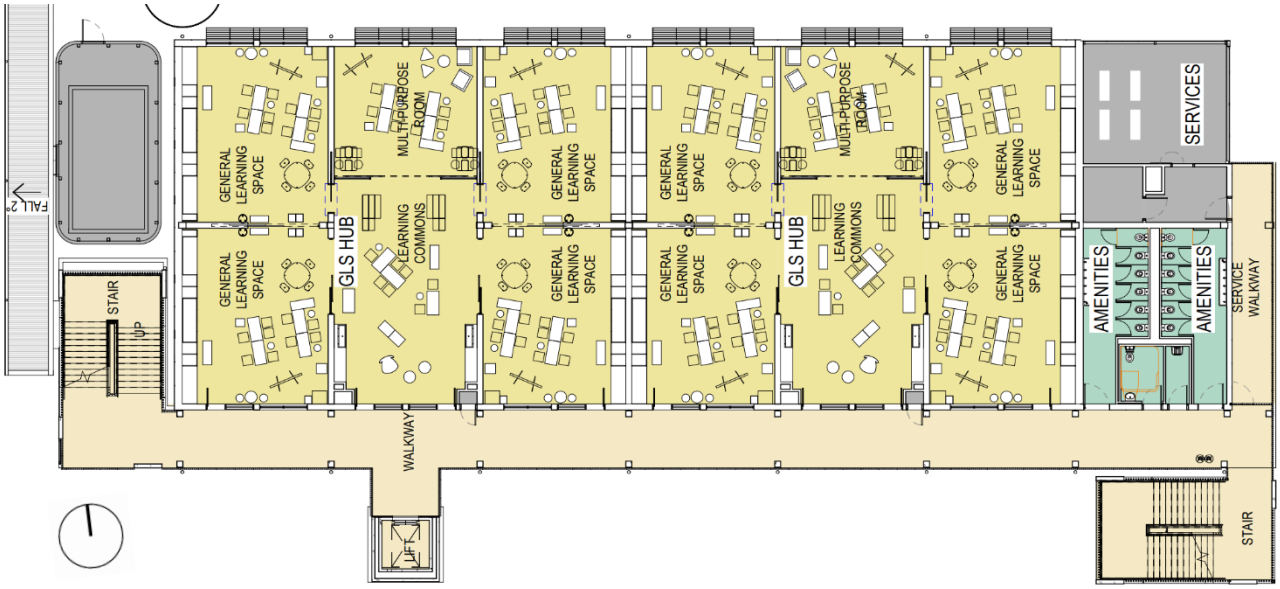



**Figure 24: Proposed first floor plan (Source: Pedavoli Architects)**

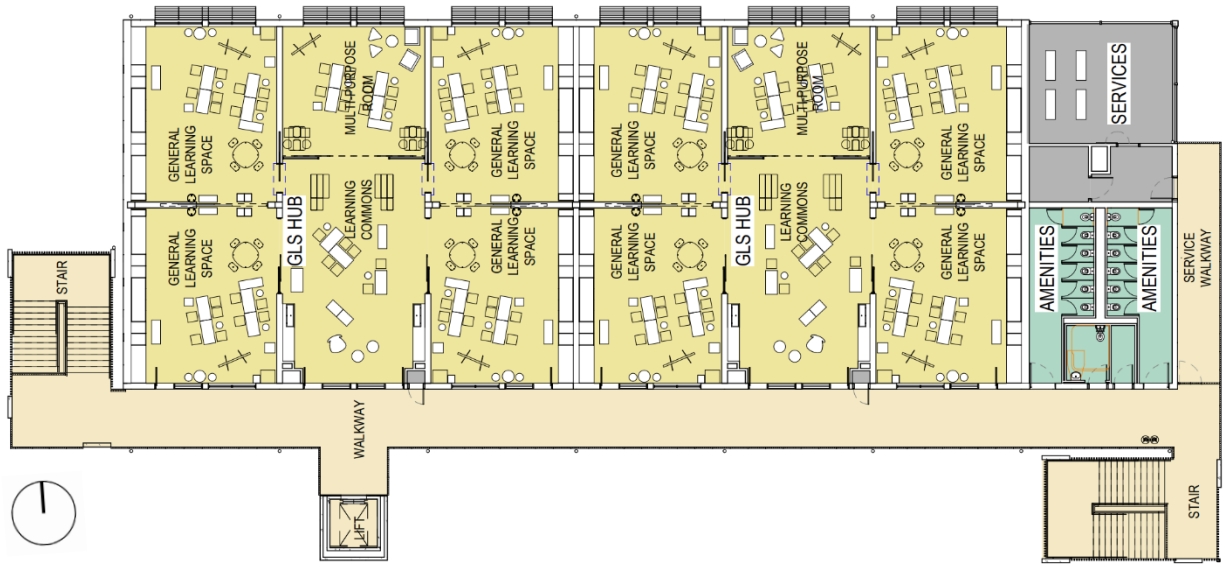



**Figure 25: Proposed second floor plan (Source: Pedavoli Architects)**

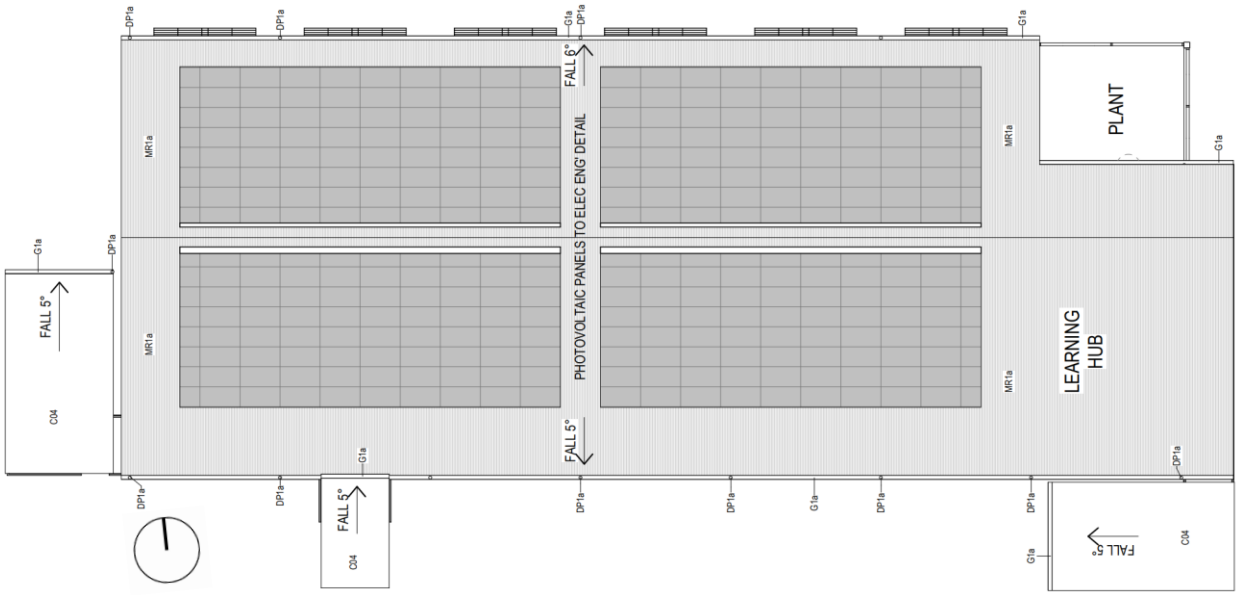



**Figure 26: Roof Plan (Source: Pedavoli Architects)**

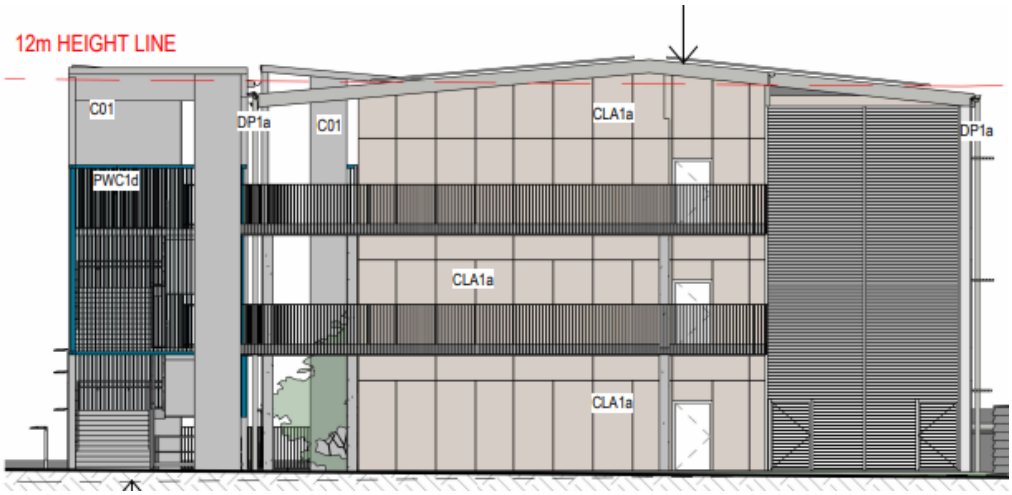



**Figure 27: East Elevation (Source: Pedavoli Architects)**

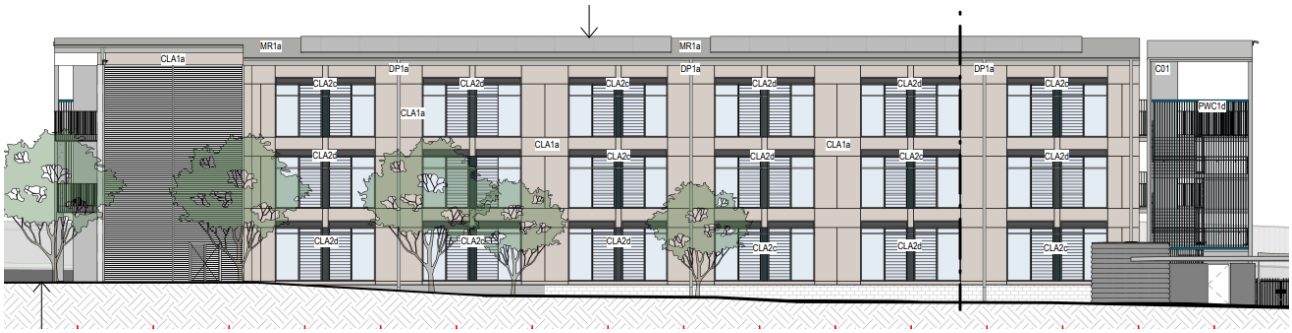



**Figure 28: North Elevation (Source: Pedavoli Architects)**

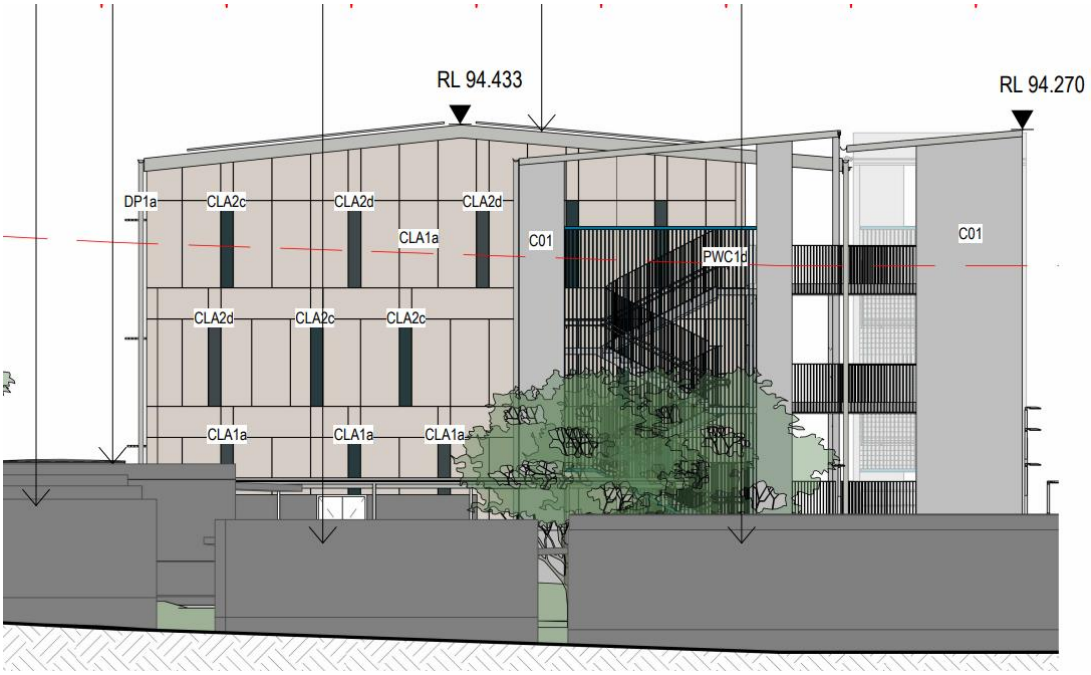



**Figure 29: West Elevation (Source: Pedavoli Architects)**


**Figure 30: South Elevation (Source: Pedavoli Architects)**

### Refurbishment of Building I

Building I is an existing single storey cuboid shaped building with a pitched roof. The building measures approximately 447 sqm gross floor area and is currently used a small library and offices.

The proposal will refurbish and change the function of the existing building to accommodate a new library. The works will involve internal wall demolition to open the space and allow for the new reading areas, program rooms and book storage. **Figures 31-33** below detail the walls to be removed in the demolition, together with the newly proposed floor plan that would arise from the changes.

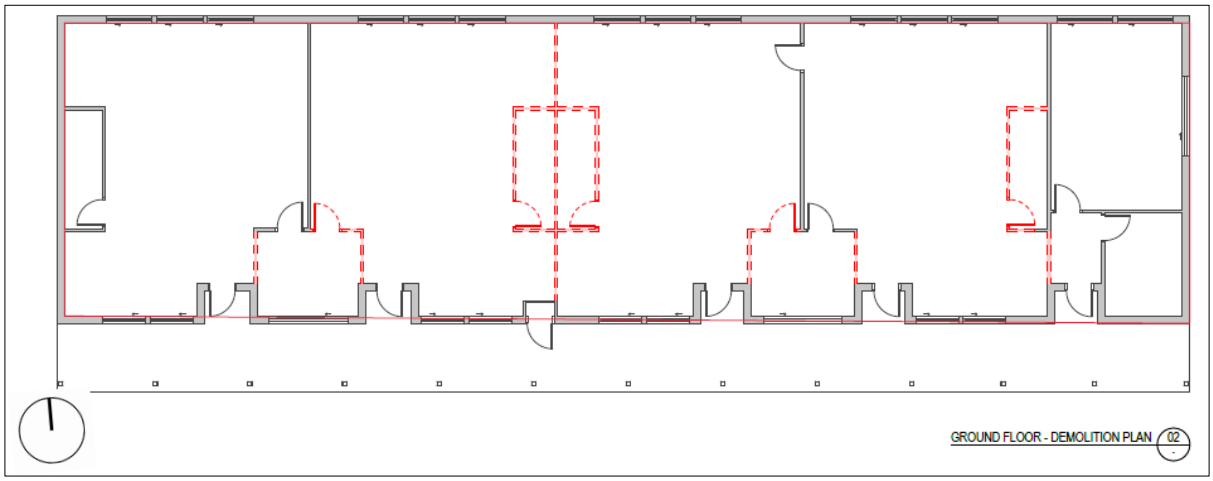



**Figure 31: Proposed Demolition Plan (Source: Pedavoli Architects)**

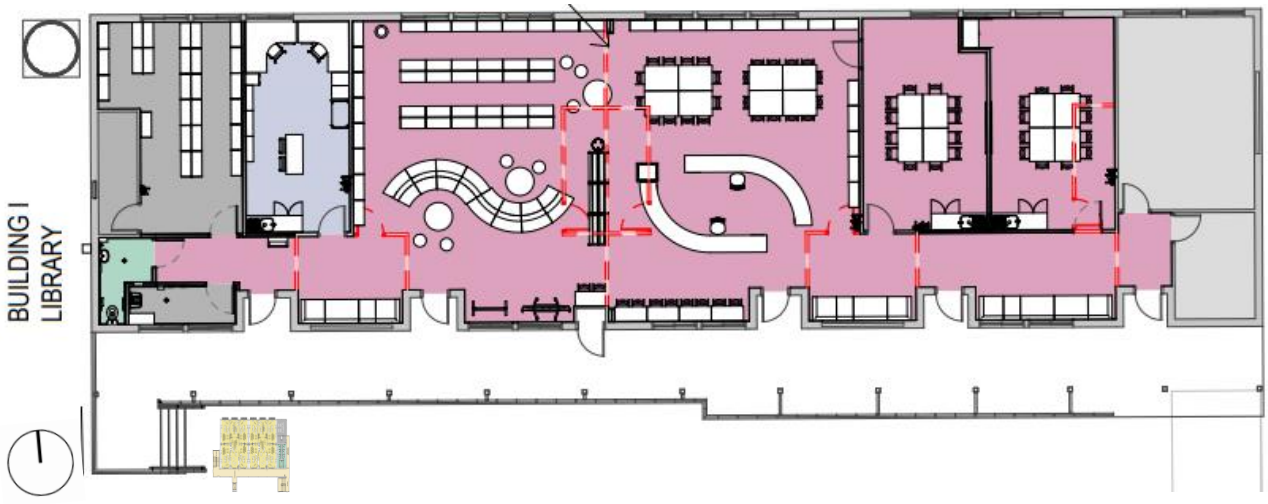



**Figure 32: Proposed Ground Floor Plan (Source: Pedavoli Architects)**

**Figure 33: Proposed Building Sections (Source: Pedavoli Architects)**

## 2.2.3 Design Quality

### Design Quality Principles

The Architectural Design Statement at **Appendix 19** evaluates how the activity responds to the Design Guide for Schools and the Design Quality Principles in the TI SEPP. A summary is provided below.

The proposed design for APS carefully blends with its surrounding environment while prioritising key design principles that enhance both educational and community outcomes. Located in a low to medium density residential area, the new three-storey building aligns with the height and scale of nearby structures, ensuring the built form is well integrated into the neighbourhood. The design incorporates Aboriginal cultural heritage elements in the landscaping, including a welcoming gathering space at the school entry, the use of native plants, and opportunities for Indigenous storytelling through signage. These features create a connection to the land and community, reinforcing cultural awareness. The school's green spaces, landscaped setbacks, and planted edges soften the visual impact of the buildings and provide a pleasant environment for both students and residents. The main entry is strategically placed along the primary street frontage of Edmondson Avenue, ensuring easy access and clear visibility for both students and visitors.

Sustainability and long-term adaptability are central to the new Learning Hub design. The building maximises environmental performance with strategies such as passive solar orientation, natural ventilation, and sunshade fins to control heat gain during summer. Operable windows allow for cross-ventilation, enhancing the building's energy efficiency and comfort. The use of durable, low-

maintenance materials, such as impact-resistant cladding, ensures the building will withstand the test of time while requiring minimal upkeep. The flexible learning spaces, including open general classrooms and learning commons, are designed to evolve with the school's changing needs, making the facility adaptable for future growth or shifts in teaching methods. These spaces are complemented by modern technologies to support dynamic and contemporary educational practices.

The design also focuses on creating an accessible, inclusive, and safe environment for all users. A ground-level walkway leading to the administration block, a lift in the Learning Hub, and level surfaces throughout the site ensure accessibility. Thoughtful wayfinding signage will further support navigation throughout the school, integrating elements that celebrate the local Indigenous culture. The main play space will be securely enclosed, with a perimeter fence extending to the car park to ensure student safety. Clear sightlines around the site and strategic placement of buildings ensure passive surveillance, enhancing security. Additionally, the learning spaces are oriented to take advantage of natural light, creating a bright and inviting atmosphere conducive to learning. Flexible spaces, including indoor and outdoor learning areas, provide opportunities for diverse educational activities. The school is designed with functional and comfortable learning environments, and the play space meets the required minimum area per student. Finally, the visual appeal of the school is highlighted through a balanced design aesthetic with neutral tones and vibrant accents, creating an inviting, modern, and engaging school environment that fosters both learning and community connection.

### Connecting with Country

The design of the activity has been significantly shaped by the principles of Connecting with Country (CWC), with a key influence being the Walk on Country held on 27 June 2022. This event involved local Aboriginal representatives, school representative, and the design team, providing an opportunity to discuss the land's cultural significance and share valuable insights. The Walk helped guide the design by integrating Aboriginal perspectives, ensuring the activity aligns with cultural values and honours the connection to the land.

The insights shared during the Walk on Country have been incorporated into the activity's design to honour the cultural significance of the site. Dreaming Poles will be included near the Administration building, serving as a lasting tribute to Aboriginal heritage. A new bush tucker garden, located within the nature play zone, will celebrate the site's history as a place rich in food and cultural exchange. Functional signage will integrate Indigenous symbols, illustrations, and narratives to educate and connect the community with Dharug traditions. Additionally, the proposed colour palette draws inspiration from the Cumberland Shale Plains Woodland, acknowledging the land's ecological and cultural importance. These design elements ensure that the activity respects and reflects the deep connection of the Dharug people to the land, incorporating their traditions, sustainable practices, and historical presence into the school environment.

### Sustainability and Climate Change

The new Learning Hub building has been designed with environmentally sustainable development principles in mind, including careful consideration of orientation, natural ventilation, and passive thermal design. Cross ventilation is maximised through operable windows, and sunshade fins on the building facades help prevent heat gain during summer. The design focuses on flexibility and adaptability, with open spaces that can be easily modified to meet the changing needs of the

school. The use of impact-resistant cladding and materials that require minimal maintenance ensures the building's longevity. The activity will meet EFSG DG02 requirements and achieve a 5 Star Green Star Design & As-Built v1.3 certification, adhering to sustainability guidelines for optimal environmental outcomes.

The upgrade will also improve accessibility and circulation, creating a more inclusive learning environment, while offering access to green spaces that encourage outdoor learning. The initiative aligns with the Department's sustainable development approach, which balances human and ecological progress. A detailed sustainability plan has been developed, incorporating cost-effective initiatives, particularly focusing on energy efficiency to reduce long-term utility expenses and minimise emissions. Sustainability efforts have been implemented without exceeding the project budget or negatively impacting delivery.

### 2.2.4 Landscaping

Proposed landscaping, ancillary to the broader activity, includes the following:

- Upgrade of the existing sports field and a new games court.
- 64 new trees and groundcover plants to be established on site.
- Existing high value trees to be retained and integrated into carpark surrounds (marked as 2 on the plan below).
- Buffer planting to boundaries to provide a softened edge and screening to the adjusting residential lots (marked as 3 on the plan below).
- The construction of a Multi-Use Games Court (marked as 4 in the plan below).
- The creation of a formal Playing field area through regrading of the existing ground level (Marked as 5 on the plan below).
- Buffer planting of native trees in a garden bed to connect to the future parkland (land on Tenth Avenue north-east of the site zoned RE1 Public Recreation) (marked as 6 on the plan below).

Refer to the landscape plans (**Appendix 20**) below for further detail.

**Figure 34: Existing sports field aerial image, identified by blue marker (Source: Nearmap)**

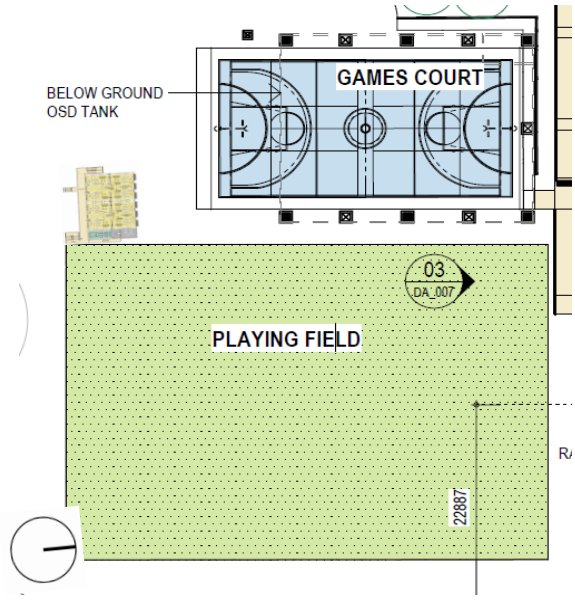



**Figure 36: Artist Impression of Proposed Upgraded Sports Field (Source: Pedavoli Architects)**


**Figure 37: Extract showing the extent of new landscaping (Source: Taylor Brammer Landscape Architects)**

## 2.2.5 Access and Parking

A new at grade carpark and driveway is proposed as part of the broader upgrades.

### New at-grade car park

The proposal will include construction of 57 new at-grade parking spaces situated in the southwest corner of the site. At present, there are only a small number (14) of staff parking spaces available for the entire site. The spaces are to be constructed from concrete graded evenly across an RL of 80m AHD. The new spaces will be accessed via the proposed new driveway along Edmondson Avenue.

Out of the 21 trees required for removal for the total activity, five of these are within the footprint of the proposed new carpark. The new car parking spaces can be seen in **Figure 38** below, together

with a plan showing them in the context of the wider site.

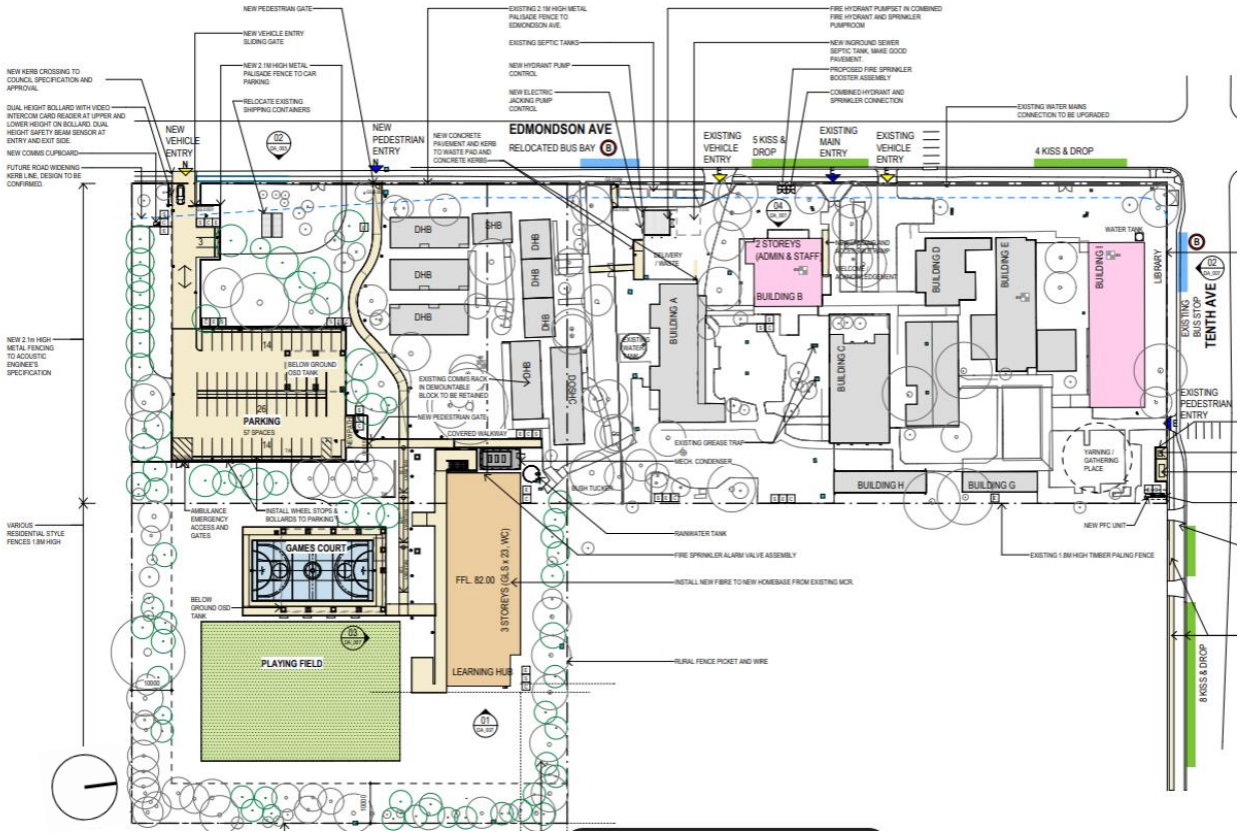



**Figure 38: Site plan with proposed parking - accessible space indicated in hatched shading (Pedavoli Architects)**

### New driveway

The proposal also incorporates a driveway with new ingress and egress on the western boundary onto Edmondson Avenue. The new driveway and entrance for vehicles will feature a sliding gate attached to the fence line, this will measure 6.00m wide and 2.15m in height. The plans below detail the entrance, the driveway and the new gate respectively. The new parking spaces have been designed to enable manoeuvring on-site and forward entry and exit to and from the public road.

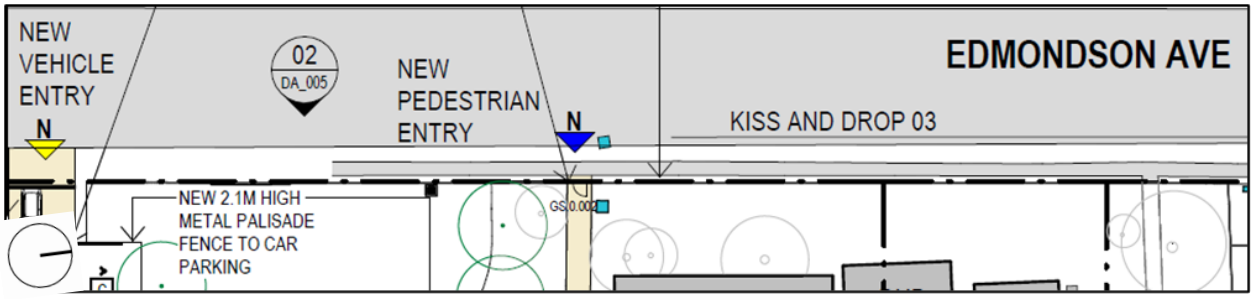



**Figure 39: Proposed entrance (Source: Pedavoli Architects)**

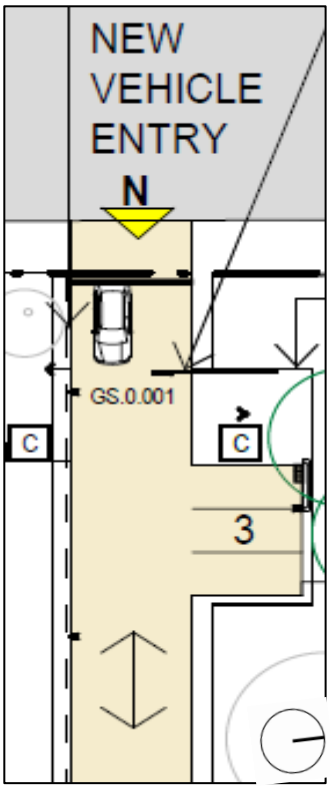



Figure 40: New driveway (Source: Pedavoli Architects)

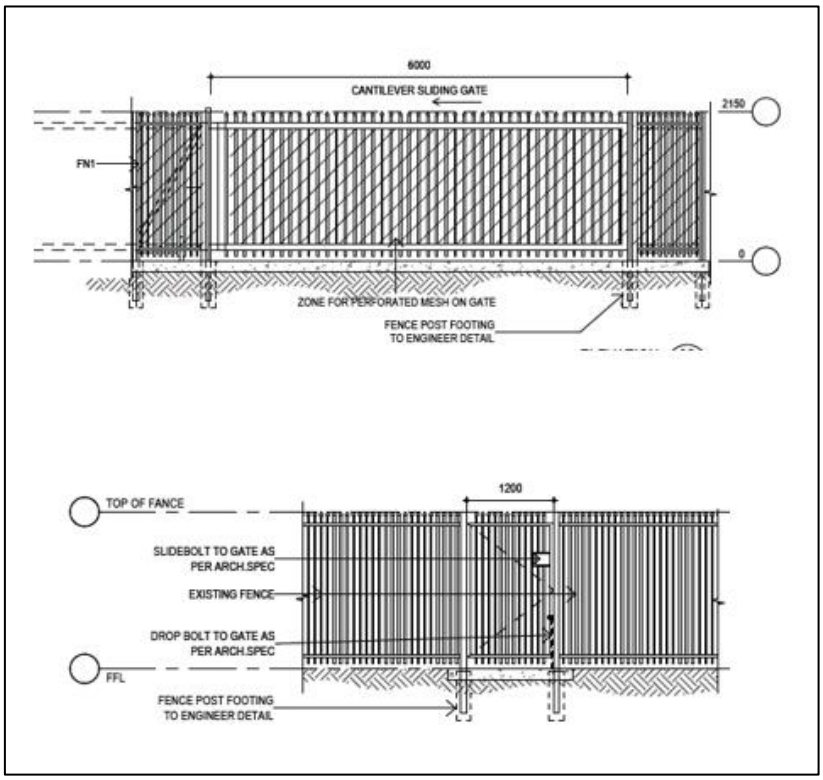



Figure 41: New sliding gate (Source: Pedavoli Architects)

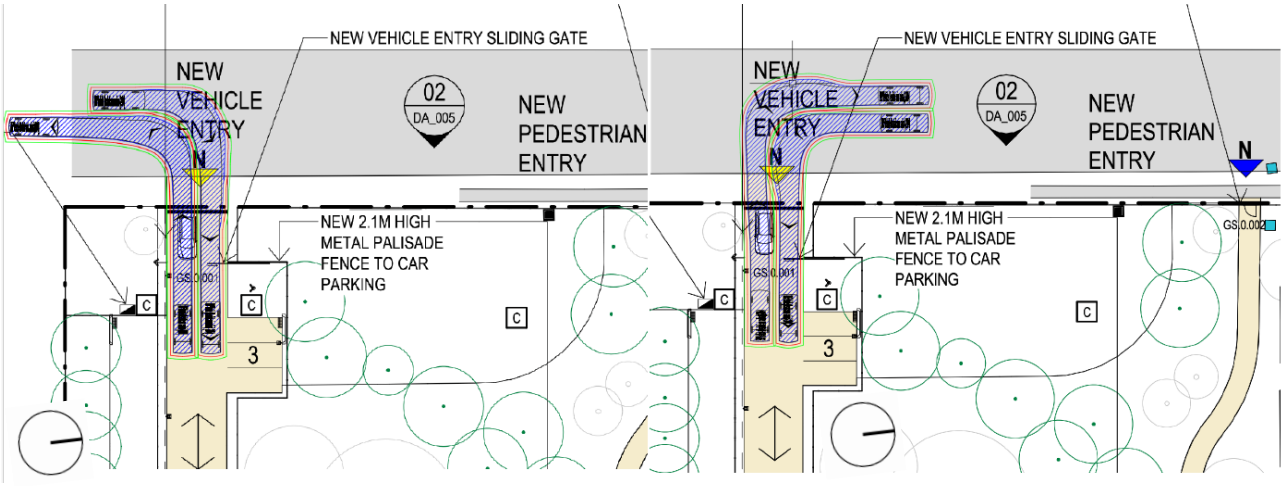



Figure 42: Swept path analysis detailing vehicular movement ingress and egress (Source: Arup)

### Off-site public domain improvements

The activity will retain the existing two ‘Kiss & Drop’ bays within the school and support learning units and proposes an additional 17 bays on Edmondson Avenue and Tenth Avenue (including a footpath extension). Refer to **Figures 43-44** below. The scope of the Kiss & Drop has been agreed with LCC at the Transport Working Groups (TWG) meetings for the project and are required to support the proposed upgrades. Whilst the eight kiss and drop bays on Tenth Avenue are located in front of the adjoining site at 90 Tenth Avenue, LCC are currently in the process of purchasing

this adjoining site for redevelopment into a council park. LCC has been consulted in this regard and the strategy to include kiss and drop bays at the frontage of 90 Tenth Avenue (future park) was agreed and is therefore considered acceptable.

The quantum of 'Kiss & Drop' bays required has been calculated using the baseline pupil mode share (89% for primary school students and 92% for pre-school and support learning unit students). A Transport Impact Assessment (**Appendix 16**) and an accompanying Preliminary Construction Traffic Management Plan (CTMP) (**Appendix 21**) have been prepared by the traffic consultant in support of the application. These documents provide further detail in relation to the proposed Kiss & Drop areas.

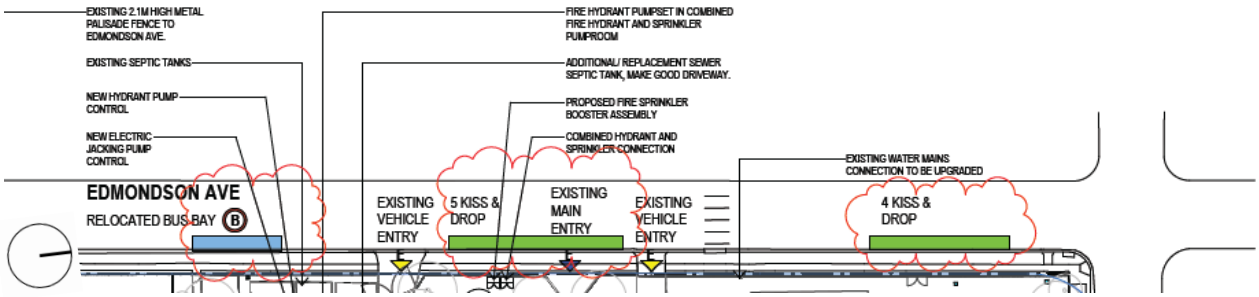



**Figure 43: Extract from overall site plan showing kiss and drop bays on Edmondson Avenue (Source: Pedavoli Architects)**

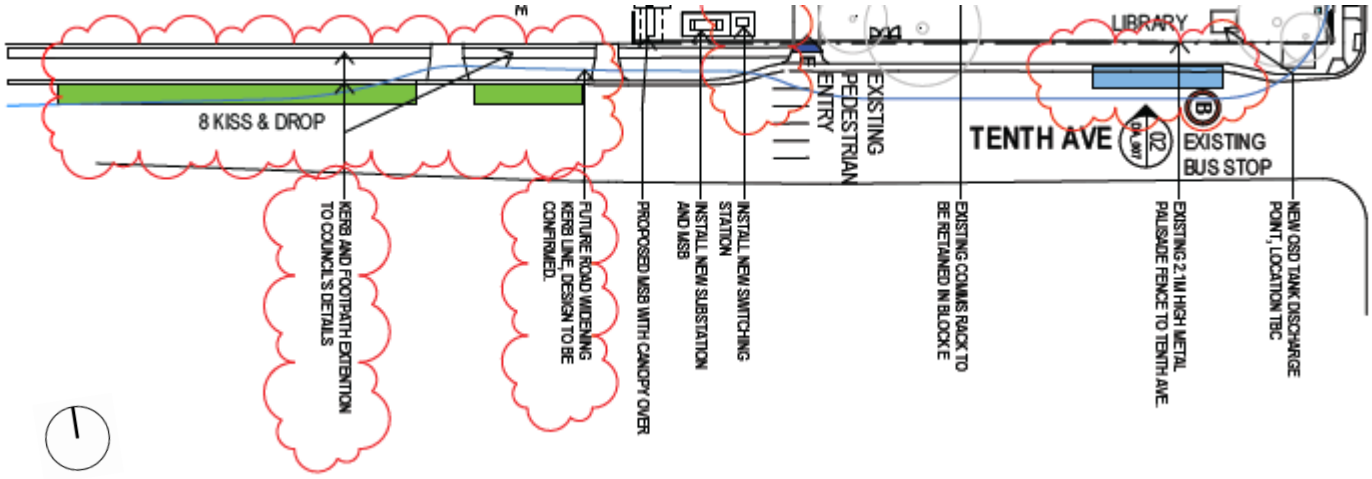



**Figure 44: Extract from overall site plan showing kiss and drop bays on Tenth Avenue (Source: Pedavoli Architects)**

## 2.2.6 Construction

### Construction Management

Construction hours for the activity 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

A Head Contractor will be engaged for the proposed works and will be required to manage the site and deliver the works through its specialist subcontractors and trades. The head contractor will be responsible for the following:

- Carrying out risk assessments, setting up and implementing management systems
- Construction site management
- Management of subcontractors on and around site
- Construction program management
- Complying with the relevant mitigation measures
- Work Health & Safety
- Implementation and management of environmental controls on site
- Implementing a Working with Children Check process
- Undertaking a hazard materials identification and management process

The works will be delivered in accordance with the relevant Work, Health & Safety (WH&S) Act and Regulations.

The construction vehicles accessing the site will mainly comprise of Medium and Heavy Rigid vehicles (MRVs and HRVs). It is expected that a one-off event with a 100-tonne mobile crane entering at the start of the construction and existing at the end of construction will be required. During certain stages of construction, an articulated vehicle will also be used onsite.

No parking will be allowed within the site for workers. The surrounding roads offer unrestricted on-street parking where parking is available. These spaces could be used by construction workers. Workers choosing to travel by car shall be responsible for finding their own parking and are to park in accordance with all signposted parking restrictions. Once the number of construction staff is agreed by the contractor, a detailed Construction Traffic Management Plan will be prepared, which will outline how to avoid interference with neighbours.

The activity will be carried out in two construction sequences: The learning hub building slab and sub-structure (Crown Certificate 1) and the remaining works (Crown Certificate 2). This is to expedite the programme so the learning hub building can be delivered as quickly as possible and address the significant growth in numbers at the school and to minimise impact to the school's operation.

### Demolition

To facilitate various aspects of the proposed activity, demolition of existing buildings and works on site is required. Most of the demolition is proposed in the south-west corner of the site, to accommodate the new at-grade parking and the new driveway.

The demolition plan provided with the architectural plans in **Appendix 3** (see APS-PA-00-ZZ-DR-A-DA_004 and **Figure 45** below) outlines the exact features to be removed, including the existing basketball court, retaining walls, a redundant LPG tank, kerb stone, grates, demountable homebase and portable containers.

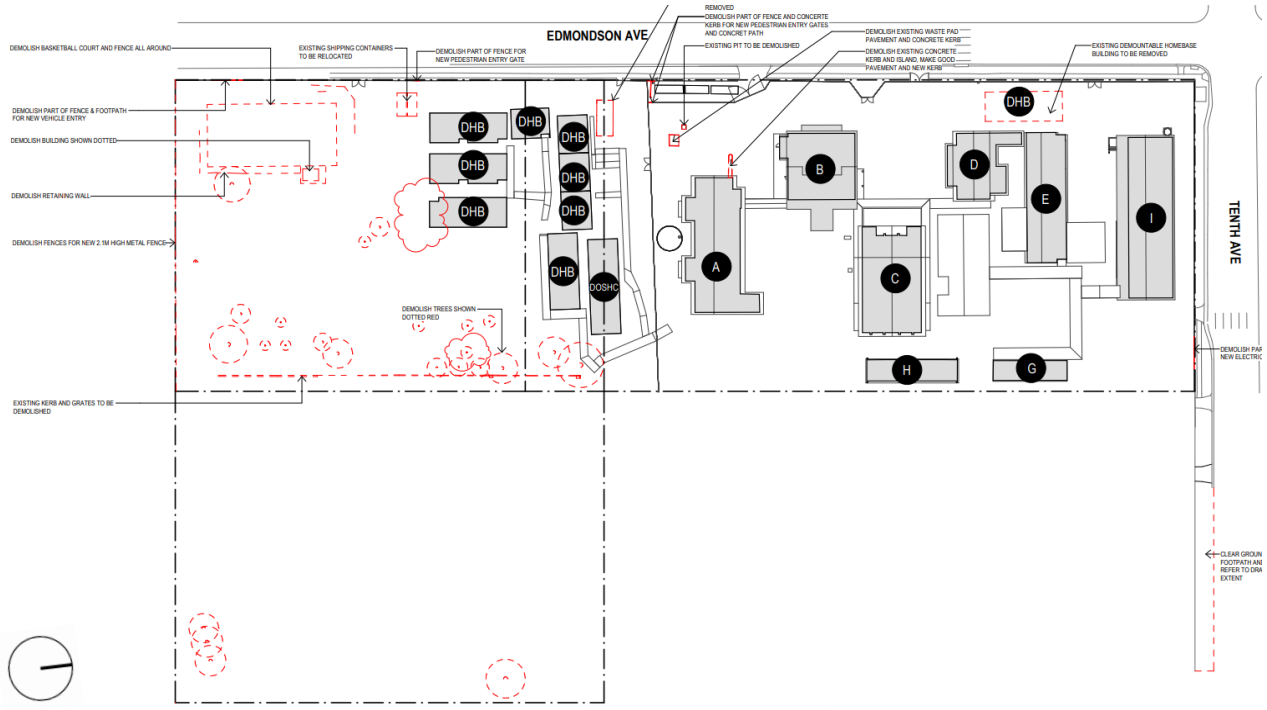



**Figure 45: Site Demolition Plan (Source: Pedavoli Architects)**

## Earthworks

The activity involves bulk earthworks, comprising fill and excavation and other site preparation works. Material derived from excavation will consist of a mixture of sandy clay fill material and residual clay soils, with the potential for excavation of weathered siltstone. Engineered fill is expected to be required beneath slabs and areas of hardstand or pavements. The thickness of engineered fill will be developed once structural loads have been confirmed.

## Remediation

The proposed activity will not change the existing use as an educational establishment. Previous investigations, including a Preliminary Site Investigation (PSI) and Detailed Site Investigation (DSI) by SMEC, identified contamination risks such as elevated PFAS levels near the southern boundary, linked to runoff from the former RFS site. Temporary fencing has been installed by APS to restrict access to these areas. PFAS contamination is a pre-existing issue, not caused by the proposed activity, and will be remediated by the LCC and the RFS before development begins.

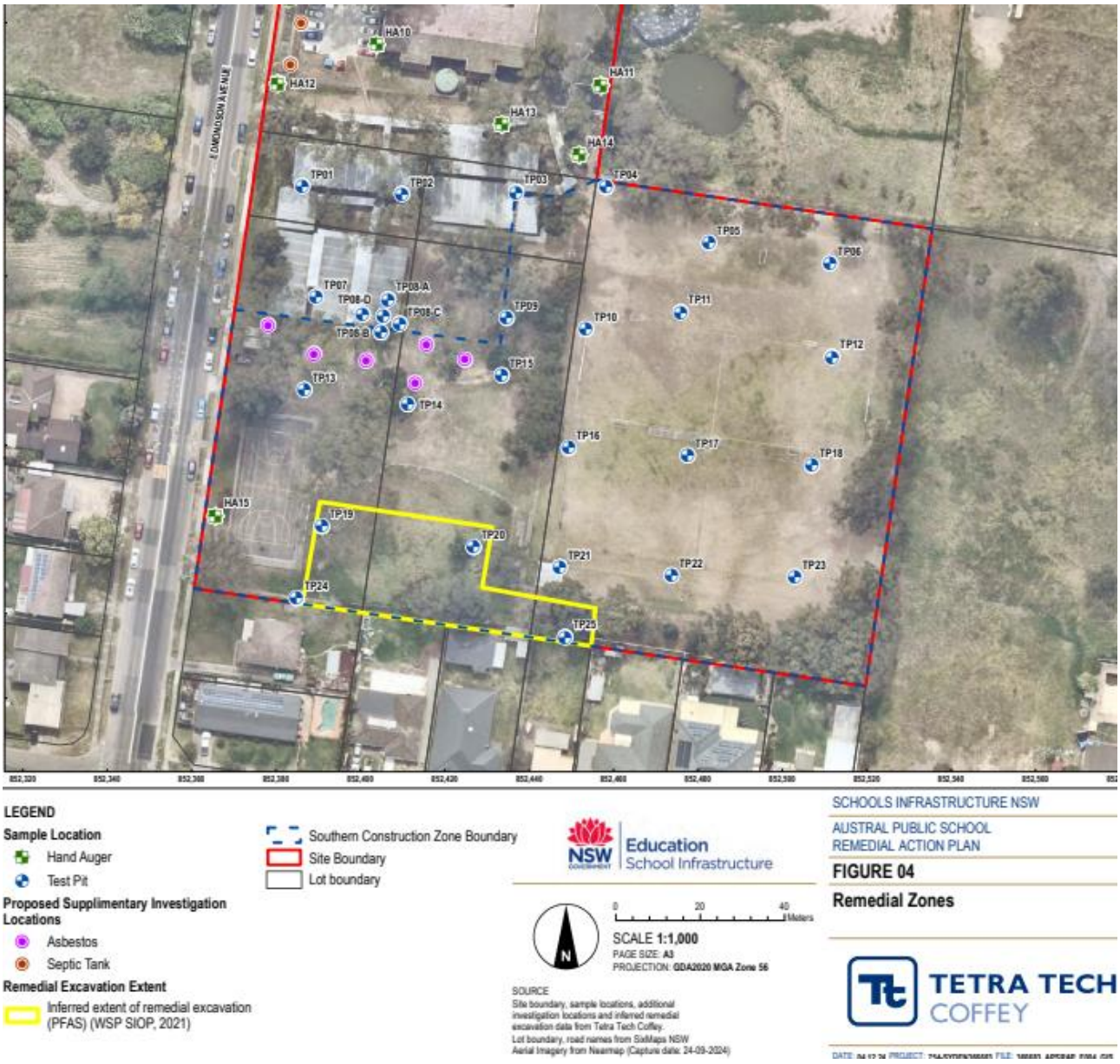



**Figure 46: Remedial excavation extent (Source: Tetra tech Coffey)**

Tetra Tech Coffey Pty Ltd has prepared a Remedial Action Plan (RAP) that addresses multiple contamination risks, including asbestos and potential pathogens from historical sewerage overflows along the site's western boundary. The RAP outlines further investigations, including assessing health risks related to septic tank overflows and additional testing near asbestos-identified areas. An Asbestos Management Plan (AMP) or Site-Specific Asbestos Management Plan (SSAMP) has been developed. The PFAS contamination in the southern portion of the site will be managed by LCC and RFS before any construction occurs.

The remediation works, which include managing hazardous materials like suspected asbestos and PFAS, will be conducted in stages, including surface soil management and further testing after demolition. The implementation of the RAP and its recommendations have been included as mitigation measures, ensuring the site is suitable for the proposed activity. The remediation process will be completed prior to footing works, with certificates of remediation provided to the certifier before the Occupation documentation is issued, ensuring the site is safe for school use.

Overall, the site can be made suitable for development, and the contamination issues do not prevent the proposed works from proceeding.

Note: The proposed remediation works (not including the fenced area which will be separately remediated by LCC and RFS) meet the conditions for Category 2 (per the Resilience and Hazards SEPP), as none of the criteria for Category 1 remediation work apply to the site. The site is not located in a floodway or any of the other environmental zones that would trigger Category 1 requirements under the SEPP. As the site is not subject to any restrictions that would require development consent, the remediation process can proceed under Category 2, and the site can be made suitable for the proposed development without the need for further consent for Category 1 Remediation Works.

### Tree and Vegetation Removal

The Arboricultural Impact Assessment Report (**Appendix 7**) details the trees designated for removal. A total of 21 trees (Nos. 53, 54, 65, 88-90, 104-107, 113-120, 152, 153, and 157) are proposed to be removed to facilitate the activity.

Under Section 3.37(5) of the TI SEPP, construction works are permitted for the purpose of constructing, operating, and maintaining permanent classrooms, a preschool, an administration building, and other related structures.

Construction works, as defined in Section 3.3 of the TI SEPP, include activities such as vegetation clearing (including tree removal), landscaping, demolition, relocation or removal of infrastructure, and the establishment of temporary construction yards and laydown areas. Given these definitions, the proposed tree removal is directly related to the intended activity and has been incorporated into the proposed scope of the REF.

### Utilities and Services

The proposal also involves the installation of a new substation located on the northern boundary of the site, to the east of Building I and south of Tenth Avenue. A Level 3 Accredited Service Provider will be appointed to prepare a method of supply and submit to Endeavour Energy for approval. **Figures 47-48** below detail the location of the proposed substation.

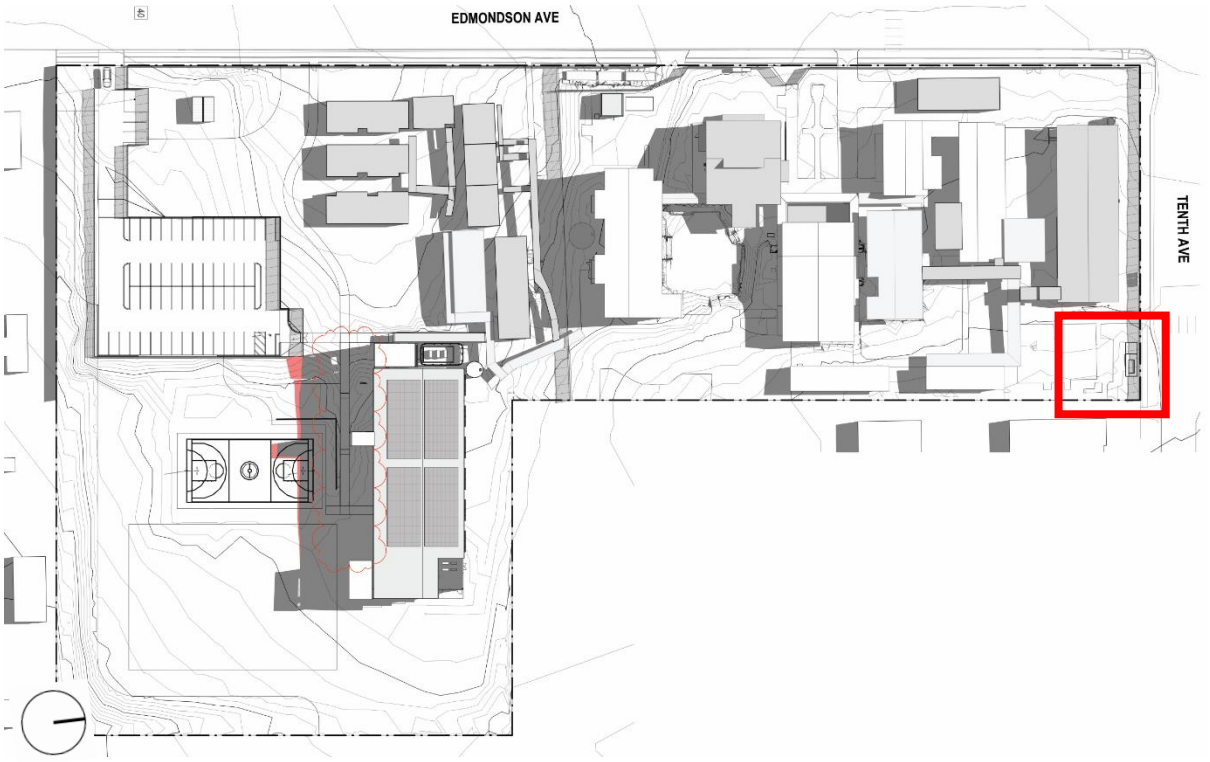



**Figure 47: Proposed Substation in whole site context outlined in red (Source: Pedavoli Architects)**

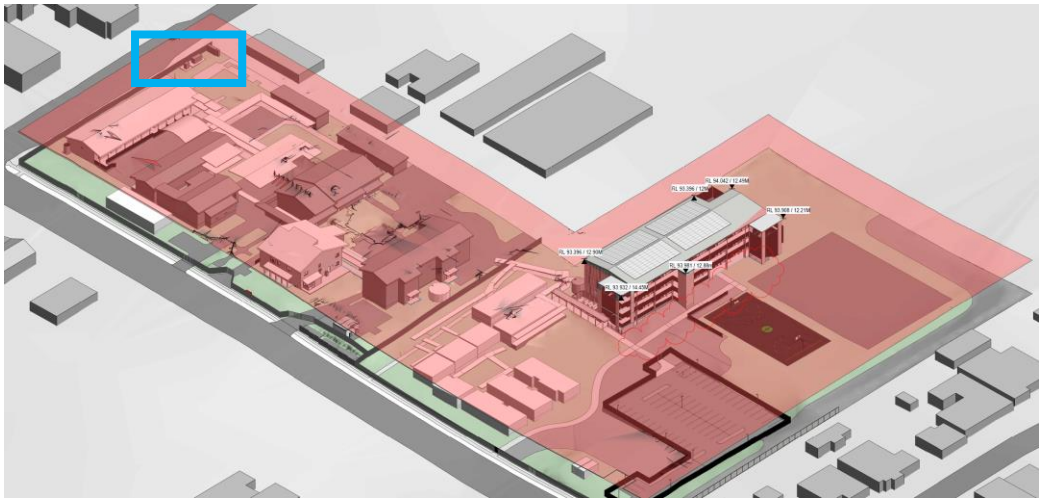


**Figure 48: Proposed Substation outlined in blue in alternative perspective of site (Source: Pedavoli Architects)**

### Electrical

The existing electrical supply to the site has been considered and determined to not have suitable capacity to provide the site with power. A new padmount substation will therefore be required, along with new main switchboard to effectively service the proposed works. The proposed location of the padmount substation is along Tenth Avenue. Existing redundant gas pipes would need to be removed from this location prior to the delivery of the padmount substation. In addition, a new site main switchboard would need to be established for the site. The proposed location of the new site main switchboard is adjacent the new padmount substation within the canopy.

### Water and Sewer

The existing 250mm CICL Sydney Water water main, located in Edmondson Ave will be able to cater for the proposed potable water and fire services demand of the site. There is sufficient flow within the Sydney Water watermain to cater for the proposed site's water supply for potable water and fire fighting water.

The existing septic pump out system will be replaced with a new underground tank. We understand the proposed septic tank location (which is ancillary to the proposed activity) will be outside of the future proposed Edmondson Avenue road widening (scheduled for completion in 2028). The total capacity of the tank has been determined as 100,000L based on the proposed student and staff numbers.

### Waste Management

A Waste Management Plan (Demolition, Construction and Operational) has been prepared by the waste consultant and provided at **Appendix 22 & 23**.

#### Demolition

It is estimated that the demolition phase will generate approximately 4,247 tonnes of waste, with the majority of the plasterboard, metal, timber, brick and concrete being recycled. Some of the timber and general residual waste will also be recycled, however, given the potential for treated timber to be found on site, the recovery rate (and the potential of recycling) is reduced.

#### Construction

Active site management during the construction phase will ensure all waste/recyclable materials are disposed of appropriately and that all waste receptacles are of sufficient capacity to manage onsite activities. It is estimated that 149.54 tonnes of waste will be generated during the construction phase.

#### Operational

Designated waste storage areas will be established for the collection of all waste and recyclables. The waste storage areas will have appropriate signage to clearly identify the area to construction workers and to prevent unauthorised access to the area.

Stockpile size or bin numbers will be minimised by regular removal of waste from site. The waste storage areas will be covered where possible to prevent transmission of dust and fine particles, odour, wind impacts, vermin and vandalism or theft.

In relation to operational waste, the waste storage area for the activity will be located adjacent to Edmondson Avenue at the end of the staff car park, which is currently the existing waste location. This will remain the waste storage area for the proposed new building, as there is adequate space to accommodate the expected increase in waste generation.

General waste and recycling are currently serviced by LCC, and the intention is to continue with LCC's service at the completion of the activity. LCC waste contractor will be able to access the site off Edmondson Avenue, into the parking lot, conduct collection and then perform a three-point turn to exit.

Overall, it is demonstrated that waste generated by the demolition, construction and operational phases of the activity has been adequately considered.

### 2.2.7 Staging

The proposed upgrade will not be staged.

### 2.2.8 Operation

**Table 3: Operational changes**

| | Existing | Proposed |
|---|---|---|
| **Students** | 681 | 734 |
| **Staff** | 40 | 64 |
| **Hours of operation** | No changes are proposed to the hours of operation. | |

## 2.3 Related activities – ancillary development

The proposed activity also involves ancillary works associated with the upgrades. Some of these works are minor, and in isolation, are categorised as exempt development under the TI SEPP (such as, landscaping, walking paths). However, for the purpose of this REF, they have been considered as ancillary to the activity and therefore assessed as development permitted without consent. The off-site transport improvements are also ancillary to the activity, but not strictly within the boundaries of the APS site. Similar to the on-site works, there are discreet components of the off-site works that may be classified as exempt development (under Section 2.113 of the TI SEPP), such as footpaths and line markings, if they were to be considered in isolation. However, the broader holistic package of off-site works can be classified as being associated with a road and therefore, are permitted without consent (and can therefore be included in this REF) under Section 2.109.

Further, we note that the proposed remediation works will be undertaken as Category 2 (work not needing consent) under the State Environmental Planning Policy (Resilience and Hazards) 2021.

The only exception to the above are the minor internal refurbishment works to existing Building B, which are explicitly excluded from the scope of this REF, as outlined in the architectural plans accompanying this REF.

# 3. Proposal Need and Alternatives

## 3.1 Proposal Need

The proposed upgrade of APS is crucial to meeting the immediate and projected student demand in the Austral and Leppington precincts, which are experiencing some of the highest population growth rates in NSW due to government rezoning and greenfield housing development. The school faces a significant shortfall of 72 PTS by 2041, and with a maximum capacity of 44 teaching spaces, upgrading the site will help alleviate enrolment pressures in the immediate and long-term . Current facilities are inadequate, with many classrooms falling below recommended standards and a reliance on six temporary teaching spaces that need replacing. The condition of core infrastructure also hampers operational effectiveness, with significant gaps in facilities for exhibitions, performances, and specialist disciplines. Furthermore, as the local population grows, the need for dedicated support classrooms for students with special needs becomes more pressing. The proposed activity will address these issues by enhancing the site's capacity, improving teaching space quality, and providing necessary support services, ensuring the school can continue to serve the community's educational needs effectively.

## 3.2 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 4**.

**Table 4: Assessment of Options and Alternatives**

| Option | Discussion | Preferred Option |
|---|---|---|
| **Option 1: The Proposed Activity** | The proposed activity, within the existing school site, maximises land efficiency while delivering significant upgrades. A new three-story building with PTS and three Specialist Teaching Spaces (STS) is designed as collaborative hubs for active, team-based learning with advanced technology. A specialised support hub will cater to diverse learning needs, while refurbishments to Building B and Building I will create a modern Administrative and Staff Centre and a revitalised library, respectively. Despite funding constraints, including the retention of demountable classrooms and the absence of a new hall or Covered Outdoor Learning Area (COLA), the proposal optimises the use of limited space to enhance learning environments and supports future growth. | Option 1 is preferred as new and upgraded educational facilities within the existing school site will meet the long-term educational and social needs of local primary school students. |
| **Option 2: Alternative Designs** | An extensive due diligence process was undertaken by the department to determine the most suitable options and designs for the site. Three alternative options were considered for the staging of the masterplan against their ability to | The alternative designs were considered to provide reduced benefits to the site than the preferred design. A number of advantages and disadvantages were identified including: |

| Option | Discussion | Preferred Option |
|---|---|---|
| | | • Option 1 – advantages include the new buildings having optimal orientation and makes provisions for future extension of the new teaching space building. Disadvantages include not providing a hall/COLA to suit an expanded school. It also stains demountable classrooms and the existing OSHC facility.<br>• Option 2 – advantages include the new buildings having optimal orientation and makes provision for the future fit out of level 2. Disadvantages include not providing a hall and COLA to suit an expanded school, retaining existing demountable classrooms and no provision for support learning facilities.<br>• Option 3.1 – advantages include the new buildings optimal orientation, all teaching spaces are a new contemporary standard, it aligns with ESFG site functional relationships, relocates the entry away from Edmondson Road to Tenth Avenue and achieves design principles. Disadvantages included exceeding the funding envelope and considerable operational interruptions as a result of construction.<br><br>The preferred option offered a more cost-effective and efficient solution for the site, aligning with broader planning efforts to enhance the educational infrastructure in the area. The advantage of this design is that the new buildings will have optimal orientation, all teaching spaces are a new contemporary standard, it aligns with EFSG site functional relationships and achieves design principles. The disadvantage of this option is that it would entail considerable operational interruptions.<br><br>Opting for an alternative site is also not preferred because the existing school site already has sufficient |

| Option | Discussion | Preferred Option |
|---|---|---|
| | | capacity to accommodate future demand through planned upgrades. Moving to a new site would incur additional costs and delays, disrupting the continuity of the educational environment for students and staff. |
| **Option 3: Do Nothing** | Under the "Do Nothing" scenario, the school would continue operating within its existing constraints, resulting in significant economic and educational costs. Excess student demand would need to be redistributed across the study area per the 50/50 rule, requiring reliance on demountables and increased spatial density to meet statutory obligations. These measures would lead to higher operational and maintenance costs, extended travel times, and overcrowded classrooms, which hinder effective learning and strain resources. Additionally, teaching spaces would remain outdated, misaligned with modern pedagogical needs, and unfit for purpose, further exacerbating adverse outcomes. This scenario risks the Department failing to meet legislative requirements to accommodate students within their designated catchment areas, compromising equity and access for NSW public school students. | Option 3 is not preferred as it perpetuates overcrowding, reliance on outdated teaching spaces, and increased use of demountables, which are costly to maintain and unsuitable for modern educational needs. This approach fails to address growing demand or align with legislative obligations, ultimately resulting in long-term economic, operational, and educational disadvantages for the school and the broader community. |

# 4. Statutory and Strategic Framework

## 4.1 Permissibility and Planning Approval Pathway

Section 4.1 of the EP&A Act states that if an EPI provides that development may be carried out without the need for development consent, a person may carry the development out, in accordance with the EPI, on land to which the provision applies. However, the environmental assessment of the development is required under Part 5 of the Act.

The 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 5**.

As part of the broader scope of works, the Department will be undertaking a suite of public domain, utilities and various other minor works. In isolation, many of these works would be classified as exempt development, pursuant to Chapter 2 of the TI SEPP. Nevertheless, for transparency and to enable a holistic understanding of the full scope of works that will be undertaken, this REF has considered and assessed all works, including those that would otherwise be exempt. Refer below for further detail.

**Table 5: Description of proposed activities under the TI SEPP**

| Description of Works | Division and Section within TI SEPP | Exempt or Development Permitted Without Consent? |
|---|---|---|
| Demolition of existing structures and removal of trees, as well as other site preparation works; | Section 3.37(1)(e) - *demolition of structures or buildings (unless a State heritage item or local heritage item),*<br>Tree removal permitted under the definition of construction works in Section 3.3.<br>The existing structures on the site are neither State nor local heritage-listed, making their demolition permissible. | Development Permitted Without Consent |
| The erection of a new three-storey building comprising teaching spaces that includes 20 permanent teaching spaces and three support teaching spaces; | Section 3.37(1)(a)(iii) *construction, operation or maintenance of any of the following—(iii) a permanent classroom,*<br>The proposed new structure is a 3-storey building incorporating classrooms and is therefore permissible. | Development Permitted Without Consent |
| Refurbishment and change of school function of Building I from classrooms to a Library; | Section 3.37(1)(a)(i) *construction, operation or maintenance of any of the following—(i) a library or an administration building,*<br>Refurbishment and change of use of Building I to a library is permissible under this section (Subclause 5 also allows for the change of use). | Development Permitted Without Consent |
| Erection of a substation within the site on the northern boundary; | Section 2.44 (2) (d) *establishment of a new substation or an increase in the area of existing substation yards or the installation of equipment, plant or structures in existing substation yards or substation buildings.* | Development Permitted Without Consent |

| | | |
|---|---|---|
| | The proposed substation is therefore permissible without development consent under this section. | |
| Fencing; | Fencing is permissible without development consent under Section 3.37(1)(d) *security measures, including fencing, lighting and security cameras* | Development Permitted Without Consent |
| Bulk earthworks, comprising fill and excavation and other site preparation works including tree removal and landscaping on the eastern parcel. | Section 3.37(5) - *Construction works* are permissible in connection with the purpose of construction, operation and maintenance of permanent classrooms, preschool, administration building and etc.<br>Construction works are defined in Section 3.3(3) and include clearing of vegetation (including tree removal) and landscaping, demolition, relocation or removal of infrastructure and temporary construction yards and lay down areas. | Development Permitted Without Consent |
| At-grade carpark (57 new spaces), including new access and gate from Edmondson Road. | Would otherwise be exempt development under Schedule 5 of the TI SEPP. However, as tree removal is required to facilitate the construction of the carpark, it is classified as development permitted without consent under Section 3.37(1)(a)(vi). | Development Permitted Without Consent |

Ancillary to the activity, the Department will be undertaking a suite of public domain and other transport improvements in the immediate vicinity of the site. If these works were considered in isolation, for the most part, they could be classified as exempt development under Chapter 2 Section 2.113 of the TI SEPP. This would also apply to other minor, low impact works on the site (if considered in isolation); they would be exempt under Chapter 3 of the TI SEPP. Nevertheless, for transparency and to enable a robust assessment, the full scope of these works has been assessed under this REF, including:

- Landscaping – in isolation would be exempt under Schedule 5, however, considered as part of the activity as *construction works* under Section 3.3(3)f).
- Upgrade of the sports field and new games court – in isolation would be exempt under Schedule 5, however, considered as part of the activity as *construction works* (as part of the landscape) under Section 3.3(3)f).
- Replacement of sceptic tank - in isolation would be exempt under Section 2.127, however, considered as part of the activity as *construction works* (as part of the landscape) under Section 3.3(3)f);
- Internal pathways and associated works in isolation would be exempt under Schedule 5, however, considered as part of the activity as *construction works* (as part of the landscape) under Section 3.3(3)(f).
- Off-site public domain improvements including retention and upgrade of the Kiss & Drop area and a temporary pedestrian road crossing on Tenth Avenue – largely exempt pursuant to Section 2.113 but considered as development without consent under Section 2.109 of the TI SEPP.

The only exception to the above are the minor modifications to Building B, which have been explicitly excluded given their minor scope and noting they are self-contained to one of the existing

buildings on the site. On the architectural plans, these works are noted to be separate to the Part 5 planning pathway.

Activities permissible without consent require environmental 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.

Additionally, 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 EIS rather than an REF. The effects of the activity on the environment are considered in Section 6 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* (DPHI 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 6.

In summary, the proposal is considered an 'activity' and 'development permitted without consent' for the purposes of Part 5 of the EP&A Act and is therefore subject to an environmental assessment through an REF.

### Pre-conditions to Pathway

Under the TI SEPP, there are several requirements which must be complied with in order for development to be undertaken as development without consent. Compliance with the relevant sections and requirements of the TI SEPP are outlined below:

**Table 6: Compliance with pre-conditions to the 'development without consent pathway'**

| Section of TI SEPP | Comment Section | Complies |
|---|---|---|
| **3.8 Consultation with councils – development with impacts on council-related infrastructure or services** | This section applies where there is likely to be a substantial impact on stormwater management, traffic capacity of the road system, the sewerage system, water supply system, more than inconsequential excavation in a road reserve or installation of a temporary structure on a public place. While the proposal will not trigger any of these threshold requirements for consultation under Section 3.8, notification of LCC will be made as part of the broader exhibition of this REF and accompanying documents. | N/A |
| **3.9 Consultation with councils—development with impacts on local heritage** | The site is not listed as a heritage item and does not fall within a heritage conservation area. Further, a historical archaeological assessment has been conducted as part of the Statement of Heritage Impact Report (**Appendix 10**) which concludes that the activity will not impact on any known historical archaeological relics.<br>Based on the above, consultation with Council LCC regarding impacts on local heritage is not required. Irrespective, as above, notification of LCC will be made as part of the broader exhibition of this REF and accompanying documents. | N/A |

| | | | |
|---|---|---|---|
| **3.10 Notification of councils and State Emergency Service—development on flood liable land** | | The site is located on (partly) flood-liable land, and therefore written notice to LCC and the State Emergency Service (SES) must be undertaken. | Capable of complying subject to exhibition of this REF. |
| **3.11 Consideration of Planning for Bush Fire Protection** | | The RFS will be sent a notification letter during the public exhibition period. | Capable of complying subject to exhibition of this REF. |
| **3.12 Consultation with public authorities other than councils** | | The activity will not involve:<br>• Development adjacent to land reserve under the NPW Act.<br>• Development on land immediately adjacent on a rail corridor that would have an effect on rail safety (noting the rail corridor south of the site is dis-used and not intended to be reinstated).<br>• Development that would increase the amount of artificial light in the night sky.<br>• Development on land within a mine subsidence district.<br>The activity will however involve access to a road and a school capacity of more than 50 students, as well as a new vehicular access point to the school from a public road. Therefore, notification of TfNSW is required under this section of the TI SEPP. The requirement for consultation under Section 3.12 will be satisfied as part of the broader exhibition of this REF and accompanying documents. | Capable of complying subject to exhibition of this REF prior to determination and provision of written notification to TfNSW. |
| **3.37 Existing or approved government schools—development permitted without consent** | | | |
| **(1)** | Within the boundaries of an existing or approved school | The activity is on land within the boundaries of an existing school, being part of the broader APS. | Yes |
| **(4)** | Contravention of any existing condition of the development consent currently operating (other than a complying development certificate) that applies to any part of the school, relating to hours of operation, noise, vehicular movement, traffic generation, loading, waste management or landscaping. | Refer to the discussion following this table for detail regarding the existing conditions of consent for the site and compliance with Section 3.37(4). | Yes |
| **(5A)** | A public authority, or a person acting on behalf of a public authority, must not carry out development under this section unless the authority or person has | These design principles are addressed in section 2.2.3 and in the accompanying Architectural Design Quality Report at **Appendix 19**. | Yes |

| | | | |
|---|---|---|---|
| | considered the following—<br>(a) the design quality of the development, evaluated in accordance with the design quality principles set out in Schedule 8,<br>(b) the design principles set out in the design guide. | | |
| **3.38 Notification of carrying out of certain development under Section 3.37** | | As the proposal involves development to which Section 3.37(1)(a) applies, written notice of the intention to carry out the development to LCC and occupiers of adjoining land for 21 days is required. The requirement for notification of these stakeholders under Section 3.38 will be satisfied as part of the broader exhibition of this REF and accompanying documents. | Capable of complying subject to exhibition of this REF prior to determination and provision of written notification to LCC and occupiers of adjoining land. |

For those parts of the activity that are captured under Chapter 2 (the substation and road improvements), there are consultation requirements that will need to be satisfied in Division 1 (of Part 2.2) of the TI SEPP. There are additional notification requirements in Sections 2.111 and Section 2.45 that may apply. Notwithstanding, these notification requirements are similar to those that fall under Chapter 3 (as noted in **Table 6** above). Notification with LCC, adjoining landowners and the various State agencies will cover all consultation requirements in Chapter 2 and Chapter 3.

**Compliance with Section 3.37(4) of the TI SEPP**

As noted in **Table 6** above, the abovementioned clause does not permit the carrying out of development under Section 3.37(1) *"in contravention of any existing condition of the development consent currently operating (other than a complying development certificate) that applies to any part of the school, relating to hours of operation, noise, vehicular movement, traffic generation, loading, waste management or landscaping"* on the site. This excludes any complying development certificate and only relates to conditions regarding hours of operation, noise, vehicular movement, traffic generation, loading, waste management or landscaping.

A request for all development consents applying to the site was submitted to LCC under the *Government Information (Public Access) Act 2009* (GIPA Act) and received on 16 December 2024. The development consent(s) listed in **Table 7** were identified.

**Table 7: Development consents applying to the site**

| Development Application # | Description | Date Determined |
|---|---|---|
| **DA337/90** | Extensions to existing kindergarten | 3 August 1990 |
| **DA355/94** | Proposed class 10a awnings | 22 February 1994 |
| **DA1032/2008** | Install 50,000 litre rainwater tank | 9 April 2008 |

The consents – **DA337/90** (Extensions to Existing Kindergarten), **DA355/94** (Proposed Class 10a Awnings), and **DA1032/2008** (Install 50,000 Litre Rainwater Tank) – involve minor works that do

not affect operational conditions of the APS, such as hours of operation, noise, vehicular movement, traffic generation, loading, waste management, or landscaping. These works, under the previous consents, are physical expansions or utility improvements that do not alter the ongoing operational or functional aspects of the school, as outlined in the TI SEPP. As a result, it is considered that the proposed activity will not contravene any existing conditions of these previous consents related to the operational aspects specified in the SEPP.

A physical inspection of LCC's archives was conducted on 14/1/25, as LCC could not provide copies of the approved plans for each of the abovementioned DAs. During this inspection, it was found that the plans provided by LCC did not relate to any of the proposed works under the scope of the upgrade.

LCC does not hold any consents for the main school buildings. Given this, it may be assumed that no conditions exist that would be contravened by the proposed works.

In conclusion, the listed consents and the absence of conflicting conditions for the main school buildings ensure that the proposed works will comply with 3.37(4) of the TI SEPP.

Refer to **Appendix 24** for a copy of the consents provided by LCC.

## 4.2 Environmental Protection and Biodiversity Conservation Act 1999

The provisions of the EPBC Act do not affect the proposal as it does not include an activity that will take place on or affect Commonwealth land or waters or Matters of National Environmental Significance. 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 8**.

**Table 8: 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 |

## 4.3 Other Approvals and Legislation

**Table 9** identifies any additional approvals that may be required for the proposed activity.

**Table 9: Consideration of other approvals and legislation**

| Legislation | Relevant ? | Approval Required ? | Applicability |
|---|---|---|---|
| **State Legislation** | | | |
| *National Parks and Wildlife Act 1974* | Yes | No | The proposal is accompanied by a Preliminary Indigenous Heritage Assessment and Impact report at **Appendix 25** which concludes that the site is of low archaeological sensitivity and low archaeological potential based on previous archaeological assessments, regional studies, and past land use. The site has been heavily disturbed as a result of previous land use, particularly relating to the construction of the existing school. |
| *Rural Fires Act 1997* | Yes | No | A very small portion of the western boundary is identified as being bushfire prone.<br>Typically, a Section 100B authorisation would be required for school development in a bushfire zone, however, as the proposed works and new building will be constructed outside the mapped portion of the land, such an authorisation would not be required.<br>The provisions of Section 100B of the *Rural Fires Act 1997* are narrowed to the building footprint that may be on designed (mapped) bushfire prone land.<br>The attached Bushfire Advice at **Appendix 14** confirms there is no requirement for any such authorisation on this basis. |
| *Water Management Act 2000* | No | No | The proposal is not located within 40 metres of a watercourse or coastline. It is more than 600 metres to Upper Canal to the east (highlighted with a red star in the **Figure 49** below) and more than 600 metres to an unnamed watercourse to the west (highlighted with a blue star).<br>  <br>**Figure 49: Hydroline Mapping (Source: SEED)** |
| *Biodiversity Conservation Act 2016* | Yes | No | The site comprises Cumberland Plain Woodland TEC. However, there are existing legal mechanisms under which these areas can be impacted without further assessment or development approvals. The NSW Environment and Heritage Minister approved the Cumberland Plain Conservation Plan which provides biodiversity certification under Part 8 of the BC Act. Section 7.6 of the BC Act states that land awarded biodiversity certification under Part 8, such as Austral Public School, does not require a separate assessment and approval for development under the BC Act or the EPBC Act.<br>The activity will not affect threatened flora or fauna or a |

| Legislation | Relevant ? | Approval Required ? | Applicability |
|---|---|---|---|
| | | | critical habitat. Refer to Section 6.7 for further information. |
| *Pesticides Act 1999* | No | No | The proposed activity will not require large quantities or dangerous pesticides to be used. |
| *Heritage Act 1977* | No | No | These considerations are not relevant to the site, as the school is not listed on the Departments170 Heritage Conservation Register or the State Heritage Register. Additionally, there are no identified significant non-Aboriginal archaeological remains ('relics') on the site. |
| *Fisheries Management Act 1994* | No | No | The proposed activity will not result in permanent obstructions to water tidal patterns or flows, or harm marine vegetation. |
| *Contaminated Lands Management Act 1997* | Yes | No | The site is not listed on EPA's contaminated lands register.<br>The DSI at **Appendix 12** concludes that remediation of the site will be required. A RAP has been prepared (**Appendix 26**) which will be implemented. |
| *Protection of the Environment Operations Act 1997* | No | No | The proposal will not result in significant air, noise, water or waste pollution. |
| *Roads Act 1993* | Yes | Yes | Off-site public domain/transport improvements are part of the scope of the rebuild.<br>Given the road that surrounds the site and where the off-site works are proposed is a classified road (rather, local roads) a Section 138 approval will be obtained (if deemed by the Department to be required). |
| *Local Government Act 1993* | Yes | Yes | The existing septic system is being upgraded as part of the proposed activity. Therefore, approval under the Local Government Act 1993 is required. |
| *Mine Subsidence Compensation Act 1961* | No | No | The site is not within a mine subsidence district. |
| *Environmental Planning and Assessment Regulation 2021 (Section 171A)* | Yes | No | 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 Part 5 of the EP&A Act. These factors are considered in detail at Section 6.<br>Further, Section 171(4) outlines circumstances where an REF must be published on the Department's website or the NSW Planning Portal. This REF is required to be published as the activity has an estimated development cost of more than $5 million and the determining authority considers that it is in the public interest to publish the review. In addition, Section 171A of the EP&A Regulation requires the consideration of the impact an activity in a defined catchment. The site is not located in a defined catchment and therefore, no further consideration of Section 171A matters is required. |
| **State Legislation – State Environmental Planning Policies** | | | |

| Legislation | Relevant ? | Approval Required ? | Applicability |
|---|---|---|---|
| *State Environmental Planning Policy (Planning Systems) 2021* | Yes | No | It is noted under Section 2.6 of the Planning SEPP, that a development does not automatically require consent under Part 4 of the Act solely because it is declared State Significant Development (SSD) under this section. Where an environmental planning instrument permits the development without consent, it may instead be assessed as an activity under Part 5 of the Act. The estimated development cost does not exceed $50 million. Additionally, the activity does not qualify as SSD because it can be carried out as development without consent under the provisions of the TI SEPP. |
| *State Environmental Planning Policy (Biodiversity and Conservation) 2021* | No | No | The SEPP does not apply to the site as it is not mapped as Biodiversity Value land, within a Coastal Use Area, or near Coastal Wetlands or Littoral Rainforests. It is not identified in Council's LCC's Koala habitat mapping, Wildlife Corridors, or Key Habitats. The site's vegetation does not represent any TECs, and no threatened flora species were detected or are likely to occur due to historical clearing. The absence of vegetation corridors and distance from suitable habitat make it unlikely for Koalas to use the site for foraging.<br>The site comprises Cumberland Plain Woodland TEC. However, there are existing legal mechanisms under which these areas can be impacted without further assessment or development approvals. The NSW Environment and Heritage Minister approved the Cumberland Plain Conservation Plan which provides biodiversity certification under Part 8 of the BC Act. Section 7.6 of the BC Act states that land awarded biodiversity certification under Part 8, such as Austral Public School, does not require a separate assessment and approval for development under the BC Act or the EPBC Act. The activity will not affect threatened flora or fauna or a critical habitat. |
| *State Environmental Planning Policy (Sustainable Buildings) 2022* | Yes | Yes | The Sustainable Buildings SEPP aims to simplify and coordinate the way that we plan for and design sustainable buildings in NSW. The policy introduces new requirements into the Regulations to explain key DA requirements.<br>In accordance with Chapter 3.1, the General Sustainability Provisions are applicable to all non-residential development, including educational establishments, and these requirements include consideration of the general sustainability provisions to be considered.<br>An EES will be prepared and has been included as a mitigation measure.<br>In addition to the above, a Sustainable Development Plan (SDP) has been prepared and is provided at **Appendix 28**. The proposed development is targeting a 5 Star Green Star Design & As-Built v1.3 rating for the new building.<br>The SDP states the proposed ESD initiatives required to achieve compliance with EFSG requirements and 5 Star Green Star Design & As-Built v1.3 certification. The SDP also responds to the general sustainability provisions |

| Legislation | Relevant ? | Approval Required ? | Applicability |
|---|---|---|---|
| | | | section in accordance with the Sustainable Buildings SEPP- concluding that the development as proposed is compliant with those provisions (See section 4.3 of the SDP).<br>The ESD objectives are to encourage a balanced approach to designing new school facilities; to be resource efficient, cost-effective in construction and operation; and to deliver enhanced sustainability benefits with respect to impacts on the environment and on the health and well-being of students, staff and visitors whilst providing the best possible facilities for a constructive student learning experience.<br>Key ESD commitments for the proposed activity are listed below:<br>• Good access to natural daylight<br>• Well-designed openings to promote natural ventilation<br>• Appropriate, high thermal construction and glazing selection<br>• Energy efficient air-conditioning systems<br>• LED luminaires<br>• Rainwater recycle tank<br>• Efficient water fixtures<br>• Waste management plan that reduces site wastage<br>• Water-wise Landscaping<br>• Photovoltaic cells to reduce grid dependency for electricity |
| *State Environmental Planning Policy (Resilience and Hazards) 2021* | Yes | No | A DSI identified contamination risks on the site, including PFAS and asbestos, but these issues are not directly related to the proposed activity. The PFAS contamination, originating from runoff from a nearby RFS site, will be remediated by the LCC and RFS under a RAP, to be separately prepared and then implemented by LCC and the RFS. The RAP also includes further investigations into potential pathogens from historical sewerage overflows and asbestos management in areas near the children's play area. Additional testing will be conducted once existing buildings are demolished, and all hazardous materials will be removed in accordance with relevant regulations. The RAP outlines necessary steps to manage these issues and ensure the site is suitable for the proposed activity. Subject to the implementation of the RAP's recommendations, including further investigations and remediation works, the site is deemed suitable for the proposed activity.<br>Refer to Section 6.3 of this REF for further information. |
| *State Environmental Planning Policy (Industry and Employment) 2021* | No | No | Not applicable. |
| *State Environmental* | No | No | Not applicable. |

| Legislation | Relevant ? | Approval Required ? | Applicability |
|---|---|---|---|
| *Planning Policy (Resources and Energy) 2021* | | | |
| *State Environmental Planning Policy (Primary Production) 2021* | No | No | Not applicable. |
| *State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021* | No | No | Not applicable. |
| *State Environmental Planning Policy (Precincts – Central River City) 2021* | No | No | Not applicable. |
| *State Environmental Planning Policy (Precincts – Western Parkland City) 2021* | Yes | Yes | Refer to Section 4.3.1 for a detailed consideration of this SEPP. |
| *State Environmental Planning Policy (Precincts – Regional) 2021* | No | No | Not applicable. |

### 4.3.1 State Environmental Planning Policy (Precincts - Western Parkland City)

The Precincts SEPP is the primary applicable Environmental Planning Instrument (EPI) to the site.

#### Zoning and Permissibility

As shown in the zoning map below, the site is zoned as ‘SP2 infrastructure’ (Educational Establishment) under the Precincts SEPP.

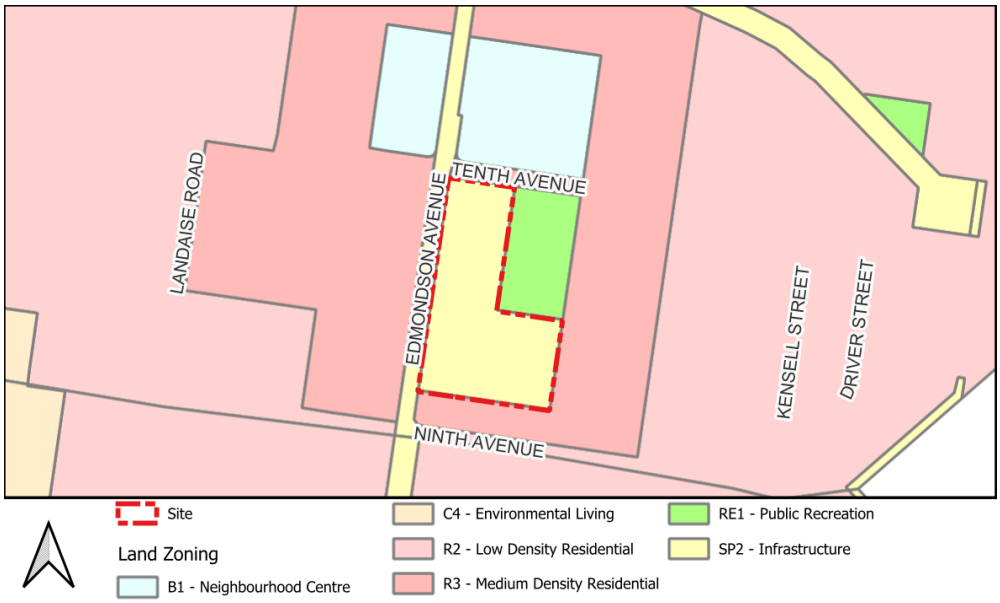



**Figure 50: Land Use Map with site outlined in red (Source: Gyde GIS data from NSW DPHI Spatial Viewer)**

The proposal is characterised as an 'educational establishment' and pursuant to the Precincts SEPP is a permissible use with consent in the SP2 zone. The objectives of the SP2 infrastructure zone are:

> *(1) The objectives of Zone SP2 Infrastructure are as follows—*
>
> *(a) to provide for infrastructure and related uses,*
>
> *(b) to prevent development that is not compatible with or that may detract from the provision of infrastructure,*
>
> *(c) to reserve land for the provision of infrastructure.*

The proposed activity is consistent with the objectives of the zone as it will provide social and public infrastructure, in the form of an upgraded public school, for the local community.

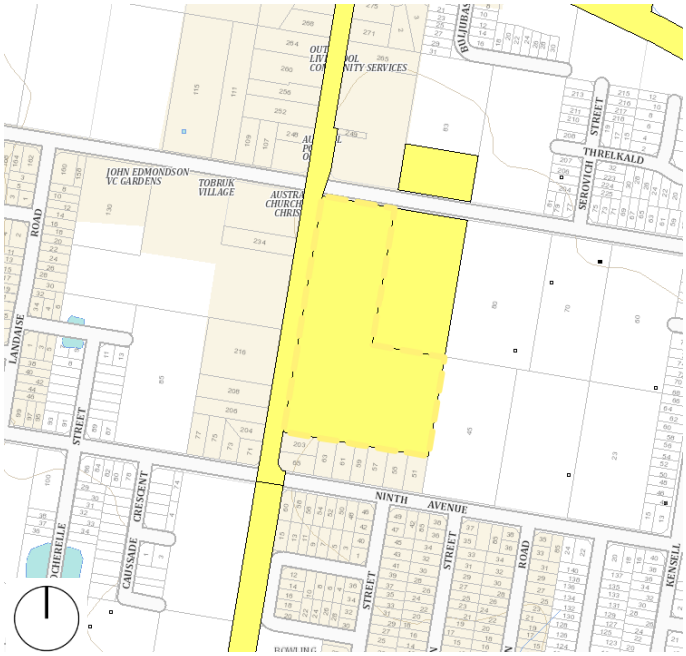
The off-site works will be located within land zoned SP2 Classified Road (Edmondson Avenue) and R3 Medium Density Residential (Tenth Avenue). The off-site works, which are associated with a road, and ancillary to the educational establishment use, are permissible with consent in both zones under the TI SEPP (S. 3.36(1)), as both of these zones are prescribed zones.

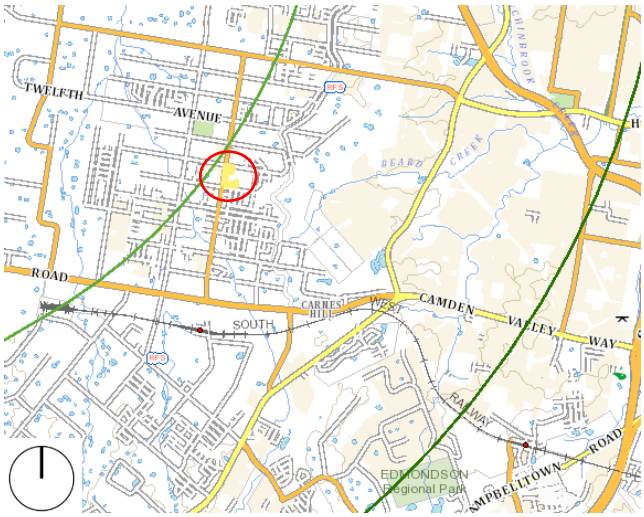
### Relevant Provisions

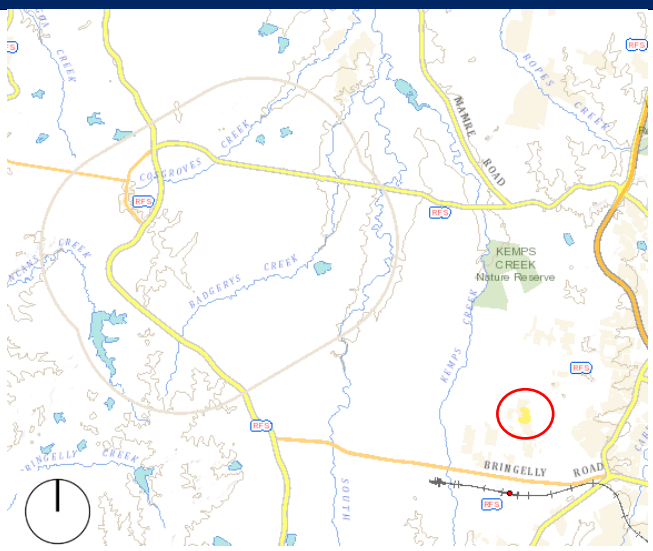
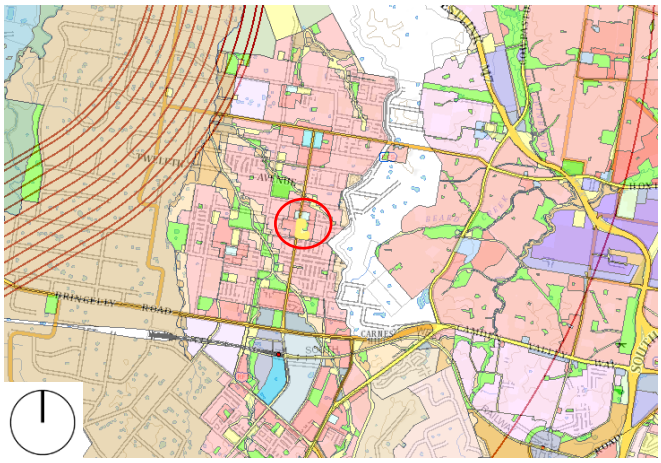
A summary of the remaining provisions of the Precincts SEPP is provided in **Table 10** below.

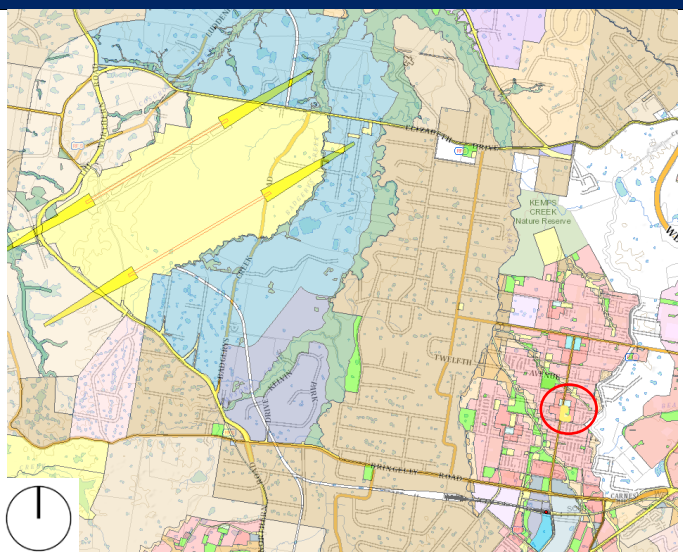
**Table 10: Remaining Precincts SEPP Provisions**

| Clause | Provision | Assessment |
|---|---|---|
| 4.3 Height of buildings | Establishes a maximum building height of 12m for the site. | Refer to the section after this table for a detailed consideration of this development standard. |
| 4.4 Floor Space Ratio (FSR) | Establishes a maximum FSR. | The site is not subject to a maximum FSR pursuant to the Precincts SEPP. |
| 5.1 Relevant | Establishes the | The site is reserved for acquisition for the purpose of an |

| Clause | Provision | Assessment |
|---|---|---|
| Acquisition Authority | relevant acquisition authority. | Educational Establishment (SP2). The Department has already acquired the site, and it is used for its intended purpose as an educational establishment.<br>The land surrounding the site is RE1 (public recreation) is managed by LCC, and roads are currently identified for expansion with Transport for NSW.<br>Land adjoining to the west is reserved for road purposes (classified road SP2). To the north, land is identified for community centre purposes (within the B1 zone). Land immediately to the east (currently residential and agricultural purposes) and is reserved for local open space (RE1).<br>  <br>**Figure 51: Acquisition Map (Source: NSW Spatial Viewer)** |
| 5.10 Heritage Conservation | Requirement for consent when impacting heritage items | The site is not an identified heritage item or located within a heritage conservation area. Refer to Statement of Heritage Impact at **Appendix 10**. |
| 5.12 Infrastructure development and use of existing buildings of the Crown | This Precinct Plan does not restrict or prohibit, or enable the restriction or prohibition of, the use of existing buildings of the Crown by the Crown. | In accordance with this clause, the provisions of the Precincts SEPP cannot restrict the use of existing building by the Crown. The proposed activity includes utilising existing buildings for the purpose of a new library and staff rooms, which is permissible under this clause. |
| 6.1 Public utility infrastructure | (1) The consent authority must not grant development consent to development on land to which this Precinct Plan applies unless it is satisfied that any public utility infrastructure that is | The existing school is serviced and will continue to be serviced subject to the required upgrades including the new substation and the replacement of the existing septic pumpout system with a new underground tank.<br>The exisitng water main will continue to cater for the proposed potable water and fire services demand of the site. |

| Clause | Provision | Assessment |
|---|---|---|
| | essential for the proposed development is available or that adequate arrangements have been made. | |
| Part 4.3 Development controls—Airport safeguards | | |
| 4.19 Wildlife hazards | The objective of this section is to regulate development on land surrounding the Airport where wildlife may present a risk to the operation of the Airport. Relevant development within the 13km buffer requires additional considerations before consent can be granted. | The site lies outside of the 8km wildlife buffer zone but is within the 13km buffer zone. The site is identified below in the top lefthand corner in red.<br>The proposed activity involves alterations and additions to an existing school that already comprises buildings. A wildlife assessment conducted in June 2022 identified no threatened fauna species on the site and also identified the lack of ground-dwelling fauna species due to the highly modified nature of the site. The activity will incorporate mitigation measures to minimise wildlife risks to airport operations (such as the implementation of a waste management plan).<br>  <br>**Figure 52: Wildlife Buffer Zone Map (Source: NSW Spatial Viewer)** |
| 4.20 Wind turbines | The objective of this section is to regulate the construction of wind turbines and wind monitoring towers on land within 30 kilometres of the Airport. | The site is outside of the 3km turbine buffer (as seen in the image below) but is within the 30km buffer. Notwithstanding, the proposal does not include any turbines. Therefore, further consideration of this clause is not necessary. |

| Clause | Provision | Assessment |
|---|---|---|
| | |  <br>**Figure 53: Wind Turbine Buffer Map (Source: NSW Spatial Viewer)** |
| 4.21 Lighting | The objective of this section is to safeguard Airport operations from the risk of lighting and reflectivity distractions for pilots. | The site is not land within the “6km Lighting Intensity Radius”, a “Light Control Zone” or a “Runway Boundary” on the Lighting Intensity and Wind Shear Map and as such this does not apply. |
| 4.22 Airspace operations | The objectives of this section are— (a) to provide for the effective and ongoing operation of the Airport by ensuring that its operation is not compromised by development that penetrates the prescribed airspace for the Airport, and (b) the relevant Commonwealth body does not object to the development. | The site lies in the final radial ring (level 230.5) of the Obstacle Limitation Surface Map. However, the activity proposed is not considered a controlled activity within the meaning of Part 12, Division 4 of the Airports Act 1996 of the Commonwealth (penetrating the airspace). As such, this clause does not apply.<br>  <br>**Figure 54: Obstacle Limitation Surface Map (Source: NSW Spatial Viewer)** |
| 4.23 Public Safety | The objective of this section is to regulate development on land on which there is an appreciable risk to public safety from the operation of the Airport. | The site lies outside of the Public Safety Area Map associated with the future airport and as such this does not apply. |

| Clause | Provision | Assessment |
|---|---|---|
| | |  |

**Proposed Height**

The Precincts SEPP stipulates a maximum 12 metres height for the site. However, the TI SEPP, which prevails over the Precincts SEPP, permits a maximum height of four-storeys for any new school buildings pursuant to the "development permitted without consent" pathway.

The proposed activity is for a 3-storey building, which complies with the 4-storey height limit outlined in the TI SEPP. The proposed height accommodates educational facility standards requiring higher storey heights (approximately four metres), ensuring compliance with guidelines and optimal site functionality. Reducing the building height would compromise operational outcomes, diminish open play space, and result in poor planning and design. The activity includes generous setbacks (11 metres to RE1 land and 33 metres to R3 land) and landscaping buffers to minimise shadowing and visual massing. Shadow impacts are limited to minor internal areas, such as the car park and playing fields, with no overshadowing of adjacent residential or open space land. Visual impacts from the height of the building are minimal due to the building's considered design, articulation, and landscaping.

## 4.4 Strategic Plans

**Table 11** considers strategic plans that are relevant to the proposed activity.

**Table 11: Consideration of applicable Strategic Plans**

| Strategic Plan | Assessment |
|---|---|
| *Greater Sydney Region Plan – A Metropolis of Three Cities Plan* | The Greater Sydney Regional Plan: A Metropolis of Three Cities was published by the NSW Department of Planning and Environment in 2018 and applies to the site and the wider Greater Sydney Region.<br>It is estimated that an extra 270,000 students will need to be |

| Strategic Plan | Assessment |
|---|---|
| | accommodated in government and non-government schools in Greater Sydney by 2036. The rationale for objective 6 of the plan is to ensure 'services and infrastructure meet communities' changing needs. Upgrades to Austral PS, particularly the new three-storey building with learning spaces will provide essential improved school infrastructure to support the growing community. These upgrades will facilitate an additional 53 students, which will assist in accommodating the future anticipated student numbers. |
| *Western City District Plan* | In particular, the activity aligns with Planning Priority W3 which seeks to 'provide services and social infrastructure to meet people's changing needs'. The upgrade to Austral PS will ensure that educational facilities within the area keep in line with the population growth and demographic changes. The contemporary design will help provide increased flexible learning spaces and assist in creating and supporting an inclusive and vibrant neighbourhood. |
| *Liverpool Local Strategic Planning Statement* | The activity is consistent with the Connected Liverpool 2040: Liverpool's Local Strategic Planning Statement – A Land Use Vision to 2040. Liveability is a core theme of the LSPS and it sets out planning priorities that will assist in meeting the identified core themes. The rationale for local planning priority 6 is for council LCC to create 'high-quality, plentiful and accessible community facilities, open space and infrastructure aligned with growth'. The upgrade to APS will provide an enhanced education facility as well as allow for an increase to the student and staff capacity of the school. With the current and future growth in Austral and its surrounding areas, upgrading of key infrastructure is necessary to accommodate the growing population. |
| Austral and Leppington - Indicative Layout Plan | The Austral and Leppington North Precincts Indicative Layout Plan (ILP) is a comprehensive long-term strategy designed to guide the development of the Austral and Leppington North areas. The ILP outlines the planned allocation of land for various purposes, including:<br>• Residential Development: Designation of areas for new housing to accommodate population growth.<br>• Commercial Zones: Establishment of shopping areas to serve the community's retail and service needs.<br>• Parks and Open Spaces: Creation of new parks and recreational spaces to enhance community well-being.<br>• Stormwater Infrastructure: Implementation of stormwater management systems to address drainage and water quality.<br>• Community Facilities: Provision of essential services such as schools, healthcare, and community centres.<br>• Transportation Infrastructure: Development and upgrading of roads to improve connectivity and traffic flow.<br>The ILP identifies APS as a designated school site, emphasising its importance within the local community. The school is adjacent to a park, providing opportunities for outdoor recreation and green space for students and residents. Additionally, the ILP includes planned upgrades to Edmondson Avenue, which will improve access to the school, enhance connectivity, and support the growing population in the area. |
| Liverpool City Council's "Delivery Program 2022-2026 and Operational Plan 2023-2024 | LCC's Delivery Program 2022-2026 and Operational Plan 2023-2024 outlines the following which, are relevant to the proposed activity:<br>• New Park: A new park is being developed next to APS, at the |

| Strategic Plan | Assessment |
|---|---|
| | corner of Tenth Avenue and Biffin Lane. The land, acquired by the LCC in April 2023, is currently under remediation.<br>• Edmondson Avenue: Design investigations are underway for the upgrade of Edmondson Avenue to establish a transit boulevard connecting centres in Austral, Leppington Station, and Fifteenth Avenue. This initiative aims to improve connectivity and support the area's development. |

# 5. Consultation

## 5.1 Early Stakeholder Engagement

**Table 12** provides a summary of early stakeholder (non-statutory) consultation undertaken to inform project development and preparation of this REF.

**Table 12: Summary of Early Stakeholder Engagement**

| Stakeholder | Engagement |
|---|---|
| Community Consultation | A community information session was held with the community in March 2024. The only feedback received was in relation to the anticipated opening of the school, with all other feedback provided being positive. |
| LCC & RFS – specific to contamination/remediation issue | Recent communication with the RFS regarding Austral PS PFAS remediation identified these works would be planned to be completed by mid-February 2025. This remediation will be undertaken as a separate process by LCC and RFS, who will prepare a separate RAP for this area. This area is highlighted in yellow on page 44 of the Remedial Action Plan (RAP) and provided in **Figure 56** below.  **Figure 56: Remedial Zones (Source: Tetra Tech Coffey)** |
| Aboriginal stakeholders | On 27 June 2022, a Walk on Country event played a pivotal role in shaping the design of the activity, with the principles of CWC guiding its development. The event brought together local Aboriginal representatives, school representatives, and the design team, fostering a dialogue about the cultural significance of the land and sharing valuable insights. This collaboration ensured that Aboriginal perspectives were integrated into the |

| Stakeholder | Engagement |
|---|---|
| | design, aligning the activity with cultural values and honouring the land's connection. |
| Traffic Working Groups (TfNSW & CouncilLCC) | The TWG meetings, held on 20/02/2024 (TWG 1) and 19/03/2024 (TWG 2), focused on addressing traffic and transport-related issues for the proposed activity. In TWG 1, key topics included the need for a 10% contingency to bus capacity to account for students not tapping on or off buses, proposed updates to bus routes 861, 1052, and 2033 with increased frequency and deviations, and the allocation of at least 17 vehicle spaces for kiss and drop bays in Stage 1, with a recommendation to place them on Tenth Avenue instead of Edmondson Avenue. Road and intersection upgrades for Edmondson Avenue were discussed, with the understanding that the upgrade would not be completed until 2028. Council LCC confirmed that the wombat crossing on Edmondson Avenue would be relocated further south during Christmas 2024 (this however does not seem to have occurred at the time of writing this REF).<br>In TWG 2, actions from TWG 1 were reviewed, including changes to the kiss and drop arrangement and the relocation of the wombat crossing. Bus route 855 modifications were discussed, and although the route is currently underutilised, it was agreed it should be included in the analysis. The impact of changes to bus route 861 on other schools was also addressed, and it was noted that the frequency of the route may increase if funding is secured. Lastly, a temporary crossing at the intersection of Edmondson Avenue and Tenth Avenue was suggested, which has been implemented into the proposed plan. |

In addition to the above, a formal pre-lodgement meeting was held with LCC on 14 February 2024. A response to the issues identified in the pre-lodgement consultation has been provided in **Table 13**.

**Table 13: Response to pre-lodgement comments made by LCC**

| Matter | Council LCC comments | Response |
|---|---|---|
| Building height | It is recommended that the structure comply with the maximum height control. If a variation in height is sought, sufficient justification is to be provided. | The permissible maximum building height for the site, as per the Precincts SEPP, is 12 metres. However, the TI SEPP permits a maximum height of four-storeys for any new school buildings utilising the "development without consent" pathway.<br>The proposed activity is for a 3-storey building, which complies with the 4-storey height limit outlined in the TI SEPP. However, the proposal exceeds the 12-metre height limit specified in the Precincts SEPP.<br>While the TI SEPP overrides the Precincts SEPP, consideration has still been given to the appropriateness of the proposed height with regard to the 12 metre height provision and surrounding area.<br>Refer to Section 4.3.1 of this REF for a detailed response and justification for the proposed height.<br>Reducing the height of the building to comply with the 12-metre standard would not enhance the amenity of the site or its surroundings. In fact, it would lead to a reduction in overall building |

| Matter | Council LCC comments | Response |
|---|---|---|
| | | and site amenity, including floor-to-ceiling heights that would no longer align with the Department guidelines, and a reduction in open space (as the footprint of the building would need to increase in size). |
| Traffic, Road Widening and Parking | The application shall be supported by a Traffic Report prepared by a suitably qualified person. The application must demonstrate that access, car parking and manoeuvring details comply with AS2890 Parts 1, 2 & 6 and Council's LCC's Development Control Plan. The application shall be supported by turning paths in accordance with AS2890 clearly demonstrating satisfactory manoeuvring on-site and forward entry and exit to and from the public road. Clearance is required to existing public utility assets, including at new road intersections, and generally at least 1m is required by the authorities. | A Transport Impact Assessment and an accompanying preliminary CTMP have been prepared by the traffic consultant. Refer to Section 6.1 for further traffic and parking analysis and **Appendix 16 & 21** for the full reports (including swept path analysis and compliance review). |
| Contamination | A suitably qualified and experienced contaminated land consultant is to prepare a Stage 1 - preliminary investigation for the property. The preliminary site investigation is to comply with guidelines made or approved by the NSW EPA under the Contaminated Land Management Act 1997 and identify all past and present potentially contaminating activities; identify potential contamination types; discuss the site condition; provide a preliminary assessment of site contamination; and assess the need for further investigations. | A DSI and RAP have been prepared by SMEC and Tetra Tech Coffey respectively and the full reports have been provided at **Appendix 12 & 26**. Contamination is addressed further in Section 6.3 of this REF. |
| Windows in building B | Council LCC suggested that consideration should be given to providing windows in ground floor rooms Staff 03 and Staff 14 within Building B in order to aid in energy efficiency and staff amenity. | Building B is an existing building, and any works are predominately associated with its internal reconfiguration which will improve energy efficiency and staff amenity. These works are not part of the scope of this REF. |
| Noise | The proposed activity may be a source of offensive noise and increase background noise and potentially impact upon human health and amenity. An acoustic report shall be prepared by a suitably qualified acoustic consultant. | A Noise and Vibration Impact Assessment has been prepared in support of the activity. Refer to **Appendix 29** and Section 6.2 for the full assessment. |

| Matter | Council LCC comments | Response |
|---|---|---|
| Bushfire | The subject site is on bushfire affected land, suitable documentation is required to address this. | A small portion of the site is within a Bushfire Zone.<br>Refer to **Appendix 14,** Section 4.3 and Section 6.9for further information. |
| Contributions | LCC stated there are Contributions Plans for the following:<br>• CR19 The Northern Boundary Road in Tenth Ave,<br>• CR19A fronting the RE1 land on Tenth Ave<br>• Community Facility on the north of Tenth Ave. | Development contributions are not payable for a Part 5 activity. Irrespective, we note that Section 2.7 of the Austral and Leppington North Contributions Plan 2021 states that it "does not apply to development for the purposes of public infrastructure provided by or on behalf of State Government or the Council". As the proposal is for public (social) infrastructure provided by State Government, the development is exempt from payment of contributions under this plan.<br>Western Sydney Growth Areas – Special Infrastructure Contributions - Section 5 of the Environmental Planning and Assessment (Special Infrastructure Contributions – Western Sydney Growth Areas (Determination) 2011, outlines that a special infrastructure contribution is not required for a government school. |
| Flooding | The proposed activity is within the catchment of Bonds Creek and is affected by local overland flooding from upstream catchment. The stormwater system of the development shall have a provision to capture flow from fully developed upstream catchment and conveyed to Edmondson Avenue | A Flood Impact Assessment has been prepared by the flood consultant.<br>The full assessment on flooding is provided in Section 6.4 of this REF. |
| Health | The application shall specify how refuse and waste will be managed during demolition, construction, and operation. Suitable waste storage facilities are to be provided as part of the proposal.<br>A sediment and erosion control plan shall be prepared and submitted to LCC for the construction phase of the project.<br>If a new canteen or alterations/additions to the existing canteen is proposed as part of any future development, detailed floor and section plans for the food premises are to be submitted to LCC for review.<br>LCC records indicate that the proposed development is within an | A Preliminary Construction Traffic Management Plan and Waste Management Report that include mitigation measures and details of how these matters will be managed can be found in **Appendix 21, 22 & 23**.<br>The Erosion and Sedimentation Control Plan provided at **Appendix 30** provides measures to ensure the development will employ appropriate soil management and sedimentation control.<br>No new canteen is proposed as part of the proposal.<br>Refer to Section 6.9 of the REF for more details on sewerage. A Hydraulic Works Utility Statement has been prepared and provided at **Appendix 17**. Sewerage for the existing site is |

| Matter | Council LCC comments | Response |
|---|---|---|
| | area that is currently serviced by an on-site sewage management system. The applicant will be required to connect the proposed development to a reticulated sewerage service where available. | arranged via a septic tank system (due to lack of an available nearby public sewer connection) which is regularly pumped out by a waste services contractor. This arrangement will continue following the development with the existing septic tank removed and replaced with a new septic tank appropriately sized to cope with the proposed activity. |

## 5.2 Statutory Consultation

Consultation will be undertaken in accordance with the statutory notification 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 21 days. This will include, the Bradfield Development Authority (previously Western Parkland City Authority), TfNSW, the SES, LCC and the RFS.
- making the REF publicly available on the Planning Portal throughout the consultation period.

Comments received will be carefully considered and responded to.

# 6. Environmental Impact Assessment

## 6.1 Traffic, Access and Parking

### 6.1.1 Assessment

A Transport Impact Assessment (**Appendix 16**) and an accompanying CTMP (**Appendix 21**) have been prepared by the traffic consultant in support of the activity. The transport strategy for APS has been developed in consultation with SINSW, LCC and TfNSW, with two Transport Working Group (TWG) meetings taking place during its preparation (refer to Section 5.1 for further information on TWGs).

#### Access

A new vehicular egress/ingress is proposed within the site's south-western corner, from Edmondson Avenue. Access to the new staff car park and manoeuvring details comply with AS2890 Parts 1, 2 & 6 and the DCP. Therefore, as the proposed access is compliant with the relevant standards, it is deemed to be acceptable. A mitigation measure has been included requiring a Section 138 approval to be obtained, if required, prior to the commencement of the relevant works (being the carpark and associated access and public domain works).

#### Public transportation

The increased capacity for both students and staff that would result from the activity has potential public transportation impacts. There are several bus services in the vicinity of the site, including services that run along Tenth Avenue and Edmondson Avenue. These bus stops provide services from Rutleigh Park to Liverpool via Austral & Leppington Station and Denham Court to Carnes Hill via Austral. There are also nine school bus services in operation.

Currently, around 8% of students have convenient access (5 minute-walk) to a public transport service that takes them to/from school with appropriate footpaths, with the potential increase to 16%, with future improvements on the footpath network from the Edmondson Avenue upgrade and local committed developments. More than half of the students live far enough to qualify for free travel to APS via public transport.

As part of TfNSW's future bus plan, the 861-bus service will be amended, to include services along Seventeenth Avenue and Sixth Avenue. This would service the new student population in both the north and south catchment areas of the APS site. In addition to this change, the assessment also includes several other proposed amendments to the bus scheduling, including a minor re-route of the 1052 School Services and 2003 School Services to cater for the expanded student catchment for morning and afternoon travel respectively. These proposed amendments have been discussed with TfNSW at TWG meetings, but the final proposal is subject to confirmation by TfNSW. The amendments would better align with school start and finish times and would avoid the need to provide completely new services.

With regards to safety, students will be expected to wait within the boundaries of the school until their required bus arrives outside the school on Edmondson Avenue.

The public transportation services will ultimately assist in positively promoting alternative, sustainable transportation options for staff and students.

### Traffic

The Transport Impact Assessment (TIA) for APS evaluates the impact of the proposed activity on traffic, parking, and transport infrastructure, noting consideration has been given to the future upgrade to Edmondson Avenue.

The TIA notes the following:

- Trip Generation and Distribution: Vehicle trip estimates are based on existing mode shares and reflect the distribution of traffic to and from APS within the broader Austral precinct. Key road connections include Fifteenth Avenue to the north and Bringelly Road to the south. Under the baseline scenario, the school expansion would generate an estimated 78 additional AM peak trips and 77 PM peak trips. These include 24 staff vehicles, 30 vehicles accessing the supported learning unit, and 23 vehicles related to primary school student pick-up and drop-off.
- Current and Future Road Network Performance: The intersection at Edmondson Avenue and Tenth Avenue is currently operating at Level of Service (LoS) F during. While Edmondson Avenue has intersection priority, the eastern approach of Tenth Avenue is expected to experience further delays. Given the projected population growth in Austral, traffic volumes are anticipated to grow at a compounded rate of 1.45% annually until 2036.
- Planned Road Upgrades and Mitigation Measures: To address existing congestion and accommodate future growth, Edmondson Avenue is set to undergo road widening, with a signalised intersection at Tenth Avenue planned for completion by LCC by 2028. This upgrade is part of LCC's broader strategy (which forms part of the *LCC Delivery Program 2022 – 2026)* to manage increasing traffic volumes in Austral and is expected to significantly improve intersection capacity and overall traffic flow.
- Managing Additional Traffic Demand: In the interim, before the completion of the intersection upgrade, additional vehicle trips may contribute to temporary delays at Tenth Avenue. However, mode shift strategies can mitigate this impact. Potential measures include encouraging carpooling, adjusting staff travel times outside peak hours and increasing public transport use, including:
    - A 10% mode shift among primary school students would fully offset all additional vehicle trips, including those from both students and staff.
    - A 7.5% mode shift would offset additional student vehicle trips only, including support class students.
    - A 3% mode shift would offset additional primary school student vehicle trips only.

### Staff Parking

The Liverpool Growth Centre Precincts DCP outlines that schools provide car parking at a rate of one space per staff member and one space per 100 students. With the proposed increase in staff from 40 to 64 staff members, the DCP would require up to 64 parking spaces for staff. However, the existing parking situation remains inadequate, forcing staff to park on the street. This activity aims to improve the current deficiencies by providing 57 new at-grade parking spaces for staff. These spaces are calculated based on a forecasted car mode share of 89%, meaning that around 89% of the staff will drive to school, rather than adhering strictly to the DCP's 1:1 ratio for staff parking. In addition to addressing the staff parking needs, the proposal also considers the increasing student population, from 681 to 734 students, and includes provisions for mitigating the impacts of this growth on student/parent parking. Specifically, 17 'Kiss and Drop' bays have been

proposed along Edmondson Avenue and Tenth Avenue, which have been agreed upon with the Council during the TWG meetings. These bays are essential to manage the increased demand and reduce congestion caused by student drop-offs and pick-ups. Further addressing transportation needs, a School Transport Plan (STP) has been prepared (**Appendix 31**) to review the existing modal choice and targets. The plan sets out specific objectives and strategies to promote sustainable travel modes through site-specific measures. The STP will be finalised and implemented as part of the overall mitigation strategy, ensuring that the development supports sustainable and efficient transport options for both staff and students.

### Kiss and Drop

The 17 'Kiss and Drop' bays proposed on Edmondson Avenue and Tenth Avenue have been agreed with LCC at the TWG meetings and they are required to mitigate the impacts of the current and proposed activity. A mitigation measure has been included which ensures that the kerb and gutter works provision on Tenth Avenue to accommodate the kiss and drop areas would need to be completed before the upgrade of the kiss and drop areas. It should be noted that the eight kiss and drop areas on Tenth Avenue are located in front of the adjoining 90 Tenth Avenue. LCC are currently in the process of purchasing this adjoining property for the redevelopment purposes into a council park. An arrangement has been agreed with LCC and the Department that the proposed location of the kiss and drop areas is therefore acceptable for this area.

### Cycling infrastructure

There is currently no cycling infrastructure surrounding the school. The proposed activity allows for 119 bicycle/scooter parking spaces, ensuring on-site cycling infrastructure is adequate for the proposed student and staff number increases. The provision will synergise with the planned off-road cycle paths that are expected to be completed by LCC on Tenth Avenue (in accordance with the provisions of the DCP) which will encourage staff to cycle to the school. The improvements to footpaths as a result of the upgrades to Edmondson Avenue and local committed developments in Austral will also encourage students to scoot.

### Other Works

As part of the scope of this project, the Department will implement several mitigation measures, including footpath improvements, a temporary pedestrian crossing, and the implementation of a (STP) to promote sustainable travel. Additional measures include on-site staff parking, bike parking facilities, and Kiss and Drop (K&D) bays to ensure safe drop-off and reduce traffic congestion. Subject to implementing these measures the Transport Impact Assessment concludes that the proposed activity will not have a significant effect on the environment. These measures are further detailed below in Section 6.1.2.

In addition to the immediate measures, the TIA also outlines several longer-term initiatives aimed at supporting sustainable travel to and from APS. These initiatives, while not required to support the proposed upgrade, are intended to enhance long-term transport options. They include the construction of new pedestrian crossings at Eighth Avenue–Lethbridge Road and Ninth Avenue–Edmondson Avenue, as well as continuous footpaths on Eighth, Ninth, and Twelfth Avenues, to better connect new residential areas to the school. Planned upgrades to the Edmondson Avenue–Tenth Avenue intersection, set for completion by 2028, will improve traffic flow and further support the Kiss and Drop zone, as well as the broader precinct. Additionally, behaviour change programs will promote active travel and help reduce traffic volumes during peak school hours. Increased bus frequency and adjustments to bus timetables for routes 861 and 2033, alongside expanded

footpath connections, will further enhance accessibility for students and encourage walking and cycling.

**Conclusion**

The proposed access, public transportation enhancements, traffic mitigation strategies, and infrastructure improvements for APS are designed to support the school's growth while maintaining accessibility and minimising transport-related impacts.

The new vehicular access point, compliant with relevant standards, ensures safe and efficient site ingress and egress. Public transport adjustments, including expanded bus routes and scheduling improvements, will enhance accessibility for students and staff, encouraging the use of sustainable travel options. Traffic impact assessments acknowledge existing congestion issues but propose measures such as Kiss and Drop zones, additional staff parking, and sustainable travel initiatives to mitigate potential disruptions.

Cycling and pedestrian infrastructure improvements, along with the implementation of a STP, will further promote active and sustainable travel. Longer-term transport upgrades, including pedestrian crossings, continuous footpaths, and the Edmondson Avenue intersection upgrade, will contribute to improved connectivity and safety for the school community.

With the outlined mitigation measures and future infrastructure developments, the proposed activity is considered to be a well-balanced and sustainable approach to addressing the school's transport needs while minimising broader impacts on the surrounding area.

### 6.1.2 Mitigation Measures

**Table 14: Mitigation Measures for Traffic, Access and Parking**

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| **Temporary Pedestrian Crossing** | Prior to operation | The temporary raised pedestrian crossing at Edmondson Avenue / Tenth Avenue is to be delivered in accordance with the recommendations of the Transport Impact Assessment dated 18 February 2025. It is to comprise a modular rubber product and installed with appropriate tactile ground surface indicators on the approaches. | Facilitate student access from APS to the Route 861 bus stop prior to delivery of the Edmondson Avenue upgrade being delivered by LCC, in which the intersection will be upgraded to a signalised crossing. |
| **Footpath improvements** | Prior to operation | New footpaths, road kerb, and designated Kiss and Drop signage shall be provided along the southern side of Tenth Avenue, extending to the end of the Kiss and Drop zone as indicated in the Public Domain Works Site Plan. All footpaths and associated infrastructure shall be designed and constructed in | These paths will offer safer routes for students living in new residential developments to travel to school and expand the walking catchment to include more of the student population. |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | | accordance with the Development Control Plan (DCP) Collector and Local Street specifications to ensure compliance with accessibility, safety, and functionality standards. The works must be completed prior to the occupation or operation of the expanded school facilities. | |
| **School Transport Plan** | Prior to and during operation | Prior to commencement of operations, a School Transport Plan (STP) must be prepared to the satisfaction of the NSW Department of Education (DoE) Transport Planning team. Any existing STP is to be reviewed and updated if necessary to reflect the impacts of the REF works, to the satisfaction of the DoE Transport Planning team. | The School Transport Plan set out objectives and strategies to assist in the development of transport goals, policies and procedures for APS. These measures promote the use of sustainable travel modes. |
| **Staff vehicle parking and bicycle parking** | Prior to operation of carpark | A total of 57 staff car parking spaces and 100 bicycle/scooter parking spaces (2 spaces for staff and 98 spaces for students) are to be provided for staff within the school boundary, prior to the commencement of operations of the relevant stage of the works. Refer to architectural plans prepared by Pedovali Architects, dated 16 January 2025. | This will increase capacity for on-site parking from 24% (baseline survey) to 89%. Reducing impact on on-street parking capacity of surrounding streets and accounting for loss of on street parking following the Edmondson Avenue upgrade.<br>Reduce demand for vehicle access by providing adequate cycling facilities. |
| **Kiss and Drop** | Prior to operation | Formal kiss and drop areas are to be provided in the locations shown within the documentation supporting the REF. this is to include a total of 2 bays within the school for pre-school and support learning unit and 17 bays on Edmondson Avenue and Tenth Avenue (with an associated footpath extension).<br>The kiss and drop bays must be fully constructed in accordance with the approved plans and available for use prior to the commencement of operations.<br>The bays and associated footpath extension must be properly maintained throughout the operation of the activity. | Continue to enable parents to drop off and pick up students in a safe designated location.<br>Reducing risk of queuing at access points. |
| **Bus Services** | Prior to and during operation | Prior to and during the operation of the activity, the Department is to continue to engage with TfNSW and Council to ensure the bus service amendments are made, as outlined in the School | To ensure adequate public transportation is provided for the school's long-term operation. |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | | Transport Plan, prepared by ARUP, dated 10 December 2024 . | |
| **Mitigation Measures of the Construction Traffic Management Plan prepared by Arup** | | | |
| **Construction Traffic management strategy** | Prior to construction | A Detailed Construction Traffic Management Plan (CTMP) is to be prepared prior to the commencement of construction. The CTMP is to be implemented during all site works. | To reduce impact of construction vehicles on the road network. |
| **Public transport guide** | Prior to construction | Workers arriving by car are to be encouraged to use public transport options and be provided information on various accessibility options available including the public transport options that connect to the site. | Encourage public transport use to reduce strain on on-street parking and road network. |
| **Footpath condition surveys** | Prior to and during construction | Prior to and during construction, dilapidation surveys are to be carried out to monitor the changes to footpath conditions to ensure footpaths continue to meet required standards. | Observe the condition of footpaths to correct damages. |
| **Traffic management and engineering controls** | During construction | Traffic management controls are to be adopted to manage safety and interruption to pedestrians, vehicles and cyclists at the entrance to the site. | Control obstructions and minimise interference to paths, pedestrians and cyclists. |
| **Construction and demolition waste management notifications** | During construction | Waste and contamination are to be managed by the contractor, consolidated on site and notified to the RMS Traffic Management Centre so that the waste vehicle transportation route from the site is planned prior to the commencement of waste and contaminated material removal. | Allows for the cataloguing, preparation and transportation of waste with appropriate materials handling. |
| **Mitigation Measures of the School Transport Plan prepared by Arup** | | | |
| **Dedicated Transport Plan Coordinator** | During operation | A dedicated Transport Plan Coordinator (TPC) is to undertake observational surveys to obtain data on pedestrian, cycling and scooting use to support the travel survey. The TPC is to also conduct site visits to evaluate the school's transport system and flag issues. | Travel plan activities can be monitored by Travel Plan Coordinator to ensure that targets and objectives specified within the STP are met. |
| **Travel welcome pack for staff** | During operation | New staff are to be provided with information on alternate modes of transport to reduce use of private vehicles. This information is to be made available upon the commencement of their employment and include details on public transport options, | Reduce traffic on road network and parking demand. |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | | carpooling, cycling, and walking routes. The information must be easily accessible and regularly updated to ensure staff are aware of sustainable travel option | |
| **Creation and update of a Transport Access Guide** | During operation | A Transport Access Guide (TAG) is to be prepared to track changes to bus routes and service times. This information is to be used to maintain awareness of public transport options and operations. Staff, parents and students are to be made aware of any such changes through relevant updates to the TAG and STP. | Promoting the use of public transport options and as alternative to active transport. |
| **Programs to promote active travel** | During operation | The Departmentis to encourage the school to participate programs to promote active travel. Hosting programs such as 'Walk to Work Day', 'Walk Safely to School', 'Walking School Bus', and 'Steptember'. | Advocate active transport by educating younger students on how to safely navigate walk to school routes. |
| **Display bus route maps and timetables within school ground** | During operation | The school is to ensure staff, parents and students are regularly made aware of public transport options. This is to include provision of information for students to evaluate suitable bus routes and engage with bus timetables in convenient spaces. | Increase public transport use to reduce private vehicle demand on car parking and road network. |
| **Introduce carpooling system and school carpark use restrictions** | During operation (Review needs to be completed 6 months post completion) | The carpooling initiatives outlined in the STP, such as provision of online services or forums to facilitate ease of finding carpooling scheme participants, are to be encouraged by the school and communicated to staff and parents. The school is to liaise with staff to discuss the feasibility of a parking management scheme which would discourage the use of single occupant car travel to the site while incentivising employees to travel by alternative modes of transport. | Reduce vehicle traffic on road network and prevent queuing at access point during morning and afternoon peak hours. |

## 6.2 Noise and Vibration

### 6.2.1 Assessment

A Noise and Vibration Impact Assessment has been prepared by the acoustic consultant and provided at **Appendix 29**.

The nearest noise sensitive receivers surrounding the site include (refer to **Figure 57)**:

1. 95 & 83 Tenth Avenue – a commercial premises located approximately 20 metres to the north.
2. 90 Tenth Avenue – a residential property located approximately less than five metres to the east.
3. 45 Ninth Avenue – a residential property located approximately less than five metres to the east.
4. Residential properties located along Ninth Avenue and Edmondson Avenue located approximately less than five metres to the west.
5. Residential properties located along Ninth Avenue and Edmondson Avenue located approximately 20 metres to the west.


| ID | Sensitive Receiver | Receiver Type | Approx. Distance, m |
|---|---|---|---|
| 1 | 95 & 83 Tenth Avenue | Commercial Premises (Neighbourhood Centre - B1) | 20 |
| 2 | 90 Tenth Avenue | Residential (Medium Density Residential – R3) | <5 |
| 3 | 45 Ninth Avenue | Residential (Medium Density Residential – R3) | <5 |
| 4 | 65, 63, 61, 59, 57, 55 & 51 Ninth Avenue & 203 Edmondson Avenue | Residential (Medium Density Residential – R3) | <5 |
| 5 | 234, 232, 216, 208, 206 & 204 Edmondson Avenue & 110 Tenth Avenue | Residential (Medium Density Residential – R3) | 20 |

**Figure 57: Nearest sensitive receivers (Source: JHA Consultants)**

Attended and unattended noise surveys were conducted at the locations shown in **Figure 58** to establish the ambient and background noise levels at the site.


**Figure 58: Noise Survey locations (Source: JHA Consultants)**

Short-term and long-term noise monitoring was also carried out on the site, which demonstrated that the noise environment surrounding the site is dominated by; natural noise (i.e., birds, insects, etc.), agricultural activities and intermittent road noise from Edmondson Avenue. Additionally, increased noise levels were recorded at night, likely due to increased wildlife activity at night, in particular from insects.

Based on the criteria from the relevant noise standards and guidelines, the **Figure 59** below summarises the operational noise level criteria.

| *Noise Emission* | *Standard / Guideline* | *Time Period* | *Noise Level Criteria (dBA)* |
|---|---|---|---|
| External Mechanical Plant | NSW EPA NPI | Day Time (7am-6pm) | 45 |
| | | Evening Time (6pm-10pm) | 43 |
| | | Night Time (10pm-7am) | 38 |
| Operational Noise | EECCF SEPP | Day Time (7am-6pm) | 45 |
| | | Evening Time (6pm-10pm) | 48 |
| Outdoor playground | AAAC Guideline | Up to 4 hours | 50 |
| | | More than 4 hours | 45 |

**Figure 59: Summary of the noise level criteria at the nearest noise sensitive receivers based on the noise emissions**

Noise emissions from the proposed activity have the potential to impact on existing surrounding noise sensitive receivers. For the purpose of this noise impact assessment, the noise sources associated with the activity have been separated into construction and operational noise impacts.

### Construction Noise

A high-level noise assessment has been carried out by JHA Consulting to predict the worst-case noise level at the nearest noise sensitive receivers. The existing school has also been considered as a sensitive receiver for the assessment as during construction there will be students attending the existing school. JHA Consulting considers that the noise associated with the construction works is expected to exceed the noise limits for highly noise affected receivers within standard hours. This assessment is based on typical noise levels associated with construction sites and machinery. Nevertheless, compliance with the relevant construction noise criteria can be achieved through specific noise mitigation measures such as acoustic screening around the construction site within the school grounds. These noise mitigation measures are to be provided in a detailed Construction Noise & Vibration Management Plan (CNVMP) and prepared by a qualified acoustic consultant prior to commencement of work.  A mitigation measure has been included in this REF requiring the preparation of a CNVMP prior to the commencement of works on the site.

### Operational Noise

The following operational noise sources have been identified:

- Mechanical plant from the activity to the surrounding receivers.
- Indoor learning activities.
- Public address and school bell systems
- Activities from the outdoor playground.
- Noise emissions from car park (whilst the new car park works are to be undertaken as ancillary works, noise emissions from the car park have been considered in this report to ensure a holistic consideration of the impacts of the upgrades).
- Traffic noise generation
- Other Noise Sources

An assessment of these noise emissions generated as a result of the proposed activity is provided below.

Mechanical Services:

Mechanical plant selections have not been made, which is typical for this stage of the design and planning approval process. Therefore, a detailed noise assessment has not been able to be carried out. Acoustic assessment of the mechanical plant will be conducted during the design phase of the project in order to confirm any noise control measure requirements. However, based on the proposed location of the mechanical plant, in order to comply with the NSW Noise Policy for Industry (NPI) criteria for noise emissions to the nearest sensitive receivers, the maximum allowable cumulative noise emissions from the external mechanical plant shall be controlled to achieve LAeq,15min 65dB(A) at one metre from the plant boundary.  JHA Consulting confirms the services are capable of complying, subject to adopting the mitigation measures of their report which accompanies the REF.

Indoor Learning Areas

Noise impacts from indoor learning activities have been assessed. The resulting noise break out from classroom activities at the boundary of the nearest noise sensitive receiver to the east is less than 30dB(A). It is therefore predicted that noise emissions from classroom learning activities will comply with the daytime operational noise criteria.

Public Address and School Bell Systems

Public address and school bell system selections have not been made yet, however a preliminary noise impact assessment has still been carried out. It is assumed that loudspeakers will be oriented to the outdoor area to the south of the new Learning Hub Building, which means that the school buildings will act as a barrier to minimise the noise impact to the nearest distance of 80m from the internal façades of the building to the boundary of the noise sensitive receivers to the north. An approximate nearest noise sensitive receiver has been assumed and given the noise level criteria and directivity of typical loudspeakers, noise emissions from the loudspeakers shall be limited to LAeq 75 dB(A) at 1m. It is anticipated that the noise impact to the nearest sensitive receivers will be negligible.

These systems will be designed, installed and operated so that they do not unreasonably interfere with the amenity enjoyed by nearby residents. Recommendations to reduce the noise impact from the public address and school bell systems include:

- Locate and orient low-powered horn-type speakers to provide a good coverage of the school while being away from nearby residences
- Mount speakers with a downward angle and as close as possible to the floor
- Adjust noise level of the systems to that they are clearly audible on the school property without being excessive
- Once an appropriate noise level has been determined, the systems should be limited to these noise levels so that staff cannot increase the noise levels
- Systems shall only be used during school hours.

Outdoor Play Area:

External noise emissions associated with the outdoor playgrounds have been assessed. Based on the projected increase in student numbers for the proposal, the noise levels as a result of the additional student population will increase the noise level on site by less than 0.5dB(A). An increase of less than 2dB(A) is considered negligible and it would not be discernible by the average listener. Therefore, noise from the outdoor playground is not expected to affect the amenity of the surrounding noise sensitive receivers.

Car Park Noise:

Noise generation from car movements in the carpark have been assessed and is expected to comply with the TI SEPP noise level criteria, provided an appropriate acoustic barrier is erected between the carpark and the sensitive receivers on Ninth Avenue. The report recommends the barrier should be a minimum of 2.1m high with solid sections of the barrier constructed from a minimum of two sheets of Colorbond. The barrier should be continuous with no gaps. This barrier is shown on the architectural drawings (**Appendix 3**) and takes the form of a 2.1m high metal fence with closed gaps, as per the recommendations of JHA Consulting.

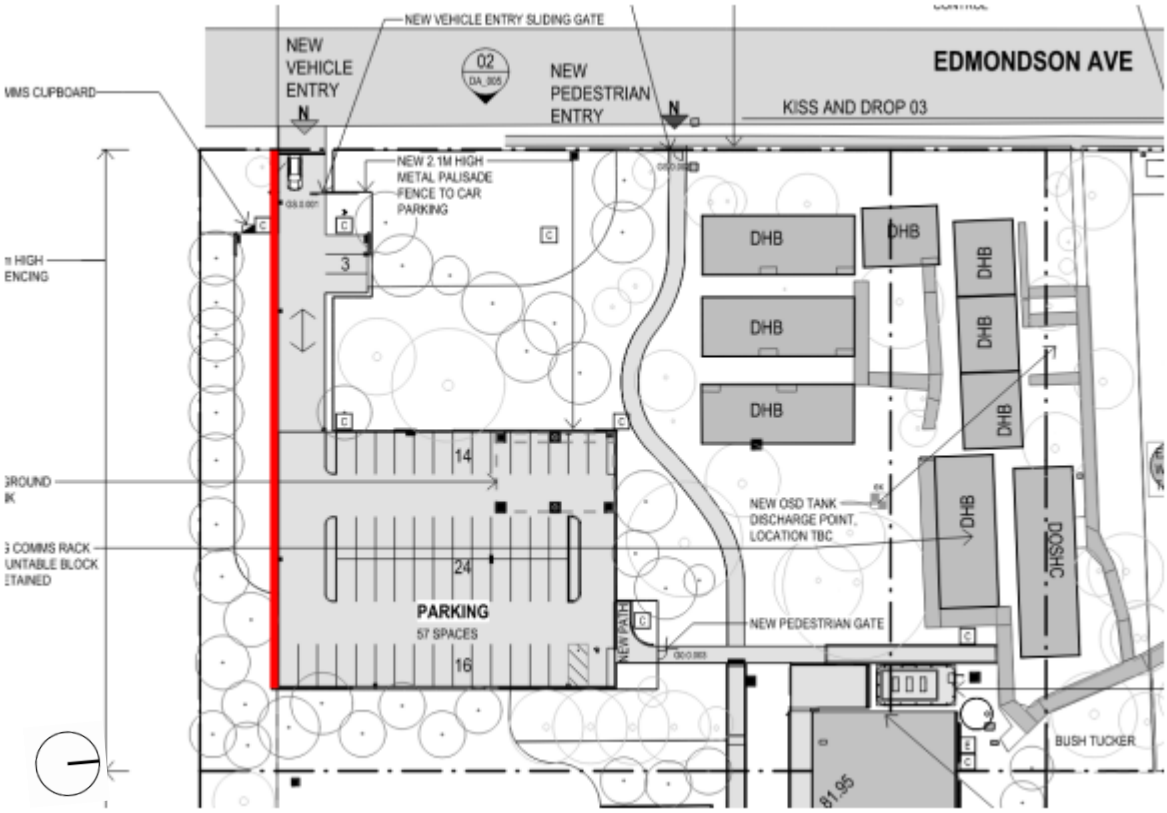



**Figure 60: Acoustic barrier shown on architectural drawings, in red (Source: Pedavoli Architects)**

Traffic Noise Generation:

Traffic noise impacts due to the likely increase in vehicle movements as a result of the proposed activity is anticipated to be insignificant, as the noise levels are not expected to increase by more than 2dB at the nearby noise sensitive receivers.

Other Noise Sources

Noise impacts from waste collection to the nearest noise sensitive receivers are likely to be negligible subject to the following recommendations:

- Waste collection and servicing is to be carried out during daytime hours. (7am – 6pm)
- Waste collection and servicing is to be carried out within the confines of the school.

Noise Intrusion:

Noise break-in from traffic noise along Edmondson Avenue has been assessed for the external glazing. A minimum sound insulation performance has been obtained to meet the internal noise level criteria as required under EFSG DG11. Acoustic design of the façade, other external building elements and ventilation openings of the school will need to be considered throughout the design development stages in order to meet the noise level criteria.

**Conclusion**

Subject to implementing the various mitigation measures outlined below, the proposal will not result in any adverse or significant acoustic impact in terms of impact on the surrounding environment, or adverse noise intrusion into the school and associated impact on amenity.

### 6.2.2 Mitigation Measures

**Table 15: Mitigation Measures for Noise and Vibration**

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| **Construction Noise and Vibration** | Prior to construction | A CNVMP is to be prepared prior to works commencing on the site.<br>The CNVMP is to include the following mitigation measures:<br>• All works will be in accordance with AS 2436-2010: Guide to Noise and Vibration Control on Construction, Demolition and Maintenance Sites;<br>• Building contractors are to implement the requirements of the Office of Environment Interim Construction Noise Guideline (July 2009) as far as practicable;<br>• Construction is to be carried out in accordance with the National Construction Code deemed-to-satisfy provisions with respect to noise transmission;<br>• All reasonable, practicable steps are to be undertaken to reduce noise and vibration from the site;<br>• Plant and equipment are to be maintained, checked and calibrated in accordance with the appropriate design requirements and to ensure that maximum sound power levels are not exceeded;<br>• Plant and equipment (where possible) are to be strategically positioned on site to reduce the emission of noise from the site to the surrounding area, users of the site and on site personnel;<br>• Unnecessary noise is to be avoided when carrying out manual operations and operating plant; and<br>• Any equipment not used for extended periods is to be switched off.<br>Additional project-specific mitigation measures are also to be included, as required, in accordance with the Noise and Vibration Impact Assessment. | To ensure the temporary impact of construction noise and vibration are mitigated on the sensitive receivers at the school site and near to the site. |
| **Plant and equipment** | Prior to construction | Prior to the commencement of the relevant stage of works, an acoustic assessment of mechanical plant is to be undertaken by a suitably qualified acoustic consultant during the detailed design phase of the project to confirm any noise control measures to achieve the relevant noise criteria at the nearest noise sensitive receivers. | To comply with the established noise level criteria. |
| | Prior to construction | Prior to the commencement of the relevant stage of works, the detailed design process | |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | | is to ensure mechanical plant is selected and strategically located to ensure the cumulative noise levels at the receiver boundaries are met. | |
| | During construction | Acoustic noise control measures are to be implemented during site works to minimise noise impacts, in accordance with the Construction Noise and Vibration Management Plan which is to be prepared in accordance with measure NV1. These include (but not limited to):<br>• In-duct attenuation.<br>• Noise enclosures as required.<br>• Sound absorptive panels.<br>• Acoustic louvres as required.<br>Noise barriers as required. | |
| | During construction | Site works contractors are to use quieter techniques for all high noise activities such as rock breaking, concrete sawing, and when using power and pneumatic tools. | |
| | During construction | Site works contractors are to use quieter plant and equipment based on the optimal power and size to most efficiently perform the required tasks. | |
| | During construction | Plant and equipment with low vibration generation characteristics is to be prioritised during selection. | |
| | During construction | Noise from plant and equipment is to be minimised and is to be operated in the quietest and most effective manner. | |
| | During construction | The site works contractor is to regularly inspect and maintain plant and equipment to minimise noise and vibration levels to ensure that all noise and vibration reduction devices are operating effectively. | |
| | During operation | No night-time operation (10pm to 7am) of the external mechanical plant is to be allowed. | |
| **On-site** | During construction | The distance between noisy activities and noise sensitive receivers is to be maximised, wherever feasible. | To minimise impact of acoustic amenity by reducing noise from the site. |
| | During construction | Noisy fabrication work is to be undertaken off-site where possible. | |
| | During construction | The site works contractor is to avoid the use of reversing beeping alarms or provide for alternative systems, such as broadband reversing alarms. | |
| | During construction | The site works contractor is to maintain any pre-existing barriers or walls on a demolition or excavation site as long as possible to provide optimum noise control. | |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | During construction | The site works contractor is to install/construct barriers that are part of the project design early in the construction of the project to mitigate site noise. | |
| | During construction | The site works contractor is to use temporary site building and material stockpiles as noise barriers. | |
| **Work scheduling** | During construction | Respite periods are to be provided, including restricting very noisy activities to daytime (7am to 6pm), restricting the number of nights that after-hours work is conducted near residences, or by determining any specific requirements, particularly those needed for noise sensitive receivers. | To minimise impact of acoustic amenity by scheduling work during periods when people are least affected. |
| | During construction | Activities are to be scheduled to minimise impacts by undertaking all possible work during hours that will least adversely affect sensitive receivers and by avoiding conflicts with other scheduled events. | |
| | During construction | Work is to be scheduled to coincide with non-sensitive periods, to reduce impact on sensitive periods including school examinations. | |
| | During construction | Noisy activities are to be scheduled to coincide with high levels of neighbourhood noise (including any surrounding construction noise) so that noise from the activities is partially masked and not as intrusive. | |
| | During construction | Deliveries and access to the site are to be scheduled/organised to occur quietly and efficiently. Parking is to only be undertaken in the relevant designated areas located away from sensitive receivers. | |
| | During construction | The number of deliveries to the site is to be optimised by amalgamating loads where possible and scheduling arrivals within designated hours. | |
| | During construction | Access routes to the site are to be designated, designed and maintained to minimise impacts. | |
| **Consultation, notification and complaints** | All stages | Maintain good communication between the community, construction staff and the school community. This is to include providing regular updates on construction works before and during construction to all key stakeholders in both the school and broader community. | Ensure consultation with community to minimise impact on acoustic amenity. |
| | All stages | A documented complaints process is to be established and included in the CEMP. A register of complaints is to be kept on | |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | | record. The complaints process is to ensure complaints are provided a fair consideration and a quick response. All feasible and reasonable measures are to be implemented to address the source of complaint. | |
| **Exceedances** | During construction | The site contractor is to implement equipment-specific screening or other noise control measures recommended in Appendix C of AS 2436:2010. | To comply with the established noise level criteria. |
| | During construction | The site contractor is to limit the number of trucks on site at the commencement of site activities to the minimum required by the loading facilities on site. | |
| | During construction | When loading trucks, best practice noise management strategies are to be adopted to avoid materials being dropped from height into dump trucks. Unnecessary idling of trucks and equipment is to be avoided. | |
| | During construction | The site contractor is to ensure that any miscellaneous equipment (extraction fans, hand tools, etc) not specifically identified in the CNVMP incorporates silencing/shielding equipment as required to meet the noise criteria. | |
| **Public address and bell system** | Prior to construction and during operation | Prior to the commencement of the relevant stage of works an acoustic assessment of the public address and school bell systems shall continue during the detailed design phase of the project in order to confirm any noise control measures required to achieve the relevant noise criteria at the nearest noise sensitive receivers. Any such noise control measures are required to be implemented during operation | To comply with the established noise level criteria. |
| | Prior to construction, during construction and operation | Low-powered horn-type speakers are to be located and orientated to provide a good coverage of the school areas whilst being directly away from residences and near sensitive receivers. System coverage shall be reviewed during the detailed design phase. | |
| | During construction and prior to operation | Speakers are to be mounted with a downward angle and as close to the floor as possible. | |
| | During construction and prior to operation | The noise level of the systems is to be adjusted on site so they will be clearly audible on the school site without being excessive. The systems shall initially be set so that the noise at nearby residences and sensitive receivers do not exceed noise | |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | | level criteria. | |
| | During operation | Once the appropriate noise level has been determined on site, the systems are to be limited to these noise levels so that staff cannot increase the noise levels. | |
| | During operation | The systems are to be set so that it only occurs on school days. | |
| **Carpark** | Prior to operation of carpark | A noise barrier in the form of a 2.1 metre Colourbond fence is to be constructed to the south of the carpark, as per the Noise and Vibration Impact Assessment prepared by JHA, dated 3 February 2025. | To comply with the internal noise level criteria. |
| **Waste collection** | During operation | Waste collection and servicing is to be carried out during daytime hours (between 7am – 6pm). | To minimise impact of acoustic amenity. |
| | During operation | Waste collection and servicing is to be carried out within the boundaries of the school. | |

## 6.3 Contamination and Hazardous Materials

### 6.3.1 Assessment

A DSI has been undertaken, and the full report is located in **Appendix 12**.

The DSI outlines the following:

- The subject site is already used as a school. The development does not propose to change the existing use, it merely provides new buildings/parking on the site.
- The site has been subject to a number of contamination investigations and reports to-date, with the most recent being a Detailed Site Investigation carried out also by SMEC.
- Laboratory testing completed indicates that PFAS compounds found during investigations exceeded the adopted human health criteria and ecological criteria within two test pits located proximal to the site's southern boundary and located within a stormwater run-off area which is from the neighbouring RFS site, formerly owned by LCC. APS have placed temporary fencing in this area to limit access to the locations where these exceedances were recorded as a temporary measure. However, this is an existing issue and not one created by way of the new works or any existing activity on the APS site.
- It is understood that LCC and the RFS is proposing improvement works in the southern part of the school site involving excavation to depths of between 0.3m and 0.5m to reduce the mass and potential for ongoing release of PFAS to provide environmental benefit only. It is also understood that these works will be the responsibility of LCC and RFS (as the PFAS source is from the RFS site adjacent to the school) and carried out under a suitable RAP (or similar), also prepared by LCC and RFS. Again, these works will need to be undertaken by LCC and the RFS irrespective of any development on the APS site.
- The RFS has had a health risk assessment carried out by Terravale in 2023 which concluded that the risk to exposures to PFAS and asbestos was low and acceptable for both primary

school students and adult staff based on daily exposure rates to maximum PFAS concentration as detected in the soil along the southern boundary. The proposed works will require excavation for a driveway and carpark in the contaminated area and will require remediation.

- Properties along the south-eastern boundary of the school use a bio-septic system that treats sewage and disperses it via sprinklers, sometimes causing runoff into the school. Additionally, there have been past issues with septic tank overflows on the site's western boundary.
- The laboratory testing also identified suspected bonded ACM in the area adjacent to the children's play area. However, the Department engaged suitably qualified professionals to clear the surface soils to manage school activities in the interim. Further testing and a more detailed plan for the affected areas will be undertaken and are separate to the subject activity.
- The density of investigation locations near existing and former historical structures (AEC 1) was generally low due to access from existing pavements and buildings. When details of known disturbance areas for the new development are known, further assessment can be carried out to target those areas to increase the confidence in the assessment and avoid unexpected finds, otherwise works can be managed through an unexpected finds procedure.
- Removal of all hazardous building materials from structures that require demolition is required, in accordance with relevant regulations and codes along with adequate assessment and clearance prior to demolition to avoid introduction of contaminants to the ground.
- Given that the full assessment on site is not currently possible due to the presence of existing buildings, and the requirement for further testing (which can only occur post demolition), the RAP as outlined below, will include requirements for future testing.
- The report by SMEC provides a series of recommendations in relation to managing site contamination. These measures are included as mitigation measures. The provision of this assessment and works demonstrate that the site will be made suitable (once the works are completed) for the future (ongoing) educational use.
- The mitigation measures can ensure the necessary assessment, and remediation works are timed to occur once the buildings have been demolished and prior to any footing works occurring on site. The associated certificates confirming the completion of any remediation works can be issued to the certifier prior to the issue of a Crown Occupation Certificate for the activity. This will ensure that the land has been made suitable for the purpose of the activity prior to students and staff using the new facilities.

Based on the recommendations of SMEC, Tetra Tech Coffey Pty Ltd has prepared a RAP which is provided at **Appendix 12 & 26**. It should be noted that the PFAS contamination, originating from runoff from a nearby RFS site, will be remediated by the LCC and RFS under a RAP which will be separately prepared by LCC and the RFS.

The RAP prepared for this activity has considered groundwater migration based on the site's hydrogeological conditions. Groundwater is expected to flow west to northwest towards Kemps Creek and its tributaries, as indicated by previous groundwater data and the location of nearby water bodies. The Upper Canal System, located 545m east, is a man-made waterway with a similar elevation to the site, making hydraulic connectivity with local groundwater unlikely. Additionally, an unnamed perennial waterway situated 600m west serves as a tributary to Kemps Creek, approximately 2.2km west of the site. Given these factors, the RAP incorporates measures to prevent potential off-site migration of contaminants towards these waterways.

Investigations on-site identified risks associated with asbestos and PFAS contamination. Additionally, a data gap exists concerning potential pathogens in soil linked to historical sewerage overflows from septic tanks along the western boundary of the site.

The Department's preferred remedial strategy includes the following mitigation measures:

1. Conduct a supplementary investigation to assess potential human health risks related to the septic tank overflow, documenting the findings in a standalone report. If risks are identified, an addendum to the RAP will be prepared; if not, the findings will be summarised in a validation report.
2. Further investigation near TP08 (which is near the demountable homebases), where asbestos was identified, to determine whether it poses unacceptable risks. If so, an AMP will need to be prepared; otherwise, the findings will be summarised in the validation report, and the project may proceed with the outlined site management measures.
3. Prepare a SSAMP for asbestos in fill surrounding TP08, which will not be disturbed during the upgrade works.

PFAS contamination in the southern portion of the site, related to a former offsite fire station, will be remediated by the LCC and the RFS before the proposed upgrade works are implemented.

### Conclusion

Overall, the assessment demonstrates that the contamination matters raised above do not render the site unsuitable for the proposed activity, and the matters can be resolved via implementation of the RAP as part of the mitigation measures. Ultimately, the site can be made suitable for the activity and ongoing educational use.

### 6.3.2 Assessment

**Table 16: Mitigation Measures for Contamination and Hazardous Materials**

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| **Mitigation Measures from Detailed Site Investigation prepared by SMEC** | | | |
| **PFAS** | During construction | The department is to continue to liaise with Council and the RFS on the remediation of PFAS on the site (for the area highlighted in yellow on page 44 of the Remediation Action Plan prepared by Tetra Tech Coffey). The department is to obtain confirmation from those agencies that the site has been remediated from PFAS prior to the commencement of any works within the area suspected to have PFAS containing material on site.<br>The department is also to develop a monitoring programme to determine the extent of the PFAS and whether the area to be remediated needs to be extended. | To reduce potential for adverse health and ecological impacts from PFAS from offsite. |
| **Asbestos in soil** | During construction | The Department's Site-Specific Asbestos Management Plan and Asbestos Management Protocols must be strictly followed and updated for any asbestos remediation that may be required and undertaken as identified in the fill immediately surrounding TP08. | To reduce risk of adverse impacts from presence of asbestos. |
| | During construction | During construction, prior to disturbance of the areas suspected to contain Asbestos, as indicated in the DSI and RAP, a further assessment must be conducted to determine the degree and extent of asbestos contamination. | |
| **Septic system** | Prior to commencement of operations | The septic system must be upgraded to prevent future overflows, with a further assessment conducted prior to or as part of the upgrade as part of the proposed activity. | To reduce potential of health impacts from exposure to septic system overflows. |
| **Managing unexpected finds** | During construction | All personnel involved in earthworks on-site must be inducted on identifying potential unexpected finds. This induction must be included as part of the general site induction and refreshed periodically during toolbox meetings. | To better assess the condition of the Site and/or reduce likelihood of dealing with unexpected finds. |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | During construction | If unexpected contamination or aesthetically unacceptable material is encountered on-site, work must cease in the affected area. The area must be isolated to minimise disturbance to the affected soils. The subcontractors, environmental consultant, and Principal Contractor must be notified immediately. The environmental consultant must inspect the find as soon as practicable to determine if emergency services are required and recommend interim actions to mitigate potential health and safety risks.<br><br>Note: aesthetically unacceptable material refers to substances that are not contaminated and do not pose a risk to human health or the environment but would be considered visually undesirable if present or reused in accessible areas during redevelopment, such as at the ground surface. These materials may include inert construction or demolition debris like concrete, brick, asphalt, and certain forms of asbestos, as well as lead-paint residues. Other examples are soils containing a high percentage of ash or slag (typically more than 5-10% of the soil volume), heavy staining, malodours, or sheens on surface waters, all of which could negatively impact the visual appeal of the site. | |
| **Asbestos in structures** | During demolition/ construction | All hazardous building materials must be removed from structures requiring demolition in compliance with relevant regulations and codes. Adequate assessment and clearance must be conducted prior to demolition. | To avoid introduction of contaminants to the ground. |
| **Mitigation Measures from Remedial Action Plan prepared by Tetra Tech Coffey** | | | |
| **RAP Addendum** | During construction | If an unacceptable risk is identified, an addendum to the RAP must be prepared. If no unacceptable risk is identified, the results must be documented in the validation report. | Ensure RAP is updated in accordance with construction risks/finds. |
| **Supplementary investigation of soils surrounding septic tank** | During construction | Prior to the disturbance of the relevant area (as outlined in the Detailed Site Investigation prepared by SMEC, dated 3 February 2025), a supplementary investigation must | Potential for unacceptable contamination from a human health perspective if works proposed for this area. |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | | be conducted to assess the potential human health risk associated with the septic tank overflow, as noted anecdotally in the Detailed Site Investigation (DSI). | |
| **Further investigation of soils surrounding TP08** | Prior to and during construction | A further investigation must be conducted in the vicinity of TP08, where asbestos was previously identified, to determine whether it poses unacceptable risks during the proposed upgrade works without appropriate mitigation, considering the ongoing use of the site as a school. The assessment must be documented in a standalone report. | Potential for unacceptable contamination from a human health perspective if works proposed for this area. |
| **General** | | | |
| **Remediation** | During demolition/ construction | In accordance with Section 4.6 of the SEPP (Resilience and Hazards) 2021, which incorporates the former State Environmental Planning Policy No. 55 – Remediation of Land (1998) under the Environmental Planning and Assessment Act 1979, remediation is classified as either:<br>1. **Category 1** – requiring development consent, or<br>2. **Category 2** – not requiring consent but requiring 30 days' notice to the Council.<br>The proposed activity is subject to a REF assessment, with the RAP forming a component of the REF. The remediation contractor is responsible for managing the planning and approval process and must ensure that the correct planning procedures are followed. | To ensure the correct planning procedures are followed. |

## 6.4 Hydrology, Flooding and Water Quality

### 6.4.1 Assessment

#### Groundwater

Groundwater was not encountered in any boreholes during fieldwork investigations. While unlikely based on those investigations, if groundwater inflows are encountered during construction, a sump

should be formed at the base of the excavation and the water pumped out. Any requisite approvals from NRAR will need to be obtained and a dewatering plan prepared for implementation.

### Stormwater

A Stormwater Management Report has been prepared by the stormwater consultant and provided at **Appendix 32**.

The stormwater management plan ensures compliance with the On-Site Stormwater Detention (OSD) Standard 2021, maintaining that post-development runoff rates do not exceed pre-development levels for storm events ranging from a 20% Annual Exceedance Probability (AEP) to a 1% AEP. The drainage system is designed to handle all site runoff effectively, ensuring that runoff from upstream properties bypasses the OSD storage during major storm events.

Two OSD facilities are proposed: OSD 1, located beneath the sports court, has a capacity of 532m³ and serves a 0.8954Ha catchment with a 250mm orifice diameter. OSD 2, situated under the car park, has a capacity of 150m³, serving a 0.2514Ha catchment with a 100mm orifice diameter. These facilities will adequately attenuate site flows to match pre-development conditions.

The stormwater design integrates Water Sensitive Urban Design (WSUD) principles as outlined in the LCC Engineering Design Specification (2009). WSUD aims to minimise the impact of urban development on the natural water cycle by optimising rainwater use and reducing demand for potable water. The WSUD strategy for this activity includes measures to replicate the natural hydrological landscape and manage stormwater effectively. There are no significant constraints, such as floodplains or sensitive environments, limiting the implementation of WSUD measures.

To meet LCC's stormwater quality requirements, pollutant reduction modelling was conducted using the MUSIC modelling, analysing reductions in total suspended solids, total nitrogen, total phosphorus and gross pollutants.

A 10kL rainwater tank will collect runoff from 0.0964Ha of roof area for non-potable uses such as toilet flushing and landscape watering. A grassed swale along the western boundary will further enhance water quality by filtering pollutants.

### Flooding

The FIA prepared by the flood consultant (**Appendix 6**) responds to the technical requirements of LCC and establishes the existing, pre-development flooding situation and the proposed, post-development situation.

The two situations are categorised into AEP events and Probable Maximum Flood (PMF) events and Stantec's conclusions on each are summarised below, with more detail in the full report.

1% AEP

In the pre-development case, the existing school site is subject to shallow overland flows during the 1% Annual Exceedance Probability (1% AEP) storm event. The flood depths are generally below 50mm across the site and flow in a northeast direction and concentrated in an existing overland flow path located along the northern boundary of the site. The floodwater depth ranges from 50-1000mm in this flow path, which flows east, and reaches a peak depth of approximately 1.0m directly upstream of where the PMF flood overtops Edmondson Avenue. A flood hazard of H1-H5 is observed through the site, with only a minor portion at the northern boundary being classified as a H5 hazard, however this is not where any of the existing buildings being renovated, or where a new building is proposed to be located. This portion of area is considered unsafe for vehicles and people. However, a flood emergency management plan (FERP) will be prepared for

the entire site which will also address the movement of people or vehicles to ensure appropriate evacuation routes.


**Figure 61: Pre-development PMF flood extent (Source: Stantec)**

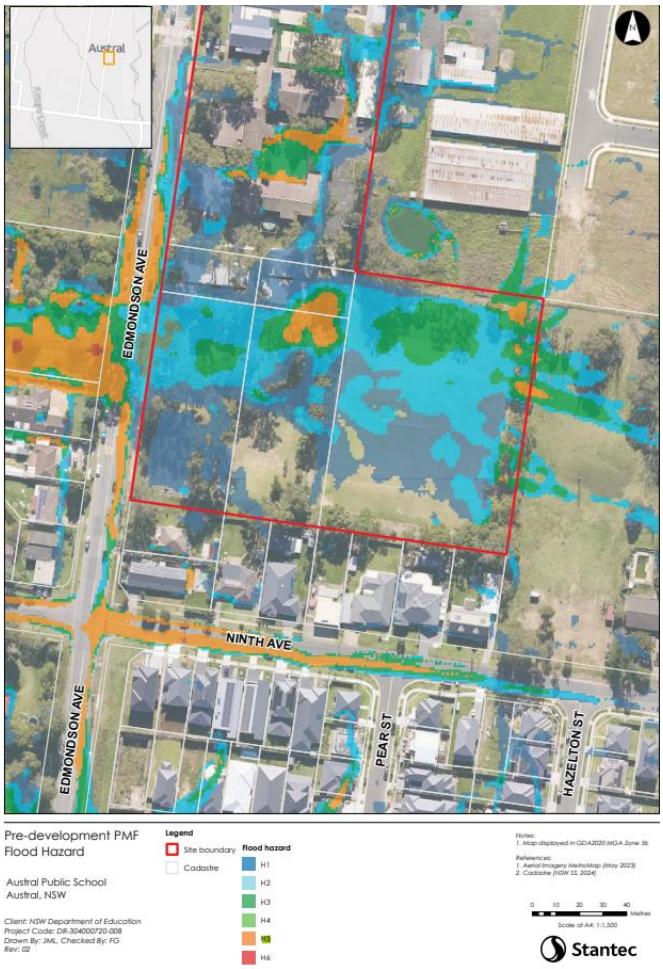



**Figure 62: Pre-development PMF flood hazard (Source: Stantec)**

PMF

The site is subject to shallow overland flows during the PMF storm event. The flood behaviour is similar in the proposed scenario when compared to the existing. The flood depths are generally below 50mm across the site and flow in a northeast direction and concentrate in an existing overland flow path located along the northern boundary of the site. T

The maximum flood hazard across the road is not increased. The flood hazard category improves in the post-development condition, at H1-H4.A minor portion of H4 flood is contained to the proposed swale areas to the east of the site; however, this area to the east is not expected to be trafficked by people or vehicles, due to the swale being located close to the boundary/ existing tree area, and outside of the main school infrastructure.

During the PMF the activity results in a maximum flood level increase of 10mm within the neighbouring site to the east, Lot 866, however, the encroachment of flood impact is still narrow, being less than 2m into the cadastral boundary. The impact is considered to be minor given that the lot is affected by the PMF in the pre-developed case, and the hazard category in the lot is not

increased in the post-development case. The flood level impact to Edmondson Avenue, road reserve, increases to approximately 90mm but as with the 1% AEP event, the maximum flood hazard category across the road is not increased. These results are considered reasonable, and no further mitigation is required within this area.


**Figure 63: Post development PMF flood extent (Source: Stantec)**

The existing floor level is set at FFL 82.00m, which is above the PMF level and complies with LCC ’s flood planning controls. Based on the flood modelling conducted by Stantec Australia, it is clear that the proposed building will not be negatively impacted by flooding during either the 1% AEP storm event or the PMF storm event. Therefore, the FFL of 82.00m is deemed appropriate and suitable for the site. A FERP will be prepared for the entire site which will address how the site will be accessed during any flooding events.

**Conclusion**

In summary, the report concludes that there are no detrimental flooding impacts as consequence of the activity proposed. The report also identifies that there is a decrease in flood hazard and risk to life and property as a direct result of the activity. The report recommends that the TUFLOW model be updated at detailed design stage to capture any modifications to the design surface.

This REF will be notified to the SES to satisfy the statutory notification requirements in the TI SEPP, given the site is partly flood affected. The outcomes of that consultation will be addressed prior to determination of the activity by the Department.

### 6.4.2 Mitigation Measures

**Table 17: Mitigation Measures for Hydrology, Flooding and Water Quality**

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| **Stormwater** | Prior to construction | The new learning hub building shall be constructed so that the ground floor level is above the 1% AEP and the PMF. The Flood Impact Assessment Report confirms that the current design ground floor level of 82.00 is above the 1% AEP and the PMF. | To ensure the building is above the PMF level. |
| **Flooding** | During detailed design | Additional hydraulic modelling is to be undertaken considering the detailed design surface prior to construction of works to ensure no change in the outcomes of the modelling undertaken to support the REF. | Possible changes to design surface and overland flood behaviour following detailed design. |
| | Prior to operation | Prior to the commencement of operation of the upgrades at the school, a FERP is prepared to clearly communicate areas of potential hazard and the flood emergency response strategy. It is recommended that the flood emergency management plan is prepared with SES consultation and considers regional evacuation management plans. | Emergency flood management for sensitive facilities. |

## 6.5 Aboriginal Heritage

### 6.5.1 Assessment

A Preliminary Indigenous Heritage Assessment has been prepared by the Indigenous heritage consultant and provided at **Appendix 25**.

The site is within the Gandangara Local Aboriginal Land Council area.

An AHIMS search was conducted on 5 February 2024, followed by an updated search on 21 January 2025. The updated search identified 58 Aboriginal sites and no Aboriginal Places within the search area. While there are no AHIMS sites recorded within the project area itself, 25 sites are recorded within one kilometre of it. The closest of these is an isolated stone artefact located approximately 356 metres north. One restricted site was identified 1.9 kilometres west of the Project Area; however, it will not be impacted by the proposed works.

The assessment outlines that the site is of low archaeological sensitivity and low archaeological potential based on previous archaeological assessments, regional studies, and past land use. The site has been heavily disturbed as a result of previous land use, particularly relating to the construction of the existing school.

**Conclusion**

Given the disturbance, the assessment concludes that Aboriginal heritage occupation would unlikely have been present within the site and wider project area. As such, it is considered that there are unlikely to be any adverse heritage impacts arising from the proposed activity. Notwithstanding the aforementioned, unexpected finds protocols will be adhered to in the event something is uncovered.

### 6.5.2 Mitigation Measures

**Table 18: Mitigation Measures for Aboriginal Heritage**

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| **Aboriginal heritage site induction (toolbox talk)** | All stages | All work is to be undertaken in accordance with the recommendations of the Preliminary Indigenous Heritage Assessment and Impact prepared dated January 2025. | To manage unexpected Aboriginal heritage finds<br>To prevent against inadvertent harm to unexpected Aboriginal finds |
| | Prior to construction | All relevant staff and contractors are to be made aware of their statutory obligations for heritage under the National Parks and Wildlife Act 1974, which may be implemented as a heritage induction. | |
| **Unexpected Aboriginal heritage finds** | During Demolition/ Construction | If any Aboriginal objects, sites or places (or potential Aboriginal objects, site or places), are uncovered in the course of the activity, work in the vicinity must cease, and Heritage NSW, and Gandangara LALC be contacted for advice. | To manage unexpected Aboriginal heritage finds |
| **Unexpected Aboriginal human remains** | During Demolition/ Construction | If suspected human remains are discovered and/or harmed in, on or under the land within the Project Area, the following actions must be undertaken:<br>• The remains must not be harmed/further harmed<br>• Immediately cease all works at that particular location and secure the area to avoid harm. | To manage any unexpected Aboriginal human remains |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | | • Notify the NSW Police and the Environment Line.<br>Do not recommence any work at the particular location unless authorized in writing by Heritage NSW or Department of Planning and Environment. | |

## 6.6 Environmental Heritage

### 6.6.1 Assessment

A “European Heritage” SOHI has been prepared by the heritage consultant and provided at **Appendix 10**.

The site is not a heritage item or within a heritage conservation area. The nearest heritage item to the site is the Upper Canal System (800 m east) which is listed on the NSW State Heritage Register, Register ID No.5051481.

Despite the site not being a heritage item, several historic buildings have been identified in the subject site dating from 1961 to 1978. These school buildings are associated with the most prolific period of development at the subject site and collectively contribute to its overall significance.

The SOHI has assessed the proposed works as having no greater than minor impact on the heritage values of the subject site. All proposed works are relegated to the less significant and less visually prominent southern section of the subject site that was amalgamated into the original school site in 1963 and has historically remained largely undeveloped. All remaining historic buildings and the historic site boundaries are to be retained with only minor, internal services upgrades to two historic buildings, one of which has been significantly modified in 2011 (Building I).

All other proposed works are either related to landscaping or are minor built elements, including a new car parking area and games court. These built elements are visually recessive and appropriately located to the south of the study area.

The archaeological potential of the subject site is low across most of the site, with the possibility that earlier school-related structures may survive beneath, or adjacent to, current buildings.

The SOHI proposes the following recommendations to support the proposed activity:

- If ground impacts are proposed for areas shown to have been occupied by early school buildings, an archaeologist should attend site to monitor and record. The archaeological work would be undertaken in accordance with section 139 of the Heritage Act 1977. In all other areas of the subject site, if unexpected finds are unearthed, work will cease, and an archaeologist contacted to make an assessment. Unexpected finds may be Aboriginal objects, historical relics or human skeletal remains.

**Conclusion**

The SOHI concludes that the continuation and enhancement of the historic, educational function of the site is embedded in the proposed activity and is a positive heritage outcome, achieved through a proposal that has minimal impacts to the heritage values of the subject site.

### 6.6.2 Mitigation Measures

**Table 19: Mitigation Measures for Environmental Heritage**

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| **Heritage Impact Statement** | All stages | All work is to be undertaken in accordance with the recommendations of the Heritage Impact Statement approved as part of the REF dated 17 January 2025. | Keeps the proposed works acceptable from a heritage perspective. |
| **Unexpected Finds Procedure** | During Demolition/ Construction | An unexpected finds procedure is to be incorporated into the construction environmental management plan (CEMP). If unexpected finds are unearthed any time during the project, work will cease, and an archaeologist will be called to assess the find.<br>Should significant relics be identified, external approvals to impact the relics may be required. | Supports cultural heritage by addressing unexpected finds appropriately and meeting heritage legislative requirements |

## 6.7 Ecology

### 6.7.1 Assessment

**Tree Removal**

An Arboricultural Impact Assessment Report has been prepared by the arborist consultant and provided at **Appendix 7**. The report provides an assessment of 167 trees located on, and adjacent to the site, and discusses the viability of these trees based on the proposed activity. It provides a SULE (Safe Useful Life Expectancy) and STARS (Significance of a Tree Assessment Rating System) rating for every tree identified. In summary, 146 trees (Trees No. 1-52, 55-64, 66-87, 91-103, 108-112, 121-151, 154-156 and 158-167) can be retained, while the 21 remaining trees (Trees No.53, 54, 65, 88-90, 104-107, 113-120, 152, 153, and 157), will require removal to accommodate the design. The tree numbers reference those in the submitted Arborist Report.

**Table 20** below summarises the trees identified for removal, together with the element of the proposed activity that is causing the impact.

**Table 20: Trees identified for removal**

| Tree Number | SULE Rating | STARS | Identified impacts |
|---|---|---|---|
| 53 | 2D | Medium | Located in an area where no works are proposed other than cut and fill, based on the drawing by Stantec, No. CI-1-100-001 (C). 50% of the Tree Protection Zone (TPZ) is subject to fill at a 0-500mm depth. This tree is unable to be retained as a result. |
| 54 | 1B | High | Located in the footprint of the proposed design. Specifically, within the footprint of the mechanical condenser and as such must be removed to facilitate this element. |
| 65 | 2D | Medium | Located in an area where no works are proposed other than cut and |

| Tree Number | SULE Rating | STARS | Identified impacts |
|---|---|---|---|
| | | | fill, based on the drawing by Stantec, No. CI-1-100-001 (C). 100% of the TPZ is subject to cut at a 0-1000mm depth. This tree is unable to be retained as a result. |
| 88 | 2A | Medium | Located not directly in the footprint of the proposed design, however, located close and adjacent to the design footprint and subject to a 'major encroachment', meaning an excess of 10% of the TPZ is affected. This tree has 23% of its TPZ affected. This tree has been identified by the Arborist as having potential to be retained, with 'Note 1' (page 45 of the Arborist report) explaining why. |
| 89 | 2A | Medium | Located not directly in the footprint of the proposed design, however, located close and adjacent to the design footprint and subject to a 'major encroachment', meaning an excess of 10% of the (TPZ) is affected. This tree has 29% of its TPZ affected. This tree has been identified by the Arborist as having potential to be retained, with 'Note 1' (page 45 of the Arborist report) explaining why. |
| 90 | 2A | Medium | Located not directly in the footprint of the proposed design, however, located close and adjacent to the design footprint and subject to a 'major encroachment', meaning an excess of 10% of the (TPZ) is affected. This tree has 25% of its TPZ affected. This tree has been identified by the Arborist as having potential to be retained, with 'Note 1' (page 45 of the Arborist report) explaining why. |
| 104 | 2D[c,e] | Medium | Located in the footprint of the proposed design. Specifically, within the footprint of the proposed car park and it therefore must be removed. |
| 105 | 1B | Medium | Located in the footprint of the proposed design. Specifically, within the footprint of the proposed car park and it therefore must be removed. |
| 106 | 2D | Medium | Located in the footprint of the proposed design. Specifically, within the footprint of the proposed car park and it therefore must be removed. |
| 107 | 2A | Medium | Located in the footprint of the proposed design. Specifically, within the footprint of the proposed car park kerb and it therefore must be removed. |
| 113 | 1B | High | Located in the footprint of the proposed design with 40% of the TPZ affected, it must therefore be removed. |
| 114 | 1B | High | Located in an area where no works are proposed other than cut and fill, based on the drawing by Stantec, No. CI-1-100-001 (C). 100% of the TPZ is subject to cut at a 500-1000mm depth. This tree is unable to be retained as a result. |
| 115 | 1B | Medium | Located within the footprint of the proposed design. Specifically, within the footprint of the proposed new building, including the pathway and stairs. The tree must be removed to facilitate these elements. |
| 116 | 1B | High | Located within the footprint of the proposed design. Specifically, within the footprint of the proposed new building, including the pathway and stairs. The tree must be removed to facilitate these elements. |
| 117 | 1B | High | Located within the footprint of the proposed design. Specifically, within the footprint of the proposed new building, including the pathway and stairs. The tree must be removed to facilitate these elements. |
| 118 | 3D[C,E] | Medium | Located in the footprint of the proposed design with 50% of the TPZ affected, it must therefore be removed. Fruiting bodies of the fungal pathogen, Phellinus are present i.e., a fungal pathogen has colonised the wound, and the body language indicates extensive decay in lower stem. T This tree is also identified as being significant with 'Note 2' (page 45 of the Arborist report) explaining why. This is assessed in greater detail below the table in this REF. |

| Tree Number | SULE Rating | STARS | Identified impacts |
|---|---|---|---|
| 119 | 2A | Medium | Located within the footprint of the proposed design. Specifically, within the footprint of the proposed new building, including the pathway and stairs. The tree must be removed to facilitate these elements. |
| 120 | 2A | Medium | Located within the footprint of the proposed design. Specifically, within the footprint of the proposed new building, including the pathway and stairs. The tree must be removed to facilitate these elements. |
| 152 | 1A | Medium | Located in the footprint of the proposed design. Specifically, within the footprint of the proposed car park and it therefore must be removed. |
| 153 | 1A | Medium | Located in the footprint of the proposed design. Specifically, within the footprint of the proposed car park and it therefore must be removed. |
| 157 | 3D | Medium | Located in the footprint of the proposed design. Specifically, within the road servicing the proposed car park and it therefore must be removed. |

**Tree of Significance**

Note 2 in the Arboricultural Impact Assessment Report (**Appendix 7**, page 44) states that tree 118 (whilst not being a threatened species) is one of the most significant site trees based on the size and amenity value, although further assessment is required to determine the long-term viability of the tree, due to it presenting signs and symptoms of a pathogen which will lead to failure.

Regardless, the compaction and cut for the foundations related to the construction methodology for the covered walkway and new three-storey building is considered likely to place this tree into irreversible decline, especially based on the existing infection. The tree is unlikely to be capable of retention due to its vicinity to proposed works and its current health. The arborist has suggested that if this tree is desired to be retained, then it should be subject to a level 3 assessment to determine if this is possible through design mitigation.

In light of the above, tree 118 will be removed due to the high probability that it will fail in the long term due to disease. The death of the tree would only be expedited by the development proposal and therefore removal is the most appropriate course of action.

**Summary of tree removal impact and proposed landscaping**

A small number of trees (21) are proposed to be removed to facilitate the activity, the majority of which are low value. Furthermore, the planting schedule will allow for a net improvement of trees on site, with a total of 64.

The land is located within an area of biodiversity certified land under the existing SWGC. This removes the requirement to prepare a Biodiversity Development Assessment Report (BDAR) and/or Species Impact Statement (SIS) for activities conducted in this areas. As such, trees within the Cumberland Plain Woodland TEC on the site can be impacted without further assessment or development approvals. In addition to the Arboricultural Impact Assessment Report, a Biodiversity Assessment Report has been prepared by the biodiversity consultant and provided at **Appendix 8**.

ERM's assessment considered the 21 trees that are proposed to be removed as part of the REF and described in the previous section of this REF. Of the trees identified for removal, 19 are native trees of which 12 are *Eucalyptus microcorys* Tallowwood, three are *Eucalyptus amplifolia* Cabbage Gum, two are *Eucalyptus moluccana* Grey Box, one *Eucalyptus tereticornis* Forest Red Gum and one *Ficus obliqua* Small Leafed Fig.

The report concludes that most of the impacted trees have a diameter at breast height (DBH) less than 50cm and are less than 15m in height and are unlikely to have developed hollows that could be used for native fauna for roosting, nesting or breeding. The Forest Red Gum tree to be removed has a DBH of 0.85m and a height of 17m, with this tree having the *potential* for hollows. Given the potential for hollows, other than a recommended mitigation measure, no further action is required as per Section 7.6 of the BC Act.

A detailed landscaping scheme has also been prepared by the landscape architect (**Appendix 20**). Key biodiversity and landscaping features include:

- Existing high value trees to be retained and integrated into carpark surrounds.
- Buffer planting to boundaries to provide a softened edge to the adjusting residential lots.
- Buffer planting of native trees in a garden bed to connect to the future parkland.
- A total of 64 new trees and shrubs planted on site.

**Conclusion**

With the above considered, the development proposal will help to deliver what we understand to be a net-gain in biodiversity at APS by introducing significant planting on the boundaries of the residential areas and future parkland, together with ensuring that the trees of high value are retained where possible.

Therefore, when considered holistically, the likely impacts of the development proposal on matters of biodiversity are considered to be acceptable providing mitigation measures are included and followed.

## 6.7.2 Mitigation Measures

**Table 21: Mitigation Measures for Ecology**

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| **Mitigation Measures outlines in Arborist Report prepared by Allied Tree Consultancy** | | | |
| **Risk Mitigation** | Prior to construction | A project arborist (conforms to the AS 4970) is required to be nominated before works start, and they are to be provided with all related site documents. | Limit risk to persons in school grounds |
| | Prior to construction | A Tree Management Plan (Arboricultural Method Statement) is to be prepared and issued to the entity responsible for the demolition/construction. | Protection of trees |
| | Prior to construction | Site induction: All workers must be briefed about the conditions outlined in Tree Management Plan before the initiation of work. This is required as part of the site induction process. | Protection of trees |
| **Tree protection** | Prior to construction | Installation of tree protection measures is to be undertaken as per the Tree Management Plan (Arboricultural Method Statement). | Protection of trees |
| **Tree removal** | Prior to | Trees are to be identified and marked for removal to prevent incorrect tree | Avoid incorrect tree |

| Mitigation Name | Timing | Mitigation Measure | Reason for Mitigation Measure |
|---|---|---|---|
| | construction | removal. | removal. |
| | During Construction | Native wildlife habitats are required to be identified to avoid injury to animals. | Protection of native fauna. |
| **Council-owned trees** | During construction | Tree No's. 1, 4-7, and 134 are to be retained and protected, as identified in the Biodiversity Assessment report prepared by ERM, dated 20 January 2025. | Protection of assets owned by a second party |
| **Mitigation Measures outlined in the Biodiversity Assessment Report prepared by ERM** | | | |
| **Threatened Flora** | During construction | Large trees that are greater than or equal to 50 cm diameter at breast height (excluding noxious weeds) are to be retained where possible and tree-protection measures will be applied for all retained vegetation. This will provide ongoing roosting and foraging opportunities for fauna. | Protection of trees |
| **Threatened Fauna** | During construction | If a koala is identified during works, operations must cease until the appropriate authorities have been contacted and a tree-felling protocol is implemented and a translocation plan is established, as required. | Protection of native fauna. |
| **Construction Equipment** | During construction | Vehicles, machinery, equipment and boots are to be free of mud, vegetation, and soil prior to entering and exiting the site. | Protection of flora and fauna. |
| **Threatened Fauna** | During construction | If microbats, grey-headed flying fox camps or bird-of-prey nests are located in the site area, works are to cease until appropriate measures have been taken to remove the threat to populations and/or nests, or they are safely translocated. | Protection of native fauna. |
| **Invasive Plant Species** | Prior to demolition/ construction | A preconstruction survey and weed management program is to be prepared to limit the potential spread of invasive plant species. | Protection of plants and trees. |

## 6.8 Social Impact

### 6.8.1 Assessment

#### Crime and Safety

Crime Prevention through Environmental Design (CPTED) is a recognised model which provides that if development is appropriately designed it can reduce the likelihood of crimes being committed. By introducing CPTED measures within the design of the development, it is anticipated that this will assist in minimising the incidence of crime and contribute to perceptions of increased

public safety. The proposal has been designed to take into consideration these principles as follows:

**Surveillance**: This principle provides that crime targets can be reduced by effective surveillance, both natural and technical. In this regard, the development has been designed to directly respond to its surrounding context, by providing windows along its southern and northern boundaries, to provide casual surveillance to the school's play areas and also the RE1 zoned land to the north.

**Access Control**: This principle provides that barriers to attract/restrict the movement of people minimises opportunities for crime and increases the effort required to commit crime. The new building will include appropriate security mechanisms to ensure the appropriate people can enter the building. Additionally, the school will operate in accordance with its existing management practices and operating hours. This will ensure that the school cannot be used by unauthorised people.

**Territorial Reinforcement**: This principle provides that well-used places reduce opportunities for crime and increase risk to criminals. There is a clear delineation between the public street and footpath verge to the proposed development. The introduction of a greater number of people to the site will increase territorial reinforcement. In particular, the strategic location of the new staff admin and library areas, in close proximity to the school's main entrance will increase the presence of staff members and students, when viewed from the public domain and will enhance the risk to offenders and crime effort.

**Space Management**: This principle provides that space which is appropriately utilised and well cared for reduces the risk of crime and antisocial behaviour. Strategies to implement this principle include, site cleanliness, rapid repair of vandalism and graffiti, the quick replacement of broken light fixtures/globes and the removal or refurbishment of decayed physical elements. The school has employees (such as cleaners and gardeners) which are responsible for the general upkeep and maintenance of the school and its buildings.

Overall, the proposed development will assist in improving the streetscape presentation of the site, which will improve the amenity, casual surveillance and ultimately public safety and sense of security within the site and surrounding area.

### Jobs during construction

The construction phase of the development is anticipated to provide several job opportunities for contractors such as those in trade, plant, building and cleaning services. Ultimately, this will deliver an economic benefit to the job market in the vicinity and beyond.

### Jobs during operation

The increased capacity of the school resulting from the proposed upgrades will deliver 64 FTE teaching roles. This is an increase from the existing 40 FTE. The increased pupil numbers will also help to provide wider economic benefits, with an increase in demand on services such as catering and transport.

### Social Impact

**Table 22** provides consideration of social impacts.

**Table 22: Social Impact**

| Type of Impact | Describe the impacts on the community and how they might be experienced, either positively or negatively | Mitigation Measures |
|---|---|---|
| Impacts on access – will there be an improvement to the quality of provision and a response to emerging and changing needs? | The upgrades will improve access by enhancing infrastructure and addressing changing needs. A new vehicular entry, expanded parking, and Kiss and Drop zones will reduce congestion and improve safety. Improved public transport services, additional bike/scooter parking, and better pedestrian infrastructure will support diverse travel modes. A School Transport Plan will ensure a responsive and sustainable approach to future access demands. | None required. |
| Impacts on privacy, overshadowing, peace and quiet, and visual amenity (views / vistas) - will there be significant change for neighbours and the local area during both construction and operation? | The new proposed 3-storey building is adequately setback from the streetscape and surrounding boundaries, which will therefore limit its privacy concerns and shadowing to within the school site and visual impact when viewed from the streetscape.<br>Noise impacts during construction and operation have been discussed in Section 6.2.1. Subject to implementing various mitigation measures, the proposal will not result in any adverse or significant acoustic impact in terms of impact on the surrounding environment, or adverse noise intrusion into the school and associated impact on amenity during the construction and operational stages. | The design and siting of buildings has provided for a maximum of three storeys in a perimeter style block with significant setbacks from the boundaries and landscaping to provide privacy when viewed from the neighbouring property to the north.<br>Mitigation measures for potential noise impacts are provided in Section 6.2.2. |
| Impacts on sense of place - will there be effects on community cohesion or how people feel connected to the place and its character? | The upgraded school will positively influence the sense of place by fostering community cohesion and enhancing connections to the area's character. By integrating modern, sustainable design elements, the school can reflect the community's identity while accommodating growth and contemporary needs. Improved facilities, such as shared recreational spaces, will serve as hubs for interaction, strengthening social ties among students, families, and residents. Careful planning to address concerns about visual impact, traffic, and accessibility will further ensure the school enhances, rather than disrupts, the community's connection to its environment. | None required. |
| Impacts on the way people get around – will there be changes | The proposed upgrades to the school will significantly influence how people | Construction traffic impacts are considered short term |

| Type of Impact | Describe the impacts on the community and how they might be experienced, either positively or negatively | Mitigation Measures |
|---|---|---|
| associated with traffic or parking in the area? | navigate the area, with a range of measures to address potential impacts on traffic, parking, and public transport. The addition of a new vehicular egress/ingress point at Edmondson Avenue and on-site compliance with manoeuvring and parking standards ensures safe and efficient vehicle access. Public transportation services, including existing bus routes and planned amendments in coordination with TfNSW, will cater to the increased student and staff population, promoting sustainable travel options. Improved pedestrian and future cycling infrastructure will encourage active transport, supported by a robust School Transport Plan to guide safe and efficient travel behaviors. Additional staff parking and Kiss and Drop zones will alleviate current parking pressures and streamline drop-off/pick-up activities, with further collaboration with Council for kerb and gutter provision. These measures collectively balance the growth in school activity with the need to maintain accessibility and connectivity for the community. | negative impacts that can be managed so that the impact is minimal.<br>Construction worker traffic will be addressed through a detailed management plan that will be implemented and encourages public transport usage.<br>The STP will be updated annually to ensure active and sustainable travel measures are implemented<br>Infrastructure upgrades proposed, include upgrades to the onsite kiss and drop, to reduce risk of queuing at access points |
| Impacts on wellbeing - will there be benefits for students and the community associated with better school facilities, sporting facilities and grounds, and active transport options? | Positive impacts related to access to new and refurbished buildings - likely to result in better education outcomes for local students which will have benefits for people throughout their lives but also can have benefits for the community. | None required. |

### 6.8.2 Mitigation Measures

The table above identifies there are mitigation measures required to address potential social impact; however, these are not in addition to those mitigation measures outlined in technical reports related to noise and traffic.  No further mitigation measures are required to be imposed with respect to social impact.

## 6.9 Other Considerations

**Table 23: Other considerations**

| Issue | Consideration |
|---|---|
| **Visual Amenity and Privacy** | **Design Addressing Visual Amenity**<br>The proposed design incorporates a range of features to enhance visual amenity and |

| Issue | Consideration |
|---|---|
| | ensure compatibility with surrounding land uses. These include:<br>• **Height and Setbacks**: The building is set back 11 metres from the northern boundary (RE1 zoned land), 33 metres from the eastern boundary (R3 zoned land), 77 metres from residential properties to the south and 67 metres from western boundary (Edmondson Avenue). These generous setbacks, combined with landscaping, ensure the new building sits harmoniously within the context of the site.<br>• **Colours, Materials, and Articulation**: The building features a mix of neutral tones and natural materials to complement the surrounding environment. Pops of accent colours and the strategic placement of cladding joints create a balanced and visually appealing façade. Articulation through recesses, varied materials, and openings further breaks up the mass of the building.<br>• **Fence**: The proposed fence along the boundary of the school's parking area will help reduce noise emissions, benefiting both the school environment and the neighbouring residential property. The existing 2.1-metre palisade fence along Edmondson Avenue, which currently provides a degree of privacy and security, will be complemented by the installation of a new Colorbond fence. This new fence will offer a more solid and unified look, enhancing privacy, security, and noise attenuation. It will seamlessly integrate with the existing palisade fence, creating a continuous boundary that provides a clear separation between the school and residential areas. Additionally, landscaping along the boundary will soften the visual impact, adding greenery and further contributing to noise reduction.<br>**Potential for Overlooking Neighbouring Properties**<br>The proposed activity minimises the potential for overlooking through careful siting and the incorporation of significant landscaping along site boundaries as shown in **Figure 64** below. Setbacks ensure sufficient distance from sensitive uses, and windows are positioned and treated to maintain privacy for both school users and adjacent properties. The nearest dwelling sits approximately 90 metres from the new building which is a generous separation to mitigate potential overlooking. |


**Figure 64: Landscape Plan showing buffer tree planting (Source: Taylor Brammer)**

**Visibility from Residential Properties or Sensitive Land Uses**

The works will be visible from adjacent RE1 zoned land (future public park) and R3 zoned residential areas; however, the design minimises visual impacts:

- **From Residential Areas**: Landscaping and significant setbacks along the southern and eastern boundaries provide effective screening. The building's articulation and neutral tones further reduce its visual prominence.
- **From RE1 Zoned Land**: Mature vegetation along the northern boundary will screen the building when viewed from the future park, while passive surveillance is supported by appropriately positioned windows.

**Visibility from the Public Domain**

The building is approximately 73 metres from Edmondson Avenue as shown in **Figure 65**, significantly reducing visibility from the public domain. Landscaping along this boundary and the use of a colour palette consistent with the site's natural surroundings further mitigate visual impacts.

| Issue | Consideration |
|---|---|

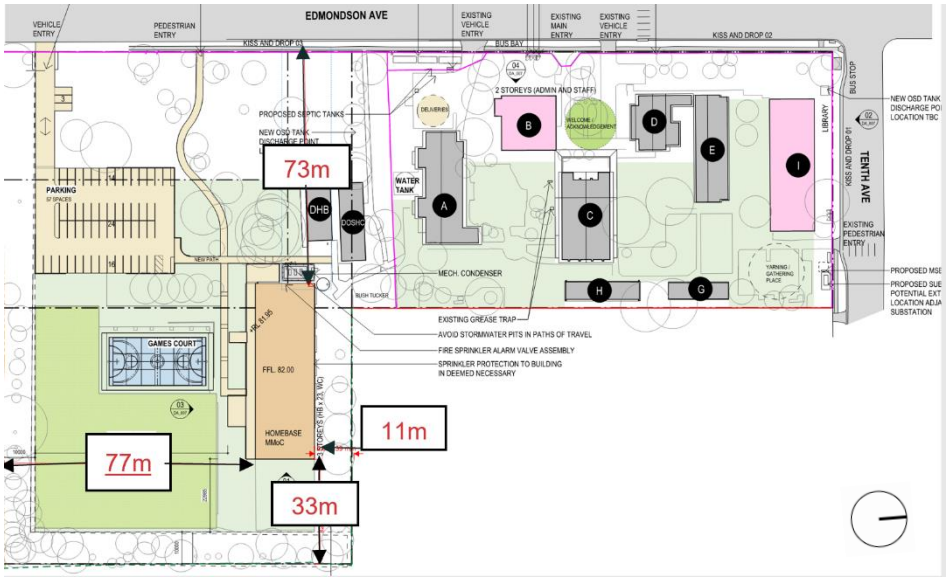



**Figure 65: Proposed setbacks (Source: Gyde, Pedavoli Architects)**

**Scenic Value and Interruption of Views**

The site is not within an area of high scenic value. The activity has been designed to minimise its impact on views, including those from the public domain and private properties. While the building exceeds the 12-metre height standard under the relevant local controls in some locations due to topography, the exceedance is minor as shown in **Figures 66-68** and does not significantly impact views.

In conclusion, the proposed activity has been carefully designed to respect the visual amenity of the area, ensure compatibility with its surroundings, and manage any potential impacts effectively. The proposed measures, including setbacks, landscaping, and detailed architectural treatment, adequately address visual amenity and impact concerns.


**Figure 66: Massing diagram from south-western corner of building (Source: Pedavoli Architects)**

| Issue | Consideration |
|---|---|


**Figure 67: Massing diagram from north-eastern corner of building (Source: Pedavoli Architects)**

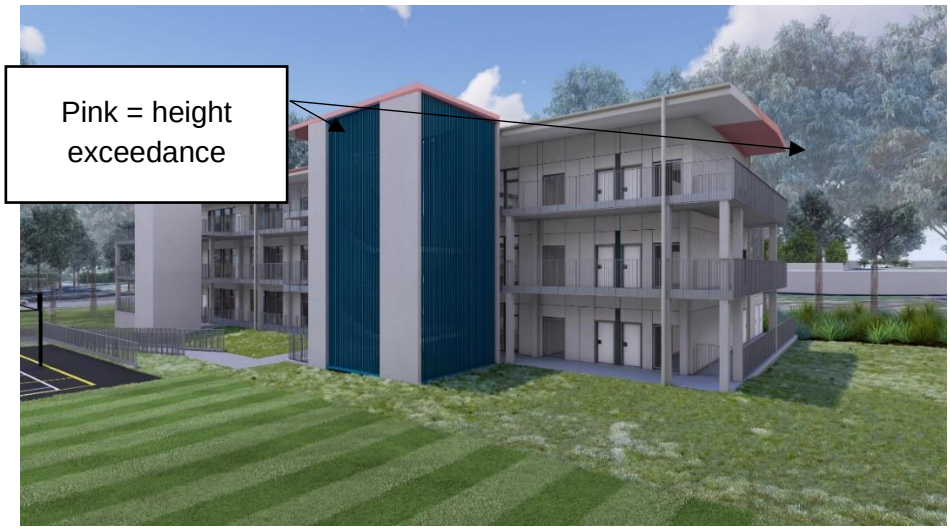



**Figure 68: Massing diagram from south-eastern corner of building (Source: Pedavoli Architects)**

| Issue | Consideration |
|---|---|
| **Overshadowing** | No adjacent land, dwellings or open space will be overshadowed by the proposed building. Some internal shadowing occurs to the proposed car park at 9am in midwinter (refer to **Figure 69**) and some shadowing to the playing fields/sports court between 12pm to 3pm (refer to **Figure 70** and **Figure 71)**. |

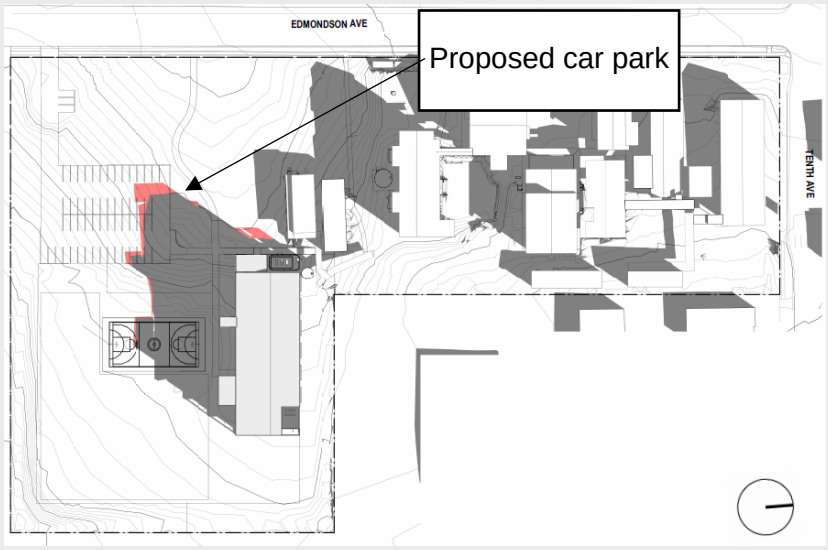



**Figure 69: Shadow diagram, 21 June at 9am, additional shadowing associated with height exceedance in red (Source: Pedavoli Architects)**

At lunchtime, when the playing fields will likely be used the most, approximately 14% of the south-western playing field will be overshadowed by the proposed building. Approximately 48 sqm or 1% of the overshadowing is associated with the height exceedance. This area is minimal and is also consistent with the Department'sguidelines to maximise opportunities for shade during play times, to promote sun protection for students.

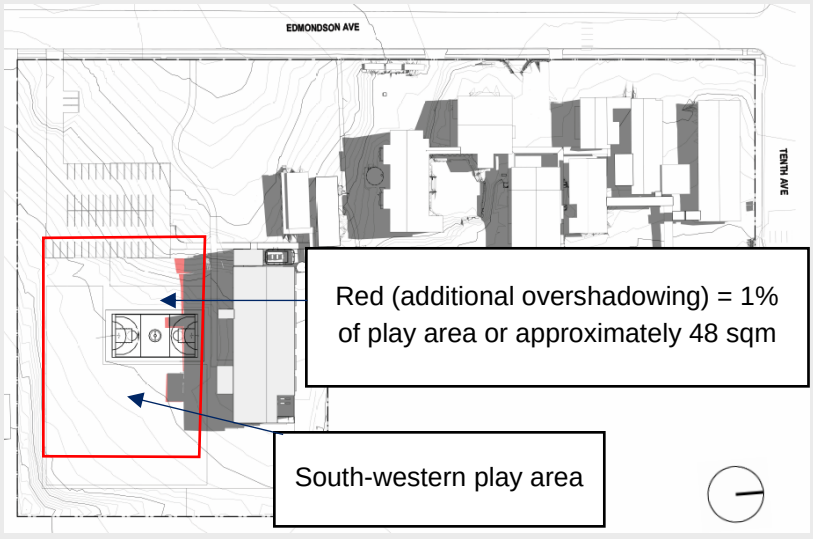
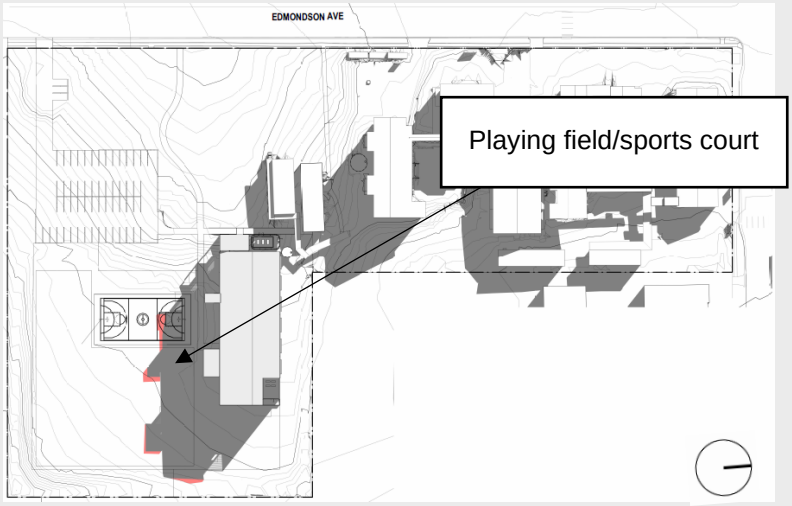



**Figure 70: Shadow diagram, 21 June at 12pm, additional shadowing associated with height exceedance in red (Source: Pedavoli Architects)**

| Issue | Consideration |
|---|---|
| |  <br>**Figure 71: Shadow diagram, 21 June at 3pm, additional shadowing associated with height exceedance in red (Source: Pedavoli Architects)** |
| **Bushfire** | A Bushfire Hazard Assessment has been prepared by the bushfire consultant and provided at **Appendix 14**.<br>The western boundary of the site is partly impacted by the 30-meter buffer zone associated with the Category 3 Vegetation (Grassland) to the western aspect (refer to **Figure 72**), which is less than 0.5ha in size. However, the developmental footprint of the proposal is not located on designated/mapped bushfire prone land. The site meets the access requirements of the Planning for Bushfire Protection (PBP) 2019, The buildings are beyond the distance required for any bushfire attack level considerations. The site is also serviced by reticulated water supply, with hydrants located at regular intervals which can comply with AS2419 and PBP 2019. The extent and nature of the potential bushfire impacts are low and will not have a significant impact on the locality, community and the environment. Any potential impacts can be appropriately mitigated or managed to ensure that there are minimal environmental impacts. Mitigation measures are provided in **Appendix 1**. |

| Issue | Consideration |
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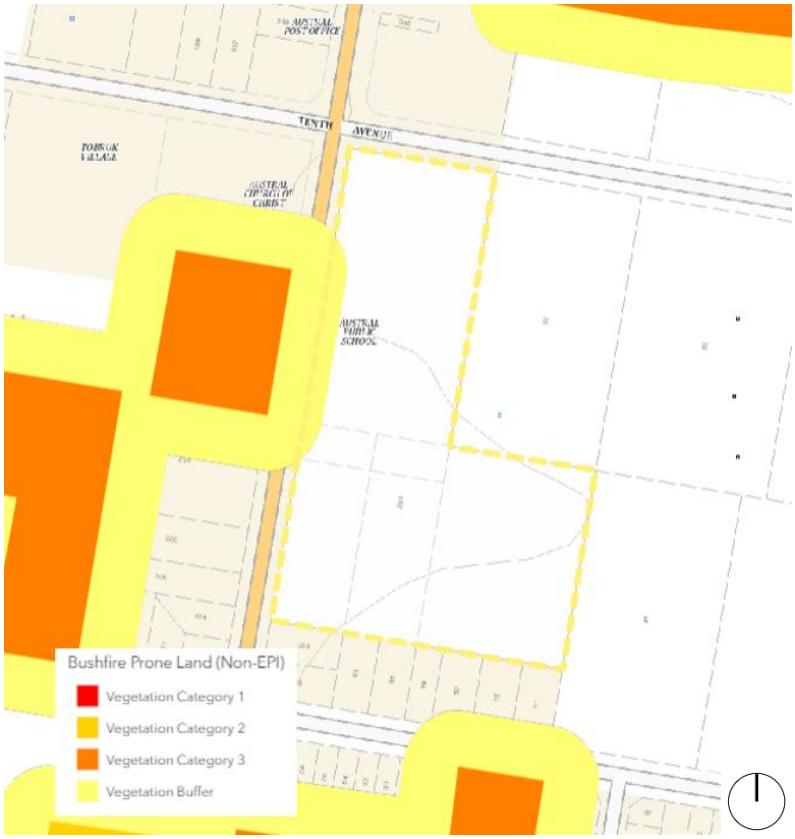
| |  <br>**Figure 72: Bush fire buffer zones, site highlighted in yellow boundary (Source: NSW Legislation)** |

| Issue | Consideration |
|---|---|
| **Soils and Geology** | A Geotechnical Interpretive Report has been prepared and provided at **Appendix 13.**<br>The ground profile across the site extent can be generally summarised as follows:<br>• Topsoil, typically comprising low to medium plasticity sandy Clay, overlying,<br>• Fill, typically low to medium plasticity sandy gravelly Clay, overlying,<br>• Residual soil, typically comprising medium plasticity silty Clay with sand, overlying,<br>• Weathered rock (inferred Bringelly Shale) ranging from very low to high strength.<br>Based on the subsurface profile encountered, the site could reasonably be taken to have a soil reactivity classification of M (moderate) based on a clayey residual soil profile overlying weathered rock. This means that the site soil could experience moderate ground movement from moisture changes. Groundwater was not encountered in any boreholes during the fieldwork.<br>During the construction phases, all materials encountered should be inspected, compared, and verified with the parameters adopted during the design process by an experienced geotechnical engineer or engineering geologist.<br>Salinity assessment, based on NSW guidelines, found residual clay soils to be non-saline to slightly saline. Before any ground disturbance, a visual inspection will be conducted to identify potential saline areas. If salinity is detected, further testing will be carried out as needed, and any confirmed saline soils will be managed according to best practice guidelines to prevent environmental impacts.<br>WSP make the following recommendations to ensure that the site is suitable for the proposed activity:<br>• All excavation work should be carried out in accordance with the SafeWork NSW publications, Excavation Work Code of Practice, January 2020 and Construction Work Code of Practice, August 2019.<br>• Geotechnical Units 1 and 2, topsoil and fill, are inherently unsuitable materials due to their variable nature and should therefore be removed off site and/or stripped and stockpiled for reuse as landscaping (non-engineered) material, as appropriate.<br>• As part of construction, the site should be suitably cleared and grubbed, with temporary drainage provided to manage surface run-off and potential inflow.<br>• The engaged contractors should examine the engineering logs to assess the required excavation plant and production rates prior to breaking ground.<br>• Poor quality clay soils and very weak rock from near the surface should be stockpiled separately for use in landscape areas or removed from site. The better-quality excavated rock could be crushed and reused as general fill.<br>• Based on the proposed activity, it is expected that there will be excavations for foundations of the proposed buildings. Due to its inherent unsuitability and heterogeneous nature, topsoil and fill materials should not be incorporated into batter slopes.<br>• All excavations (deeper than 1.5m) should be observed by a geotechnical engineer.<br>• Foundation options will depend on the structural loading and the ability of the structure to accommodate movement. Options which should be considered include pad footings, engineered fill and piled foundations, this will be required to be designed by a suitably qualified Structural Engineer.<br>• Prior to ground disturbance, a visual inspection will be undertaken to identify areas that potentially contain saline soils. Areas where evidence of salting is observed or recorded will be subject to further testing as required. If salinity is confirmed, excavated soils will be managed in accordance with Book 4 Dryland Salinity: Productive use of Saline Land and Water to prevent impacts from salinity.<br>Subject to implementing the recommendations (as summarised above), which have been included as mitigation measures in **Appendix 1** to this REF, WSP concludes that there are no geotechnical risks identified that would constrain future development of the proposed site. |

| Issue | Consideration |
|---|---|
| **Waste** | A Waste Management Plan (Demolition, Construction and Operational) has been prepared by the waste consultant and provided at **Appendix 22 & 23.**<br>The activity will generate approximately 4,247 tonnes of waste, with the majority of the plasterboard, metal, timber, brick and concrete being recycled. Some of the timber and general residual waste will also be recycled, however, given the potential for treated timber to be found on site, the recovery rate (and the potential of recycling) is reduced.<br>Designated waste storage areas will be established for the collection of all waste and recyclables. The waste storage areas will have appropriate signage to clearly identify the area to construction workers and to prevent unauthorised access to the area.<br>Stockpile size or bin numbers will be minimised by regular removal of waste from site. The waste storage areas will be covered where possible to prevent transmission of dust and fine particles, odour, wind impacts, vermin and vandalism or theft.<br>In relation to operational waste, the waste storage area for the development will be located adjacent to Edmondson Avenue at the end of the staff car park, which is currently the existing waste location. This will remain the waste storage area for the proposed new building, as there is adequate space to accommodate the expected increase in waste generation.<br>General waste and recycling are currently serviced by LCC, and the intention is to continue with LCC's service at the completion of the activity. LCC's waste contractor will be able to access the site off Edmondson Avenue, into the parking lot, conduct collection and then perform a three-point turn to exit.<br>Overall, it is demonstrated that waste generated by the demolition, construction and operational phases of the activity has been adequately considered. Any potential impacts can be appropriately mitigated or managed to ensure that there are minimal environmental impacts. Mitigation measures are provided in **Appendix 1**. |
| **Air Quality** | The proposed new school building, setback from the classified road, is not expected to be affected by pollution or air quality issues from the road. Vehicle emissions decrease quickly with distance, and the setback provides sufficient separation to ensure clean air for the building. Additionally, the proposed school will not generate any air quality impacts on surrounding land uses, which are limited to low-density residential areas, as the new building will be used exclusively for classrooms. While some dust may be generated during construction, this will be managed with appropriate mitigation measures (**Appendix 1**), such as dust suppression, and will be temporary in nature. Overall, the activity will not result in any ongoing air quality impacts to the surrounding area. |
| **Wind** | The proposed activity, specifically the new three-storey school building is too low to significantly affect wind patterns or create strong ground-level winds. Its size and design, with open spaces and landscaping surrounding the building, prevent wind from being channelled or amplified. Therefore, there no noticeable impact on pedestrians or the environment is anticipated. |
| **Pipelines** | The site sits approximately 670m from the Central Trunk Main and Eastern Gas Pipeline. The proposed activity can be accommodated without any additional risk to the school, subject to the implementation of the measures within the Preliminary Hazard Analysis of Gas Pipeline Risk Report (**Appendix 33**). Any potential impacts can be appropriately mitigated or managed to ensure that there are minimal environmental impacts. Mitigation measures are provided in **Appendix 1**. |
| **Aviation** | **Obstacle Limitation Surface**: The site lies in the final radial ring (level 230.5) of the Obstacle Limitation Surface Map. However, the proposed activity is not considered a controlled activity within the meaning of Part 12, Division 4 of the Airports Act 1996 of the Commonwealth (penetrating the airspace). As such, this does not apply.<br>**Aircraft Noise**: The site is not within the ANEF zone of the Western Sydney Airport or any other airports in the vicinity of the site. |
| **Accessibility and BCA** | There are additional reports that have been prepared for the activity, including to address BCA compliance and accessibility requirements (refer **Appendix 34 & 35** respectively). Both reports identify that the activity is capable of complying with the |

| Issue | Consideration |
|---|---|
| | relevant requirements and standards subject to detailed design, and where appropriate, performance solutions. Compliance with the recommendations in the reports has been included in the mitigation measures at **Appendix 1**, to be addressed in detailed design, prior to construction. |

## 6.10 Cumulative Impact

The Austral area, including the site of APS, is experiencing significant growth and change as part of the South-West Growth Area. A review of the LCC development application register indicates multiple residential subdivisions and low- to medium-density housing developments have been approved within 500 metres of the site in the past two years. These align with the Austral and Leppington North ILP, which provides a long-term strategy for land use and infrastructure delivery in the area (**Figure 73**).

The Leppington Town Centre Planning Proposal aims to rezone land approximately 750 metres south of the school site to accommodate high-density residential, retail, and commercial uses. While the school site itself is not included in this proposal, the potential approval of this rezoning is expected to significantly alter the character and context of the surrounding area.

Consultant reports prepared as part of the assessment for this proposal have thoroughly investigated cumulative impacts, including those related to nearby approved and planned developments. These reports conclude that cumulative impacts, such as potential construction traffic and operational effects, can be effectively managed with appropriate mitigation measures. These measures include construction traffic management plans, noise controls, and scheduling of works to minimise disruption to the surrounding area. With these measures in place, any cumulative impacts are expected to be appropriately managed and are unlikely to result in significant adverse effects.

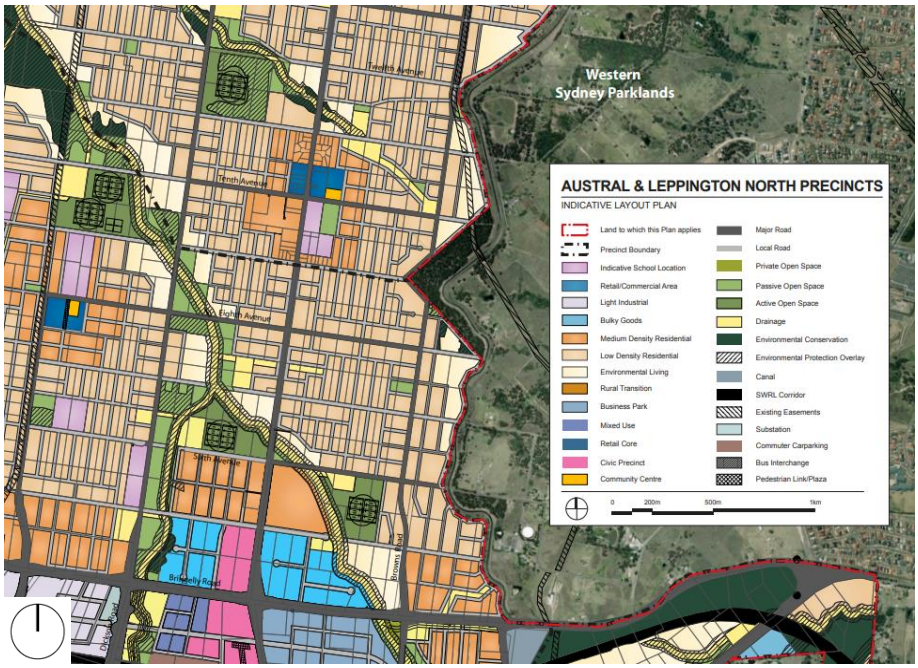
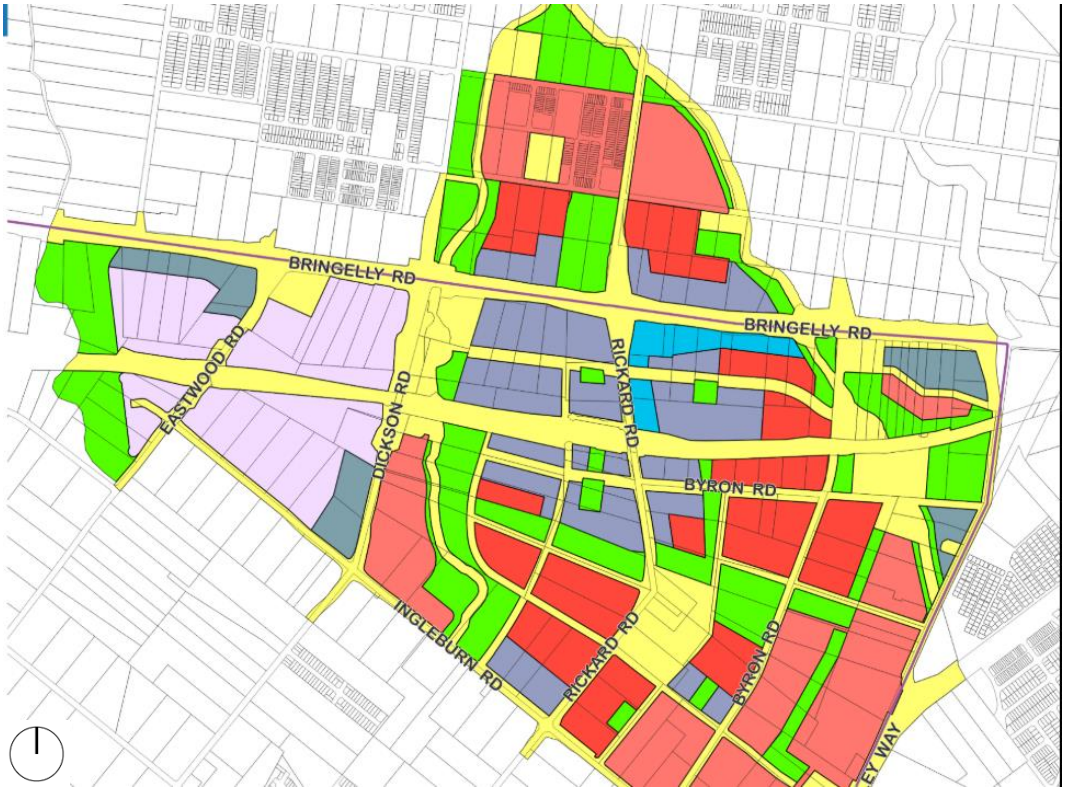



**Figure 73: Austral and Leppington North Indicative Layout Plan (Source: NSW Department of Planning, Housing and Infrastructure)**




## 6.11 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 24** and where mitigation measures have been proposed in response to the factor, these have been identified.

**Table 24: Environmental Factors considered**

| Environmental Factor | Consideration | Mitigation Measure Reference |
|---|---|---|
| Any environmental impact on a community? | Short term impacts may arise during the demolition and construction process including traffic, noise, access and dust. However, suitable mitigation measures have been included to ensure potential impacts are minimised during the demolition and construction process. Environmental impacts have been assessed as part of this REF and subject to the implementation of the proposed mitigation measures, the activity will not result in unacceptable environmental impacts. The proposed activity has been designed in accordance with the recommendations of the consultant team. Long-term, the proposed activity will have a beneficial impact for the community by increasing the capacity of education infrastructure for the growing community and by providing modern and fit-for-purpose school facilities. | Refer to the transport mitigation measures set out in **Table 14**; Refer to the noise and vibration mitigation measures set out in **Table 15**.<br>A CEMP will be required as identified in mitigation measures at **Table 15.** |
| Any transformation of a locality? | There is an existing school located on the site. The proposed activity includes new and refurbished buildings. The proposed new building is setback from the public domain area and therefore will not have an impact on the surrounding streetscape.<br>There will be short term impacts during construction which are subject to suitable mitigation measures. The proposed activity will not significantly change the locality, but the revitalised school will have a positive impact by providing an upgraded school for the growing community. | There are no mitigation measures as no visual impact is expected.<br>Biodiversity mitigation measures are set out in **Table 21.** |
| Any environmental impact on the ecosystems of the locality? | The proposed activity will not result in significant impacts on the ecosystems of the locality. The proposal is unlikely to affect any threatened species, populations or ecological communities. Mitigation measures have been identified to minimise any indirect or potential impacts arising from sediment, dust and vegetation removal.<br>The land is located within an area of biodiversity certified land under the existing SWGC. This removes the requirement to prepare a BDAR and/or SIS for activities conducted in this area. | Refer to the mitigation measures set out in **Table 21**. |
| Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality? | There will be a short-term impact on the aesthetic qualities of the site during the construction work. Mitigation measures have been identified to address construction noise, vibration and traffic impacts. In addition, measures are in place to mitigate environmental impacts of the school's operations. Accordingly, the proposed activity will not reduce aesthetic, recreational, scientific or other qualities of the locality. | Refer to the transport mitigation measures set out in **Table 14**.<br>Refer to the noise and vibration mitigation measures set out in **Table 15**;<br>Refer to the stormwater management mitigation measures set out in **Table 17**. |
| Any effect on locality, place or building having aesthetic, anthropological, archaeological, | There will be no impact on non-Aboriginal heritage items, noting the site does not comprise any and is not in proximity to any other such items. The site is also not within any conservation areas.<br>As outlined in Section 6.6, the site is of low archaeological sensitivity and low archaeological potential based on previous archaeological assessments, regional studies, and past land use. | Refer to mitigation measures set out in **Table 18** and **Table 19**. |

| Environmental Factor | Consideration | Mitigation Measure Reference |
|---|---|---|
| architectural, cultural, historical, scientific or social significance or other special value for present or future generations? | The site has been heavily disturbed as a result of previous land use, particularly relating to the construction of the existing school. Given the disturbance, the Aboriginal heritage occupation would unlikely be present within the site and wider project area. As such, it is considered that there are unlikely to be any adverse heritage impacts arising from the proposed activity. Notwithstanding the aforementioned, unexpected finds protocols will be adhered to in the event something is uncovered. | |
| Any impact on the habitat of protected animals, within the meaning of the *Biodiversity Conservation Act 2016*? | The works do not impact on the habitat of any protected animals, within the meaning of the Biodiversity Conservation Act 2016. Mitigation measures have been identified in the Biodiversity Assessment Report prepared by ERM to mitigate any indirect impacts. | Refer to the mitigation measures set out in **Table 21**. |
| 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 will not result in the endangering of any species of animal, plant or other form of life. Mitigation measures have been identified in the Biodiversity Assessment Report prepared by ERM to mitigate any indirect impacts. | Refer to the mitigation measures set out in **Table 21**. |
| Any long-term effects on the environment? | The proposed activity has been designed to ensure there will be no unacceptable long-term impacts on the environment. The works will upgrade an existing public educational facility, which has positive social and economic benefits. | Refer to the mitigation measures set out in **Table 22**. |
| Any degradation of the quality of the environment? | Appropriate mitigation measures have been recommended to ensure that the activity will not reduce the quality of the natural environment, including ecology, landscape, stormwater management, noise and waste management. | Refer to the Ecology mitigation measures set out in **Table 21**.<br>Refer to the transport mitigation measures set out in **Table 14**.<br>Refer to the noise and vibration mitigation measures set out in **Table 15**.<br>Refer to the stormwater management mitigation measures set out in **Table 17**. |
| Any risk to the safety of the environment? | The proposed activity has been designed in accordance with the environmental constraints of the site. | Refer to the Flooding mitigation measures set out in **Table 17**. |
| Any reduction in the range of beneficial uses of the | The proposed activity will not result in a reduction in the range of beneficial uses of the environment. | Refer to the Flooding mitigation measures set out in |

| Environmental Factor | Consideration | Mitigation Measure Reference |
|---|---|---|
| environment? | | **Table 17**. |
| Any pollution of the environment? | The activity will not result in pollution or contamination of the environment. Stormwater and sewage management have been thoroughly considered in the assessment of potential environmental impacts, and appropriate mitigation measures have been put in place to prevent pollution. Additionally, the management of contamination risks, including the safe removal of hazardous materials and asbestos, has been addressed to ensure there is no impact on the environment. These measures will further safeguard against any adverse effects during the construction and operational phases. | Refer to the Flooding mitigation measures set out in **Table 17**. |
| Any environmental problems associated with the disposal of waste? | Construction and operational waste management plans have been prepared which set out all management practices required to reduce, minimise or avoid adverse impacts arising from the disposal of waste. In addition, a Hazmat Report will be prepared which will set out waste management procedures for the removal of hazardous materials. All outcomes and recommendations of these reports have been captured in the mitigation measures for the activity. | Refer to the Waste mitigation measures set out in **Table 24**. |
| Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply? | The activity is unlikely to result in increased demands on resources that are, or are likely to become, in short supply. Measures to reduce the consumption of materials, energy and water over the lifetime of the building have been incorporated into the building's design and so will be implemented through the terms of the activity, once approved. | N/A |
| Any cumulative environmental effects with other existing or likely future activities? | As set out in Section 6.10 of this REF, there will be no cumulative environmental effects of the activity with any other existing or likely future activities. | N/A |
| Any impact on coastal processes and coastal hazards, including those under projected climate change conditions? | The site is not in a coastal location. Therefore, further consideration of this factor is not required. | N/A |
| Applicable local strategic planning statement, regional strategic plan or district strategic plan made under Division 3.1 of the | The proposed activity is consistent with the aims, objectives, planning priorities of the relevant strategic plans, as set out in Section 4.4 of this REF. | N/A |

| Environmental Factor | Consideration | Mitigation Measure Reference |
|---|---|---|
| Act? | | |
| Any other relevant environmental factors? | There are no further environmental factors that need to be considered in the assessment of the activity. | N/A |

# 7. Justification and Conclusion

The proposed upgrade of APS at 205 Edmondson Avenue, Austral 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 Species Impact Statement 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 REF.