# NEW PUBLIC SCHOOL IN MULGOA RISE

## Modification Report - Temporary School Facilities for SSD 11070211

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## Approval for issue

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# EXECUTIVE SUMMARY

This Modification Report has been prepared by RPS Australia East Pty Ltd (RPS) on behalf of the NSW Department of Education (the 'Applicant'), to support a modification to the New Public School in Mulgoa Rise development consent (SSD 11070211) granted on 18th March 2022. The development consent currently permits the construction and operation of:

- A new primary school to accommodate up to 414 students (Kindergarten to Year 6) and 27 staff. The development as approved includes:
  - Three two-storey buildings to accommodate 18 learning spaces and 2 support classes.
  - A library, staff facilities and administrative areas.
  - One single storey building including a school hall with canteen and OOSH facilities and associated works including COLAs.
  - Outdoor play spaces, hard and soft landscaping, drop off and pick up areas and staff car parking.

This Modification Report seeks approval for modifications to the approved SSD 11070211, pursuant to Section 4.55(2) of the *Environmental Planning and Assessment Act, 1979* (EP&A Act) to allow the construction and operation of a temporary school within the boundaries of the approved school site, comprising:

- Erection of a series of demountable structures on the site including:
  - 9 General Learning Spaces.
  - 2 Support Unit Learning Spaces.
  - 1 Administration Block.
  - 1 Staff Facilities Block.
  - 1 Library Block.
  - 2 Toilet Block Facilities.
  - 1 Accessible Toilet Block facility.
  - Covered walkways.
- Establishment of an outdoor play area on the temporary school site area.
- Security fencing around the perimeter of the temporary school site area.
- Access and use of a temporary pick up and drop off area on Forestwood Drive (to the south).
- Operation of the temporary school from 12th December 2022, catering for 230 students and 25 staff, to enable the school to open on Day 1 of Term 1 2023. Operation will include the access and use of the following permanent facilities which were approved as part of the original consent:
  - Access and use of the Hall, COLA, bike racks, end of trip facilities and sports court, which were approved as part of the original consent and will be completed prior to 12th December 2022.
  - Access and use of the waste storage area and staff car park which will be complete and operational prior to 12th December 2022.
  - Access and use of designated pick up and drop off on Deerubbin Drive (to the north) and Forestwood Drive.
- Removal of the temporary school demountable buildings within 24 months from the commencement of operation of the temporary school area.

The proposed modifications will not have any unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, noise and environmental impacts and can be managed in accordance with the updated mitigation measures provided within this report.

The modification affecting SSD 11070211 is considered to be acceptable under the relevant considerations of section 4.15 of the EP&A Act, and as such it is recommended that approval be granted to the proposal as modified.

# 1 INTRODUCTION

This Modification Report (MOD) has been prepared by RPS Australia East Pty Ltd (RPS) on behalf of NSW Department of Education (the 'Applicant') in support of a modification to the State Significant Development Approval SSD 11070211 (the Project) for the New Primary School in Mulgoa Rise.

This MOD seeks approval for modifications to the approved SSD 11070211, pursuant to Section 4.55(2) of the *Environmental Planning and Assessment Act, 1979* (EP&A Act) to allow the construction and operation of a temporary school within the boundaries of the approved school site.

The "site" is located at 1-23 Forestwood Drive, Glenmore Park, NSW. The land is described as Lot 1663 DP1166869 within the Local Government Area (LGA) of Penrith.

The site as identified in **Figure 1** and **Figure 2** is located within an urban release area in Glenmore Park (Mulgoa Rise), approximately 200 metres east of the Mulgoa Nature Reserve and has an area of approximately three (3) hectares. The site is located approximately 54.6km west from the Sydney CBD. The closest town centre is Glenmore Park, which is located approximately 2.2km north-west of the site.

## 1.1 The applicant

The NSW Department of Education is the largest provider of public education in Australia with responsibility for delivering high-quality public education to two-thirds of the NSW student population. The NSW Department of Education is both the proponent and the owner of the land upon which the proposed new school is to be constructed.

## 1.2 Summary of the approved project

A Government election commitment in 2012 to build 190 new schools across the state, was implemented with the aim to address the issues of overcrowding and ensuring all students are given equal access to quality educational opportunities. NSW Department of Education has committed to building a new primary school at Mulgoa Rise, one of 4 new schools in the Glenmore Park Primary School Community Group (SCG).

The New Primary School in Mulgoa Rise is designed and will be built to significantly improve educational outcomes and address the capacity shortfall across the area for an approximate 414 students initially, with the expansion to 1000 as demand grows.

The site is a cleared rectangular greenfield site in a relatively new residential subdivision in Glenmore Park, known as Mulgoa Rise. The site is surrounded by a vacant site (to be a mixed-use commercial and residential precinct) to the north, Council playing fields to the east, and low-density residential dwellings to the west and south. The site sits on land above what was previously a quarry.

The site layout for the new school will see the buildings arranged along Deerubbin Drive and Darug Avenue, playground, shared sensory play area and assembly area within the site behind these buildings and a games court and staff car park on the eastern edge of the site. The school buildings have been designed with respect to the new educational standard of the Design for Manufacture and Assembly (DFMA) method of construction.

The school has been designed to facilitate future expansions should additional demand materialise. Considerations of investment options led to the following:

- Design of a school to facilitate a Core 21 school with 18 learning spaces (LS) + 2 support classes, with the selected core facilities at Core 35, for the Hall, Library, Staff facilities and Admin. This will accommodate an initial 414 students.
- A future development on the site, that does not form part of this application and not considered at this time, will complete the build to a Core 35, resulting in up to 44 learning spaces and 4 support classes.

The New Primary School in Mulgoa Rise will incorporate Best Practice Pedagogy for the Learning Spaces (LS), these will be fit-for-purpose, incorporate the use of technology and providing flexibility in design to allow for the delivery of modern pedagogies that are focused on creating learning environments that students may encounter in the workforce, where there is an enhanced focus on self-direction, self-reflection, evaluation, and collaboration.

Glenmore Park and surrounding areas are undergoing significant housing development and population growth resulting from large infrastructure projects (Western Sydney Airport as an example). The increasing number of students have four schools located on the northern border of Glenmore Park, leaving more than a third having to travel larger distances to school from outside the catchment areas. The New Primary School in Mulgoa Rise will be closer to the current and projected demand growth. It will reduce travel time for students and parents and will support the use of active movement transport such as walking and cycling.

The New Primary School in Mulgoa Rise will provide the surrounding community access to the school's core facilities - the communal hall, the library and the outdoor sports court. The school will also provide Outside School Hours Care (OSHC) services to assist dual-working families with parents commuting and working long hours.

A general overview of the development as approved includes the following:

- Construction of school buildings ranging from 1 to 2 storeys, including:
  - General and special support learning areas.
  - Staff rooms and administration office.
  - Hall.
  - Library.
  - Out of school hours care facility
- Landscaping works.
- Parking, pick-up and set-down zones, bus zones.
- Waste and service vehicle access and plant areas.
- Associated works including school identification signage, pedestrian crossing infrastructure, on-site infrastructure, and utilities.

SSD 11070211 Consent Approval (development as approved) for the above project was received on the 18 March 2022. Construction works for SSD 11070211 as approved, commenced from the 21 March 2022.

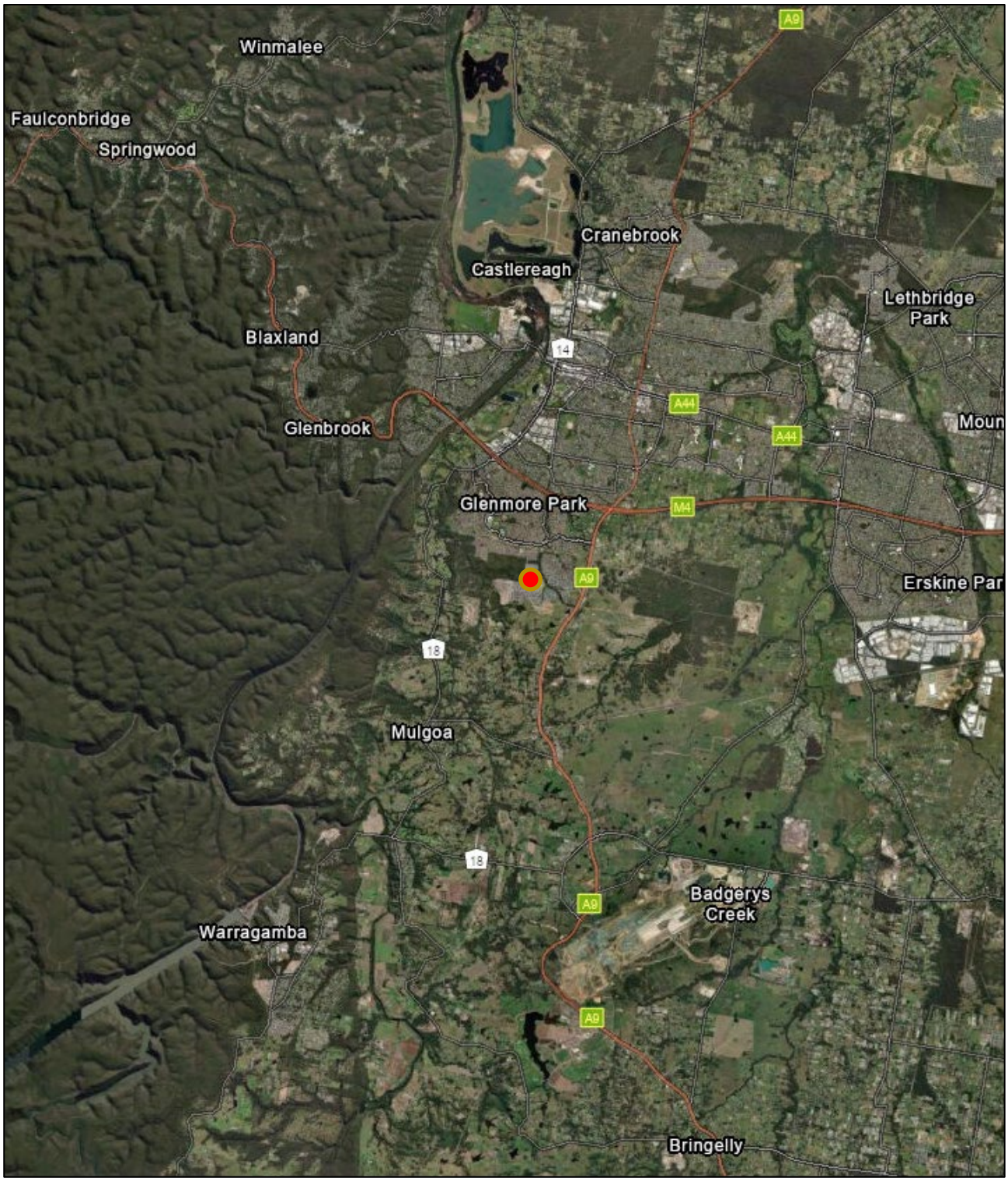


**Figure 1 Site Context**

(Source SixMaps)


**Figure 2 Site Area**

# 2 PROPOSED MODIFICATION

## 2.1 Overview and reasons for modifications

The Project has encountered significant delays that were not anticipated including significant wet weather delays throughout the start of 2022. As a consequence, the Applicant is anticipating a delayed completion of almost 3 months for the New School at Mulgoa Rise from a forecast Day 1 Term 1 2023 completion date. Information received from the school Principal, noted the enrolment forecast for Day 1 Term 1 2023 is for 230 school children ranging from kindergarten through to Year 6.

As such, the Applicant is seeking approval for modifications to the approved SSD 11070211, pursuant to Section 4.55(2) of the *Environmental Planning and Assessment Act, 1979* (EP&A Act) to allow the construction and operation of a temporary school within the boundaries of the approved school site.

The purpose of the temporary school will be to facilitate the predicted 230 school children from Day 1 Term 1 2023 until the remainder of the permanent new school can be completed. The demountable buildings associated with the temporary school will be located on land approximately 2000m2 in area.

The proposed modifications comprise of the following:

- Erection of a series of demountable structures on the site including:
  - 9 General Learning Spaces.
  - 2 Support Unit Learning Spaces.
  - 1 Administration Block.
  - 1 Staff Facilities Block.
  - 1 Library Block.
  - 2 Toilet Block Facilities.
  - 1 Accessible Toilet Block facility.
  - Covered walkways.
- Establishment of an outdoor play area on the temporary school site area.
- Security fencing around the perimeter of the temporary school site area that will prevent entry to other parts of the site which are not operational.
- Access and use of a temporary pick up and drop off area on Forestwood Drive (to the south).
- Associated works including temporary school identification signage, on-site infrastructure, and utilities.
- Operation of the temporary school from 12 December 2022, catering for 230 students and 25 staff, to enable the school to open on Day 1 of Term 1 2023. Operation will include the access and use of the following permanent facilities which were approved as part of the original consent:
  - Access and use of the Hall, COLA, bike racks, end of trip facilities and sports court, which were approved as part of the original consent and will be completed prior to 12 December 2022.
  - Access and use of the waste storage area and staff car park which will be complete and operational prior to 12 December 2022.
  - Access and use of designated pick up and drop off on Deerubbin Drive (to the north) and Forestwood Drive.
- Removal of the temporary school demountable buildings within 24 months from the commencement of operation of the temporary school area.

An updated Project Description is contained in **Appendix A** with additional mitigation measures contained in **Appendix B**.

The proposed location of the temporary facilities is within the current Site, as shown in **Figure 3.** Updated Architectural Plans are contained within **Appendix C** and Landscape Design Drawings are contained within **Appendix D**.

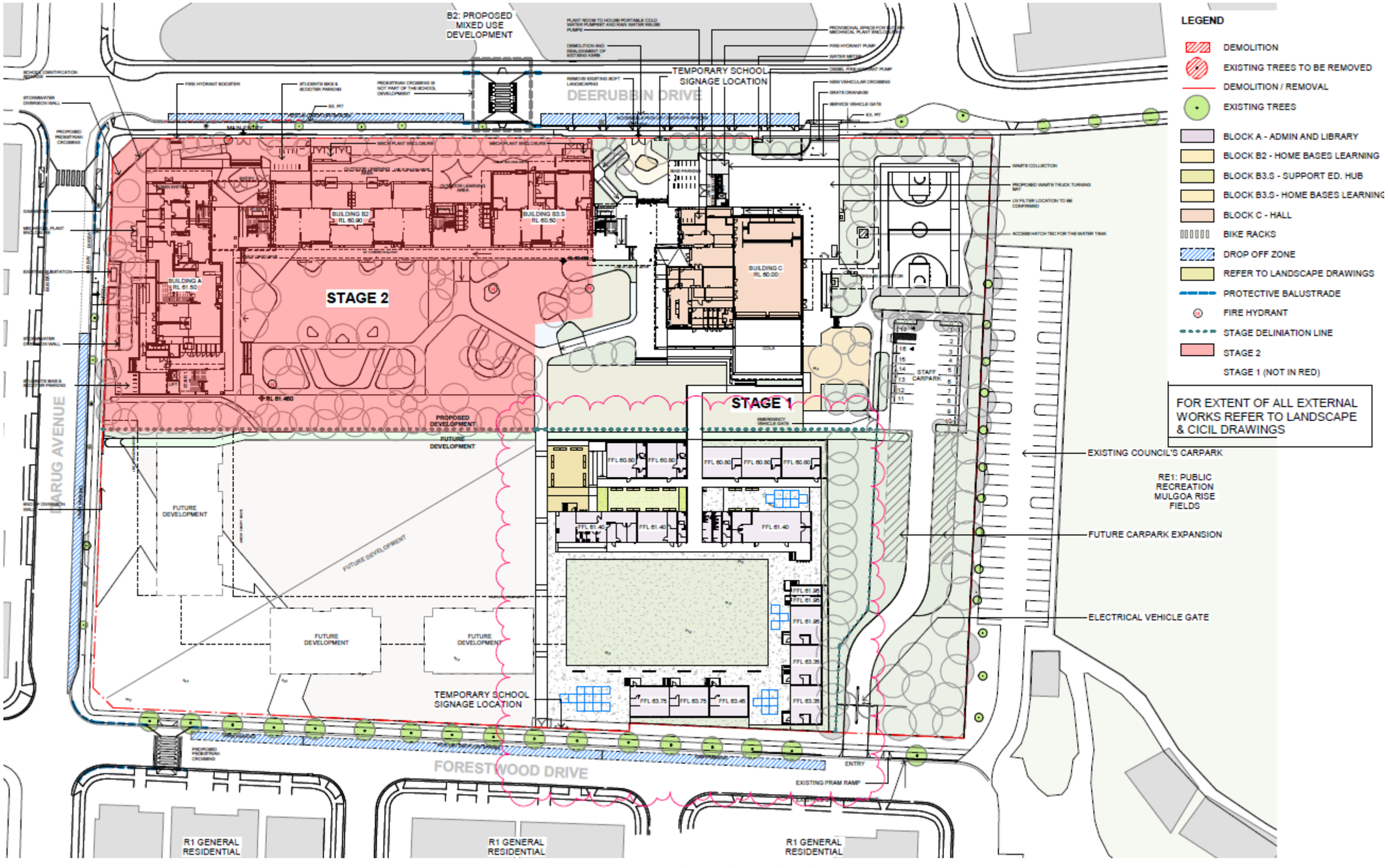


**Figure 3 Proposed Modification Site and Site Staging Plan**

## 2.2 Construction overview for temporary demountable structures

The proposed modification will not result in significant impacts to the overall management of soil and water on the site during both construction and operation. Construction activities will be minor and short lived. The methodology for construction of the temporary school structures will be limited to construction of pile footings, minor landscaping for grassed surfaces, and trenching for services.

Footings will be erected at an appropriate depth determined by a competent person and required demountable building footing specification in accordance with AS 2159. If uplift is anticipated at the base of the demountable buildings, then suitable tie-downs, kentledges, ground anchors or friction piles shall be provided to ensure stability. All ground anchors will be designed in accordance with AS 4678.

## 2.3 Project staging

The proposed modification will require the Project to be delivered in two (2) stages as outlined below and illustrated in **Figure 3**. A staging report will be prepared in accordance with Condition A9-A12 of SSD 11070211 to set out how the operation as a part of the whole project will be staged, including details of work and other activities to be carried out in each stage and the general timing of when operation of each stage will commence and finish.

### 2.3.1 Stage 1

Stage 1 will involve the construction and operation of a temporary school during the construction of the new school and will comprise of the following:

- Erection of a series of demountable structures and covered walkways
- Establishment of an outdoor play area on the temporary school site area.
- Security fencing around the perimeter of the temporary school site area.
- Access and use of a temporary pick up and drop off area on Forestwood Drive (to the south).
- Associated works including temporary school identification signage, on-site infrastructure, and utilities.
- Operation of the temporary school from 12 December 2022, catering for 230 students and 25 staff, to enable the school to open on Day 1 of Term 1 2023. Operation will include the access and use of the following permanent facilities which were approved as part of the original consent:
  - Access and use of the Hall, COLA, bike racks, end of trip facilities and sports court, which were approved as part of the original consent and will be completed prior to 12 December 2022.
  - Access and use of the waste storage area and staff car park which will be complete and operational prior to 12 December 2022.
  - Access and use of designated pick up and drop off on Deerubbin Drive (to the north) and Forestwood Drive.

Stage 1 is anticipated to begin immediately following approval of this modification and it is noted that works associated with development, as approved, commenced 21 March 2022.

### 2.3.2 Stage 2

Stage 2 will involve the construction and operation of the remainder of the development not included in Stage 1 and removal of Stage 1 temporary demountable structures:

- Construction of the remainder of the development in accordance with the terms of consent, this will be undertaken concurrently with the Stage 1 works. It is noted that these works have already commenced as per the current development as approved and are anticipated to be completed by May 2023.
- Operation of the new school in accordance with Part D and Part E of SSD 11070211. It is anticipated that the new school will be operational by approximately May 2023.
- Removal of the temporary school demountable buildings within 24 months from the commencement of operation of the temporary school area anticipated to be 25 December 2022.

## 2.4 Modifications to Conditions of Consent

The proposed amendments to the conditions of consent are provided in blue in **Table 1** below.

**Table 1 Conditions for modification**

| Modification Description | Proposed Condition |
|---|---|
| The proposed modification seeks to amend Condition A2 in Schedule 2, PART A to update and include additional plans applicable to the modification. | **Architectural Plans prepared by *NBRS Architecture***<br><br>**Updated Plans**<br>20415-NBRS-DR- AR-SSDA-0110, Rev 012, Site Plan, 07-07.22<br><br>**New Plans**<br>20415-NBRS-DW-AR-SSDA-0113, Rev 09, Temporary School – Site Access and Security Plan, 07-07-22<br>20415-NBRS-DW-AR-SSDA-1003, Rev 01, Temporary School – GF Plan, 07-07.22<br>20415-NBRS-DW-AR-SSDA-1004, Rev 01, Temporary School – Roof Plan, 07-07.22<br>20415-NBRS-DW-AR-SSDA-3015, Rev 01, Temporary School Elevations, 07-07.22<br>20415-NBRS-DW-AR-SSDA-4004, Rev 01, Temporary School – Sections, 07-07.22 |
| The proposed modification seeks to amend Condition A19 in Schedule 2, PART A to exclude the temporary demountable buildings requirements to be consistent with the approved plans referenced in condition A2 due to the temporary nature of the structures. | **External Materials**<br>A19. The external colours, materials and finishes of the buildings, with the exception of temporary demountable buildings, must be consistent with the approved plans referenced in condition A2. Any minor changes to the colour and finish of approved external materials may be approved by the Certifier provided:<br>a. the alternative colour/material is of a similar tone/shade and finish to the approved external colours/building materials;<br>b. the quality and durability of any alternative material is the same standard as the approved external building materials; and<br>c. a copy of any approved changes to the external colours and/or building materials is provided to the Planning Secretary for information. |
| The proposed modification seeks to include a new condition in Schedule 2, PART A to commit to preparing a Staging Report for the construction and operation of the temporary school facility. | A9A. A Staging Report will be prepared to facilitate construction and operation of the temporary school facility as outlined in Modification 1. |
| The proposed modification seeks to amend Condition B15 in Schedule 2, PART B to include mitigation measures into the CTPMSP to manage potential impacts associated with the construction of Stage 2 while Stage 1 is in operation. | B15. The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must be prepared to achieve the objective of ensuring safety and efficiency of the road network and address, but not be limited to, the following:<br>a. be prepared by a suitably qualified and experienced person(s);<br>b. be prepared in consultation with Council and TfNSW;<br>c. detail:<br>i. measures to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services;<br>ii. measures to ensure the safety of vehicles and pedestrians accessing adjoining properties where shared vehicle and pedestrian access occurs;<br>iii. heavy vehicle routes, access and parking arrangements;<br>iv. the swept path of the longest construction vehicle entering and exiting the site in association with the new work, as well as manoeuvrability through the site, in accordance with the latest version of AS 2890.2;<br>v. construction vehicle volumes during stages of works and measures to reduce parking impacts on local streets; and |

| Modification Description | Proposed Condition |
|---|---|
| | vi. arrangements to ensure that construction vehicles enter and leave the site in a forward direction unless in specific exceptional circumstances under the supervision of accredited traffic controller(s).<br>vii. measures that are to be implemented to mitigate the potential impacts associated with the construction of Stage 2 while Stage 1 is in operation including scheduling truck movements outside drop-off and pick-up times for the temporary school. |
| The proposed modification seeks to amend the existing condition in relation an Operational Flood Emergency Plan by extending the applicability of the condition to the temporary school facilities. | **Operational Flood Emergency Management Plan**<br>D33. Prior to the commencement of the operation of Stage 1 (Temporary School) and prior to the operation of Stage 2 an Operational Flood Emergency Response Plan (OFEMP) must be prepared by the Applicant and submitted to the Certifier. The OFEMP must be implemented and must:<br>(a) be prepared by a suitably qualified and experienced person(s);<br>(b) address the provisions of the Floodplain Risk Management Guidelines (EESG);<br>(c) include details of:<br>(i) the flood emergency responses for the operational phase of the development;<br>(ii) predicted flood levels;<br>(iii) flood warning time and flood notification;<br>(iv) assembly points and evacuation routes;<br>(v) evacuation and refuge protocols; and<br>(vi) awareness training for employees and contractors, and visitors. |
| The proposed modification seeks to include a new condition in Schedule 2, PART E to commit to removal of the proposed temporary demountable buildings. | **Temporary School**<br>E14. Unless otherwise agreed by the Planning Secretary, removal of the temporary school demountable buildings will occur within 24 months of commencement of operation of the temporary school area. |

## 2.5 Supporting documentation

This modification report has been prepared in association with the following documentation:

- Updated Architectural Plans by NBRS Architects.
- Landscape Plans by NBRS Architects.
- Traffic Statement by ptc.
- Acoustic Impact Assessment by PWNA.
- Further acoustic advice by PWNA.
- Combined Services Plan by Norman, Disney and Young.
- Flooding and Stormwater Advice by Woolacotts.
- Construction Waste Management Plan by EcCell.
- Operational Waste Management Plan by EcCell.
- Accessibility Management Statement by NBRS.
- Access Assessment Report by BAC Access.
- BCA Assessment Report by BCA Access.

# 3 STRATEGIC CONTEXT

## 3.1 Project need

A Government election commitment in 2012 to build 190 new schools across the state, was implemented with the aim to address the issues of overcrowding and ensuring all students are given equal access to quality educational opportunities. Schools Infrastructure NSW (SI NSW) has committed to building a new primary school at Mulgoa Rise, one of 4 new schools in the Glenmore Park Primary School Community Group (SCG).

The new primary school at Mulgoa Rise has been designed to significantly improve educational outcomes and address the capacity shortfall across the area for an approximate 414 students initially, with the expansion to 1000 as demand grows. Glenmore Park is a suburb experiencing significant urban and population growth. In response, the Department of Education (DoE) has proposed a new primary school at Mulgoa Rise with flexible learning spaces aimed at reducing pressure on surrounding local primary schools.

The Glenmore Park SCG is undergoing significant housing development and population growth resulting from large infrastructure projects, including the Western Sydney Airport. The increasing number of students have only the four schools located on the northern border of the SCG, leaving more than a third having to travel larger distances to school from outside the catchment areas.  A new school in Mulgoa Rise will reduce travel time for students and parents and supports the use of active movement transport such as walking and bicycles.

## 3.2 Analysis of feasible alternatives

A Final Business Case (FBC) was prepared by SINSW to seek Treasury NSW's approval and the release of funding for the new school at Mulgoa Rise, as identified in the 2019/20 budget state budget. The investment options considered in the FBC considered both non-capital (i.e., demand management-based solutions) and capital solutions. The long list and short list of options were assessed to determine the extent to which they address the service need. Following a Cost Benefit Analysis (CBA) of the options considered DoE and SINSW concluded that the approved development under SSD-11070211 was the preferred option.

Enrolment forecasts for Day 1 Term 1 2023 are for 230 school children ranging from kindergarten through to Year 6. Considering the current approval and weather delays, the development under SSD-11070211 is not anticipated to be completed by Day 1 Term 1 2023.

Consideration was given to Staging the construction and operation of the development as approved to facilitate operation of the school for Day 1 Term 1 2023. It was determined that with was not feasible due to core infrastructure not being available to adequately facilitate the operation of the school.

The consequences of not carrying out the modification would result in potential increased demand on surrounding schools and transport infrastructure to temporarily accommodate and transport the predicted 230 students who would otherwise have attended the New School at Mulgoa Rise on Day 1 Term 1 2023. Disruptions to the anticipated Day 1 Term 1 2023 commencement date may also cause negative social impacts through the disruption of learning for those students required to be temporarily accommodated in other schools and the uncertainty of when the new school at Mulgoa Rise will be completed.

It is also noted that the Glenmore Park SCG is undergoing significant housing development and population growth resulting from large infrastructure projects (Western Sydney Airport as an example). The increasing number of students have only the four schools located on the northern border of the SCG, leaving more than a third having to travel larger distances to school from outside the catchment areas.

# 4 STATUTORY CONTEXT

## 4.1 Section 4.55(2) assessment

Section 4.55(2) of the *Environmental Planning and Assessment 1979* (EP&A Act) addresses modifications of consents that do not involve minimal environmental impact. Matters for consideration of modification under Section 4.55(2) of the EP&A Act that are applicable to SSD 11070211 are detailed below.

### 4.1.1 Substantially the same development

Section 4.55(2)(a) requires the consent authority to be "*satisfied that the development to which the consent as modified relates is substantially the same development as the development for which consent was originally granted and before that consent as originally granted was modified (if at all)*".

The NSW Land and Environment Court has established several precedents as to what may be considered as being 'substantially the same development', and what should be factored into the consideration of this threshold test.

The consideration of the substantially the same development test not only includes the physical characteristics of the approved and modified schemes, but also the nature and magnitude of the impacts of the developments. In this regard, the modified scheme should be "essentially or materially" the same as that originally approved.

The proposed modifications are 'substantially the same' as the development as approved under SSD 11070211 as:

- The proposed modifications to the development are in keeping with the approved use and is substantially the same development. The approved development is for use as a school, and the modifications directly relate to the operation of the school while construction of the permanent structures onsite is ongoing. The intent of SSD-11070211 is relatively unchanged with staging conditions triggered to facilitate operation of required infrastructure. This will ensure that the school will be able to operate on Day 1 Term 1 2023 to cater for the forecasted students and teachers.
- Construction of short-term portable classrooms (temporary demountable structures) is exempt development under 3.39(l)(i) of the *State Environmental Planning Policy (Transport and Infrastructure) 2021,* if it is on land within the boundaries of an existing school.
- There are no changes are proposed to the maximum capacity of the site with an estimated 230 students on a permanent basis utilising the temporary school (compared to the 414 students identified in the current approval).
- There are no changes proposed to the approved land-uses at the site.
- There are no significant departures proposed to the approved architectural plans other than the addition of the temporary demountable buildings.
- While staging is proposed as permitted by Condition A9-A12 of the current approval the staged construction and operation of the development will deliver the new permanent school as per the currently approved development consent.

### 4.1.2 Submissions

Section 4.55(2)(d) requires the Applicant to "*considered any submissions made concerning the proposed modification within the period prescribed by the regulations or provided by the development control plan, as the case may be*". DoE proposes to consider and respond to any submissions made concerning the proposed modification within the period prescribed by DPE.

The modifications will not result in any significant additional social and environmental impacts as previously assessed for the approved development. A detailed assessment of the potential impacts of the proposed modifications is provided at Section 5 below.

If necessary, the modification application may be notified according to the stipulations of the *Environmental Planning and Assessment Regulation 2021.*

## 4.2 Section 4.15(1) assessment

In determining an application for modification of a consent under section 4.55, the consent authority must take into consideration such of the matters referred to in 4.15(1) as are of relevance to the development the subject of the application.

The proposed modifications to SSD 11070211 are required to be assessed under Section 4.15(1) of the EP&A Act, which dictates the consent authority must adhere to the following when assessing a development application:

a. *the provisions of-*

   i. *any environmental planning instrument, and*

   ii. *any proposed instrument that is or has been the subject of public consultation under this Act and the has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*

   iii. *any development control plan, and*

   (iiia) *any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and*

   iv. *the regulations (to the extent that they prescribe matters for the purposes of this paragraph),*

   v. *(Repealed)*

   *that apply to the land to which the development application relates,*

b. *the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*

c. *the suitability of the site for the development,*

d. *any submissions made in accordance with this Act or the regulations,*

e. *the public interest.*

These considerations are addressed below.

### 4.2.1 Section 4.15(1)(a) - environmental planning instruments

An assessment against the entire statutory planning policies and controls applying to the site was previously undertaken as part of the original application SSD 11070211. Consideration of the scope of the proposed modifications, no additional planning controls or policies apply to the assessment of the application. The principal Environmental Planning Instruments (EPIs) that are applicable to the modification are:

- *Environmental Planning and Assessment Act 1979.*
- *Environmental Planning and Assessment Regulation 2021*
- *State Environmental Planning Policy (Planning Systems) 2021.*
- *State Environmental Planning Policy (Precincts – Western Parkland City) 2021.*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021.*
- *Penrith Local Environmental Plan 2010*.

#### 4.2.1.1 State Environmental Planning Policy (Planning Systems) 2021

The Planning Systems SEPP is a comprehensive EPI that consolidated the former State and Regional Development SEPP 2011, Aboriginal Land SEPP 2019, and the Concurrences and Consents SEPP 2018 on the 1st of March 2022. Chapter 2 of the Planning Systems SEPP is associated with state and regional development, which is relevant to this modification report as it seeks to amend an approved State Significant Development (SSD) for the establishment of temporary school facilities.

This application is declared a modification to an SSD subject to Section 2.6 of the Planning Systems SEPP.

### 4.2.1.2 State Environmental Planning Policy (Transport and Infrastructure) 2021

The Transport and Infrastructure SEPP is a newly consolidated EPI (as of the 1st of March 2022), which superseded the former Infrastructure SEPP 2007, Educational Establishments and Childcare Facilities SEPP 2017, Major Infrastructure Corridors SEPP 2020, and Three Ports SEPP 2013. Consequently, the Transport and Infrastructure SEPP deals with the planning processes and legislative requirements around infrastructure, educational and childcare facilities, major infrastructure corridors, and the three ports (Port Botany, Port Kembla, Port Newcastle).

Chapter 3 of the Transport and Infrastructure SEPP relates to educational establishments and childcare facilities, which dictates the legislative framework for the development within new or existing schools. This is directly applicable to this modification proposal, which includes the establishment of temporary facilities for the New School at Mulgoa Rise while construction is ongoing with the permanent school facilities. In accordance with the stipulations of Section 3.36 of the Transport and Infrastructure SEPP, the consent authority must consider the following applicable clauses, contained within **Table 2** below.

**Table 2 Section 3.36 Schools – development permitted with consent**

| Clause | Comment | Compliance |
|---|---|---|
| *(1) Development for the purpose of a school may be carried out by any person with development consent on land in a prescribed zone.* | The proposed development is within R1 - General Residential which is a prescribed zoning under the Transport and Infrastructure SEPP. | Yes |
| *(2) Development for a purpose specified in section 3.40(1) or 3.41(2)(e) may be carried out by any person with development consent on land within the boundaries of an existing school.* | Development consent is being sought for the proposed modifications within this report. | Yes |
| *(5) A school (including any part of its site and any of its facilities) may be used, with development consent, for the physical, social, cultural or intellectual development or welfare of the community, whether or not it is a commercial use of the establishment.* | There are not any changes proposed to the existing community uses of the school establishment. | N/A |
| *(6) Before determining a development application for development of a kind referred to in subsection (1), (3) or (5), the consent authority must take into consideration-*<br>*a. the design quality of the development when evaluated in accordance with the design quality principles set out in Schedule 8, and*<br>*b. whether the development enables the use of school facilities (including recreational facilities) to be shared with the community.* | The demountable structures are a prefabricated temporary structure that will not form part of the permanent design of the permanent school.<br>The modification will not facilitate or negate the use of school facilities (including recreational facilities) to be shared with the community and is consistent with the development as approved. | N/A |
| *(7) Subject to subsection (8), the requirement in subsection (6)(a) applies to the exclusion of any provision in another environmental planning instrument that requires, or that relates to a requirement for, excellence (or like standard) in design as a prerequisite to the granting of development consent for development of that kind.* | The *Penrith Local Environmental Plan 2010* does not indicate any additional provisions for excellence (or a like standard) in design.<br>A competitive design process is not required. | N/A |
| *(8) A provision in another environmental planning instrument that requires a competitive design process to be held as a prerequisite to the granting of development consent does not apply to development to which subsection (6)(a) applies that has a capital investment value of less than $50 million.* | | |
| *(9) A provision of a development control plan that specifies a requirement, standard or control in relation to development of a kind referred to in subsection (1), (2), (3) or (5) is of no effect,* | Noted. | Yes |

| Clause | Comment | Compliance |
|---|---|---|
| *regardless of when the development control plan was made.* | | |
| *(10) Development for the purpose of a centre-based child care facility may be carried out by any person with development consent on land within the boundaries of an existing school.* | This modification application does not include development for the purposes of a centre-based childcare facility. | N/A |

In addition to Section 3.36, Section 3.39(1)(l) permits short-term portable classroom (including its removal) as exempt development if it is on land within the boundaries of an existing school and complies with the below requirements:

- is not more than 1 storey high.
- is more than 5 metres from any property boundary with land in a residential zone and more than 1 metre from any property boundary with land in any other zone.
- is removed within 48 months of being installed.

All proposed temporary demountable structures are no more than 1 storey high and will be removed within 24 months of being installed. Due to the restricted area available for the temporary school the temporary demountable structures will be placed less than 5 metres from the property boundary along Forestwood Drive. Further discussion of the impacts and required mitigations measures associated with the reduced setback is contained in Section 5.1.1.

### 4.2.1.3 State Environmental Planning Policy (Precincts – Western Parkland City) 2021

This SEPP contains planning provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area. The precincts in this SEPP are located in the Western Parkland City. This city is based the strategic planning vision of the 'three cities' regions identified in the Greater Sydney Region Plan – A Metropolis of Three Cities.

Chapter 4 – Western Sydney Aerotropolis applies to the proposed modification area. As the proposal is for an educational establishment, it is considered noise-sensitive development. Due to the location of the site being a minimum 30km from the airport and the existing built form, it is not considered that the proposed modification will be subject to the impacts of aircraft noise.

### 4.2.1.4 Penrith Local Environmental Plan 2010

The PLEP 2010 is the relevant planning instrument to the site. The parcel of land has been assessed against the relevant controls for the site in **Table 3**.

**Table 3 Penrith LEP 2010 Compliance Table**

| Clause | Comment | Complies |
|---|---|---|
| **2.1 Land Zones** | | |
| R1 General Residential | Zone Objectives:<br>• To provide for the housing needs of the community.<br>• To provide for a variety of housing types and densities.<br>• To enable other land uses that provide facilities or services to meet the day to day needs of residents.<br>• To ensure that a high level of residential amenity is achieved and maintained.<br>• To ensure that new development reflects the desired future character and dwelling densities of the area. | The proposed modification remains consistent with the objectives of the R1 General Residential zone. |
| **4.3 Height of Buildings** | | |
| The Height of Building on any land is not to exceed the maximum height shown for the land on the Height of Building Map | The site has a maximum building height requirement of 15m.<br>The proposed temporary demountable structures are single storey and do not exceed the maximum height requirement. | Yes |

| Clause | Comment | Complies |
|---|---|---|
| **4.4 Floor Space Ratio** | | |
| | Not applicable under Penrith LEP. | N/A |
| **5.10 Heritage Conservation** | | |
| | The site has been historically quarried for clay and shale and has been backfilled. The heritage impact assessment did not retrieve any evidence of heritage significance at the site. | N/A |
| **Part 6 Urban release areas** | | |
| | The site has been identified as within the Glenmore Park urban release area. As the development does not require subdivision the Clause does not apply in this instance. | N/A |
| **7.1 Earthworks** | | |
| | The earthworks required for the proposed development are minor and are not likely to have any detrimental effect on soil stability or existing drainage patterns in the locality or development as approved. | Yes. |
| **7.2 Flood planning** | | |
| | The site is located on flood prone land and has been appropriately designed to meet the minimum finished floor level in the flood management plan. | Yes. |
| **7.16 Glenmore Park Stage 2** | | |
| | The proposal will ensure that the transition of lot sizes between the urban areas of Glenmore Park, the surrounding rural landscape and the adjoining Mulgoa Nature Reserve is not overdeveloped. Existing extractive industries have ceased. | Yes. |

#### 4.2.1.5 Development Control Plan

The proposed modification remains consistent with the assessment undertaken as part of the EIS for the Penrith Development Control Plan 2014. The proposed modification will not detract from the vision of the Glenmore Park Stage 2 and meets the performance measures providing a primary school that is centrally located to provide a focal point for the new community.

#### 4.2.1.6 Planning Agreement

The proposed modification will not impact the terms of any relevant planning agreement associated with the development as approved.

#### 4.2.1.7 Regulations

This modification report has been prepared in accordance with the relevant provisions of the *Environmental Planning and Assessment Regulation 2021.*

### 4.2.2 Section 4.15(1)(b) - Likely impacts of the proposed modification

The modifications will not result in any significant additional social and environmental impacts as previously assessed for the approved development. A detailed assessment of the potential impacts of the proposed modifications is provided at Section 5 below.

### 4.2.3 Section 4.15(1)(c) - Suitability of the site

The suitability of the site for school uses was determined through approval of SSD 11070211. The proposed amendments to the conditions of consent would not alter the nature of the development as approved, such that it would become unsuitable for the site, as:

- the site is entirely suitable for the development of the proposal as it continues the approved use of the site as an educational establishment
- the site is capable of accommodating students by Day 1 Term 1 2023, with no significant additional adverse impacts on the student population, surrounding residential properties or the local road network.

### 4.2.4 Section 4.15(1)(d) - Submissions

DoE proposes to consider and respond to any submissions made concerning the proposed modification within the period prescribed by DPE.

### 4.2.5 Section 4.15(1)(e) - Public interest

The proposed modification to SSD 11070211 remains in the public interest as:

- the development is permissible with consent and has been prepared having regard to the objectives of the Transport and Infrastructure SEPP.
- the proposed modification has had regard to relevant applicable statutory planning policies and generally complies with the objectives of the development controls for the site.
- the temporary school will prevent the fragmentation of the school community across multiple sites until the construction of permanent school is complete.

On balance, accounting for site suitability, environmental impacts, risk assessment and key benefits, the proposed development is in the public interest.

# 5 ASSESSMENT OF IMPACTS

Section 4.55(3) requires the consent authority to "*take into consideration such of the matters referred to in section 4.15(1) as are of relevance to the development the subject of the application*". The Environmental Impact Statement dated 23 August 2021 (EIS, 2021) and Response to Submissions dated 17 November 2021 submitted as part of SSD 11070211 addressed:

- The provisions of all relevant environmental planning instruments.
- The likely impacts of the development – environmental, social, and economic.
- The suitability of the site for the development; and
- The public interest.

The assessment of the modified proposal against Section 4.55(3) remains unchanged with respect to the above considerations given the reasons outlined in Section 4. The following matters which require further assessment of impacts are outlined throughout Section 5 below.

## 5.1 Built form and urban design

### 5.1.1 Built form and scale

The temporary demountable structures are of single storey construction at a scale sympathetic to the future new school buildings and the surrounding residences. The highest demountable structure will be positioned at RL 63.75m and will be approximately 3 metres high, significantly less than the highest structure associated with the currently approved new school buildings positioned at RL 72.0m and approximately 11m tall.

The site layout will see the temporary school structures located in the southeast corner of the site west of the carpark access road and south of Building C. An aerial impression of the site arrangements is provided in **Figure 4.**

The building volumes are articulated and separated to relate to the suburban setting, also providing an opportunity for good daylighting and natural ventilation. The design utilises the currently approved structures including Hall, COLA, bike racks, waste storage area, staff car park, end of trip facilities and sports court.

An outdoor play area is in the centre of the temporary structures and allows acoustic protection for surrounding land uses and privacy for students. Pick-up and drop-off facilities will be provided along the bounding streets of Deerubbin and Forestwood Drive. Pedestrian entries are limited to the eastern end of Deerubbin Drive and a entry centrally located on Forestwood Drive (well separated from vehicle access). Vehicular entry to the site is a single entry from Forestwood Drive.

At the closest point to the southern boundary elements of the temporary school structures will be approximately 1.5 metres from the 2100mm high security fence. At this location it is noted that the boundary with Forestwood Drive is indented by 2 metres possibly reflecting the historic 20 metre street reserve against that of Forestwood Drive to the west of the Hassall Way intersection. Having regard for the boundary anomaly and the fact that residential development on the southern side is set back 3 metres from the road reserve the distance of the temporary school structures from the southern boundary is considered appropriate in this instance.

The layout of the temporary school structures in in keeping with the site narrative of the preliminary research into the history of the locality, where Darug Nation and Gandangara Nation boundaries intersect, and the area is recorded as a meeting point for the two clans.

Material finishes for the temporary school structures will be consistent with contemporary demountable structures used by NSW Department of Education. Architectural Plans contained within **Appendix C** provide a perspective of the buildings as viewed from the proposed outdoor playing area.

**Figure 4 Aerial impression of the site arrangements**

### 5.1.2 CPTED Assessment

CPTED is a crime prevention strategy that focusses on the planning, design and structure of cities and neighbourhoods. It reduces opportunities for crime by using design and place management principles that prevent the likelihood of essential crime ingredients (law, offender, victim or target, opportunity) from intersecting in time and space.

The temporary school structures comply with the principles of CPTED that will deter unsocial and criminal behaviour from the site. The general design elements are outlined below:

- Pathways, hallways and carpark are designed to be open and not enclosed to minimise any blind corners.
- Communal/ Public areas generally have windows to all walls with glass panels on entrance doors to provide natural surveillance.
- Signage will be provided at site entrances, exits and throughout temporary school structures in accordance with EFSG Guidelines policy.
- Fencing will be provided around the entirety of the temporary school structure areas and will not provide opportunities for entrapment and lack of surveillance from other areas.
- Walkways, pathways, and external lighting will be provided in accordance with the applicable Australian Standards.

The CPTED principles adopted as part of the temporary school structures will be supported by the existing CPTED design principle adopted as part of the existing approved structures to be utilised as part of the operation of the temporary school structures.

### 5.1.3 Visual impacts

Central to the assessment of visual impact is the criteria of sensitivity, magnitude of change, consistency with applicable and relevant planning instruments and consideration of residual impact. Existing approved tree planting along the carpark access road will provide screening to the single storey temporary school structures reducing the impact of the structures. The visual impact of the temporary school structures will result in minor changes from the surrounding context and currently approved development. The visual impact will be temporary and the temporary school site will be reinstates to its previous turfed appearance after the temporary school structures are removed.

## 5.2 Trees and landscaping

It is likely that one existing street tree on Forestwood Drive may require removal to allow sufficient width for the delivery and construction of the demountable buildings. The tree is located directly opposite 32 Forestwood Drive and will be replaced with a tree of similar height and age once operation of the temporary school ceases.

Surrounding ground surfaces will be grassed with no additional tree or landscaping works proposed. This is due to the temporary nature of the development and to reduce ongoing maintenance costs. The following mitigation measures are proposed during construction of the temporary school structures:

- A site-specific Tree Protection Plan (TPP) is prepared to guide the construction process, particularly in relation to existing street trees on Forestwood Drive.
- Tree protection zones are recommended for all trees within the site that are to be retained.
- Tree protection fencing is to be utilised to protect trees to be retained during construction.
- If trees display signs of stress or deterioration, remedial action shall be taken to improve the health of the impacted tree.

Landscape Design Drawings are contained in **Appendix D**.

## 5.3 Environmental amenity

### 5.3.1 Solar access and overshadowing

The buildings are well spaced and aligned to the southern and eastern boundaries to enable adequate sunlight to enter into the playground, even during winter. The temporary school structures are adequately set back from Forestwood Drive with no potential overshadow impacts to the adjacent residential properties as illustrated in the shadow diagrams contained in **Appendix C**.

### 5.3.2 Privacy

The temporary school structures height, scale and orientations contribute to the visual privacy of the site. The build heights are single storey and are reflective of the surrounding residential properties preventing impacts from direct overlooking. The outdoor play area is located in the centre of temporary school structures and allows for acoustic protection and privacy for students. The existing approved boundary landscaping will be utilised to provide additional privacy for both students and surrounding residents.

# 5.4 Transport and accessibility

## 5.4.1 Methodology

A Traffic Impact Statement has been prepared by PTC and is contained in **Appendix E**. The Traffic Impact Statement has been prepared to assess and address changes to the existing the traffic and transport impacts as a result of the proposed modification.

## 5.4.2 Assessment

***Proposed elements of the SSD that will be operational with the temporary school***

Students will have access to the Hall, COLA, bike racks, end of trip facilities and sports court, under the current approval, all of which can be delivered in time for the Day 1 Term 1 2023 opening. In addition, the waste storage area and staff car park will be complete and operational to serve the temporary school. Pick up and drop off on Deerubbin Drive (to the north) will also be available as approved and won't conflict with construction access which is all from Darug Avenue.

Pedestrian access to the temporary school will be provided via:

- A pedestrian walkway access from Forestwood Drive.
- Pedestrian entry off Deerubbin Drive.

Waste service and delivery vehicles will enter and exit the site from the approved entry / exit point adjacent to Deerubbin Drive.

34 bicycle and 48 scooter spaces on the north-eastern side of the site will not be constructed prior to the opening of the proposed temporary school. However, additional racks will be provided off Deerubbin Drive to account for the approved travel mode target of 35% cycling or scooting.

Construction of all SSD approved public domain works including pedestrian zebra crossings, relocation of the bus bay, line marking and sign-posting of on-street parking and pick-up and drop-off spaces will be undertaken in accordance with the previous approval, and all these facilities will be available from Day 1, Term 1 2023.

***Site and Pedestrian Access***

Two pedestrian gates, one off Deerubbin Drive and one off Forestwood Drive enable quick access from all travel directions and therefore, are considered adequate for the reduced number of students.

The approved staff car park and service vehicle access gates will be constructed and operational from Term 1 Day 1.

***Bicycle and Scooters***

The SSDA was approved with the provision of 64 bike spaces and 80 scooter spaces, i.e., total 144 spaces, which accounts for 35% of student population (out of 414 students) to cycle and scoot. The temporary school will provide 38 bike spaces and 48 scooter spaces, i.e., a total of 86 spaces for 230 new students, which accounts for 37% of the student population (a greater percentage than the previous approval for cycling and scooting population).

A total of 6 bicycle spaces and sufficient number of lockers for staff will be constructed as per the approved SSDA plans and will be made available at the start of Day 1, Term 1 2023.

The temporary school will provide 1 WC with a shower and change facilities, which is in accordance with the approved SSDA.

Staff bicycle spaces will be provided in a secured Shared Multi Use storeroom, which may be equipped with bike racks. Bicycle spaces for visitors and students are provided as rails. This arrangement complies with Council's DCP and the approved SSD plans.

***Zebra Crossing***

Zebra crossings on the Darug Avenue and Forestwood Drive will be constructed as approved during the SSDA stage and will be made available to the public at commencement of Day 1 Term 1 2023. All signs and line marking related to the zebra crossing will be completed prior to commencement of Day 1 Term 1 2023.

***Bus***

The relocation of the bus stop on the eastern side of Darug Avenue will be finalised prior to commencement of Day 1 Term 1 2023 of the temporary school, as approved during the SSDA stage.

***School Zone***

Upon further consultation with TfNSW, the School Zone will be installed as per the SSD approved concept plans, prior to commencement of the temporary school.

***Pick up and Drop off***

Pick-up and drop-offs will be undertaken on the frontage roads as approved during the SSDA stage. Pick up and drop off areas (school days) will be provided on Forestwood Drive. 15-minute parking will be provided on Forestwood Drive as well and on Darug Avenue. It is proposed to provide the SSD approved quantity of pick-up and drop-off spaces for the reduced student population at the temporary school.

Line marking and sign posting for the general pick-up and drop-off spaces, assisted pick-up and drop-off spaces and time restricted parking spaces will be completed before commencement on Day 1 Term 1 2023.

***Car Parking***

It is proposed to construct the full extent of the staff car park approved as per the SSD prior to commencement of the temporary school. The temporary school will have a reduced number of staff, thus the demand is expected to be accommodated within the car park.

The staff car park with access off Forestwood Drive will be operational from Day 1 Term 1 2023 of the proposed temporary school.

***Waste Collection***

The waste collection area with access off Deerubbin Drive as approved by the SSDA will be operational from Day 1 Term 1 2023.

***General Deliveries***

Other delivery vehicles will utilise the on-street parking along the frontage roads, as per the approved the SSDA.

***Emergency Vehicles***

A fire truck will be able to access the site off Deerubbin Drive from Day 1 Term 1 2023.

A 7m long Bariatric ambulance will be able to access the site via the staff car park. Due to the location of the demountables on the west of the car park, the ambulance will drive into the car parking aisle and reverse back into the site from the aisle. Such access is in accordance with the ASNSW ambulance access specification.

***School Transport Plan***

The methodology presented in the School Transport Plan (STP) dated 20/08/2021 and approved as part of the SSDA will be retained and implemented in the temporary school.

All approved public domain works (zebra crossings, bus stop relocation, pick-up / drop-off) will be finalised prior to commencement of the temporary school to support the anticipated travel behaviour.

Two pedestrian gates, one off Deerubbin Drive and one off Forestwood Drive will enable quick access from all travel directions and therefore, are considered adequate for the reduced number of students.

In lieu of bicycle spaces on the north-eastern side of the site, additional bike spaces will be provided off Deerubbin Drive to account for the approved travel mode target of 35% cycling or scooting.

An update to the approved STP will be required as part of the occupation certificate, at which stage adjustments to the access points and bike rack locations as well as operation based on the temporary structures can be made. At that time, consultation with the principal will be undertaken.

***Construction Traffic Management Plan***

The methodology of the approved Construction Traffic Management Plan (CTMP) dated 01/04/2022 will be largely retained, though some changes would be required to facilitate the proposed additional site access off Forestwood Drive. This access would be used solely to construct the temporary structures, whilst the access off Darug Avenue would continue being used for the main school construction.

The following adjustments would need to be made to the approved CTMP.

- A proposed additional construction vehicle access off Forestwood Drive and traffic control at the Forestwood Drive / Darug Avenue intersection is required.
- The TGS on the Darug Avenue / Forestwood Drive intersection would need to be adjusted to facilitate the additional traffic control.
- A gate controller would be required at Forestwood Drive.
- “No Parking” signs would need to be installed at the entry gate, extended 12m towards the western side of the gate to facilitate the swept path.

### 5.4.3 Mitigation measures

The following mitigation measure is recommended.

- An amended Construction Traffic Management Plan is to be prepared detailing the proposed additional construction vehicle access off Forestwood Drive and traffic control, including gate control and “No Parking” signs at the Forestwood Drive / Darug Avenue intersection.

### 5.4.4 Conclusion

The proposed modification will provide adequate pedestrian access to the temporary school, provide sufficient bicycle / scooter parking, provide adequate staff parking, will provide end of trip facilities and provide appropriate access for emergency vehicles.

The methodology of the approved School Transport Plan will be retained for the temporary school. Changes to gate and bicycle location are proposed to be updated at the time when the STP would be updated for the purpose of the occupancy certificate.

The methodology of the approved Construction Traffic Management Plan will be amended to incorporate a proposed additional construction vehicle access off Forestwood Drive and traffic control at the Forestwood Drive / Darug Avenue intersection.

## 5.5 Ecologically sustainable development

The existing approved design for the new school incorporates sustainability measures that have far reaching benefits from the perspective of energy, water, and waste reduction; as well as providing good indoor environment quality, thermal comfort, and visual comfort. These are expected to have a positive impact on the health and wellbeing of the students and staff occupying the buildings.

The temporary school structures will not impact the existing approved development’s ability to satisfy the principles of Ecologically Sustainable Development (ESD), the Government Architect NSW (GANSW) Environmental Design in Schools requirements, and the Educational Facilities Standards and Guidelines (EFSG) requirements.

The temporary school structures are predicted to be in operation for less than 24 months and will have minimal impact. The temporary school structures will provide a sufficient indoor environmental quality and thermal / visual comfort that will result in suitable environmental that will not negatively impact on the health and wellbeing of students and staff occupying the building for the duration operation.

## 5.6 Heritage

A Statement of Heritage Impact (SHI) was completed by Comber Consultants to address Item 7 of the SEARs for the school as approved. The SHI found that the site does not contain any heritage significance, with no objection from agencies to the proposal in respect of heritage. No further assessment or specific mitigation measures are required as part of the proposed modification. Permits under sections 60 and 140 of the *Heritage Act 1974* or under Part 6 of the *National Parks & Wildlife Act 1974* are not required.

## 5.7 Aboriginal cultural heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) was completed by Comber Consultants to address Item 8 of the SEARs for the school as approved.

The ACHAR identified no previous archaeological surveys within the study area. The AHIMS search of the study area (9 September 2020) included a 1km buffer, with no sites shown as having been recorded within the boundaries of the study area. This is consistent with the absence of archaeological survey prior to significant disturbance of the site. The site is not a registered Aboriginal place.

The site has been subjected to extensive quarrying and filling. Although it is possible that a low density of artefacts may once have existed on the property, due to the extensive disturbance, it is not predicted that any Aboriginal objects will be located on the property. Due to the lack of evidence of Aboriginal occupation on the site and the extensive quarrying and filling of the study area, the proposed construction of the temporary school structures on the site would have no impact on Aboriginal objects.

Due to the extensive disturbance on the site no specific mitigation measures are required. However, in the unlikely event that an Aboriginal object was identified during construction works, those works must cease immediately in the vicinity of that object and further advice sought from the consultant.

## 5.8 Noise and vibration

Pulse White Noise Acoustics Pty Ltd (PWNA) was engaged to prepare an Acoustic Impact Assessment Report for the construction and operation of the proposed modification. The report addressed the following impacts:

- External acoustic impact from typical operational conditions.
- External acoustic impact from construction activities related to the temporary facilities.
- Acoustic impact of construction activities related to the permanent educational facilities onto the temporary premises.

The Acoustic Impact Assessment Report is contained in **Appendix F** and additional advice from PWNA regarding noise intrusion assessment conducted for noise emissions generated by construction activities of the permanent school facilities on the temporary facilities is contained in **Appendix G.** Findings and recommendations of both documents are summarised below.

### 5.8.1 Existing environment

The temporary school facilities are surrounded by the following premises which are also considered the nearest noise affected receivers.

- Residences which are located along the western and southern property boundaries. Residences along the western property boundary are situated across Darug Avenue; and those along the southern property boundary are located across Forestwood Drive.
- A future mixed-use development which will be located across Deerubbin Drive (i.e. 90-98 Glenmore Ridge Drive), along the northern property boundary.
- Residences which are also situated along Deerubbin Drive, to the north-east and north-west from the site.
- A childcare centre located at Ground Level, 71 Deerubbin Drive, Glenmore Park. This only operates from Mondays to Fridays, 6:30 am to 6:00pm.
- Along the eastern property boundary: Active recreation areas (i.e. Mulgoa Rise Fields), and areas dedicated to environmental conservation.

### 5.8.2 Assessment

***Operation of buildings***

The demountable buildings will be served by 7.1 KW ceiling split air conditioning units. Typically, an outdoor unit which is part of this air conditioning system generates noise emissions of 55 dBA at 1m from the unit under free-field conditions.

Therefore, the Acoustic Impact Assessment Report assumes that the following spaces will be served by the air conditioning system described above:

- General learning spaces (i.e. homebases).
- Support unit learning spaces.
- Library.
- Staff facilities.

**Table 4** summarises the predicted external noise levels from mechanical services. From the assessment outcomes listed in this table, it is noted that compliance is achieved with the most stringent applicable noise criteria (i.e. daytime criteria). Therefore, no further acoustic treatment is required for mechanical services.

**Table 4 Predicted noise emissions from mechanical services**

| Receiver | Predicted Noise Levels (db LAeq, 15 minutes) | Noise Criteria (db LAeq, 15 minutes) | Assessment Outcomes |
|---|---|---|---|
| 34 Forestwood Drive | Less than 35 | Daytime: 40 | Compliance |
| 31 Darug Avenue | Less than 35 | Daytime: 42 | Compliance |
| 27 Darug Avenue | Less than 35 | Daytime: 42 | Compliance |
| 90-98 Glenmore Ridge Drive (future mixed-use development) | Less than 35 | Daytime: 48 | Compliance |
| 71 Deerubbin Drive | Less than 35 | Daytime: 48 | Compliance |

Note 1: Exceedances of 1-2 dB are considered to be marginal since these are found to be subjectively imperceivable

***Operation of playgrounds***

For the prediction of outdoor noise emissions due to students playing in outdoor areas, a typical lunch / recess period has been considered. In this scenario, it is assumed all students are in the designated playground.

To predict the noise impact into nearest affected receivers, a 3D computational model of the site and surrounding area was developed and subsequently analysed using SoundPLAN version 8.0 acoustic modelling software. A summary of the predicted noise levels, as well as assessment outcomes, is presented in **Table 5** and it is observed that compliances are achieved at all nearest affected residential receivers.

**Table 5 Predicted noise emissions for a typical lunch / recess period**

| Receiver | Predicted Noise Levels (db LAeq, 15 minutes) | Noise Criteria (db LAeq, 15 minutes) | Assessment Outcomes |
|---|---|---|---|
| 34 Forestwood Drive | 47 | 45 | Compliance |
| 31 Darug Avenue | 40 | 45 | Compliance |
| 27 Darug Avenue | 40 | 45 | Compliance |
| 90-98 Glenmore Ridge Drive (future mixed-use development) | 40 | 48 | Compliance |
| 71 Deerubbin Drive | 41 | 48 | Compliance |

Note 1: Exceedances of 1-2 dB are considered to be marginal since these are found to be subjectively imperceivable

***Operation of PA system***

As a performance requirement, it is recommended the outdoor PA system should be designed so noise emissions from the PA system do not exceed the intrusiveness criteria listed in the Noise and Vibration Noise Assessment provided as part of the EIS for the site. Noise emissions should be obtained under free-field conditions, excluding any noise reflections from walls or vertical structures. It is recommended the following be considered as part of the PA system design:

- Outdoor PA system should not operate outside school opening hours (i.e. between 6:30 pm and 6:30 am), and should not operate within the night time period (i.e. between 10:00 pm and 7:00 am).
- Low-powered horn-type speakers should be located and orientated to provide a good coverage of the school areas whilst being directly away from residences and sensitive receivers. System coverage shall be reviewed during the design phases.
- Speakers should be mounted with a downward angle and as close to the floor as possible. Speakers should be mounted below the height of school buildings and include directional speakers to mitigation noise spill to neighbouring receivers.
- Once appropriate noise levels from the speakers are obtained within school premises and at nearest affected receivers, the system gain should be limited so that staff cannot increase the noise levels.

***Carpark Noise Emissions***

The staff carpark will be completed by the time the temporary school facilities are operational. Section 5.7 of the Noise and Vibration Noise Assessment provided as part of the EIS for the site discussed in detail the assessment of carpark noise emissions. In this assessment the carpark noise emissions were found to be compliant with the external noise level criteria.

Since there are no changes to the operational conditions of the carpark while the temporary facilities are on site, it is expected that compliance will be maintained. Therefore, no further acoustic treatments are required.

***Waste Collection***

To maintain compliance with the external noise level criteria, it is advised that waste collection should be undertaken between 7:00 am and 10:00 pm.

***Noise Impact on Local Roads***

The Noise and Vibration Noise Assessment provided as part of the EIS for the site discussed in detail the noise impact on local roads. From this report, it was concluded there will be no such impact. Since it is expected that there will be no operational changes while the temporary facilities are installed on site, then it is likely compliance will be maintained. Therefore, no further acoustic treatments are required.

***Construction and vibration of temporary facilities***

It is noted that nearest affected residences will be noise affected and a construction noise and vibration management plan should be prepared. It is also recommended that confirmation of the traffic volumes generated by the construction activities do not exceed the recommended maximum growth of 60% relative to the existing traffic volumes. Indicative safe distances should be validated prior to the start of construction works by undertaking measurements of vibration levels generated by construction and demolition equipment to be used on site.

***Impacts of construction activities related to the permanent facilities.***

In accordance with information provided by the building contractor for the permanent school facilities (Richard Crookes Constructions), it is noted that the only works remaining from January 2023 till project completion are the following:

- Services and finishes.
- External works (landscaping and public domain).
- Commissioning.

Internal noise levels were predicted for those emitted by construction activities related to the permanent facilities and the following is noted:

- Provided that façade doors and windows can remain closed during construction works for services and finishes, there is not likelihood of noise impact within temporary educational spaces.

- During external works, there is also not likelihood of noise impact within educational spaces provided that façade doors and windows can remain closed, and construction works are undertaken beyond 40m from the school premises. For work to be undertaken within 40m of the temporary school premises, it is advised that these should be coordinated with school staff so these are only undertaken outside school operational times (i.e. between 7:00 am and 8:00 am, or after 3:00 pm).

### 5.8.3 Mitigation measures

The following mitigation measures are recommended.

***Operation of the PA system***

- Outdoor PA system should not operate outside school opening hours (i.e. between 6:30 pm and 6:30 am), and should not operate within the night time period (i.e. between 10:00 pm and 7:00 am).
- Low-powered horn-type speakers should be located and orientated to provide a good coverage of the school areas whilst being directly away from residences and sensitive receivers. System coverage shall be reviewed during the design phases.
- Speakers should be mounted with a downward angle and as close to the floor as possible. Speakers should be mounted below the height of school buildings and include directional speakers to mitigation noise spill to neighbouring receivers.
- Once appropriate noise levels from the speakers are obtained within school premises and at nearest affected receivers, the system gain should be limited so that staff cannot increase the noise levels.

***Waste Collection***

- Waste collection should be undertaken between 7:00 am and 10:00 pm.

***Noise and Vibration***

- The contractor should develop a construction noise and vibration management plan (CNVMP) in order to implement mitigation measures to manage the noise and vibration impact onto the potentially affected receivers.
- As part of the CNVMP a detailed construction program should be provided which should include the following:
  - Schedule of construction activities (classified into scenarios if applicable).
  - List of construction equipment per activity.
  - Location of construction equipment.
  - Duration of construction activities, as well as proposed construction hours.
- The contractor should, where reasonable and feasible, apply best practice noise mitigation measures. These measures include the following:
  - Maximising the offset distance between plant items and nearby noise sensitive receivers.
  - Preventing noisy plant working simultaneously and adjacent to sensitive receivers.
  - Minimising consecutive works in the same site area.
  - Orienting equipment away from noise sensitive areas.
  - Carrying out loading and unloading away from noise sensitive areas.
- On-site monitoring be conducted to attest this impact and propose mitigation measures as construction activities develop.
- The contractor should take reasonable steps to control noise from all plant and equipment. Examples of appropriate noise control include efficient silencers and low noise mufflers.
- Any vibration generating plant and equipment is to be located in areas within the site in order to lower the vibration impacts.
- Investigate the feasibility of rescheduling the hours of operation of major vibration generating plant and equipment.

- Identify other vibration sensitive structures such as tunnels, gas pipelines, fibre optic cables, Sydney Water retention basins. Specific vibration goals should be determined on a case-by-case basis by an acoustic consultant which is to be engaged by the construction contractor.
- Use lower vibration generating items of construction plant and equipment, that is, smaller capacity plant.
- Minimise conducting vibration generating works consecutively in the same area (if applicable).
- Schedule a minimum respite period prior to long continuous activities.
- Use only dampened rock breakers and/or “city” rock breakers to minimise the impacts associated with rock breaking works.
- Deliveries should be undertaken, where possible, during standard construction hours.
- Maximise hammer penetration (and reduce blows) by using sharp hammer tips. Keep stocks of sharp profiles on site; and monitor the profiles in use.
- It is advised that mobile plant and trucks operating on site for a significant portion of the project are to have reversing alarm noise emissions minimised. This is to be implemented subject to recognising the need to maintain occupational safety standards.
- A complaint response procedure should be implemented. Information to be gathered as part of this process should include location of complainant, time/s of occurrence of alleged noise or vibration impacts (including nature of impact particularly with respect to vibration), perceived source, prevailing weather conditions and similar details that could be utilised to assist in the investigation of the complaint. All resident complaints will be responded to in the required timeframe and action taken recorded.

***Impacts of construction activities related to the permanent facilities.***

- External doors and windows of the temporary buildings should remain closed while construction works within the Stage 2 are undertaken.
- For work to be undertaken within 40m of the temporary school premises, these should be coordinated with school staff so these are only conducted outside operational times of temporary school facilities.

### 5.8.4 Conclusion

The Acoustic Impact Assessment Report found / recommended the following.

- Operational noise emissions (such as those from building services, playgrounds, and carpark) are found to be compliant. No further acoustic treatments are required.
- Conceptual measures and performance requirements for the PA system mentioned above should be followed.
- Waste collection to be undertaken between 7:00 am and 10:00 pm.
- Noise impact on local roads is found to be negligible.
- For installation works of the demountable facilities, a construction noise and vibration management plan will be required to address the acoustic impact of such works onto nearest affected receivers.

Additional advice (**Appendix G**) suggests that:

- External doors and windows should remain closed while construction works within the Stage 2 are undertaken.
- For work to be undertaken within 40m of the temporary school premises, these should be coordinated with school staff so these are only conducted outside operational times of temporary school facilities.

## 5.9 Social impacts

A Social Impact Assessment (SIA) was completed by RPS to address Item 9 of the SEARs for the development as approved. The SIA concluded that the negative social impacts are primarily associated with the construction phase of the project both directly and as a result of cumulative construction works. The associated negative impacts include:

- Privacy, peace, and quiet enjoyment for neighbours and the local area, particularly changes to people's daily lives and activities.
- How people get around if traffic/parking demands or noise levels increase.

Several positive social impacts were identified during the assessment including:

- Equity of access to education and associated services for different social and cultural groups.
- Enhancement of public space.
- Changes to environmental values, visual landscape, aesthetic values, and amenity.
- Improvement of community cohesion, identity, and sense of place.

The proposed modification is not predicted to exacerbate the construction impacts associated with the approved development. Cumulative impacts may be experienced during the operation of the temporary school structures and construction of the remaining approved school. These impacts are predicted to be primarily associated with increased traffic demands during drop-off and pick-up times.

The key social impact mitigation measures remain unchanged, to reduce the social impact of the project include, undertaking regular community consultation, facilitating channels for complaints and feedback, implementing traffic management plans to reduce access and safety issues, and reducing construction impacts through a construction environmental management plan. Following the review of social impacts identified during this assessment there are no unreasonable social impacts that would preclude approval of the project.

## 5.10 Biodiversity

A Biodiversity Development Assessment Report (BDAR) Waiver Request was prepared by Cumberland Ecology to address Item 11 of the SEARs for the development as approved. A BDAR waiver was granted by the Planning Secretary on 20 April 2021. The delegated "Environment Agency Head" in the Environment, Energy and Science Group (EESG) of the Department has also granted a waiver in a letter dated 15 April 2021.

The proposed modification is unlikely to have significant impacts upon defined biodiversity values as a result of the proposed modifications being located on grassed and previously disturbed land that does not conform to any recognised plant community types.

No further biodiversity mitigation measures are required for the proposed activity. It is concluded that an additional or amendment to the BDAR waiver is not required for the proposed modification.

## 5.11 Penrith Section 7.12 Contributions Plan

It is noted that local infrastructure contributions under the provisions of Section 7.12 of the EP&A Act were not levied under the development consent SSD 11070211 and accordingly it is considered that levying of such contributions for the temporary school facilities would be unreasonable.

## 5.12 Utilities

The temporary demountable structures will not require additional infrastructure connections outside of the site other than those already approved. There will be no additional capacity required from existing services and utilities available for the proposed modifications. The modification can be adequately serviced by power, telecommunications, water, sewer, and gas services.

A combined services site plan has been prepared for the temporary school and is contained within **Appendix H**. There are no proposed changes or additions to the mitigation measures outlined in the EIS for utilities.

## 5.13 Flooding

A combined Flood and Stormwater Advice Statement, prepared by Civil Engineers Woolacotts, has been prepared and is contained in **Appendix I**.

### 5.13.1 Existing environment

The temporary school facilities site is approximately 2000m2 in area. The site grades gently from a high point in the south-west corner, to a low point in the northeast corner. An existing grassed batter (approximately 1V:10H) is located along the southern site boundary. Remaining gradients within the site, from the toe of the batter to the northwest corner of the site, varies between 1% to 4%. The site is subjected to overland flow flooding during the 1% Annual Exceedance Probability (AEP) storm event and Probable Maximum Flood.

### 5.13.2 Assessment

The TUFLOW model prepared for the EIS illustrated that overland flow flooding occurred in the north-western corner during the 1% AEP storm event, and eastern portion of the Site. This flooding was shallow (less than 300mm) and has a hazard classification of H1, which is the lowest level of hazard and is generally safe for people, vehicles, and buildings. The flood levels vary from 63m AHD in the south-east corner of the site to 59m AHD in the north-east corner of the site.

The majority of the temporary buildings will be located outside of the flood zone. Buildings HB5 and HB4 are partially obstructing the overland flow path. To maintain the current overland flow regime, it is recommended to allow flood water to flow freely underneath the buildings, therefore these will be constructed on piers. The building HB6 and the adjacent lavatory are also recommended to be raised on piers since their locations are close to the flood overland flow path. The site is not impacted by significant flood characteristics, however Condition D33 of approved SSD 11070211 requires the preparation of an Operational Flood Emergency Management Plan. This requirement should be extended to the temporary school facilities.

### 5.13.3 Mitigation measures

The following mitigation measures are recommended.

- All buildings will need to comply with Penrith City Council's floodplain management policy.
- Buildings HB4 and HB5 will require a minimum floor level of RL 63.30 m AHD.
- The floor level of HB6 building and the adjacent lavatory should be constructed at RL 61.70m AHD.
- Prior to the commencement of the operation of Stage 1 (Temporary School) an Operational Flood Emergency Response Plan (OFEMP) must be prepared by the Applicant and submitted to the Certifier. The OFEMP must be implemented and must:
  - (a) be prepared by a suitably qualified and experienced person(s);
  - (b) address the provisions of the Floodplain Risk Management Guidelines (EESG);
  - (c) include details of:
    - (i) the flood emergency responses for the operational phase of the development.
    - (ii) predicted flood levels.
    - (iii) flood warning time and flood notification.
    - (iv) assembly points and evacuation routes.
    - (v) evacuation and refuge protocols; and
    - (vi) awareness training for employees and contractors, and visitors.

### 5.13.4 Conclusion

Providing the above mitigation measures are implemented the proposed modification will not exacerbate flooding within or externally to the site.

## 5.14 Stormwater

A combined Flood and Stormwater Advice Statement, prepared by Civil Engineers Woolacotts, has been prepared and is contained in **Appendix I**.

### 5.14.1 Existing environment

The subject site is located outside of Penrith City Council's identified On-Site Detention (OSD) areas within the Stormwater Drainage Guidelines for Building Developments. Thus, OSD is not required for the proposed development. This has been confirmed in previous email correspondence between ACOR and Penrith City Council.

### 5.14.2 Assessment

The additional stormwater runoff generated from the temporary school facility is anticipated to be sufficiently managed through the currently approved in-ground pit and pipe system as part of the overall site stormwater management system.

A stormwater management system has been developed to accommodate the approved development as a result of the increased impervious areas, as well as comply with Council's requirement. The temporary school structures will include impervious roof structures that will capture all runoff and will be processed through the existing stormwater management system. There will be no additional uncovered impervious surfaces that will require overland stormwater management as part of the proposed modification.

During construction, erosion and sediment control measures will be provided in accordance with the requirements of "Managing Urban Stormwater Soils and Construction, 4th Edition (Blue Book)". These measures will include silt fences on the low side of the site, silt traps at stormwater pits and a construction exit to remove silt from vehicles before they leave the site. Dust control measures will also be provided.

Ongoing management and maintenance of the stormwater system inclusive of the pits, pipes, and detention tank are required to form part of the school's maintenance schedule. The periodic cleaning of the system to remove rubbish and debris is recommended to be undertaken at 6-month intervals and following any storm greater than the 10% AEP event.

Stormwater runoff from all pervious and impervious surfaces within the proposed development will generally be collected by the existing approved in-ground pit and pipe gravity pipe system. The in-ground pit and pipe system has been sized to accommodate the 5% AEP (20-year ARI) storm flows for the site.

### 5.14.3 Mitigation measures

Mitigation measures for stormwater as documented within the approved EIS will be sufficient for the management of stormwater for the proposed modification.

## 5.15 Soils

A Soil and Water Assessment (SWA) was prepared by Woolacotts to address Item 17 of the SEARs for the development as approved. The proposed modification will result in minimal impacts to the existing soil and water profile for the site during construction and operation of the temporary school structures. The methodology for construction of the temporary school structures will be limited to construction of footings, minor landscaping for grassed surfaces, and trenching for services.

The proposed modification will not result in significant impacts to the overall management of soil and water on the site during both construction and operation. During construction, erosion and sediment control mitigation measures will be provided in accordance with the requirements of "Managing Urban Stormwater Soils and Construction, 4th Edition (Blue Book)". These measures will include silt fences on the low side of the site, silt traps around new and existing stormwater pits and a sedimentation basin.

Other measures to be provided on site during construction include construction exits for all vehicles leaving the site, and revegetation of the site as soon as practicable. Erosion control measures must be inspected and maintained after each rain event and at intervals not exceeding two weeks. Works will be in accordance with the sites Erosion and Sediment Control Plan located in the Stormwater Management Plan. Management of saline soils / groundwater will be in accordance with the approved Salinity Management Plan (SMP).

## 5.16 Waste – Construction

A construction Waste Management Plan (CWMP) was prepared by EcCell Environmental Management (EcCell) to address the potential construction impacts associated with the temporary school facilities. The CWMP is contained in **Appendix J.**

### 5.16.1 Existing environment

The site is currently vacant and is generally well grassed with trees along the southern, eastern, and northern boundaries. The subsurface consists of fill material deposited as part of the rehabilitation works completed following closure of the former quarry to which the site is situated over. There are currently no structures on site and the need for a hazardous materials survey is not required.

### 5.16.2 Assessment

The NSW EPA Waste Classification Guidelines (NSW EPA, 2014a) groups wastes that pose similar risks to the environment and human health, as defined in the *Protection of the Environment Operations Act 1997*. The primary waste streams expected to be generated and corresponding EPA classifications for the construction of the development are summarised in **Table 6** below. Waste streams expected to be generated during the construction phase of the proposed modification will be associated with the construction of footings, minor landscaping for grassed surfaces, and trenching for services.

**Table 6 Construction Waste Generation Streams and Estimated Volumes**

| Material Type | Estimated Volume | | | On-Site Treatment Method | Off-Site Treatment Method |
|---|---|---|---|---|---|
| | Reuse | Recycle | Disposal | | |
| Excavated Brown Fill | 10m3 | | | Separated to a designated stockpile and reused on-site for resurfacing | N/A, noting excavated fill removed from site will be classified by a suitably qualified environmental consultant before reuse on the site or disposal off-site if contaminated and unsuitable. |
| Concrete Brick Block – work and Tiles | | 16 $m^3$ | | Co-mingled Bins | Crushed for road base |
| Metals | | 8 $m^3$ | | Co-mingled Bins | Scrap metal dealer for smelting |
| Timber off-cuts | | 12 $m^3$ | | Co-mingled Bins | Recycled for chips and mulch |
| Cardboard | | 5 $m^3$ | | Co-mingled Bins | Recycled into cardboard |
| Plasterboard | | 8 $m^3$ | | Co-mingled Bins | Recycled as soil conditioner |
| Containers, Plastics, Plastic Packaging | | 8 $m^3$ | | Co-mingled Bins | Styrene and plastic to landfill and Paint drums nested and recycled |
| Pallets and Reels | 25 units | | | Separated onsite | Returned to the supplier |
| Liquid Waste & Paint Washout | | | 4 $m^3$ | Separated onsite | Transferred to licenced landfill |
| General Waste | | | 8 $m^3$ | Co-mingled Bins | Transferred to licenced landfill |
| Putrescible Food Waste | | | 1 $m^3$ | | |
| **Sub Total** | **NB: 25 units** | **49 $m^3$** | **13 $m^3$** | | |
| **Total** | | **72 $m^3$** | | **Plus, an additional 60 pallets (single units returned to suppliers for reuse)** | |

As the contracts for all contractors have not been let there are still those including the waste contractor to be advised (TBA). All waste will be co-mingled and taken for off-site separation and reuse or recycling except pallets and reels.

### 5.16.3 Mitigation measures

There is expected to be no change to the mitigation measures required to manage waste during construction of the temporary school facilities.

All waste will be removed by a licensed waste contractor using 15m bins on site during construction. The construction waste will be removed when bins are full and within the construction site hours to reduce disturbance of the neighbours.

There will be a designated waste storage area for the disposal and storage of construction waste prior to collection. This area will be located conveniently for the construction work team to use the bins as well as for waste contractors to collect. The waste storage area will be dynamic and will change over the life cycle of the development. Other requirements include:

- The routes for movement of waste between work site and waste storage area are to be kept obstruction-free.
- The routes for movement of bins and waste between storage and collection points are marked in the site drawing and will be kept obstruction-free (if waste is moved between the waste storage area(s).
- The waste bin collection point provided will be accessible for waste collection vehicles. There are no obstructions to turning or reversing, pulling up vehicles and lifting bins.
- Access for waste collection vehicles will not be compromised by construction-related activities vehicles or other consequences of construction staging.
- All waste not being reused on site will be removed during, or at the completion of, the construction stage.
- No waste will be left on site unless it is part of valid reuse on site, which is integral to and in place in the design.
- In order to manage noise levels, collection of waste from the construction site will only occur during hours approved for construction work.
- All vehicles entering or leaving the site must have their loads covered.
- All vehicles, before leaving the site, to be cleaned of dirt, sand and other materials, to avoid tracking these materials onto public roads.
- At the completion of the works, the work site is left clear of waste and debris.

## 5.17 Waste - Operational

An Operational Waste Management Plan (OWMP) was prepared by EcCell Environmental Management (EcCell) to address the potential operational impacts associated with the temporary school facilities. The OWMP is contained in **Appendix K.** In preparation of the OWMP the following waste specific guidelines were considered:

- NSW Environment Protection Authority (EPA) Waste Classification Guidelines 2014.
- NSW EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities 2012.
- NSW EPA's Waste Avoidance and Resource Recovery (WARR) Strategy 2014-21 with expected future guidelines to replace this during the construction and operation phases of the development.

A review of the potential operational waste impacts of the temporary school facility was undertaken to determine if the existing mitigation measures are suitable for the proposed modification.

### 5.17.1 Existing environment

The site is currently vacant and is generally well grassed with trees along the southern, eastern, and northern boundaries. The subsurface consists of fill material deposited as part of the rehabilitation works completed following closure of the former quarry to which the site is situated over. There are currently no structures on site and the need for a hazardous materials survey is not required.

## 5.17.2 Assessment

The NSW Waste Classification Guidelines (NSW, EPA 2014a) groups wastes that pose similar risks to the environment and human health, as defined in the *Protection of the Environment Operations Act 1997*. Waste streams and classifications expected to be generated during the operational phase of the developments as outlined in the OWMP:

- General solid waste (putrescible) – food and garden organics etc.
- General solid waste (non-putrescible) – Metals, Plastics, Paper, Cardboard etc.
- Potentially hazardous waste – chemical liquids, solid waste, batteries, printer cartridges, e-waste etc.

As there is no reference in Penrith Development Control Plan 2014 C5 Waste Management for waste strategies for schools, a desktop assessment of waste generated from similarly structured schools with a variety of student numbers to provide indicative waste volumes, was conducted. The following waste generation estimates were calculated as outlined in **Table 7** below.

**Table 7 Operational Waste Generation Streams and Estimated Volumes**

| Material Type | Weekly Vol. (L) | Bin Volume (L) | # Bins | Bin Size ($m^2$) |
|---|---|---|---|---|
| Paper Cardboard | 341 | 660 | 1 | 1.16 |
| Comingled | 382 | 660 | 1 | 1.16 |
| Soft Plastics | 369 | 660 | 1 | 1.16 |
| Organics | 68 | 120 | 1 | 0.27 |
| Return & Earn* | 41 | 240 | 1 | 0.43* |
| General | 505 | 660 | 1 | 1.16 |
| | | | Circulation Space | 6 |
| | | | **Total Area Required** | **16.7** |

*Return & Earn Recyclable waste should not be stored in the waste storage area due to the threat of theft and trespass. This is to be stored in a separate lockable, secure, and accessible area within the school grounds.

Areas for storage and collection of the applicable waste streams will be provided and marked out on a concrete waste pad. The waste pad area approved contains a minimum of 17$m^2$ to accommodate all bins and containers, for all applicable waste streams, for at least one collection cycle. The total area required for operation of the temporary school structures is a waste pad area of 11$m^2$.

## 5.17.3 Mitigation measures

It is anticipated that mobile garbage bins (MGBs) will be utilised within the school and a combination of MGBs suitable to use for waste streams and separation will be used. It is anticipated that staff, students and visitors will place general waste and recycling into small waste and recycling bins (paper and comingled) located in the offices, canteen, classrooms and open space playground. These small waste bins should be segregated as per the final waste streams. Waste will be then transported by cleaning contractors via the nominated egress corridors/pathways to the waste storage area and placed in the correct waste stream bins.

The western area of the carpark will remain as the waste collection point as shown in **Figure 5**. The appointed waste contractors will collect each waste stream from the loading bay at nominated times in accordance with the relevant waste contract using standard plant and equipment. The waste collection truck will schedule collection out of school hours to reduce any risk from the truck and bin movements to the school and lower the risk for surrounding residents.

Schools must use Contract 9698 in buy. NSW website. This contract is mandatory and covers waste management services (bins, collection, transport, processing, treatment and disposal). Waste streams include general waste, organic, grease trap, recycling, secure destruction and clinical.

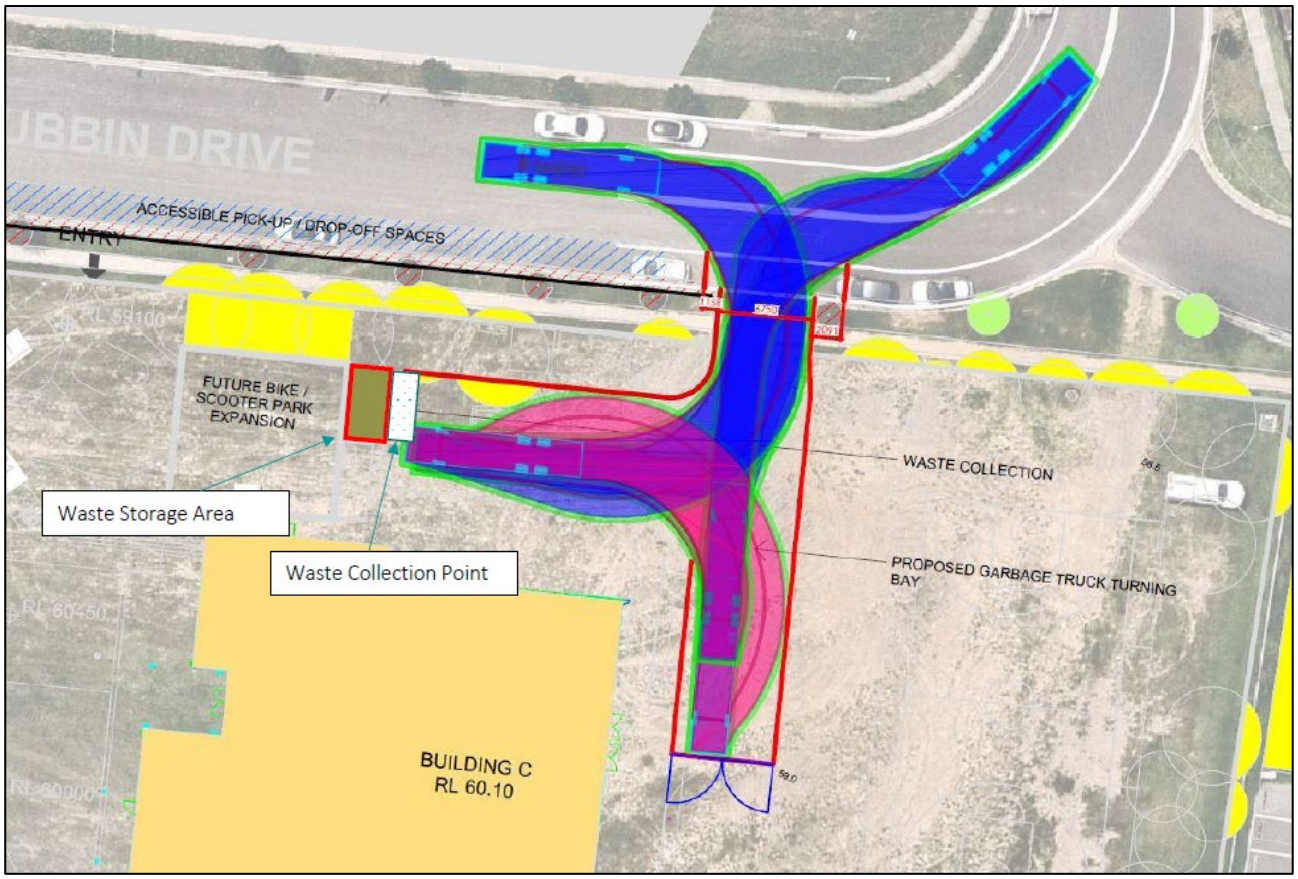


**Figure 5 Proposed waste storage area and swept paths**

## 5.18 Contamination

A Detailed Site Investigation (DSI) was prepared by JK Environments (JKE) to address Item 19 of the SEARs for the development as approved. The DSI included investigation of the temporary school site and mitigation measures as detailed within the EIS and response to submission documents remain relevant to the proposed modification.

It is noted that extensive earth works across the entire site (Lot 1663 DP1166869) has occurred and final surface levels have been formed. It is also noted that construction works that will be carried out during the operation of the Stage 1 area (Temporary School area including the permanent facilities of the Hall and other facilities within Building C, COLA and staff car park) will be confined to the activities of services and finishes, external landscaping and domain works and commissioning. Condition B24 required a Supplementary Asbestos Investigation Report to be prepared and to be provided to the Planning Secretary for information. Prior to construction commencing the Certifier for the project was satisfied that all unexpected asbestos containing material had been removed.

Having regard for the above additional mitigations measures in relation to contamination are not considered necessary. The unexpected finds protocol currently in place will be utilised during construction.

## 5.19 Aviation

The temporary school structures will consist of single-storey buildings located in the southeast corner of the site. The proposed maximum building height is approximately 67.75m AHD (63.750m AHD surface level plus 4m height building), with all plant and ancillary features captured within this height. Only mobile cranes will be used during construction. It is noted that the development as approved requires temporary crane activity that will reach a maximum height of 209.5m AHD during construction, a height required for 2 / 3 storey construction.

Construction and operation of the temporary school facilities will not penetrate the Outer Horizontal Surface of the Western Sydney Airport Obstacle Limitation Surfaces (OLS) which is set at 230.5m AHD. This surface

will not be penetrated either permanently by the building development, or temporarily by the four mobile construction cranes, meaning no controlled activity approval will be required.

Although no controlled activity approvals are required for the development to proceed, cranes that are 110m or more AGL do trigger the requirement to notify the Civil Aviation Safety Authority (CASA), which means the tallest of the four mobile cranes that will used during construction will meet the criteria.

It is concluded that no applications seeking aviation approvals for the building and associated cranes is required. The rationale for this is that the buildings and cranes will not penetrate any protected airspace or defined flight operational surfaces and therefore, will not adversely affect the safety, efficiency, or regularity of operations of aircraft (aeroplane and helicopters).

## 5.20 Accessibility

An Accessibility Management Statement and Strategy, prepared by NBRS, is contained in **Appendix L.** The Strategy adopted is based on standard practice with temporary schools usually provided under Exempt Development for students to have access to the commonly utilised areas and approximately 50% of homebases. In this case accessible elements of the proposed school will be:

- 3 x Homebases.
- 2 x Support Unit Homebases.
- Admin unit.
- Staff facilities unit.
- Library unit.
- Student and Staff toilet facilities.

Proposed arrangements for designated accessibility spaces and the library office are as follows.

- In the event that the school enrols a student or employs a staff member who uses a wheelchair or other types of mobility aid, that persons relevant activity will be conducted in one of 2 x Homebases, Admin unit, 1x bank of toilet facilities and canteen linked with elevated walkway and compliant ramp & handrail. An asphalt path at ground level, connected to the elevated walkway also provides an accessible path of travel to the central play area.
- In the event that the school employs a staff member who uses a wheelchair or other types of mobility aids and their primary activity is in the library space, then the school will provide alternative space or arrange for an electronic operated door to be installed to provide access to the office.

It is considered that the Accessibility Management Statement and Strategy adequately addresses accessibility issues for the temporary school facilities.

In accordance with the general requirements for equitable access under the *Disability Discrimination Act 1992* the proposed design of the temporary structures against the BCA's Deemed-to-Satisfy Provisions, an Access Assessment Report has been prepared and is contained in **Appendix M**. Due to the short duration of operation for the temporary school, and the raised nature of the demountable buildings, access to at least 50% of the homebases is required namely using external ramps and elevated walkways. Within the Accessibility Management Plan provided By NBRS, refer to **Appendix L**, the proposed temporary school facilities provide access to over 50% of the homebases via proposed external ramps and elevated covered walkways, including the administration block, toilet facilities, library, and canteen. Wide asphalt pathways will be provided at ground level on the site, connecting these ramps to gate entries. This is deemed to satisfy the requirements of the *Disability Discrimination Act 1992, Building Code of Australia 2019* (BCA2019) Volume 1 Amendment 1 – Part D3 and Clause F2.4, AS1428:2009, AS/NZS1428.4.1:2009, and AS/NZS2890.6:2009.

A BCA Assessment of the proposed temporary school has been prepared and is contained in **Appendix N**. The demountable buildings will comply or are not subject to compliance under a series of design specifications under the building's Architectural Design Certification. Any major design changes required under the BCA Assessment is detailed in **Table 8.**

**Table 8 BCA Assessment of temporary structures**

| BCA Reference | Design Requirement | Comment | Complies |
|---|---|---|---|
| Part C1 & Specification C1.1 | Fire Resistance and Stability | As the temporary buildings are Type C construction, no fire rated construction is required. | Yes |
| Part C2 | Compartmentation and Separation | Under Clause 2.2 of the BCA, the temporary buildings adhere to floor area and volume limits. | Yes |
| Part C3 | Protection of Openings | The temporary buildings are not required to have any protection of openings. | Yes |
| Section D | Occupant Access and Egress | Whilst BCA clause D1.2(d)(vi) requires two exits for any storey with more than 50 persons, this may not be deemed appropriate or necessary for temporary school buildings. For example, Homebases 1/2/3 and 4/5/6 will likely have over 50 persons however it is considered satisfactory for each homebase to have direct egress to open space in less than 20m. For the northern buildings (S1/S2;HB7/8/9 and Admin/Library) each homebase or area has direct egress to the external walkway in less than 20m and three exit points to open space to satisfy egress requirements of Part D1 of BCA.<br>Additional detail around treads, risers, landings, thresholds, balustrades and handrails are not available-however compliance will be ensured during construction.<br>Electrical distribution cupboards must be provided with smoke separation materials. | Yes/Will comply |
| Part D3 and Clause F2.4 | Access for people with disabilities | Over 50% of homebases are accessible via elevated walkways and external ramps, which are accessed via clearly defined, asphalt pathways at ground level. | Yes |
| Parts E1, E2 and E4 | Services and equipment | Whilst the buildings are in groupings with a floor area less than 500m2 and an onsite hydrant system is not required, the provision of street hydrant to the south on Forestwood Drive is available to assist FRNSW provide some level of coverage to the site if required. It is also anticipated the external hydrant system serving the permanent school site will be operational during operation of the temporary buildings, thereby allowing some level of coverage to the site if required. | Yes |
| Part F2 | Facilities in Class 3 to 9 buildings | Number of toilets are considered to satisfy Clause F2.3 and the requirements for ambulant and accessible facilities. The temporary buildings will have a population of 230 students and 25 full time staff. | Yes |
| Part F3 | Room Heights | Minimum heights are compliant. | Yes |
| Part F4 | Light and Ventilation | Classrooms are able to provide minimum required natural light and ventilation. Artificial lighting and mechanical ventilation may be required in the Administration Block and Library. | Yes/Will comply |

## 5.21 Site suitability

The suitability of the site for school uses was established via the approval of SSD 11070211. There are no known site conditions which would prevent the development including geotechnical conditions, contamination, flooding, biodiversity, bush fire and Aboriginal cultural heritage and historical archaeology.

The proposed modifications will not have any unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, noise and environmental impacts and can be managed in accordance with the updated mitigation measures provided within this report.

The proposed modification would not alter the nature of the approved development, such that it would become unsuitable for the site, as:

- The site is entirely suitable for the development of the proposal as it continues the approved use of the site as an educational establishment as identified within Schedule 1 of the SRD SEPP and Chapter 3 of the Transport and Infrastructure SEPP.
- The site is capable of accommodating the temporary school facilities with no significant additional adverse impacts during construction of Stage 2 works, or on the surrounding residential properties or the local road network.

The proposed modifications will not have any unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, noise and environmental impacts and can be managed in accordance with the updated mitigation measures provided within this report.

The site is therefore suitable for the proposed development.

## 5.22 Cumulative Impacts

Cumulative impacts are those impacts likely to arise from the interaction of the proposed development and associated operations with other significant projects and activities in the area. The impacts may be caused by both construction and operational activities and can result in a greater impact to the surrounding area than would be expected if each project was undertaken in isolation.

This assessment is in accordance with the requirement to consider “any cumulative environmental effect with other existing or likely future activities”.

The Penrith City Council DA Tracker and DPIE’s Major Projects website do not identify any completed, underway or proposed developments in the immediate vicinity of the project site at the time of writing, other than the approval of SSD 11070211. The design and assessment have taken into consideration construction of the permanent buildings during the operation of the temporary school facilities. development of this site.

The proposed modification has sought to avoid, minimise and mitigate potential impacts on environmental values within the site through a risk-based approach.

# 6 JUSTIFICATION OF MODIFICATION AND CONCLUSION

This Modification Report seeks approval for modifications to the approved SSD 11070211, pursuant to Section 4.55(2) of the EP&A Act to allow the construction and operation of a temporary school within the boundaries of the approved school site. In summary, the proposed modifications are considered appropriate as:

- The enrolled students will be located within a secure part of the site and away from the construction of buildings that are yet to be completed and away from land and buildings not yet operational.
- It is unlikely there will be unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, noise and environmental impact and can be managed in accordance with the updated mitigation measures provided within this report.
- The development resulting from the proposed modifications are “substantially the same” as the approved development.

The modification affecting SSD 11070211 is considered to be acceptable under the relevant considerations of section 4.15 of the EP&A Act, and as such it is recommended that approval be granted to the proposal as modified.

# Appendix A
# Updated Project Description

A Government election commitment in 2012 to build 190 new schools across the state, was implemented with the aim to address the issues of overcrowding and ensuring all students are given equal access to quality educational opportunities. School Infrastructure NSW has committed to building a new primary school at Mulgoa Rise, one of 4 new schools in the Glenmore Park Primary School Community Group (SCG).

The New Primary School in Mulgoa Rise is designed and will be built to significantly improve educational outcomes and address the capacity shortfall across the area for an approximate 414 students initially, with the expansion to 1000 as demand grows.

The site is a cleared rectangular greenfield site in a relatively new residential subdivision in Glenmore Park, known as Mulgoa Rise. The site is surrounded by a vacant site (to be a mixed-use commercial and residential precinct) to the north, Council playing fields to the east, and low-density residential dwellings to the west and south. The site sits on land above what was previously a quarry.

The site layout for the new school will see the buildings arranged along Deerubbin Drive and Darug Avenue, playground, shared sensory play area and assembly area within the site behind these buildings and a games court and staff car park on the eastern edge of the site. The school buildings have been designed with respect to the new educational standard of the Design for Manufacture and Assembly (DFMA) method of construction.

The school has been designed to facilitate future expansions should additional demand materialise. Considerations of investment options led to the following:

- Design of a school to facilitate a Core 21 school with 18 learning spaces (LS) + 2 support classes, with the selected core facilities at Core 35, for the Hall, Library, Staff facilities and Admin. This will accommodate an initial 414 students.
- A future development on the site, that does not form part of this application and not considered at this time, will complete the build to a Core 35, resulting in up to 44 learning spaces and 4 support classes.

The New Primary School in Mulgoa Rise incorporates Best Practice Pedagogy for the learning spaces, these will be fit-for-purpose, incorporate the use of technology and providing flexibility in design to allow for the delivery of modern pedagogies that are focused on creating learning environments that students may encounter in the workforce, where there is an enhanced focus on self-direction, self-reflection, evaluation, and collaboration.

Glenmore Park and surrounding areas are undergoing significant housing development and population growth resulting from large infrastructure projects (Western Sydney Airport as an example). The increasing number of students have four schools located on the northern border of Glenmore Park, leaving more than a third having to travel larger distances to school from outside the catchment areas. The New Primary School in Mulgoa Rise is closer to the current and projected demand growth. It will reduce travel time for students and parents and will support the use of active movement transport such as walking and cycling.

The New Primary School in Mulgoa Rise provides the surrounding community access to the school's core facilities - the communal hall, the library and the outdoor sports court. The school also provides Outside School Hours Care (OSHC) services to assist dual-working families with parents commuting and working long hours.

A general overview of the development as approved includes the following:

- Construction of school buildings ranging from 1 to 2/3 storeys, including:
  - General and special support learning areas
  - Staff rooms and administration office
  - Hall
  - Library
  - Out of school hours care facility
- Landscaping works
- Parking, pick-up and set-down zones, bus zones
- Waste and service vehicle access and plant areas
- Associated works including school identification signage, pedestrian crossing infrastructure, on-site infrastructure, and utilities.

***Temporary school facilities***

- Erection of a series of demountable structures on the site including:
  - 9 General Learning Spaces.
  - 2 Support Unit Learning Spaces.
  - 1 Administration Block.
  - 1 Staff Facilities Block.
  - 1 Library Block.
  - 2 Toilet Block Facilities.
  - 1 Accessible Toilet Block facility.
  - Covered walkways.
- Establishment of an outdoor play area on the temporary school site area.
- Security fencing around the perimeter of the temporary school site area.
- Operation of the temporary school from 12th December 2022, catering for 230 students and 25 staff, to enable the school to open on Day 1 of Term 1 2023. Operation will include the access and use of the following permanent facilities which were approved as part of the original consent:
  - Access and use of the Hall, COLA, bike racks, end of trip facilities and sports court, which were approved as part of the original consent and will be completed prior to 12th December 2022.
  - Access and use of the waste storage area and staff car park which will be complete and operational prior to 12th December 2022.
  - Access and use of designated pick up and drop off on Deerubbin Drive (to the north) and Forestwood Drive.
- Removal of the temporary school demountable buildings within 24 months from the commencement of operation of the temporary school area.

# Appendix B
## Additional mitigation measures

# ADDITIONAL MITIGATION MEASURES

| Item | Mitigation Measures |
|---|---|
| **Trees** | • A site-specific Tree Protection Plan (TPP) is prepared to guide the construction process, relation to existing street trees on Forestwood Drive.<br>• Tree protection zones are recommended for all trees within the site that are to be retained.<br>• Tree protection fencing is to be utilised to protect trees to be retained during construction.<br>• If trees display signs of stress or deterioration, remedial action shall be taken to improve the health of the impacted tree. |
| **Transport and Accessibility** | • An amended Construction Traffic Management Plan is to be prepared detailing the proposed additional construction vehicle access off Forestwood Drive and traffic control, including gate control and "No Parking" signs at the Forestwood Drive / Darug Avenue intersection. |
| **Noise and Vibration** | Impacts of construction activities of the permanent facilities on the temporary school<br>• External doors and windows of the temporary buildings should remain closed while construction works within the Stage 2 are undertaken.<br>• For work to be undertaken within 40m of the temporary school premises, these should be coordinated with school staff so these are only conducted outside operational times of temporary school facilities. |
| Flooding | • All buildings will need to comply with Penrith City Council's floodplain management policy.<br>• Buildings HB4 and HB5 will require a minimum floor level of RL 63.30 m AHD.<br>• The floor level of HB6 building and the adjacent lavatory should be constructed at RL 61.70m AHD.<br>• An Operational Flood Emergency Response Plan for the temporary school is to be prepared. |

# Appendix C
## Updated architectural plans

# Appendix D
# Landscape Design Drawings

# Appendix E
## Traffic Statement

# Appendix F
# Acoustic Impact Assessment Report

# Appendix G
## Acoustic Advice regading impact noise intrusion from construction works for permanent facilities

# Appendix H
## Combined Services Plan

# Appendix I
# Flood and Stormwater Advice Statement

# Appendix J
# Construction Waste Management Plan

# Appendix K
# Operational Waste Management Plan

# Appendix L
# Accessibility Management Statement

# Appendix M
# Access Assessment Report

# Appendix N
# BCA Assessment