

Review of Environmental Factors

Gillieston Public School Redevelopment and New Public Preschool

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Acknowledgement of Country

The NSW Department of Education acknowledges the traditional custodians of the land on which the Gillieston Public School redevelopment and new public preschool is proposed.

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

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

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


Declaration

This Review of Environmental Factors (REF) has been prepared by Willowtree Planning on behalf of the NSW Department of Education (Department) and assesses the potential environmental impacts which could arise from redevelopment and expansion of the educational establishment at Gillieston Public School located at 100 Ryans Road and 19 Northview Avenue, Gillieston Heights.

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

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

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

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Appendices

Appendix	Name
1	Mitigation Measures prepared by Willowtree Planning Version 7 dated 15/05/25
2	Survey prepared by ADW Johnson Version C dated 18/10/24
3	Not utilised
4	Not utilised
5	Survey Report prepared by ADW Johnson Version F dated 14/01/25
6	Not utilised
7	Section 10.7 Planning Certificates dated 13/01/25
8	Preliminary Construction Management Plan Version 6 dated 13/01/25
9	Staging Plans Issue 01 dated January 2025
10	Architectural Drawings prepared by SHAC Revision D dated January 2025
11	Embodied Emission Report prepared by Arcadis Version 03 dated 15/01/25
12	Landscape Drawings prepared by Terres Revision Q dated 14/01/225
13	Architectural Design Report prepared by SHAC Version E Dated 13/01/25
14	Sustainable Development Plan prepared by Arcadis Version 05 dated 15/01/25
15	Civil Design Report prepared by ACOR Version E dated 15/01/25
16	Preliminary Desktop Site Investigation prepared by Stantec Version 4 dated 24/01/25
17	Detailed Site Investigation prepared by Stantec Version 4 dated 24/01/25
18	Remedial Action Plan prepared by Stantec Version 6 dated 24/01/25
19	Interim Audit Advice prepared by Ramboll dated 23/01/25
20	Arborist Report prepared by ArbPro dated 15/01/25
21	Waste Management Plan prepared by MRA Consulting Group Version 1 dated 21/01/25
22	Aboriginal Cultural Heritage Assessment Report prepared by EMM Version 4 dated 16/01/25
23	Bushfire Report prepared by Ecological Australia Version 3 dated 15/01/25
24	Biodiversity Report prepared by GHD dated 23/10/24
25	Heritage Report prepared by Umwelt Version 08 dated 15/01/25
26	Mine Report prepared by Stantec Version 3 dated 15/01/25
27	Net Zero Emissions Report prepared by Arcadis Version 2 dated 15/01/25
28	Signage Assessment prepared by Willowtree Planning Version 2 dated 11/12/24
29	Flood Report prepared by ACOR Version 5 dated 15/04/25

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30	Social Impact Assessment prepared by Willowtree Communications Version 3 dated 17/01/25
31	Stakeholder Consultation Summary prepared by Johnstaff Version 2 dated 23/01/25
32	Traffic and Transport Impact Assessment prepared by Bitzios Version 5 dated 17/01/25
33	School Transport Plan prepared by Bitzios Version 4 dated 17/01/25
34	Noise And Vibration Impact Assessment prepared by RWDI Version E dated 15/01/25
35	Geotechnical Report prepared by Stantec Version 4 dated 17/01/25
36	Land Use Conflict Risk Assessment prepared by Stantec Version 1 dated 24/01/25
37	Groundwater, Surface Water and Salinity Impact Assessment prepared by Stantec Version 1 dated 24/01/25
38	Visual Impact Assessment prepared by SHAC Version A dated 04/10/24
39	Not utilised
40	Childcare Assessment Table prepared by Willowtree Planning Version 2 dated 23/01/25
41	Accessibility Assessment Report prepared by City Plan Version 4 dated 16/01/25
42	BCA Report prepared by City Plan Version 7 dated 16/01/25
43	Mechanical and Electrical Schematic Design Report prepared by Arcadis Version 4 dated 16/01/25
44	Hunter Water Hydraulic Design Assessment Letter dated 11/12/23
45	Certificate of Design: Hydraulic Services prepared by ADW Johnson dated 01/12/23
46	Preliminary Desktop Review – Geotechnical prepared by Stantec Version 3 dated 17/01/25
47	Design Review Summary prepared by SHAC undated
48	National Quality Framework Compliance Assessment prepared by SHAC
49	Public Exhibition Responses (Agencies) – consolidated by Johnstaff dated 22/04/25

Abbreviations

Abbreviation	Description
ACHAR	Aboriginal Cultural Assessment Report
AHIMS	Aboriginal Heritage Information System
ASS	Acid Sulfate Soils
AHD	Australian Height Datum
AHIP	Aboriginal Heritage Impact Permit
AHIMS	Aboriginal Heritage Information Management System
APZ	Asset Protection Zone
BAL	Bushfire Attack Level
BC Act 2016	<i>Biodiversity Conservation Act 2016</i>
BC Regulation	<i>Biodiversity Conservation Regulation 2017</i>
BCA	<i>Building Code of Australia</i>

Abbreviation	Description
BDAR	Biodiversity Development Assessment Report
Biodiversity and Conservation SEPP	<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>
BFPL	Bushfire Prone Land
BPA	Bushfire Planning Area
CCPG	<i>Child Care Planning Guideline</i>
CEMP	Construction Environmental Management Plan
CNVMP	Construction Noise and Vibration Management Plan
COLA	Covered Outdoor Learning Area
CPTED	Crime Prevention Through Environmental Design
CTEMP	Construction Traffic and Environmental Management Plan
CWC	Connecting with Country
DSI	Detailed Site Investigation
DoE	NSW Department of Education
DPHI	Department of Planning, Housing and Infrastructure
EFSG	<i>Educational Facilities Standards and Guidelines</i>
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
FTE Staff	Fulltime Equivalent Staff
GIPA	<i>Government Information (Public Access) Act 2009</i>
GLAs	General Learning Areas
GLS	General Learning Spaces
GPT	Gross Pollutant Trap
GSWSIA	<i>Groundwater, Surface Water and Salinity Impact Assessment</i>
Ha	Hectares
HIS	Heritage Impact Statement
IAA	Interim Audit Advice
KnD facility	<i>Kiss and Drop Facility</i>
LOS	Level of Service
LEP	Local Environmental Plan
LGA	Local Government Area

Abbreviation	Description
LUCRA	Land Use Conflict Risk Assessment Report
MCC	Maitland City Council
MDCP 2011	<i>Maitland Development Control Plan 2011</i>
MLEP 2011	<i>Maitland Local Environmental Plan 2011</i>
Maitland LSPS	Maitland Local Strategic Planning Statement
MNES	Matters of National Environmental Significance
NCC	<i>National Construction Code</i>
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NPW Regulation	<i>National Parks and Wildlife Regulation 2009</i>
NPWS	National Parks and Wildlife Service (part of EES)
NSW RFS	NSW Rural Fire Service
NVIA	Noise and Vibration Impact Assessment
OSD	Onsite Detention
OSHC	Outside School Hours Care
PCEMP	Preliminary Construction Environmental Management Plan
PCMP	Preliminary Construction Management Plan
Planning Systems SEPP	<i>State Environmental Planning Policy (Planning Systems) 2021</i>
PMF	Probable Maximum Flood
Proponent	Department of Education
RAP	Remedial Action Plan
REF	Review of Environmental Factors
Resilience and Hazards SEPP	<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>
Roads Act	<i>Roads Act 1993</i>
SA NSW	Subsidence Advisory NSW
SIA	Social Impact Assessment
SCPP DoE	<i>Stakeholder and Community participation plan, for new schools and major school upgrade projects undertaken under Division 5.1 of the EP&A Act 1979 (Department of Education, October 2024)</i>
SCPP DPHI	<i>Stakeholder and community participation plan for new health services facilities and schools (Department of Planning Housing and Infrastructure (DPHI), October 2024)</i>
Sustainable Buildings SEPP	<i>State Environmental Planning Policy (Sustainable Buildings) 2022</i>
SEPP	State Environmental Planning Policy
TI SEPP	<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>
TIA	Transport Impact Assessment
TfNSW	Transport for NSW
VIA	Visual Impact Analysis
WC	Water Closet

Abbreviation	Description
WM Act	<i>Water Management Act 2000</i>
WMP	Waste Management Plan

Executive Summary

The Activity

The proposed activity seeks to redevelop and expand Gillieston Public School to undertake the work described below:

- Demolition of select existing structures;
- Site preparation works, including tree clearing;
- Increase the capacity of the School from approximately 339 to 736 students; and
- Construction of:
 - Three (3) storey learning building to contain:
 - 32 general learning spaces and support hubs; and
 - administration and staff hubs.
 - one (1) storey hall, canteen and outside school hours care (OSHC)
 - library
 - one (1) storey public preschool (60 spaces)
 - covered Outdoor Learning Areas (COLAs)
 - outdoor play areas, including games courts and yarning circle
 - new at grade parking
 - extension of the existing drop-off / pick-up area and bus bay
 - realignment of the existing fencing
 - new substation
 - associated stormwater and sewer infrastructure
 - associated landscaping
 - pedestrian and associated road upgrade works to adjoining roads

The school population will increase from 339 students and 35 fulltime equivalent staff (FTE) up to 736 students, 50 FTE staff and preschool to accommodate up to 60 children and up to 10 staff (the activity).

The existing school is located at (100 Ryans Road and 19 Northview Street, Gillieston Heights, known respectively as Lot 51 DP 1162489 and Part Lot 2 DP 1308605). The existing school occupies the western side of Lot 51 DP 1162489, while the eastern side is mostly undeveloped, with a drainage easement at the northeastern corner. The NSW Department of Education is in the process of acquiring 19 Northview Street (Lot 2 DP 1308605, increasing the Site size to 23,425 m². The Site has a 12m fall from east to west.

The redevelopment supports Gillieston Heights' growing population, addressing the lack of schools in the Maitland LGA. The expanded facility will accommodate an additional 397 students, providing much-needed capacity for the expanding community. The scale of the proposed built form is suitable within the transitioning location of Gillieston Heights.

Planning Pathway

The activity involves works by the Department (a public authority) within the boundaries of the existing Gillieston Public School. Accordingly, pursuant to Section 3.37 of the TI SEPP. The new public preschool and part of the eastern car park will be on land that does not contain an existing or approved school, therefore the planning pathway for these works will be pursuant to Section 3.37A of the TI SEPP. The provision of a new substation will be pursuant to Section 2.45 of the TI SEPP whilst off site works relating to roadworks and stormwater will be pursuant to Section

2.109 and 2.137 of the TI SEPP, respectively. All of the proposed works are classified as an activity which may be carried out without consent.

Therefore, the activity is considered an 'activity' for the purposes of Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and is subject to an environmental assessment. For the purposes of this activity, the Department is the proponent and the determining authority and the required environmental assessment is in the form of a Review of Environmental Factors (REF). The REF has been prepared in the accordance with the *Guidelines for Division 5.1 Assessments* (DPE, June 2022) and the *Guidelines for Division 5.1 assessments - consideration of environmental factors for hospital and school activities Addendum* (DPHI, October 2024).

Consultation

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

Comments received will be carefully considered and responded to.

In addition, non-statutory consultation has been undertaken with a range of community and government stakeholders throughout the design process.

Environmental Impacts

The Site is positioned over a former mine, both mine and geotechnical reports confirm that construction can proceed with appropriate mitigation measures. The Site also faces localised flooding in the northeastern corner, where the 3-storey main learning building will cantilever over the easement pending its extinguishment or consent from Maitland City Council (MCC). Development on the easement cannot proceed without these approvals, but mitigation measures will manage this phase.

Contamination reports found high levels of lead and zinc under and near some existing school buildings on the western side of the Site. A Remedial Action Plan (RAP) and Interim Audit Advice confirm that the Site can be remediated, with the potential need for further investigations and a revised RAP to be prepared. Remediation will involve either removal of contaminants or on-site encapsulation, requiring a Long-Term Environmental Management Plan if the latter is chosen.

Although the Site is mapped as bushfire-prone, recent greenfield developments have altered its classification. Once asset protection zones (APZs) are registered on adjoining properties to the east, northeast and north, an application will be made to NSW RFS to update the bushfire mapping, removing the bushfire-prone classification and allowing the activity to proceed without the need for a Section 100B bushfire safety authority.

The activity will increase the Site's bulk and scale, with a three-storey main learning building along the northern boundary (Gillieston Road), stepping down to a one-storey hall and preschool along Northview Street. This design minimises overshadowing and maintains residential scale along Northview Street. The architecture will reflect modern learning environments and connect with the land's cultural significance. The buildings will not overlook neighbouring properties, with landscaping, appropriate separation and orientation protecting privacy.

The internal layout of the main learning building promotes natural surveillance, with general learning areas surrounding communal spaces and corridors. The hall connects to the COLA, and the preschool offers adequate space for up to 60 children and up to 10 staff, with outdoor areas separated by planter beds for privacy.

Other impacts have been considered as detailed in this REF.

Justification and Conclusion

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

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

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

1. Introduction

The NSW Department of Education (the Department) proposes to redevelop and expand Gillieston Public School to undertake the work described below:

- Demolition of select existing structures;
- Site preparation works, including tree clearing;
- Increase the capacity of the School from approximately 339 to 736 students; and
- Construction of:
 - Three (3) storey learning building to contain:
 - 32 general learning spaces and support hubs; and
 - administration and staff hubs.
 - one (1) storey hall, canteen and out of school hours care
 - library
 - one (1) storey public preschool (60 spaces)
 - covered Outdoor Learning Areas (COLAs)
 - outdoor play areas, including games courts and yarning circle
 - new at grade parking
 - extension of the existing drop-off / pick-up area and bus bay
 - realignment of the existing fencing
 - new substation
 - associated stormwater and sewer infrastructure
 - associated landscaping
 - pedestrian and associated road upgrade works to adjoining roads

The school population will increase from 339 students and 35 fulltime equivalent staff (FTE) up to 736 students, 50 FTE staff and preschool to accommodate up to 60 children and up to 10 staff (the activity) at Gillieston Public School located at 100 Ryans Road and 19 Northview Street, Gillieston Heights known respectively as Lot 52 DP 1162489 and Lot 2 DP 1308605 (the Site).

The suburb of Gillieston Heights is transitioning from rural to residential and significant growth is anticipated and will see an increasing number of families moving into the suburb which is positioned within a greenfield release corridor. The existing school caters for 339 students and services a catchment area, which includes Gillieston Heights in Maitland LGA and extends south to include parts of the greenfield residential area of Cliftleigh in Cessnock LGA. The redevelopment is required to respond to the expected growth in this catchment, noting that the existing school relies on the use of demountable classrooms. The redevelopment will provide for a modern educational establishment that will service the growing population.

This Review of Environmental Factors (REF) has been prepared by Willowtree Planning on behalf of the Department to determine the environmental impacts of the proposed staged redevelopment of Gillieston Public School and new public preschool at 100 Ryans Road and 19 Northview Street, Gillieston Heights. For the purposes of these works, the Department is the proponent and the determining authority under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

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

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

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

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

2. Proposed Activity

2.1 The Site

The Site is identified within Table 1, containing the following land holdings:

Table 1: Legal Site Description and Land Size

Site Address	Legal Description(s)	Land Area (approx.)
100 Ryans Road, Gillieston Heights	Lot 51 DP 1162489	20,640 m ²
19 Northview Street, Gillieston Heights	Lot 2 DP 1308605	2,785 m ²
Total Site Area (By Title)		23,425 m ² (2.342 ha)

The Site comprises two lots each being irregular in shape, however, when joined together create a more rectangular lot with a curve along the southern boundary. The Site has a northern frontage of 194.525m to Gillieston Road, a 116.34m western frontage to Ryans Road and 190.02m southern frontage to Northview Street. The Site has an area of 23,425 m² (2.342 ha), refer to the survey at [Appendix 2](#).

Table 2 identifies the land on which the proposed works are located and the respective (current) landowners.

Table 2: Land on which the proposed works are located and landowner

Land	Owner	Works
Lot 51 DP 1162489 (being existing school boundary)	Minister for Education and Early Learning	<ul style="list-style-type: none"> • Demolition of select existing structures; • Site preparation works, including tree clearing; • Increase the capacity of the School from approximately 339 to 736 students; and • Construction of: <ul style="list-style-type: none"> ○ Three (3) storey learning building to contain: ○ 32 general learning spaces (GLS) and support hubs; and ○ administration and staff hubs. ○ one (1) storey hall, canteen and out of school hours care ○ library ○ part of one (1) storey public preschool (60 spaces) ○ covered Outdoor Learning Areas (COLAs) ○ outdoor play areas, including games courts and yarning circle ○ new at grade parking ○ extension of the existing drop-off / pick-up area and bus bay ○ realignment of the existing fencing ○ new substation

Land	Owner	Works
		<ul style="list-style-type: none"> ○ associated stormwater and sewer infrastructure ○ associated landscaping
Lot 2 DP 1308605 (being new land)	UPG 400 Pty Ltd	<ul style="list-style-type: none"> • Construction of at grade parking • Part of preschool building and car park • Some fencing/associated landscaping • Part driveway access to the Site
Gillieston Road, Northview Street and Ryans Road reserves	Maitland City Council	<p>Associated off-site infrastructure works to support the school including:</p> <ul style="list-style-type: none"> • Realigned footpath along Northview Street adjacent to the new kiss and drop area • 'kiss and drop' for four (4) and queuing area for a further eight (8) cars along northern side of Northview Street • Two new vehicular crossings, on Northview Street and Gillieston Road • New bus bay along southern side of Gillieston Road; • Partial footpath along Gillieston Road between the vehicular crossing and western end of the new bus bay • Wombat pedestrian crossing on Ryans Road • Pedestrian crossing on Northview Street.
Lot 1 DP986279 Lot 213 DP1186997	UPG 400 Pty Ltd	<p>Off-site Stormwater Works:</p> <ul style="list-style-type: none"> • new culvert under Gillieston Road to convey upstream stormwater • local regrading of the existing surface levels is required to direct upstream flows to the culvert entrance. • Construction of a swale to divert water to temporary detention basin to the north of the Site. • Construction of temporary basin with outlet pipes and spillway crest to hold lost detention storage from the Site and surrounding catchment area.

Owners consent for works within Lot 51 DP 1162489 and Lot 2 DP 1308605 has been provided with lodgement of this REF. Works within Gillieston Road, Northview Street and Ryans Road will require a Section 138 Approval prior to commencement of any works within the Council owned Land. Refer to Figure 1 and Figure 2, which illustrate the Site context and surrounding area.

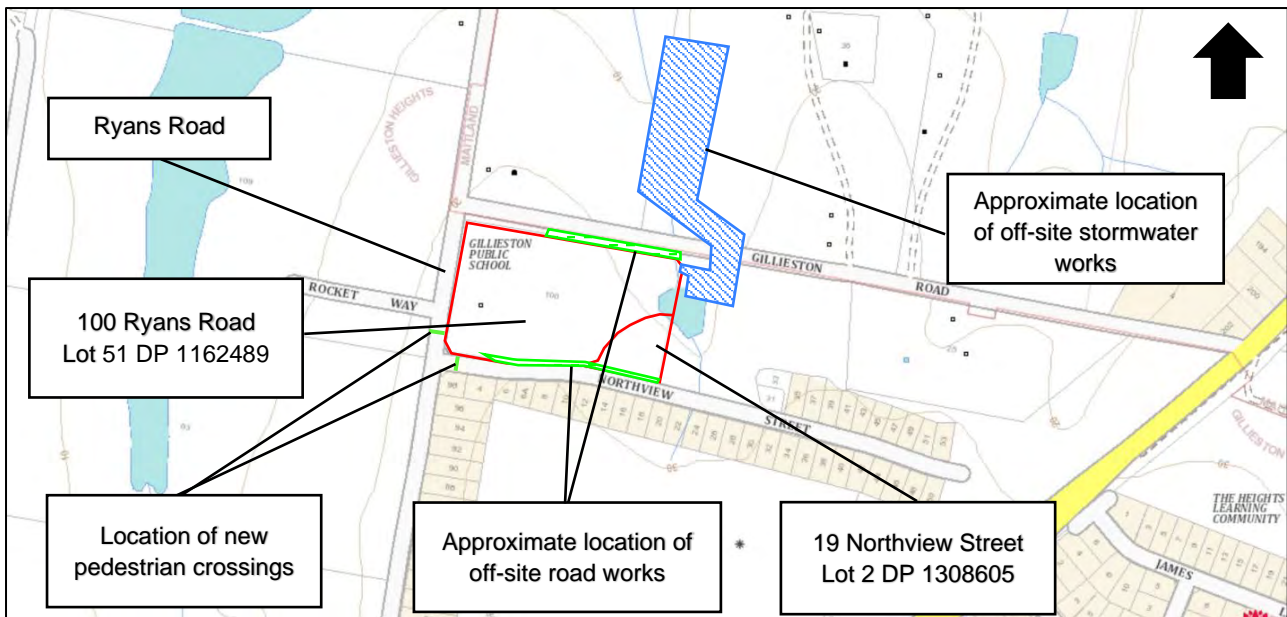


Figure 1. Cadastral Map (Source: SIX Maps, 2024)



Figure 2. Aerial Map (Source: Near Map, 2024)

In its existing state, the Site comprises the existing Gillieston Public School. Existing school buildings are primarily located in the west portion of the Site with a large area of open space situated in the eastern portion. There are limited permanent structures located on the subject site with fourteen (14) existing demountable classrooms and buildings currently occupying the Site. Permanent buildings consist of the Learning Centre (s170 heritage listed building), Main Administration Building, Library and GLS building located in the centre of the Site, refer to Figure 3.



Figure 3: Existing Site Plan (Source: SHAC, 2024)

Existing car parking is provided in the northwestern corner of the Site, within the front setback of the existing Learning Centre, and is accessed via Gillieston Road for staff. Pedestrian access is available via the main entrance from Gillieston Road and via separate pedestrian-only access gates on Northview Street and Ryans Road.

The Site contains the following existing improvements:

- Learning centre within the original 1897 (former) school accommodation building
- 14 demountable classrooms and buildings
- 1 permanent classroom
- Library building
- COLA
- 3 toilet blocks
- 2 sheds
- Awning and play equipment
- Shade awning over sandpit
- Pathways
- Carpark containing 9 car spaces

The existing school Site (Lot 51 DP 1162489) and improvements are shown in Figure 3 , along with the land known as Lot 2 DP 1308605, which will be acquired by the Department. All works undertaken within the existing school boundary will be assessed under section 3.37(1) of the TI SEPP, while the new preschool, car parking, fencing and landscaping is proposed within Lot 2 DP 1308605 and will be assessed under Section 3.37A of the TI SEPP as identified below in Figure 4.

The provision of off-site road works and stormwater works will be assessed under Section 2.109, Section and Section 2.137(1) of the TI SEPP, respectively. Whilst the new substation will be assessed under Section 2.45 of the TI SEPP.

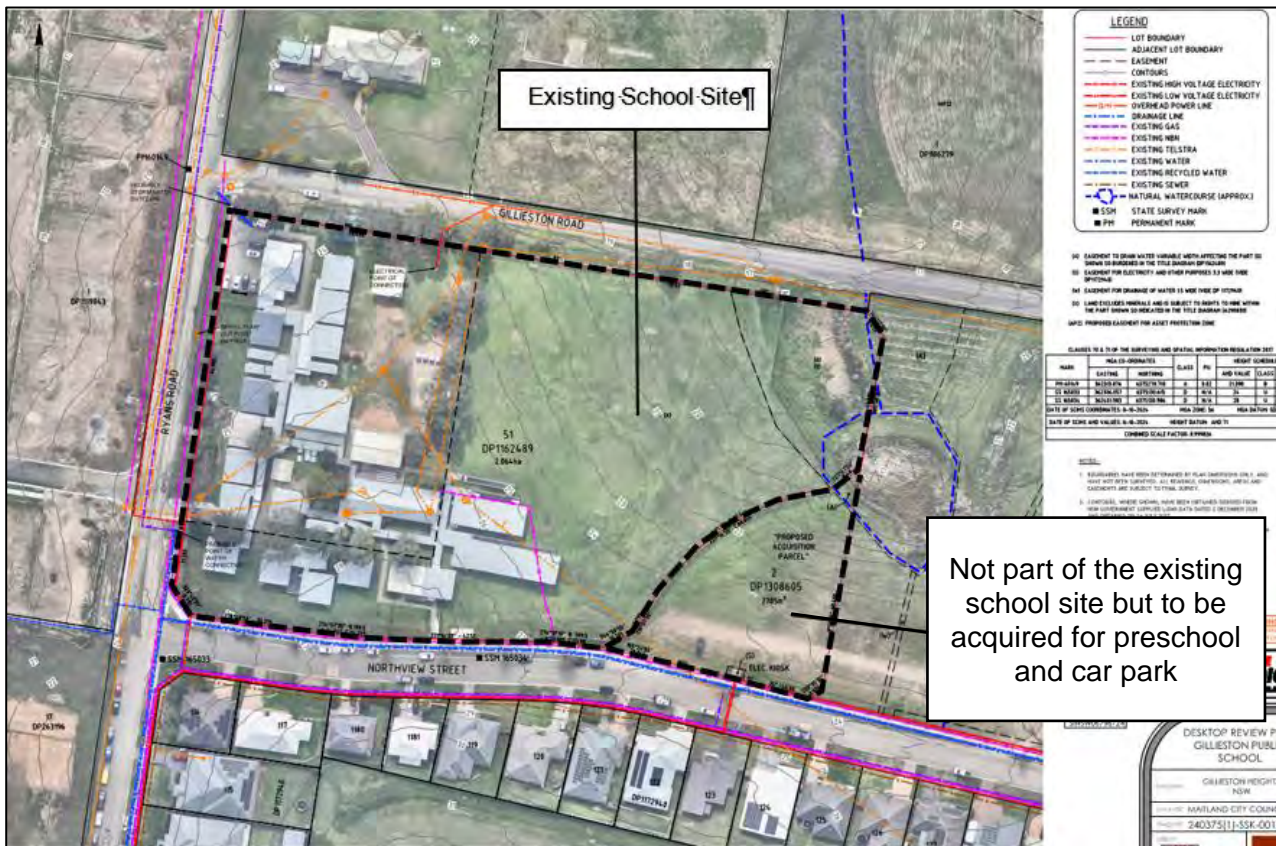


Figure 4: Survey and Existing Site Plan (Source: ADW Johnson, 2024)

The Gillieston Public School Site is located around 10 km northeast of Kurri Kurri, 3 km south of Maitland and is in the Maitland Local Government Area (LGA). The Site is approximately 500m west of Cessnock Road and approximately 30 km northwest of Newcastle, in the upper Hunter Valley of NSW.

Gillieston Public School is surrounded by many developing housing estates, such as Saddlers Ridge, Gillieston Grove, Wallis Creek, Darcy's Peak and Cliftleigh, as well as the older, well-established area of Gillieston Heights.

The Site is located in Wonnarua Country with the Wonnarua people being the traditional custodians of Boun – the 'place of the Bittern' which is today known as Maitland and is within the Mindaribba Local Aboriginal Land Council area.

The school was established in 1858 and was originally known as Fishery Creek School until 1893. The area is currently undergoing a significant transformation from rural to urban, which commenced in the early 2000s. Housing development continues and is underway to the west and south of the Site, a DA has been lodged (**DA/2019/278**) for subdivision of the land to create 175 residential lots over two stages with associated site works and infrastructure on the UPG 400 Pty Ltd owned land to the east, northeast and north of the Site, a copy of the current development application (DA) can be found within the Surveying Report (see Appendix G) at **Appendix 5**.

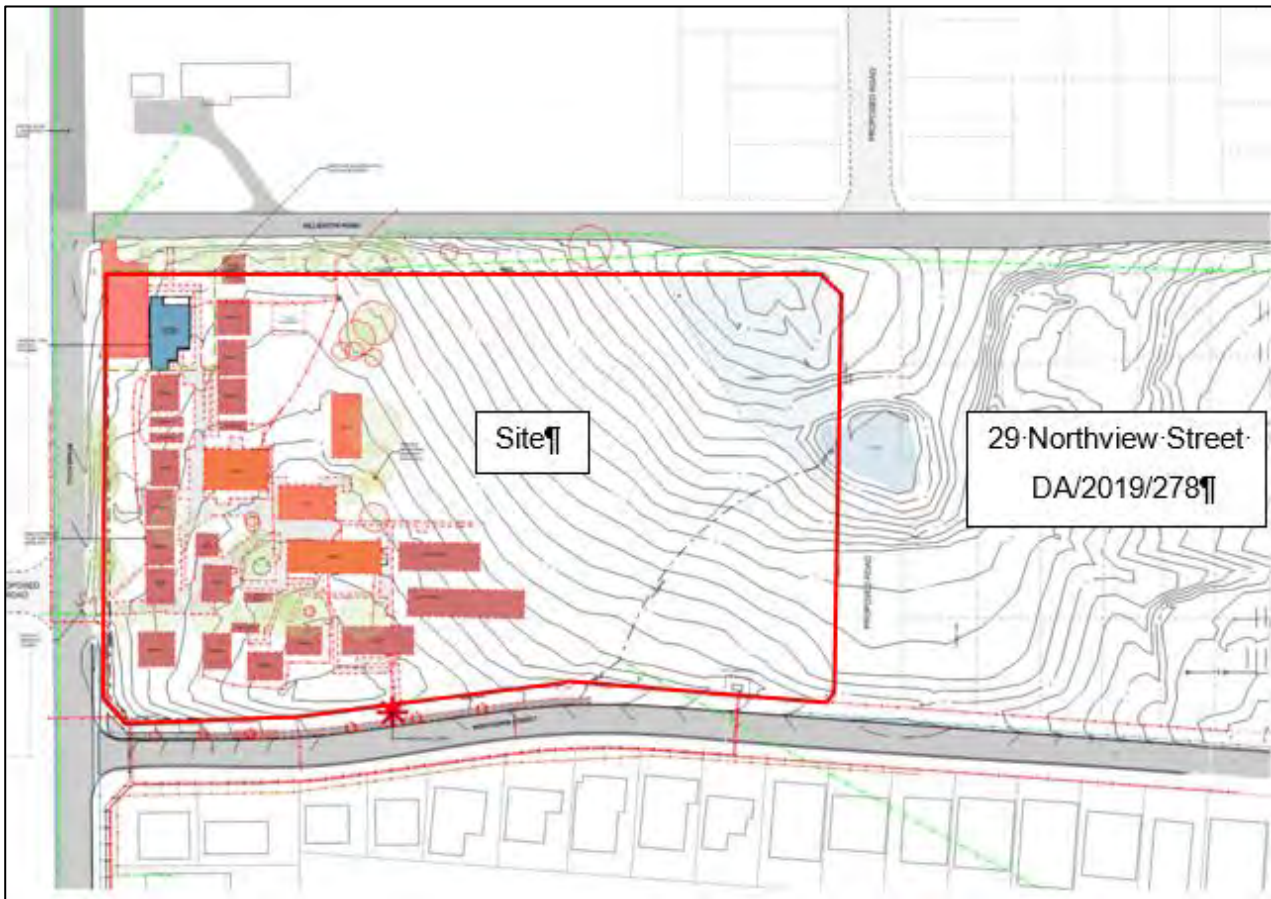


Figure 5: Site in Relation to DA/2019/278

The school redevelopment will serve the projected growth in the Central Maitland release area corridor along Cessnock Road, which, when fully developed, will link urban areas of Kurri Kurri and Maitland.

The immediately surrounding context exhibits a character of low density residential and agricultural lands with many new residential subdivisions currently being developed, Figure 4 illustrates the transitional nature of the locality which is intensifying from rural to residential. The proposed expansion of the Site will support the needs of the increasing residents within the surrounding school catchment area.

The Site exhibits frontage to three (3) local roads which facilitate local connectivity with a local school bus route providing access from the catchment area. The existing roads are described in **Table 3** below:

Table 3: Surrounding Roads

Road Name	Jurisdiction	Hierarchy	Lanes	Divided	Posted Speed
Northview Street	Council	Local	2	No	50km/h
Ryans Road	Council	Local	2	No	50km/h 40km/h (school peaks)
Gillieston Road	Council	Local	2	No	50km/h 40km/h (school peaks)

Northview Street contains kerb and gutter with a footpath along the northern alignment adjacent to the school boundary and this continues for a small section around the southwestern corner, whilst the remainder of the street frontages are not yet improved with drainage and footpaths.

The northeastern corner of the Site is burdened by an easement to drain water which benefits Maitland City Council, the location of the easement is outlined in a red broken line in Figure 6 below.

The department have designed the building to cantilever over the easement to ensure no works impede Maitland City Council's right to drain water across the land (refer to advice in [Appendix 6](#)), no works will be undertaken on the easement until consent is received from Maitland City Council (MCC) or the easement is extinguished. MCC will be advised as part of the exhibition period of the intention to cantilever over the easement, with no works to occur until a resolution between the Department and MCC has been reached to undertake alternative stormwater works to enable extinguishment of the easement or MCC issues consent to build over the easement.

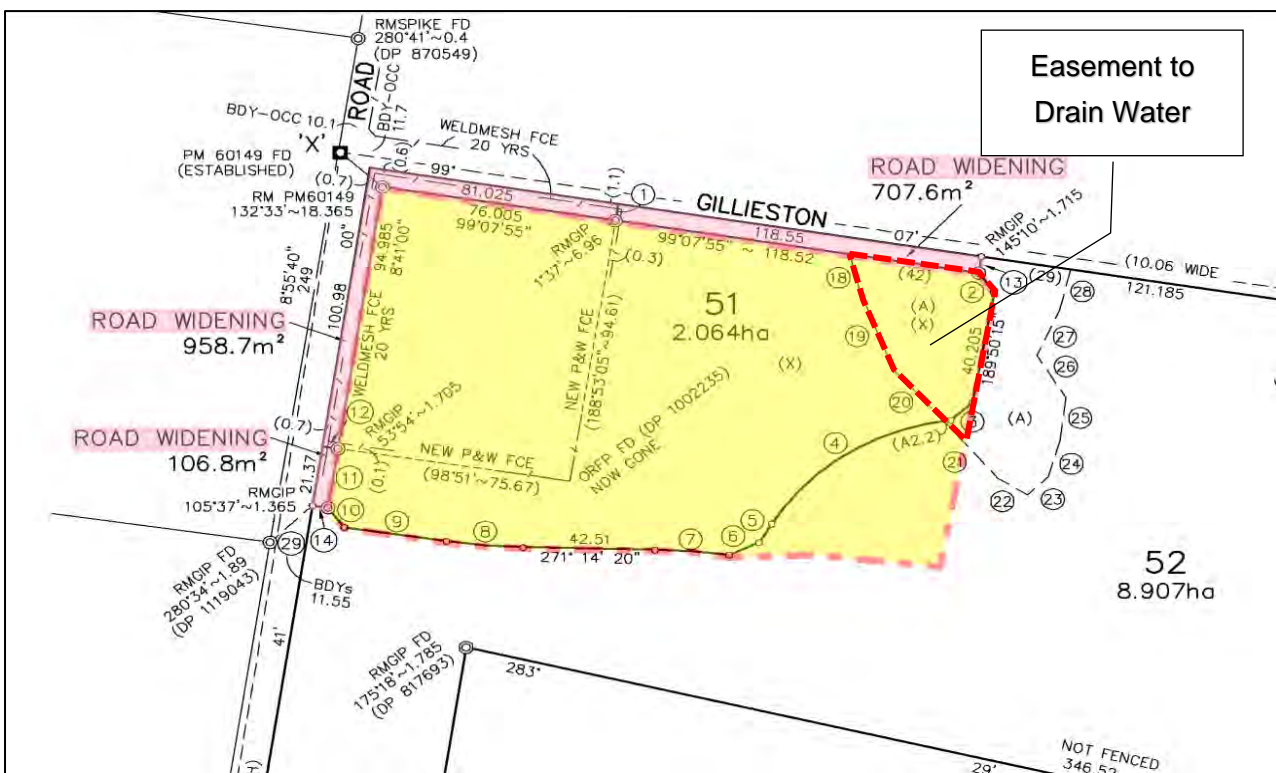


Figure 6. Lot and DP Title (Source: ADW Johnson, 2024)

The Site has gentle slope at the western end and then falls steeply from the centre towards the northeastern corner, where it falls towards the existing dam (refer to survey in Figure 6 above).

The land has fall of approximately 12m from northwest to northeast, from 28m AHD and 16m AHD respectively.

Currently the stormwater from the Site is directed across the natural topography via a first-order ephemeral drainage line that is positioned along the northeastern corner of the Site and flows northwest via a culvert underneath Gillieston Road. An existing easement to drain water traverses the northeastern corner of the Site benefiting Council and allowing water to drain from Northview Street to land to the north of the Site at 56 Gillieston Road, Gillieston Heights.

There are several street trees positioned along Gillieston Road, Ryans Road and Northview Street and within the Site boundaries. A total of 60 trees were assessed as being potentially impacted by the activity.

2.1.1 Site Constraints and Opportunities

Consideration of site constraints has been undertaken through a review of the Section 10.7 (2 & 5) Planning Certificates numbered PC/2025/69 and PC/2025/71 both dated 13/01/2025 (refer **Appendix 7**), mapping under relevant Environmental Planning Instruments (EPIs), and a review of specialist consultant reports and other desktop assessments. Key Site constraints include:

- Zoning - RU2 Rural Landscape and R1 General Residential under the Maitland Local Environmental Plan 2011 (MLEP 2011)
- Heritage – the original school building is listed on the Section 170 Heritage and Conservation Register of the Department of Education.
- Mine Subsidence – the Site is positioned above an old mine but not identified as a mine subsidence district.
- Bushfire Prone Land – the Site is currently mapped as bushfire prone land, temporary Asset Protection Zones (APZs) proposed to mitigate risk.
- Flooding - the Site has been identified as being affected by localised flooding, when runoff from the local catchment exceeds the capacity of the street drainage system, creating a flood island, this is discussed further in Section 7.
- Contamination – the Site has been identified as having lead levels above the acceptable human levels, suitable remediation will be required.
- Traffic - traffic generation, car parking and upgrade to surrounding roads and provision of footpaths surrounding the Site.
- Tree removal/Ecology - 52 trees have been assessed on Site along with 9 street trees. A total of 18 trees will be removed.
- Noise – the activity will create noise associated with construction and operation and impact on surrounding sensitive receivers and school students.
- Groundwater, Surface Water and Salinity - consideration of groundwater and salinity impacts.
- Land use Conflict - potential impacts to and from adjoining land uses (i.e. residential and agricultural).
- Aboriginal heritage - several artefacts have been identified across the Site.
- Easements – there is an existing easement to Drain Water across the northeastern corner of the Site.
- Urban release area – the Site is positioned within an urban release area.

Consideration has also been given to opportunities identified in project activity, including:

- Heritage – retention of building
- Remediation of land – to be suitable for school use
- Bulk and scale – building position and orientation minimises impacts.

2.2 Proposed Activity

The proposed activity involves the staged redevelopment of Gillieston Public School and comprises the following works:

- Demolition of select existing structures;
- Site preparation works, including demolition, earthworks, tree removal and remediation;
- Increase the capacity of the School from approximately 339 to 736 students; and
- Construction of:
 - Three (3) storey learning building to contain:
 - 32 GLSs and support hubs; and
 - administration and staff hubs.
 - one (1) storey hall, canteen and out of school hours care
 - library
 - one (1) storey public preschool (for up to 60 spaces)
 - covered COLA
 - outdoor play areas, including games courts and yarning circle
 - new at grade parking
 - extension of the existing drop-off / pick-up area and bus bay
 - realignment of the existing fencing
 - new substation
 - associated stormwater and sewer infrastructure
 - associated landscaping
 - associated pedestrian and associated road upgrade works to adjoining roads

The proposed works will be staged as outlined in below and at Section 2.2.2 below. The Activity along with works and methods are outlined in detail further below with Table 4 providing a summary of key aspects of the activity.

Table 4: Summary of the activity

Project Element	Description
Site Area	23,425m ²
Project Name	Gillieston Public School redevelopment and new public preschool
Project Summary	<p>The staged redevelopment of Gillieston Public School comprises the following works:</p> <ul style="list-style-type: none"> • Demolition, temporary relocation and removal of existing temporary structures. • Site preparation works, including demolition, earthworks, tree removal and remediation. <ul style="list-style-type: none"> ○ Construction of Three (3) storey learning building to contain: ○ 32 permanent general learning spaces and 3 support teaching spaces • Administration and staff hubs • Hall, canteen and library • Out of school hours care - Public preschool (standalone building for 60 places) • Covered Outdoor Learning Area (COLA) - Outdoor play areas, including games courts and yarning circle • New at-grade car parking • Extension of the existing drop-off / pick-up area and new bus bay • Realignment of the existing fencing

Project Element	Description
	<ul style="list-style-type: none"> • New substation • Associated stormwater and sewer infrastructure upgrades • Associated landscaping • Associated pedestrian and road upgrade works
Use	Educational establishment and preschool
Student and Staff Numbers	736 students and 50 FTE staff
Preschool Places	60
Car Parking	School – 50 car spaces Preschool – 15 car spaces
Bicycle Parking	52 bicycle spaces
Height	Main Learning Building = 17.30m (37.785 AHD) being three (3) storeys Preschool = 7.45m (33.240 AHD) Hall = 6.15m (31.940 AHD)
Street Setbacks	Gillieston Road – 5.67m Northview Street (Preschool) – 7.87m Northview Street (Hall) – 6.825m Ryans Road (Hall) – 76.46m
GFA	8,922m ²
Landscaped Area	8213.4m ² will be soft landscaping
Play Space	Hard Play Scape = 2,019m ² Soft Play Space = 8,213m ² Total Play Space = 10,232.4m ²
Preschool Outdoor Play Space	421m ²
Canopy Cover	Existing – 1,306m ² Proposed – 6,232m ² Total = 7,538m ² (41.14% of external site – excludes building footprint)
Off Site Works	<p>Gillieston Road</p> <ul style="list-style-type: none"> • New bus bay along southern side of Gillieston Road • Partial footpath along Gillieston Road between the vehicular crossing and western end of the new bus bay • New vehicular crossing <p>Northview Street:</p> <ul style="list-style-type: none"> • 'kiss and drop' for four (4) and queuing area for a further eight (8) cars along northern side of Northview Street • Realigned footpath along Northview Street adjacent to the new kiss and drop area • Pedestrian crossing • New vehicular crossing <p>Ryans Road:</p> <ul style="list-style-type: none"> • Wombat pedestrian crossing <p>Off-site Stormwater Works</p> <ul style="list-style-type: none"> • new culvert under Gillieston Road to convey upstream stormwater • local regrading of the existing surface levels is required to

Project Element	Description
	<p>direct upstream flows to the culvert entrance.</p> <ul style="list-style-type: none"> • Construction of a swale to divert water to temporary detention basin to the north of the Site. • Construction of temporary basin with outlet pipes and spillway crest to hold lost detention storage from the Site and surrounding catchment area.

Staging

The activity seeks to stage the redevelopment of Gillieston Public School and the stages are listed in the PCMP at **Appendix 8** and also within the staging plans provided at **Appendix 9**. The proposed staging is reflected in Table 5 below.

Table 5: Staging Plan

Stage	Proposed Works
1	<ul style="list-style-type: none"> • Site establishment • neighbouring and council stormwater works • all works required for the completion of the new Learning Building and required decanting • all works required for the completion of the new preschool • Bus Bay in Gillieston Road and eastern sections of the Northview Street 'kiss and drop' public domain works <p>Please note: that the area identified as an easement is in possession of the contractor. However, works in this area cannot be commenced until neighbouring and council stormwater works are complete.</p>
2.1a	<ul style="list-style-type: none"> • Site shed relocation • Remediation and make good of the area where hall and OSHC demountables are proposed to be relocated • Relocation of hall and Bush demountables and associated decanting to facilitate construction of new hall and OSHC building.
2.1b	<ul style="list-style-type: none"> • construction of new car park
2.2	<ul style="list-style-type: none"> • completion of and handover of New Hall and OSHC building • completion of landscaping • completion of public domain works Northview Street western section 'kiss and drop'.
2.3	<ul style="list-style-type: none"> • removal of relocated demountables • completion of landscaping including basketball court

The key features of the proposed activity are shown in Figure 7 to Figure 11.



Figure 7. Site Plan (SHAC: 2024)



**Figure 8. Photomontage of Main School Building looking from Gillieston Road
(Source: SHAC, 2024)**



**Figure 9. Photomontage of Main School Building looking southwest from Gillieston Road
(Source: SHAC, 2024)**



**Figure 10. Photomontage of Main School Building looking northwest from Northview Street
(Source: SHAC, 2024)**



**Figure 11. Photomontage of Main School Building looking southwest from new car park
(Source: SHAC, 2024)**

2.2.1 Design development

The proposed staged redevelopment of Gillieston Public School will see the removal of 14 demountable buildings and the establishment of more permanent structures. The proposed buildings along with other key landscape and design elements will all be addressed separately below and are also shown in the proposed architectural drawings found at [Appendix 10](#) and in Figure 7 to Figure 11 above.

Main Learning Building

The main learning building will be positioned along the Gillieston Road frontage and has been designed to step down the frontage due to the topography of the Site, refer to Figure 8 above. A plaza has been introduced at the main entry positioned between the future bus bay (on Gillieston Road) and the Administration functions within the lower ground floor of the southern part of the new three (3) storey main learning building, reflected in the photomontage in Figure 8 and Figure 9 above.

The southern facade has been designed to provide circulation corridors with three (3) strategically positioned stairwells and two (2) external lifts, all providing open circulation between GLAs and educational functions such as the library and administration functions on ground level and GLAs and communal learning spaces above.

Internally the layout of the building has been designed with the following functions:

Lower Ground – eastern end

The lower ground level is positioned at the eastern end of the building and has been stepped down the Site and consists of the following:

- Main plaza entry and lobby
- Administration offices
- Staff lounge area and facilities; and
- Student Water Closet (WC) accessed from the southern façade.

Ground Level – both eastern and western end

The ground level consists of the following:

- Eight (8) GLAs and two (2) communal learning spaces at the eastern end of the building
- Central student water closets are positioned at the eastern end of the northern building where the northern façade is setback
- Library with office, store and amenities; and
- Three (3) GLAs, one (1) learning communal learning space 'Specialist Learning Support Officers' offices, plant and more water closets for staff and students at the western end of the building.

Level One – both eastern and western end

The first level consists of the following:

- Sixteen (16) GLAs
- Four (4) communal learning spaces positioned between a bank of four (4) GLAs
- Two (2) storerooms; and
- Two (2) amenities spaces consisting of one (1) female WC, one (1) male WC and one (1) accessible WC.

Level Two – western end

The second level is positioned at the western end of the building due to Site levels and steps down the Site towards the east, this level consists of the following:

- Eight (8) GLAs
- Two (2) communal learning spaces positioned between a bank of four (4) GLAs; and
- One (1) amenities space consisting of one (1) female WC, one (1) male WC and one (1) accessible WC and store, airlock and comms room positioned centrally between each bank of leaning spaces.

Hall and COLA

The proposed hall and 'covered outdoor learning area' (COLA) will be positioned adjacent to Northview Street towards the midpoint of the Site and will be a one storey building oriented towards the all surface multi-sports field that will be positioned centrally between the main school building, hall and preschool buildings, refer to Figure 10 and Figure 11 above.

The building has been designed to a lower one storey scale which responds suitably to the scale of residential dwellings positioned on the southern side of Northview Street. The design is modest consisting of brick and compressed fibre cement sheets with a skillion roof that incorporates a central clerestory roof to provide increased light to the centrally located hall. The materials and finishes respond to the surrounding natural elements of the landscaping.

Internally the layout of the building has been designed with the following functions:

- Open hall with stage positioned centrally within the building and COLA area
- Canteen facility that opens to the proposed COLA area positioned on the northwestern side of the building

- Future Outside School Hours Care (OSHC) kitchen, future OSHC office, water closet and sports room positioned at the southeastern end of the building
- The main entry to the hall will be positioned on the northeastern elevation and will connect to external circulation pathways and stairs to the future multi-sports field to the northeast; and
- Circulation pathways surround the building and COLA to provide access to other school functions and landscaped areas.

Pre-School Building

The proposed pre-school building will be positioned towards the southeastern corner of the Site and will be one storey in form responding suitably to the lower scale residential properties on the southern side of Northview Street and the proposed Hall/COLA building positioned to the west. The design is of a lower scale and will be finished in a natural colour palette that integrates with the Hall and main school building, it will also incorporate a skillion roof with a central clerestory that will provide increased internal light and amenity to the building, refer to Figure 12.

Internally the layout of the building has been designed with the following functions:

- Three (3) playrooms ranging in size from 75.49m² to 77.25m² (total area 229m²) and positioned along the northeastern elevation for direct connection to the future outdoor preschool open space (area of 421m²) with each room having direct access to amenities
- Meeting rooms, administration offices, storerooms, laundry, kitchen, comms room, foyer entry and accessible water closet are positioned on the southwestern side of the building nearest to Northview Street; and
- The main entrance is positioned along the southwestern elevation and connects to external pathways with direct access Northview Street and the future preschool car parking area, positioned to the east of the new building.

The preschool open space is orientated to the northeast of the building with stairs and ramp to be provided to enable equitable access between the building and outdoor play area for children and staff of the centre. The position of the 421m² of outdoor open space will ensure there is a high level of solar access. The preschool will cater for up to 60 children and up to 10 staff.



Figure 12. Photomontage of Gillieston Public School redevelopment looking west at a Birdseye angle (Source: SHAC, 2024)

Heritage Building

The original 1897 building (refer Figure 13) will be retained in the northwestern corner of the Site. No works are proposed to the existing building as part of the proposed works, but landscaping works will be undertaken around the heritage building to improve circulation within the Site.

It is noted that the main learning building has been positioned to maintain a 28.9m separation to minimise impacts on this item.



Figure 13. Photographs of Heritage Building (Source: SHAC, 2024)

Design Guide and Design Quality Principles

Pursuant to Section 3.37(5A)(a) and 3.37A(3) (b) of the EP&A Act, before determining a REF for a government school consideration must be given to:

The design quality of the development when evaluated in accordance with the design quality principles set out in Schedule 8.

An assessment of Schedule 8 of the TI SEPP in relation to the activity has been included in the Table 6 below:

Table 6: Schedule 8 of the TI SEPP

Principles	How the Activity seeks to address this principle
Principle 1 – responsive to context	
<i>Schools should be designed to respond to and enhance the positive qualities of their surroundings.</i>	<ul style="list-style-type: none"> The Site is within a transitional area and has been stepped down in scale to Northview Street, where there are recently developed lower scale detached residential dwellings. This will ensure no detrimental shadow to adjoining uses, with the 3 storey main learning building positioned along the northern boundary and balancing of bulk and scale across the Site. Separation has been provided between the 3 storey main learning building and heritage building in the northwestern corner to protect the curtilage of the item. Adequate separation is provided with existing roads and setbacks to ensure privacy for existing and future residential dwellings. Elements of Country have been integrated into the design through form and material and finish selection,
<i>In designing built forms and landscapes, consideration should be given to a Country-centred approach and respond to site conditions such as orientation, topography, natural systems, Aboriginal and European cultural heritage and the impacts of climate change.</i>	
<i>Landscapes should be integrated into the overall design to improve amenity and to help mitigate negative impacts on the streetscape and neighbouring sites.</i>	

Principles	How the Activity seeks to addressed this principle
	<p>this also is present in the future landscaping which will incorporate yarning circles and less structured play areas.</p> <ul style="list-style-type: none">The proposed landscaping will provide for improved local climate control and soften built form providing for various areas of play.
Principle 2 – sustainable, efficient and resilient	
<i>Good school design combines positive environmental, social and economic outcomes and should align with the principles of caring for Country.</i>	<ul style="list-style-type: none">Building orientation of the 3 storey main learning building will position the longer façade to the north with greater openings and the screening will provide for sun control to the all levels within the building. No openings are proposed along the western wall and this will assist in minimising heat gain with open walkways along the eastern façade to provide sun protection and natural light and ventilation.Extended roof overhang will form the COLA on the northwestern side of the proposed hall and this element will reduce the heat impacts from the western sun.Robust, low maintenance materials will be utilised.Strategies to reduce waste & minimise the embodied energy in the materials will be further explored during design development & documentation, refer to the ESD report at Appendix 11.Social sustainability-outdoor spaces, collaboration spaces, active and passive recreation areas, retreat spaces, yarning circles and circulation areas will be provided within the landscaping, refer to Appendix 12.The activity will provide 41.4% canopy coverage which will assist in creating a more sustainable environment.
<i>Schools should be designed to be durable and resilient in an evolving climate.</i>	
<i>Schools and their grounds should be designed to minimise the consumption of energy, water and other natural resources and reduce waste.</i>	
Principle 3 – accessible and inclusive	
<i>School buildings and grounds should be welcoming, easy to navigate and accessible and inclusive for people with differing needs and abilities.</i>	<ul style="list-style-type: none">The School has a main entry from the north off Gillieston Road, which has direct access to the school Administration area, as a point for secure control. A second southern public access point is provided from the southern boundary, aligning to the proposed kiss & drop zone, allowing for access to the OSHC and public preschool outside of school hours, and for the main pick up and drop off times.Secure permeable fencing will be provided around the School and gates will control access to parts of the School whilst ensuring that the built form addresses each street frontage and creates a welcoming address, as shown in the Architectural Design Report at Appendix 13.Improved public domain works to create a larger KnD area on Northview Street, bus bay and footpath on Gillieston Road and pedestrian crossing on Ryans Road and Northview Street will improve pedestrian safety around the Site.Levels within the 3 storey main learning building will be linked via stairs and lift access to create excellent circulation and access.A combination of stairs, ramps and lifts will ensure that circulation around the Site will be suitably managed.
<i>Schools should be designed to respond to the needs of children of different ages and developmental stages, foster a sense of belonging and seek to reflect the cultural diversity of the student body and community.</i>	
<i>Schools should be designed to enable sharing of facilities with the community and to cater for activities outside of school hours.</i>	

Principles	How the Activity seeks to address this principle
	<p>future way-finding signage will manage the movement through the Site.</p> <ul style="list-style-type: none">The activity does not change the ability for the School facilities to be shared with the community, this will form part of the final Plan of Management, as a mitigation measure.
Principle 4 – health and safety	
<i>Good school design should support wellbeing by creating healthy internal and external environments.</i>	<ul style="list-style-type: none">Teaching spaces will integrate window openings that will overlook the public domain and play areas to facilitate passive surveillance and eliminate “hiding spots’.The classrooms are located on the perimeter of the building maximising natural daylighting. Furthermore, each classroom's fenestration includes operable louvres allowing for natural ventilation.All amenities open onto public corridors and circulation zones. To ensure visibility of amenities is maintained on upper levels, amenities are provided, not as consolidated toilet banks, but as individual airline style cubicles.The activity has been designed to address Crime Prevention Through Environmental Design (CPTED) principles, refer to Architectural Design Report at Appendix 13.Access for pedestrian and bicyclists can enter from three frontages which will improve natural surveillance.Internal breakout space will enable supervision and visual connection with the main learning building.As discussed above (under Principle 3) there will be continuing connections to a bus network and safer pedestrian routes surrounding the school.
<i>The design should ensure safety and security within the school boundaries, while maintaining a welcoming address and accessible environment.</i>	
<i>In designing schools, consideration should be given to connections, transport networks and safe routes for travel to and from school.</i>	
Principle 5 – functional and comfortable	
<i>Schools should have comfortable and engaging spaces that are accessible for a wide range of formal and informal educational and community activities.</i>	<ul style="list-style-type: none">Variety of additional learning and teaching spaces will offer different levels of openness and connections for preschool, OSHC, primary student and staff.Clear circulation paths are provided.Abundant natural light and operable louvres to control solar heat gain.Natural as well as mechanical ventilation is provided.Significant landscaped areas that will provide both passive and active play spaces for all.
<i>In designing schools, consideration should be given to the amenity of adjacent development, access to sunlight, natural ventilation, proximity to vegetation and landscape, outlook and visual and acoustic privacy.</i>	
<i>Schools should include appropriate indoor and outdoor learning and play spaces, access to services and adequate storage.</i>	
Principle 6 – flexible and adaptable	
<i>In designing schools, consideration should be given to future needs and take a long-term approach that is informed by site-wide strategic and spatial planning.</i>	<ul style="list-style-type: none">Regular column grid and open floor plates will offer maximum flexibility across the main learning building.The Hall will enable a variety of uses, including school assemblies and concerts, OSHC and outdoor play and learning under the COLA.
<i>Good design for schools should deliver high environmental performance and ease of</i>	

Principles	How the Activity seeks to address this principle
<i>adaptation, and maximise multi-use facilities.</i>	<ul style="list-style-type: none">• Rational circulation• Consolidation of services and wet areas• Variety of learning and teaching spaces offering different levels of openness.• Robust, low maintenance materials• Abundant natural light• Natural as well as mechanical ventilation
<i>Schools should be adaptable to evolving teaching methods, future growth and changes in climate, and should minimise the environmental impact of the school across its life cycle.</i>	
Principle 7 – visual appeal	
<i>School buildings and their landscape settings should be aesthetically pleasing by achieving good proportions and a balanced composition of built and natural elements.</i>	<ul style="list-style-type: none">• The proposed buildings have been suitably sited to reduce impacts to surrounding properties and will provide well design landscaped areas to cater for passive and active recreation whilst ensuring circulation space is provided throughout for access and connection.• The landscaping has been well considered and will integrate successfully with the new built form.• The 3-storey main learning building is positioned along the northern edge of the Site and this will define the school boundary and will ensure that shadow falls within the School boundary to reduce impacts to lower scale residential properties to the south and future properties to the north.• The lower scale single storey hall and preschool positioned to the south of the Site is an appropriate transition to reduce the scale towards residential properties along Northview Street.• Overall, the Site will be identifiable as having community significance and will be positioned to service the urban growth area of Gillieston Heights, it will enable community use and connection for the neighbourhood and Country.
<i>Schools should be designed to respond to and have a positive impact on streetscape amenity and the quality and character of the neighbourhood.</i>	
<i>The identity and street presence of schools should respond to the existing or desired future character of their locations.</i>	
<i>The design of schools should reflect the school's civic role and community significance.</i>	

The proposed staged redevelopment of Gillieston Public School was reviewed by the State Design Review Panel (SDRP) at the first meeting on 4 May 2024 and subsequently at a second meeting on 28 August 2024. The feedback has been addressed in the Design Review Summary at **Appendix 47**.

Connecting with Country

Designing with Country is emphasised throughout the design process through workshops with the Local Aboriginal Land Council and community groups.

Several consultations were undertaken with the Aboriginal community as listed below:

- 01 March, 2023 - Initial contact made with the Aboriginal Community Liaison Officer for the Department of Education
- 27 April, 2023 - First meeting with Key Aboriginal Stakeholders and project team; and
- 12 May, 2023 - Walk on Country scheduled with Key Aboriginal Stakeholders and project team.

Further consultation with the indigenous community was undertaken, and an information pack was emailed out and an offer for further engagement was made on the following dates:

- 30/05/24

- 7/06/24
- 12/09/24
- 15/09/24

Sustainability and Climate Change

The activity has been designed to achieve a minimum 4-star Green Star rating as outlined in the Sustainable Development Plan (SDP) prepared by Arcadis at **Appendix 14**. The ESD measures that will be incorporated into the design are listed below:

Indoor Environment Quality

- Use of low VOC paints
- Install optimum insulation
- Provide double glazing for windows
- Incorporate natural ventilation

Water Initiatives

- Reduce potable water through use of rainwater for irrigation
- Use of Australian natives in landscaping
- Water efficient fixtures

Energy

- Install optimum insulation in new/existing building fabric where possible
- Replacing existing glazing with improved glazing
- Smart building technologies and intelligent controls for ventilation, air conditioning
- lighting controls, to optimize energy usage; and
- Solar PV system to be incorporated with battery storage.

Waste

- Provide waste collection facilities that are labelled, easily to accessible, and evenly distributed throughout the buildings.

Materials

- Maximise recycled and reused material in the construction of buildings
- Choose light-coloured and reflective materials for pavements, sidewalks, and buildings to reduce the absorption of solar heat.

Connection to Country

- Minimum of 80% of plants are indigenous, native plant species; and
- Design facilities for use outside of school hours for activities such as weekend church groups, sport events and public meetings.

Climate Change

- Conduct a Climate Change Risk Assessment
- Prepare a climate change adaptation and resilience plan

Landscaping

A landscape master plan has been provided at **Appendix 12** with a relevant extract below at Figure 14. The landscape master plan illustrates a variety of play spaces and adequate circulation spaces

that provide excellent connections across the Site. The proposed landscape master plan seeks to deliver the following:

- Hard play space and assembly area
- Future outdoor classroom and passive play space
- Future ecological play space
- Vegetation buffer between childcare and greater play
- Space to include endemic plantings
- Concrete bleachers
- Accessibility ramp from upper access to ball play area
- 30 x 20m multi use sports field, turfed
- Battered mass planting
- Main north/ south access path
- Cola breakout space with concrete bleacher seating
- Gravel transition space
- Wind break planting
- Open grass sport field
- Yarning circle
- Future cultural space and exploratory nature play
- School signage and perimeter canopy screening
- Future productive garden and bush tucker walk
- Mass planting and trees for heritage building special Buffer
- Level turf soft play space
- Perimeter mass planting of at least 2m in width
- Screening hedge plants
- Formal garden with connection to heritage building and potential for public interaction; and
- Basketball court positioned to the south of the heritage building.



Figure 14. Landscape Master Plan (Source: Terras, 2024)

The Landscape Schematic design (refer **Appendix 12**) describes the landscape design as being developed to have a 'connection with country' (CWC) with the material and colour palette inspired by the history of the heritage of the Site and the use of sandstone and cedar throughout the landscape design will be sourced from Country (with consent).

The planting will consist of mainly native species with an emphasis on bush tucker. The species will provide for varying height and form to integrate with the future built form and play spaces within the landscaping, to assist in defining areas within the school with a total canopy coverage of 7,538m² being 41.4% (excluded building footprint).

The future school play areas will contain a total of 10,232.4m² of total play space, consisting of 2,019m² of hard play space and 8,213.4m² of soft play space. These areas will provide passive and active play for students but will also allow for use as 'yarning circles' and eco play areas to encourage CWC. Whilst the preschool will provide 421m² of outdoor play area, this area will be separated from the main school playgrounds by landscaping.

The proposed car park areas and street frontages along Northview Street and Ryans Road will provide for more dense plantings and existing street trees will be retained along Gillieston Road. Formal landscaping will be undertaken around the existing heritage building positioned in the northwest corner of the Site.

It is envisaged that the current landscape design will be developed further, in the future, to enable the activity of ecological play spaces and outdoor classroom and passive play space.

The Site will be secured by a 2.150mm high palisade fence with secure gate pedestrian entry points positioned along all street frontage and gates will secure the vehicle entry points on Gillieston Road and Northview Street. Fencing will provide separation between the preschool and remaining school Site and low level 1.2m high fencing will be provided around the preschool outdoor area and between the school car parking area and playground.

Access and Parking

The proposed pedestrian and vehicular access connections following redevelopment are reflected in Figure 15 below and described further below.

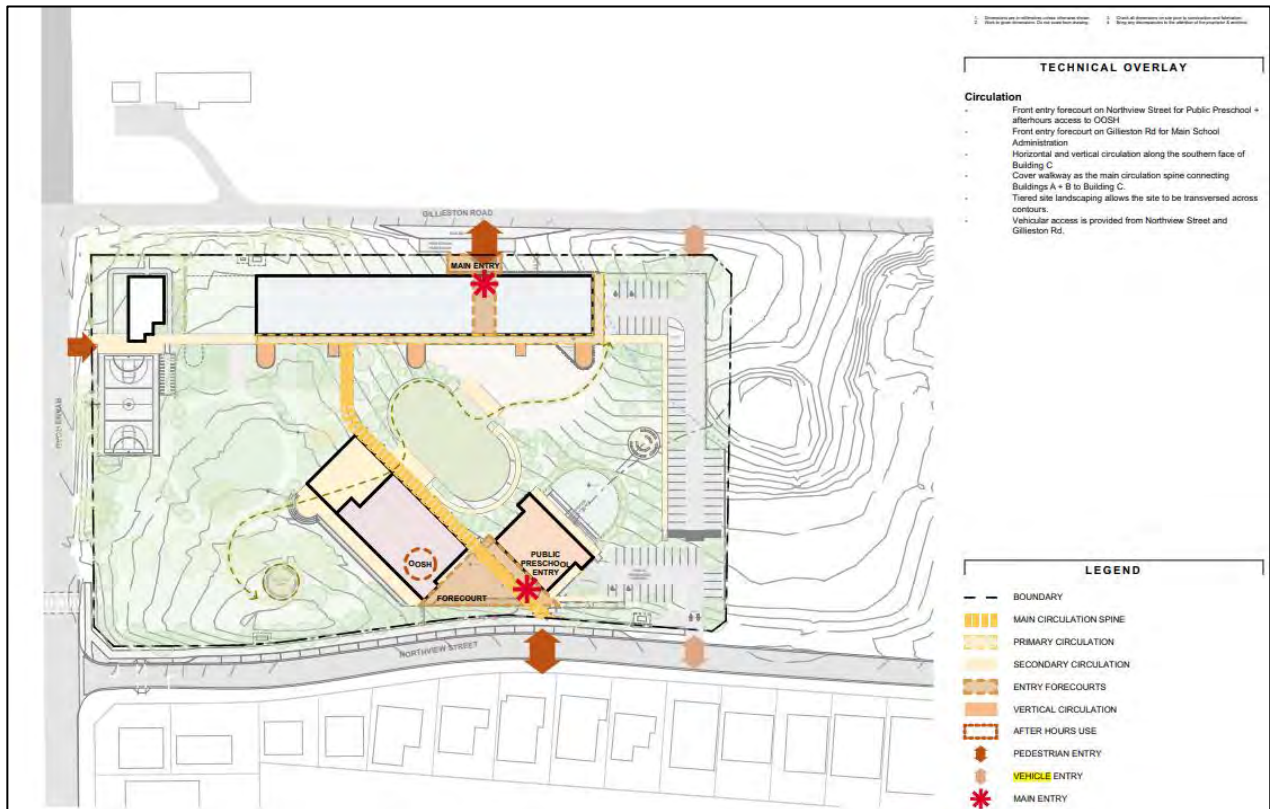


Figure 15. Pedestrian and Vehicle Circulation Overlay (Source: SHAC, 2024)

Pedestrian Access

The main pedestrian entry point for the school will be positioned along Gillieston Road, with the main entry for the preschool positioned along Northview Street adjacent to the preschool and hall, this entry and the existing entry from Ryans Road will also act as secondary entry points to the school. Within the school there will be a main circulation spine between the main building and the Northview Street to the south and primary and secondary circulation spaces are also shown. An informal track from the northeastern corner to the southwestern corner is also provided and this reflects CWC principles.

A portion of footpath will be constructed between the new bus bay and main building entry on southern side of Gillieston Road while the northern side of Northview Street will be upgraded to accommodate the future 'kiss and drop' zone with four (4) pick up spaces and a further eight (8) queuing vehicle spaces, requiring the realignment of the public footpath for the majority of the Site frontage. The KnD will be undertaken in stages to ensure that area remains free for drop-off and pick-up to support the ongoing operation of the existing school.

A new crossing will be provided towards the southern end of the Ryans Road frontage providing east-west access across Ryans Road.

Bicycle Access and Parking

Bicycle access will be provided from all frontages with 52 bicycle parking storage spaces to be located on the eastern side of the proposed basketball court.

Staff Parking During Construction

In the interim, the school will continue to use the existing staff car parking near the Heritage building at the corner of Ryans Road and Gillieston Road, until the final car park works are completed which will occur after completion of new learning building.

Vehicle Access and Parking

The existing car parking area in the northwestern corner will service the school until the new car park is constructed, at which point the existing car park will be removed and replaced with two new car parking areas along the eastern boundary (refer to Figure 16), the northern area will service the school containing 50 car spaces and the southern areas will service the preschool containing 15 car spaces. Two (2) new vehicular crossings will be constructed to provide access to both Gillieston Road and Northview Street.

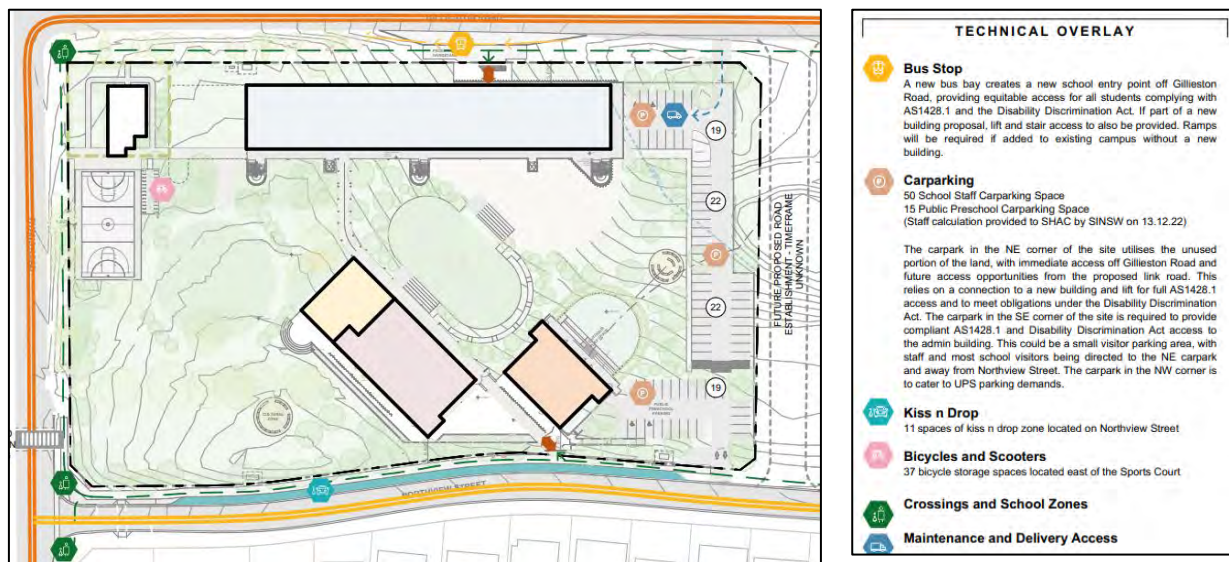


Figure 16. Proposed Parking Layout (Source: SHAC, 2024)

The activity seeks to provide a 'kiss and drop' zone along Northview Street to allow for four (4) pick-up spaces and queuing capacity for a further eight (8) vehicles, these works will also require the realignment of the existing footpath.

Waste and Service Vehicle Arrangements

The storage, access and manoeuvrability space required for bins to be collected within the school grounds is estimated to be 45m². The proposed location of the waste storage area is adjacent to the school carpark and service vehicles will enter and leave via the Gillieston Road driveway.

Public Domain Works

The activity seeks to provide public domain improvement along Gillieston Road in the form of a new bus bay and portion of a new public footpath on the southern side of Gillieston Road whilst providing a new 'kiss and drop' area with four (4) pick up spaces and queuing for a further eight (8) cars along northern side Northview Street, these changes will require realignment of the existing footpath. Refer to Figure 17 which outlines the location of these works.

In addition, a new wombat pedestrian crossing will be provided across the southern part of Ryans Road (east to west) and a crossing facility at the western end of Northview Street (North to south).

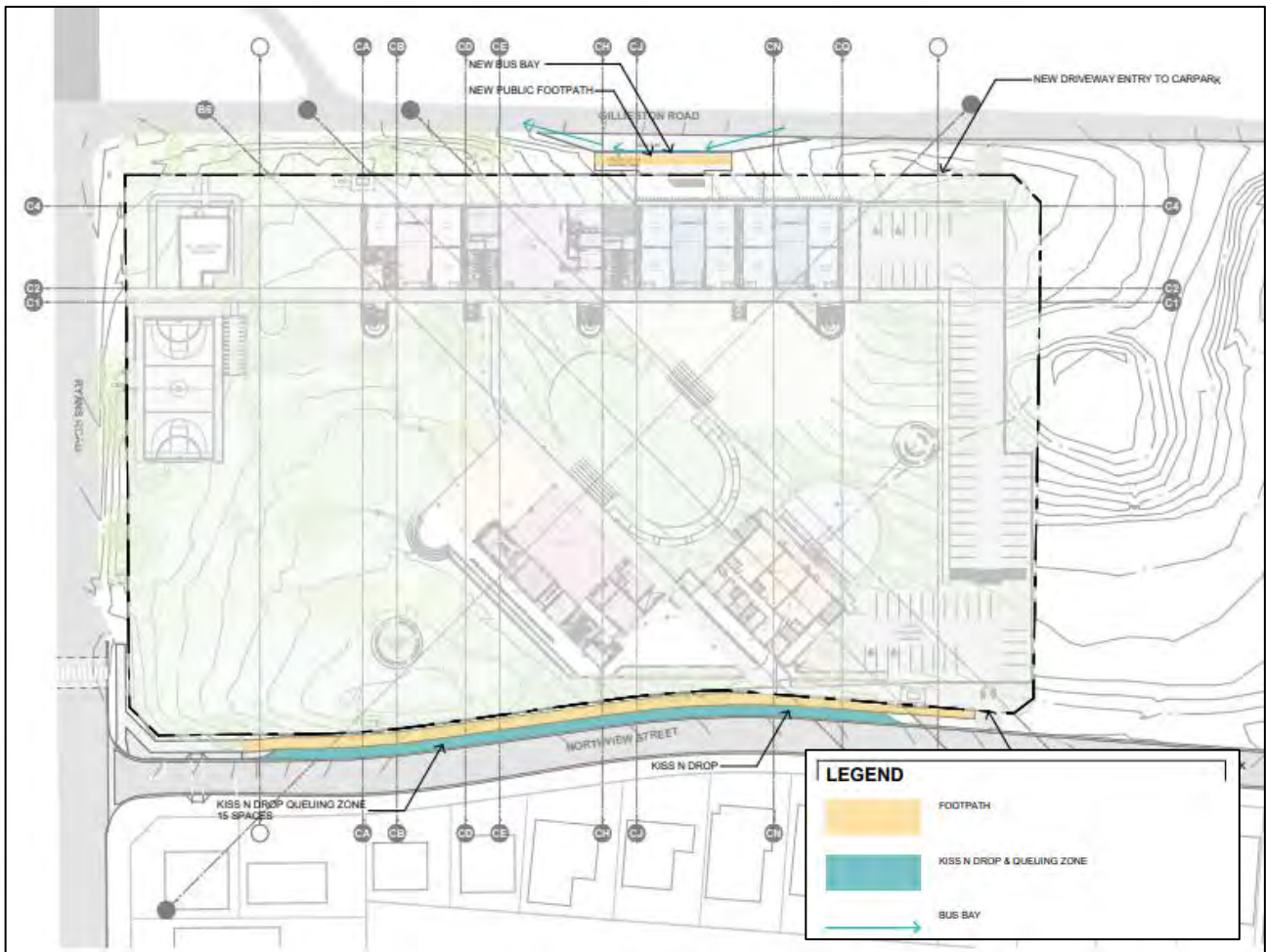


Figure 17. Public Domain Works (Source: SHAC, 2024)

Signage

A signage strategy has been provided and can be found within the Architectural Drawings at **Appendix 10** and this strategy has been extracted and provided below at Figure 18 and Figure 19. Signage will be in the form of:

- Integrated artwork
- School crest/name signage
- Super graphics
- School guiding principles

Signage will be non-illuminated and positioned on each of the new building as follows:

- Main Learning Building northern façade – 4.2m x 4.2m exterior grade powdercoated aluminium finish
- Preschool southwestern façade – 4.3m x 0.42m aluminium 3D individual powder coated lettering
- Public School southeastern facade– 6.085m x 0.42m aluminium 3D individual powder coated lettering
- Gillieston Road wall entry sign – 3.565m x 0.55m consisting of individual 3D lettering

All other remaining signs relate to integrated artwork, directional signage and supergraphics.



Figure 18. Signage Strategy (Source: SHAC, 2024)

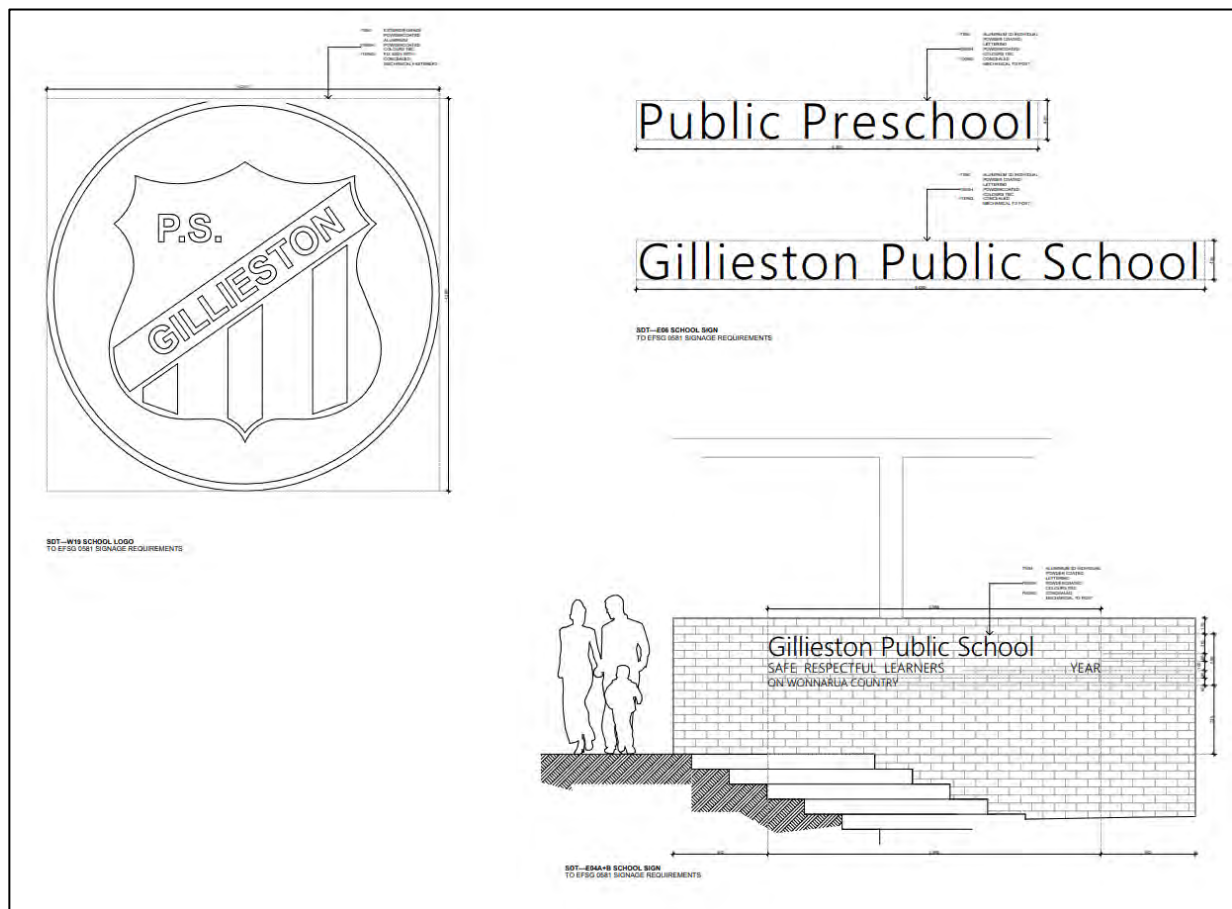


Figure 19. Signage Details (Source: SHAC, 2024)

2.2.2 Construction

A Preliminary Construction Management Plan has been prepared and is provided at **Appendix 8**, details of key construction activities are outlined below.

Construction Hours

The following construction hours are sought:

- 7:00am to 6:00pm, Monday to Friday
- 8:00am to 1:00pm, Saturday

No work without prior approval on Sundays and Public Holidays

It is noted that there may be occasional periods of 'out hours work' for special deliveries, hoarding installation and removal, and service connections. While crane installation and removal may be also be undertaken across a weekend to minimise impacts on surrounding areas.

Occasional night works, and works on Sundays or public holidays, would be required where dictated by authority requirements (such as road closures) or for worker or public safety (such as utilising cranes for special lifts and works around Gillieston Road).

Construction Access and Vehicular Routes

Construction vehicles are expected to approach and depart from the Site via Gillieston Road and Ryans Road. The anticipated vehicular ingress and egress routes will be reflected in the final *Construction Environmental Management Plan* (CEMP), however, the staging plans outlined the following:

Construction vehicle access during Stage 1 will be via Northview Avenue as access from Gillieston Road will be limited due to retaining and earthworks needing to be completed in the north-eastern corner of the Site.

For Stage 2, the primary school access will be relocated to the new permanent Site on Northview Ave, with bus bay operations relocated to Gillieston Road frontage. Construction vehicle access during Stage 2 will be via the existing Site's driveway on Ryans Road.

A Site-specific management plan will be developed to manage works within the public domain, this will be required under a mitigation measure.

The parking location for construction workers will be determined prior commencement of works and will be included within the CEMP, prior to the commencement of works.

Materials Handling

Given the anticipated Site constraints, a detailed crane analysis will need to be undertaken to determine the type, size, position and quantity of cranes required for the most efficient material handling solution for the project, a mitigation measure shall be included to requires details to be submitted prior to the commencement of works. The use of a forklift or telehandler may be required to assist with unloading, general materials handling, and bins on Site.

Site Establishment Works

The following works will be undertaken prior to the commencement of works:

- Physical separation of the Site from the street and the school will be established through Class A Hoarding or appropriate fencing to that satisfaction of the Principal Certifying Authority.
- Temporary footpaths will be established where it is deemed required for public access.
- Site accommodation will be located within the Site boundary to accommodate construction workers and site visitors.
- Staff inductions to train all new workers before commencing work onsite.

Demolition

It is proposed to remove all existing demountable and permanent buildings, with the exception of the heritage listed building, from the Site, refer to demolition plan at Figure 20. Staging of demolition and relocation will be undertaken in accordance with the staging plan at **Appendix 9**.

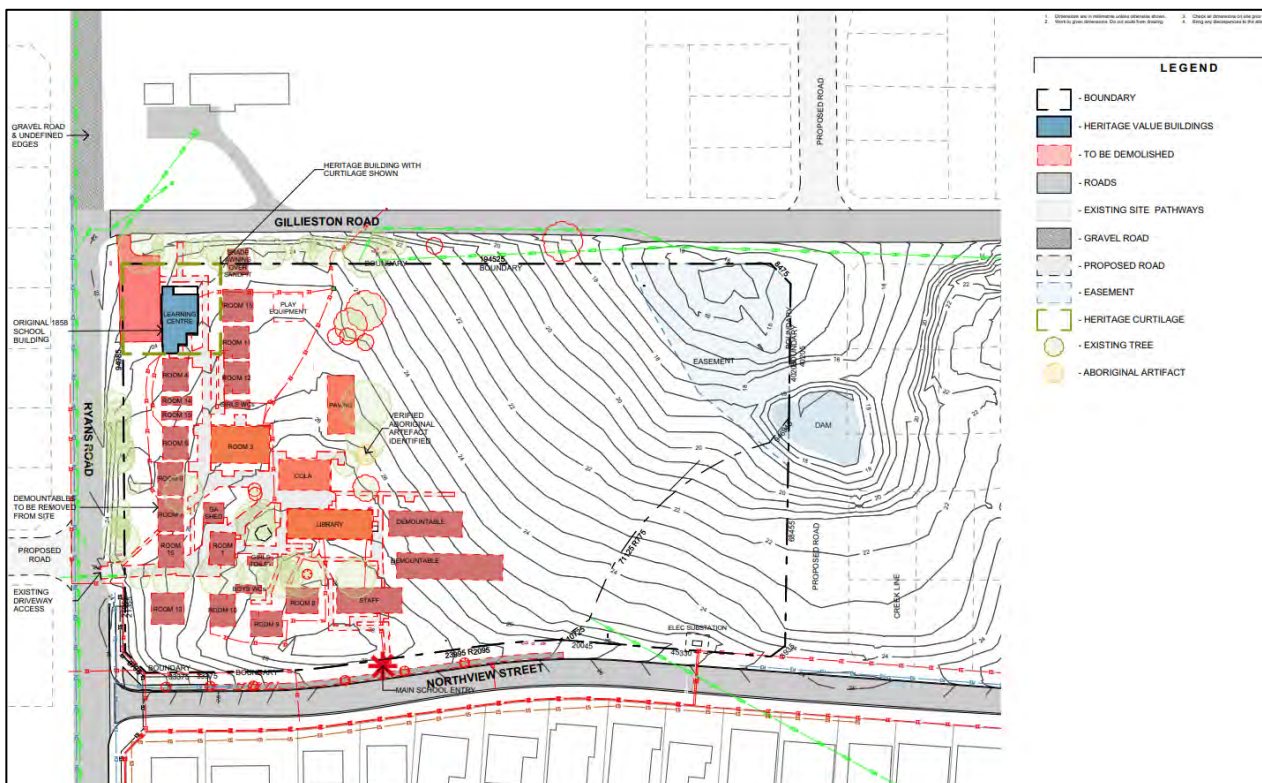


Figure 20. Demolition Plan (Source: SHAC, 2024)

Earthworks

The western side of the Site is relatively flat and will not require any significant regrading but will involve the removal of demountable buildings and car park.

Installation of several retaining walls across the eastern part of the Site will vary in height between 2m and 3m due to the slope of the land with 530m of retaining walls required, refer to Civil Report at **Appendix 15**. The proposed levels to the east of the Site will be increased, with the following cut and fill will be undertaken across the Site:

- Total cut = 3,100m³
- Total fill = 14,200m³
- Total fill over cut = 11,100m³

Figure 21 outlines the areas of cut and fill and illustrates the significant filling of the eastern side of the Site, coloured in green.



Figure 21: Proposed Cut and Fill (Source, ACOR: 2024)

The new car park and eastern retaining wall are currently positioned within an existing easement (refer Figure 6). A mitigation measure will be imposed to require owners' consent and/or extinguishment of the easement prior to any works being commenced on this part of the Site.

Remediation

The Site has been investigated for contamination and the following reports have been prepared to accompany this activity:

- Preliminary Desktop Site Investigation prepared by Stantec dated 08/11/2024 refer **Appendix 16**
- Detailed Site Investigation (DSI) prepared by Stantec dated 08/11/2024 refer **Appendix 17**
- Remedial Action Plan (RAP) prepared by Stantec dated 08/11/2024 refer **Appendix 18**
- Interim Audit Advice (IAA) Letter prepared by Ramboll dated 10/10/2024 refer **Appendix 19**

Part of the Site has already been remediated, shown shaded in pink, on the sampling plan at Figure 22, whilst the yellow area identifies the areas still requiring remediation.

The Site will require remediation works to be undertaken in accordance with RAP (as amended) and any additional contamination identified during works, will require further investigation and potential remediation, mitigation measures have been included to ensure that works are investigated thoroughly, with remediation to be undertaken in accordance with any amended reports that have been endorsed.



Figure 22: Contamination Sampling Plan (Stantec: 2024)

Tree and Vegetation Removal

The Arborist Report at [Appendix 20](#) assessed a total of 60 trees within and adjacent to the Site which may be impacted by the activity, following the assessment a total of 18 trees required removal. All trees to be retained are of medium retention value and of those being removed have the following retention value:

- 7 medium retention value
- 1 low retention value
- 2 exempt retention value; and
- 1 is an environmental weed

More than 18 replacement trees will be provided across the Site, to provide more than 41.4% canopy cover (excludes area of building footprints) and the planting of replacement trees will be endemic species.

Utilities and Services

Stormwater

The activity seeks to provide improved infrastructure and convey stormwater via an onsite detention facility (320m³ in size) to be located beneath the future northeastern car park area before discharging to an existing pipe in Gillieston Road for upstream discharge to an onsite detention facility.

To enable the works above to be undertaken works are required within the adjoining property to the east of the Site, currently owned by UPG 400 Group Pty Ltd. Additional stormwater detention and a new culvert under Gillieston Road will be required in the eastern neighbouring property to offset the volume of storage lost due to the filling in the northwest corner of the school Site and to provide a

new conveyance route for the upstream stormwater due to the retaining walls on the school's eastern boundary which will alter the flow of water from the adjoining site, refer to Civil Report at **Appendix 15** and details of the off-site stormwater works below in Figure 23. It is noted the indicative subdivision shown to the left of the proposed off-site stormwater in Figure 23 is not approved and is subject to a current development application.

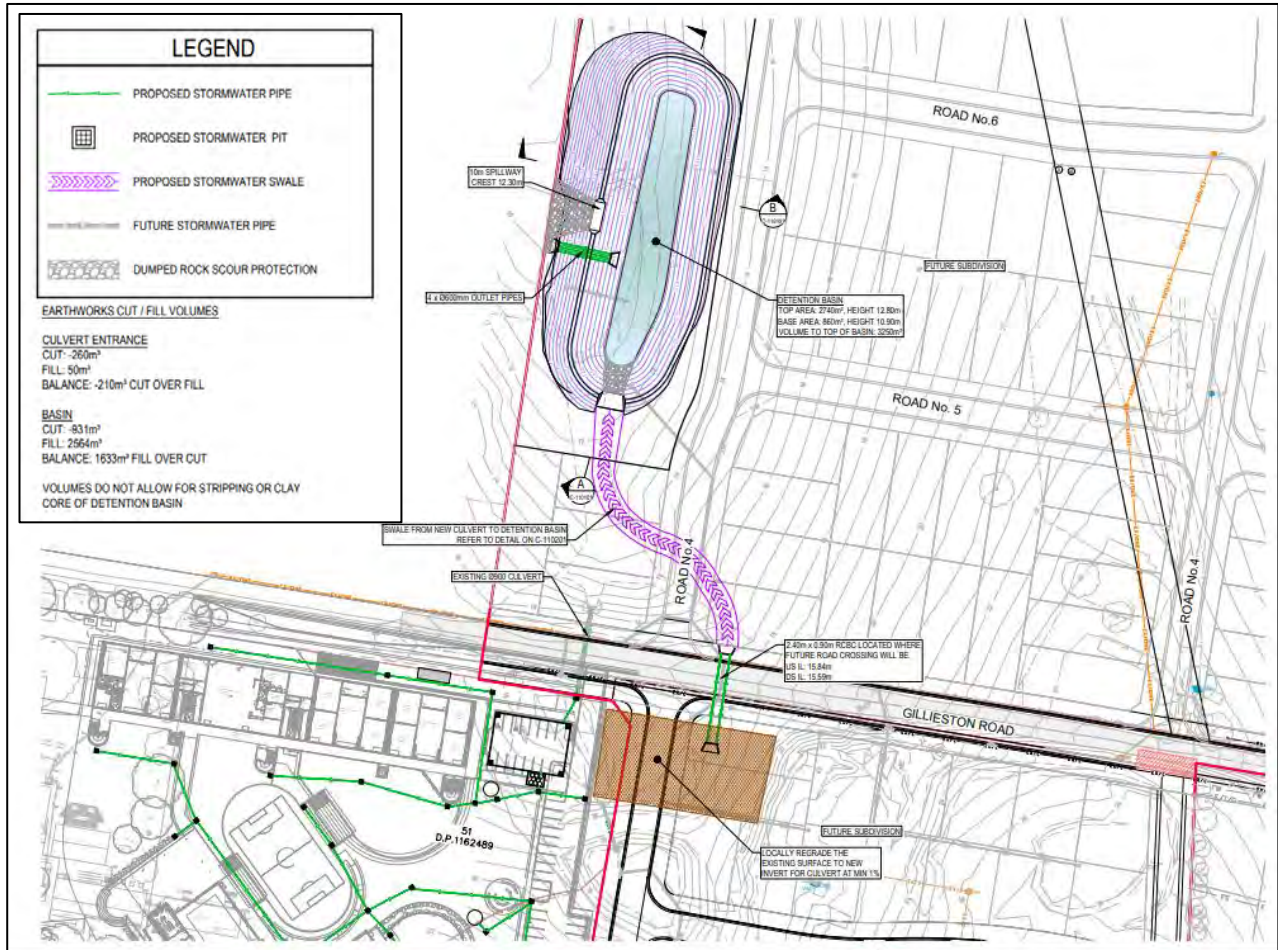


Figure 23: Offsite Stormwater Works (Acor: 2024)

Finally, the installation of a stormwater treatment train of rainwater reuse, pit baskets and storm filters will reduce the pollutants leaving the Site, to the satisfaction of the Maitland City Council requirements.

Electricity

The survey report at **Appendix 5** confirms that Site is currently serviced by existing electrical mains that are positioned within the eastern alignment of Ryans Road and northern alignment of Northview Street directly adjacent to the southwestern boundary of the school. A substation is positioned within an easement for electricity within the soon to be acquired Site (Lot 2 DP 1308605), but this substation does not service the existing school, it is likely to service the adjoining and future residential subdivision. The actual electrical connection to the school is via a pole-mounted electrical connection on northern side of Gillieston Road and via a private pole and electrical substation located on southern side of Gillieston Road.

A new substation to service the school will be positioned towards the western end of Gillieston Road within the Site boundaries.

Potable Water

The school has connection to water mains for potable water at the southwestern corner of the Site and the local Authority has confirmed that the water main has suitable pressure and flow for connection to the proposed activity; however, an upgrade may be required as pumps will be required for the fire system. The design of these pumps will be undertaken during the proceeding design stages; a mitigation measure will address this.

Sewer

The school is not currently connected to the Hunter Sewer mains but instead relies on a pump-out system position towards the northern section of the Ryan's Road frontage.

An upgraded system is required to be installed to meet the needs of the increased population on Site. The proposed system has been designed by ADW Johnson and will consist of 150mm gravity drainage for the existing school, DN1500 Pre-packaged Pumpstation, DN75 HDPE rising main and connection into existing HWC gravity sewer drainage system. Adjacent to the pre-packaged pumpstation, a 150mm capped stub connection is being installed for connection of the proposed Buildings. Details of the new sewer system are provided within the Civil Report at **Appendix 15**.

Gas

Gas connection is available along southern alignment of Northview Street and partly along the eastern alignment of Ryans Road.

Telephone and NBN

Telephone and NBN services exist along both Gillieston Road and Ryans Road.

Waste Management

Construction Waste Management

The *Preliminary Construction Management Plan* (PCMP) at **Appendix 8** and **Appendix 21** outlines the construction waste procedures and includes mitigation measures to be incorporated into the REF.

Operational Waste Management

A Waste Management Plan has been provided at **Appendix 21** and adequate waste area is provided in the northeastern corner of the school carpark and garbage trucks will be able to enter and leave the Site in a forward direction, this will service both the school and preschool.

Refer to swept path for waste collection vehicle at **Appendix 21** of the Waste Management Plan, there is adequate manoeuvring space.

A mitigation measure will be imposed to require preparation of a final operational waste management plan prior to the commencement of operation.

Staging

The following activities have potential to impact on stakeholders if not managed effectively and communicated proactively:

- Access and traffic management
- Planning and management of any major shutdowns
- Minimising and controlling disruptions
- Protection of existing school assets

- Emergency after-hours call-out
- Hazardous material identification and removal
- Items of Heritage significance
- Items of Archaeological significance
- Noise, dust and vibration control; and
- Out of hours work.

The following management plans need to be prepared:

- Stakeholder Management Plan
- Risk Management Plan
- Disruptive Works Notification Procedure; and
- Construction Environmental Management Plan.

A mitigation measure will be included to ensure the above management plans are prepared.

Table 5 above outlines the staging of the activity.

2.2.3 Operation

The activity will provide operation for the following number of students and staff:

School

The proposed population of the school will be as follows:

- 736 students and 50 FTE staff.

Hall

The proposed hall will be used in conjunction with school activities but will also be utilised for OSHC, this use is defined as exempt development under the section 3.39(1)(h) of the TI SEPP and therefore won't be considered under the REF.

Preschool

The proposed preschool will cater for up to 60 children and up to 10 staff and comprise of the following spaces:

- 3 x indoor playrooms = 229.8m² in total
- 3 x amenities assigned to each playroom
- 421m² of outdoor play area
- Kitchen
- Administration and office rooms

2.3 Related activities

No other projects are occurring concurrently at the Site.

3. Activity Need and Alternatives

3.1 Activity Need

Gillieston Heights is progressively being developed into an urban neighbourhood with areas surrounding the Site being part of a greenfield land release. These new homes will place substantial demand for primary school student places in the area. The existing primary school does not have sufficient capacity to cater for the increase in demand. Accordingly, there is a need to respond to population growth in the area and otherwise there is the potential to lead to a decline in education outcomes.

The Site and proposed design are considered to meet the objectives of the proposed activity, as it allows for the staged redevelopment of Gillieston Public School with new public preschool; would be suitably located; and is zoned accordingly for such permissible educational establishment purposes.

3.2 Alternatives

The proposed activity has been developed following a consideration of options and alternatives to address the need identified above. A summary of the options considered is provided in Table 7.

Table 7: Assessment of Options and Alternatives

Option	Discussion	Preferred Option
Option 1: The Proposed Activity	<p>The configuration of the proposed activity was chosen based on the subject site's topography; road access; operational efficiencies; as well as the need to respond to the character of the surrounding area. It is noted that a different site configuration would not have been able to respond to the abovementioned site opportunities and constraints.</p> <p>Notwithstanding, the proposed activity is justified on the basis that it is compatible with the locality in which it is proposed, resulting in positive social and economic benefits, whilst appropriately managing and mitigating any potential environmental impacts requiring consideration.</p> <p>From a locational perspective, the subject site was chosen as it is an established school and would be able to accommodate a suitable platform and scale of built form proposed. Accordingly, the site's locality is considered satisfactory from a strategic standpoint, for which the activity responds to the educational character intended for the site; and the limited environmental constraints which make the site suitable for the redevelopment of the existing school.</p>	<p>Option 1 is preferred as:</p> <ul style="list-style-type: none"> • Use of the existing Site • Community identifies the Site for its educational use and more tolerable to intensification of the Site • Site positioned within an urban growth area and its intensification is required to provide school facilities for the population increase. • Size of the Site is of a suitable size for the expansion.
Option 2: Development on an Alternative Site	<p>Consideration of alternative sites were made, however these were dismissed as the subject site resulted in the most beneficial outcomes for the activity as:</p>	<p>Option 2 is not preferred as it:</p> <ul style="list-style-type: none"> • Required acquiring another Site • Cost associated with relocating

Option	Discussion	Preferred Option
	<ul style="list-style-type: none"> • it is an existing school site • it is located within a site zoned for education purposes • the site has appropriate separation from sensitive land activities • all potential environmental impacts of the activity can be suitably mitigated within the site • the surrounding road network provides good connectivity • the activity can be developed with appropriate visual amenity given its surrounding context; and • The activity is justified on the basis it is compatible with the locality in which it is proposed while having no unacceptable economic, environmental or social impact. 	<ul style="list-style-type: none"> • Potential of increased environmental constraints; and • Community accept the Site is already utilised for school uses.
Option 3: 'Do Nothing Scenario'	<p>This option was dismissed as the objectives of the activity would not be met, including the objective of facilitating the education needs of a growing community. If the proposed activity was not to proceed, the site would continue to remain underutilised, would not adequately respond to population growth in the area and place additional demand on existing school infrastructure in surrounding towns, potentially leading to a decline in education outcomes.</p>	<p>Option 3 is not preferred as it does not address the identified need for intervention at the Site.</p>

4. Statutory and Strategic Framework

4.1 Permissibility and Planning Approval Pathway

State Environmental Planning Policy (Transport and Infrastructure) 2021 (TI SEPP) aims to facilitate the effective delivery of infrastructure and educational establishments across the state and provides that various developments for the purposes of a government school are permitted without consent. The proposed activity is development permitted without consent as outlined at Table 8.

Table 8: Description of Proposed Activities under the TI SEPP

Division and Section within TI SEPP	Description of Works
2.45	Section 2.45 permits the installation of a new substation provided it is carried out on behalf of a public authority as it is not a project to which Part 3A applies or State Significant Infrastructure. The activity will require notification to MCC for 21 days.
2.109	<p>Section 2.109 permits the construction of road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land. Section 2.109 is outlined below:</p> <p>(1) Development for the purpose of a road or road infrastructure facilities may be carried out by or on behalf of a public authority without consent on any land. However, such development may be carried out without consent on land reserved under the <i>National Parks and Wildlife Act 1974</i> only if the development—</p> <p>(a) is authorised by or under the <i>National Parks and Wildlife Act 1974</i>, or</p> <p>(b) is, or is the subject of, an existing interest within the meaning of section 39 of that Act, or</p> <p>(c) is on land to which that Act applies over which an easement has been granted and is not contrary to the terms or nature of the easement.</p>
2.126	<p>Section 2.126 (6) allows for development for the purpose of sewage reticulation systems to be carried out without consent on land in the prescribed circumstances.</p> <p>Section 2.126(1) (a) outlines the prescribed circumstances as being carried out by or on behalf of a public authority, which is defined under the Act, the department is considered to be a <i>statutory body representing the Crown</i>.</p> <p>On this basis, the proposed onsite sewer pumping station and potential upgrade to existing sewer pipes under Northview Street, will require a Section 50 Certificate under the Hunter Water Act.</p>
2.137	<p>Section 2.137 allows for development for the purpose of stormwater management systems which may be carried out by or on behalf of a public authority without consent on any land.</p> <p>The proposed off-site stormwater works on adjoining Site at 29 Northview Street and under the future road positioned to the east of the Site can be undertaken in accordance with this Section and will be undertaken on behalf of MCC and the Department of Education. Stormwater Management Works includes the following:</p> <ul style="list-style-type: none"> works for the collection, detention, harvesting, distribution or discharge of stormwater (such as channels, aqueducts, pipes, drainage works, embankments, detention basins and pumping stations), and stormwater quality control systems (such as waste entrapment facilities, artificial wetlands, sediment ponds and riparian management), and stormwater reuse schemes. <p>It is noted that tree removal is defined as ‘construction works’ under Section 2.3(3) of the TI SEPP, and under Section 2.136(2) of the TI SEPP the ‘construction works’ definition applies to the activity provided it relates to the development for the purposes of stormwater management systems may be carried out by or on behalf of a public</p>

Division and Section within TI SEPP	Description of Works
	authority without development consent in accordance with Section 2.137.
3.23	An assessment against the <i>Child Care Planning Guideline</i> is provided at Appendix 40 .
3.26	The object of this section is to identify development standards for particular matters relating to a centre-based child care facility that, if complied with, prevent the consent authority from requiring more onerous standards for those matters. On this basis, the preschool will provide adequate indoor and outdoor unencumbered space, refer to Appendix 40 .
3.37	<p>The proposed activity comprises construction, operation or maintenance on behalf of a public authority within the boundaries of an existing or approved government school, including:</p> <ul style="list-style-type: none"> • Demolition of select existing structures • Site preparation works, including demolition, earthworks, tree removal and remediation • Removal of demountable buildings • Increase the capacity of the school from approximately 339 to 736 students; and • Construction of: <ul style="list-style-type: none"> ○ Three (3) storey learning building to contain: <ul style="list-style-type: none"> ○ 32 GLAs and support hubs; and ○ administration and staff hubs. ○ one (1) storey hall, canteen and out of school hours care ○ library ○ part of the one (1) storey public preschool (60 spaces) ○ covered Outdoor Learning Areas (COLAs) ○ outdoor play areas, including games courts and yarning circle ○ new at grade parking ○ extension of the existing drop-off / pick-up area and bus bay ○ realignment of the existing fencing ○ associated stormwater and sewer infrastructure <p>It is noted that tree removal is defined as ‘construction works’ under Section 3.3(3) of the TI SEPP, and under Section 3.37(5) of the TI SEPP the ‘construction works’ definition applies to the activity provided it relates to the activity being within an existing school permitted under Section 3.37(1)(a),(b) and (c).</p> <p>The proposed activity involves the construction of building(s) with a maximum height of three storeys which is less than the greater of four storeys as the Site is not limited in height under the environmental planning instrument applying to the Site.</p> <p>The proposed activity would not result in the contravention of any existing condition of the development consent currently operating (other than a complying development certificate) that applies to any part of the school, relating to hours of operation, noise, vehicular movement, traffic generation, loading, waste management or landscaping, refer to Table 9.</p> <p>The Design Quality Principles set out in Schedule 8 of the TI SEPP and the Design Principles set out in the Design Guide for Schools have been considered as set out in Section 2.2.1.</p>
3.37A	The proposed activity comprises development for the purposes of a government

Division and Section within TI SEPP	Description of Works
	<p>school, being a pre-school and associated car parking area, on behalf of a public authority on land which does not contain an existing or approved school and is in the R1 General Residential Zone which is a prescribed zone under the TI SEPP. No trees are proposed for removal from this part of the Site.</p> <p>The proposed activity involves the construction of building(s) with a maximum height of one storey which is less than the greater of four storeys and there is no height limit under the environmental planning instrument applying to the Site, being MLEP 2011.</p> <p>The Design Quality Principles set out in Schedule 8 of the TI SEPP and the Design Principles set out in the Design Guide for Schools have been considered as set out in Section 2.2.1.</p>

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

Additionally, section 5.7 of the EP&A Act states that an activity that is likely to significantly affect the environment must be subject of an Environmental Impact Statement rather than an REF. The effects of the activity on the environment are considered in Section 6 and have been assessed as a less than significant impact and can therefore proceed under an REF assessment.

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

The *Guidelines for Division 5.1 Assessments* (DPE June 2022) and the *Guidelines for Division 5.1 assessments Consideration of environmental factors for health services facilities and schools Addendum* (DPHI, October 2024) provide a list of environmental factors that must be taken into account for an environmental assessment of the activity under Division 5.1 of the EP&A Act. These factors are considered in detail at Section 6.

Existing Development Consents

A request for all development consents applying to the Site was submitted to Maitland City Council under the *Government Information (Public Access) Act 2009* (GIPA Act) and the development consent(s) listed in Table 9 were identified. It is noted that there were no consents found that related to the school operations.

Table 9: Development consents applying to the Site

Development Application	Description	Date Determined
DA23/0048	Education Establishment - Alterations and Additions	Withdrawn – no applicable conditions
DA10/2640	<p>Boundary Adjustment – included following condition:</p> <p>4) <i>Road reserve widening along the road frontages of the property shall be dedicated to Council, sufficient to provide:</i></p> <p>a) <i>in Gillieston Road, a width of 11m from the centre of the existing road reserve; and</i></p> <p>b) <i>in Ryans Road, a width of 5m.</i></p>	13/10/2010

The proposed activity would not contravene any existing condition of the consent(s) currently operating (other than a complying development certificate) that applies to any part of the school, relating to hours of operation, noise, vehicular movement, traffic generation, loading, waste management or landscaping.

4.2 Environmental Protection and Biodiversity Conservation Act 1999

The provisions of the EPBC Act do not affect the activity as it is not development that takes place on or affects Commonwealth land or waters. Further, it is not development carried out by a Commonwealth agency or development on Commonwealth land, nor does the proposed development affect any matters of national significance. An assessment against the EPBC Act checklist is provided at Table 10.

Table 10: EPBC Act Checklist

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

4.3 Other Approvals and Legislation

Table 11 identifies any additional approvals that may be required for the proposed activity.

Table 11: Consideration of other approvals and legislation

Legislation	Relevant?	Approval Required?	Applicability
State Legislation			
<i>National Parks and Wildlife Act 1974</i>	Yes	Yes	Refer to the Aboriginal Cultural Heritage Assessment report at Appendix 22 , an AHIP will be required and will form a mitigation measure.
<i>Rural Fires Act 1997</i>	Yes	No, unless the APZs are not registered prior to construction.	<p>The Site is currently mapped Bushfire prone land with the Site being affected by the following categories:</p> <ul style="list-style-type: none"> Vegetation Category 3 Vegetation Buffer <p>The DoE is currently progressing the application of temporary easements on surrounding lands to manage these lands and</p>

Legislation	Relevant?	Approval Required?	Applicability
			remove the Bushfire prone Land mapping from the Site, on this basis referral to the NSW RFS is not likely to be required, refer to accompanying Bushfire Report at Appendix 23 . A mitigation measure will require resolution of the mapping prior to the commencement of works.
<i>Water Management Act 2000</i>	No	No	The Site is not positioned within 40m of a defined waterway.
<i>Biodiversity Conservation Act 2016</i>	Yes	No	Refer to the Biodiversity Report at Appendix 24 , the activity is unlikely to result in any significant impacts on threatened biota.
<i>Pesticides Act 1999</i>	No	No	No pesticides will be required.
<i>Heritage Act 1977</i>	Yes	No	<p>The original school building, positioned in the northwest corner of the Site is listed on the Department of Education's s170 Heritage Conservation Register.</p> <p>A HIS has been prepared, refer to Appendix 25 and has assessed the impacts on the following items within the Site:</p> <ul style="list-style-type: none"> • Original school building (to be retained);and • Interwar timber classroom that is not intact, and was moved to this Site after its initial construction (to be demolished) <p>The HIS concluded that the construction of a 3 storey building behind the original building (to be retained) would have adverse impacts on its setting but was acceptable. Mitigation measures will be provided to reduce impacts in this instance.</p> <p>Demolition of the interwar timber classroom is identified as being an acceptable adverse impact.</p> <p>The following mitigation measures will be included, as outlined in the HIS:</p> <ul style="list-style-type: none"> • Select a place for the school bell in the development; • Undertake a Photographic Archival Recording of the timber classroom building (Building B00A) before it is demolished; • Report to the heritage consultant if any item of potential archaeological value is uncovered during excavation and/or demolition.
<i>Fisheries Management Act 1994</i>	Yes	No	The activity will not result in any permanent obstructions to water tidal patterns or flows and will not harm marine vegetation.
<i>Contaminated Lands Management Act 1997</i>	Yes	No	The Site is not listed on the register for Contaminated Lands.
<i>Protection of the Environment Operations Act 1997</i>	Yes	No	The activity will not result in significant air, noise, water or waste pollution.
<i>Roads Act 1993</i>	Yes	Yes	<p>The activity will involve the following:</p> <ul style="list-style-type: none"> • result in road closures

Legislation	Relevant?	Approval Required?	Applicability
			<ul style="list-style-type: none"> blocking of pathways Road works (i.e. bus bay, kiss and drop and footpath works) <p>On this basis, approval under Section 138 of the Roads Act will be required. A mitigation measure will require approval to be obtained prior to commencement of works.</p>
<i>Local Government Act 1993</i>	Yes	No	No approval is required under the Local Government Act but is required under Section 50 of the Hunter Water Act 1991 for potable water and sewer connection.
<i>Mine Subsidence Compensation Act 1961</i>	No	No	The Site is not identified as being within a mine subsidence district. Notwithstanding, the Mine Report at Appendix 26 , identifies old disused mines underneath the Site, approval is not required, and mitigation measures will be included to manage any potential impacts.
<i>Environmental Planning and Assessment Regulation 2021 (Section 171A)</i>	No	No	The Site is not within a regulated catchment, not located within the Sydney Drinking Water Catchment and not located within the Sydney Harbour Catchment, as defined under the Biodiversity and Conservation SEPP.
<i>Hunter Water Act 1991</i>	Yes	Yes	The activity will require connection to water and sewer services, on the basis approval will be required and this will form a mitigation measure.
State Legislation – State Environmental Planning Policies			
<i>State Environmental Planning Policy (Planning Systems) 2021</i>	Yes	No	Under Section 2.6 of the Planning Systems SEPP, the activity is permitted as being permitted without consent under Part 5 of the EP&A Act and this assessment has determined that the works can be undertaken as development without consent due to recent legislation changes under Part 3 of the TI SEPP.
<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>	No	No	The provisions of the SEPP do not apply to the Site, refer to Biodiversity Report at Appendix 24 .
<i>State Environmental Planning Policy (Sustainable Buildings) 2022</i>	Yes	No	Chapter 3 applies to the activity as it is development that includes the construction of a building that is more than \$5 million. On this basis, Section 3.2 requires consideration. An Embodied Emissions Report (refer Appendix 11) has been prepared along with a net zero emissions report (refer Appendix 27). Both reports appropriately address the requirements of <i>State Environmental Planning Policy (Sustainable Buildings) 2022</i> (Sustainable Buildings SEPP).
<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>	Yes	No	Several contamination investigations have been undertaken, and the RAP (refer Appendix 18) and IAA (refer Appendix 19) recognise that contamination has been identified within parts of the Site and adjoining dam. Remediation will be undertaken in accordance with the mitigation measures within the RAP and IAA and an unexpected finds protocol will also be required. The RAP is likely to require updating should more contaminants be identified during works. The mitigation

Legislation	Relevant?	Approval Required?	Applicability
			<p>measures will be required to be implemented to ensure the remediation of the Site is undertaken in line with the recommendations and following completion, a Site Auditor will need to confirm the Site has been suitably remediated.</p> <p>The remediation works are classified as Category 2 works and can be undertaken as part of this activity.</p> <p>It is noted that the Site is not identified in the MLEP 2011 as being flood affected but surrounding land is, as shown from Council flood studies. A Flood Impact Assessment (refer Appendix 29) and has identified that the Site is affected by flooding at the northeastern corner, this is discussed further in Section 6.8.</p>
<i>State Environmental Planning Policy (Industry and Employment) 2021</i>	Yes	No	<p>Chapter 3 Advertising and Signage applies. The signage strategy and drawings can be found within the Architectural Drawings at Appendix 10.</p> <p>The signage satisfies Section 3.1(1)(a) being highly compatible within the redeveloped school with respect to the future signage placement and design. An assessment against Schedule 5 can be found at Appendix 28 and finds that the signage location and design are suitable.</p>
<i>State Environmental Planning Policy (Resources and Energy) 2021</i>	No	No	Does not apply.
<i>State Environmental Planning Policy (Primary Production) 2021</i>	No	No	Does not apply.
<i>State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021</i>	No	No	The Site is not positioned within the Eastern Harbour City Precinct.
<i>State Environmental Planning Policy (Precincts – Central River City) 2021</i>	No	No	The Site is not positioned within the Central River Precinct.
<i>State Environmental Planning Policy (Precincts – Western</i>	No	No	The Site is not positioned within the Western Parkland City.

Legislation	Relevant?	Approval Required?	Applicability
<i>Parkland City) 2021</i>			
<i>State Environmental Planning Policy (Precincts – Regional) 2021</i>	No	No	The Site Is not positioned within an identified Activation Precinct.

4.4 Strategic Plans

Table 12 considers strategic plans that are relevant to the proposed activity.

Table 12: Consideration of applicable Strategic Plans

Strategic Plan	Assessment
<i>Hunter Regional Plan 2041</i>	<p>The Regional Plan identifies significant growth in the Maitland/Cessnock region identifies a need for 37,800 new dwellings with 20% infill and 80% greenfield in the upper hunter. The activity will achieve the following objectives:</p> <p>Objective 3 – of the Region Plan seeks to create 15-minute neighbourhoods with mixed use neighbourhoods which nominate schools as being within the mix. The expansion of the school will support this objective as it will service existing and future residential dwellings within the Gillieston Heights urban release area.</p> <p>Objective 4 – seeks to create an inter-connected and globally-focused Hunter without car dependent communities. The expansion of the school will be within a 15-minute walking and cycling catchment of the urban release area, satisfying this objective and more importantly Strategy 4.1.</p> <p>Objective 5 – seeks to plan for ‘nimble neighbourhoods’, diverse housing and sequenced development. The Regional Plan identifies significant growth in the Maitland/Cessnock region identifies a need for 37,800 new dwellings with 20%. On this basis, the activity will support the anticipated growth.</p> <p>Overall, the activity will help meet the objectives of the Regional Plan.</p>
<i>Hunter Regional Transport Plan</i>	<p>There are no significant forecast changes to the regional and local transport networks around the school. The Plan seeks to encourage walking and cycling in close proximity to schools and provides a new bus bay, upgrades to footpaths, pedestrian crossing and bicycle parking, the activity supports this goal.</p>
<i>District Plan</i>	<p>Part 3 of the Hunter Regional Plan 2041 contains district planning and growth areas. The Site is not identified as being in one of these areas.</p>
<i>Maitland Local Strategic Planning Statement</i>	<p>The population of Maitland will increase from 83,200 to 110,600 by 2040. The increasing population needs to be supported by facilities such as schools.</p> <p>Local Planning Priority 03 – seeks to support place-based planning and provide schools within walking and cycling catchments. The activity will support the residential growth and support this priority.</p> <p>Local Planning Priority 06 – seeks to plan for healthy, culturally rich and socially connected communities. The provision of an expanded</p>

Strategic Plan	Assessment
	<p>school will promote connection and satisfy this planning priority.</p> <p>Local Planning Priority 15 – seeks to align infrastructure delivery to support planned growth, it recognises that there is need for new and expanded school facilities. The activity is consistent with this planning priority.</p> <p>Local Planning Priority 18 – seeks collaboration in the delivery of infrastructure and services to support planned growth and Council seeks to advocate the NSW Government as there is an increasing backlog in school facilities. The delivery of the developed Gillieston Public School will assist in satisfying this priority.</p>
<i>Maitland Citywide Integrated Land Use and Transport Strategy</i>	The Strategy recognises significant growth in housing within Gillieston Heights and the need for upgrade to Cessnock Road, being the closet classified road to the Site. The strategy recognises the need for upgrade but does not identify roads in the immediate vicinity of the school. This Strategy was prepared in 2008 and it is likely that the statistics within the report have significantly changed.
<i>Maitland Operations Plan 2024-25</i>	The Plan does not identify any funding towards roads servicing the school.
<i>Design Guide for Schools (Government Architect NSW)</i>	The architect has designed the school and preschool redevelopment in accordance with this guideline, refer to Schematic Design Report at Appendix 13 .

4.5 Maitland Local Environmental Plan 2011

Table 13 considers key matters identified in the MLEP 2011.

Table 13: Consideration of MLEP 2011

Legislation	Relevant? Yes/No	Assessment
Maitland Local Environmental Plan 2011		
Zone	<p>R1 General Residential</p> <p>RU2 Rural Landscape</p>	The activity for the redevelopment of an existing educational establishment is consistent as it satisfies the objectives of the RU2 zone by providing a compatible land use and objectives of the R1 zone by providing a land use that provide facilities to meet the day-to-day needs of residents.
Height of Buildings	NA	There are no height restrictions on the land
Floor Space Ratio	NA	There are no FSR restrictions on the land
Heritage	No but listed under Section 170 Register	<p>The Site is not listed as a heritage item, not within a conservation area and not located in close proximity to a heritage listed item.</p> <p>Notwithstanding, the Site's original school building is listed the Section 170 Register of the Department of Education. Refer to discussion above under the Heritage Act 1977, the activity is acceptable subject to mitigation measures.</p> <p>A Heritage Impact Statement is provided at Appendix 25.</p>
Flood Planning	No	The Site is not identified as being flood affected. However, the northeastern corner of the Site is subject to localised flooding, the future stormwater works will

Legislation	Relevant? Yes/No	Assessment
		assist with improving this constraint.
Minimum Lot Size	450m ² 40 hectares	Not applicable as the Site does not seek subdivision.
Public Utility Infrastructure	Yes	The Site is located within an urban release area and public utility infrastructure is available for the redevelopment.
Urban Release Areas	No	Although the Site is positioned within an urban release area this control is not applicable as it is not intended to undertake greenfield subdivision.
Acid Sulfate Soils	Yes	The Site is nominated as Class 5 Acid Sulfate Soils (ASS), however, the Geotechnical Report (refer Appendix 35) suggests that further testing be undertaken prior to works to ensure that there is no further potential for ASS.
Earthworks	Yes	The Site will require significant earthworks as outlined in the Civil Report at Appendix 15 . All works can be suitably mitigated.
Riparian Land and Watercourses	No	Not identified on MLEP 2011 mapping.

4.6 Maitland Development Control Plan 2011

The *Maitland Development Control Plan 2011* (MDCP 2011) applies to the Site. The relevant sections have been discussed below under each relevant heading.

Section B.3 – Hunter River Floodplain

Refer to the Flood Report at [Appendix 29](#), the Site is not affected by the backflow of the Maitland River Probable Maximum Flood (PMF).

Section B6 – Site Waste Minimisation and Management

The MDCP 2011 requires the submission of both construction waste and operation waste management plans. The REF is accompanied by a waste management plan ([Appendix 21](#)) and a mitigation measure will be imposed to require the update of Operational Waste Management Plan, if required, prior to the commencement of operations, to ensure that it aligns with any design development prior to approval.

Section C.11 – Vehicular Access and Car Parking

The MDCP 2011 requires the following minimum number of car spaces to be provided:

- Childcare – 1 space per 4 children (or part thereof) and provided in a convenient location
- Educational Establishments – 1 space per employee or staff member plus 1 space per 30 students over 17 years plus provision of drop off/pick up zone. Require detailed traffic study.
- Recommends a school traffic management plan be prepared annually and issued to parents.

The activity will increase students to 736 and staff to 50 FTE staff across the next 10 years and will cater for up to 60 pre-school children, on this basis a minimum 45 car spaces would be required to service the school and 15 spaces for the pre-school.

The car park will provide 50 school car spaces, 15 preschool car spaces and a 'kiss and drop' facility (KnD facility) along Northview Street. The number of car spaces provided complies with the MDCP 2011.

Section F.5 – Gillieston Heights Urban Release Area

Part of the Site, with the exception of the existing school, is located within the Gillieston Heights urban release area, refer to Figure 24. The controls in this section describe the anticipated residential growth of the locality and transition from rural to residential and require schools to be located adjacent to bus routes and provide a community focal point. The redevelopment of the school will continue to provide a focal point for the community and is positioned within the middle of an urban release area.

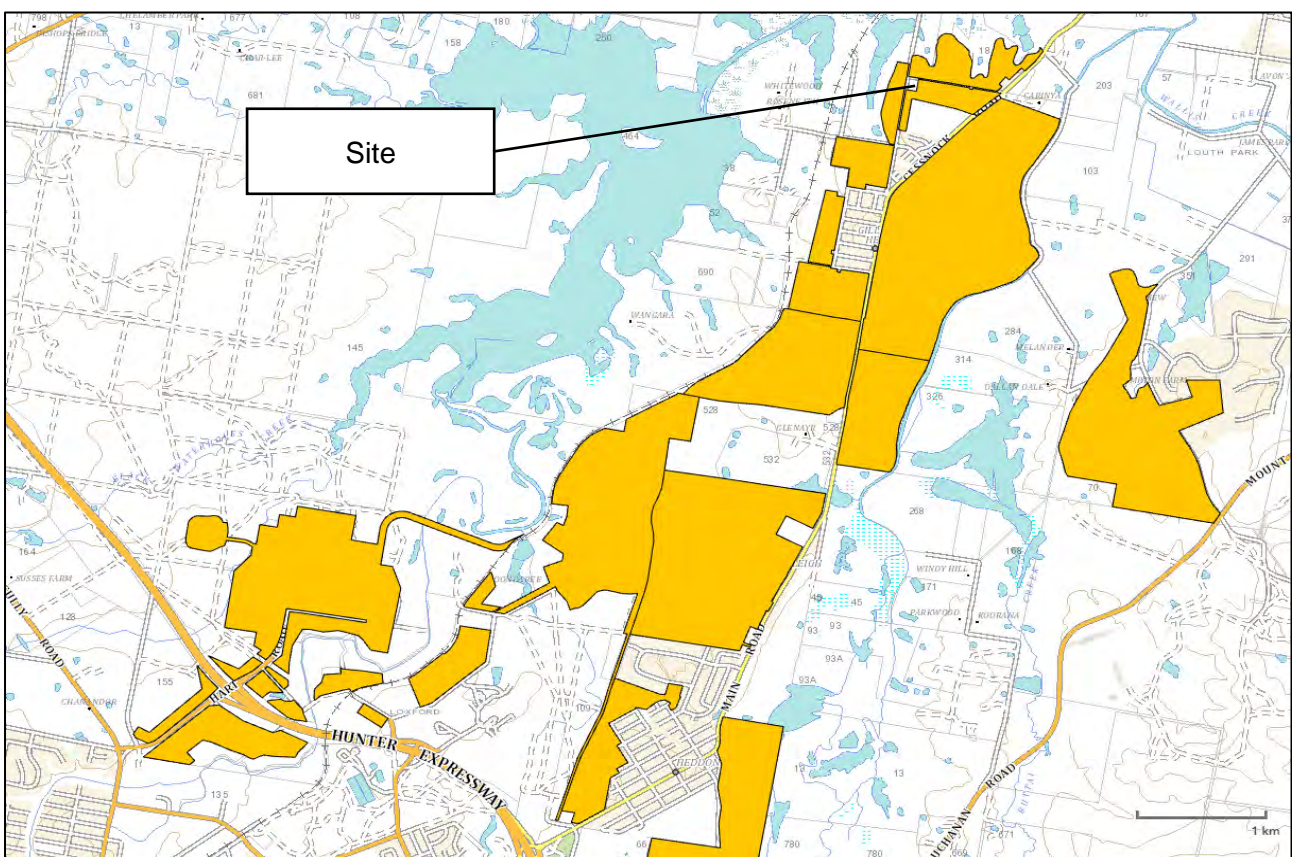


Figure 24: Urban Release Area Map (DHPI: 2024)

The undeveloped area of the Site falls within the urban release area, it was anticipated that the R1 zoned part of the Site would become residential housing, however, there is demand to expand the school to provide a facility for the growing community.

Under Section 1.2 the MDCP 2011 requires the widening of Gillieston Road to 11 metre carriageway, in accordance with Council requirements. Gillieston Road is 11m wide, widening is not required, refer to DA No 10/2640 which required road widening as a condition of consent.

The MDCP 2011 contains citywide flood maps, the Site is not identified as being flood affected, refer to Figure 25.

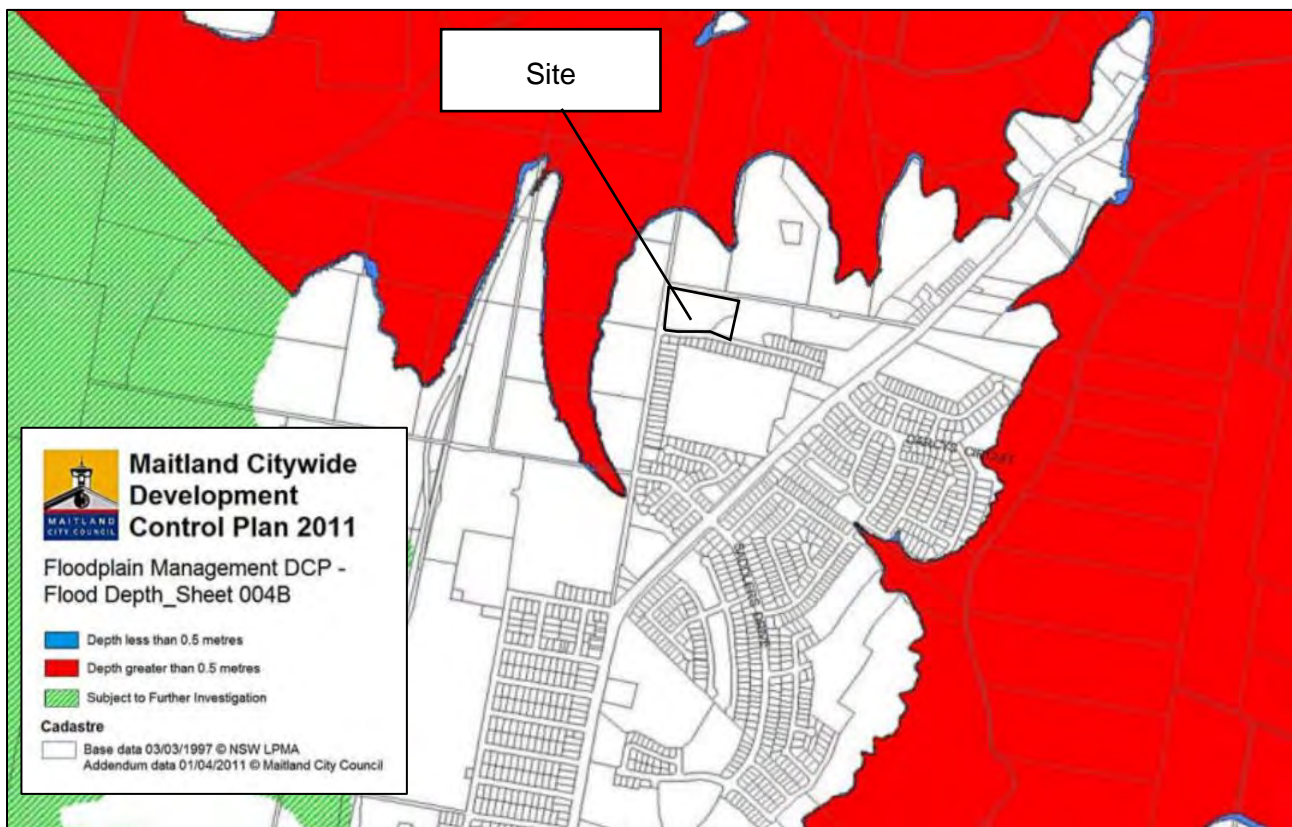


Figure 25: Citywide Flood Map (MCC: 2024)

No further provisions in the MDCP 2011 are relevant to the activity.

5. Consultation

5.1 Early Stakeholder Engagement

The Social Impact Assessment (SIA) at **Appendix 30** provides details of Community consultation and early engagement whilst the Stakeholder Consultation at **Appendix 31** provides details on stakeholder consultation. The Stakeholder Consultation determine the following at Section 2.3 of the report:

Based on the identification of potential impacts and an assessment of the nature and extent of the impacts of the proposed activity, it is determined that all potential impacts can be appropriately mitigated to ensure that there is minimal impact on their locality, community and/or the environment.

The assessment below and inclusion of mitigation measures at **Appendix 1** outline how the activity can be suitably mitigated.

5.2 Statutory Consultation

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

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

The REF was publicly exhibited between 21 February to 20 March 2025. In addition to the notification of adjoining neighbours the following agencies were also notified:

- Maitland City Council
- Ausgrid
- Jemena
- Subsidence Advisory
- NSW State Emergency Services (SES)
- NSW Rural Fire Service (RFS)
- Hunter Water
- Transport for NSW

Following the closure of exhibition a total of six (6) submissions were received, as outlined below:

- One (1) public submission
- Five (5) agency submissions were received, from the following:
 - Maitland City Council
 - Ausgrid
 - Jemena
 - Subsidence Advisory

o SES

Table 14 provides an overview of the comments received during the consultation period and how these comments have been responded to. In addition, **Appendix 49** provides a detailed response from the relevant consultants, addressing in detail the key issues that were raised and how they will be mitigated.

Table 14: Response to considerations raised during consultation

Consideration Raised	Response	Mitigation Measure
Public Submission – Name Withheld		
<p>The key issues raised in this submission are detailed below:</p> <ul style="list-style-type: none"> school traffic for drop off and pick up congestion. Narrowness of Northview Street. Gillieston Road and Ryans Road. Increased traffic and impacts to surrounding traffic network. Lack of traffic management. Supportive of school expansion but traffic impacts need to be addressed. Extension of Northview Street may improve traffic. 	<p>Refer to the amended traffic report at Appendix 32, currently there is no formal kiss and drop zone (KnD) but a formal KnD will be provided along the northern side of Northview Street with a temporary turn around facility provided on Site to minimise disruption along the eastern side of Northview Street to improve management around this locality.</p> <p>In addition, the queuing area for the KnD has been extended to 100m to accommodate four (4) spaces for drop -off/pick-up and queuing capacity for fourteen (14) vehicles. A mitigation measure requires a management plan of the KnD to be developed and this will assist in reducing conflicts along Northview Street.</p> <p>In the long-term the Site to the east of the school will be redeveloped and a north-south road will be positioned along the eastern boundary of the school, the temporary turnaround facility will be in place until the north-south road is provided between Northview Street and Gillieston Road and/or Northview Street is continued through to the east to Cessnock Road. Having consideration of the enrolment numbers between 2026 and 2036, this outcome is supported by the amended TTIA at Appendix 32, and the activity can be suitably mitigated with improved management, future road improvements and creation of robust management plan that will be implemented by the school.</p> <p>To ensure the KnD operates adequately and minimises conflict with the turning facility, preschool traffic and queuing impacts along Northview Street the following will mitigate impacts:</p> <ul style="list-style-type: none"> A 6-month post-opening review of the OTMP is recommended to be conducted and submitted to the satisfaction of DoE's Transport Planning Team to monitor and mitigate any identified operational issues associated with the Kiss n Drop and interface with the pre-school driveway. A 6-month post-opening review of the Operational Transport Management Plan is to be conducted and submitted to the satisfaction of DoE's Transport Planning 	<p>GMM10 GMM11 GMM16 CMM8 CMM24 OPMM6 OPMM7 OPMM8 OPTMM1</p>

Consideration Raised	Response	Mitigation Measure
	<p>Team to monitor and mitigate any identified operational issues associated with the Kiss n Drop and interface with the pre-school driveway.</p> <p>Refer to amended TTIA at Appendix 32.</p>	
Maitland City Council received 24 March 2025		
<p>As you will note from Council's comments (Attachment 1), it has been identified that significant adverse impact is likely to be experienced as a result of the proposed works. The primary source of impact will relate to traffic, transport and stormwater. Other issues associated with contamination, design and potentially bushfire have also been identified. Regarding traffic and transport matters, Council strongly objects to the lack of road upgrade works being nominated by NSW Department of Education – School Infrastructure. This will have a significant and unreasonable impact on the surrounding road network, and on the community. These issues must be addressed.</p>	<p>The update to the REF, following public consultation, discussion in this table and the following amended and new appendices together suitably mitigate the impacts and demonstrate that the activity can function and operate safely and adequately based on the existing infrastructure:</p> <ul style="list-style-type: none"> • Appendix 1 – Mitigation Measures • Appendix 29 – Amended Flood Report • Appendix 30 – Amended SIA • Appendix 49 – Exhibition Responses – Agencies and Public 	<p>CMM2 CMM13 CMM15 CMM24 NVMM1 NVMM2 NVMM3 OPMM4 OPMM9 OPTMM1 OPTMM2 OPFMM1 OPFMM2 BMM1 BMM2 BMM3 BMM4 BMM5 BMM6 BMM7 BMM8</p>
<p>19 Northview Street, Gillieston Heights may not be part of the land that comprises the boundary of an existing or approved school. For this reason, the utilisation of Clause 3.37 of the SEPP (Transport and Infrastructure) 2021 (T&I SEPP) may not apply.</p>	<p>Section 3.37.A of the T&I SEPP allows for land to be used for the purpose of a new school where there is no existing or approved school. These changes were introduced in November 2024.</p>	-
<p>Access Report – ensure design and compliance capability of play areas within school including movement between outdoor areas within the school.</p>	<p>Our Architects (SHAC) have confirmed that all buildings and paths are designed to meet the requirements of AS1428.1 and AS1428.2. Further details will be provided as the design progresses to allow for signoff by an Access Consultant prior to issue of certification for Crown building work under section 6.28 of the EP&A Act. Equitable access to be provided between the central multisport field and school buildings will be further considered prior to construction.</p> <p>Our Access Consultant (City Plan) has advised that play spaces and play elements, along with fittings and furnishings are not legislative requirements. Although consideration will be given to these</p>	GMM4

Consideration Raised	Response	Mitigation Measure
	elements.	
Acoustic - The acoustic report indicates general compliance with construction noise, mechanical equipment, playground activity, and traffic considerations, but requires additional construction phase mitigation measures and may face future operational challenges if residential development occurs along Gillieston Road or from car park noise affecting Northview Street residents, with any issues falling under NSW EPA jurisdiction.	Noted. A mitigation measure has been included to require monitoring of noise 12 months after completion of works, to ensure no adverse impacts	CMM15
Arborist Report - Council ecologists raise no concerns in regard to biodiversity impact.	Noted	-
BDAR Assessment - Council ecologists raise no concerns in regard to biodiversity impacts. Only four living native trees will be removed with no habitat features impacted. The proposal also includes a significant amount of revegetation through landscape trees to occur as part of the development.	Noted	-
Bushfire Report - it is expected that the school would be referred to the NSW RFS, being a special fire protection purpose, under the Rural Fires Act 1997	Noted. RFS were notified and there have been ongoing discussions with the RFS to amending bush fire prone land maps and providing easement for APZ's to ensure that adjoining land is maintained as an APZ. Mitigation measures have been included to address such matters.	GMM8 BMM1 BMM2 BMM3 BMM4 BMM5 BMM6
Contamination/RAP – Further data gap investigation required to ensure site will be suitable for use.	Noted. Mitigation measure requires this to be undertaken.	LCMM6
Flood risk management report - The flood assessment highlights several concerns including questionable time of concentration calculations, increased hazard risks from the box culvert solution near a 2.5m retaining wall, lack of datum for water levels, incorrect statements about evacuation routes, high water velocities threatening structural stability, and potential for alternative design approaches that could improve flow conveyance without requiring such high retaining walls.	Refer to amended Flood Report at Appendix 29 , the flood engineer has confirmed that the Site can be suitably managed through improved stormwater flow and management plans.	CMM2 OPTMM1 OPTMM2 OPFMM1 OPFMM2
Geotech Report (Desktop) - The recommendation of the DSI should	These have been included as mitigation measures.	SWMM6

Consideration Raised	Response	Mitigation Measure
be implemented.		LCMM1 LCMM2 LCMM3 LCMM4 LCMM5 LCMM6 LCMM7 LCMM8 LCMM9
HIS - <ul style="list-style-type: none"> - The teachers' residence – retention supported and will consider listing under Schedule 5 of the LEP. - Consider the curtilage around the former residence, - Consider relocation and retention of Building BOOD. - Comply with HIS mitigation measures. 	<p>Refer to discussion in Section 6.10 of this report.</p> <p>Should Council seek to heritage list the former teacher's residence, this would need to be progressed by Council.</p> <p>Removal of Building BOOD has been supported by the HIS at Appendix 25, as it has been altered and relocated to this Site, demolition is still required, and its removal is reasonable on this basis.</p> <p>Mitigation measures have been included.</p>	HMM1 HMM5 HMM4
Traffic Report – Road infrastructure Upgrades: <ul style="list-style-type: none"> - The Department of Education should fund road infrastructure improvements along the development site's frontage to accommodate increased traffic from their project, rather than relying on adjacent greenfield developments to provide these necessary improvements. - The proposal does not comply with Chapter F.5 of the Gillieston Heights Urban Release Area and does not provide a simple and safe movement system for private vehicles, public transport, pedestrians and cyclists. - The REF also refers to planning activity and/or Council undertaking upgrade road works. Road works are not identified within Councils current four-year Capital Works Program. These upgrades are being undertaken by developers as they subdivide and undertake 	<p>Refer to amended Traffic and Transport Impact Assessment version 5 dated 9 May 2025 prepared by BITZIOS at Appendix 32.</p> <p>Refer to discussion in Section 6.1 of this report, the strategic vision for the development of the Site, as identified in MDCP2011, is for residential land use. However, it does not provide a detailed precinct plan, in the absence of this there is less certainty of the development and formation of roads throughout the northern section of the URA.</p> <p>The school expansion will now occupy the wider site area and will not be developed for residential purpose but will service the growing community. On this basis, it is unreasonable to require the public school to require significant upgrades to the surrounding street network particularly when the amended TTIA at Appendix 32 demonstrates that the operation of the school in 2025 and 2036 can be undertaken without adverse impact on the surrounding street network. In addition, the shared cycle and pedestrian pathway are positioned on the western side of Ryans Road and northern side of Gillieston Road, therefore requiring the adjoining sites to include this expansion within the future development of the adjacent land.</p> <p>The amended TTIA (refer Appendix 32) demonstrates that the infrastructure being provided will ensure a simple and safe movement system for pedestrians, cyclists and private vehicles.</p> <p>The activity is for an expansion of an existing school to service the URA growth, the current contribution plan exempts schools from the requirement to pay additional fees, as they will be providing a service to the surrounding residents and the school will not generate the profit that a residential subdivision would.</p>	GMM10 CMM2 OPTMM1 OPMM9

Consideration Raised	Response	Mitigation Measure
<p>road widening and road construction works adjacent to their own lands.</p> <ul style="list-style-type: none"> - Reference is also be made to the Maitland Development Control Plan (DCP) Chapter F.5 where it is noted that road widening of Ryans Road and Gillieston Road incorporating paths is identified and proposed as part of the urban release area requirements. 		
<p>Traffic Report – Infrastructure Funding Agreements –</p> <ul style="list-style-type: none"> - There are numerous references to required upgrade works being undertaken by others and the availability of funding arrangements to deliver such improvements. - while the school development is exempt from standard developer contributions, the Department of Education could enter into a Planning Agreement to fund necessary supporting infrastructure. - It is recommended that School Infrastructure and Department of Education actively seek funding for delivery of these items rather than rely on others to nominate and/or otherwise fund infrastructure works that are directly attributable to the school. 	<p>Noted. See discussion above, the Site is not being developed for profit unlike residential subdivision. There is no requirement to provide significant upgrades and the development is exempt under the current contributions plan.</p> <p>Refer to amended TTIA at Appendix 32, infrastructure will be provided as detailed below:</p> <ul style="list-style-type: none"> • Wombat crossing on Ryans Road • Pedestrian crossing on Northview Street • Bus bay relocation to Gillieston Road and footpath along part of the southern side Gillieston Road; and • Partial footpath along the northern side of Northview Street. • Line marking in the vicinity of the Ryans Road and Northview Street intersection. <p>The improvements made were determined to be adequate based on the revised student population projections, which are now anticipated to be lower than first forecast based on current enrolments.</p>	<p>CMM20 CMM21 OPMM6 OPMM7</p>
<p>Traffic Report – Report Review –</p> <p>The report notes that traffic growth would continue to be generated without the school upgrade but fails to highlight that the school is a key destination hub that generates traffic in the area.</p> <p>The report relies upon others to construct necessary road works. Importantly, the report notes that other transport improvements will be undertaken in response to future residential growth.</p>	<p>Refer to amended TTIA at Appendix 32, the report acknowledges that there will be increased traffic associated with the expansion but also demonstrates that some of these trips would be part of daily car movements as parents drop off on their way to work.</p>	<p>GMM1 GMM3 GMM10 GMM11 GMM16 CMM2 CMM24 OPTMM1 OPTMM2 OPTMM3 GMM13</p>

Consideration Raised	Response	Mitigation Measure
The report fails to acknowledge the school as a contributor to generation, demand and need.		OPMM6 OPMM7 OPMM8 OPMM9
<p>Traffic Report – Report Review – Specific concerns with traffic report identified:</p> <p>a) 1.2 - Notes a “series of upgrades” and “contributions” towards transport infrastructure to facilitate that all necessary infrastructure fronting the school is to be provided. Please identify where Council has committed to funding and upgrading the road infrastructure requirements associated with Ryans Road and Gillieston Road.</p> <p>b) 2.4 – References Council as undertaking infrastructure upgrades. Road works are not identified within Councils current four-year Capital Works Program.</p> <p>c) 3.2 – Key intersections do not highlight the concerns that will result at Northview Street and Ryans Road and Gillieston Road intersections near the school.</p> <p>d) 3.3.1 – If the plan is to rely on active transport but suitable connections don’t exist, how is this going to work?</p> <p>e) 3.3.2 – Three buses are outlined, but there are only two (2) spaces in the lay by. The report continues to avoid responsibility with regards to providing appropriate transport options, specifying that buses are the responsibility of TfNSW.</p> <p>f) 3.5 – This section infers that crashes are not attributable to the school. Further comment should be provided to validate this claim. The school directly creates demand for road users in the area.</p> <p>g) 4.1 – The assessment should consider the ultimate demand for the development, not just partial enrolment growth out to 10 years.</p> <p>h) 4.2 – Kiss and Drop – There is strong objection to the provision of any infrastructure within Northview Street because the road is a cul-de-sac which was never intended to serve as a primary entry to the</p>	Refer to the amended TIAA at Appendix 32 – Attachment A, all traffic matters have been suitably addressed.	GMM10 GMM11 GMM16 GMM13 CMM2 CMM17 CMM20 CMM21 CMM22 CMM23 CMM24 UIMM4 OPMM6 OPMM7 OPMM8 OPTMM1 OPTMM2 OPTMM3 OPMM6 OPMM9

Consideration Raised	Response	Mitigation Measure
<p>school. The report then explains that this is due to "...activity occur(ing) in the area". Council notes that the school is the activity that is required to upgrade adjacent road infrastructure to serve its (and the wider community) needs for access.</p> <p>i) 5.1 – Notes DDA compliant access is not possible on Ryans Road. Concern is raised as this frontage is the main pedestrian network and access, with enter/exit proposed here. The requirements for ramps does not mean that DDA access cannot be provided, it means that infrastructure is required.</p> <p>Furthermore, the report notes that there is "No space for a bus turn around". It is therefore recommended to construct the road between Northview Street and Gillieston Road.</p> <p>j) 5.2 – Road widths can and should be adjusted to accommodate all development needs.</p> <p>k) Section 6 – Bus stops – The nominal bus stop configuration does not comply with the State Transit Bus Infrastructure Guide requirements. However, it is noted that the overall provided length of the facility is adequate. However, confirmation is required that the nominal width of 3.2m allows for the provision of a suitably wide travel lane (both sides of the road) for the passage of vehicles along Gillieston Road.</p> <p>l) Table 7.1 – Northview/Ryans intersection – The report does not acknowledge the lack of suitable turning space, the cul-de-sac arrangement and the ability to provide a road connection through from Northview Street to Gillieston Road to support the development. This statement is further supported by the notation that the Ryans Road and Gillieston Road intersection is not important because movements will be from the south. Furthermore, the provision of the Kiss and Drop area means traffic demand in this area will be required to return through the intersection. This doubling of</p>		

Consideration Raised	Response	Mitigation Measure
<p>the traffic demand should be modelled for impacts on the intersection (Refer also to Section 7.5.2). What mode split does the assessment use (existing or targets? – Council notes that it should be using existing).</p> <p>m) Table 7.2 – The daily rate (7.40 Vs 7.53), AM peak (0.71 Vs 0.83) and PM peak (0.78 Vs 0.84) do not align with the values established by the TfNSW Guide to Traffic Impact Assessment.</p> <p>n) Table 7.3 – Adopts rates as outlined in Figure 7.1 which are referred to as ambitious. Whilst the comment around Figure 7.1 notes these values as based upon the local context and catchments, it fails to consider that a significant portion of the school catchment has limited access to active transport infrastructure of which to facilitate such travel. In the absence of active transport infrastructure (of which the school is not providing) existing rates should be adopted for the purposes of establishing anticipated traffic demand.</p> <p>o) Table 7.4 – Adopts estimated number of students as of 2036. The assessment is to include demand associated with the whole proposal, not just anticipated by the 10-year horizon. The 10-year horizon is nominated to accommodate background growth.</p> <p>p) 7.5.2 – Notes that the Kiss and Drop operates on a continue to work arrangement but fails to acknowledge the duplication due to the cul-de-sac will result in additional traffic being rediverted back thorough the Northview/Ryans intersection.</p> <p>q) 7.6 – Assumptions to adopt a car travel rate of 40% based on additional development are low. All previous advice points to 60% for private vehicle usage mode share and a rate of 1.75 for carpooling (57%).</p> <p>r) 7.7 – States Road formations will be of a Collector standard; however, the report continues to fail to note that the school will not be contributing to this whilst espousing</p>		

Consideration Raised	Response	Mitigation Measure
<p>the values and benefits of such upgrades to support the development. Furthermore, the report declares that upgrades are required.</p> <p>s) 7.8 – The report requests others to deliver transport related infrastructure to support the growth surrounding the school. This should be the responsibility of the key provider increasing demand in the area (i.e. the school).</p> <p>t) Section 8.2 – An assessment of the proposed parking and surrounding road network is to be undertaken to confirm that sufficient parking opportunities exist to cater for the estimated demand based upon current mode user shares. (i.e. is there sufficient capacity in the adjoining road network for on-street parking to support the development?)</p> <p>u) 8.2.1 – The report states that Kiss and Drop has capacity for 288 vehicles over 30mins. Verifications is required to confirm how a turnover timeframe of 25 seconds per space has been established, particularly when NSW Road Rules allow for a maximum of 2 minutes. Also, demand should be based on current mode shares, not future targets. This relies on the fact that people will not arrive prior to bell time. In Council's experience this rarely happens. The operation of the Kiss and Drop is governed by typical "No Parking" restrictions and enforcement by Council and/or NSW Police. Policies and Procedures as part of the School Travel Plan is irrelevant. The report also identifies that queuing in Ryans Road is likely, but the intersection has not been modelled. This needs to be modelled.</p> <p>Comments continue to note that intersections along Ryan Road are less than 40m (this not true) and therefore do not facilitate upgrades to Northview Street. This further reinforces that Northview is not appropriate for the main site entry, and it is suggested that left in/out to Ryans Road. Everything here suggests that Northview is not appropriate for the purposes of</p>		

Consideration Raised	Response	Mitigation Measure
<p>providing a Kiss and Drop and main entry location.</p> <p>v) Four spaces plus eight spaces for queuing that will be turned into “No Stopping”. Any Kiss and Drop proposal should be contained internal to the subject site. It is not the requirement of the public road corridor to facilitate private development uses.</p> <p>w) Bicycle facilities should be provided on site.</p> <p>x) Section 9 – References swept paths for RCV and MRV in Appendix H – There is no such appendix or turning templates provided.</p> <p>y) Section 11 Summary – This section relies upon alignment with local and state government goals to reduce car dependence but is not contributing to such actions with required infrastructure. It is agreed that traffic growth will continue to occur, but the school fails to acknowledge that the school contributes to the volume of current (and future) traffic growth in the area. The summary notes that the proposal meets the need at opening of the school but that additional transport improvements are required over time. It is considered that these needs should be provided for as part of the proposed development.</p> <p>Z) Repeated reference to Councils Developer Contributions Plans. There are no contributions, nor projects identified within the immediate vicinity of GPS for which contributions can be applied.</p>		
<p>Traffic – Other/Generalised Traffic –</p> <p>11.11 It appears a current traffic counts assessment has not been undertaken on the surrounding road network. All of the assessment is based on estimated volumes generated.</p> <p>11.12 The existing road network being Gillieston Road (approx. 6m wide) and Ryans Road (approx. 9m wide) are inadequate to support the proposed development. Road widening along these streets shall be delivered in conjunction with the</p>	<p>Refer to Attachment A of the amended TIAA at Appendix 32.</p> <p>The revised population numbers are lower than initially forecast, this is based on current enrolments, refer to amended TTIA at Appendix 32. The TTIA demonstrates that the existing infrastructure is adequate to service the expanded school.</p> <p>It is also confirmed that only two (2) buses will service the school but highlights that there is capacity for a third bus but this is dependent on population increases within the school and also within the surrounding URA.</p>	<p>GMM10</p> <p>GMM11</p> <p>GMM16</p> <p>GMM13</p> <p>CMM2</p> <p>CMM17</p> <p>CMM20</p> <p>CMM21</p> <p>CMM22</p> <p>CMM23</p> <p>CMM24</p> <p>UIMM4</p>

Consideration Raised	Response	Mitigation Measure
<p>school upgrade.</p> <p>11.13 The proposed Bus bay shall be located outside of the ultimate Gillieston road cross section being an 11m wide carriageway, with minimum 4.5m wide verges. This is to ensure the function of this road is not impeded by the upgrade of the school.</p> <p>11.14 The report suggests only two buses will be stopped at the bus bay at any one time. There is no further detail to suggest this is appropriate or sufficient. Where will any additional buses wait for pick up?</p> <p>11.15 Any works within the road reserve require approval under Section 138 of the Roads Act, with the application to be submitted to Council for review and approval.</p> <p>11.16 The location of the proposed Wombat Crossing and Children's Crossing shall be consulted with Council's Traffic department.</p> <p>11.17 The proposed Kiss n drop facility with temporary u-turn facility is unsafe, as cars need to cross a pedestrian path twice in order to make a u-turn. This also interacts with the proposed southern carpark driveway entry/exit. During peak times the operation of this will impact traffic flow within Northview Street.</p> <p>11.18 Northview Street is a cul-de-sac and aligns with the concept of a yield street with low value given to both movement and place considerations. The inclusion of Northview Street as part of the school development strategy will require widening of Northview Street in accordance with Councils Manual of Engineering Standards to provide for sufficient travel lanes and parking allowances to supplement the schools traffic demands. Furthermore, the use of Northview Street should not be considered unless sufficient attention is given to issues associated with vehicle circulation.</p> <p>11.19 Any upgrades required to facilitate the expansion of the school at the Cessnock Road/Gillieston Road intersection</p>		<p>OPMM6</p> <p>OPMM7</p> <p>OPMM8</p> <p>OPTMM1</p> <p>OPTMM2</p> <p>OPTMM3</p> <p>OPMM6</p> <p>OPMM9</p>

Consideration Raised	Response	Mitigation Measure
and/or Cessnock Road/Vintage Drive intersection will be determined by TfNSW.		
Waste Management Plan – <ul style="list-style-type: none"> - Demolition and construction part acceptable. - The operational waste management plan outlines a centralised collection system but requires detailed design considerations for safe manual transportation, potentially including electric bin tugs, and proper waste storage area facilities with water access, drainage and shade. - It is also recommended that the detailed design stage ensures that the waste storage area is fitted with water taps/hose and appropriate drainage to allow ease of ongoing cleaning and maintenance. Consideration should also be given to ensuring shade to minimise odour during summer and hotter months. - Consideration to be given to acoustic impacts from collection outside of school hours. 	<p>Note – no concern with demolition and construction waste management plan.</p> <p>Mitigation Measure OPMM1 requires the waste areas to suitably graded, provide with a tap/hose and potential use of bin tugs.</p>	<p>GMM19 CMM2 CMM6 CMM11 CMM18 NVMM3 OPMM1</p>
PSI – <ul style="list-style-type: none"> - DSI and RAP prepared. - Recommendations to be implemented. 	<p>Noted. An amended RAP will be required following removal of demountables and other buildings. Mitigation measures have been included.</p>	<p>LCMM1 LCMM2 LCMM3 LCMM4 LCMM5 LCMM6 LCMM7 LCMM8 LCMM9</p>
ACHAR – <ul style="list-style-type: none"> - All mitigation measures identified in this report must be adhered to, including the preparation of an AHIP. 	<p>Noted. Mitigation measures have been included.</p>	<p>CMM2 CMM26 HMM2 HMM3 HMM6 HMM7 HMM8 HMM9</p>

Consideration Raised	Response	Mitigation Measure
		HMM10 HMM11 HMM12
Groundwater – <ul style="list-style-type: none"> - No groundwater to be encountered. - What is the difference between the iso plans shown in page 173 and 180 of 235 of the document? Noting that these are civil drawings in a geotech report. 	<p>Stantec confirmed interception of groundwater unlikely, however, contingencies in place within the CEMP that is required.</p> <p>Plan on page 173 is the cut and fill plan whilst plan on page 180 relates to stormwater management plan, have been included to illustrate the changes to the topography.</p>	CMM2 CEMM2 SWMM4
<ul style="list-style-type: none"> - Civil Design – - a) the retaining wall and development of the school will alter the natural flow path of water, which will change the area of impact during storm events, to what extent is unclear. - b) It is unclear as to why the proposed basin on the Northern side of Gillieston Road is called 'Temporary'. This should be permanent as it is proposed to provide detention storage that is being removed as part of the school redevelopment. This basin will accept both private and public stormwater flows. The ownership of this basin shall be discussed with Council and appropriate easements shall be created over this to allow legal stormwater discharge and ongoing maintenance of the facility. - c) Changes to the existing easement or works within this easement will require further discussions with Council, as Council is benefited from this easement. - d) The proposed sewer pump station is to be located outside of the road reserve. - e) The extent of earthworks shall be clearly shown on the plans, as the proposal includes regrading land 	<ul style="list-style-type: none"> a) the stormwater is graded away from the Site towards the northeast of the site. b) Adjoining developer to undertake final stormwater works and size may require adjustment. c) Easements will require adjustment and mitigation measures have been included to address the easement matters. d) Noted, a mitigation measure (GMM18) is recommended to ensure the sewer pump is positioned within the school grounds. e) Civil drawings accompany the application and demonstrate cut and fill. f) The development is staged refer to Architectural drawings at Appendix 10 and an erosion and sediment plan will be prepared for issue of CC, refer to mitigation measure CMM2. g) Upstream water will be diverted to the culvert not to the 900mm culvert. h) Plans are correct, the OSD is 320m³. i) Pathways service the main entry points, Ryans Road will not have pedestrian entrances once the school opens and the pathways along Northview Street and Gillieston Street are adequate, refer to Appendix 49 for detailed response. j) The dam will not be dewatered but some impact will occur with the future stormwater works, a mitigation measure (CMM2) has been included to manage interactions with the dam. 	GMM7 GMM13 CMM2 SWMM5 SWMM7 SWMM8 OPMM2

Consideration Raised	Response	Mitigation Measure
<p>outside of the school site. Owners consent should be obtained for these works, including consent from Council to undertake works within the easement for drainage.</p> <ul style="list-style-type: none"> - f) Plans attached to the report appear to deal with the proposed development holistically and do not consider staging proposed by other associated plans. This includes for the provision of suitable erosion control details at construction entry/exit points for all stages. - g) The drainage proposal nominates to connect directly to the existing 900mm culvert under Gillieston Road. Give the quantum of fill occurring in this area, it is queried how surface flow for the adjacent upstream catchment will continue to access the 900mm diameter culvert for discharge. The nominal sections provided in the plan have no reference to align with on the general arrangement plan. - h) Volume for OSD on plans specifies 320m³ but the report nominates 280m³. Confirmation on correct required and provided volumes is required. - i) Plans show proposed footpath to Northview Street (replacement) and partially along Gillieston Road between bus stop and car park area. There is no new path nominated for Ryans Road despite the nomination of a proposed pedestrian access point, including its use during staged construction when other options are limited, connecting to one of the main pedestrian pathway spines through the school 		

Consideration Raised	Response	Mitigation Measure
<p>site. It is considered that the provision of footpath across all road frontages to serve the school should be provided as a minimum. This would be a requirement for construction of a childcare centre in accordance with the DCP and it is considered this should also apply for the construction around school sites as well.</p> <p>- j) Sampling of surface water from the dam in the eastern portion of the site identify some metals and PFOS contamination that would require consideration during the proposed dewatering and filling of the dam as part of the redevelopment works.</p>		
VIA – is acceptable.	Noted.	-
Interim Audit Advice – report acceptable	Noted. Mitigation measures included to require update following preparation of the amended RAP.	CMM2 GMM9 LCMM1 LCMM2 LCMM3 LCMM4 LCMM5 LCMM6 LCMM7 LCMM8 LCMM9
Electrical & Mechanical Report – comply with design and mitigation measures.	Noted. Mitigation measures have been included.	UIMM2 UIMM6 UIMM7 UIMM8
Staging Plans - The following comments are noted: a) 4.4 - The PCMP refers to external approvals from NSW Fire and Rescue, but this agency is not identified as a requirement for approval or otherwise referenced within the REF. b) 5.2 – Hoarding on the street/road will require approval from Council. c) 6.1 & 6.2 – Further work is considered necessary to develop a CEMP that aligns with the outcomes of the Aboriginal Cultural	See responses to each item below: a) NSW RFS is the relevant authority, this has been identified in mitigation measure GMM8. b) Approval will be obtained from Council for hoardings, a mitigation measure has been included. c) These matters can be addressed within the final CEMP to be developed inline with the ACHAR (refer CMM2 and CMM26). d) A mitigation measure (CMM17) is included to require all vehicles to enter and leave the Site in a forward direction. e) A mitigation measure (CMM2 and CMM26)	GMM8 CMM2 CMM3 CMM17 CMM26 HMM2

Consideration Raised	Response	Mitigation Measure
<p>Heritage Assessment Report including a cultural heritage induction package, information on unexpected artefact findings, and cultural awareness training. Refer to mitigation measures ACHM 1 through 10 within supporting document A1 for further information.</p> <p>d) 7.3 – Not “where possible”. All vehicles entering and exiting the site are to leave in a forward direction.</p> <p>e) 11 – The mitigation measures identified do not consider all of the requirements specified within the PCMP including but not limited to the need for a Safety Management Plan. Furthermore, the measures discussed in detail within the various sections of the PCMP are not summarised as required mitigation measures within this chapter. Some of these measures are however incorporated into the A1 Mitigation Measures associated with the REF. There are missing pieces of information and inconsistencies within the PCMP and between other supporting documents</p>	<p>will be included to require the Construction and Environmental Management Plan (CEMP) to be updated prior to CC.</p>	
<p>Mine Subsidence - To be assessed by Subsidence Advisory NSW.</p>	<p>Refer to Subsidence Advisory NSW referral comments, the REF does not require agency referral. Notwithstanding, appropriate mitigation measures will be included to address geotechnical and structural concerns.</p>	<p>MSMM1 MSMM2</p>
<p>Stakeholder Consultation - Based on the reasons outlined in this table, there are significant impacts associated with this proposal, primarily relating to traffic implications, as well as stormwater. The following statement in this report disputes the mitigation of the activity in respect of traffic and, stormwater etc.</p>	<p>The REF has carefully considered all aspects of the proposal thoroughly and the accompanying report and mitigation measures have been carefully considered and determines that the activity is suitable and necessary service to the growing community.</p>	<p>CMM2 CMM24 OPTMM2</p>
<p>SIA - The Social Impact Assessment is comprehensive and demonstrates appropriate community engagement undertaken to inform development. Appropriate consideration has also been given to the demographics within the school catchment and how the development supports the community given the growth within the catchment area. Noting</p>	<p>The SIA has been updated to note that the delivery of transport and transit infrastructure will be covered by TTIA at Appendix 32 and mobility infrastructure will be provided in accordance with TTIA at Appendix 32. Refer to amended SIA at Appendix 30.</p>	<p>OPTMM1 OPTMM2 OPTMM3 CMM2 CMM25 CMM26 NVMM1 NVMM2 NVMM3</p>

Consideration Raised	Response	Mitigation Measure
concerns around traffic being of key concern, I anticipate Council's traffic team will provide relevant feedback on the management of traffic. Additional potential impacts have been considered in Section 5 of the report. It is recommended the mitigation recommendations outlined in the Social Impact Assessment report are implemented to minimise and manage any potential negative impacts associated with this development.		
LUCRA - Recommendations to be adopted. Council notes the Traffic issues previously raised in this table conflict with land use conflict assessment.	Mitigation measures have been included.	LUMM1 LUMM2 LUMM3 LUMM4
BCA - Recommendations to be adopted.	Mitigation measures have been included (GMM4), compliance will be required a Crown Certification stage.	GMM4
Design Review Summary – Noted.	Noted.	-
Embodied Emissions Report - Compliance with specified legislation can be achieved.	Identifies that compliance can be achieved.	SCMM1
Sustainable Development Plan - Compliance with specified legislation can be achieved.	Identifies that compliance can be achieved.	SCMM1
School Transport Plan – a) 3.3.4 – The report Nominates carpooling. There is no way this can/will be implemented as a long-term outcome. b) Section 3 provides a list of actions, however many of these are not actually considered likely to result in driving change or outcomes associated with transport usage and mode shares. c) Section 4 then reaffirms the desire to have others (local and other state government entities) integrate the school actions for delivery of transport related facilities. d) States Council does not have a Bike Plan. This is incorrect, although it is noted that Council is currently reviewing this plan in conjunction with the PAMP to prepare a city-wide Active	Refer to amended TTIA at Appendix 32 . The School Travel Plan will evolve as the area changes and will require continual improvement. Given the forecasted population will be lower than originally anticipated, this will be beneficial to allow for robust management systems to be developed and put into action early. Increasing development in the surrounding locality will also see improvements with infrastructure and most importantly additional connection points along Northview Street, which will assist in minimising traffic impacts for existing residents. A mitigation measure has been included (OPTMM2) to require the School Transport Plan to include information on future Bike Plans for the locality and have consideration for the city-wide Active Transport Strategy, once the policy has been adopted.	OPMM7 OPTMM1 OPTMM2 OPTMM3

Consideration Raised	Response	Mitigation Measure
<p>Transport Strategy.</p> <p>e) If the School Transport Plan is to be implemented, reviewed and managed moving forward, then an appropriate template for reporting on actions should be provided as part of the STP including required due dates and other critical information pre-filled. Not just an example with blank spaces for data entry.</p> <p>f) Section 5 – Funding Arrangements – relies heavily on Councils budget allocations and successful grant opportunities. Refer to common themes.</p>		
<p>Net Zero Emissions - Compliance with specified legislation can be achieved. Ability to comply.</p>	<p>Noted. Mitigation measures apply to the sustainability of the development.</p>	<p>SCMM1</p>
<p>Childcare Planning Guideline Assessment –</p> <p>a) The REF report and documents do not specify the ages of children intended to be catered for by the preschool, but I am assuming 3-6 as it is a preschool as opposed to a long day care? Clarification in this regard would be ideal as it limits the scope of considerations of age suitable design (change tables, cot rooms, bottle prep areas, etc).</p> <p>b) No. of children per room not indicated on plans but it appears approx. 20 children per room can be accommodated totalling 60 children as proposed.</p> <p>c) The design location of bathrooms across the centre ideal – an amenities room should be placed between Playroom 03/01 to be shared with Playroom 02. The detailed design of each bathroom should be provided to determine suitability with regard to the childcare planning guidelines (age appropriate toilet facilities, nappy change benches (including steps) if applicable, wash baths (if applicable) and staff handwashing sinks, design to accommodate dignity and privacy of children through low level dividers between toilets, supervision windows into play spaces and direct access to outdoor play area.</p> <p>d) Fit out of laundry should identify that adequate washing and drying</p>	<p>Refer to detailed discussion in the Appendix 49.</p> <p>The ages of children will be 3 to 6 years.</p> <p>The design will be developed prior to Crown Certification. The areas utilised will need to comply with the National Quality Standard and the DoE has a very rigorous design team that will ensure compliance with the childcare standards.</p>	<p>GMM1 GMM2 GMM3 GMM4</p>

Consideration Raised	Response	Mitigation Measure
<p>facilities are available as well as storage of soiled clothing prior to washing.</p> <p>e) The design does not incorporate a reception area/desk which is required.</p> <p>f) Entry to be further articulated and onsite directional signage to be utilised to direct persons to the entry.</p> <p>g) The kitchen appears very small – clarification should be sought as to whether meals are intended to be prepared on site or if children will be required to bring their own meals.</p>		
<p>Schedule 5 Signage Assessment –</p> <p>Signage assessment acceptable consider sign placement to confirm no sightlines are obstructed.</p>	Refer to mitigation measure SMM1 in Appendix 1 .	SMM1
<p>Hunter Water Design Assessment –</p> <p>a) An application for the decommissioning of redundant wastewater system must be sought via MCC.</p> <p>b) A Section 50 application must be sought via Hunter Water.</p> <p>c) All utilities associated with sewer (i.e. pumpstation) should be provided on private land</p>	Refer to mitigation measure GMM1, requiring all separate approvals to be obtained.	GMM1
<p>Certificate of Design Hydraulic –</p> <p>As above – see Hunter water comments.</p>	Noted – refer above.	-
NSW SES received 20 March 2025		
<p>Flooding Assessment Requirements</p> <ul style="list-style-type: none"> Consider the full range of flooding events up to the Probable Maximum Flood (PMF), not just the 1% Annual Exceedance Probability (AEP) flood Include climate change considerations in line with NSW Government Guidelines Address concerns about the northeastern corner of the site which experiences H5 hazard level flooding (unsafe for vehicles, 	<p>Refer to detailed discussion in Appendix 49, in response to the NSW SES matters.</p> <p>Notwithstanding, a flood emergency response plan (FERP) will be updated and approved by the DoE (OPFMM1 and OPFMM2 in Appendix 1)</p> <p>An amended Flood Report has been prepared and addresses these matters, refer Appendix 29</p>	<p>OPFMM1</p> <p>OPFMM2</p>

Consideration Raised	Response	Mitigation Measure
people, and buildings)		
Site Risk Management <ul style="list-style-type: none"> Ensure all site users (staff, students, carers, and construction workers) are made aware of flood risks through inductions, signage, and information tools Address concerns about Gillieston Heights being a High Flood Island with extended isolation periods (up to 9 days) during flood events Consider that the area has limited access to essential services including hospitals during floods 	Refer to amended Flood Report at Appendix 29 and has considered the high floor island risks and associated risks to access essential services during floods. Several mitigation measures have also been included.	OPFMM1 OPFMM2 OPTMM1
Emergency Planning <ul style="list-style-type: none"> Review and update the school's Emergency Management and Evacuation Plan specific to flood events Address the significant increase in vulnerable population (from 339 to 1,012 students) Include consideration of secondary emergencies during flooding (fires, medical emergencies) Implement early warning triggers in the Flood Emergency Response Plan (FERP) Consider procedures for closing the school ahead of the school day when flooding is expected 	Noted, the amended Flood Report (refer Appendix 29) has considered this, and suitable mitigation measures are included.	OPFMM1 OPFMM2 OPTMM1
Operational Considerations <ul style="list-style-type: none"> Notify NSW SES if proposed works may disrupt local road operations, potentially delaying emergency vehicle access Address concerns about increased pressure on emergency services due to the larger student population (including preschool children) 	Refer to Section 8.2 of the amended Flood Report at Appendix 29 , an Emergency Response Team within the DoE will liaise NSW SES and evacuation prior to flooding will be undertaken. In the unlikely event that an evacuation route is cut, the school would be reliant on emergency services.	OPFMM1 OPFMM2

Consideration Raised	Response	Mitigation Measure
Documentation <ul style="list-style-type: none"> Align with NSW Government's Flood Prone Land Policy and Flood Risk Management Manual 2023 Utilise online resources available at www.ses.nsw.gov.au for additional support 	Noted.	-
NSW Ausgrid received 10 March 2025		
<p>No objection to the proposal subject to the following:</p> <ul style="list-style-type: none"> Methodology of electricity connection Consult with energy provided and then undertake an assessment Substation may be required additional electricity conduits in the footway adjacent to the development will be assessed and documented in Ausgrid's Design Information developer is to consider the impact that existing street lighting and any future replacement streetlighting and maintenance may have on the development developer engage a Level 2 Accredited Service Provider (ASP) Electrician to ensure that the installation will comply with the Service Rule There are existing overhead electricity network assets in Gillieston Rd. Comply with sitework Australia. There are existing underground electricity network assets in Gillieston Rd, Ryans Rd, & Northview St. Special care should also be taken to ensure that driveways and any other construction activities within the footpath area do not interfere with the existing cables in the footpath. 	<p>Refer to Appendix 49 for detailed discussion.</p> <p>Notwithstanding above, the mitigation measures (UIMM6, UIMM7 and UIMM8 in Appendix 1) have been included to address electricity connections.</p> <p>No street lighting will be impacted.</p> <p>Regarding tree planting, mitigation measure (OPMM4, CMM2, TMM1, TMM4 and TMM5 in Appendix 1) has been included.</p>	<p>GMM1</p> <p>GMM3</p> <p>UIMM2</p> <p>UIMM6</p> <p>UIMM7</p> <p>UIMM8</p> <p>OPMM4</p> <p>CMM2</p> <p>TMM1</p> <p>TMM4</p> <p>TMM5</p>
Jemena received 18 March 2025		
No objection subject to 'Before you Dig Australia,	Noted	-
Subsidence Advisory received 5 March 2025		

Consideration Raised	Response	Mitigation Measure
<p>The proposed development is not within a declared mine subsidence district. Subsidence Advisory does not have legislative powers under the act to make determinations regarding development or subdivision on land that is not within a district.</p> <p>We note however that the site is undermined by historic abandoned workings in the Homeville Top seam. The workings under the site are not considered to pose a risk of subsidence to the proposed school redevelopment and new pre-school.</p> <p>Design measures to account for future coal mine subsidence are not required.</p>	<p>Noted, mitigation measures have been included.</p>	<p>MSMM1 MSMM2</p>

6. Environmental Impact Assessment

6.1 Traffic, Access and Parking

Background

The Site is positioned within an urban release area and all strategic policies have identified a need for increased school facilities to service the Maitland LGA. The activity will see a significant increase in both the student and staff population which will in turn increase car and bus movements to and from the Site, impacting on surrounding road networks. A Traffic and Transport Impact Assessment (TTIA) was prepared and subsequently amended, following the exhibition of the REF to respond to the submission received. The amended TIAA and is provided at [Appendix 32](#).

The school catchment area is identified in Figure 26. There is a need to expand the school in the current location based on the anticipated growth and this will assist in developing 15-minute mixed use centres as outlined in the Hunter Regional Plan 2041 and Maitland LSPS, being positioned within the walking and cycling distance of the existing and future residential dwellings whilst being serviced by a bus route.

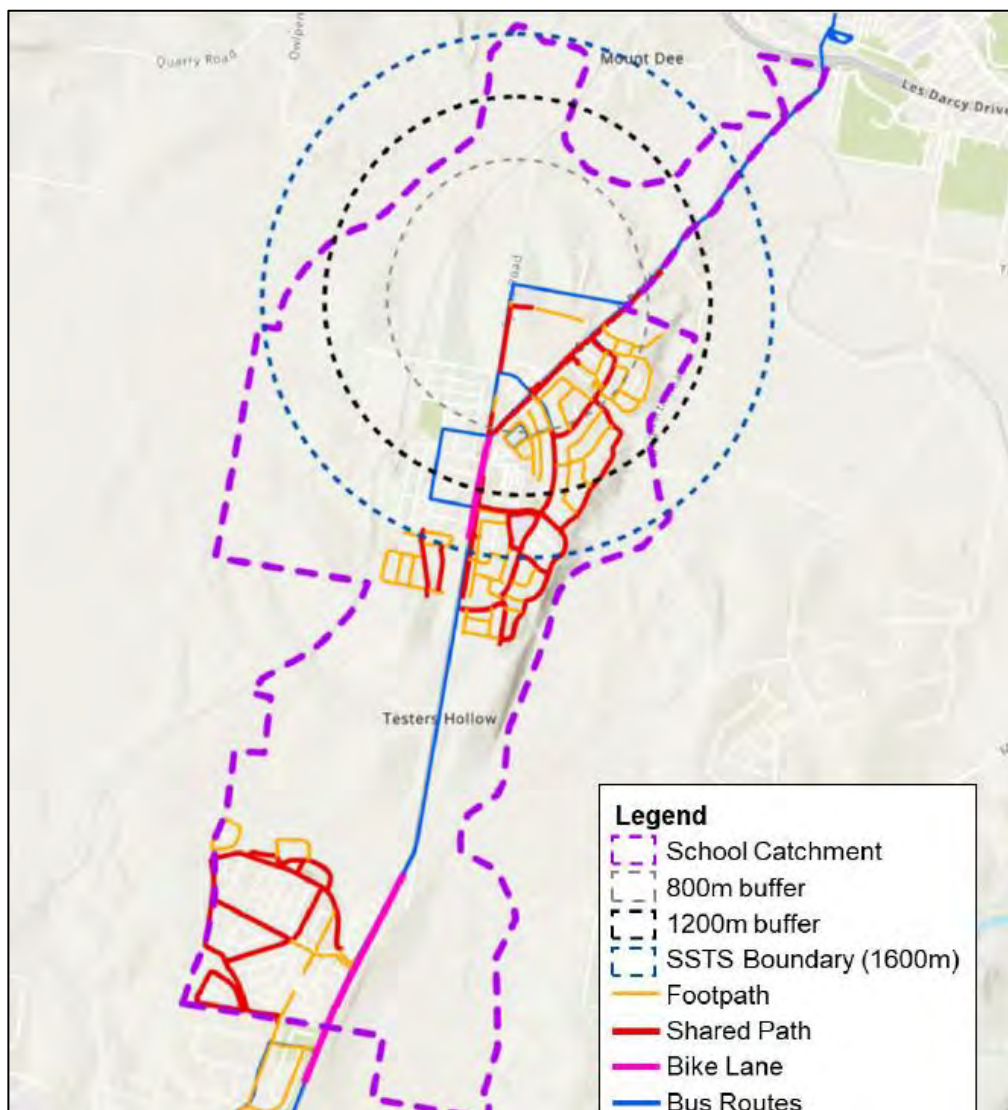


Figure 26: School Catchment and Walk/Cycle Catchments (Bitzios: 2024)

Currently the Site operates with around 411 students and 23 full time equivalent (FTE) staff and operates between 8.00am and 3.00pm. The school is serviced by the S934 bus in the mornings and the S851 and S936 buses in the afternoon, all buses are school buses. It is noted that 59.6% of students are dropped off by car, 28.1% by bus, 2.5% cycle/scoot and 5% walk. The main pedestrian access to the school is provided on southern side of Gillieston Road near the main entrance with separate pedestrian-only access gates on Northview Street and Ryans Road, no formal KnD areas are currently provided.

Staff car parking is provided adjacent to the heritage building at the northwestern corner of the Site with frontage to both Gillieston Road and Ryans Road, the size of the car park will not be of adequate size to service the increased student and staff population.

Predicted Traffic Growth and Responsibility of Infrastructure Delivery and Improvements

The Department of Education (DoE) is delivering school-specific transport infrastructure designed to meet the school's operational needs at opening, as detailed in the amended TTIA (refer Section 4.2, Section 5 and Section 6 at **Appendix 32**), these include:

- new pedestrian crossings
- a Kiss and Drop zone;
- a dedicated bus bay; and
- signage and lone marking.

Recent road upgrades, such as at Northview Street, have been designed to have a width of less than the standard residential street width and this has not considered the impacts on the long-established school Site.

The amended TTIA (Sections 2.4 and 7.4 at **Appendix 32**) identifies that traffic growth is due to nearby residential development, not the school. The school's upgrades are scaled appropriately for opening and aligning with existing and future infrastructure, most of which lies outside the school Site.

The school is located towards the northern extent of the urban release area and its school catchment, therefore the traffic associated with the school is generally to/from the area south of the Ryans Road and Northview intersection. By 2026, Ryans Road will be generally of an urban road form with widening and upgrades occurring on the western side of the road. An urban road with a kerbside lane with occasional parked vehicles has a capacity of around 600 vehicles per hour per lane and environmental capacity of around 6,000 vehicles per day for a collector street.

Increases in school traffic on the northern extent of Ryans Road and Gillieston Road intersection will be minimal. Existing and future bus movements will continue to turn left at this intersection out of Gillieston Road onto Ryans Road with minimal impedance and therefore is not the trigger for any pavement widening works. Widening of these streets will be needed when these areas expand, it is anticipated that the URA population growth will generate up to 2,180 additional daily trips along Ryans and Gillieston Roads compared to the anticipated 397 daily trips (2036) and up to 527 daily trips (2036) per peak period that is anticipated with the school population increase. On this basis, the upgrades beyond the infrastructure to be delivered by the redevelopment is unreasonable as it is clear that the expected population growth from the URA is driving the need for road upgrades and expansions, refer to the amended TIAA **Appendix 32**, demonstrating that the modelling is accurate for trip generation based on school growth.

Notwithstanding, the increase in car movements associated with the 2026 commencement date is generally attributed to the preschool, Bitzios has recommended a 6-month OTMP review to assess Kiss and Drop operations and may recommend staggered school/preschool finish times to reduce traffic conflicts on Northview Street, pending the outcome of that report.

It is noted that following exhibition of the REF, projected population growth was revisited and was found to be lower than anticipated, and the revised figures are shown in **Table 15**. On this basis, the SIDRA intersection modelling has not been updated but given demands will be lower (reflected in **Table 15**) the intersections were found to be acceptable and **determined that the Gillieston and Cessnock Road intersection will be operating at capacity regardless of the school development**. On this basis, the transport related inclusions will remain sufficient for operation, particularly for between 2025 and 2036. It is noted the SIDRA intersection assessments were modelled conservatively, refer to amended TIAA at **Appendix 32**.

Table 15: Projected Student Enrolment Increases 2022 to 2036

Table 4.1: Projected Student Enrolment Increases						
Year	2022	2024	2025	2026	2031	2036
Student Enrolments / Forecast	339	351	411	424	665	682
The site will also accommodate universal pre-school (UPS) with capacity for 60 children and <10 staff.						

In addition, Part F.5 Section 1.2 of the MDCP 2011 does provide transport movement hierarchy controls which relate to Gillieston West, where the school is positioned, refer to Figure 27 below. It is noted that the strategic planning for the Site lacks detailed precinct plans and has led to ad-hoc subdivision and road connections. A review of the concept plan for Gillieston West within the MDCP 2011 identifies the following :

- does not anticipate any expansion of the School, the wider school Site has been nominated for residential development,
- identifies the need to provide a shared pedestrian/bike pathway along the northern side of Gillieston Road and western side of Ryans Road, which is the opposite side of the school boundaries;
- does not identify any road widening of along the southern side of Gillieston Road and eastern side of Ryans Road;
- provides a strategic access point at Gillieston Road and Cessnock Road; and
- does not identify any new roads through the school Site or the recently constructed Northview Street.



Figure 27: Gillieston Heights Western Precinct Plan (Maitland Council DCP: 2014)

On this basis, the growth expected from the URA now requires the school to be increased in size to service the increasing population. The strategic vision for the school Site has pivoted to accommodate the expected growth and is no longer proposed for residential purposes. Under Part F.5 Section 1.2 Development Controls Section 1, it states:

- 1. Road layout should be consistent with the Precinct Plan. Development applications for subdivisions must ensure that road networks connect to other development areas in a logical hierarchy of street function.*

It is clear from the above that the residential subdivision of land, by various parties, will be responsible for the upgrading to the surrounding road network. In respect of the bike lanes, these are nominated on the opposite side to the school frontages and will be the responsibility of the development of lands to the north of Gillieston Road and west of Ryans Road and not the school. The school traffic will be directed to Northview Street and pedestrians will be directed to the new pedestrian crossings at the southwestern corner of the Site, the activity will provide for a simple and safe movement system for private vehicles, public transport and pedestrians. The development of a shared pedestrian/cycleway is supported and encouraged with the future development of the URA to the north and west of the school, as such the activity seeks to satisfy the provisions of the MDCP 2011.

The proposed new bus zone is fit-for-purpose noting the design of the stop will be a 3.2m wide indented bus bay initially and then form part of kerbside shoulder/lane once wider upgrades to Gillieston Road occur in the future. Another significant consideration is the need to relocate the

existing school bus stop to Gillieston Road. This is necessary due to the approved subdivision roads on the western side of Ryans Road and the height (level) difference between the road and Site, which creates safety concerns and issues with DDA compliance. The bus bay will service two (2) buses, however, should additional buses be required in the future there is adequate space to extend the bus bay as required, refer to Section 6.1 of the amended TIAA at [Appendix 32](#).

The safe movement of school community is provided for by providing new pedestrian crossings in vicinity of the school's main entry and connecting in with existing and planned shared path infrastructure, directing pedestrian movement towards the URA lands to the west, southwest and south, where majority of residential properties are positioned, Section 5.2 of the TIAA at [Appendix 32](#) addresses the type of pedestrian crossing design.

The KnD zone design with the indented zone allows for two-way vehicle movement to occur on the street which is not currently possible based on the existing narrow street form approved by Council when accommodating for the existing school's pick-up times and any on-street parking demand for residents and their visitors. The facility will provide a 100m queuing area to accommodate queuing for fourteen (14) vehicles and four (4) formal spaces, a temporary turn around facility will be provided on site to assist with managing traffic, refer to Section 4.2 of the amended TIAA at [Appendix 32](#).

The proposed school expansion will not depend on frontage works along Ryans or Gillieston Roads for its opening. Instead, it will provide its own infrastructure to connect to the existing road and pathway network. External roadworks on other properties is beyond the Department of Education's (DoE) responsibility and will need to be completed by others, as can be seen above, the significant car movement increase will result from the development of the URA not the school, the amended TTIA (refer [Appendix 32](#)) confirm that the infrastructure improvements provided are adequate when considering the significant traffic generation increase will result from the URA lands not the school expansion.

The amended TTIA (refer [Appendix 32](#)) acknowledges the role of Council, TfNSW, and developers in infrastructure delivery and highlights the DoE's planned contributions (bus bay, pedestrian crossings, kiss-n-drop) to be delivered for the first year-of-opening. The amended TTIA notes that DoE should continue to work with Council and TfNSW in opportunities to fund and deliver additional transport infrastructure surrounding the school Site to service the Gillieston URA and support sustainable transport options, the amended TTIA clearly demonstrates that the majority of traffic increase will be driven by the URA developments more than the school, this is further justified in the amended TTIA at [Appendix 32](#).

The TTIA (refer [Appendix 32](#)) recognises there are current gaps in pedestrian and cycling infrastructure but outlines a clear plan showing how the school fits into the broader movement goals of the DCP. The proposed upgrades aren't meant to solve all connectivity issues across the area, but instead represent sensible, proportionate improvements that align with Council's staged approach for Gillieston Heights.

Concerns that the proposal doesn't support safe or straightforward movement overlook key design features, such as the separation of car and bus traffic, new pedestrian crossings, and plans for future connections that tie into the school's access strategy. Given the school is at the northern edge of its catchment, most of the pedestrian and cycle demand comes from the south and west, where the proposed crossings connect with existing and planned pathways making the school safe and

operational for its expanded activity. Facilities to the north aren't currently needed and will be considered as surrounding development progresses.

In respect of funding, the school is delivering several important upgrades that will be functional and delivered for the first year of opening, the DoE is committed to continue to work with Council and TfNSW in opportunities to fund and deliver additional transport infrastructure surrounding the school Site to service the Gillieston URA and support sustainable transport options (refer to [Appendix 32](#)).

The Activity will see an increase in the school numbers to from 441 in 2025 to 682 students in 2036 with a preschool accommodating up to 60 children and up to 10 staff. On this basis, the existing infrastructure surrounding the school will not support the increased activity, for the following reasons outlined in the TTIA (refer [Appendix 32](#)):

- The existing bus-drop-off and pick-up area along Ryans Road is positioned opposite a future intersection on the western side of Ryans Road
- Equitable access that is DDA compliant can only be provided at the eastern end of Gillieston Road and Northview Street frontages
- Lack of existing pathways around existing school due to topography
- Levels along Ryans Road present difficulties in maintain and providing bus and car drop off points; and
- Existing bus stop can only accommodate one bus at a time and does not provide undercover waiting areas.

Figure 28 below illustrate the existing conditions surrounding the Site.



Figure 28: Images of Existing School Surrounds (WTPC: 2024)

To support the activity the following works will be undertaken:

- New pedestrian crossing on Ryans Road – this is positioned between nearby intersections and designed to connect to the shared path on the western side of Ryans Road, the position is the safest most convenient location along Ryans Road and will connect with a pathway from the Northview Street main entry to school.
- Crossing on Northview Street – this is positioned at this point due to DDA compliant footpaths and although it is 150m to the west of the single entry/exit point along Northview Street, the single entry is due to safety and supervision reasons, on this basis the entry is positioned towards the KND area and students walking/cycling will be encouraged to walk along the northern side of Northview Street to safely cross at Northview Street or Ryans Road, an

additional crossing at this point would create greater conflict with the movement of cars turning around at the KND.

- Bus bay on southern side of Gillieston Road – this will service two buses and will be indented to ensure traffic flow remains unimpeded and has been endorsed by TfNSW meeting the width requirements, with a 3.2m wide bus-bay being suitable. A two-bus bay layout is operationally appropriate given the staggered arrival times of school services. Key operational considerations include timetabling of buses to avoid arrival of multiple buses at the same time and that local buses drivers/operators typically coordinate arrival and departure sequences, using real time tracking. The operator has endorsed the solution, and TfNSW did not raise any objections to the proposed arrangement through the consultation process.
- KnD facility along northern side of Northview Street will provide four (4) pick up spaces and has capacity to provide a 100m queuing capacity, increasing the capacity to provide for fourteen (14) vehicles, a mitigation measure will be required to amend the drawings to clearly identified the space to be provided for fourteen (14) vehicles.

The management and use of the KND facility should be included in the schools plan of management and will be overseen by the teachers on duty, a mitigation measure shall be included to this effect and this function will minimise illegal u turns along Northview Street. This area will be signed as 'no stopping' during peak morning and afternoon times but will be available for parking outside of these times, a further mitigation measure will be included to require an Operational Transport Management Plan to be prepared prior to operation.

- New vehicular crossover on Gillieston Road at eastern end to service school car park;
- New vehicular crossover on Northview Street at eastern end to service preschool car park; and
- Signage and line marking within the vicinity of the Ryans Road and Northview Street intersection.

New partial pathway facilities, along each street frontage, have been designed to meet the needs of the project activity and the surrounding transport network that will be present in 2026.

Due to the steep slope and significant elevation difference between Ryans Road and the school Site, creating DDA compliant access along the entire length of Ryans Road is not feasible. Such modifications would require substantial changes to the layout and would encroach upon essential space needed for play areas and outdoor learning environments, critical elements for the school's daily operations. Additionally, Council recently approved a new road opposite the current bus zone, making it unsafe to keep the existing bus stop on Ryans Road. Instead, accessible access is being focused on Gillieston Road, where new bus and pedestrian facilities are being established.

Transport improvements such as pathways and crossings will likely be implemented as future residential growth occurs in the area, coordinated with greenfield subdivision and development that will bring significant changes in coming years. Currently, a wider network of shared path infrastructure exists on the western side of Ryans Road, with pathways and crossing facilities connecting to this infrastructure.

Since the school does not have pedestrian or front-door access on Ryans Road, and until development occurs on the northern side of Gillieston Road, there is no trigger or demand for additional pathway infrastructure along Ryans Road. The school's management plan will need to ensure parents are discouraged from dropping off children along Ryans Road and Gillieston Road,

instead directing them to utilise Northview Street. A specific mitigation measure addressing this will be included.

Overall, the above improvements will enable the school to operate and minimise impacts on surrounding roads and residential properties. The amended TTIA at [Appendix 32](#), is satisfied as follows:

- that the improvements will be adequate to meet the needs of the development based on the proposed activity and surrounding traffic network envisaged for 2026.
- Other improvements for pedestrians and traffic will be coordinated and undertaken as part of the future greenfield subdivision of surrounding land and these improvements will have to consider forecast traffic as a result of the expected changes.
- Maintain DDA access.
- Reduce conflicts with future road changes along Ryans Road.
- Provide for a safer environment for children accessing the school.
- The new bus stop will allow for buses to travel on their existing routes and provides a stop that can accommodate up to two (2) buses at any one time. The stop will have convenient and direct access into the school and the Main Learning Building which will provide for undercover waiting areas close to the stop.

On this basis, the school can operate satisfactorily with the above improvements and further increased activity will accommodate wider works for further improvements, as required. Section 3.3.1 and Section 5.2 of the amended TTIA (refer [Appendix 32](#)) acknowledges current limitations in active transport infrastructure, however, the school is addressing this through the delivery of the new pedestrian crossings, footpath connections, signage, line-marking and travel planning and these will continue to improve with upgrades from nearby residential subdivisions. It is noted that active transport will increase with future URA development.

While full active transport connectivity will evolve as the surrounding subdivisions develop, there are clear opportunities for future collaboration between DoE, Council, developers, and TfNSW through shared funding models, Section 7.11 contributions, and State grants (e.g. GetActive NSW). The school's works represent a proportionate and catalytic investment toward broader connectivity goals.

A mitigation measure will be imposed to require a Section 138 approval to be obtained prior to the construction of the specific off-site works, to ensure that they are undertaken to the satisfaction of Council, being the owner of the land. Details of the pedestrian access improvements, line marking and bus bay improvements are shown respectively at Figure 29 and Figure 30.

The current KnD facility is informal with majority of parents dropping off along Northview Street or at times along other streets, this arrangement will be inadequate for the increasing student and staff population.

The expanded KnD facility, along the northern side of Northview Street, will have four (4) drop-off bays and queuing capacity for a further fourteen (14) vehicles and can service up to 288 vehicles within 30 minutes based on a 30 second dwell time. Based on the anticipated student numbers in 2026 between 121-146 vehicles (2026) over a 30-minute period will require servicing and the design of the KnD is adequate, with 160 vehicles expected based respectively on the 2036 projected figures, (refer to amended TTIA at [Appendix 32](#)). This will remove unrestricted on-street parking, noting that the spaces will be available for use outside of school drop off and pick up times and be signed as 'no parking' during school peak times, car parking is assessed in the following sections. The amended TIAA at [Appendix 32](#), does consider a longer dwell time of 45 seconds (due to primary aged children) and risk of queuing in Ryans Road, however, the management of the KnD will assist in addressing this along with line marking and signage restrictions as shown in Figure 29 above.

A temporary u-turn facility is proposed onsite until Northview Street is continued through to the east, as shown in Figure 31. This will mitigate the impact on the number of cars utilising the cul-de-sac at the eastern end of Northview Street and a swept path analysis in the amended TTIA (refer [Appendix 32](#)) and confirms that the cars can enter and exit the Site in a forward direction. It is noted that on-site KnD facilities were not feasible due to lack of open space for increased student population and level changes, refer to amended TTIA [Appendix 32](#))

Northview Street is the only street capable of servicing a KnD due to surrounding grades, land constraints, and lack of alternate access. Council's own subdivision approvals have contributed to these constraints, and the school has responded by implementing a temporary turnaround and upgraded crossings to ensure safety and functionality of the KnD in this location. In addition, Northview Street will be connected through to Gillieston Road when the residential subdivision to the east of the Site is progressed, therefore the impacts along Northview Street will be temporary at this time.



Figure 31: Temporary U-turn Bay (Bitzios: 2024)

The amended TTIA ([Appendix 32](#)) identifies the potential for KnD traffic to be extended and result in queued traffic in Ryans Road for a short period of time (i.e. less than 15 minutes), if the demand of 146 to 160 vehicles is required, this is based on a 45 second dwell time . The traffic consultant has noted that they would normally recommend *a turn lane to be created and kerbside parking*

restricted in vicinity of the intersection. However, in this case closely spaced intersection previously approved by Council on the western side of Ryan Road (see Figure 8.2) which are both within 25m of Northview Street's intersection with Ryans Road which does not align with Council's DCP which requires a minimum intersection of at least 40m. Figure 32 illustrates the position of the new intersection on the western side of Ryans Road, the amended TTIA (refer [Appendix 32](#)) does note that queuing of this length is unlikely once parent behaviours adapt and more on street parking becomes available.

To ensure traffic can move past queued traffic a mitigation measure will be included to restrict either Northview Street or the opposing new streets on the western side to left-in/left-out only. This would remove turning vehicle conflicts on Ryans Road in proximity to the school and pedestrian crossings.



Figure 32: Future Intersection Conflict on Ryans Road (Bitzios: 2024)

It is noted that consideration has previously been given to providing a connection between the school and preschool car parks to minimise impacts on the KND facility and conflicts at peak school drop-off and pick-up times. This was not possible due to level changes across the Site and was not supported by SI's transport planner and the Traffic Working Group (made up of Council and SI Traffic Planners). However, to minimise and manage potential conflict between the KnD and preschool traffic a mitigation measure should be included to require a 6-month post-opening review of the Operational Traffic Management Plan (OTMP) to be conducted and submitted to the Department of Education's Transport Planning Team. The review will monitor and address operational issues with the Kiss and Drop facility and its interaction with the preschool driveway.

The main concern is managing traffic volumes on Northview Street during pick-up times and preventing conflicts between preschool and Kiss and Drop traffic at the turn-around facility. A key mitigation measure that may be implemented following the 6-month review is **staggering the finish times between the school and preschool**. This would reduce traffic overlap during peak periods, particularly while temporary arrangements are in place before additional road connections or turn-around facilities become available.

To ensure that the operation of the KnD facility is appropriately managed a mitigation measure will require the School Travel Plan to include the following management requirements, as suggested in the amended TTIA at **Appendix 32**. The required mitigation measures are outlined further below but will essentially require the management of the KnD operation by staff and monitoring its operation after 6 months. .

The amended TTIA requires the implementation of an Operational Transport Management Plan (OTMP) to ensure safe, efficient and coordinated management of all school transport operations including signage and line markings. A mitigation measure will be included to this effect.

Traffic Assessment

The amended TTIA (**Appendix 32**) estimated that the existing school movements, within peak am and pm times, are as shown in Figure 33.

Figure 7.2: Estimated Existing School Peak Traffic Generation						
Component	AM			PM		
	IN	OUT	Total	IN	OUT	Total
Staff	23	0	23	0	12	12
Non-staff (student drop off/pick up)	114	114	228	114	114	228
TOTAL	137	114	251	114	126	240

Figure 33: Existing School Park Traffic Generation

It is estimated that the proposed activity will generate the following additional car movements as shown in Figure 34 and Figure 35 below. The proposed traffic generation figures were calculated based on the following assumptions:

- Each student dropped off at school will generate two trips, being one IN and one OUT trip
- Staff will generate one IN trip during the AM peak, and one OUT trip during the PM peak, with only 50% of staff departing at peak times.

Table 7.7: 2036 AM Peak Trips				
Component	IN	OUT	IN Trips	OUT Trips
Primary School (Drop-off)	100%	100%	273	273
Pre-School (Drop-off)	100%	100%	60	60
School Staff	100%	0%	50	0
Pre-School Staff	100%	0%	10	0
Total students' trips with carpool correction factor			191	191
Staff trips			60	0
Total GPS Trips			251	191
<i>Existing Trips</i>			114	126
Net GPS Trips			+137	+65

Figure 34: Proposed am School Park Traffic Generation

Table 7.8: 2036 PM Peak Trips				
Component	IN	OUT	IN Trips	OUT Trips
Primary School (KnD)	100%	100%	273	273
Pre-School (Pick-up)	100%	100%	60	60
School Staff	0%	50%	0	25
Pre-School Staff	0%	50%	0	5
Student trips (w trips w/ car share correction factor)			191	191
Staff trips			0	30
Total GPS Trips			191	221
<i>Existing Trips</i>			114	126
Net GPS Trips			+77	+95

Figure 35: Proposed pm School Park Traffic Generation

Overall, the additional movements will relate to KnD movements, being stop-by trips for carers who continue on their way to work and beyond, with a significant amount of traffic being trips that will be undertaken in any case by the carers of the school children.

The traffic generated by the activity is expected to increase proportionally with the enrolments, which equates to an additional 120 trips in 2026 increasing to 190 additional trips in 2036.

Intersection Operations

- The intersection assessment within the amended TTIA ([Appendix 32](#)) has considered the effects at opening (2026) and in 10-years (2036) and compared the following scenarios:
- 'without development' (background traffic (BG))
- 'with development' (design traffic (Design))

The traffic consultant determined that the majority of school/student related traffic would already be accommodated within background traffic, and assumed the following:

- *Net staff trips as staff who would travel from further afield as they do not need to live 'within catchment'*

- *Minor diversion of car-based trips from those residing in the new development off Kiah Road (Lots 1-3, DP 113652) who would first travel up Ryans Road to drop-off rather than travelling directly towards Cessnock Road and similar divert their trip in the afternoon*
 - *47 trips has been estimated based on 0.45 trips per dwelling which has been assumed considered ABS Census data indicated 0.9 children per household of in Gillieston Heights of which half are of pre/public school age and car based mode share assumption of 40% for student travel*
- *Car-based trips for new students who would reside within the Gillieston Heights South (East Precinct) in which there is a 257 dwelling development being proposed by Walker Gillieston Heights Pt Ltd and 67 dwellings by others at 457 and 463 Cessnock Road. As works have not started at these sites it would be expected this would only contribute to 2036 traffic assumption. This area has been assumed as accounting for 58 trips in peaks that would be trip diverted to turn in/out of Vintage Drive rather than be a through trip on Cessnock Road in background traffic growth scenarios.*
 - *58 trips based same earlier noted assumptions students per household and mode share assumptions of 40% car travel in 2036.*

It is noted that the amended TTIA identifies which key intersection assessments were and were not assessed and why, for example Northview/Ryans Road intersection were excluded due to its geometric constraints, limited ability to support turn treatments and minimum upgrade potential due to adjacent subdivision roads layouts approved by Council. The constraints at this intersection as a result of the most recent upgrades (by others and approved by Council) were outlined in the consultation phase.

A SIDRA assessment of the proposed 2026 and proposed 2036 'level of service' (LOS) for each key intersections, under each scenario, is reflected in Figure 36 to Figure 38 below. It is noted that all traffic analysis and SIDRA modelling—including trip generation assumptions—were completed prior to the release of the current Guide to Traffic Impact Assessment (GTIA) in November 2024, as evidenced by the SIDRA output dates provided in the appendices. At the time, the methodology used was appropriate and consistent with then-current guidance and practice (refer **Appendix 32**), it is noted that the student population numbers have been revised as per the amended TTIA at **Appendix 32** but the intersection modelling has not been rerun and remained at the higher population numbers, on this basis the modelling below will improve further.

Table 7.9: Cessnock Road / Gillieston Road SIDRA Results								
Scenario	AM Peak				PM Peak			
	LOS	DOS	Avg Delay (s)	95%ile Queue (m)	LOS	DOS	Avg Delay (s)	95%ile Queue (m)
2026 Background Traffic Volumes								
2026 BG	F	2.25	82.9	334.9	F	0.96	5.3	27.0
2036 Background Traffic Volumes								
2036 BG	F	27.18	3013.1	4143.3	F	5.16	259.1	1802.6
2026 Design Traffic Volumes								
2026 Design	F	2.49	129.4	392.4	F	1.87	32.3	171.4
2036 Design Traffic Volumes								
2036 Design	F	29.16	4358.1	4394.7	F	7.23	411.3	2078.7

Figure 36: Cessnock Road/Gillieston Road Intersection Assessment

Table 7.10: SIDRA Results Ryans Road/ Vintage Drive intersection								
Scenario	AM Peak				PM Peak			
	LOS	DOS	Ave Delay (s)	95%ile Queue (m)	LOS	DOS	Ave Delay (s)	95%ile Queue (m)
2026 Background Traffic Volumes								
2026 BG	B	0.16	6.2	4.4	B	0.14	6.3	3.9
2036 Background Traffic Volumes								
2036 BG	B	0.21	6.3	6.1	B	0.17	6.4	5.0
2026 Design Traffic Volumes								
2026 Design	B	0.18	5.9	5.1	B	0.14	5.8	3.8
2036 Design Traffic Volumes								
2036 Design	B	0.23	6.1	7	B	0.17	6.0	4.9

Figure 37: Ryans Road/Vintage Drive Intersection Assessment

Table 7.11: SIDRA Results								
Scenario	AM Peak				PM Peak			
	LOS	DOS	Ave Delay (s)	95%ile Queue (m)	LOS	DOS	Ave Delay (s)	95%ile Queue (m)
2026 Background Traffic Volumes								
2026 BG	C	0.78	20.1	86.5	B	0.69	17.4	74.8
2036 Background Traffic Volumes								
2036 BG	C	0.84	26.9	164.4	B	0.74	18.2	118.2
2026 Design Traffic Volumes								
2026 Design	B	0.78	19.4	84.9	B	0.70	17.5	76.2
2036 Design Traffic Volumes								
2036 Design	C	0.87	27.9	174.9	B	0.74	18.2	118.2

Figure 38: Cessnock Road/Vintage Drive Intersection Assessment

It is concluded that the key intersections and surrounding traffic network, under all scenarios, will not generally alter the 2026 level of service, which remain as follows:

- Cessnock Road and Gillieston Road – Level F in morning and afternoon peak period
- Ryans Road and Vintage Drive – Level B in morning and afternoon peak period
- Cessnock Road and Vintage Drive – Level C (small improvement to Level B in 2026 but returns to Level C in 2036 for AM peak) and Level B in the PM peak.

The Cessnock Road/Gillieston Road intersection will see the greatest level of change, however the activity will only result in 53 net trips (2% of overall increase peak hour traffic) and on this basis is acceptable. It is noted that there are other nearby intersections which will have greater capacity, parents will be directed to consider alternate routes to Cessnock Road to minimis impacts on the surrounding network.

It is noted that the Cessnock/Gillieston intersection will be operating at capacity in 2026 regardless of the school redevelopment, as outlined above. The intersection has deficiencies with the geometry

and has been identified as requiring signalisation, this however is dependent on acquisition of the southwestern corner of the intersection to enable an upgrade and has previously been investigated as part of recent greenfield subdivisions in the surrounding area. TfNSW is developing a strategy to upgrade Cessnock Road, therefore any upgrade will be coordinated through TfNSW as part of the MR195 corridor, Council and the subject landowner (of land to southwest of intersection).

Bitzios has confirmed that SIDRAs modelling capability for intersections already at capacity for 10-year horizons is limited and creates sometimes unrealistic outcomes. Notwithstanding, the upgrade of this intersection will be managed by TfNSW and the school impact on this intersection is only a 2% increase, which is negligible, the majority of the increase will come from greenfield redevelopment.

In addition, Bitzios have confirmed that on-site traffic observations were not undertaken due to the constantly evolving changes from subdivision growth and changing travel patterns, significant changes to intersection operation will be impacted most by the future external growth of the Gillieston Heights residential growth.

The traffic assessment for the GPS indicates an expected increase of 120 and 190 trips by 2026 and 2036 respectively, primarily due to the preschool facility on-site. Current intersection analyses show that while Gillieston Road/Cessnock Road experiences long delays for existing traffic, the future impacts are not generated by the school. The nearby intersections operate at acceptable service levels and have capacity to absorb additional diverted traffic.

On this basis, the redevelopment will have negligible impact and does not warrant any mitigation measures for intersection performance. It is anticipated that upgrades to the key intersections along Cessnock Road will be undertaken in tandem with greenfield subdivision applications within the nominated urban release area.

It is recommended that a mitigation measure be imposed to require the School Travel Plan be updated to advise parents to encourage the use of alternate routes to the south of the Site to avoid the Cessnock/Gillieston intersection, a mitigation measure will be included to this effect.

Travel Mode for Students and Staff

The accompanying School Transport Plan (STP) (refer [Appendix 33](#)) has determined that currently approximately 24% of student live within a 15-minute walking catchment of the school and 60% live within a 15-minute cycle catchment and this is envisaged to increase overtime as new dwellings develop to the west, north and northeast of the Site. The travel mode share for students is identified below:

- 4.7% - Other
- 5.0% - walk
- 2.5% - cycle/scooter
- 28.1% - catch a bus
- 59.6% - dropped off by car

The amended TTIA (refer [Appendix 32](#)) makes reference to a school student travel survey, which determined an average car share factor of 1.75 students per car was applied to non-staff trips to represent families with more than one child attending the School or students car pooling. On this basis, the amended TTIA at [Appendix 32](#) has concluded that this equates to 59% of car-based trips

being carpooled and on this basis it is anticipated that carpooling will continue at a similar rate with the school expansion.

The STP identified that all staff travelled to work by car and given that they live outside the catchment there are limited alternate modes of transportation.

Given the surrounding greenfield subdivisions, it is determined that there will be an increase in students walking and cycling/riding to school.

The proposed activity will enable improved pedestrian safety with the implementation of crossings, bus bay and KnD area and this will assist in ensuring less dependency on car usage. Staff will be encouraged to carpool to also reduce car usage and improvement and monitoring required as outlined in the STP. The following mitigation measures will be included:

1. Comply and implement and monitor all recommendations with the School Transport Plan prepared by Bitzios dated 18 November 2024.
2. The School Transport Plan is to be reviewed and updated (as required) every 12 months.

Car Parking and Bicycle Parking Requirements

The required number of car parking spaces is identified under the MDCP 2011 and an assessment of the proposed number of car spaces is provided in Table 16.

Table 16: Activity Parking Requirements and Compliance

Land use	Parking Rate	Quantity	Spaces Required	Spaces Provided
Primary School (Educational Establishment)	1 space per staff plus provision for a drop off/pick up area	50 Staff (FTE)	50	50
Pre School (Child Care)	1 space per 4 children in attendance or part thereof.	60 Students	15	15
Total			65	65

A total of 50 car parking spaces will be provided for staff associated with the school and a further 15 car parking spaces associated with the preschool complying with the MDCP 2011, this has been discussed above in Section 2.2.1.

A total of 52 bicycle parking spaces will be provided on Site and this complies with the Austroads Guide to Traffic Management rate of 1 space per 5 pupils over year 4.

The TTIA at [Appendix 32](#) confirms that the car parking areas have been designed to comply with the Australian Standards and can accommodate a 12.3m Refuse Collection Vehicle can enter and leave the Site in a forward direction.

Bus Movements

Existing school bus services are provided by Rover Coaches and public bus service area provided by Hunter Valley Buses under contracts with TfNSW. There are three school bus services – S934 operates in the morning, S851 and S936 operate in the afternoon that service the school and currently stop in front the school on its Ryans Road frontage. Bus travel accounts for 28.1% of student travel at present.

The proposed bus bay along Gillieston Road will enable two buses to stop at any one time and this will be adequate for the expected growth of the school and future servicing needs and the existing

Ryans Road required relocation due to the proximity of intersections along the western side of Ryans Road.

Section 6.0 of the TTIA at **Appendix 32** provides adequate justification on the relocation of the bus stop further bus bay analysis to determine that the location is highly appropriate.

Construction Vehicles

Vehicles that will access the Site during construction works will comprise articulated vehicles and small-heavy rigid vehicles. The truck types are listed below:

- Demolition material removal trucks
- Spoil and excavation removal trucks
- Concrete trucks
- Rigid delivery trucks; and
- Semi-trailers for large equipment and plant (subject to access).

All heavy goods heavy machinery plants, construction materials will be delivered outside of peak hours and deliveries will occur where pedestrians and cyclists are restricted from accessing.

Construction workers will be encouraged to start earlier and finish earlier than the school peak times to minimise impacts on traffic and school operations.

Construction vehicle volumes are expected to be low, in the order of 10-20 vehicles per day with approximately 10 vehicles in the busiest construction period. This usually occurs during concrete pours or the demolition phase. The traffic generation of this magnitude is less than the number of trips generated and assessed for the operational phase of the activity and therefore the potential impacts are anticipated to be minimal.

To minimise conflict between pedestrian/cyclists and construction activity hoardings/fencing along with traffic controls will reduce conflicts and ensure safety is maintained for all stakeholders. A management plan needs to be developed to manage construction vehicles and to minimise conflicts within the public domain.

Access During Construction

Stage 1 Works

During Stage 1 construction works pedestrian access to school will be maintained from Ryans Road, the car parking area in the northeastern corner will continue to be used and the informal KnD in Northview Street will continue to function with traffic management/pedestrian control until Stage 1 works are complete. Construction vehicles will have to access the Site via Northview Street as levels at the northeastern corner of the Site are not suitable until grading works have been completed.

Stage 2 Works

Following completion of Stage 1 works pedestrian access will be moved to Northview Street and Gillieston Road with bus bay operations commencing on Gillieston Road. All construction vehicles will continue to access the Site from Ryans Road.

Following completion of the activity, all pedestrian access will be limited to Gillieston Road, Northern end of Ryans Road (northern end) and Northview Street with the southern end of Ryans Road being closed off.

Construction Workers Parking

The existing car park will be utilised by staff during construction works until the final car parking area is complete. Management of construction parking location will be managed by the contractor and will be considered in the final CEMP report, to be prepared prior to the commencement of works.

Delivery of Goods

It will be the contractor's responsibility to ensure deliveries of goods are carried out in safe manner and at a suitable time. Delivery access will need to be either through Ryans Road and/or Northview Street. This information will be captured in final CTMP to be prepared prior to the commencement of works.

Impact on Access to Private Properties

Access should not be affected as staging has been designed to avoid conflict with residential streets where possible and practical, and traffic control will be required at busy times to ensure disruptions are minimised, a mitigation measure will be included to ensure impacts are minimised through traffic control management along Northview Street.

Conclusion and mitigation measures

Based on the above, the following mitigation measures are implemented:

- *One raised zebra (wombat) crossing on Ryans Road and*
- *One Children's crossing on Northview Street.*
- *Relocate and upgrade bus stop facilities consisting of a new bus bay to accommodate two buses on Gillieston Road (southern frontage).*
- *Extend and upgrade the indented parking spaces on Northview Street to formalise the Kiss n Drop (KnD) zone. The KnD Zone is to consist of indented bays on Northview catering for 4 collection bays and queuing of 100m catering for a further 14 vehicles.*
- *Prior to the commencement of operations of the new KnD facility on Northview Street, a Pre-Opening Stage Road Safety Audit is recommended to be undertaken by a qualified and independent Road Safety Auditor. A copy of the final Road Safety Audit Report, along with the Designer's Response addressing each audit finding, must be submitted to the satisfaction of DoE's Transport Planning Team.*
- *The frontage activity on Northview Street shall include a driveway facility that allows vehicles to turn-around on the site, until such time that a future road or cul-de-sac facility is provide to the east on Northview Street.*
- *To assist in managing the demands and the operational efficiency of the KnD, bus bay and pedestrian access areas, the infrastructure provisions should be supported by the School Travel Plan, Travel Access Guide and supporting operational guidance (including an Operational Transport Management Plan) on the correct and appropriate use of the transport facilities surrounding the site.*
- *A 6-month post-opening review of the Operational Transport Management Plan is to be conducted and submitted to the satisfaction of DoE's Transport Planning Team to monitor and mitigate any identified operational issues associated with the Kiss n Drop and interface with the pre-school driveway.*
- *Truck loads would be covered during transportation off-site;*
- *Neighbouring properties would be notified of construction works and timing. Any comments would be recorded and taken into consideration when planning construction activities;*

- *All activities, including the delivery of materials would not impede traffic flow along local roads;*
- *Materials would be delivered, and spoil removed during standard construction hours*
- *Avoid idling trucks alongside sensitive receivers;*
- *Deliveries would be planned to ensure a consistent and minimal number of trucks arriving at site at any one time.*
- *To manage driver conduction the following measures to be implemented:*
 - *Avoid idling trucks alongside sensitive receivers; and*
 - *Deliveries would be planned to ensure a consistent and minimal number of trucks arriving at site at any one time.*
 - *Drivers are to give way to pedestrians and plant at all times.*
 - *Compliance with the School Travel Plan*
- *A site-specific management plan will be developed to manage works within the public domain.*
- *A detailed crane analysis will need to be undertaken to determine the type, size, position and quantity of cranes required for the most efficient material handling solution for the project, a mitigation measure shall be included to requires details to be submitted prior to the commencement of works. The use of a forklift or telehandler may be required to assist with unloading, general materials handling, and bins on Site.*

6.2 Noise and Vibration

The Site is positioned in an urban release area, with the surrounding locality transitioning from rural uses to residential and the activity will significantly increase student capacity and be located amongst residential uses.

A Noise and Vibration Impact Assessment (NVIA) has been undertaken by RWDI in accordance with the EPA's *NSW Road Noise Policy (2011)* and can be found at [Appendix 34](#). The NVIA has assessed the potential impacts to the school and surrounding uses. This report considers the noise impacts associated with operational, road traffic, external noise, internal noise and construction noise and vibration impact, with each impact assessed separately under title below with the impacted receiver locations identified in Figure 39 below.



Figure 39: Residential Receivers Assessed in Noise Assessment (rwdi: 2024)

Operational Noise Assessment

The NVIA assessed noise generation from the following primary sources:

- Mechanical plant noise
- Vehicle noise during student drop off and pick up (includes outside of school hours childcare times); and
- Passive recreational noise from students occupying external play areas.

It determined that the mechanical services noise can be mitigated through design and operation whilst the vehicle movements will remain compliant with noise criteria levels, including vehicles dropping off and picking up outside of school hours and noise associated with outside of school functions.

The largest impact from the activity will be the noise emanating from the use of the outdoor areas during recess and lunch. It is noted that in several recent Land and Environment Court Cases (*Meridan School v Pedavoli* and *Christian Brothers v Waverly Council*) that playing outdoors in schools was found to not constitute offensive noise, in respect of the latter case Commissioner Murrell commented that:

"It is important in our society for uses such as schools and residential areas to coexist".

The noise from play areas was modelled from each play area shown in Figure 40.



Figure 40: Future play areas within Gillieston Public School (rwdi: 2024)

It was predicted that noise levels would marginally increase at receivers, with greatest impact being at the western end of Northview Street (at maximum capacity of Stage 1), noting that the noise increase will be gradual until full capacity is achieved. Management of the noise in these outdoor areas can be mitigated by staggering lunch breaks, supervising children and maintaining complaints register. Finally, PA systems and the school bell can impact on surrounding properties, these will need to be managed, by the incorporation of mitigation measures to manage their use and placement within the school.

Road Traffic Noise Generation

The NVIA has assessed road traffic noise based on sub-arterial road land use as the activity is *major traffic generating development*, this is based on the functional role definition for sub-arterial roads provided in Table 2 of the *Road Noise Policy (EPA, 2011)* (RNP) where it states that sub-arterial roads “may have been designed as local streets but can serve major traffic generating developments or support non-local traffic”. On this basis the activity is considered to be traffic-generating development that will support non-local traffic based on the school catchment size and likeliness of children being dropped off by vehicles.

The noise was determined to be within acceptable limits for surrounding residential receivers. No mitigation measures are required on this basis.

Construction Noise and Vibration Impact

The NVIA has determined that all construction related activities and vibration impacts are generally within acceptable levels for all residential receivers and the school operations, subject to mitigation measures relating to operation of equipment and preparation of a final ‘Construction Noise and Vibration Management Plan’ (CNVMP) that will consider all equipment, is to be prepared prior to the commencement of each stage of works.

Construction Work Hours

The proposed construction hours outlined in the PCMP at **Appendix 8** will be:

- Monday to Friday – 7am to 5pm
- Saturday – 8am to 5pm; and
- No work on Sundays and public holidays.

These vary from the standard hours for construction for Maitland City Council (MCC), which are consistent with NSW EPAs Guidelines being:

- Monday to Friday – 7am to 6pm; and
- Saturday – 8am to 1pm; and
- No work on Sundays and public holidays.

In addition, there may be outside deliveries and equipment installation required to avoid peak hours. The hours will need to align with the MCC construction hours and DoE standard hours with outside of hours construction deliveries and equipment installation activities to be mitigated through management plans.

Internal Noise Impacts

The proposed buildings will be constructed to the design levels provided in Figure 41 below.

Occupancy Type	Recommended Design Level (L _{Aeq,cont.} dBA)
Assembly Halls up to 250 seats	30 – 40
Assembly halls over 250 seats	30 – 35
Libraries – General Area	40 – 50
Libraries – Reading Area	40 – 45
Office Areas	40 – 45
Professional and Administrative Spaces	35 – 40
Teaching Spaces – Primary Schools	35 – 45
Staff common rooms	40 – 45

Figure 41: External Noise Intrusion Criteria for Educational Institutions (rwdi: 2024)

The noise from the projected traffic volumes have been conservatively based on worst case scenario in Figure 42.

Location	AM Peak L _{Aeq} , 1hr dBA	PM Peak L _{Aeq} , 1hr dBA
Building A (Southeast and Southwest Façades Facing Northview Street)	≤62	≤62
Building B (Southeast and Southwest Façades Facing Northview Street)	≤59	≤59
Building B (Northeast façade/school hall space)	≤48	≤48
Building C (Northern Façade Facing Gillieston Road)	≤58	≤56

Figure 42: Predicted Traffic Noise Level at Activity Facades (rwdi: 2024)

The NVIA determined that the noise can be managed with the following mitigation measures:

- ceiling and wall construction along with standard 6mm openable glazing with no rubber seals (Rw 22)
- Ventilation of rooms in Building B facing Northview Street and Building C facing Gillieston Road should be provided by other means to maintain this acoustic performance; and
- Glazing suppliers are to provide acoustic laboratory test reports confirming that the acoustic performance of their window systems (combined performance of the glass and window/door frame) meet the Rw requirements specified below. Glazing requirements should be confirmed at detailed design stage.

Construction Staging

The NVIA has considered the noise impacts associated with the construction staging and categorised into the following three categories:

- Demolition and clearing works
- Excavation and piling
- Building Construction

The NVIA has assessed the impacts on all sensitive receivers, including the operational classrooms and concluded the following:

- *Excavation and piling works are expected to result in exceedances of the daytime noise-affected NMLs at the residential receivers by up to 28 dB both during Stage 1 and Stage 2.*
- *Excavation and piling works are expected to result in exceedances of the NML for the classrooms within Gillieston Public School by up to 11 dB during both Stage 1 and Stage 2.*
- *Construction activities are expected to result in exceedances of the daytime noise-affected NMLs by up to 26 dB during Stage 1 works, and 25 dB during Stage 2.*
- *Construction activities are expected to result in exceedances of the NML for the classrooms within Gillieston Public School by up to 9 dB during Stage 1 works, and 10 dB during Stage 2.*
- *No exceedances to the highly noise affected NML are predicted at any of the residential receivers.*

The above conclusions relate to a worst-case scenario and to mitigate this impact a detailed CNVMP should be prepared to reduce and manage noise prior to each stage of works, this will form a mitigation measure.

Finally, to ensure that vibration impacts are also monitored and managed a mitigation measure will be included for the event that there be use of vibration intensive plant used within the minimum recommended distances within the Transport for NSW's (TfNSW) *Construction Noise and Vibration Strategy* of a sensitive receiver, or if there are any other vibration intensive plant items that the Contractor has concerns for causing disruption at a neighbouring receiver, it is mitigation measure will be included to require a preliminary vibration survey (typically attended vibration measurements) be undertaken of each vibration generating piece of plant.

If exceedances of vibration levels are identified, then management strategies will need to be further developed to minimise impacts for sensitive receivers.

Assessment

The NVIA (refer **Appendix 34**) includes a preliminary construction noise and vibration impact assessment in Section 6 of this report. This assessment included indicative predictions of construction noise and vibration impacts at the surrounding sensitive receivers, as well as indicative construction noise and vibration mitigation measures.

The preliminary construction noise assessment conducted indicates that the typical worst-case construction noise impacts are predicted to exceed the noise-affected noise management levels (NMLs) of the EPA's Interim Construction Noise Guideline (ICNG) at the surrounding residential receivers and school receivers within the Site. This is not uncommon considering the low background noise levels expected on Site and the proximity of the receivers to the construction works. It is noted that the preliminary assessment did not predict any exceedances of the highly noise-affected NML of the ICNG.

Where exceedances of the noise-affected NMLs are expected, the ICNG states that all reasonable and feasible measures should be applied to manage construction noise emissions from the Site. The NVIA has recommended that a detailed Construction Noise and Vibration Management Plan is prepared for the activity (typically at construction certificate stage when there is a clearer understanding of the proposed construction methodology) to determine specific noise and vibration, this is recommended as a mitigation measure, below.

It is noted that removal of garbage from the Site will be undertaken outside school hours, noise associated within this activity should remain compliant with the noise criteria established in the NVIA. On this basis the NVIA should be updated to ensure that the waste collection times will not exceed the noise criteria established at the boundary, a mitigation measure will be included to this effect.

The expanded size of the school is needed to service the growing needs of the Gillieston Heights, which will see a significant increase in young families moving into the area, on balance the operational noise impacts associated with the activity can be suitably mitigated to minimise impacts on adjoining neighbours on this basis the proposed school operations and impacts from construction/vibration impacts are reasonable, the following mitigation measures will be included:

- Mechanical Services:
 - Mechanical services can feasibly comply with the required criteria
 - Specific measures to be determined after final equipment selection and plantroom design
- Noise from Children
 - There are no formally required compliance criteria for this source of noise, the following advice is provided for management of this source of noise:

- Recess and lunch breaks should be staggered such that no more than half of the student capacity (~370 students) are in the outdoor play areas at any given time (numbers to be confirmed based on what is feasible for the school operations).
- Children in outdoor play areas are to be supervised by staff to manage any excessive noisy behaviour.
- The school should maintain a complaints register.
- Noise from School Announcements
 - There are no formally required compliance criteria for this source of noise, the following advice is provided for management of this source of noise:
 - Speakers should be located and orientated to provide good coverage of the school areas whilst being directed away from residences. The coverage of the system should be subject of the detail design of the system.
 - The volume of the system should be adjusted on-site so that announcements and bells are clearly audible on the school Site without being excessive.
 - Once the appropriate level has been determined on-site, the system should be limited to the acceptable level so that staff cannot increase noise levels.
 - The bell system should be set so that it only occurs on school days.
- Construction Noise and Vibration
 - Construction noise and vibration management plan should be prepared prior to the commencement if construction works on-site to determine all reasonable and feasible measures for minimising construction noise and vibration impacts on surrounding receivers, including existing school operations.
- An acoustic report shall be prepared and submitted to the Project Lead and DoE's Post Approval and Compliance Team for its assessment and approval within 12 months of occupation/completion of the development. Noise measurements are to be taken at the nearest noise sensitive locations.

6.3 Contamination and Hazardous Materials

As described in Section 2.2.2 above, a RAP (refer [Appendix 18](#)) has identified the proposed remediation works are defined as 'Category 2' works and therefore can be managed under the REF pathway.

Under Section 4.11 of the Resilience and Hazards SEPP, Category 2 work is a remediation work that is not described in section 7.8(a)-(f) of the Resilience and Hazards SEPP. The remediation works identified Section 7.8(a)-(f) has been considered further in Table 17 below:

Table 17: Resilience and Hazards SEPP Section 7.8(a) – (f) Category 1 - Remediation Work Categories

Section 4.8	Remediation Work	Comment
(a)	Designated development	The activity is not defined as designated development under Schedule 3 of the EP&A Act 2021.
(b)	to be carried out on land declared to be a critical habitat	The Site does not contain a critical habitat.
(c)	likely to have a significant effect on a critical habitat or a threatened species,	The Site does not have a critical habitat and no identified threatened species, populations or

Section 4.8	Remediation Work	Comment
	population or ecological community	ecological communities, refer to Appendix 24 .
(d)	development for which another state environmental planning policy or a regional environmental plan requires development consent	The remediation works do not require development consent or consent via another SEPP and/or regional environmental plan.
(e)	<p>carried out or to be carried out in an area or zone to which any classifications to the following effect apply under an environmental planning instrument</p> <p>(i) coastal protection</p> <p>(ii) conservation or heritage conservation</p> <p>(iii) habitat area, habitat protection, habitat or wildlife corridor</p> <p>(iv) Environment Protection,</p> <p>(v) escarpment, escarpment, protection or escarpment preservation,</p> <p>(vi) Floodway,</p> <p>(vii) Littoral rainforest,</p> <p>(viii) Nature reserve,</p> <p>(ix) scenic area or scenic protection area; or</p> <p>(x) Westland</p>	<p>The remediation works we will not be carried out in any of these classifications.</p> <p>It is noted that the Site is affected by flooding in the northeast corner, however, this is an overland flow path and not considered to be defined as a floodway, as confirmed in the flood report at Appendix 29.</p>
(f)	carried out or to be carried out on any land in a manner that does not comply with the policy made under the contaminated land planning guidelines by the council for any local government area in which the land is situated (or if the land is within the unincorporated area, the Minister)	The proposed remediation works will be able to be undertaken in accordance with the Resilience and Hazards SEPP. Refer to the RAP at Appendix 18 and the IAA at Appendix 19 .

Table 17 confirms that the remediation works remain as Category 2 works and development consent is not required for these remediation works to be undertaken.

The RAP has highlighted several options of remediation, however, the preferred remediation options for making the Site suitable, for its intended educational establishment use and preschool (i.e. centre-based childcare), is a two-option approach, both approaches are outlined below:

- *Option 7 - Excavation and Off-site disposal*
- *Removal of the contaminated materials will effectively mitigate the risk to human health and ecological receptors.*
- *If contaminated materials are unable to be removed in their entirety, for example if underground services and/or structures restrict excavation, residual impacted material would require management under a long-term EMP (i.e. Option 9)*
- *Option 8 and 9 - Above-ground containment/encapsulation and in-situ contaminant/encapsulation*

- *Options 8 and 9 are suitable methods of eliminating an unacceptable risk to receptors under the future land use.*
- *The location(s) for containment / encapsulation requires consultation with site stakeholders, including the Department and the appointed NSW EPA site auditor. Under the current design scenario, the preferred locations are beneath pavement and within the western or central portions of the site, which are situated away from the drainage channel that runs east of the site.*
- *As stated in Section 8.0, the estimated quantity of contaminated material requiring remediation is 115 m³. The current bulk earthworks plan for the proposed development indicates a fill requirement of 14,200m³ (JS – to update RAP to change 16,085 m³ to 14,200m³), and as such it is considered that Option 8 and 9 are feasible and practical.*
- *Toxicity Characteristic Leaching Procedure (TCLP) testing has been undertaken on several soil samples impacted by lead. The TCLP results represent worst case leachability scenario with the soils being exposed to pH 1 acid, which is an environmental setting that is not envisaged post construction. The current leachability results, along with the vertical distribution of lead impact within the soil profile (i.e. shallow impact), indicate that the contaminated soil can be managed under a cap and contain scenario rather than requiring encapsulation. Further testing is necessary to confirm the leachability properties and to inform the design requirements for containment / encapsulation areas.*
- *Following construction of containment / encapsulation areas, an LTEMP will be required for the ongoing management (in perpetuity). It is envisaged that the LTEMP would form a condition of consent issued by Council under the development approval and is an appropriate mechanism for legal enforcement. Public notification would be through the Section 10.7 planning certificate and be available on the SI website.*

The RAP (refer [Appendix 18](#)) concludes *once all data gap investigations are completed, remediation and validation undertaken, and remaining contamination (if any) managed under an LTEMP, then the site would be considered suitable for the intended land use post-construction of the proposed development.*

A draft IAA has subsequently been prepared by Ramboll (refer [Appendix 19](#)) and determined that the proposed remediation options above are appropriate subject to the outcomes of further data gap analysis and implementation of the RAP mitigation measures to ensure that the Site is suitable for use, this will all be subject to the final validation by the Site Auditor, noting that further testing may identify further contaminants and an amended RAP may be required. It is noted that any works to the dam will need to have careful consideration and remediation when works are undertaken.

It is required that the public roads, where work is proposed, should be tested and included in the amended RAP and final audit statement to ensure these areas are suitable for their intended use and minimise risks to construction workers and community.

The removal of demountable and demolition of buildings may uncover hazardous materials such as lead, asbestos and other materials. A mitigation measure shall be included to require a hazardous survey to be undertaken for all demountable buildings and buildings prior to the commencement of works, removal of items should be in accordance with these requirements.

The PSI, DSI, RAP and IAA (refer respectively to [Appendix 16](#) to [Appendix 19](#)) have all identified the need to remediate the Site to make it suitable for school and preschool uses and to ensure that a data gap analysis is undertaken following the removal of existing demountable/buildings.

A review of all the recommended mitigation measures, extracted from the four (4) contamination reports are detailed below:

- *Prepare a hazardous assessment on all buildings to be removed and/or demolished. Any demolition/removal works should be in accordance with the final hazardous assessment plans.*
- *Contamination is known to exist at the site that currently renders the site unsuitable. In order to render the site suitable, a data gap investigation is required as well as implementation of the RAP and preparation of a Validation Report upon completion.*
- *Where encapsulation or cap and contain of contaminated material is chosen as the preferred remediation strategy, a Long-Term Environmental Management Plan (LTEMP) must be prepared for the site.*
- *Prior to remediation works taking place, interim management controls should be put in place to ensure no risk to site users*
- *A Validation Consultant is engaged to document the remediation works.*
- *Any amendments to the remediation approach are reviewed by the Site Auditor, including the proposed location(s) and capping and containment design for onsite retention of contaminated materials.*
- *The Construction Environmental Management Plan (CEMP) is prepared under the framework provided as part of the RAP prior to commencement of the remediation works, including to reflect the development consent conditions and regulatory requirements. The CEMP should be implemented by the Principal/Remediation Contactor.*
- *Validation of remediation works is compiled into a Validation Report, in accordance with NSW EPA (2020) Contaminated Land Guidelines, Consultants reporting on contaminated land, for review and audit by the Site Auditor. The Validation Report will document how the remediation acceptance criterion has been achieved.*
- *If an LTEMP is required due to retained contamination, the EMP is reviewed and audited by the Site Auditor and agreed as an appropriate method of management prior to implementation.*
- *If an LTEMP is required, in order to facilitate the legal enforceability of the LTEMP, it is recommended that the consent authority include conditions of consent that require implementation of the LTEMP, or otherwise implementation of any conditions on the Site Audit Statement (SAS), during occupation of the site.*
- *A Section A SAS and SAR assessing the suitability of the site for occupation is prepared by a NSW EPA Accredited Site Auditor following completion of remediation.*
- *If staged re-occupation of the site is required following remediation of portions of the site, commensurate staged validation reporting will be required to facilitate the site audit. Consultation with the Principal Certifying Authority would be required to define the site audit requirements for reoccupation (i.e., through IAA, or separate Section A SAS).*

In conclusion, the reports have identified that there are still known areas across the Site that contain lead and zinc exceeding the safe human health levels identified on the Site and there are also areas of exceedances of ecological criteria for total and dissolved copper and zinc, dissolved lead, total nickel and perfluorooctanoic acid (PFOS - forever chemical) reported within surface water samples collected from the dam that straddles the eastern boundary, as outlined in the DSI (refer [Appendix 17](#)).

Stantec has confirmed that: in respect of the Dam exceedances of ecological criteria, it is noted that the water catchment collects surface waters from the broader surrounds to the south (off-site), which is inferred upgradient. As such, waters within the dam may be subject to off-site influences. In the absence of a known on-site source of PFAS and the metals impacted soils on-site found to be non-leachable, the detections of contaminants in surface water are inferred to be from an off-site upgradient location, noting the catchment encompasses up-gradient lands.

The current design for the Site indicates that the dam will not be filled during construction. On this basis, Stantec have confirmed that the interactions with surface water are envisaged to be limited to managing erosion and sedimentation (ERSED) during earthworks and construction. The protocols for management of ERSED and water quality must be documented in the construction contractors Construction Environmental Management Plan and associated sub-plans to ensure compliance with relevant guidelines and regulatory requirements.

On this basis, the mitigation measures suggested in the PSI, DSI, RAP and IAA (refer respectively to [Appendix 16](#) to [Appendix 19](#)) have been consolidated and the mitigation measures found in the IAA will be included to ensure that the Site is suitably remediated:

Mitigation measures will be implemented to address the following:

Contamination and Remediation

- (i) An updated or new revision of the Remediation Action Plan (RAP) is to be prepared that outlines any additional contamination identified undertaken as a data gap analysis, and the remediation strategy updated to include the known and any additional identified contamination that is found to be above the applicable land use criteria at the Site.

Depending on the significance of the remediation recommendations informed by the Data Gap Investigation, an update to the RAP may be required and will be confirmed by the Site Auditor.

If an amended RAP is required, this must be provided to the Site Auditor for review and endorsement prior to any remediation work commencing.

- (ii) A Validation Consultant is engaged to document the remediation works.
- (iii) At the completion of remediation in accordance with the RAP, preparation of a Validation Report and Long-Term Environmental Management Plan (LTEMP) shall be prepared, if required under the RAP. These must be reviewed by the Site Auditor who will prepare a Section A Site Audit Statement (SAS) and Site Audit Report (SAR) assessing the suitability of the Site for the proposed use.
- (iv) Any material being removed from Site be classified for off-site disposal in accordance the EPA (2014) Waste Classification Guidelines and/or an applicable NSW EPA Resource Recovery Order.
- (v) If staged re-occupation of the Site is required following remediation of portions of the Site, commensurate staged validation reporting will be required to facilitate the Site audit. Consultation with the Crown Certifier would be required to define the Site audit requirements for reoccupation (i.e., through IAA, or separate Section A SAS).

- (vi) Validation of remediation works is compiled into a Validation Report, in accordance with NSW EPA (2020) Contaminated Land Guidelines, Consultants reporting on contaminated land, for review and audit by the Site Auditor. The Validation Report will document how the remediation acceptance criterion has been achieved.
- (vii) Should a LTEMP be required under the RAP and the method of management must be endorsed by the Site Auditor, the LTEMP shall be implemented during occupation or use of the Site. The approved LTEMP is to be reviewed periodically and, where appropriate, updated or amended. The approved LTEMP is to be implemented until a Site audit confirms that the Site is suitable for the proposed use without an LTEMP.
- (viii) If an LTEMP is required, in order to facilitate the legal enforceability of the LTEMP, it is recommended that the consent authority include conditions of consent that require implementation of the LTEMP, or otherwise implementation of any conditions on the Site Audit Statement (SAS), during occupation of the Site.
- (ix) Any amendments to the remediation approach are reviewed by the Site Auditor, including the proposed location(s) and capping and containment design for onsite retention of contaminated materials.
- (x) The Construction Environmental Management Plan (CEMP) is prepared under the framework provided as part of the RAP prior to commencement of the remediation works, including to reflect the development consent conditions and regulatory requirements. The CEMP should be implemented by the Principal/Remediation Contactor.
- (xi) The interactions with surface water are envisaged to be limited to managing erosion and sedimentation (ERSED) during earthworks and construction. The protocols for management of ERSED and water quality must be documented in the construction contractors Construction Environmental Management Plan and associated sub-plans to ensure compliance with relevant guidelines and regulatory requirements.

6.4 Bushfire

The Site is partially mapped as bushfire prone land (BFPL) as shown in Figure 43. The mapped area is identified as being vegetation buffer and vegetation category 3. Ordinarily future redevelopment for the purposes of a School would be subject to provisions of S100B of *Rural Fires Act 1997*.

The Site is surrounded by a number of approved developments that will alter bushfire hazards and current Asset Protection Zones (APZ). Due to the uncertainty of when the surrounding developments will occur, DoE is in the process of acquiring an easement for a temporary APZ on grassland vegetation to the north, northeast and east of the Site. Current earthworks to the west of the Site have removed the grassland hazard in this direction. The creation of an easement over the land to the north will be managed as temporary APZ. The Site will therefore be more than 100 metres away from any surrounding grassland hazards, reducing the exposed rating to a maximum Bushfire Attack Level (BAL) of BAL-LOW. Confirmation from Council, whilst liaising with the NSW RFS, will be required to seek amendment to the BFPL map but until then Mitigation Measures BMM7 and BMM8

will ensure that the APZs are created and they are managed in perpetuity by the Department of Education, until such time that the BFPL maps have been amended.

A Bushfire Protection Assessment (BPA) (refer to [Appendix 23](#)) has been prepared as the Site is a special fire protection purpose (i.e. school) requiring the activity to be assessed in accordance with *Planning for Bushfire Protection* and this report can be found at [Appendix 23](#), the BPA determined that the mapping is currently out of date, due to recent development on adjacent lands and removal of bushfire prone vegetation.

A separate application has been lodged with Council to amend the bush fire prone land map, Council will seek certification of the map from the NSW RFS Commissioner to remove the bushfire prone land mapping from the Site, over the property to the north (compulsory acquisition) and imposition of easements for APZs across the following lots (Bathla owned):

- part of 56 Gillieston Road, Gillieston Heights (Part Lot 2 DP 997874)
- part of 40 Gillieston Road, Gillieston Heights (Lot 1 DP 986279)
- part of 29 Northview Street, Gillieston Heights (Lot 1 DP 1308605)

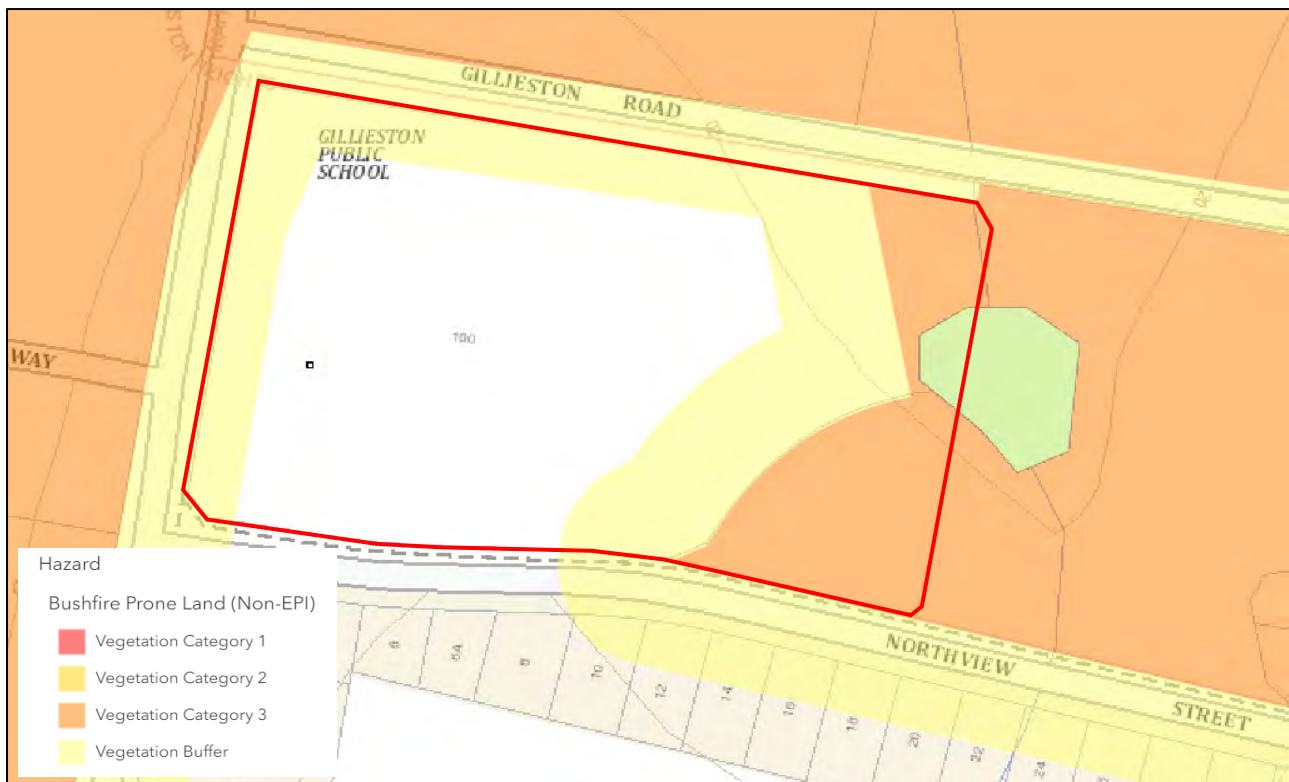


Figure 43: Bushfire Prone Land Map (DPHI Spatial Viewer: 2024)

Progressing the creation of temporary and acquired easements for an APZ across the surrounding properties positioned to the north to east will suitably provide adequate separation from the bushfire planning area and support the removal of bushfire prone land mapping from the Site, this is supported, provided the APZs are suitably managed in perpetuity as a mitigation measure (BMM8 in Appendix 1), this outcome will remove the bushfire constraints from the Site, refer to Figure 44.

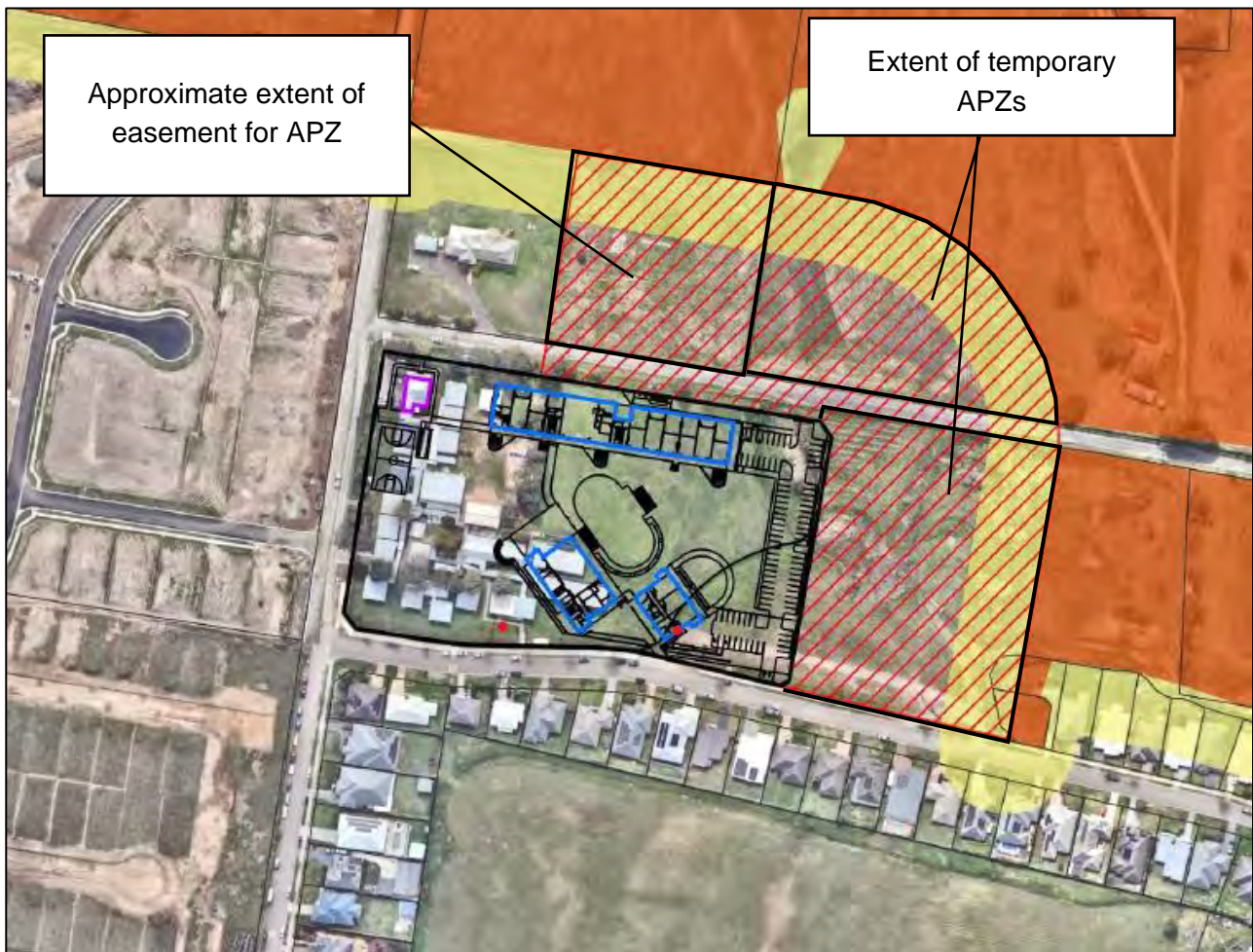


Figure 44: Approximate Extent of Asset Protection Zones (Eco Logical: 2024)

In addition to the above, the redevelopment was assessed against the Bushfire Protection Measures and the BPA confirms that the development will be capable of satisfying the bushfire planning principles subject to inclusion of mitigation measures GMM8 and BMM1 to BMM8 in Appendix 1.

Following acquisition of land and registration of APZs on the surrounding Sites the PBP requirements will reduce, which is considered a positive outcome. This is subject to the inclusion of the following mitigation measures GMM8 and BMM1 to BMM8 in Appendix 1. :

In the case that the NSW RFS amend the bushfire mapping prior to the creation of APZ easements on the lands identified in Figure 44, a mitigation measure for the registration of the relevant APZs can occur prior to Occupation based on the Bushfire Consultants advice in email dated 14 April 2025 (refer **Appendix 23.1**), in this instance mitigation measure BMM7 in Appendix 1 shall be worded to reflect this.

6.5 Soils and Geology

The activity will have significant land disturbance, particularly at the northeastern corner of the Site. As discussed in Section 2.2.2, there will be significant fill required due to the location of the existing dam along the eastern boundary, along with regrading of the Site prior to the commencement of each stage of works. The cut and fill required is shown in Figure 21 and outlined below:

- Total cut = 3,100m³
- Total fill = 14,200m³

- Total fill over cut = 11,100m³

In the *Groundwater, Surface Water and Salinity Impact Assessment* (GSWSIA) (refer [Appendix 37](#)) includes the proposed cut and fill plan for the proposed bulk earthworks and this plan identifies the locations that will be cut (excavated) and those that will be filled (soil emplaced). This plan has been reviewed and included in the GSWSIA (refer [Appendix 37](#)) to demonstrate the anticipated topographic changes during the proposed activity, and to consider potential environmental interactions. Stantec have advised that the risk of intercepting groundwater as part of bulk earthworks is considered unlikely based on the cut and fill plan, which is outlined in Section 6 and Section 10.4.1 of the GSWSIA (refer [Appendix 37](#)).

In addition, the GSWSIA (refer [Appendix 37](#)) also includes the Stormwater Management Plan that shows the design contours, which represent the elevation in which stormwater infrastructure will be installed at the Site. As outlined in Section 10.1 of the GSWSIA (refer [Appendix 37](#)), this plan indicates that sufficient design measures are included to capture, direct, consolidate and discharge stormwater from the Site. Therefore, it is considered that there are adequate drainage design features to prevent inundation and these have been included to demonstrate the required geotechnical changes to ensure the stormwater drainage design can function adequately,

The GSWSIA (refer [Appendix 37](#)) did not identify any concerns with salinity and determined that the proposed works will be above the groundwater table but anticipated that any groundwater will be associated with seepage flows along the interface of the residual clay and bedrock and along minor fractures and joints in the rock above the permanent regional groundwater table.

The current data gathered in the GSWSIA (refer [Appendix 37](#)) and Geotechnical Report (refer [Appendix 35](#)) has determined, during intrusive investigation, that groundwater is unlikely to be intercepted during construction activities. For future construction, the construction contractors Construction Environmental Management Plan (CEMP) must include contingencies and controls to manage potential interactions with waters, including potential seepage and surface water flows (if observed).

Stantec's GSWSIA and the response to the RFI's, following exhibition of the REF, apply to the environmental considerations related to surface water and groundwater. Clarification on the technical detail and specifications within each plan should be sought from the specialist consultants who prepared the plans.

In respect of the acid sulfate soils (ASS), the Site is not identified within the MLEP 2011 as being affected by ASS, however, the geotechnical report (refer [Appendix 35](#)) did identify the potential for ASS. On this basis further detailed testing is required a mitigation will be included to require an ASS Management Plan to be prepared, the following mitigation measure will be included:

- *Additional testing to delineate / confirm presence of Acid Sulfate Soils.*

Pending the outcome of the further testing, an ASS Management Plan may be required, this will be included as a mitigation measure, it will only apply if the additional testing confirms the presence of ASS.

The report confirmed that the Site is above a former mine and confirms that Stantec have also prepared a mine subsidence report. It is recommended that *redevelopment of the Site shall consider the findings and recommendations outlined in Stantec's desktop mine report and any advice/requirements from SA NSW (if provided).* mitigation measures from the Mine Subsidence Report at [Appendix 26](#) will be included.

Stantec has confirmed that based on the conditions encountered in the previous geotechnical investigation (refer [Appendix 35](#)), it is recommended that long-term excavations in Site materials should be either battered at the below batter angles or flatter and protected against erosion or be supported by engineer designed and suitably constructed retaining walls. It was noted that the following soil conditions were identified:

- Colluvial Soil – 2.5H:1V
- Residual Soil, EWM and weathered rock - 2H:1V

Stantec confirm that excavations may be battered steeper in rock materials, subject to specific geotechnical assessment. Proposed long term batter angles would require confirmation by a geotechnical engineer and proposed long term batter angles to be confirmed in the additional geotechnical investigation proposed, on this basis further geotechnical investigation is required.

It is noted that no road widening will be undertaken as part of this activity, the delivery of the Bus Bay, kiss and drop and pedestrian crossings along with the retaining wall along the eastern edge of the future car park are the areas that will require further investigation of batters to ensure soil can be retained adequately.

The activity can be supported from a geotechnical perspective but will require further testing to be undertaken, the following mitigation measure will be included:

- *Further intrusive geotechnical investigation must be undertaken to fill in data gaps and provide updated advice following recent design changes. This pertains particularly to the eastern section of the Site previously not investigated, and areas where design changes have occurred (i.e. central portion of the Site where deep cut is proposed).*

The contractor will manage stockpiles on Site and coordinate and manage materials transported from the Site, this will need to be included in the final CTEMP, prior to the commencement of each stage of works.

6.6 Mine Subsidence

The subject Site is **not** mapped as being within a Mine Subsidence district. However, the eastern part of the subject Site is identified as being within an underground coal mining area (see Figure 45).

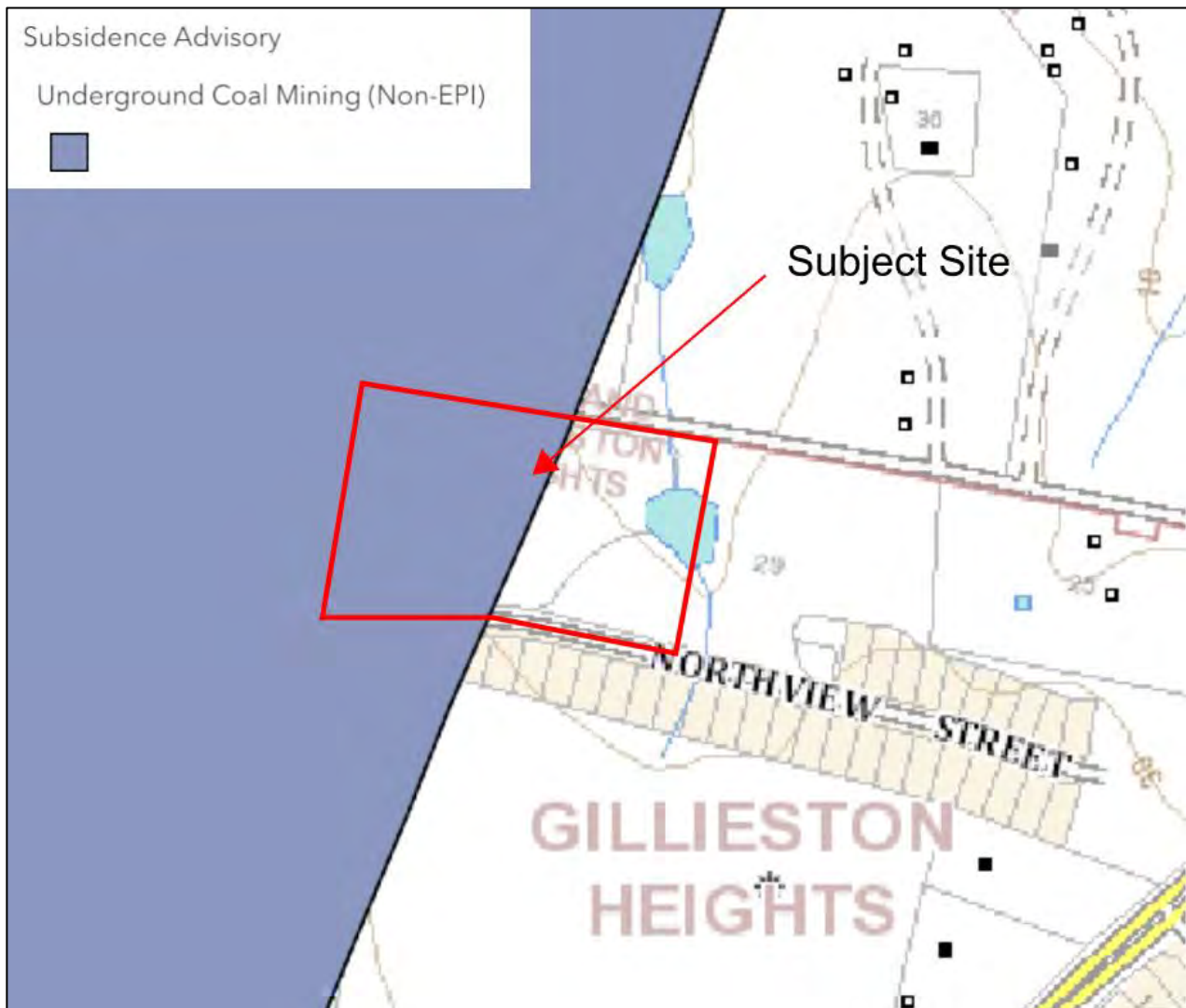


Figure 45: Underground Coal Mining Map (NSW Spatial Viewer: 2024)

Following these findings, a desktop study was undertaken and identified that the Site is positioned above the *Great Top Split Seam* and further investigation revealed that extensive mining of two seams under the Site were undertaken between the 1920 and 1928, with the top seam being at a depth of 320m BGL and the bottom seam being 430m BGL.

A Mine Report (refer [Appendix 26](#)) was prepared, and it determined that the age of the mining activities, combined with no evidence of subsidence detected with a walkover of the Site, concluded that there was low risk from further subsidence subject to the following mitigation measures:

- *The identified risk of damage to proposed development relating to mine subsidence shall be mitigated by incorporation of the estimated subsidence parameters in the design such that the structures and infrastructure remain serviceable (Table 5-9). This must be implemented in the next design phase post REF.*

Table 5-9 Recommended subsidence Parameters for design of infrastructure associated with the site – based on Holla 1987 [7]

Parameter	Value
Maximum Subsidence S_{\max} (mm)	200
Maximum Tensile Strain $+E_{\max}$ (mm/m)	2.0
Compressive Strain $-E_{\max}$ (mm/m)	1.0
Tilt G_{\max} (mm/m)	2.0
Radius of Curvature (km)	6 km

- *Typical Subsidence Advisory NSW (SA NSW) approval conditions for similar developments shall be implemented (if not by SA NSW) including the need for sign off from the structural engineer that the structures associated with the development have been designed to remain serviceable for the recommended subsidence parameters as well as the below.*
 1. *The proposed structure(s) associated with development shall be designed to be “safe, serviceable and readily repairable” using the subsidence parameters outlined below:*
 - *Maximum vertical subsidence: 200 mm*
 - *Maximum tensile strains: 2.0 mm/m*
 - *Maximum compressive strains: 1.0 mm/m*
 - *Maximum tilt: 2.0 mm/m*
 - *Minimum radius of curvature: 6 km*
 2. *‘Roadworks identified in the subdivision plan shall be designed as a flexible pavement with a bitumen or asphalt treated surface over one or more unbound base courses in accordance with the relevant Australian Standards and Codes of Practice.’*

All construction activities will need to be assessed by a structural engineer and structural drawings shall be amended to include the parameters to ensure compliance with the mitigation measures above. On this basis, the activity can be supported, subject to adhering to the mitigation measures.

6.7 Air Quality

A *Land Use Conflict Risk Assessment Report* (LUCRA) has been prepared (refer to [Appendix 36](#)), the LUCRA has undertaken a risk assessment of existing intensive agriculture (poultry farm) to consider concerns regarding odour impacts and potential increase in complaints due to an increase of school population.

The poultry farm is positioned to the northeast of the Site at 18 Gillieston Road, Maitland and has been in operation since 1970s and has expand across time. The farm is identified within the Gillieston Heights North Urban Release Area under the MLEP 2011 and it is anticipated that at some point will be redeveloped for residential uses but currently remains in operation.

Under the MDCP 2011, Part F.5 Section 1.7 has the following key consideration for land adjoining poultry farms:

- *Land Adjoining Poultry Farm: To ensure that future residential development is not adversely affected by the operation of the poultry farm, this control states ‘No development is to occur in areas subject to odour levels greater than 3 odour units as identified in the Precinct Plan’.*

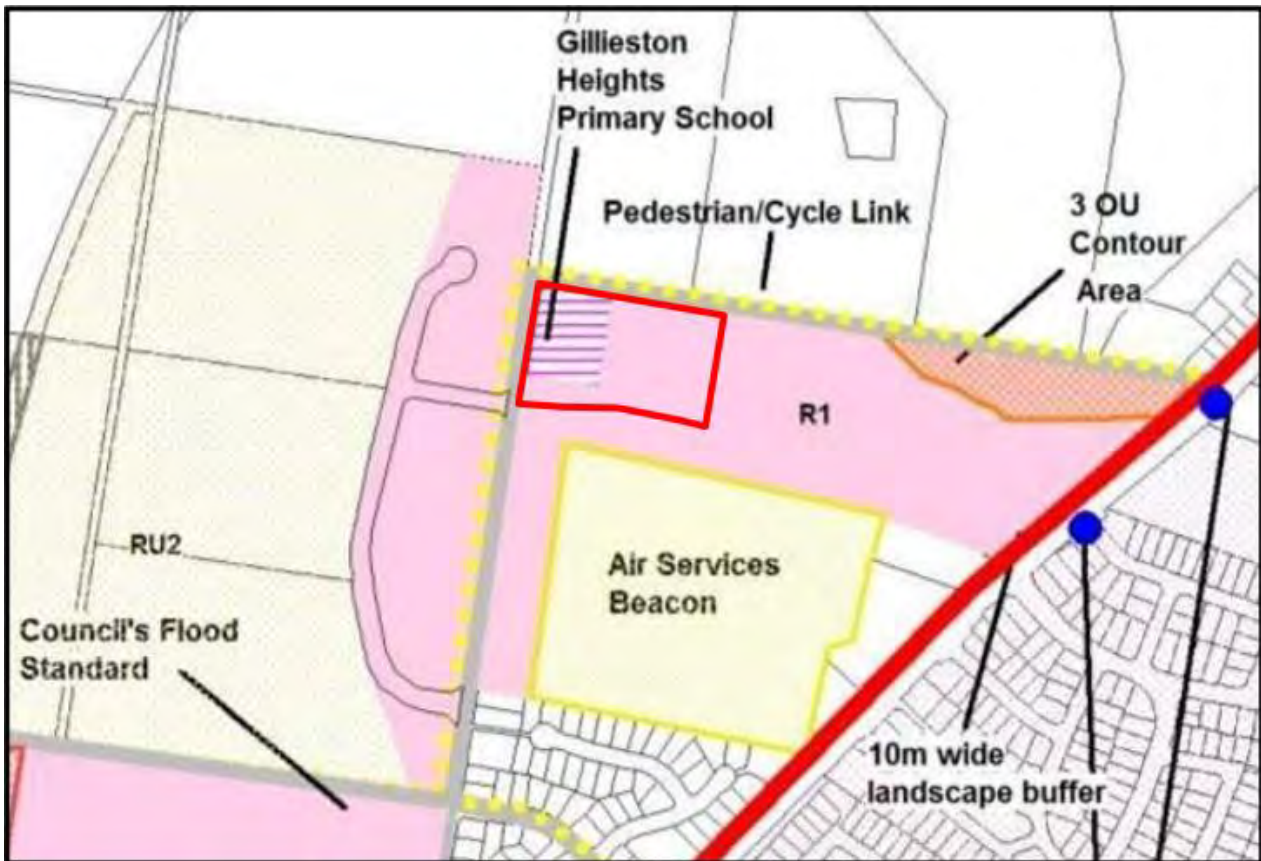


Figure 46: Figure 4 from MDP – Odour Contour Area (MCC: 2024)

As shown in Figure 46, the Site sits a significant distance from the poultry farm contour area. Notwithstanding, the LUCRA has identified that the *Best Practice Management for Meat Chicken Production in NSW manual provided by the NSW Department of Primary Industries* recommends a 1000m separation between poultry farm indoor broiler and sensitive land uses. The Site has the following distances between the poultry farm (refer Figure 47):

- Separation distance between nearest existing subject Site building and main shed: approx. 420m; and
- Separation distance between nearest proposed subject Site building and main shed: approx. 340m.

Also see below image from the LUCRA:



Figure 47: Illustrates the separation distances from poultry farm (Stantec:2024)

The LUCRA determines that the impacts between the uses are reduced the computerisation and tunnel ventilation upgrade to the poultry farm 7 years ago, low-lying elevation of the poultry farm buildings and landscaping and the position of the new learning building will also provide a buffer to the remainder of the Site. The following mitigation measures will support the activity and mitigate odours and conflicts:

- Engineering:
 - Internal ventilation units such as air-conditioning.
 - Administrative:
 - limit outdoor play during odour incidences
 - Awareness of forecasts of weather forecast (eg. northeast wind direction) • Close windows/doors facing the poultry farm during high wind events and/or odour events.
- Landscape design to incorporate elements that enhance visual amenity.
- Rainwater tanks:
 - Tank strainer or dust cover to be installed at rainwater collection points
 - First flush diverter to be installed on rainwater tanks Administrative
 - Rainwater collected on Site must not be used for human consumption (drinking water)
- No poultry to be kept on the school Site.

The activity has the potential to create dust during works and is in close proximity to residential properties along Northview Street, Gillieston Road and Ryans Road and to students and teachers within the school which will continue to operate whilst works are being undertaken, to mitigate this all works will need to be undertaken in accordance with the PCMP at **Appendix 8**.

6.8 Hydrology, Flooding and Water Quality

Groundwater and Salinity

The accompanying GSWSIA at **Appendix 37** determined that there was no groundwater or seepage encountered to a depth of 5m below ground, there will be no impact as the activity has a maximum depth of 2m proposed and a low risk of salinity developing. Notwithstanding, the Geotechnical Report at **Appendix 35** has identified seepage, however, does not consider this to be a significant concern. Notwithstanding, future data gap analysis testing is required and depending on the outcomes of the final testing conclusions this may change, refer to Section 6.4 above.

Water Quality

The GSWAIA at **Appendix 37** outlines the existence and current reliance on the first-order ephemeral drainage line that directs water to the dam on the eastern boundary and then away from the Site towards the north-west into private dams or ponds before continuing into Swamp Creek, which is considered a freshwater system. There is the potential for this system to be impacted by shallow groundwater flow along with livestock, who may drink the water. Protection of freshwater aquatic ecosystems downgradient of the Site is considered an applicable environmental value.

Management of this drainage line is important, and any onsite drainage directed into off-site drainage will need to be managed to maintain water quality for properties upstream, the proposed stormwater system will include an underground onsite detention (OSD) and contain gross pollutant trap (GPT) storm filters. The GSWAIA concludes that the water quality of stormwater discharged from the Site will be improved and will regulate volume flow rates from the Site. The proposed onsite stormwater works are illustrated in Figure 48.

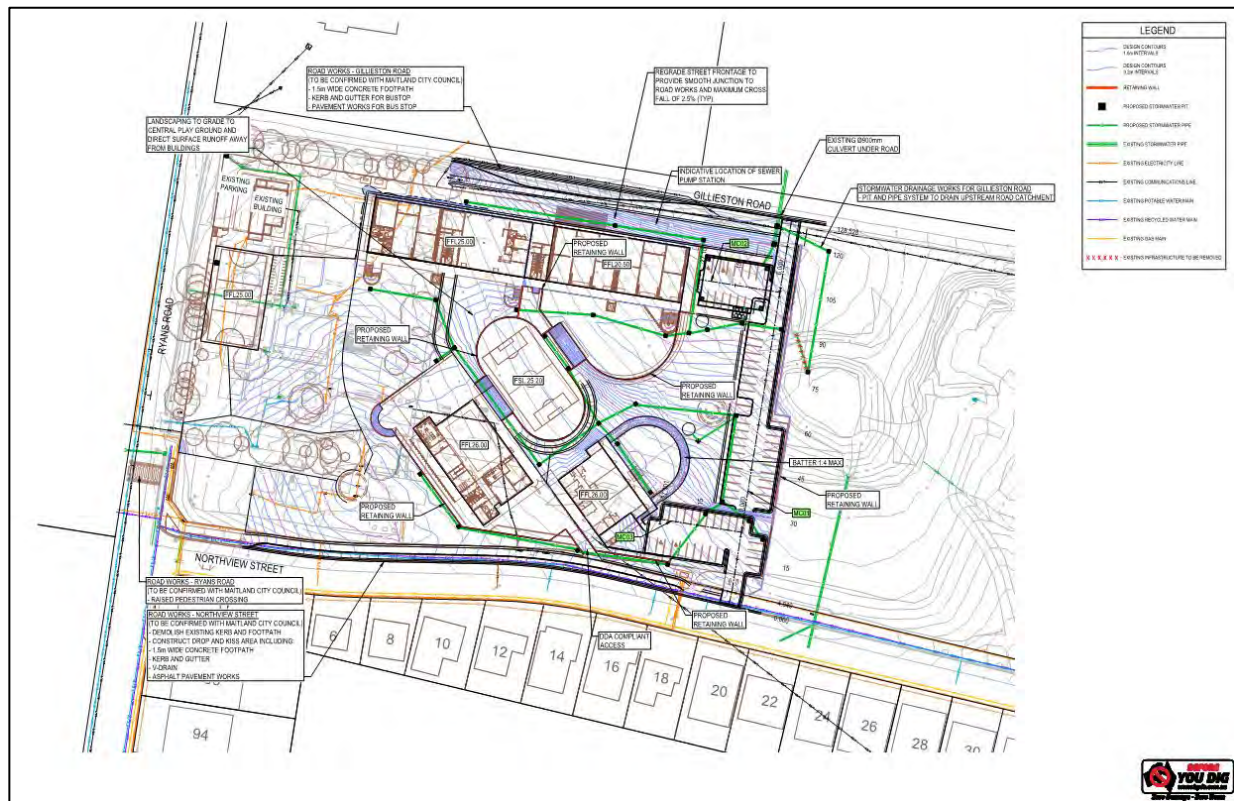


Figure 48: Proposed Civil Works (Stantec:2024)

To enable works in the northeastern corner of the Site to proceed, offsite stormwater works are required to be undertaken to ensure that the Site and surrounding catchment that drains through the Site can be adequately serviced. The offsite works required are listed below:

- new culvert under Gillieston Road to convey upstream stormwater
- local regrading of the existing surface levels is required to direct upstream flows to the culvert entrance.
- Construction of a swale to divert water to temporary detention basin to the north of the Site.
- Construction of temporary basin with outlet pipes and spillway crest to hold lost detention storage from the Site and surrounding catchment area.

At the time of preparing this report the offsite works had been issued to the adjoining land owner (Bathla) and MCC. Bathla have given their approval to proceed with the design and MCC are still reviewing the design and are yet to respond. On this basis a mitigation measure will be included to require offsite stormwater works to be agreed to before works on the easement, within the northeastern corner of the Site, can commence. The mitigation measure will provide flexibility around design in case modifications are required to finalise the design.

Further mitigation measures are not required in this instance as the stormwater system will assist in improving water quality discharged from the Site. Notwithstanding, this is dependent on the resolution of the off-site stormwater works and easement resolution, on this basis mitigation measures will be included to require temporary onsite detention and ensure no works commence until the following are satisfied:

- Prior to the commencement of works within the nominated easement to drain water across the northeastern corner of the Site needs to be extinguished or consent from Maitland City Council obtained for works on the easement.
- Prior to commencement of works consent is required to be obtained from Bathla and Maitland City Council for the off-site stormwater works associated with redirection of water from the dam.
- Temporary on-site detention is required to be provided, outside the existing drainage easement, until such time as the consent is obtained and/or easement extinguished to enable the pre-development stormwater water works to be commenced and completed. Following completion of the final stormwater works the temporary on-site detention will need to be removed and landscaped.
- All off-site stormwater works have to been undertaken and completed to enable the works on Site to progress.

The Department has developed off-site stormwater work plans, these can be found at **Appendix 37A**. The plans require endorsement from both the UPG 400 Pty Ltd and MCC prior to the design being finalised. As discussed above, no works can commence until approval is obtained for the off-site stormwater works.

An application under Section 50 to Developer Services has already been applied for based on Hunter Water Advice Letter for wastewater and potable water as shown in the Civil Report at **Appendix 15**. Once final design documentation has been completed this will need to be forwarded for approval, a mitigation measure has been included.

Flooding

A Flood Impact Assessment Report has been prepared by ACOR (refer [Appendix 29](#)) and had consideration for *the Flood Impact Assessment of the 1% AEP event has been undertaken in accordance with the requirements of Maitland City Council's (the Council) Development Control Plan (DCP), Local Environmental Plans (LEP) and NSW Floodplain Development Manual to define flood behaviour for both pre-development (existing) and post-development (proposed) scenarios.* The northeastern corner of the Site is traversed by a 1st order stream via a series of dams before discharging to Swamp Fishery Creek to the northwest of the Site, as shown in Figure 49. It is noted that under Section 41 of the *Water Management Regulation 2018* the activity does not require a 'controlled activity approval' and therefore is not defined as 'Integrated Activity' under the EP&A Act.



Figure 49: Proposed Site and 1st Order Stream Drainage (ACOR:2024)

The Site is not affected by backwater from the Hunter River in the PMF flood event but is located within the Wallis Creek and Swamp Fishery Creek catchment, being located on high ground between the floodplains of the two creeks but is identified as being subject to local flooding at the northeastern corner of the Site and during the 1% AEP flood behaviour has the potential at the northeastern corner to have a depth of 2.04m based on pre-development of the Site, however, this presents as a "generally safe for vehicles and buildings" vulnerability category.

The report concluded the following mitigation measures are to be included:

- *the impact of fill by the proposed development on the overland flow at the eastern side of the Site is mitigated by the proposed new 1/2400x 900 mm stormwater culvert under Gillieston Road*
- *The proposed new 1/2400 x 900mm stormwater culvert (unblocked) Conveys the 1% AEP peak discharge under Gillieston Road without flow overtopping the road*
- *in the unlikely event of 50% blockage of the proposed new 1/2400 x 900 mm stormwater culvert, flow will overtop Gillieston Road with depths of less than 0.1 m and remains trafficable with peak flood hazard vulnerability of H1*
- *Proposed building floor levels are significantly higher than the peak water level at the northeast corner of the Site for the 1% AEP climate change event and the one in 500 AEP event*
- *the proposed activity incorporates a stormwater detention tank that attenuates peak discharge rates from the developed area of the Site to existing conditions peak discharge rates for storm events up to the 1% AEP (refer to Civil Engineering Report by ACOR Consultants)*
- *Evacuation routes are readily available for the area and evacuation from the Site can be achieved prior to inundation of the evacuation route to the north this will be facilitated by the NSW Department of Education Emergency Response Team.*

On this basis, the flood impacts can be suitably mitigated by the following measures:

- *New culvert under Gillieston Road*
 - *A new 1/2400 x 900 mm reinforced concrete box culvert is proposed to drain overland flow under Gillieston Road. The culvert has been sized to mitigate the effect of proposed fill encroaching into the overland flow path.*
- *New detention basin north of Gillieston Road*
 - *A detention basin is proposed to attenuate discharge in the over land flow path. Refer to the civil engineering report by ACOR consultants and appendix D for details regarding the detention basin.*
- *Flood evacuation*
 - *When notified of possible flooding or isolation by the NSW SES or Emergency Response Team within the NSW Department of Education, the school body is to assist with coordinating the evacuation of the school.*

It is noted that the easement across the northeastern corner will require extinguishment and or owners consent from MCC before the above works can be undertaken. A mitigation measure will be included to address this concern.

The Emergency Response Team will develop a comprehensive Flood Risk Response Plan that will include evacuation preparations for various flood events (5%, 10%, 20%, and 50% AEP). Shelter-in-place arrangements for local overland flow events are considered appropriate as these flows are

typically short in duration and pose no risk to the school buildings. Additionally, established protocols for closure or evacuation will be implemented in coordination with the NSW Department of Education Emergency Response Team, with decisions made at least 24 hours before potential flooding events. These measures, combined with regular risk assessment monitoring and installation of fencing along the retaining wall on the eastern boundary to prevent access to the flood risk area of the Site during adverse events, overall the amended Flood Report at [Appendix 29](#) demonstrates that flood risks can be effectively managed.

On the basis above, the activity will have no detrimental impact on hydrology, flooding and water quality subject to imposition of mitigation measures and overall, the water discharging from the Site will be improved.

6.9 Aboriginal Heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared refer to [Appendix 22](#), which identified a low-density surface artefact that was registered on the Aboriginal Heritage Information Management System (AHIMS) as AHIMS #38-4-2290 (GilliePS-2023-IF1). During investigations 17 Aboriginal stakeholders registered interest in the project and the 4-day field assessment identified a further two findings, as outlined in the report:

Overall, the findings were found to conform with the regional models of isolated or low-density artefact scatters reflecting transitory use of the landscape in proximity to water sources. One site, AHIMS #38-4-2290 (GilliePS-2023-IF1) was identified in previous investigations. The previously identified site AHIMS #38-4-2290 (GilliePS-2023-IF1) was inspected and a further two artefacts were identified. One milky quartz flake and one silcrete flake. This Site was updated to AHIMS #38-4-2290 (GilliePS-2024-AS1). No cultural material was recovered from the excavation.

The area where the artefact was identified is reflected in Figure 50.



Figure 50: Aboriginal Artefact Location (EMM: 2024)

It was concluded that the proposed works would have a direct impact on the identified artefact AHIMS #38-4-2290 (GilliePS-2024-AS1), being a low-density stone artefact scatter of low significance. Mitigation measures have been included in the ACHR to guide post-approval requirements and be included as mitigation measures; they are identified below:

- *No ground disturbance activities are permitted within 10 m of identified Aboriginal site AHIMS #38-4-2290 (GilliePS-2024-AS1), without obtaining an Aboriginal Heritage Impact Permit (AHIP) to allow impacts from Heritage NSW. Given the paucity of cultural materials encountered, no further archaeological mitigation is proposed for inclusion in the AHIP.*
- *Develop a Construction Environmental Management Plan (CEMP) or equivalent, to ensure the cultural landscape is considered throughout the project. This includes rehabilitation of areas where infrastructure is not remaining after the project.*
- *Include in the CEMP the cultural heritage induction package for all construction personnel and subcontractors, procedures for managing unexpected discoveries, and avoidance of impact to locations outside the AHIP boundary.*
- *Implement cultural awareness training for all relevant personnel and contractors involved in the project, to be conducted on Country by representatives of the RAPs as part of the Site induction process.*
- *Maintain consultation with the registered Aboriginal parties during the finalisation of the assessment process and throughout the project.*
- *A copy of the ACHA will be lodged with AHIMS and provided to each of the registered Aboriginal parties.*

- *If any part of the construction footprint is located outside the areas identified in this ACHA, or if any alteration is proposed, further assessment of these areas should be undertaken to identify and manage Aboriginal objects or sites*
- *Update the AHIMS Site Recording Form for AHIMS #38-4-2290 to reflect the findings of this assessment.*
- *In case of a change in the heritage consultant during the project, ensure a proper handover is conducted to avoid loss or mistranslation of the intent of information, findings, and heritage management steps.*
- *Completed documentation, including approved AHIPs, must be supplied to DoE Heritage so it can be archived on the DoE Aboriginal Cultural Heritage Register.*

6.10 Environmental Heritage

The original 1897 single-storey former residential building (refer to Figure 51) positioned at the northwestern corner of the Site, now used for teaching, remedial and school administration purposes, is listed on the Section 170 for Department of Education (Heritage Item ID: 5068006). Although not listed under the MLEP 2011, consideration must still be given to the heritage significance of this building and its curtilage. In addition, the existing Inter-war timber library was also assessed (refer Figure 52), this building was cut and relocated from Kurri Kurri and has had various modifications over time, the HIS at Appendix 25 is supportive of the demolition as the building is not intact enough for heritage listing.

It is noted that the original 1894 Federation school building was demolished in the 1950s and the Umwelt Report determines that the location of the building is likely to have low historical archaeology for footings, as Federation footings were quite common. The location of the former building is shown within Figure 53 below.



Figure 51: 1897 Building (Umwelt: 2024)



Figure 52: School Library (Umwelt: 2024)

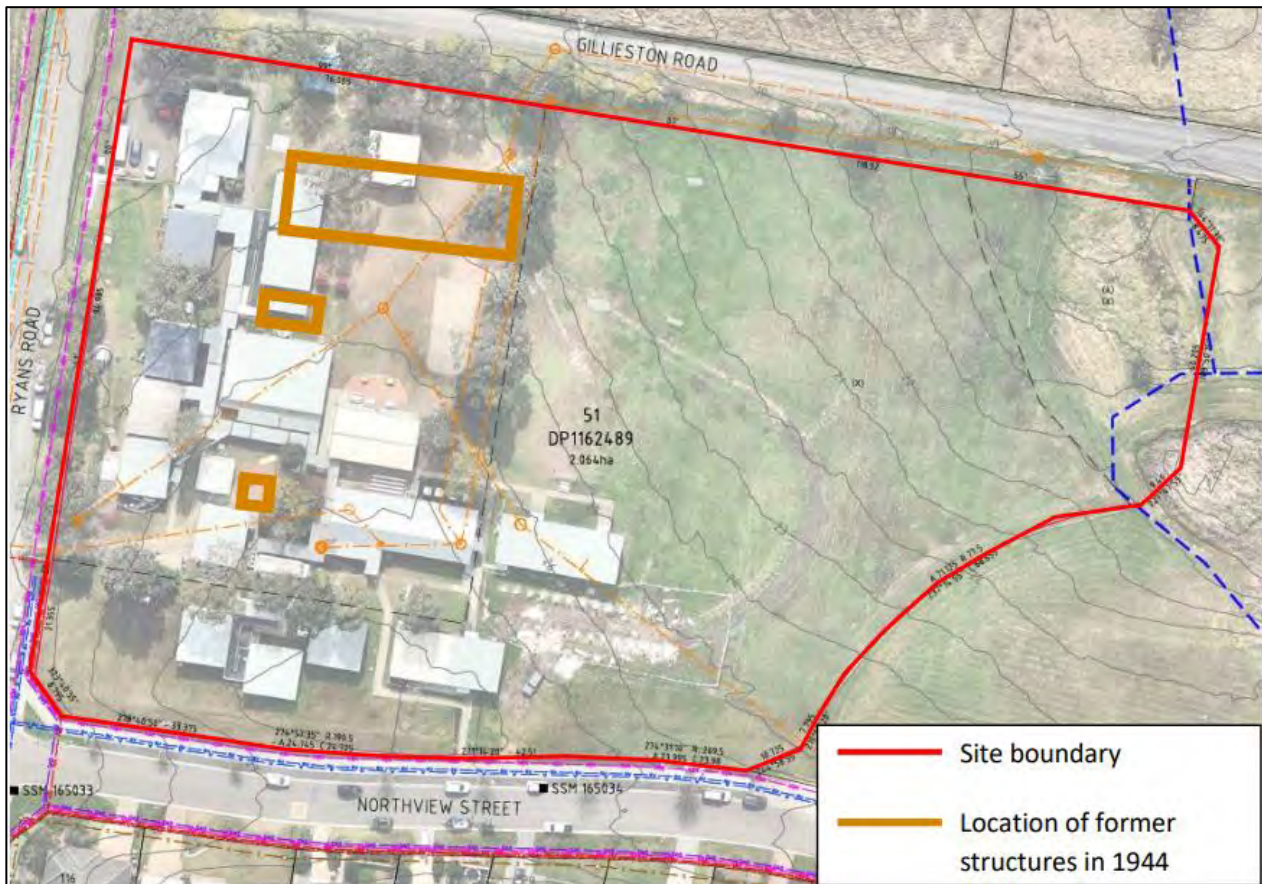


Figure 53: Location of former Structures in 1944 (Umwelt: 2024)

The 1897 building, most likely designed by the former famous local architect JW Pender, is listed on the Section 170 heritage register will be retained insitu. The HIS has included mitigation measures to improve and maintain the significance of the listed item and supports the continuing use of the Site for public education, the following mitigation measures are to be included:

- *Select a place for the school bell in the development.*

- Undertake a Photographic Archival Recording of the timber classroom building (Building B00A) before it is demolished.
- Report to the heritage consultant if any item of potential archaeological value is uncovered during excavation.

The HIS has assessed the activity and identified the heritage curtilage for the Site be positioned around the 1897 building in the northwestern corner of the Site (refer to Figure 54). This has been determined to be the most significant area based on the significance grading within the HIS, based on an assessment of the Site and its historical development.

The activity seeks to remove the car park area and reinstate the surroundings of the 1897 building with appropriate landscaping, this is considered to be a positive outcome and will ensure the continuing use of the building.

Overall, the continuing use of the Site for public education is a positive outcome for the Site and the HIS determines that *the heritage impacts can be appropriately mitigated to ensure that there is minimal impact on the heritage significance of elements in the locality and will not diminish the community's appreciation of local heritage and the environment.*

A mitigation measure will be included to require future use and management of the heritage building to be undertaken in accordance with the relevant provisions of the "Heritage Asset Management Guidelines" of the State Agency Heritage Guidelines been considered.

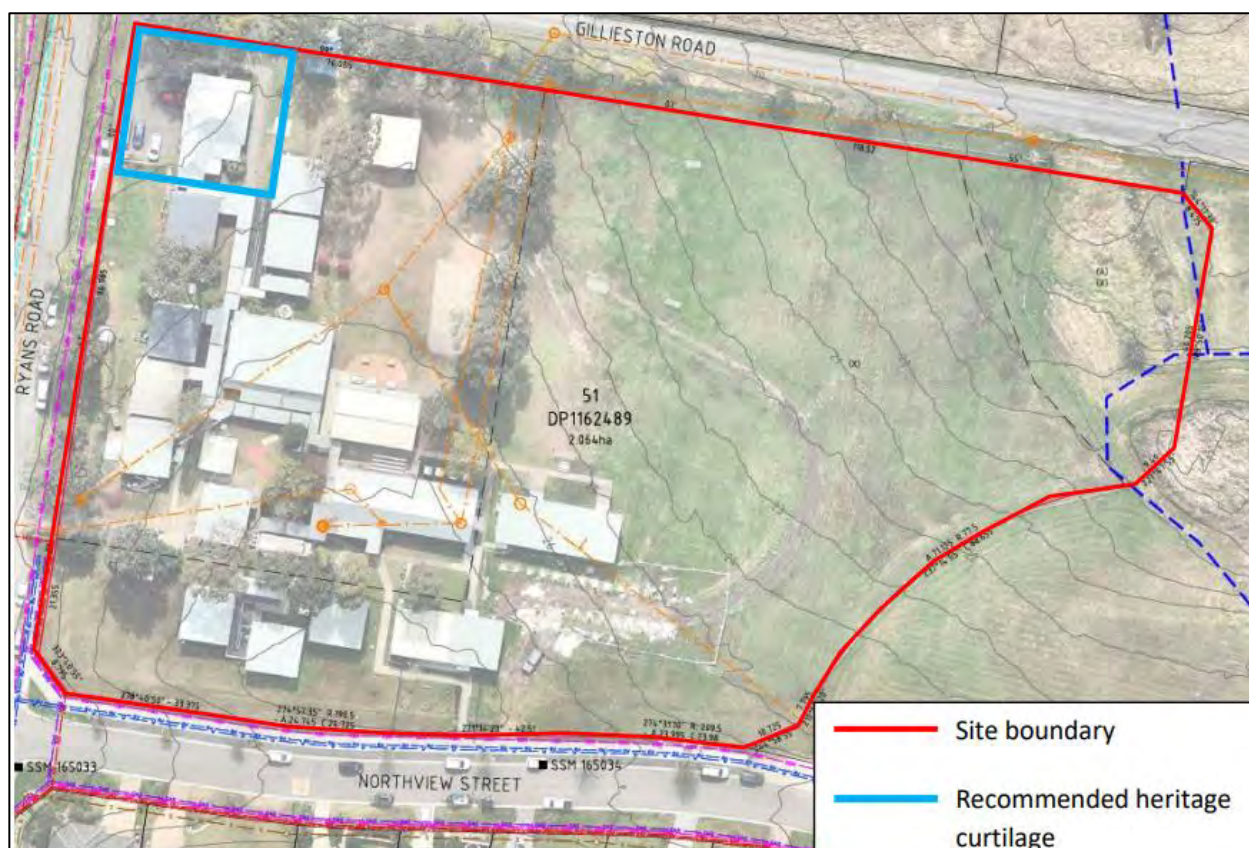


Figure 54: Recommended Heritage Curtilage (Umwelt: 2024)

Design Guide for Heritage

The Design Report (refer [Appendix 13](#)) has considered the requirements of the School Infrastructure *Design Guide for Heritage* with the final design having developed in response to the objectives, in particular the building will be retained and a setback for 28.9m provided between the

retained building and new 3 storey learning building to the east. This separation and the final details of the western wall finishes will minimise impacts on the significance of the item, all new building works will be clear of the recommended curtilage boundary. The design development has responded to the key objectives as follows:

- Objective 1 – Better Fit – the building will be retained, and a setback for 28.9m provided between the retained 1897 building and new 3 storey learning building to the east.
- Objective 2 Better Performance – retention and reuse of the building with provide for greater protection of the asset
- Objective 3 Better Community – the retention of the building will remain connected to its long-term use for public education and will provide for connection to the community.
- Objective 4 Better People – retention of the building will be important for the historical significance of the Site.
- Objective 5 Better Working – Future use is to be determined but it is envisaged that an ongoing use will be found.
- Objectives 6 Better Value – the cost of retaining the building will be offset by the retention of the original building to ensure its continuing association with public education.
- Objective 7 Better Look and Feel – the landscaped area surrounding the building will be complementary to the item and provide a buffer to soften the proposed Main Learning Building to the east.

On this basis, the activity has satisfactorily considered the *Design for Heritage* principles.

The activity will have some impact on the significance of the retained S170 heritage listed 1897 building, however, on balance the retention and improvement of the 1897 building will be positive and removal of detracting improvements is supported as it will retain the original building on a Site that has continually been used for Public Education.

Overall, the activity will not detrimentally impact on the heritage significance of the item and recommended curtilage, subject to compliance with the HIS and mitigation measures listed below:

- *select a place for the school bell in the activity*
- *Undertake a Photographic Archival Recording of the timber classroom building (Building B00A) before it is demolished*
- *Report to the heritage consultant if any item of potential archaeological value is uncovered during excavation*

6.11 Ecology

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), any action (which includes a development, project or activity) that is considered likely to have a significant impact on Matters of National Environmental Significance (MNES) (including nationally threatened ecological communities and species and listed migratory species), must be referred to the Commonwealth Minister for the Environment. The purpose of the referral is to allow a decision to be made about whether an action requires approval on a Commonwealth level. If an action is considered likely to have significant impact on MNES, it is declared a “Controlled Action” for which formal Commonwealth approval is required.

As assessed at Section 4.2 of this REF, the activity does not warrant significant impacts on MNES, therefore no further consideration of the EPBC Act is required.

A Biodiversity Letter and Assessment has been undertaken (refer to [Appendix 24](#)) and has concluded that the activity is unlikely to result in any significant impacts on threatened biota. The following mitigation measures are included:

- *Native trees should be retained where possible, as these trees provide a foraging resource for local native fauna.*
- *Any trees to be removed should be assessed prior to clearing by having an ecologist inspect the trees for birds nests. Trees with occupied nests should be retained until after nesting is completed.*
- *Any existing trees that are to be retained near areas to be developed should have appropriate tree protection fencing around them.*
- *Locally endemic native species should be considered for any new plantings.*

An Arborist Report has also been prepared (refer [Appendix 20](#)) and has determined that 18 trees require removal, the removal can be supported subject to the inclusion of the following mitigation measures:

- *Engage project arborist during the design stages of the project to make recommendations on tree sensitive construction measures if required.*
- *Trees identified for pruning and removal should be undertaken prior to erection of protection fencing, and before demolition and construction works begin.*
- *Tree protection zones should be implemented on completion of tree works.*
- *Install tree protection fencing and signs.*
- *Regular inspections should be undertaken to ensure compliance with the TPP is maintained.*
- *The project arborist should supervise any works within an established TPZ.*
- *The condition of trees should be assessed on completion of the development and tree protection fencing can be removed.*
- *The project arborist should assess the condition of the trees and make recommendations for any remedial actions.*
- *Following completion of any remedial works, the project arborist should certify compliance with the TPP. Certification should include a statement on the overall condition of trees after construction.*

Overall, the tree removal is supported, and a significant number trees, in excess of 18 trees, will be planted across the Site as shown on the Landscaping Plan at [Appendix 12](#), therefore the tree canopy (41.4%) and plantings across the Site is a positive outcome and improves the existing conditions on Site.

Any trees to be planted underneath overhead powerlines and above underground cables must comply with the requirements of 'ISSC 3 Guidelines for Managing Vegetation Near Power Lines', a mitigation measure will be included to ensure vegetation in these locations aligns with this policy.

6.12 Services

The Site is suitably serviced and/or has access to the following utilities for electricity and NBN. The Site relies on onsite wastewater and a septic system is positioned on the western boundary, as part of this activity the wastewater system is being upgraded and on this basis the activity can proceed.

Due to an increase in power needs, from the activity, a new substation will be required, and this will be positioned at the western end of Gillieston Rd within the Site boundaries. This is supported as it will be setback from the public domain.

Hunter Water has been advised of the activity and no specific concerns were raised, a separate approval will be required under Section 50 of the Hunter Water Act 1991, a mitigation measure will be included to this effect.

Approval will be required from Maitland City Council for the decommissioning of the redundant wastewater system, a mitigation measure will be included.

The proposed new sewer pump station shall be positioned within the Site boundaries, a mitigation measure is recommended to require the infrastructure to be repositioned to be within the Site boundaries.

In regard to electricity connection, this should be undertaken in line with Ausgrids Electrical Standard (ES)1- Premise Connection Requirements. A suitable mitigation measure will be included. Preliminary enquiries have been undertaken with Ausgrid and this will assist in confirming any upgrades prior to the commencement of works and engage a Level 2 Accredited Service Provider electrician to ensure installation will comply with the service standards. If electricity conduits are required within the public road way this will require a road opening permit under the Roads Act. It is recommended that the developer locate and record the depth of all known underground services prior to any excavation in the area. Safe Work Australia – Excavation Code of Practice, and Ausgrid's Network Standard NS156 outlines the minimum requirements for working around Ausgrid's underground cables, a mitigation measure shall be included, which will require compliance with standards and licences.

6.13 Visual Privacy and Amenity

Built Form

Gillieston Heights has been identified as an urban release area and the land uses surrounding the school have not yet confirmed the context of surrounding built form and this is likely to change over the next few years. However, it is anticipated that the surrounding sites will follow subdivision patterns similar to the southern side of Northview Street and western side of Ryans Road and will likely consist of 1 to 2 storey development heights, however, there are no height or FSR restrictions under the MLEP 2011.

The layout of the new buildings has had careful consideration by the architect to ensure that uses are aligned and have a greater sense of accessibility, Figure 55 provides an overview and the placement of buildings.

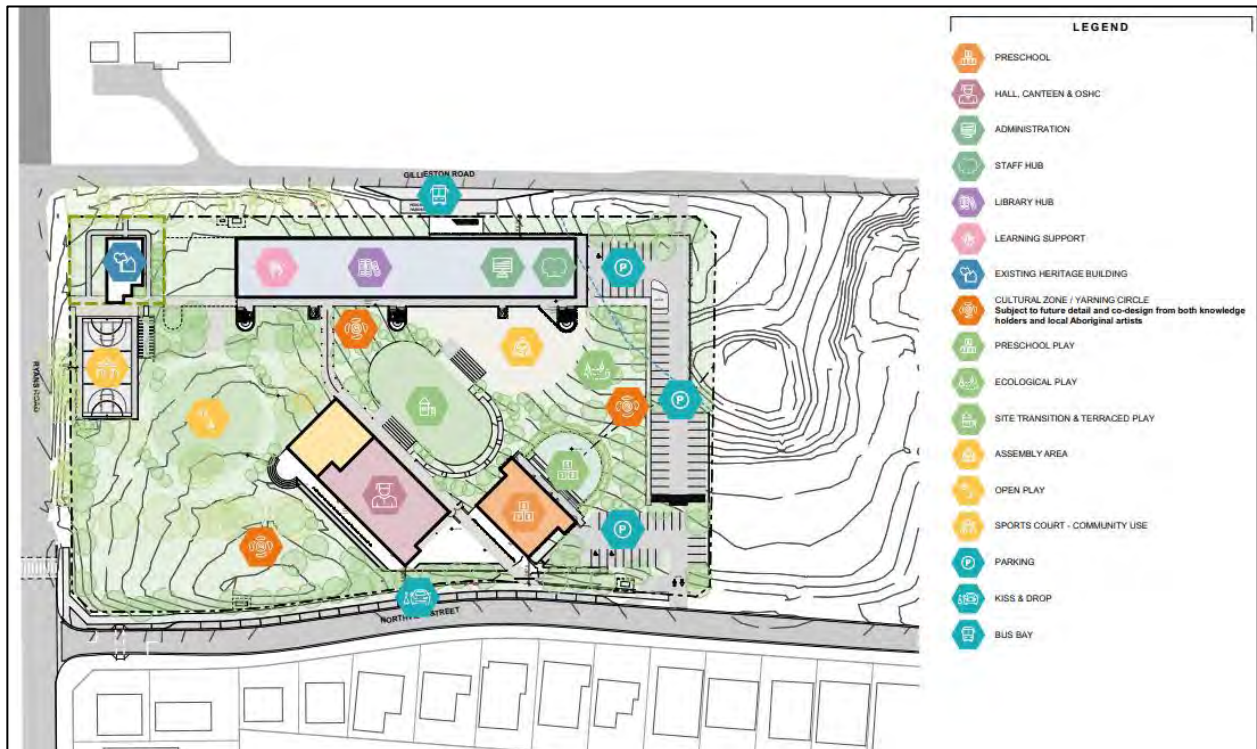


Figure 55: Proposed Site Plan and Building Placement (SHAC:2024)

The main learning building is positioned along Gillieston Road and has been designed to step down the Site from west to east due to the natural topography of the Site (refer Figure 56). This building has a height of 12.926m at the western end (Ryans Road end), 16.427m at the midpoint and 17.094m at the eastern end. The scale of the building responds appropriately to the landform and has been positioned on the lower lying part of the Site to minimise bulk and scale and provide greater separation to the recently constructed dwellings along Northview Street, to ensure these dwellings maintain high levels of solar access.

In addition, the 28.9m separation between the retained heritage building and the new leaning Building (refer Figure 56) and future landscaping will be adequate to minimise impacts to the curtilage of the Section 170 listed heritage item, refer to heritage discussion in Section 2.2.1. The western facade of the building has been identified on the architectural drawings as requiring public art, any final design should be undertaken in consultation with Umwelt heritage specialists and be approved prior to installation, a mitigation measure is included. The proposed staff car park at the eastern end will provide adequate separation between the Learning Building and adjoining future road.



Figure 56: Northern Elevation of Main Learning Building (SHAC:2024)

The main Learning Building facade has the greatest impact when viewed from the public domain and the design of the facade and choice of materials and colours will minimise scale when viewed from Gillieston Road and integrate with the streetscape. The external screen will assist in minimising overlooking to the Site to the north and future landscaping will assist in softening the built form and the break in the midpoint of the facade will reduce the length of the facade, thereby reducing bulk and scale when viewed from the public domain.

The SHAC Design Report (refer [Appendix 13](#)) describes the architectural design of the facade *it has been developed using the standardised Wall panels approach which integrates framing, linings, insulation, windows and louvres to the northern facade. But with site specific EFSG compliant approach to the screening element. The design proposes the External Façade material to be brick & FC Panels, which meet the Educational Facilities Standards and Guidelines (EFSG) requirements for a “whole of life approach, off-the-shelf materials and standard colours”, whilst allowing for movement, thermal and other environmental tolerances. The design proposes a full elevation perforated screen to provide consistent sun shading to the full extent of the northern facade, whilst still allowing for access to views from internal spaces.* At the eastern end of the building are circulation balconies with window openings (refer to Figure 9).

Overall, the Main Learning building has been suitably designed to respond to the topography of the Site and the recessing of the northern facade ensures that the bulk and scale when viewed from Gillieston Road is minimised.



Figure 57: Northern Elevation of Main Learning Building and Wider Site (SHAC:2024)

Figure 58 and Figure 59 below, detail two sections through the activity, demonstrating that the height of the hall (6.423m) and the preschool (7.282m) have been suitably designed to maintain a single storey form that will ensure that the residential dwellings on the southern side of Northview Street will not be overshadowed and maintain an appropriate transition towards the existing lower scale dwellings.

It is clear that both buildings have been sited to respond to the topography of the Site and will nestle into the Site to minimise impacts and provide for appropriately designed architectural built form. The skillion roof of each building, combined with materials and finishes will ensure the built form seamlessly integrates into the expanded school Site, refer Figure 57 above.

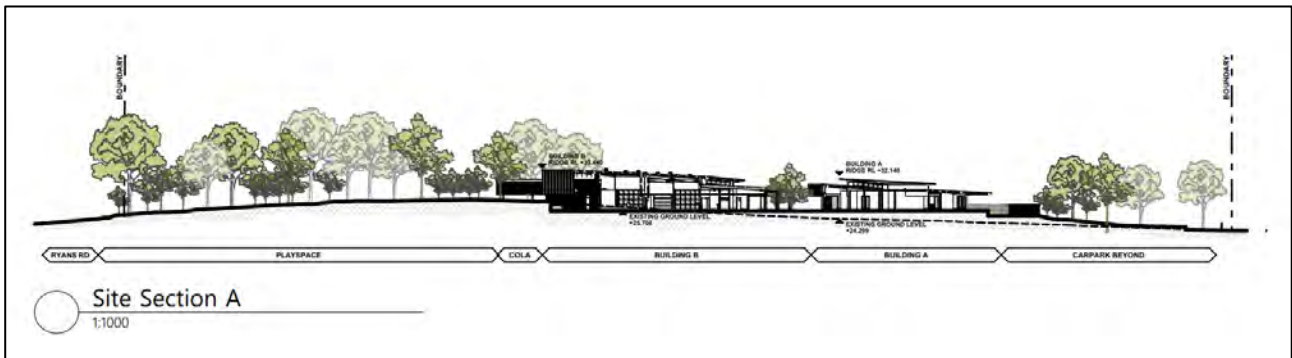


Figure 58: Section through Hall and Preschool (SHAC:2024)

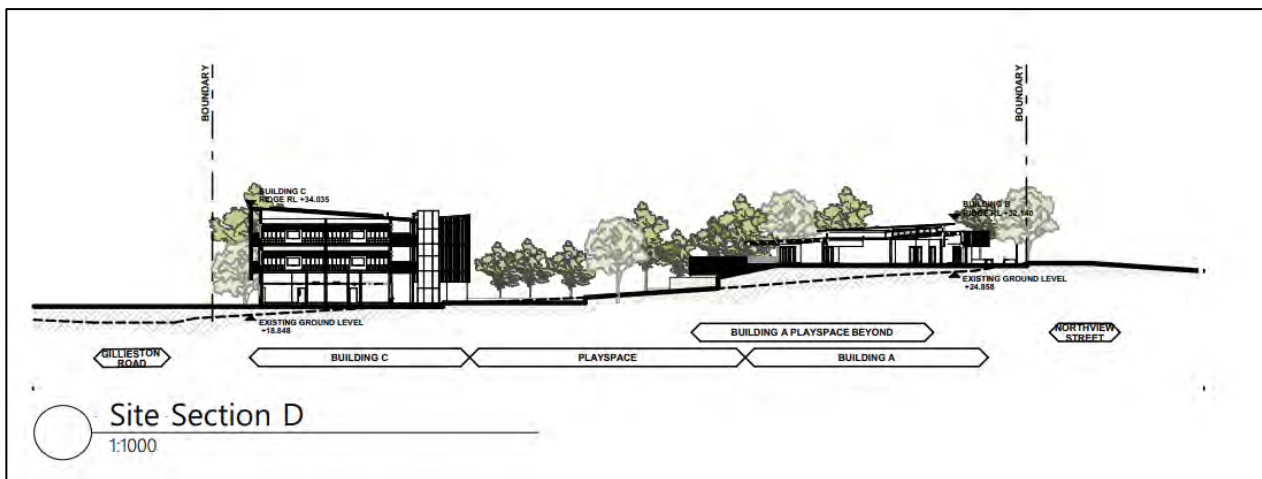


Figure 59: Section through Main Learning Building and Preschool (SHAC:2024)

Dhiira was engaged by SHAC in June 2023, to assist in the CWC design, and has required that the following dominant design themes be incorporated into the project moving forward (as outlined in the Design Report at [Appendix 13](#)) and recommended that the following dominant themes be incorporated into the design moving forward:

- *Reflect country – significance of country and story telling to be integrated into the built environment*
- *Integration of Culture – determine how the Aboriginal community will use, interact and participate in the space both through social and economic interests*
- *Aboriginal Education – co-design spaces for both Aboriginal and non-Aboriginal students to learn under; and*
- *Materiality – Material choices be led by Aboriginal community in respect of material sourcing, culture and heritage.*

Overall, the bulk and scale of the new buildings have been carefully considered and will minimise impacts to surrounding land uses and have successfully incorporated 'Designing with Country' into the final design .

Visual Privacy

A view analysis has been undertaken and is incorporated into the architectural design, view analysis at [Appendix 38](#), with the key views extracted and provided below in Figure 60. The setbacks between the proposed buildings and future residential dwellings ranges between 27m to 32m with a separation of 62m from the eastern car park to potential future residential dwellings to the east.

The impact from the preschool and hall will be minimal given the lower scale-built form and topography, with sightlines directed up and over the roof of dwellings. Whilst the impact from car park areas is negligible due to setbacks and time that would be spent within these spaces throughout the day-to-day operations of the school.

The greatest impact will be from the main Learning Building, the view lines from the first level has the potential to impact on the privacy of future dwellings, however, the width of Gillieston Road (approximate road width of 16.6m inclusive of road reserve) and future landscaping screens along the northern elevation will suitably reduce impacts to existing and future development along the northern side of Gillieston Road, in addition all other sightlines are acceptable and will not result in ongoing impacts.

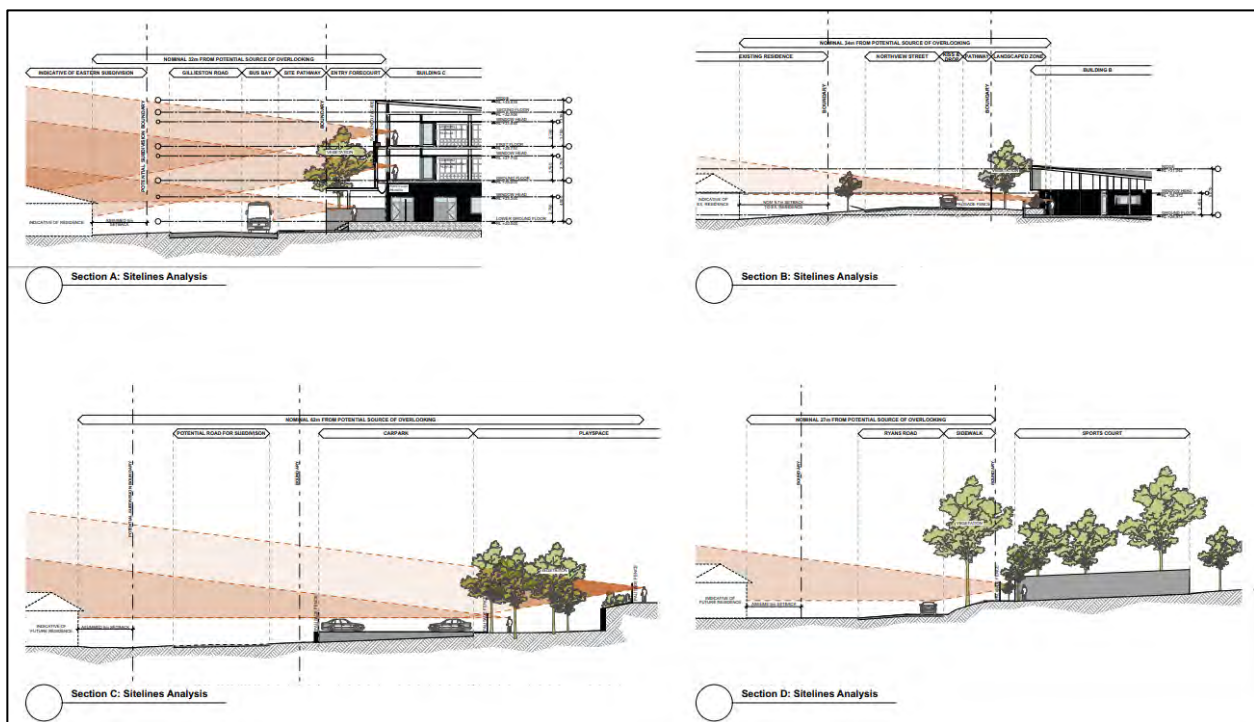


Figure 60: Sightline Analysis from Future Buildings (SHAC:2024)

The views across the Site will change view lines for properties surrounding the Site given the intensification of the educational establishment and new preschool (centre-based child care centre). This is unavoidable unless all buildings remain between 1 and 2 storeys. The activity is supported as it has been carefully designed to step down across the Site and minimise bulk and scale (refer to Figure 57) and the transitioning nature of the locality envisages the need for increased facilities to service the growing population.

Visual Impact Assessment

The activity will result in significant change to the existing Site with the development of the eastern end which is currently vacant and construction of a three (3) storey building and two (2) new one (1) storey buildings and removal of all buildings at the western, with the exception of the 1897 heritage building which will be retained in the northwestern corner.

A visual impact assessment (VIA) has been prepared and is attached at **Appendix 38** and the VIA has assessed six (6) key viewpoints the existing and proposed impacts are provided in Figure 61 to Figure 66.



Figure 11: EXISTING - View SE from proposed site looking from Northview Street.



Figure 12: EXISTING - View SE from proposed site looking from Northview Street.



Figure 13: PROPOSED: South Elevation of Main Building and Childcare Building.



Figure 14: PROPOSED: South and Southeastern Elevation - Main Building

Figure 61: Viewpoint 1 Northview Street– High Impact (Source: SHAC, 2024)



Figure 15: EXISTING - View SW from proposed site looking from Ryans Road.



Figure 16: PROPOSED - View SW from proposed site looking from Ryans Road.

Figure 62: Viewpoint 2 Ryans and Northview Street - Moderate-Low Impact (Source: SHAC, 2024)



Figure 17: EXISTING - View from Gillieston Road looking West towards the proposed site.



Figure 18: PROPOSED - View from Gillieston Road looking West towards the proposed site.

Figure 63: Viewpoint 3 Gillieston Road – Moderate-Low Impact (Source: SHAC, 2024)



Figure 64: Viewpoint 4 Southwest of Site – Moderate-Low Impact (Source: SHAC, 2024)



Figure 65: Viewpoint 5 West of Site – Low Impact (Source: SHAC, 2024)



Figure 66: Viewpoint 6 Northwest of Site– Low Impact (Source: SHAC, 2024)

Overall, the average impact was determined to be moderate, with the highest impact affecting the residential properties positioned on the southern side of Northview Street. There will be a significant visual impact along Northview Street, however, the outlook for the rural lands to beyond the Site will change in time, again, as further residential subdivision occurs to support housing growth in the urban release areas.

On balance, the visual impact is acceptable given the setbacks from Northview Street, stepping down of built form across the Site, materials and finishes and future landscaping. In addition, the school already exists here so the visual impact is not unexpected.

Landscaping

The proposed landscaping is highly suitable for the future school and preschool activities, refer to Landscaping Plans at [Appendix 12](#).

The landscaping along the Gillieston Road frontage will reflect this as the main entry to the redeveloped school with landscaping having a more structured finish with reduced plantings in this location to provide for sightlines to the architecturally designed three (3) storey building.

Spaces throughout the Site will be developed to create both passive and active spaces and utilise plantings to create a natural separation of these spaces.

Overall, the future landscaping will successfully integrate with the redeveloped school and provide for variety of play spaces with the future buildings provided a buffer between the active turfed multi sports field positioned centrally within the Site. The following mitigation measures were recommended to be included:

- *Existing vegetation retained where possible to provide established canopy*
- *Tree planting is provided throughout the Site and along the boundary to provide shade and soften built-form. New heritage garden curtilage to a heritage building to provide an opportunity for future community involvement and structural integration.*
- *Water sensitive urban design (WSUD) principals have been considered with onsite stormwater harvesting and reuse proposed*
- *All softscaped areas on site maintains deep soil access for ground water recharge opportunities.*
- *Incorporated Crime Prevention Through Environmental Design CPTED Principals have been adopted throughout the Landscape design process.*
- *The open-play space design has taken into consideration the projected growth rates for the local community.*

However, on review of all the documentation the above have successfully been incorporated into the proposed design and mitigation measures will not be required in this instance but landscaping design compliance will be included.

The removal of trees is across the Site and within the adjoining Council land is required to enable the redevelopment of the Site, however, retention of established street trees and trees within the southwestern corner are considered a positive outcome. As shown in the Landscape Plans at **Appendix 12**.

6.14 Overshadowing

The proposed redevelopment of the existing school will not create any unreasonable impact on adjoining properties, all shadow will generally fall within the school with the exception of the shadow cast by the eastern boundary 0.6m to 2.5m high retaining wall, which will extend across the land where the future north-south road is proposed but will not impact future residential land further to the east. However, the placement of buildings will ensure that the suitable levels of solar access are maintained to outdoor play areas throughout the year, refer to shadow diagrams below in Figure 67. No mitigation measures required.

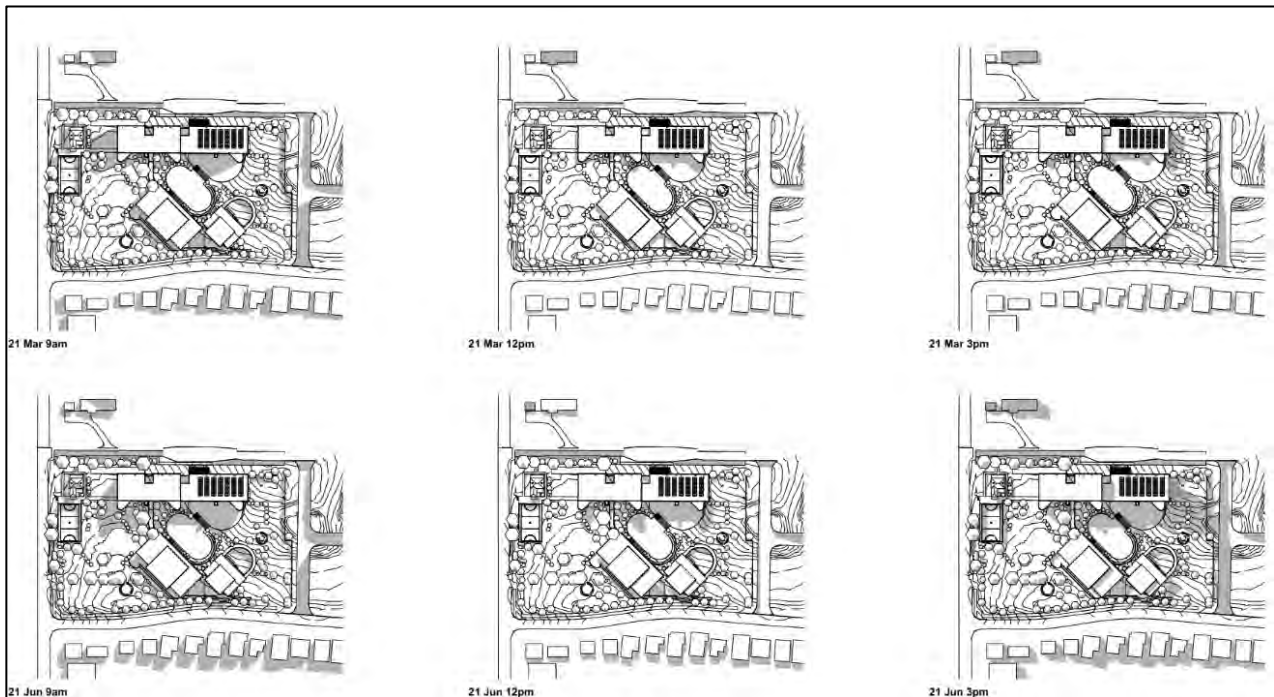


Figure 67: Shadow Diagrams (SHAC: 2024)

6.15 Operational Waste Management

A Waste Management Plan (WMP) has been prepared and is provided at **Appendix 21**. The WMP outlines the management of construction waste and identifies if the waste will be re-used, recycled or disposed, demonstrating that waste can be suitably managed.

The WMP determines that the following waste will be generated by the activity of the school and preschool:

Number of Students	Waste Stream	Generation Rate (L/student/week)	Total Weekly Generation (L)
736	General waste	50	39,800
	Paper & Cardboard	18	14,328
TOTALS	General waste		39,800 L
	Paper & Cardboard		14,328 L

On the basis of the above waste generation the following waste storage is required:

- General Waste - 12 x 1,100L bins (collected 3-4 times a week) – requires 28m² storage area
- Paper & Cardboard – 7 x 1,100L bins (collected 2 times a week) – requires 17m² storage area.

A waste storage area equivalent to 45m² is required and this will be provided along the western side of the school car park, positioned towards the northwestern corner of the car park. Bins will be scattered through the school and cleaners will be responsible for emptying waste into the bins within

the waste storage area. It is recommended that the floor of the waste area be graded and drained to an approved drainage outlet connected to the sewer and have a smooth, even surface, covered at all intersections with walls, a suitable mitigation measure shall be incorporated into this REF to ensure that the design of the waste area can satisfy this requirement.

Across time more waste management options may be introduced but for now the proposed WMP is considered suitable, with the inclusion of a mitigation measure to require an updated OWMP.

Due to the topography of the Site, the use of bin tugs and/or janitor's trolleys may be required to assist in moving waste across the Site to the waste area, positioned within the car park at the northwestern corner of the Site. Prior to construction the width of pathways may require amendment to accommodate the bin-tugs and janitors' trolleys. A mitigation measure is recommended to ensure that movement of waste across the Site can be undertaken without any Work Health and Safety issues.

6.16 Sustainability

The Sustainable Buildings SEPP applies to the Site as the activity will exceed \$5 million EDC. Chapter 3 Section 3.2 of the Sustainability SEPP provides objectives that must be considered to ensure that the embodied emissions attributable to the activity have been quantified.

The sustainability initiatives and outcomes are discussed in Section 2.2.1 of this Report. In addition, the REF is supported by an Embodied Emissions Report ([refer Appendix 11](#)) and Net Zero Statement ([refer Appendix 27](#)), the reports determine that all buildings, including the preschool, will achieve a 4 green star certification rating and will satisfy the objectives of the Sustainability SEPP.

6.17 Social Impact Assessment

Willowtree Communications were appointed by the Department to prepare a SIA, this was amended following exhibition of the REF with the amended SIA provided at [Appendix 30](#). The amended SIA has concluded that the community are broadly supportive of the activity as the existing facilities are no longer fit for purpose and there is a growing need for the expansion of the school to service the growing population for Gillieston Heights and the surrounding school catchment.

The activity will result in the creation of jobs during construction and up to 50 FTE school staff and 10 preschool staff along with indirect jobs arising from extracurricular activities and the operation of the OSHC, which will be permanent job creation. This will be a positive social impact that will support the local community.

As discussed in both the Architectural Design Report at [Appendix 13](#) and the amended SIA at [Appendix 30](#), the activity will have positive impact through CPTED principles, in particular the design of the activity will create high visibility of the school perimeter with permeable fencing to provide security whilst maintaining sightlines. Fencing and gates will control access throughout the school and installation of CCTV will manage the Site when not occupied.

Based on the significant size of the activity the SIA has determined that the Site will be impacted visually by the activity. However, this has been mitigated by architectural design, building siting and landscaping to minimise impacts on the surrounding sites and locality. It is acknowledged that the Site is positioned within a transitioning area and the need for increased student places balances the visual change with need for the locality.

In respect of traffic management, the SIA at Appendix 30 has demonstrated that the traffic will be managed and infrastructure delivered in accordance with the Bitzios amended TTIA at [Appendix 32](#).

Noise associated with the activity, both during construction and operation, is unavoidable. However, mitigation measures will assist in managing both types of noise and this will ensure that the amenity of existing and future residents is suitably managed.

Overall, the SIA has determined that the benefits of the activity will provide improved facilities to the community and mitigation measures can suitably manage the construction for ongoing operation of the school. The mitigation measures found under Section 6 of the amended SIA report (refer [Appendix 30](#)) will be included.

6.18 Signage

The proposed signage strategy outlined in Section 2.2.1 above details the future location of signage, the chosen locations are highly suitable in the context of the expanded school use. Illustrative details have been provided with this REF and they are detailed in the photomontages in Section 2.2 above.

An assessment against Chapter 3 and Schedule 5 *Advertising and Signage* under the *State Environmental Planning (Industry and Employment) 2021* is required. In this instance, consideration of the relevant provisions under Chapter 3 Advertising and Signage is provide below. Detailed signage plans will be required to be provided to the Department and Crown Certifier prior to installation of any signage, this will form a mitigation measure.

Aims and Objectives of Chapter 3 Advertising and Signage

Chapter 3 aims:

(a) to ensure that signage (including advertising):

- (i) is compatible with the desired amenity and visual character of an area, and*
- (ii) provides effective communication in suitable locations, and*
- (iii) is of high quality design and finish, and*

(b) to regulate signage (but not content) under Part 4 of the Act, and

(c) to provide time-limited consents for the display of certain advertisements, and

(d) to regulate the display of advertisements in transport corridors, and

(e) to ensure that public benefits may be derived from advertising in and adjacent to transport corridors.

The proposed signage will achieve the aims and objectives of Chapter 3 as it will be integrated with the Site layout and reflective of the overall design of the built form with the existing and expanded Gillieston Public School. The siting, design and scale of the signage will be consistent with the proposed activity and would not detrimentally affect the visual character of the area, and through high quality detail and finish, the signage will be suitable for the surrounding locality. The signage will effectively identify the Site as a school and preschool, thereby promoting legibility for all site users.

An assessment against Schedule 5 is provided at [Appendix 28](#).

6.19 Preschool

The proposed preschool has been designed to accommodate up to a maximum of 60 children (between the ages of 3 to 6 years) and up to 10 staff and will satisfy Chapter 3 Section 3.23 of the TI SEPP. An assessment of the *Child Care Planning Guideline* (CCPG) has been undertaken, and the activity will comply with the requirements, refer to assessment at [Appendix 40](#). Based on the maximum numbers it is anticipated that 20 children will be allocated per room.

On this basis, the activity has adequate unencumbered indoor and outdoor space, being 3.83m² per child for indoor space and 7m² for outdoor space. This ensures compliance with the TI SEPP, CCPG and provisions of the *Education and Care Services National Regulations*.

In addition, an assessment against the National Quality Framework has been prepared by SHAC and can be found at [Appendix 48](#) and demonstrates compliance.

The outdoor area will provide shade from the awning, however, an additional 55m² of shaded play area is required until trees are established, on this basis a mitigation measure will be included to ensure these details are refined prior to construction of the preschool commencing.

A total of 15 car spaces are required to be allocated to the preschool use, a mitigation measure will be included, in respect of the use of the spaces this will be subject to operational requirement of the centre.

It is recommended that that anticipated private vehicle car use associated with the preschool be incorporated into the final School Travel Plan following consultation with the operators of the future facility and a 6-month post-opening review of the Operational Traffic Management Plan (OTMP) should be conducted and submitted to the Department of Education's Transport Planning Team. The review will monitor and address operational issues with the Kiss and Drop facility and its interaction with the preschool driveway.

The main concern is managing traffic volumes on Northview Street during pick-up times and preventing conflicts between preschool and Kiss and Drop traffic at the turn-around facility. A key mitigation measure that may be implemented following the 6-month review is **staggering the finish times between the school and preschool**. This would reduce traffic overlap during peak periods, particularly while temporary arrangements are in place before additional road connections or turn-around facilities become available. Any required changes should be incorporated into the School Travel Plan and will form a mitigation measure.

The LUCRA at [Appendix 36](#) has considered odour impacts on the wider school, which includes the preschool and appropriate mitigation measures have been included.

In respect of noise impacts from the school, the age of the children attending the preschool will not generally sleep for long periods of time and play mats will be offered as required, on this basis the noise impacts should not be detrimental.

Further detailed drawings will be required to fit-out the preschool, these should be provided to the Crown Certifier prior to the commencement of works associated with the preschool. This should also include the design of the bathrooms, laundry, office and kitchen. A mitigation measure has been included to this effect, it is noted that the children attending will be required to bring their own lunch so meals will not be being served on the premise.

6.20 Cumulative Impact

The amended SIA at [Appendix 30](#) outlines the surrounding developments and these have been extracted and provided below:

- **DA/2019/278** - Gillieston Heights East Precinct Subdivision – Lot 1 DP 1308605 – residential subdivision development activity, which is for ‘Staged Torrens Title Subdivision of four (4) lots into 175 lots and two drainage reserves’.
- Gillieston Heights West Precinct – current Development activity for residential development is subject to Subsidence Advisory NSW Lot 17 DP 263196 (as per records on NSW Spatial portal).
- **DA/2022/912** at Cessnock Road Gillieston Heights - Two Hundred and Twenty Four (224) Lot Torrens Title Subdivision (14 Stages). The activity relates to Precinct 1B of the site subdivision (Figure 1), and the development application seeks consent for Torrens title subdivision of this land.
- **DA/2023/551** at 457 Cessnock Road and 65 Redwood Drive Gillieston Heights - Torrens Title Subdivision to Create Three Hundred and Twenty-Two (322) Residential Lots, Three (3) Stormwater Basins and Three (3) Public Reserve Lots. The activity relates to land within the south-east Gillieston Heights Urban Release Area and the development application seeks consent for Torrens title subdivision of this land. The subdivision is commonly known as ‘Wallis Creek South’.
- **DA/2024/40** at 11 Cessnock Road Gillieston Heights - Demolition of Existing Structures and Construction of a New Medical Centre. The proposed development is for the demolition of the existing structures and construction of single-storey Medical Centre for General Practitioners (GP).

The Site is positioned within a urban growth area and development surrounding the Site generally relates to greenfield subdivision, this will create truck traffic and machinery associated with engineering works, on this basis the redevelopment of the Site will need to carefully consider truck movements to and from the Site based on existing traffic conditions. The final CTEMP will need to manage these movements and may require adjustments depending on which surrounding subdivisions will be underway when works commence on the Site.

Based on the above, this supports the arguments in the amended TTIA (refer [Appendix 32](#)) that the surrounding road network will be most heavily impacted by these developments given their scale and not the school. In addition, the activity is needed given the high number of residential lots proposed.

6.21 BCA and Accessibility

BCA

A Building Code of Australia Report (BCA Report) was prepared by City Plan and determined that the activity is capable of complying with the BCA. The BCA Report can be found at Appendix 42. An appropriate mitigation measure has been included to ensure the activity can achieve compliance with the BCA.

Accessibility

The proposed activity will be capable of complying with the relevant Australian standards, refer to the Access Report at [Appendix 41](#). All buildings and pathways will be designed to meet the requirements of AS1428.1 and AS1428.2. Further details will be provided as the design progresses and will be signed off by the access consultant under the certification process.

In respect of accessibility throughout the future landscaped areas within the school, there is a significant level change between the multi-use sports field (central open play space) and the hard play space (assembly area) which makes a ramp impractical. The installation of essential lift will provide the opportunity to improve connections and provide suitable access between all major play spaces including the hard play, COLA/hall, grassed field, basketball court and passive play areas. A mitigation measure is recommended to require investigation to enable the lift to also connect into the central multi-use field (mid-level from lift) as part of the design progression. Mitigation measure GMM4 (refer Appendix 1) will require compliance with BCA before crown building work can commence.

The internal placement of furniture and fittings will need to have consideration for the Australian standards and these details will be incorporated at the relevant design stage. There is no specific legislative requirement for fittings and furnishings to be detailed at planning approval stage, detailed designs will be incorporated at the relevant crown certificate stage.

6.22 Land Use Conflict Risk Assessment

A Land Use Risk Assessment (LUCRA) has been undertaken and provided at [Appendix 36](#), the assessment considered the following potential conflicts:

- Oduor form poultry farms
- Visual impact to poultry farm
- Use of pesticides
- Visual impact of higher school building
- Biosecurity if chickens kept on school grounds
- Increased traffic movement
- Increased road traffic/parking

The LUCRA has found that there could be potential conflicts between the proposed redevelopment and some of the surrounding land users including current or future residential land uses and rural land users, specifically poultry farming. Engineering and administrative controls are proposed to be implemented to reduce instances of conflicts to acceptable risk level (risk ranking < 10), effectiveness of which should be monitored using the suggested performance monitoring criteria (Section 3.4 of the LUCRA Report at [Appendix 36](#)).

Suggested risk mitigation measures are provided in Table 4-1 to reduce potential conflict risks associated with odour, visual impacts and traffic related issues, these have been extracted and provide below:

- Where possible, school and landscape design to incorporate elements that reduce noise and odour conflicts as well as increase visual amenity.
- Rainwater tanks to have a tank strainer or dust cover as well as a first flush diverter to be installed at rainwater collection points.
- Administrative – Rainwater collected from tanks not to be used for drinking water.
- No poultry to be kept on the school Site.

- Internal ventilation units such as air-conditioning.
- Administrative – limit outdoor play during odour incidences and close windows/doors facing the poultry farm during high wind events.
- School design to include visually aesthetic elements to increase visual amenity of the Site. To be considered in Visual Impact Assessment.

The proposed controls can be implemented during design, construction or operation stages of the project. While these controls are suggested, other design and operational controls may be considered to provide similar reduction in risk ranking, to <10. This may include further specific assessments such as the following (but not limited to), to further inform any design elements of the project to ensure sufficient risk reduction is achieved:

- Odour impact assessment
- Traffic impact assessment
- Acoustic assessment
- Visual Impact Assessment

On this basis, separate reports have been undertaken for traffic, acoustic and visual impact assessment, all of which have now been suitably mitigated, refer to the following respective sections: **Section 6.1**, **Section 6.2** and **Section 6.13**. On this basis, the LUCRA is satisfactory and the mitigation measures in Table 4-1 of the LUCRA shall be incorporated into the mitigation measures.

6.23 Consideration of Environmental Factors

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

The assessment provided in the sections above has been prepared to provide a detailed consideration of the factors that must be taken into account for an assessment under Division 5.1 of the EP&A Act. These factors are summarised at Table 18 and where mitigation measures have been proposed in response to the factor, these have been identified.

Table 18: Environmental Factors considered

Environmental Factor	Response/Assessment	Mitigation Measure Reference
(a) Any environmental impact on a community?	<p><u>Pre-construction</u></p> <p>The northeastern corner of the Site is constrained by an easement for drainage benefitting Maitland City Council, currently this restricts the ability to undertake works in this location and to avoid impact on the easement the main Learning Building has been designed to cantilevered over a small section of the easement. The terms of the easement do not specify a height or depth and as such the consent of Maitland City Council, who benefit from the easement or extinguishment of the easement, would be required prior to the commencement of any ground works within the easement.</p> <p>In addition, the accompanying amended flood report at Appendix 29 clearly demonstrates the need for the easement at present, given the potential for localised onsite flooding in adverse events. To enable extinguishment of the easement stormwater management works will need to be undertaken off-site on the adjoining site to redirect water downstream to the north. The proposed staff car park and associated retaining wall are proposed within in the easement and will impact the easement, therefore no works can be undertaken in this location until the stormwater works are redirected via a piped system further to the north of the Site from the northeastern corner.</p> <p>On this basis, works can only commence within the drainage easement with the consent of Council and/or completion of stormwater management works off-site to enable extinguishment of the easement, a mitigation measure will be included to this effect. There is risk of creating adverse impacts for properties up and down stream if this is not resolved adequately prior to commencement of works within the easement.</p> <p>A mitigation measure will be included to ensure no building works commence on Site until the off-site drainage associated with down-stream and up-stream properties is resolved, if works were to proceed, prior to resolution of off-site stormwater works, local flooding and adjoining properties will be impacted with change in water flow direction.</p> <p>A temporary driveway will be required adjacent to the KnD area on northern side of Northview Street to enable vehicles to turn around on Site and avoid traffic impacts at the eastern end of Northview Street, which is currently a no through road. This can be removed once Northview Street is extended to Cessnock Road.</p>	<p>Relevant mitigation measure:</p> <p>CMM8 GMM6 GMM7 GMM10 GMM13 GMM16 SWMM7 CMM22 CMM24 OPMM6 OPMM7 OPMM8 OPMM9</p>
	<p><u>During Construction</u></p> <p>The activity has the potential to generate noise and vibration impacts during works, to the surrounding sensitive noise receivers and also the impact to students and staff of Gillieston Public School, as the works will be undertaken whilst the school continues to operate. As discussed in Section 6.2 the works can be suitably mitigated with preparation of a construction and vibration management plan and ensure use of equipment is managed to minimise noise emissions to surrounding properties. A complaints register shall be formalised for follow up during construction to assist in mitigating any complaints.</p> <p>A CEMP is required to be prepared prior to the commencement of Site works, this will assist in mitigating: noise, vibration, traffic, construction vehicle routes, access and parking, pollution/dust, water and stormwater</p>	<p>Relevant mitigation measure:</p> <p>CMM2 CMM13 CMM15 CMM22 CMM23 CMM26</p>

Environmental Factor	Response/Assessment	Mitigation Measure Reference
	<p>flow, sediment and run-off and waste removal.</p> <p><i>Bushfire</i></p> <p>The Site is partially mapped as Bushfire Prone Land; however, this constraint is in the process of being removed with creation of an easement and registration of Temporary APZs on Sites to the east, northeast and north. Following APZ registration on Title an application will be made to the NSW RFS to amend the Bushfire Prone Land mapping for removal from the Site. Provided that the mapping is amended there will be no need for further mitigation. However, should this not eventuate then a Section 100B application will need to be made to the NSW RFS, in this case no works can commence until the recommendations are received and it is determined that they can be implemented, this is addressed in Section 6.4.</p> <p><i>Contamination</i></p> <p>The Site is known to be contaminated with higher levels of lead and zinc refer to Section 6.3, a RAP and Interim Site Audit Report have been prepared, both have identified the need for further Data Gap Analysis prior to remediation works and consideration of contamination outside of the Site's boundary is also required. On this Basis, the Site is capable of being made suitable, subject to more testing (generally underneath demountable buildings) and preparation of an amended RAP.</p> <p>The consultant has classified the remediation works as being Category 2 Remediation, on this basis, remediation can be considered under the REF pathway. It is noted that the remediation of land can be undertaken via a 2-option process (removal or encapsulate/cap and contain on Site), should the encapsulate option be undertaken then a LTEMP will need to be prepared and registered on Title to ensure the contaminants remain sealed insitu and managed effectively to avoid harm and risk to the school community.</p> <p><i>Employment Creation</i></p> <p>The activity will provide for additional construction jobs during works, this will be economically beneficial for the surrounding community.</p>	<p>OPMM3</p> <p>OPMM4</p> <p>OPMM7</p> <p>OPMM8</p> <p>OPMM9</p> <p>OPTMM1</p> <p>OPTMM2</p> <p>OPTMM3</p> <p>GMM8</p> <p>BMM1</p> <p>BMM2</p> <p>BMM3</p> <p>BMM4</p> <p>BMM5</p> <p>BMM6</p> <p>BMM7</p> <p>BMM8</p> <p>LCMM1</p> <p>LCMM2</p> <p>LCMM3</p> <p>LCMM4</p> <p>LCMM5</p> <p>LCMM6</p> <p>LCMM7</p> <p>LCMM8</p> <p>LCMM9</p>
	<p><u>Post-construction</u></p> <p>The proposed stormwater management will improve water quality flows from the Site, with the inclusion of an OSD system with GPT to filter water discharged into the future piped system to be discharged to the north of the Site, as shown in the Civil Report at Appendix 15.</p>	<p>Relevant mitigation measure:</p> <p>GMM3</p>

Environmental Factor	Response/Assessment	Mitigation Measure Reference
	<p>The flood report prepared by ACOR (refer Appendix 29) has determined that the future stormwater works will improve localised flooding on the Site, mitigation measures will be included in relation to the new culvert design and flood evacuation procedures.</p> <p>Following the APZ registration on the adjoining properties to the east, northeast and north of the Site, the Site will no longer be constrained as Bushfire Prone Land, this will remove the constraint from the Site.</p> <p>The waste management plan at Appendix 21 demonstrates that waste vehicles can access and leave the Site in a forward direction and there is adequate area for waste storage within the staff car park.</p> <p>Compliant car parking will be provided onsite for both the school and preschool uses and separate driveway entry points will minimise conflicts between users. A boom gate will be positioned adjacent to the preschool spaces to ensure cars unrelated to the preschool do not occupy these spaces.</p> <p>The traffic generation will not alter the current capacity of the main intersections as shown in the TTIA at Appendix 32 and the local traffic management improvements are supported:</p> <ul style="list-style-type: none"> • Gillieston Road - 2 x bus bays and partial footpath • Northview Street - kiss and drop for 4 cars and queuing capacity for further 14 vehicles, footpath realignment and school crossing at western end • Ryans Road – wombat crossing • Line marking within the vicinity of the KnD area <p>These improvements will assist in calming traffic and improving the locality for pedestrians. A Section 138 Approval will be required prior to commencement of these works, a mitigation measure has been included.</p> <p>Currently, Northview Street is a cul-de-sac but in time will be extended to connect to Cessnock Road, to the east. To minimise impacts for residents at the eastern end of Northview Street a temporary driveway will be constructed adjacent to the preschool entry, to provide an onsite u-turn bay that will allow vehicles to turn around onsite and exit via the preschool driveway. This has the potential for conflict with preschool vehicles and may lead to queuing beyond Northview Street and Ryans Road intersection at peak times. This can be mitigated by requiring a management plan to be prepared and implementation of traffic control at morning and afternoon peak times.</p> <p>A Plan of Management is required to be prepared to manage ongoing school operations.</p>	<p>GMM7</p> <p>GMM10</p> <p>GMM11</p> <p>GMM13</p> <p>GMM14</p> <p>GMM15</p> <p>GMM16</p> <p>CMM20</p> <p>CMM21</p> <p>CMM22</p> <p>CMM23</p> <p>CMM24</p> <p>OPMM2</p> <p>OPMM6</p> <p>OPMM7</p> <p>OPMM8</p> <p>OPMM9</p> <p>OPTMM1</p> <p>OPTMM2</p> <p>OPTMM3</p> <p>SWMM1</p> <p>SWMM5</p> <p>SWMM7</p>
	<p><u>Social</u></p> <p>Socially the need for the school redevelopment and expansion is to service the needs of the growing community, with the surrounding area demographics changing. The amended SIA at Appendix 30, demonstrates the need of the increase in student population and need for increased school facilities and preschool in the Maitland region.</p>	<p>Relevant mitigation measure:</p> <p>CMM23</p> <p>CMM24</p> <p>OPTMM1</p>

Environmental Factor	Response/Assessment	Mitigation Measure Reference
		OPTMM2 OPTMM3
	<p><u>Cumulative</u></p> <p>There are several greenfield DAs currently submitted and/or recently determined for residential Torrens Title lot submission. The cumulative impact from housing growth will increase demand for school facilities, on this basis the activity is supported.</p> <p>The subdivision development will require construction vehicles to utilise the surrounding roads, there is likely to be increased noise and traffic for surrounding residents, but this will only be temporary whilst construction works are being undertaken. The CEMP will assist in managing this traffic around the Site.</p> <p>A LTEMP may be required to manage maintain ongoing suit suitability.</p> <p>A management plan will manage the use of the KnD, this will assist in mitigating traffic impacts and the School Travel Plan will assist in managing demands associated with school and movement to and from home to school.</p> <p>A FERP will be required and this will assist in managing adverse events like potential floods, the DoE has team that the school will liaise with throughout these events.</p> <p>Finally, a pre-opening stage road safety audit will be undertaken to ascertain if any further improvements will be required to improve safety for the school community and surrounding residents.</p>	<p>Relevant mitigation measures:</p> <p>CMM2 LCMM8 CMM18 CMM21 CMM25 OPMM6 OPMM7 OPMM8 OPMM9 OPTMM1 OPTMM2 OPTMM3 LCMM7 LCMM8 OPFMM1 OPFMM2</p>
	<p><u>Culturally</u></p> <p>An aboriginal item has been identified onsite and an ACHAR prepared see Appendix 22, a mitigation measure will require a 10m exclusion zone to be provided around the recent find, however, if that is not possible then an AHIP will be required.</p> <p>The activity has been designed to include cultural areas within the landscaping to provide a connection with Country and enable students to connect culturally whilst at School.</p> <p>The retention of the 1897 heritage is a positive outcome and mitigation measures will require the relocation of the school bell, photographic archival recording of the timber classroom and to ensure a heritage consultant is notified if any archaeological items are found during works.</p>	<p>Relevant mitigation measure:</p> <p>HMM1 HMM2 HMM3 HMM4 HMM5</p>

Environmental Factor	Response/Assessment	Mitigation Measure Reference
		HMM6 HMM7 HMM8 HMM9 HMM10 HMM11 HMM12 CMM2 CMM26
(b) Any transformation of a locality?	<p>The Site will be significantly transformed from undeveloped at the eastern end of the Site to containing a 3 storey building along Gillieston Road and two x one (1) storey buildings (hall and preschool) along Northview Street with sporting fields and landscaped areas in between the buildings. The expanded school is needed to service the expected population growth surrounding the school.</p> <p>As demonstrated in the VIA at Appendix 38, the report considered 6 viewpoints from the Site surrounds, with 5 out of 6 viewpoint impact ranked moderate to low with only one high impact potential identified, this impact was looking northwest from Northview Street.</p> <p>The hall and preschool are of a lower scale maintaining solar access to residential properties along Northview Street and present no significant impact from bulk and scale. The 3 storey Learning Building along Gillieston Road creates a high potential view impact, when viewed from Northview Street, however on balance with the material and colour finishes, architectural design and setbacks the visual impact on balance can be supported.</p> <p>Across time, the redevelopment of surrounding land will lessen the visual impact of the school Site. Cumulatively the scale of the activity is suitable, and surrounding development will generally consist of 1-2 storey residential dwellings, so it is unlikely that the built form will detrimentally impact the surrounding locality.</p>	No mitigation required
(c) Any environmental impact on the ecosystems of the locality?	<p>The Biodiversity Report at Appendix 24 did not identify any threatened species. A total of 18 trees will require removal but on balance the proposed endemic planting, as shown on the landscaping plan at Appendix 12, will have a positive impact and provide 41.4% canopy cover (excluded building footprints) and when the trees mature these will assist in screening the buildings across the Site.</p> <p>The landscape design is highly suitable and will create a landscape setting to support the new facility.</p>	<p>Relevant mitigation measure:</p> <p>TMM1 TMM2 TMM3 TMM4</p>

Environmental Factor	Response/Assessment	Mitigation Measure Reference
		TMM5 TMM6 SWMM8
(d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?	<p><u>Noise</u></p> <p>As discussed in Part (a) above the activity has the potential to result in noise impacts from traffic, construction and operational noise on the surrounding properties and to the continuing school population, with the school continuing to operate whilst works are being undertaken. Suitable mitigation measures have been included to mitigate noise from construction, vibration, traffic and ongoing school operations (refer to the CNVMP at Appendix 34) to address:</p> <ul style="list-style-type: none"> • Machinery operation and management to reduce noise • PA System and announcements – speaker location and orientation to be considered • Staggered recess/lunch times – maximum 370 students on outdoor play areas at once and supervised by teachers to manage excessive noisy behaviour • Complaints register • Preparation of a construction noise and vibration management plan <p>With the above measures the amenity of surrounding residents can be suitably managed. However, further consideration needs to be given to noise impacts on existing school operations during construction, a mitigation measure will be included. Although this noise is temporary it may be very impactful.</p> <p><u>Visual Privacy</u></p> <p>The location of the buildings will not unreasonably impact on existing and future residential properties given the separation between the new buildings and nearest residential properties and generous setbacks. Overall, the activity will not adversely impact existing and future residents. Overall, privacy of surrounding uses has been suitably mitigated.</p> <p><u>Streetscape</u></p> <p>The activity will significantly change the streetscape along Gillieston Road with construction of a three (3) storey building and views across the Site from residential properties on Northview Street to the rural countryside will also be impacted. Notwithstanding, the setbacks, materials and finishes and landscaping will assist in minimising the impact. Ultimately the surrounding lands will be redeveloped for residential housing and the locality is in known transition.</p>	<p>Relevant mitigation measure:</p> <p>CMM2 CMM13 CMM14 CMM15 CMM24 NVMM1 NVMM2 NVMM3 OPMM4 OPMM9 OPTMM2 OPTMM3 LUMM3</p>
(e) Any effect on locality, place or building having aesthetic, anthropological,	<p>An ACHAR was prepared (refer Appendix 22). Aboriginal items were identified, it is proposed to provide a 10m exclusion zone around the item but if works can't avoid the area, then a AHIP will be required prior to the commencement of work.</p> <p>The 1897 building in the northeastern corner of the Site is listed on the Section 170 heritage register, refer to</p>	<p>Relevant mitigation measure:</p>

Environmental Factor	Response/Assessment	Mitigation Measure Reference
archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?	the HIS at Appendix 25 . Retention of the building is supported, and relocation of the school bell is required. An archival recording of the timber classroom is required and during works if any items of archaeological value are identified a heritage consultant must be notified. Landscaping around the boundary of the heritage item will assist in providing a suitable buffer and soften the built form.	CMM2 CMM26 HMM1 HMM2 HMM3 HMM4 HMM5 HMM6 HMM7 HMM8 HMM9 HMM10 HMM11 HMM12
(f) Any impact on the habitat of protected animals, within the meaning of the <i>Biodiversity Conservation Act 2016</i> ?	No impact on the habitat of protected animals, refer to Biodiversity Assessment at Appendix 24 .	Relevant mitigation measure: TMM1 TMM2 TMM3 TMM4 TMM5 TMM6
(g) Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?	No impact on the habitat of protected animals, refer to Biodiversity Assessment at Appendix 24 .	No mitigation measure required
(h) Any long-term effects on the environment?	The proposed off-site stormwater management works will improve localised flood impacts and will also reduce impact for surrounding properties and improve water quality output from the Site.	Relevant mitigation measure:

Environmental Factor	Response/Assessment	Mitigation Measure Reference
	<p>A LTEMP is required to be prepared to manage contamination onsite if the encapsulation/cap and contain methods are chosen. This needs to be strictly adhered to for the health of the students, staff and visitors to the Site.</p> <p>The activity will achieve a 4-star green efficiency rating and incorporate the required energy efficient requirements refer to the NABERs Embodied Emissions Materials form at Appendix 11 and Net Zero Emissions Statement Report at Appendix 27.</p> <p>The proposed stormwater management plans (refer Appendix 15) and the Groundwater, Surface Water and Salinity Impact Assessment (refer Appendix 37) demonstrate that stormwater management works will improve water quality from the Site.</p> <p>The expansion of Gillieston Public School will provide significant long term social benefits, it is clear that in the Strategic direction for the Hunter Region and Maitland LGA, that there is a lack of school and preschool spaces to service the growing population, on this basis increased school placements and replacement of ageing infrastructure will be a very positive outcome.</p> <p>Finally, that whilst some trees are required to be removed to enable the activity to proceed, there will be significant tree planting (41.4% canopy achieved) that will offset this and long term create a positive environmental outcome.</p>	<p>GMM1 GMM7 CMM2 SWMM1 SWMM4 SWMM5 SWMM7 SWMM8 OPMM2 SCMM1 LCMM1 LCMM4 LCMM5 LCMM6 LCMM7 LCMM8 TMM1 TMM2 TMM3 TMM4 TMM5 TMM6</p>
(i) Any degradation of the quality of the environment?	There will be no significant degradation to the environment.	No mitigation measures
(j) Any risk to the safety of the environment?	<p>There are two main environmental risks, flooding/stormwater and contamination, that have the potential to have adverse impacts if not mitigated adequately, each are discussed under separate title below.</p> <p><u>Flooding</u></p> <p>The Site drains towards the dam positioned on the eastern boundary which then drains towards the catchment</p>	<p>Relevant mitigation measure:</p> <p>CMM2</p>

Environmental Factor	Response/Assessment	Mitigation Measure Reference
	<p>further north of the Site. An easement to drain water is positioned to the northwest of the dam (on the Site). Currently the activity cannot proceed on the easement without consent or extinguishment. Notwithstanding, the works along the eastern boundary will require significant fill and will affect water flows from the Sites to the east. On this basis, works cannot commence in this locality until the stormwater works off-site are resolved and direct water way from the Site/s. For now the building will cantilever over the easement.</p> <p>Notwithstanding the above, the future stormwater works will improve localised flooding across the northeastern corner the Site.</p> <p><u>Contamination</u></p> <p>As discussed above, the Site is contaminated with higher levels of lead and zinc and if not remediated well there is risk of ongoing risks associated with children. The remediation needs to be carefully considered to ensure that there are no ongoing risks and a LTEMP may be required, if the encapsulate/cap and contain method is proceeded with.</p>	<p>CMM26 UIMM8 OPFMM1 OPFMM2 OPMM9 LCMM1 LCMM2 LCMM3 LCMM4 LCMM5 LCMM6 LCMM7 LCMM8</p>
(k) Any reduction in the range of beneficial uses of the environment?	No impact, continuing education use and expansion is required and is consistent with the Hunter Regional Plan, Maitland LSPS and local strategic policies.	No mitigation measure required
(l) Any pollution of the environment?	No likely pollution expected from the proposed works, subject to appropriate mitigation measures.	<p>Relevant mitigation measure:</p> <p>GMM7 SWMM5</p>
(m) Any environmental problems associated with the disposal of waste?	A WMP has been provided and demonstrates that all construction waste and operation waste can be suitably managed, refer to Appendix 21 .	<p>Relevant mitigation measure:</p> <p>CMM2 OPMM1 CMM18 GMM19</p>
(n) Any increased	No impacts.	No mitigation

Environmental Factor	Response/Assessment	Mitigation Measure Reference
demands on resources (natural or otherwise) that are, or are likely to become, in short supply?		measures
(o) Any cumulative environmental effects with other existing or likely future activities?	Surrounding lands are currently being developed or are likely to be developed in the future for greenfield subdivision as outlined above. There will be some cumulative impacts from noise and construction traffic generation. This will be managed with through the required CEMP. The impact from the noise and traffic for subdivision works are expected within an urban release area and are temporary in nature, the activity will need to manage this and may need to adjust the CEMP throughout the project to mitigate any conflicts during the construction period. A mitigation measure is included to this effect.	Relevant mitigation measure: CMM2 CMM26 HMM7
(p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?	No impacts.	No mitigation measures
(q) Applicable local strategic planning statement, regional strategic plan or district strategic plan made under Division 3.1 of the Act?	Refer to Section 4.4 within the REF which has considered all the applicable strategies, a summary of how the activity satisfies the intent of the strategies is provided below: <u>Hunter Regional Plan 2041</u> The activity will satisfy Objectives 3, 4 and 5 will be achieved through expansion of the educational facilities to service the growing population. This will also support the 15-minute city, by providing services near residential growth areas. <u>Hunter Regional Transport Plan</u> No forecast upgrades to roads surrounding the Site, however, walking and cycling are being encouraged. <u>Maitland Local Strategic Planning Statement</u> The activity will be consistent with Objectives 03, 06, 15 and 18 by providing schools within a walking/cycling catchment, creating healthy, culturally rich and socially connected communities, aligning school infrastructure delivery to align with planned growth and delivering an expanded school to assist with an increasing backlog in school facilities in the LGA. <u>Maitland Citywide Integrated Land Use and Transport Strategy</u> No immediate road upgrades for adjoining streets surrounding the Site.	No mitigation measures

Environmental Factor	Response/Assessment	Mitigation Measure Reference
	<p><u>Maitland Operations Plan 2024-25</u></p> <p>No funding identities for roads servicing the school.</p> <p><u>Design Guide for Schools (Government Architect NSW)</u></p> <p>The architect has designed the school activity in accordance with this guideline, refer to Schematic Design Report at Appendix 13.</p>	
(r) Any other relevant environmental factors?	All other environmental factors have been addressed throughout this REF Report and associated supporting specialist reports.	No mitigation measures

7. Justification and Conclusion

The proposed activity, being the staged redevelopment of Gillieston Public School and construction of a public preschool is subject to assessment under Part 5 of the EP&A Act. The REF has examined and taken into account to the fullest extent possible all matters affecting, or likely to affect, the environment by reason of the proposed activity.

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

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

The activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats, and therefore it is not necessary for a Species Impact Statement and/or a BDAR to be prepared. The environmental impacts of the activity are not likely to be significant and therefore it is not necessary for an EIS to be prepared and approval to be sought for the activity from the Minister for Planning under Part 4 of the EP&A Act. On this basis, it is recommended that the Department determine the proposed activity in accordance with Part 5 of the EP&A Act and subject to the adoption and implementation of mitigation measures identified within this report.