Environmental Impact Statement

New High School in Bungendore
(SSD-14394209)

Prepared on behalf of NSW Department of Education

September 2021

mecone

Project Director

Georgia Sedgmen

Project Planners

Jack Rixon

Sophie Butcher

Revision	Revision Date	Status	Authorised	
			Name	Signature
A	09/09/2021	Draft	Georgia Sedgmen	

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

Contact

Mecone
Suite 1204b, Level 12, 179 Elizabeth Street
Sydney, New South Wales 2000
info@mecone.com.au
mecone.com.au

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Statement of validity

Applicant details

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

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

Site and proposal details

Site address and legal description:

Address	Legal Description
6-14 Butmaroo Street	Part Lot 701 DP1027107
2 Majara Street	Lot 12 DP 1139067
4-6 Majara Street	Lot 13 DP 1139067 Lot 14 DP 1139067
10 Majara Street	Lot 3 DP 830878
Butmaroo Street	Part Lot 701 DP 96240
Portion of Majara Street between Turallo Terrace and Gibraltar Street	N/A

Proposed development: Establishment of a new high school/educational establishment in Bungendore, associated infrastructure and new community centre

Prepared by

Name: Georgia Sedgmen

Qualifications: Master of Planning

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

Certification

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

- It is in accordance with Part 4 of the *Environmental Planning and Assessment Act 1979* and Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*;

- All available information that is relevant to the environmental assessment of the development to which the statement relates; and
- The information contained in the statement is neither false nor misleading.

Signature:

Name: Georgia Sedgmen

Date: 09 September 2021

Glossary and abbreviations

Term/acronym	Description
ARI	Annual Recurrence Interval
AS	Australian Standards
BCA	Building Code of Australia
BC Act	*Biodiversity Conservation Act 2016*
CEMP	Construction Environmental Management Plan
COLA	Covered Outdoor learning Area
Council	Queanbeyan-Palerang Regional Council
CPTED	Crime Prevention through Environmental Design
DA	Development Application
DCP	Development Control Plan
DoE	Department of Education
DPIE	Department of Planning Industry and Environment
EFSG	Educational Facilities Standards & Guidelines
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
ESD	Ecologically Sustainable Development
General Learning Space	A high school class room
GFA	Gross Floor Area
HVAC	Heating, Ventilation and Air Conditioning system
INP	Industrial Noise Policy
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan

Term/acronym	Description
LGA	Local Government Area
MMoC	Modern Methods of Construction
NCC	National Construction Code
Proposal	Establishment of a new high school at Bungendore
QPRC	Queanbeyan-Palerang Regional Council
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policies
Site	Part Lot 701 DP1027107, Lot 12 DP1139067, Lot 13 DP1139067, Lot 14 DP1139067, Lot 3 DP830878, Part Lot 701 DP96240
Stream	Indicative size of a secondary school based on student population
SSD	State Significant Development
WSUD	Water Sensitive Urban Design

Executive Summary

Purpose of report

This Environmental Impact Statement (EIS) has been prepared on behalf of the NSW Department of Education (DoE) to accompany a State Significant Development (SSD) application (SSD-14394209) for a new high school in Bugendore, NSW.

This EIS is submitted to the Minister for Planning pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The site is located in Bungendore within the Queanbeyan-Palerang Regional Council (QPRC or Council) Local Government Area (LGA). The site comprises four lots, two part lots and a portion of road reserve, with a total area of approximately 29,205m^2. The site currently contains the existing Bungendore Customer Centre and carpark for QPRC, Bungendore Community Centre, Bungendore Pool, a portion of Bungendore Park that includes Mick Sherd Oval, a portion of Bungendore Common and a portion of Majara Street road reserve.

DPIE issued the Secretary's Environmental Assessment Requirements (SEARs) for the project on 11 March 2021. This EIS has been prepared in response to the project SEARs.

Overview of the proposal

The proposal seeks approval for development of a new high school in Bungendore with capacity for up to 450 students. The proposed works generally include:

- Demolition of Bungendore Community Centre (following construction of the proposed community building) and demolition of Bungendore Pool;
- Construction of new school buildings and facilities design as a Stream 3 high school with Core 4 facilities;
- Construction of new community building to replace existing Bungendore Community Centre to provide for a community library, Council shopfront and community health hub;
- Repurposing of existing single storey Council building for use as a school building;
- Establishment of an agricultural plot and associated high school building and scout storage shed;
- Construction of a school access road to the eastern edge of the site providing access to staff car parking;
- Development of a forecourt and plaza for pedestrians;
- Construction of new games courts;
- Provision of dedicated open space areas; and

- Associated off-site works, including upgrades to nearby road intersections and infrastructure, on-street parking, crossings and footpaths.

Project background and need

Communities near the ACT-NSW border are experiencing increased demand for schools and enrolment places. The south West Tablelands Regional Plan 2036 identifies that there are approximately 5,354 NSW students who travel to the ACT for school, of whom 70% come from the QPRC LGA. Due to increasing enrolments and capacity pressures, the ACT has recently updated its enrolment policy to reduce capacity to accommodate students from NSW. Increasing access to schools for NSW border residents is therefore identified as a key planning priority in the Regional Plan.

The Bungendore Structure Plan 2048 anticipates an additional 3,568 people will be living in the town over the next 10 years, which will increase demand for key social infrastructure, including schools, open space and recreation facilities. The QPRC Local Strategic Planning Statement envisions that by 2040 families in Bungendore will have the choice to send their child to a primary or secondary school within the town. To enable this, a new secondary school will be needed in the town.

On 14 December 2018, the Deputy Premier, John Barilaro MP, announced a new high school would be provided to the community of Bungendore, proposed to be opened in Term 1, 2023.

Over a 12-month period, DoE undertook an assessment of over 1,000 hectares of land in and around Bungendore. Each site was assessed based on its suitability to support the needs of the project. This included availability of services such as sewage, electricity and roads; environmental constraints such as bushfire, ecological impacts and flooding; and potential community benefits. In addition, a public expression of interest was initiated seeking landowners and developers willing to offer land to the DoE for the proposal; however, no suitable site was identified through this process. Ultimately, the subject site was identified as the most suitable location for the proposed new high school in Bungendore given its central accessible location and relatively few site constraints.

Engagement between DoE and QPRC commenced in mid-2020, and an initial workshop and report in July 2020 proposed the Bungendore Education Precinct Proposal. Council resolved at its August 2020 meeting to provide in-principle support to the high school including establishment of the precinct and co-use of facilities. Council also resolved to support the sale of 4-6 Majara Street, 10 Majara Street and the Majara road reserve between Turallo Terrace and Gibraltar Street.

Following detailed investigations and ongoing consultation, the DoE proposal for the Bungendore Education Precinct was presented to Council in October 2020. Council resolved at its meeting on 28 October 2020 to support the proposal and initiated the closure of Majara Street road reserve in accordance with the meeting resolution.

It is further noted that a new pool (not part of this SSDA) is planned as part of the Bungendore Sports Hub, for which Council has secured funding. The new eight-lane outdoor swimming pool will be of a significantly higher quality than Bungendore Pool and is expected to provide an improved recreation experience. The new pool will also

remain accessible to the population, being less than 1km from the existing Bungendore Pool. The new pool is expected to be operational by the 2022 – 2023 summer season, the same year as the school.

Consultation

Pre-lodgement consultation was conducted with various stakeholders including QPRC officers; State agencies including Government Architect NSW, Transport for NSW; John Holland Rail; the local community; and local Aboriginal stakeholders. Comments provided by these stakeholders have been instrumental in the preparation of the EIS. Section 6 describes the consultation activities undertaken.

Planning context

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

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) nominates certain types of development as SSD. Under clause 15(1) of Schedule 1 of the SRD SEPP, development for the purpose of a new school, regardless of the CIV, is categorised as SSD. The proposed school is a new school and is therefore classified as SSD.

Palerang Local Environmental Plan 2014 (PLEP 2014) applies to the site. The site is currently zoned RE1 Public Recreation, SP2 Infrastructure and R2 Low Density Residential under PLEP 2014. Educational establishments are currently prohibited in all three zones. However, clause 35(1) of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (Education SEPP) states that development for the purpose of a school may be carried out by any person with development consent on land in a prescribed zone. Clause 33 of Education SEPP identifies the SP2 and R2 zones as prescribed zones. As such, the proposal is permitted with consent in these zones. In regards to the site's RE1 land, consent can be granted to the proposal pursuant to clause 4.38(3) of the EP&A Act, which allows for consent to be granted to partly prohibited SSD. This is discussed in further detail at section 5 of the EIS.

The proposal is otherwise generally consistent, with the exception of a minor variation to the height standard under PLEP 2014. Clause 42 of the Education SEPP identifies that development consent may be granted for development for a school that is SSD even though the development would contravene a development standard imposed by an environmental planning instrument. This is discussed in further detail at section 5.9.2 of the EIS.

Site acquisition and community land classification

At the date of lodgement of this EIS, the land on which the school will be located is not currently owned by the applicant. Owner's consent, however, is not required to lodge a Crown development application pursuant to clause 49(2) of the Regulation. In accordance with this clause, the applicant has given written notice to the owner of the relevant land, being QPRC and Crown Lands.

The Minister for Education is in the process of acquiring the relevant land by agreement but notes that, pursuant to the authority under section 125 of the *Education Act 1990* and in accordance with the procedure prescribed under the *Land Acquisition (Just Terms Compensation) Act 1991* (Just Terms Act) it could be acquired by agreement or compulsory process under the Just Terms Act.

The portion of the site on Lot 701 DP1027101 (Bungendore Park) and Lot 701 DP96240 (Bungendore Common) is effectively classified as "community land" and therefore subject to the provisions of Division 3.4 "Crown land managed by Councils" of the *Crown Land Management Act 2016*. However, following the completion of the acquisition process and the vesting of the land in the Minister for Education, the land will no longer be classified as "community land". Instead, the land will simply be held by the Minister and be subject to the RE1 Public Recreation zoning classification under PLEP 2014.

Also, Lot 701 in DP96240 (Bungendore Common) is currently subject to an undetermined Aboriginal land claim. The applicant is managing the issue with Crown Lands but is aware that the acquisition of that land cannot occur until the land claim is determined. The applicant will also consult with the maker of the relevant land claim.

Environmental impacts and mitigation measures

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

- Built form and urban design;
- Environmental amenity;
- Ecologically Sustainable Development;
- Transport and accessibility;
- Aboriginal Cultural Heritage;
- Heritage;
- Social Impacts;
- Noise and vibration;
- Biodiversity;
- Trees removal;
- Stormwater drainage;
- Bushfire;
- Flooding;
- Soil and water;

- Waste;
- Contamination; and
- Utilities.

A range of mitigation measures have been recommended based upon the input of specialists. Section 10 of the EIS sets out a summary of the mitigation measures.

Subject to implementation of the identified mitigation measures, the potential environmental impacts of the proposal will be acceptable and manageable.

Conclusion

The proposal has been designed to avoid environmental impacts where possible. The proposal minimises tree removal, respects the surrounding heritage items, and provides for a built form compatible with the streetscape and local character. The proposal will also provide for shared administration and staff facilities between the high school and existing primary school and construction of community facilities including a community library, Council shopfront and community health hub.

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

1 Introduction

This Environmental Impact Statement (EIS) has been prepared on behalf of the NSW Department of Education (DoE) to accompany a State Significant Development (SSD) application (SSD-14394209) for a new high school in Bungendore, NSW. This EIS is submitted to the Minister for Planning pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

As the proposed development is a new school, it is classified as SSD in accordance with Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011 (State and Regional Development SEPP)*. Clause 14 of Schedule 1 states that development for the purpose of a school is SSD regardless of capital investment value (CIV).

DPIE issued the Secretary's Environmental Assessment Requirements (SEARs) for the project on 10 March 2021. This EIS addresses the issued SEARs.

1.1 Project overview

The proposal seeks approval for development of a new high school in Bungendore with capacity for up to 450 students. The proposed works generally include:

- Demolition of Bungendore Community Centre (following construction of the proposed community building) and demolition of Bungendore Pool;
- Construction of new school buildings and facilities design as a Stream 3 high school with Core 4 facilities;
- Construction of new community building to replace existing Bungendore Community Centre to provide for a community library, Council shopfront and community health hub;
- Repurposing of existing single storey Council building for use as a school building;
- Establishment of an agricultural plot and associated high school building and scout storage shed;
- Construction of a school access road to the eastern edge of the site providing access to staff car parking;
- Development of a forecourt and plaza for pedestrians;
- Construction of new games courts;
- Provision of dedicated open space areas; and
- Associated off-site works, including upgrades to nearby road intersections and infrastructure, crossings, footpaths and the like will be provided to encourage active transport opportunities, respond to changing traffic conditions and

improve public infrastructure in an around the site to the benefit of the community.

1.2 Project background and need

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

Communities near the ACT-NSW border are experiencing increased demand for schools and enrolment places. The south West Tablelands Regional Plan 2036 identifies that there are approximately 5,354 NSW students who travel to the ACT for school, of whom 70% come from the QPRC LGA. Due to increasing enrolments and capacity pressures, the ACT has recently updated its enrolment policy to reduce capacity to accommodate students from NSW. Increasing access to schools for NSW border residents is therefore identified as a key planning priority in the Regional Plan.

The Bungendore Structure Plan 2048 anticipates an additional 3,568 people will be living in the town over the next 10 years, which will increase demand for key social infrastructure, including schools, open space and recreation facilities. The QPRC Local Strategic Planning Statement envisions that by 2040 families in Bungendore will have the choice to send their child to a primary or secondary school within the town. To enable this, a new secondary school will be needed in the town.

On 14 December 2018, the Deputy Premier, John Barilaro MP, announced a new high school would be provided to the community of Bungendore, proposed to be opened in Term 1, 2023.

Over a 12-month period, DoE undertook an assessment of over 1,000 hectares of land in and around Bungendore. Each site was assessed based on its suitability to support the needs of the project. This included availability of services such as sewage, electricity and roads; environmental constraints such as bushfire, ecological impacts and flooding; and potential community benefits. In addition, a public expression of interest was initiated seeking landowners and developers willing to offer land to the DoE for the proposal; however, no suitable site was identified through this process. Ultimately, the subject site was identified as the most suitable location for the proposed new high school in Bungendore given its central accessible location and relatively few site constraints.

Mick Sherd Oval and the proposed community facilities will be subject to joint use agreements between QPRC and DoE. It is anticipated that the Oval will be used exclusively by the school to deliver the school curriculum during school hours. The formal arrangements are subject to ongoing discussions between QPRC and DoE.

Engagement between DoE and QPRC commenced in mid-2020 and an initial workshop and report in July 2020 proposed the Bungendore Education Precinct Proposal. QPRC resolved at its August 2020 meeting to provide in-principle support to the high school including establishment of the precinct and co-use of facilities. Council

also resolved to support the sale of 4-6 Majara Street, 10 Majara Street and the Majara Street road reserve between Turallo Terrace and Gibraltar Street.

Following detailed investigations and ongoing consultation, the DoE proposal was presented to QPRC in October 2020. The proposal outlined the scope and sequencing of works associated with construction and detailed the potential impacts on QPRC and community assets. QPRC resolved at its meeting on 28 October 2020 to support the proposal in terms of supporting the establishment of the new high school and shared use facilities, agreeing to the sale of the high school site, authorising the necessary road closure along Majara Street, authorising the Chief Executive Officer (CEO) to negotiate the terms of joint use agreements and noting detail design and traffic plans will form part of the SSD applications.

QPRC has since initiated the closure of Majara Street road reserve in accordance with the resolution of 28 October 2020. Pursuant to Section 38B of the *Roads Act 1993*, the proposed road closure was notified between 3 February and 3 March 2021. QPRC is continuing to progress the road closure.

Council also considered road closure at its 28 April 2021 meeting and resolved to endorse a concept plan for the road closure, note all submissions, advise DoE that Council's endorsement is reliant on a formal agreement for the resolution of various traffic issues, and authorise the CEO to execute the necessary documentation to effect the road closure.

1.3 Alternatives considered

DoE undertook a structured approach in assessing options to meet the identified service need. The options considered are outlined in Table 1-1.

Table 1-1 Options considered

Option	Description	Analysis
A	No action	Should the project not proceed, a high school would remain absent from the Bungendore locality, requiring high school students to travel to the nearest high schools at Queanbeyan or Canberra.
B	New high school at alternative site	Over a 12-month period, DoE undertook an assessment of over 1,000 hectares of land in and around Bungendore. Each site was assessed based on its suitability to support the needs of the project. This included availability of services such as sewage, electricity and roads; environmental constraints such as bushfire, ecological impacts and flooding; and potential community benefits. In addition, a public expression of interest was initiated seeking landowners and developers willing to offer land to the DoE for the proposal; however, no suitable site was identified through this process.

Option	Description	Analysis
C	Development of new high school at the proposed site location	This option meets identified demand for a high school and delivers on the State government's announcement of a new high school in Bungendore. The location was chosen after in-depth investigations and consideration of alternatives. Also, several master plan options were considered for the site to provide the best use and optimisation of the site. This is discussed further in **Appendix 4.**

1.4 SEARs

The project SEARs were issued on 10 March 2021. The table below identifies where the SEARs are addressed within the EIS.

Table 1-2 Project SEARs

SEAR	Location in EIS
General requirements	
The Environmental Impact Statement (EIS) must be prepared in accordance with and meet the minimum requirements of clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000 (the Regulation).	Throughout EIS
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Section 9
In addition, the EIS must include: • an executive summary	Executive summary (front of report)
• a complete description of the development, including: o the need for the development o justification for the development o suitability of the site o alternatives considered o likely interactions between the development and existing, approved and proposed operations in the vicinity of the site o a description of any proposed building works o a description of existing and proposed operations, including staff and student numbers, hours of operation, and details of	Section 1 Section 3 Appendix 2 Appendix 3 Appendix 4

SEAR	Location in EIS
any proposed before/after school care services and/or community use of school facilities o site survey plan, showing existing levels, location and height of existing and adjacent structures/buildings and site boundaries o a detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development o plans, elevations and sections of the proposed development o cladding, window and floor details, including external materials o a site plan showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process) o plans and details of any advertising/business identification signs to be installed, including size, location and finishes o any staging of the development o details of construction and decommissioning including timing o an estimate of the retained and new jobs that would be created during the construction and operational phases of the development along with details of the methodology to determine the figures provided.	
• a detailed assessment of the key issues identified below, and any other significant issues identified in the risk assessment, including: o a description of the existing environment, using sufficient baseline data and methodology to establish baseline conditions o an assessment of the potential impacts of all stages of the development on all potentially impacted environments, sensitive receivers, stakeholders and future developments. The assessment must consider any relevant legislation, policies and guidelines. o consideration of the cumulative impacts due to other related development proposed or underway on the site, including development progressed under other assessment pathways and all other developments in the vicinity (completed, underway or proposed). o identification of all proposed monitoring or required changes to existing monitoring programs.	Section 7

SEAR	Location in EIS
○ measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment and triggers for each action. ○ details of alternative measures considered.	
• a consolidated summary of all the proposed environmental management and monitoring measures, identifying all commitments included in the EIS.	Section 9
• the reasons why the development should be approved and a detailed evaluation of the merits of the development, including consequences of not carrying out the development.	Section 11
The EIS must be accompanied by a report from a qualified quantity surveyor providing a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived.	Appendix 1
Key issues	
The EIS must address the following specific matters: **1. Statutory Context and Strategic Context and Policies** Address the statutory provisions contained in all relevant legislated and draft environmental planning instruments, including but not limited to: • State Environmental Planning Policy (State and Regional Development) 2011 • State Environmental Planning Policy (Infrastructure) 2007 • State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 • State Environmental Planning Policy No 64 – Advertising and Signage • State Environmental Planning Policy No 55 – Remediation of Land • Draft State Environmental Planning Policy (Remediation of Land) • Draft State Environmental Planning Policy (Environment) • Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities) • Palerang Local Environmental Plan 2014 Having regard to the relevant environmental planning instruments: • address the permissibility of the development, including the nature and extent of any prohibitions	Section 4 Section 5 Appendix 28

SEAR	Location in EIS
• identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards • adequately demonstrate and document how each of the provisions in the listed instruments are addressed, including reference to necessary technical documents.	
Address the relevant planning provisions, goals and strategic planning objectives in all relevant planning policies including but not limited to the following: • NSW State Priorities • State Infrastructure Strategy 2018 – 2038 Building the Momentum • Future Transport Strategy 2056 • Crime Prevention through Environmental Design (CPTED) Principles • Better Placed: An integrated design policy for the built environment of New South Wales (Government Architect NSW (GANSW), 2017) • Healthy Urban Development Checklist (NSW Health, 2009) • Draft Greener Places Design Guide (GANSW) • Koala Habitat Protection Guideline (DPIE 2020) • Palerang Development Control Plan 2020 • South East and Tablelands Regional Plan 2036 • Queanbeyan-Palerang Local Strategic Planning Strategy	Section 4
2. Built Form and Urban Design • Address: o the height, density, bulk and scale, setbacks and interface of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces o design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colour palette. o how Crime Prevention through Environmental Design (CPTED) principles are to be integrated into development o how good environmental amenity would be provided, including access to natural daylight and ventilation, provision of shade, acoustic separation, access to landscape and outdoor spaces and future flexibility o how design quality will be achieved in accordance with Schedule 4 Schools – design quality principles of State Environmental Planning Policy (Educational Establishments	Section 3 Section 7.1 Appendix 4 Appendix 19 Appendix 20 Appendix 26

SEAR	Location in EIS
and Child Care Facilities) 2017 and the GANSW Design Guide for Schools (GANSW, 2018) o how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.	
• Provide: o a detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development o a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape including views to and from the site and any adjoining heritage items.	Section 2 Section 3 Section 7.1 Section 7.3 Appendix 4
3. Trees and Landscaping • Provide: o Where relevant, an arboricultural impact assessment, prepared by a Level 5 (Australian Qualifications Framework) Arborist, which details the number, location and condition of trees to be removed and retained, includes detailed justification for each tree to be remove and details of the existing canopy coverage on-site o a detailed site-wide landscape strategy, that: - details the proposed site planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage - provides evidence that opportunities to retain significant trees have been explored and/or informs the plan - considers equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing vegetation - demonstrates how the proposed development would: • contribute to the long-term landscape setting in respect of the site and the streetscape • mitigate the urban heat island effect and ensure appropriate comfort levels on site • contribute to objectives to increase urban tree canopy cover o a detailed landscape plan prepared by a suitably qualified person.	Section 7.2 Section 3.5 Appendix 5a Appendix 5b Appendix 11

SEAR	Location in EIS
Relevant Policies and Guidelines: • Australian Standard 4970 Protection of trees on development sites • Draft Greener Places Design Guide (GANSW) • Technical Guidelines for Urban Green Cover in NSW (Office of Environment and Heritage (OEH), 2015)	
4. Environmental Amenity • Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing, wind impacts and acoustic impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated • Provide: o shadow diagrams o a view analysis, where relevant, of the site from key vantage points and streetscape locations and public domain including photomontages or perspectives showing the proposed and likely future development o an analysis of proposed lighting that identifies lighting on-site that will impact surrounding sensitive receivers and includes mitigation management measures, to manage any impacts.	Section 7.2 Appendix 4
5. Transport and Accessibility Provide a transport and accessibility impact assessment, which includes, but is not limited to the following: • analysis of the existing transport network, to at least the proposed enrolment boundary, including: o road hierarchy o pedestrian, cycle and public transport infrastructure o details of current daily and peak hour vehicle movements based on traffic surveys and / or existing traffic studies relevant to the locality o existing transport operation for 1hour before and after proposed bell times such as span of service, frequency for public transport and school buses, pedestrian phasing for signals o existing performance levels of nearby intersections utilising appropriate traffic modelling methods (such as SIDRA network modelling). o Location and nature pf adjoining rail infrastructure that may be impacted by the development.	Section 7.4 Appendix 6a Appendix 6b Appendix 6c

SEAR	Location in EIS
• details of the proposed development, including: o a map of the proposed access which identifies public roads, bus routes, footpaths and cycleways o pedestrian site access and vehicular access arrangements, including for service and emergency vehicles ad loading/unloading, including swept path analysis demonstrating the largest design vehicles entering and leaving the site and moving in each direction through intersections along the proposed transport routes. o car and motorcycle parking, bicycle parking and end-of-trip facilities o drop-off / pick-zone(s) and arrival/departure bus bay(s) o pedestrian or road infrastructure improvements or safety measures. • analysis of the impacts due to the operation of the proposed development, including: o proposed modal split for all users of the development including vehicle, bicycle riders, public transport, school buses and other sustainable travel modes o estimated total daily and peak hour vehicular trip generation o a clear explanation and justification of the: - assumed growth rate applied - volume and distribution of proposed trips to be generated - type and frequency of design vehicles accessing the site o details of performance of nearby intersections and level crossings with the additional traffic generated by the development both at the commencement of operation and in a 10-year time period (using SIDRA network modelling) o cumulative traffic impacts from any surrounding approved development(s) o adequacy of pedestrian, bicycle and public transport infrastructure and operations to accommodate the development o adequacy of car and motorcycle parking and bicycle parking provisions when assessed against the relevant car / bicycle parking codes and standards o adequacy of the drop-off / pick-up zone(s) and bus bay(s), including assessment of any related queuing during peak-hour access	

SEAR	Location in EIS
○ adequacy of the existing / proposed pedestrian infrastructure to enable convenient and safe access to and from the site for all users. • measures to ameliorate any adverse traffic and transport impacts due to the development based on the above analysis, including: ○ travel demand management programs to increase sustainable transport (such as a Green Travel Plan and / School Transport Plan) ○ arrangements for the Travel Coordinator roles ○ governance arrangements or relationships with state and local government transport providers to update roads safely ○ infrastructure improvements or protection measures, including details of timing and method of delivery. • a preliminary school transport plan detailing an operational traffic and access management plan for the site, pedestrian entries, the drop-off / pick-up zone(s) and bus bay(s) • analysis of the impacts of the traffic generated during construction of the proposed development, including: ○ construction vehicle routes, types and volumes ○ construction program (duration and milestones) ○ on-site car parking and access arrangements for construction, emergency and construction worker vehicles ○ cumulative impacts associated with other construction activities in the locality (if any) ○ road safety at identified intersections near the site due to conflicts between construction vehicles and existing traffic in the locality ○ measures to mitigate impacts, including to ensure the safety of pedestrian and cyclists during construction. • Analysis of the impacts of construction works on the adjoining rail corridor prepared in consultation with NSW Trains • A preliminary Construction Traffic and Pedestrian Management plan Note: Further guidance is provided in the TfNSW advice attached to the SEARs. Relevant Policies and Guidelines: • Guide to Traffic Generating Developments (Roads and Maritime Services, 2002) • EIS Guidelines - Road and Related Facilities (Department of Urban Affairs and Planning (DUAP), 1996) • Cycling Aspects of Austroads Guides	

SEAR	Location in EIS
• NSW Planning Guidelines for Walking and Cycling (Department of Infrastructure, Planning and Natural Resources (DIPNR), 2004) • Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments (Austroads, 2020) • Australian Standard 2890.3 Parking facilities, Part 3: Bicycle parking (AS 2890.3).	
6. Ecologically Sustainable Development (ESD) • Identify: o how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) would be incorporated in the design and ongoing operation phases of the development o proposed measures to minimise consumption of resources, water (including water sensitive urban design) and energy o how the future development would be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design (including water sensitive urban design) and technology and use of renewable energy o how environmental design will be achieved in accordance with the GANSW Environmental Design in Schools Manual (GANSW, 2018). • Provide: o an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level o a statement regarding how the design of the future development is responsive to the NARCliM projected impacts of climate change o an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design. Relevant Policies and Guidelines: • NSW and ACT Government Regional Climate Modelling (NARCliM) climate change projections.	Section 7.5 Appendix 27
7. Heritage • Provide a Statement of Heritage Impact (SOHI) prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual (Heritage Office and DUAP,	Section 7.7 Appendix 7

SEAR	Location in EIS
1996) and Assessing Heritage Significance (OEH, 2015). The SOHI is to address the impacts of the development on the heritage significance of the site and adjacent areas and is to identify: o All heritage items (state and local) within the vicinity of the proposal including built heritage, landscapes and archaeology (this includes historic sites with Aboriginal Cultural Heritage values). Detailed mapping of these items shall be provided. The SOHI shall consider the curtilage and setting of the items and provide individual assessments of why the items and site(s) are of heritage significance. o How the development is consistent with any relevant Conservation Management Plan o All heritage items (states and local) within the vicinity of the site including built heritage, landscapes and archaeology, curtilage and setting of the items, detailed mapping of these items, and assessment of why the items and site(s) are of heritage significance. o The impacts of the development on heritage item(s), heritage significance or cultural heritage values of the site, including visual impacts, required BCA and DDA works, new fixtures, fittings and finishes, any modified services. o The attempts to avoid and/or mitigate the impact on the heritage item(s), heritage significance or cultural heritage values of the site o The attempts to recognise, celebrate, and interpret for the public the heritage significance of the identified items, landscapes, and archaeology within the development. o Justification for any changes to the heritage fabric or landscape elements including any options analysis. • An historical archaeological assessment should be prepared by a suitably qualified historical archaeologist in accordance with the guidelines Archaeological Assessment (1996) and Assessing Significance for Historical Archaeological Sites and Relics (2009). This assessment should identify what relics, if any, are likely to be present, assess their significance and consider the impacts from the proposal on this potential archaeological resource. The investigation should also address the previous Ground Penetrating Radar investigation undertaken within the site to understand the potential for unmarked burials to survive. If appropriate, archaeological testing to inform the EIs is recommended during the SSD assessment stage. If testing is undertaken it should be used to inform and refine design for the SSD. Where harm is likely to occur, it is recommended that that the significance of the relics be considered in determining an appropriate Research Design and Excavation Methodology shod also be prepared to guide any proposed excavations or salvage programme.	
8. Aboriginal Cultural Heritage	Section 7.6

SEAR	Location in EIS
• Provide an Aboriginal Cultural Heritage Assessment Report (ACHAR) that: o identifies and describes the Aboriginal cultural heritage values that exist across the site o includes surface surveys and test excavations where necessary o has been prepared in accordance with the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) and Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010) o incorporates consultation with Aboriginal people in accordance with Aboriginal Cultural Heritage Consultation Requirements for Proponents (Department of Environment, Climate Change and Water, 2010) o documents the significance of cultural heritage values of Aboriginal people who have a cultural association with the land o identifies, assesses and documents all impacts on the Aboriginal cultural heritage values o demonstrates attempts to avoid any impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR and EIS must outline measures proposed to mitigate impacts. o Demonstrates attempts to interpret the Aboriginal cultural heritage significance identified in the development. Any Aboriginal objects recorded as part of the Aboriginal Cultural Heritage Assessment Report must be documented and notified to the Aboriginal Heritage Information Management System (AHIMS) within Heritage NSW of the Department of Premier and Cabinet.	Appendix 8
9. Social Impacts • Provide a Social Impact Assessment prepared in accordance with the draft Social Impact Assessment Guideline 2020 Relevant Policies and Guidelines: • Draft Social Impact Assessment Guideline 2020 (Department of Planning, Industry and Environment)	Section 7.8 Appendix 9
10. Noise and Vibration • Provide a noise and vibration impact assessment that: o includes a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation and construction	Section 7.9 Appendix 12

SEAR	Location in EIS
○ details the proposed construction hours and provide details of, and justification for, instances where it is expected that works would be carried out outside standard construction hours ○ includes a quantitative assessment of the main sources of operational noise, including consideration of any public-address system, school bell, mechanical services (e.g. air conditioning plant), use of any school hall for concerts etc. (both during and outside school hours) and any out of hours community use of school facilities ○ outlines measures to minimise and mitigate the potential noise impacts on nearby sensitive receivers ○ considers sources of external noise intrusion in proximity to the site (including, road rail and aviation operations) and identifies building performance requirements for the proposed development to achieve appropriate internal amenity standards ○ demonstrates that the assessment has been prepared in accordance with polices and guidelines relevant to the context of the site and the nature of the proposed development. Relevant Policies and Guidelines: • NSW Noise Policy for Industry 2017 (NSW Environment Protection Authority (EPA) • Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) • Assessing Vibration: A Technical Guideline 2006 (Department of Environment and Conservation, 2006)	
11. Biodiversity • Provide a Biodiversity Development Assessment Report (BDAR) that assesses the biodiversity impacts of the proposed development in accordance with the requirements of the Biodiversity Conservation Act 2016, Biodiversity Conservation Regulation 2017 and Biodiversity Assessment Method, except where a BDAR waiver has been issued in relation to the development or the development is located on biodiversity certified land • Where a BDAR is not required because a BDAR waiver has been issued in relation to the development, provide: ○ a copy of the BDAR waiver and demonstrate that the proposed development is consistent with that covered in BDAR waiver ○ an assessment of flora and fauna impacts where significant vegetation or flora and fauna values would be affected by the proposed development.	Section 7.10 Appendix 10

SEAR	Location in EIS
12. Contributions • Identify: o any Section 7.11/7.12 Contribution Plans, Voluntary Planning Agreements or Special Infrastructure Contribution Plans that affect land to which the application relates or the proposed development type o any contributions applicable to the proposed development under the identified plans and/or agreements. Justification is to be provided where it is considered that the proposed development is exempt from making a contribution o any actions required by a Voluntary Planning Agreement or draft Voluntary Planning Agreement affecting the site or amendments required to a Voluntary Planning Agreement affected by the proposed development.	Section 5.11
13. Staging • Assess impacts of staging where it is proposed and detail how construction works and operations would be managed to ensure public safety and amenity on and surrounding the site.	Section 3.10
14. Utilities • In consultation with relevant service providers: o assess of the impacts of the development on existing utility infrastructure and service provider assets surrounding the site o identify any infrastructure upgrades required off-site to facilitate the development and any arrangements to ensure that the upgrades will be implemented on time and be maintained o provide an infrastructure delivery and staging plan, including a description of how infrastructure requirements would be co-ordinated, funded and delivered to facilitate the development.	Section 7.17 Appendix 13
15. Stormwater Drainage • Provide: o a preliminary stormwater management plan for the development that: - is prepared by a suitably qualified person in consultation with Council and any other relevant drainage authority - details the proposed drainage design for the site including onsite detention facilities, water quality measures and the nominated discharge point	Section 7.11 Appendix 15

SEAR	Location in EIS
- demonstrates compliance with Council or other drainage authority requirements. o stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties. • Where drainage infrastructure works are required that would be handed over to Council, provide full hydraulic details and detailed plans and specifications of proposed works that have been prepared in consultation with Council and comply with Council's relevant standards. Relevant Policies and Guidelines: • Guidelines for developments adjoining land managed by the Office of Environment and Heritage (OEH, 2013).	
16. Flooding • Identify any flood risk on-site in consultation with Council and having regard to the most recent flood studies for the project area and the potential effects of climate change, sea level rise and an increase in rainfall intensity • Assess the impacts of the development, including any changes to flood risk onsite or off-site, and detail design solutions to mitigate flood risk where required. Relevant Policies and Guidelines: • NSW Floodplain Development Manual (DIPNR, 2005).	Section 7.13 Appendix 16
17. Soil and Water • Provide: o an assessment of potential impacts on surface and groundwater (quality and quantity), soil, related infrastructure and watercourse(s) where relevant o water quality impacts, particularly the impact on relevant environmental values of the Lake George catchment during construction o details of measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles o an assessment of salinity and acid sulphate soil impacts, including a Salinity Management Plan and/or Acid Sulphate Soils Management Plan, where relevant. Relevant Policies and Guidelines: • Managing Urban Stormwater - Soils and Construction Volume 1 (Landcom, 2004) • Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2016)	Section 7.14 Appendix 15 Appendix 17 Appendix 18

SEAR	Location in EIS
• Guidelines for development adjoining land managed by the Office of • Environment and Heritage (OEH, 2013).	
18. Waste • Identify, quantify and classify the likely waste streams to be generated during construction and operation • Describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste • Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site. • Provide a hazardous materials survey of existing aboveground buildings that are proposed to be demolished or altered. Relevant Policies and Guidelines: • Waste Classification Guidelines (EPA, 2014).	Section 7.15 Appendix 18 Appendix 19 Appendix 20
19. Contamination • Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. This must include the following prepared by certified consultants recognised by the NSW Environment Protection Authority: o Preliminary Site Investigation (PSI) o Detailed Site Investigation (DSI) where recommended in the PSI o Remediation Action Plan (RAP) where remediation is required. This must specify the proposed remediation strategy o Preliminary Long-term Environmental Management Plan (LEMP) where containment is proposed on-site. Relevant Policies and Guidelines: • Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP, 1998) • Sampling Design Guidelines (EPA, 1995) • Consultants Reporting on Contaminated land – Contaminated Land Guidelines (EPA, 2020) • National Environment Protection (Assessment of Site Contamination) Measure (National Environment Protection Council, as amended 2013)	Section 5.8 Section 7.16 Appendix 18
20. Bush fire	Section 7.12

SEAR	Location in EIS
• Provide a bush fire assessment that details proposed bush fire protection measures and demonstrates compliance with Planning for Bush Fire Protection (NSW RFS, 2019).	Appendix 21
Plans and documents	
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents. Any plans and diagrams included in the EIS must include key dimensions, RLs, scale bar and north point.	Throughout appendices

In addition to the plans and documents required in the General Requirements and Key Issues sections above, the EIS must include the following:
• Section 10.7(2) and (5) Planning Certificates (previously Section 149(2) and (5) Planning Certificate)
• Design report to demonstrate how design quality would be achieved in accordance with the above Key Issues including:
  ○ architectural design statement
  ○ diagrams, structure plan, illustrations and drawings to clarify the design intent of the proposal
  ○ detailed site and context analysis
  ○ analysis of options considered to justify the proposed site planning and design approach
  ○ summary of feedback provided by GANSW and NSW State Design Review Panel (SDRP) and responses to this advice
  ○ summary report of consultation with the community and response to any feedback provided.
• Geotechnical and Structural Report
• Accessibility Report.
	Appendix 22
	Appendix 4
	Appendix 14
	Appendix 15
	Appendix 17
	Appendix 25

Consultation	
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, relevant special interest groups, including local Aboriginal land councils and registered Aboriginal stakeholders and affected landowners. In particular, you must consult with: • the relevant Council • Government Architect NSW (through the NSW SDRP process) • Transport for NSW • John Holland Rail, manager of the Country Regional Network	Section 6 Appendix 23

SEAR	Location in EIS
Consultation should commence as soon as practicable to inform the scope of investigation and progression of the proposed development. The EIS must describe and evidence the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided. Targeted consultation in accordance with the draft Social Impact Assessment Guideline 2020 (Department of Planning, Industry and Environment) must also occur where there is a requirement to prepare and submit a Social Impact Assessment.	
If you do not lodge a development application and EIS for the development within two years of the issue date of these SEARs, you must consult further with the Planning Secretary in relation to the preparation of the EIS. If any other significant issues are identified in the risk assessment, that are not identified in this SEARs, the Planning Secretary must be consulted in relation to the preparation of the EIS.	Noted
The assessment of the key issues listed above must consider, but not be limited to, relevant guidelines, policies, and plans as identified.	Relevant guidelines, policies and plans considered in assessment of key issues

2 Site analysis

2.1 Regional context

The site is located in the town of Bungendore in the QPRC local government area (LGA). Bungendore is located close to the border of the Australian Capital Territory (ACT), approximately 40km east of Canberra and 26km from Queanbeyan. Canberra and Queanbeyan provide the main employment sources for the town. A regional context map is provided at Figure 2-1.

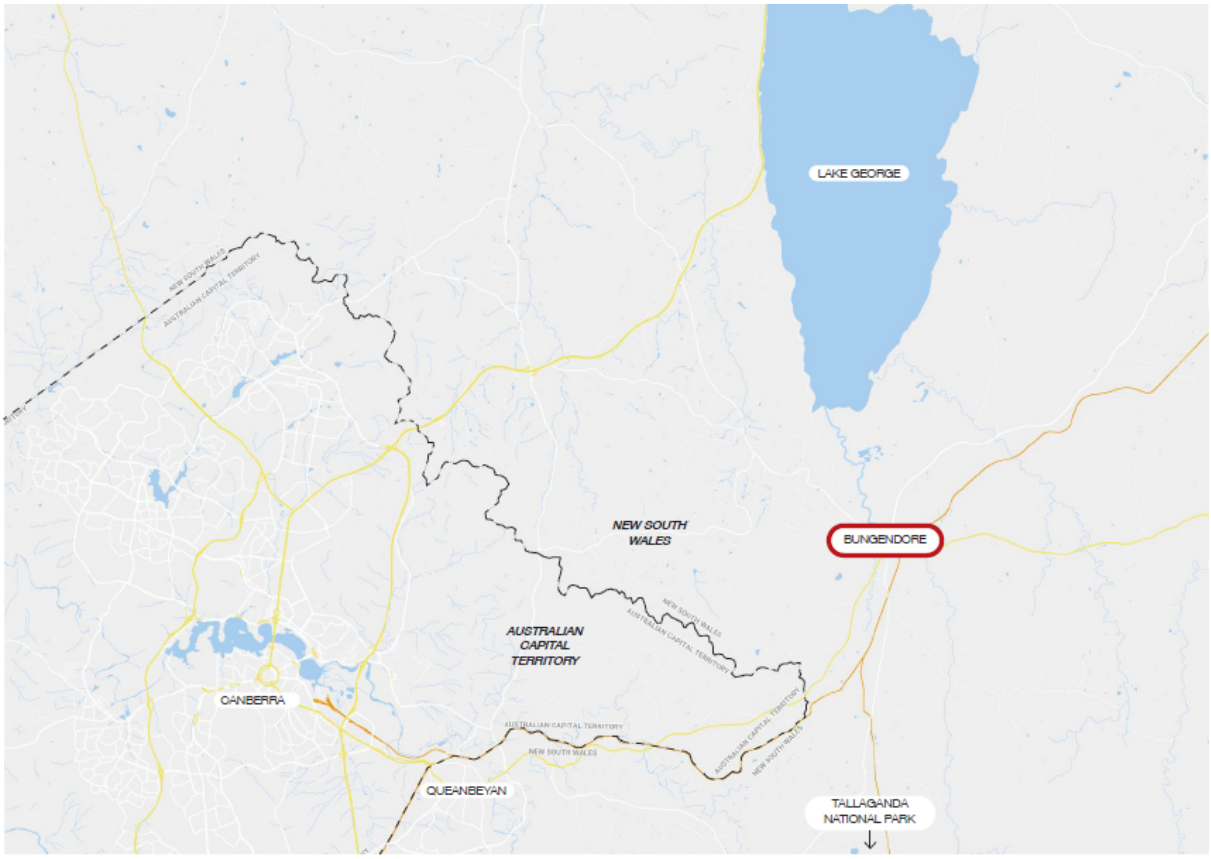


Figure 2-1 Regional context plan
Source: TKD Architects

2.2 Local context

Bungendore is a rural town on the open plain south of Lake George, bounded by significant ridges to the east, west and south. The town's topography is generally flat and is bisected by Turallo Creek running east to west and by the Sydney to Canberra rail line running north to south. Turallo Creek and its reserve are the only dominant natural land features within the town.

The Bungendore commercial centre is located along the Kings Highway, approximately 300m southwest of the site. There is also an industrial area located to the south of the town, which contains self-storage warehouses, car repair centres, landscape supplies and a coach centre. The small commercial and light industrial

areas provide local employment and services to residents in the town and the surrounding rural community.

Bungendore comprises mostly low-density residential development in the form of single and double storey dwelling houses. New residential subdivisions known as North Elmslea and Bungendore East are located to the east of the railway line and to the northern part of the town, respectively, and are expected to be fully developed over the next 10 years.

The major open landscape features within the town are Turallo Creek reserve, Frogs Hollow, Bungendore Park, Days Hill (Spooks Hill) and Turallo Reservoir Hill.

The photos below show the key surrounding development. A local context map is provided at Figure 2-2.

Figure 2-2 Local context map
Source: TKD Architects

Figure 2-3 Mick Sherd Oval
Source: TKD Architects

Figure 2-4 Community Swimming Pool
Source: TKD Architects

Figure 2-5 Council Chambers Building
Source: TKD Architects

Figure 2-6 Bungendore Scout Facility
Source: TKD Architects

Figure 2-7 Bungendore Common
Source: TKD Architects

Figure 2-8 Turallo Creek
Source: TKD Architects

2.3 Site description

The site includes a portion of Bungendore Park including Bungendore Pool and a portion of Mick Sherd Oval; the former Council site at 10 Majara Street; the portion of

Majara Street road reserve bounded by Turallo Terrace and Gibraltar Streets; Nos. 2 and 4-6 Majara Street; and a portion of Bungendore Common (refer to Table 2-1 below).

The site is approximately 29,205m^2 in area and consists of a relatively flat topography. The land is mostly cleared of vegetation with some mature trees interspersed throughout the lots.

Table 2-1 Subject lots

Property Address	Legal Description
6-14 Butmaroo Street	Part Lot 701 DP1027107
2 Majara Street	Lot 12 DP1139067
4-6 Majara Street	Lot 13 DP1139067 Lot 14 DP1139067
10 Majara Street	Lot 3 DP830878
Butmaroo Street	Part Lot 701 DP96240
Portion of Majara Street (between Turallo Terrace and Gibraltar Street)	N/A

An aerial view of the site is provided in Figure 2-9 below.

Figure 2-9: Site aerial depicting the land subject to the proposed High School.
Source: TKD Architects

Table 2-2 below provides a summary of the existing land use, frontages and access points are detailed in Table 2-2 below.

Table 2-2 Existing land use and access

Property address	Existing use	Frontage	Existing access
Part 6-14 Butmaroo Street	Bungendore Park, used as public open space	The park as a whole has frontages of approximately 200m to Butmaroo Street, Majara Street, Gibraltar Street and Turallo Terrace.	Pedestrian access to the park is gained via all four frontages, whilst vehicular access to the parking area within the park grounds is provided via Gibraltar Street

Property address	Existing use	Frontage	Existing access
		The portion of the park contained by the site has frontages of approximately 200m to Majara Street, 30m to Gibraltar Street and 120m to Turallo Terrace.	at the southwest corner of the site. The portion of the park contained by the site has no formalised vehicular access.
2 Majara Street	Bungendore Community Centre	Approximately 40m to Majara Street and 47m to McCusker Drive	Pedestrian access is gained via each frontage. The site has no formalised vehicular access.
4-6 Majara Street	Vacant land	Approximately 42m to Majara Street	Pedestrian and vehicular access are via Majara Street, though the site has no formalised vehicular access.
10 Majara Street	Public administration building used by QPRC	Approximately 106m to Majara Street	Pedestrian and vehicular access are gained via Majara Street.
Butmaroo Street	Vacant land	The lot as a whole has a frontage of approximately 140m to McCusker Drive, while the site has a frontage of approximately 120m to McCusker Drive.	Pedestrian access is gained via McCusker Drive. There is no formalised vehicular access.

2.4 Existing development

Bungendore Park, located at 6-14 Majara Street, is a recreational open space used by the community. The park contains a range of community facilities including Mick Sherd Oval, the community swimming pool, Bungendore Tennis Club, Anzac memorial, playground equipment, a public amenities building and car parking.

The Bungendore Community Centre, located at 2 Majara Street, provides a variety of rooms that can be hired for various community needs including meetings, social events and education programs. The venue currently hosts before and after school programs, community groups, health practitioners and other functions.

The Council building located at 10 Majara Street is one of three public administration office buildings used by QPRC within the LGA.

As discussed previously, the site will also occupy the portion of Majara Street between Turallo Terrace and Gibraltar Street. Majara Street is an existing local road.

2.5 Transport infrastructure

The road infrastructure in Bungendore generally consists of a grid of local roads. Kings Highway (B52), a sub-arterial road that connects Canberra to Batemans Bay, also passes through the town.

The site is well connected to the local road network, having frontages to four local roads, including Majara Street, Turallo Terrace, Gibraltar Steet and McCusker Drive.

Bungendore Station is located immediately to the south of the site. The station is serviced by the southern NSW regional trainline between Central Station in Sydney and Canberra and connects to nearby stations at Tarago and Queanbeyan.

The closest public bus stop to the site, located on Gibraltar Street between Mick Sherd Oval and Bungedore Public School, connects Bungendore with Queanbeyan (844/D841 service).

2.6 Vegetation, topography and natural features

The site is characterised by managed exotic grass (i.e., lawns and oval), gardens, and planted native and exotic trees. These areas have been subject to significant disturbance due to their regular use by the public (i.e., high pedestrian traffic, use of sporting fields and open space) and continual maintenance of the vegetated areas (i.e., mowing of lawns and garden maintenance).

The site generally falls from southwest to northeast towards Turallo Creek. The main school site falls 2m from east to west from the railway line to the proposed boundary on Mick Sherd Oval and 1.5m from south to north between Gibraltar Street and Turallo Terrace. The agricultural site has a steeper south-to-north fall of approximately 3.6m towards the creek.

2.7 Easements

Survey plans of the proposed site do not identify any current easements that apply to the site.

However, existing utility infrastructure exists on site, requiring new easements to be created. The closure of Majara street in particular will require a permanent easement to be created for the existing QPRC water main and underground high voltage (HV) cabling route.

2.8 Heritage

Two of the site's lots are identified as local heritage items, namely Lot 701 DP10227107, which contains Bungendore Soldiers Memorial, and Lot 701 DP96240, which contains Bungendore Common. While the entirety of Lot 701 DP10227107 is identified as part of the heritage curtilage, the memorial arch of the Soldiers Memorial is not located within the subject site. The Bungendore Common is currently used as public open space (dog off-leash area).

There are also a number of heritage items in close proximity to the site, including the Bugendore Train Station, which is a State significant item located directly to the east of the site. For further detailed discussion on heritage, refer to section 7.7 of this EIS.

3 Description of proposed development

The table below provides a summary of the key elements of the proposed development. The elements are described in further detail in the subsections below the table.

The new-build components of the school are to be constructed via Modern Methods of Construction (MMoC).

Table 3-1 Summary description of the development

Proposal element	Brief description
Demolition	The proposal includes demolition of: • Bungendore Community Centre (following construction and opening of the new community centre building) • Bungendore Pool • Oval amenities building to the south of the pool • Majara Street between Gibraltar Street and Turallo Terrace (including associated guttering and road infrastructure)
Tree removal and retention	• Removal of 63 trees • Retention of 108 trees
Earthworks	• Total cut volume = approximately 3,190m^3 • Total fill volume = approximately 3,460m^3 • Imported fill volume = 270m^3
Built form	• Construction of 3 double storey school buildings, alterations and additions to the existing single storey Council building and establishment of an Ag Plot and associated buildings • Construction of a new community library, Council shopfront and community health hub
Site area	29,205m^2
Gross floor area (GFA)	7,380m^2
Maximum height	12m
Land use	School (a type of educational establishment)
Student capacity	450 students

Proposal element	Brief description
Access	• The main pedestrian access to the high school will be provided on Gibraltar Street, with an additional pedestrian access point provided on Turallo Terrace • Vehicle access will be provided adjacent to the main pedestrian access via a new roundabout at the corner of Majara and Gibraltar streets adjacent to the main pedestrian access

Parking	• 44 car parking spaces will be provided to teachers and staff in an at-grade carpark, including 2 spaces for the mobility impaired
	• 4 bicycle parking spaces for staff will be provided in proximity to Building A
	• 76 bicycle parking spaces for students will be located at the northern and southern pedestrian entries
	• The proposal also includes the following community parking to partially off-set the loss of parking on Majara Street:
	  ○ 35 spaces on the southern side of Turallo Terrace
	  ○ 5 spaces on the northern side of Turallo Terrace

Landscaping	146 new trees proposed, plus numerous shrubs and groundcovers
Jobs	• Construction: 110 full-time equivalent • Operation: 41 full-time equivalent
Construction hours	• Monday to Friday: 7:00am to 5:00pm • Saturdays: 8:00am to 1:00pm • No work on Sunday or public holidays
Hours of operation	• Buildings A, B, C: 8:00am to 5:00pm Monday to Friday • Building D (hall/gym): 8:00am to 5:00pm Monday to Friday plus additional hours subject to joint-use agreement with QPRC • Building E (community building): Subject to operational requirements to be determined by QPRC
Off-site works	• 35 community car parking spaces on the southern side of Turallo Terrace near the proposed community centre and associated tree removal • Kiss-and-drop areas on the northern side of Gibraltar Street near main pedestrian entry and on the southern side of Turallo Terrace

Proposal element	Brief description

	• New roundabouts at the intersection of Gibraltar Street/Majara Street and Gibraltar Street/Butmaroo Street
	• Wombat/school pedestrian crossing on Gibraltar Street to replace existing school crossing between the primary school and high school
	• Relocation of primary school bus zone to the southern side of Gibraltar Street
	• Pedestrian crossing across Turallo Terrace to support pedestrian movement between school and Ag Plot and Scout Hall
	• Realignment of shared paths within and in proximity to Mick Sherd Oval and high school site including:
	  ○ Link existing shared path on Turallo Terrace (east of Butmaroo Street) to existing shared path on Turallo Terrace the southwest of Turallo Creek
	  ○ New shared path to the west of Mick Sherd Oval, connecting the shared path on Turallo Terrace to Gibraltar Street

3.1 Demolition

The proposal requires demolition of the following buildings and structures:

- Bungendore Pool;
- Bungendore Community Centre;
- Oval amenities building to the south of the pool; and
- Majara Street between Gibraltar Street and Turallo Terrace (including associated guttering and road infrastructure).

The proposal also requires relocation of existing Mick Sherd Oval flood lights and relocation of the Bush Balladeers Place and rotunda (Poets Corner). The Bush Balladeers Place and rotunda are currently situated on Mick Sherd Oval. These will be moved in their entirety (under a separate approval process) to Frogs Hollow, the reserve on Tarago Road.

The existing Bungendore Community Centre will remain operational until the proposed new community centre (Building E) is constructed and operational. There will be no period of time during which community centre facilities are unavailable for use.

It is understood that the existing community swimming pool is intended to be replaced by a new heated 25m outdoor pool to be located at the future Bungendore Sports Hub for which Council has secured funding. The new eight-lane outdoor swimming pool will be of a significantly higher quality than Bungendore Pool and is expected to provide an improved recreation experience. The new pool will also remain accessible

to the population, being less than 1km from the existing Bungendore Pool. The new pool is expected to be operational by the 2022 – 2023 summer season, the same year as the school. The new pool is not proposed under this application but rather is to be delivered separately by Council.

Figure 3-1 below shows an extract of the demolition plan.

A hazardous materials (HAZMAT) survey for the Bundgenore Community Centre and existing Council building will be undertaken. DoE does not have ownership of the site and therefore cannot vacate the buildings to perform a detailed HAZMAT survey at this stage.

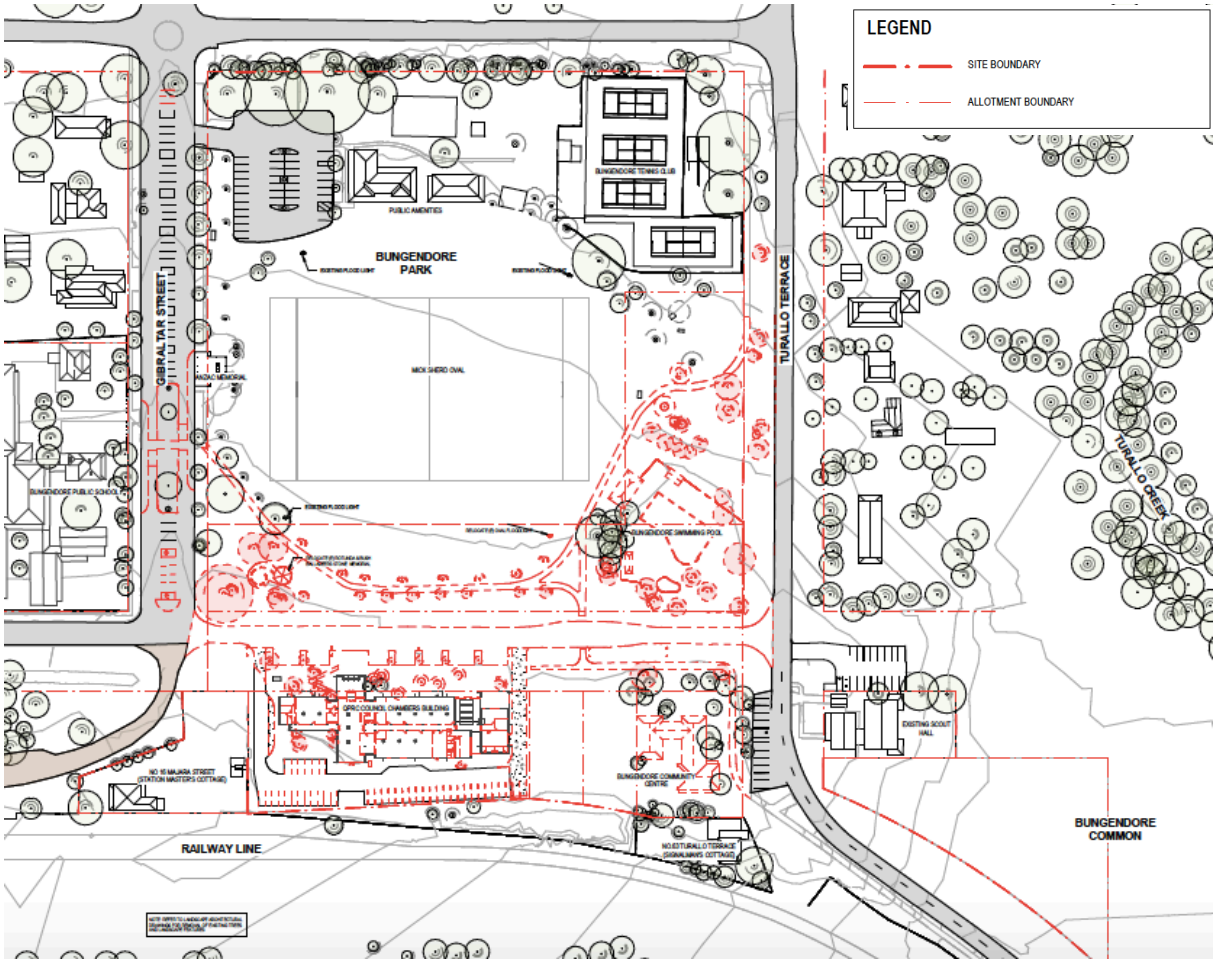


Figure 3-1 Demolition plan
Source: TKD Architects

3.2 Tree removal and retention

The proposal seeks to retain trees where possible, with a total of 108 trees proposed to be retained.

It is proposed to remove 76 trees including 6 high retention value trees, 42 medium retention value trees and 28 low retention value trees. These trees will be highly affected (>20% tree protection zone encroachment and/or structural root zone

encroachment) and cannot be retained under the proposed design footprint. For details of the trees to be removed, refer to the arborist report at **Appendix 11**.

The removal of the 6 high retention value trees is considered acceptable given the proposal has been designed to maintain the majority of the site's significant trees and provides for a high quality landscape outcome including 146 new tree plantings. For further details on the proposal's landscape strategy, refer to section 3.5 and **Appendix 5a and 5b** of this EIS.

Of the 76 trees to be removed, 9 trees are located outside of the site boundaries and are proposed to be moved due to various off-site works including provision of community car parking.

A tree plan is provided below (with a high quality version provided in the landscape package at **Appendix 5a and 5b**). For further discussion on tree removal and retention, refer section 7.2 of this EIS.

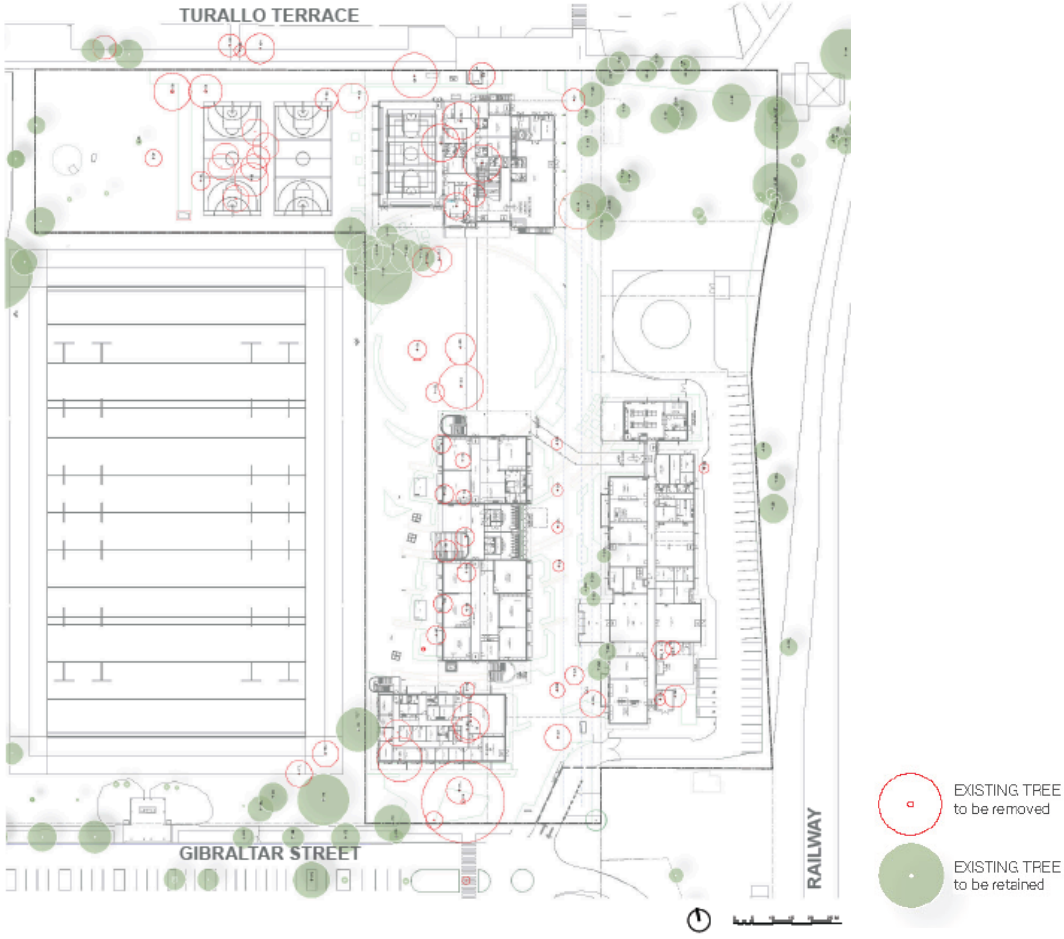


Figure 3-2 Tree removal/retention plan
Source: Context

3.3 Earthworks

The proposal requires limited cut and fill to form the platforms for the buildings and play areas. A bulk earthworks drawing is provided in the civil engineering report at **Appendix 15**, and an extract of the drawing is provided below.

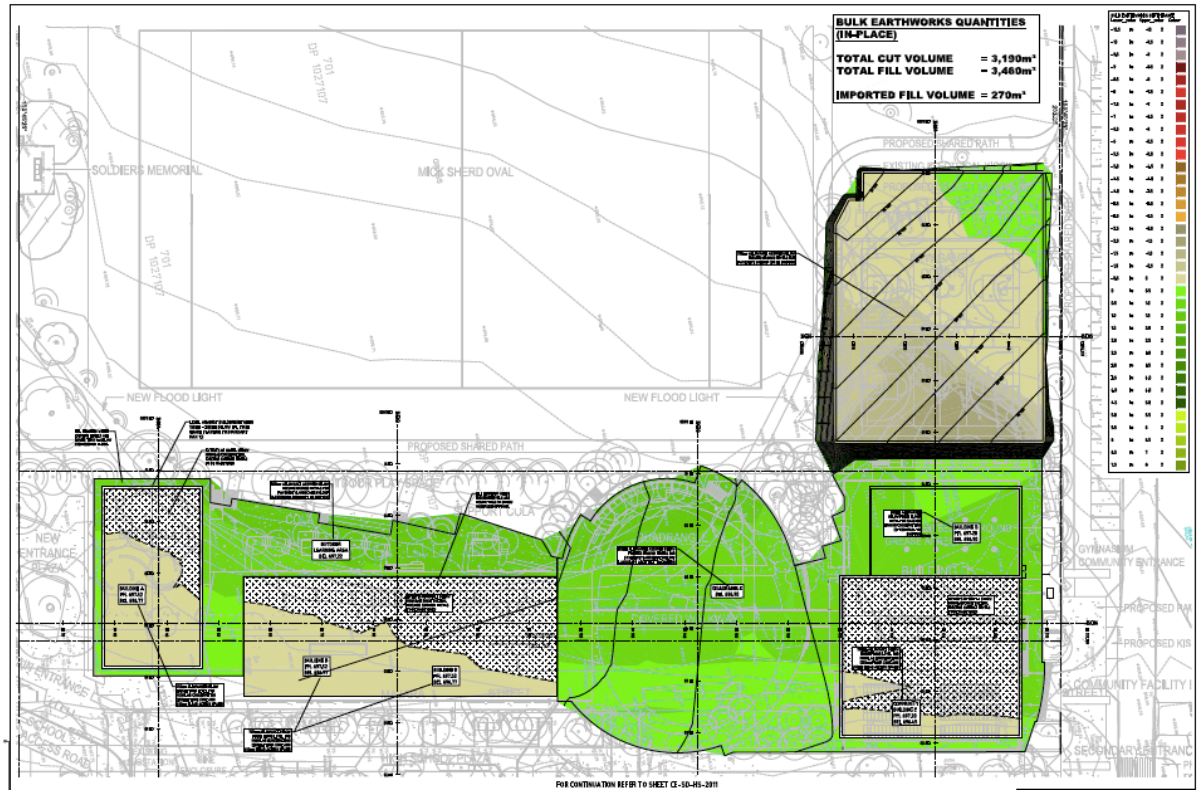


Figure 3-3 Earthworks plan
Source: M+G Consulting

3.4 Built form and design

3.4.1 Layout

The proposed school includes a main school site contained by Turallo Terrace to the north and Gibraltar Street to the south, and a separate Ag Plot to the north of Turallo Terrace.

The new facilities on the main campus are provided within three new buildings and one existing building including:

- Building A (new 2-storey building), which contains administrative facilities;
- Building B (new 2-storey building), which contains General Learning Spaces;
- Building C (existing 1-storey building to be refurbished), which contains workshops and labs; and

- Building D+E (new two-storey building), which contains the school gym and canteen (Building D) as well as the new community library, Council shopfront and community health hub (Building E).

Built form on the separate Ag Plot includes:

- Building F (new 1-storey building), which contains a workshop plus animal and plant spaces; and

- Small Scout storage shed.

Circulation routes and open spaces between buildings on the main campus provide permeability throughout the campus, creating strong connections with the existing Oval and providing an open and low density response, in keeping with the town's context.

Buildings have been sited to respond to the town's urban grid, provide significant setbacks from the adjacent boundaries to retain the open character of the town, and provide new high quality landscape, streetscapes and public spaces.

A site plan is provided in Figure 3-4.

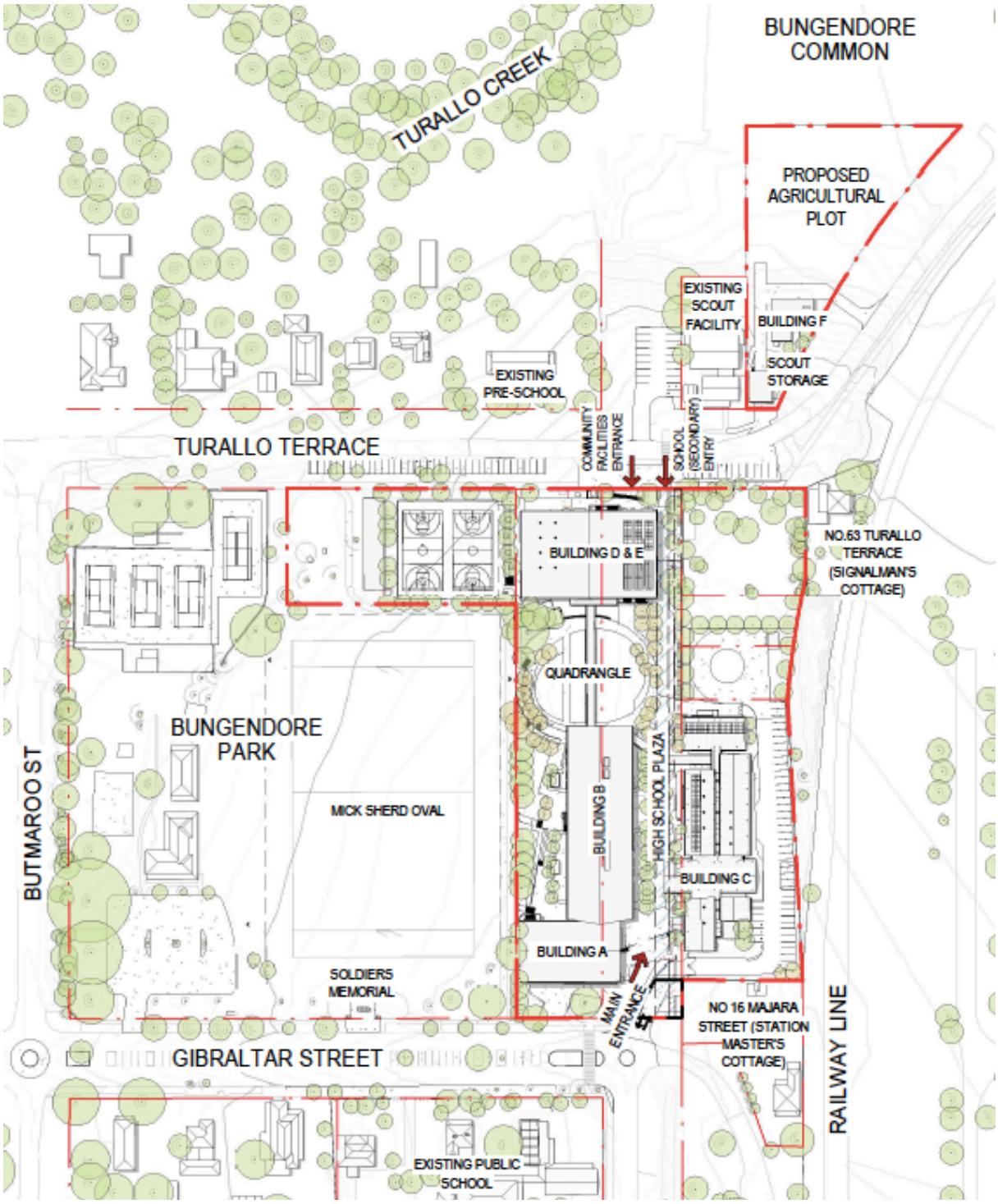


Figure 3-4 Site plan
Source: TKD Architects

3.4.2 Height, bulk and scale

The new high school buildings are one and two storey in scale. Floor-to-floor heights are approximately 4m and have been designed to accommodate NCC and SINSW requirements for ceiling heights and accommodate services reticulation efficiently. Roofs have also been designed with shallow pitches to minimise the bulk of the buildings.

The new facilities within the main campus have been split into three new buildings which breaks down the overall building mass to respond to the bulk and scale of the town. The new buildings have been located in the centre of the site, with large landscaped setbacks providing suitable setbacks to the public realm and nearby development.

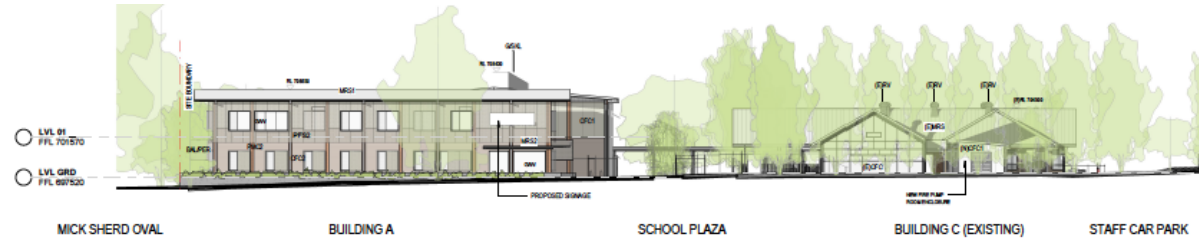


Figure 3-5 South elevation (Building A and existing Council building)
Source: TKD Architects

Figure 3-6 East elevation (Building A and B)
Source: TKD Architects

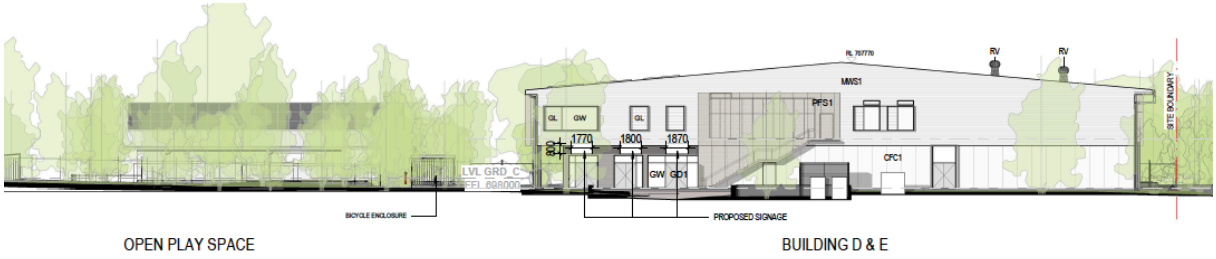


Figure 3-7 North elevation (Building D+E)
Source: TKD Architects

3.4.3 Density

The density of the development is driven by the requirement to cater for the predicted student numbers and forecasted growth of the town, and the incorporation of new community facilities.

The proposed GFA is 7,380m^2. Based on a site area of 29,205m^2, the proposed FSR is 0.25:1. This density is considered appropriate to the rural town setting.

3.4.4 Setbacks

The proposal features the following setbacks from the site boundaries:

- **North boundary (Turallo Terrace)**: Building E+D is setback 8m from the northern boundary, which is consistent with the typical setbacks of surrounding development in proximity to the site and provides convenient access for the community facilities.

- **South boundary (Gibraltar Street):** Building A has a large set back to Gibraltar of 16.5m. The large setback supports the town's open character, supports a welcoming and inclusive entrance space and generally matches the entrance to the adjacent public school.

- **East boundary (Rail Corridor):** Building C is the existing Council building which will retain its existing setback to the rail corridor (approximately 16.8m), adjacent to the eastern boundary of the site.

- **West boundary (Mick Sherd Oval):** A large setback area is provided between Building B and D+E to the western boundary to accommodate the open place space and games courts.

Building F is sited on an irregular shaped lot and has been setback from Turallo Terrace/McCusker Drive to maintain a similar setback of other adjacent buildings, as far as practical, whilst achieving adequate access to the building, separation from adjoining developments, connection with the main school site and optimisation of the agricultural open space area to support curriculum activities.

3.4.5 Open spaces

Buildings have been sited to provide sufficient open play space for the high school on the western edge of the campus and between Buildings B and D. The ability to contain the majority of open play space to the western portion of the site enables good opportunity for visual surveillance and supervision during lunch and recess. The open space areas are also designed to break down the overall built form of the proposal and provide separation between each of the buildings.

Two new games courts are also proposed to the north of Mick Sherd Oval to provide additional open play space for students during supervised curriculum activities.

Mick Sherd Oval is not proposed to be utilised as general play space for the school. Instead, the Oval will be utilised by the school during school hours for delivery of the school curriculum.

3.4.6 Façade articulation

Building A

The scale of the façade has been broken down into vertical bays through expressed cladding that define the building's planning and structural grid. At ground floor level,

the textured fibre cement cladding provides the building with a solid, rough base, responding to the rusticated historic façades typical of the town.

A perforated, angled screen at the first floor provides shading to windows and the facade, evoking verandahs typical of the town. The perforated screen, combined with defined overhanging eaves, expresses the horizontality of the building.

Figure 3-8 Building A - southern elevation
Source: TKD Architects

Building B

The linear form is expressed via rhythm and repetition of windows, vertical and horizontal sunshades, and a single linear roof form that extends beyond the building to provide shelter and shade to covered walkways and stairs, drawing users through the campus.

With its facade composition and materiality, the building takes influence from the region's pastoral heritage.

Integration of planting within the building, including planted balustrades to key circulation nodes and a green wall to the eastern façade, provides permanence to the building and responds to biophilic design principles.

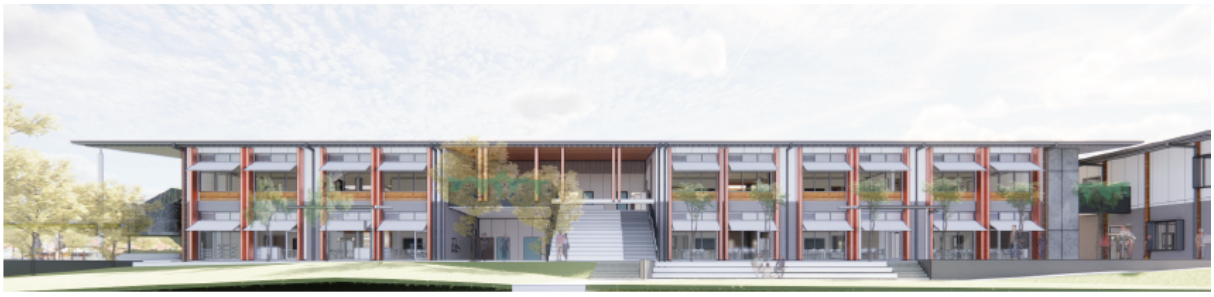


Figure 3-9 Building B - western elevation
Source: TKD Architects

Building C

Building C is the existing Council building constructed of bagged finish brickwork, earthy coloured fibre cement cladding, and corrugated metal walling and roofing. It is a good example of contemporary architecture in keeping with the historical village character of Bungendore.

Building D+E

Building D+E is larger in size, accommodating the school's key facilities to be shared with the community. The design is reflective of the agricultural character of the northern portion of the site and beyond.

Perforated screening and an extension of the hall roof provide shelter over the main covered learning space to the south. The library entrance is recessed, and double height glazing provides views from the tiered learning seating to outside. At first floor to the north, the full height glazing is mirrored to provide views towards the agricultural plot, Turallo Creek and country beyond.

To the north and southern elevations, screened egress stairs are expressed, contributing to the overall expression of the façades.

Fibre cement cladding and large glazed windows extending down to ground level provide a defined public entry to the community facilities. At first floor level, picture windows with projecting sunshades frame views of the creek and country beyond to the north. Angular perforated screening shades the eastern facade and creates a sense of rhythm towards the new school plaza.

Figure 3-10 Building D+E – northern elevation
Source: TKD Architects

Building F

Building F is smaller in footprint and scale and has a simple skillion roof form rising to the south addressing the agricultural plot and views of the rural country beyond. The facade is designed to be robust and utilitarian, typical of an agricultural building.

The scout storage shed, similar to Building F, is simple in form and facade composition, reflecting its utilitarian use.

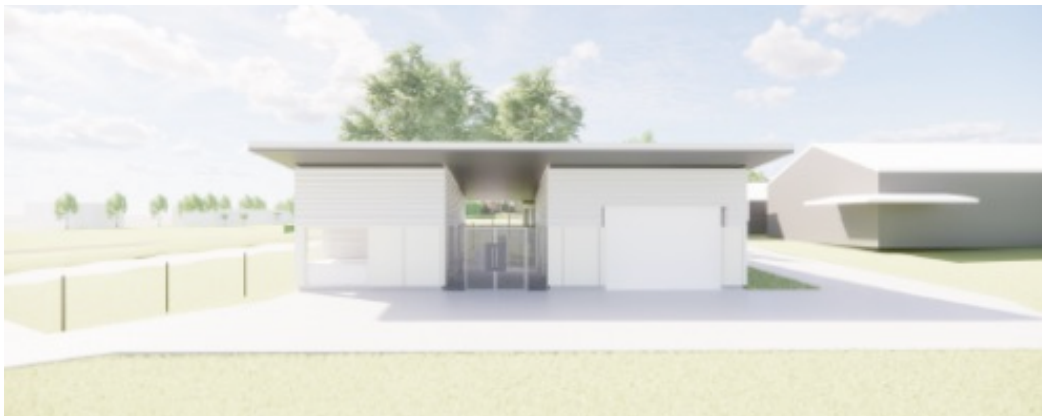


Figure 3-11 Building F – southern elevation
Source: TKD Architects

3.4.7 External materials and finishes

Materials and finishes have been selected for their aesthetic, low maintenance and durable qualities. The MMoC methodology adapted for the project has been a key driver in the material selection, requiring materials to be lightweight and easily transportable.

The earthy quality of colours provide a Connection with Country, responding to the natural surrounding landscape, as well as reflecting material tonality of the existing Council building.

For the buildings on the agricultural plot, high level corrugated walling is proposed to respond the agricultural, rural character and adjacent existing scout facility.

Corrugated metal roofing is proposed to each of the buildings to remain in keeping with the materiality and character of the town.

The proposed materials are illustrated at Figure 3-12 below and further detail provided in **Appendix 4.**

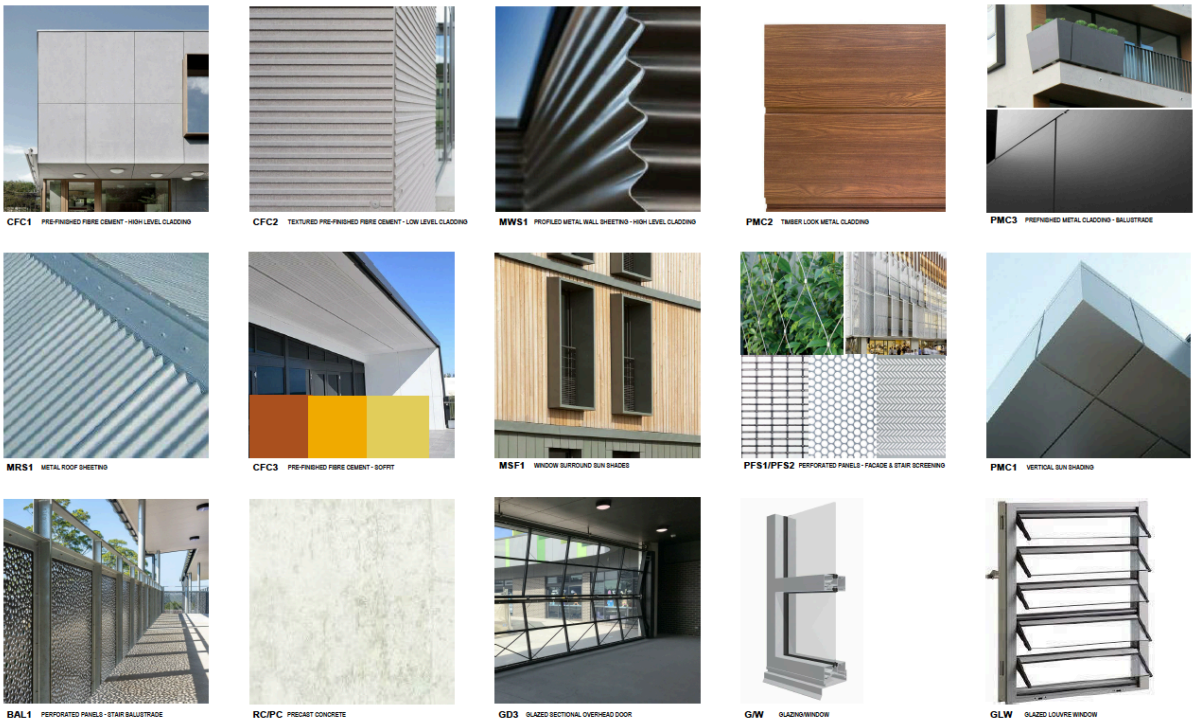


Figure 3-12 Sample external materials and colours
Source: TKD Architects

3.5 Landscaping

A landscape report and plans have been prepared by Context and are attached at **Appendix 5a and 5b**. Key features of the landscape design include avenue planting, low height walls for informal seating, semi enclosed outdoor learning areas, vegetated garden beds, shade trees, open play space, turfed embankments and tiered seating.

The new school plaza is to act as a circulation, breakout and play space for the school.

Covered walkways, covered outdoor learning spaces and canopy trees throughout the campus provide protection from the sun and rain.

A total of 146 new tree plantings are proposed. One of the key objectives of the landscape design is the maximisation of the overall tree canopy area to maximise shade in summer, protection against winter winds and to reduce the heat island effect. Trees are also a main landscape element that defines the character, identity and amenity of the site. The ratio between evergreen native and deciduous non-native trees aims to achieve a balance between the need to maximise the summer shade and still enable winter sun.

Canopy coverage within the main school grounds (excluding the Ag Plot) will nearly double. The canopy will increase from 2,946m^2 (11.9% of site area) to 5,727m^2 (23.2%).

Most of the existing significant trees in the northeastern corner of the site and to the southwest of Building D have been retained and have been incorporated into the landscape design.

The orientation of the north-south school plaza, which replaces the existing section of Majara Street, is strengthened by a row of native trees on its western side, while tree plantings along the eastern side are restricted by proposed services.

A row of native trees also marks the western boundary between the school and the existing Oval and provides shade for spectators of sports games.

The main quadrangle space and the extensive outdoor play space are both framed by rows of trees, spatially enclosing these spaces and providing shade. The proposed games courts is also framed by shade providing trees.

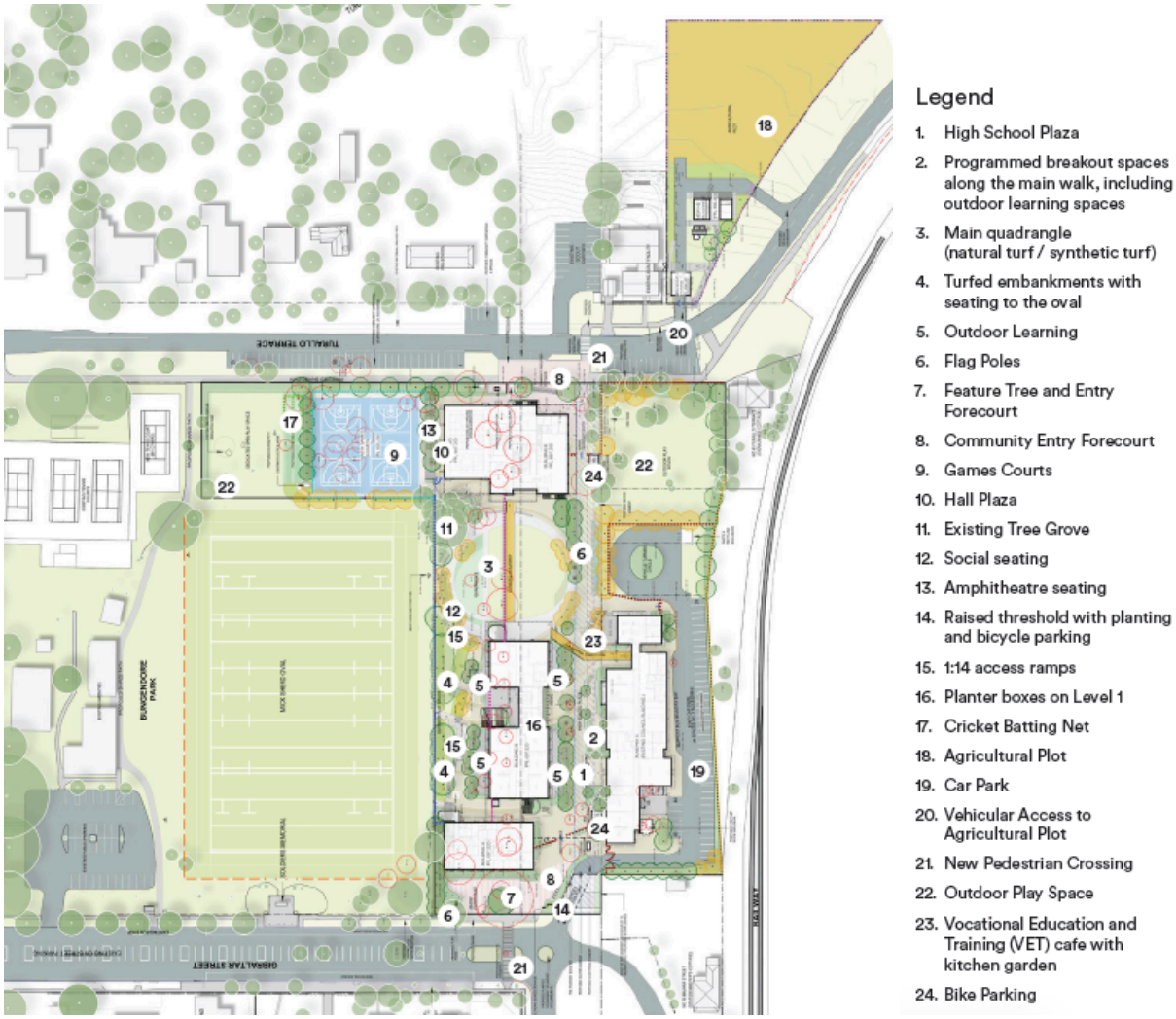


Figure 3-13 Landscape site plan
Source: Context

3.6 Access and circulation

Pedestrian access

The main pedestrian access to the high school will be provided on Gibraltar Street, with an additional pedestrian access point provided on Turallo Terrace. New road infrastructure, including a wombat/school pedestrian crossing and new/extended

footpaths and shared paths, are also proposed to provide improved access to and from the site.

Vehicular access

Vehicular access into the site will be provided via the northern leg of the proposed roundabout at the intersection of Gibraltar Street and Majara Street. Only teachers, staff and waste collection vehicles will have access to the new access road that will be controlled via a gate and a reader/intercom.

Pick-up/drop off

The high school student pick-up/drop-off zones will be on the northern side of Gibraltar Street (15 spaces) and the southern side of Turallo Terrace (3 spaces), adjacent to the high school site. The zone on Turallo Terrace will provide utility to parents (particularly in the AM peak) residing in northern Bungendore to drop their students off and travel westbound onto Molonglo Street/Kings Highway and onto the commercial centres of Canberra and Queanbeyan. The pick-up/drop-off zones will be controlled by No Parking signage (8:00am to 9:30am and 2:30pm to 4:00pm school days) to encourage vehicle turnover. Outside of these periods, the pick-up/drop-off zone can be used for parking by the general public.

There will be opportunities for parents/guardians with special needs children attending the high school and minibuses associated with the NSW's Government Assisted School Travel Plan (ASTP) to pick-up/drop-off their children within the staff carpark. While no dedicated bays will be provided for such pick-up/drop-off, provision of ASTP and special needs access within the staff park will provide separation from other parental pick-up/drop-off activity and occur behind gates, significantly reducing student safety risks.

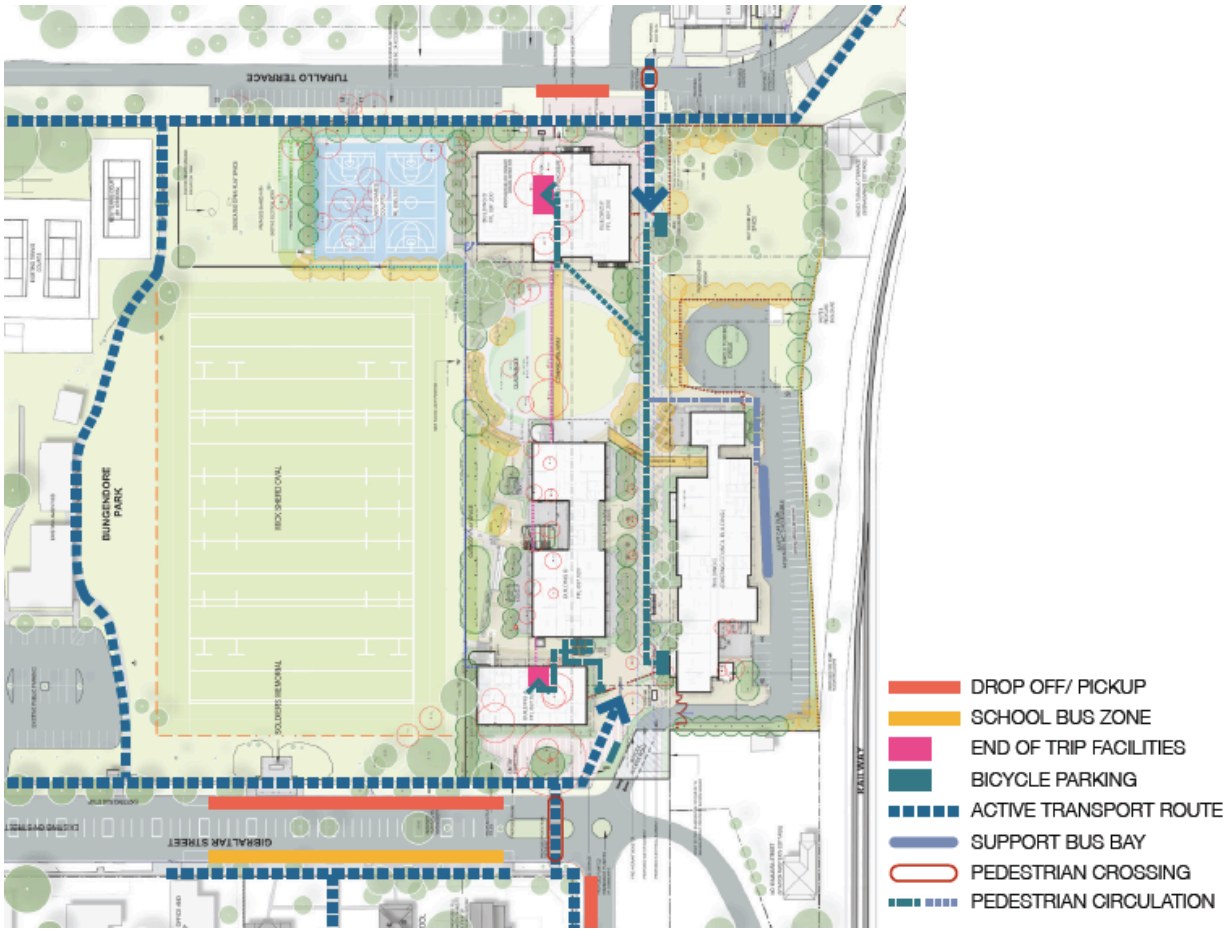


Figure 3-14 Access diagram
Source: TKD Architects

3.7 Car parking and servicing

The proposed carparking strategy has been designed to utilise the existing Council building carpark and surface material to the eastern side of the existing building for staff parking. A total of 44 spaces including 2 accessible spaces are provided. Community carparking (35 spaces) will be provided along Turallo Terrace adjacent the new games courts and open play space.

A separate driveway entry into the car park is located parallel to the pedestrian entry and is directed behind the technology building to provide a clear separation between pedestrian and vehicular movement while allowing for car parking for staff and site servicing. A planter provides a safety barrier and landscaping buffer at the school entry.

A new turning head is proposed to the northern end of the car park to facilitate turning of a waste collection vehicle.

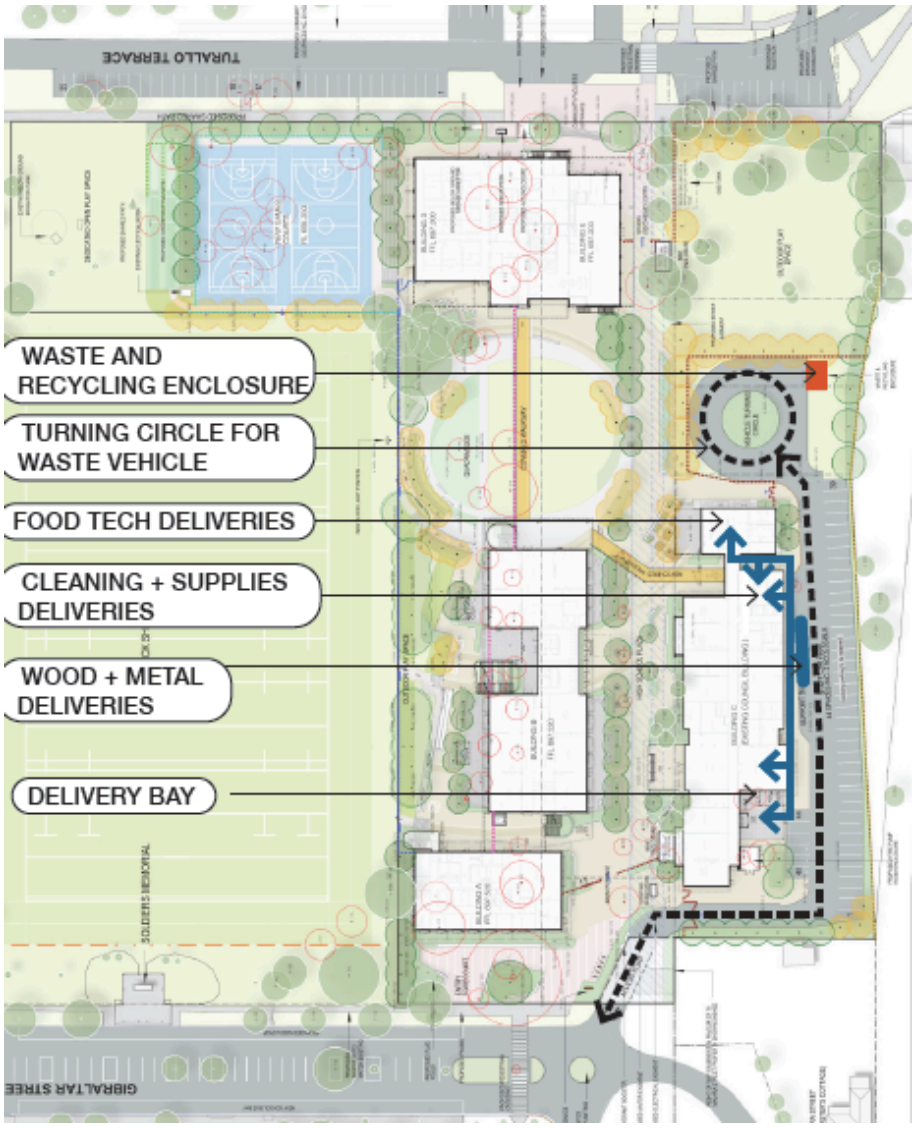


Figure 3-15 Site servicing strategy
Source: TKD Architects

3.8 Security and fencing

The fencing type to site boundaries varies across the site, responding to the adjacent uses. The fencing plan generally includes the following elements:

- Main entries will include EFSG-compliant 2.1m palisade fencing;
- Fencing to Mick Sherd Oval will be lower in height to provide a more open connection to the community and Oval;
- 2.1m fence line is proposed in the centre of the campus to provide a secure line for the school and is in place to provide a safe environment for students and staff in the case of an emergency;
- 2.1m high chain wire fence surrounding Ag Plot; and

- Fencing to the rail corridor is proposed as 2.4m high palisade fencing to comply with TfNSW requirements.

The proposed fencing plan is illustrated at Figure 3-16 below.

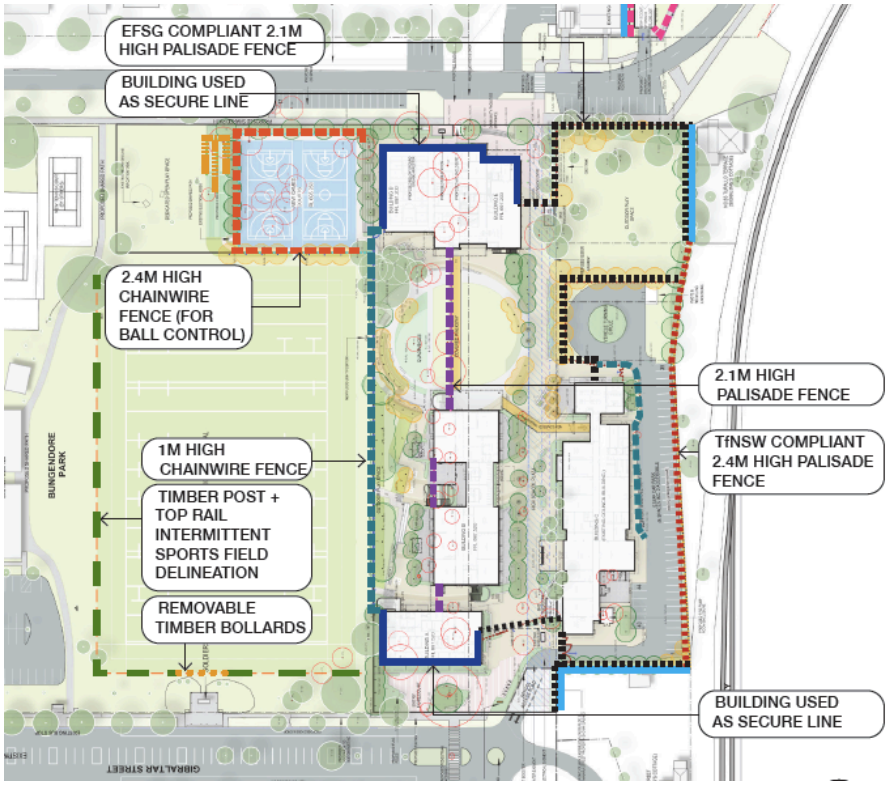


Figure 3-16 Fencing plan
Source: TKD Architects

3.9 Utilities

The proposal will connect into the existing sewer, potable water, gas and telecommunications infrastructure available to the site.

The existing substation that currently services the existing Council building will be upgraded to a new larger Essential Energy kiosk substation.

The proposal will also include the installation of a 70kW photovoltaic (PV) solar power grid-connect rooftop system to assist in the offset of power consumption costs on site.

Following closure of Majara Street, a permanent easement will need to be created for the existing QPRC water main and underground High Voltage cabling route for the portion of the road affected by the closure.

3.10 Staging

The existing Bungendore Community Centre will remain operational until the proposed new community centre (Building E) is constructed and operational. There will be no period of time during which community centre facilities are unavailable for use.

Approximately 35 QPRC staff may need to be accommodated in the Council building to be retained for the duration of the works and into occupation. The details of this arrangement are subject to discussions with Council.

The proposal does not include any other staged construction or occupation arrangements.

3.11 Construction

Construction is anticipated to commence early 2022 and be completed in early 2023. Construction of the proposal will be undertaken during standard hours, namely:

- Monday to Friday: 7:00am to 6:00pm;
- Saturdays: 8:00am to 1:00pm; and
- No work on Sunday and public holidays.

Approximately 110 full-time equivalent jobs will be created during construction.

3.12 Operational details

Table 3-2 below provides an overview of the proposed use and hours of operational for the proposal.

Table 3-2 Operational details

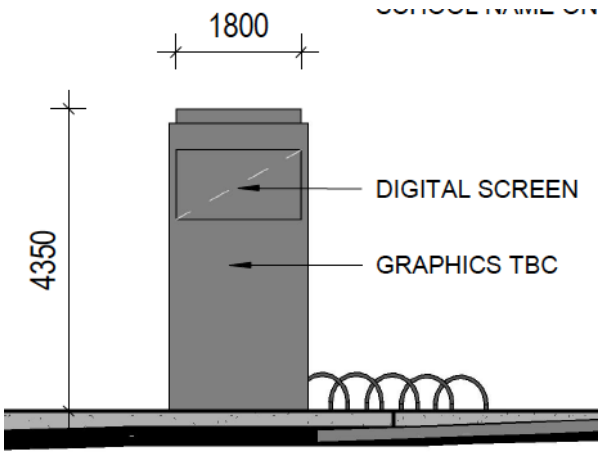
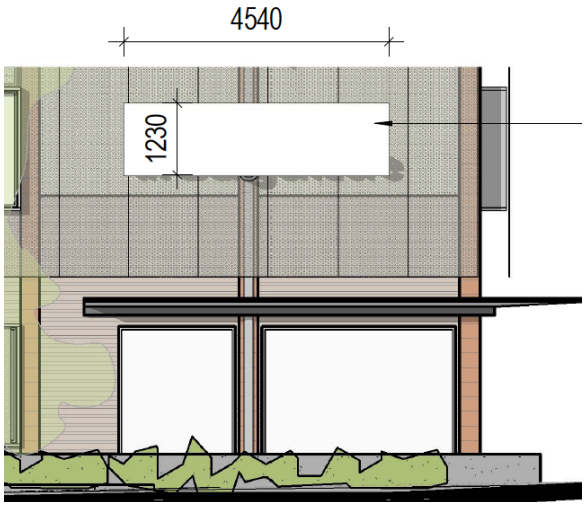
Building/activity	Use details	Hours of operation
General	The new high school in Bungendore will cater for students Year 7 to Year 12. The school will have the following capacity following completion of the development: - 41 full time staff - 450 students	Monday to Friday 8:00am to 5:00pm
Hall/gym	Generally used during standard school hours. This application contemplates the future use of school facilities out of school hours. In particular, the use of the hall and associated facilities for school events such as presentation nights, drama or music recitals. The application contemplates the use of the hall for community use, whether for one-off or periodic events. This will be subject to reaching a shared use agreement in the future.	Monday to Friday 8:00am to 5:00pm Saturday, Sunday and public holidays 8:00am to 10:00 The hall may be used outside of standard school hours on weekdays until up to 10:00pm subject to a possible future joint-use agreement with Council

Building/activity	Use details	Hours of operation
Outdoor sports courts	Intended to only be used by the school during standard school operating hours Available for community use outside school hours and may be subject to a possible future joint-use agreement with Council	Monday to Friday 8:00am to 5:00pm
School library	Intended use for school only during standard school hours	Monday to Friday 8:00am to 5:00pm
Community building	Health Hub and Community Library	As per the existing Council hours of operation Monday to Friday 8:30am to 4:30pm
Waste collection	Waste contractor to transfer waste bins from the waste storage area in the car park area to the adjacent waste collection point and then transfer the bins to the waste storage area at nominated times in accordance with the relevant waste contract (Refer to section 7.15 and **Appendix 20** for further details on waste management)	It is anticipated that waste collection will occur outside of peak school hours

3.13 Signage

Two signs are proposed as part of this application, as described in Table 3-3. The location of the signs is shown at Figure 3-17.

Table 3-3 Proposed signage

Signage type	Size and location	Image
Digital pylon sign	4.35m max height 1.8m-wide digital display Located at main pedestrian entry	
Wall sign	4.54m x 1.23m display area for school identification (exact content yet to be determined) Located on second storey of Building A south elevation near main pedestrian entry	

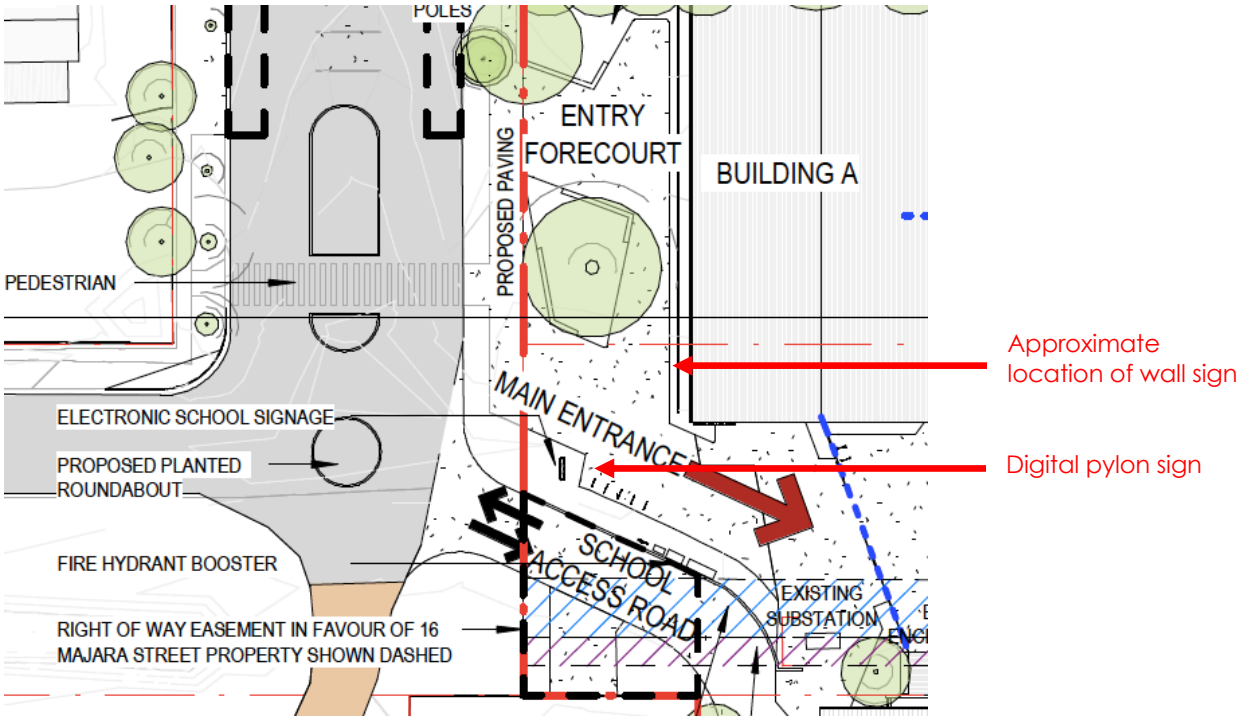


Figure 3-17 Signage location plan
Source: TKD Architects

3.14 Joint use arrangements

Mick Sherd Oval, new community centre, school hall and outdoor sports courts will be subject to joint use agreements between QPRC and DoE.

It is anticipated that the Oval will be used exclusively by the school during school hours for delivery of the school curriculum. The formal arrangements are subject to ongoing discussions between QPRC and DoE.

3.15 Off-site works

The proposal includes upgrades to the surrounding public domain/road reserve as follows:

- 35 community car parking spaces on the southern side of Turallo Terrace near the proposed new community building;
- Kiss-and-drop areas on the northern side of Gibraltar Street near the main pedestrian entry and on the southern side of Turallo Terrace;
- New roundabouts at the intersection of Gibraltar Street/Majara Street and Gibraltar Street/Butmaroo Street;
- Wombat/school pedestrian crossing on Gibraltar Street to replace existing school crossing between the primary school and high school;
- Relocation of primary school bus zone to the southern side of Gibraltar Street;

- Pedestrian crossing across Turallo Terrace to support pedestrian movement between school and Ag Plot and Scout Hall;
- Realignment of shared paths within and in proximity to Mick Sherd Oval and high school site, including:
    - Link existing shared path on Turallo Terrace (east of Butmaroo Street) to existing shared path on Turallo Terrace the southwest of Turallo Creek; and
    - New shared path to the west of Mick Sherd Oval, connecting the shared path on Turallo Terrace to Gibraltar Street.

For further detail, refer to the Transport Assessment at **Appendix 6a**.

4 Strategic context

The proposal is consistent with the relevant planning provisions, goals and strategic planning objectives in relevant planning policies, as outlined in the table below.

Table 4-1 Assessment against strategic plans

Strategic plan	Purpose
NSW State Priorities	The 14 NSW State Priorities were unveiled in 2019 to provide a framework for economic growth, infrastructure delivery, service provision, and community wellbeing and safety across NSW. The proposal seeks to construct a new school to enable increased student capacity within Bungendore. Through its provision of important educational services, the proposal supports the priority of "bumping up education results for children". The other priorities are generally not relevant given the proposal's nature and location.
State Infrastructure Strategy 2018 – 2038 Building the Momentum	The State Infrastructure Strategy is a 20-year infrastructure investment plan for the NSW Government that places strategic fit and economic merit at the centre of investment decisions. The Strategy's strategic objective for education infrastructure is to "Deliver infrastructure to keep pace with student numbers and provide modern, digitally-enabled learning environments for all students". The Strategy primarily relates to addressing enrolments in schools, which are expected in to increase by 25% over the next 20 years. The proposal is consistent with the Strategy's relevant objective in that it provides for important social infrastructure to support the states future population growth incorporating best practice approaches to education.
Future Transport Strategy 2056	The Future Transport Strategy 2056 is an update of the NSW Long Term Transport Masterplan. It sets the 40-year vision, directions and outcomes framework for transport customer mobility in NSW. The Strategy will be delivered through a suite of accompanying plans, including Services and Infrastructure Plans and issue-based or placed-based Supporting Plans. The proposal encourages active transport and the utilisation of public transport, which is assisted by the school's central location within Bungendore, close to residential development and Bungendore Station and Bungendore Public School. There are no other specific objectives or actions in the strategy directly relevant to the proposal.

Strategic plan	Purpose
South East and Tablelands Regional Plan 2036	The South East and Tablelands Regional Plan 2036 is the NSW Government's strategy for guiding land use planning decisions for the region over the next 20 years. The Plan sets out four strategic goals for the South East and Tablelands region: • A connected and prosperous economy; • A diverse environment interconnected by biodiversity corridors; • Healthy and connected communities; and • Environmentally sustainable housing choices The Plan contains a number of directions that are generally relevant to the proposal particularly Direction 21, as detailed below. *Direction 21: increase access to health and education services* Schools near the NSW-ACT border face increased enrolments and many schools have capacity to use infrastructure more effectively. New schools, if required, will be established where there are no other sustainable options available within existing assets. Planning for new schools in regional NSW will consider the specific needs and characteristics of local student population trends. *Actions* *21.2 Work with ACT government to meet the growing and changing education needs of cross border communities* The Queanbeyan-Palerang LGA is expected to require an additional 12,050 dwellings to accommodate 25,050 more people by 2036. Residential growth areas include Bungendore. The anticipated increase in population in Bungendore has resulted in the requirement for a new high school.
Queanbeyan-Palerang Local Strategic Planning Statement Towards 2040	The LSPS sets a 20-year vision for Queanbeyan-Palerang. A series of land-use planning priorities are identified to inform the direction and content of the LSPS. The vision for Bungendore in 2040, as identified in the LSPS is that it is a vibrant town with a historic village character that attracts visitors and residents alike. The LSPS states that families should have the choice for the children to attend local primary and secondary schools within the town. Planning actions for Bungendore include: • Planning Priority 2: We have an active and healthy lifestyle:

Strategic plan	Purpose
	○ 4.2.3 Undertake needs analysis for the main townships to identify necessary facilities to meet the needs of the existing and future population The anticipated increase in population in Bungendore has resulted in the requirement for a new high school.
Bungendore Structure Plan 2048	The Bungendore Structure Plan 2048 has been prepared to guide the growth of Bungendore in a coordinated and efficient manner. The plan states that the current rate of growth will produce an additional 4,152 residents into Bungendore by 2041. This equates to an additional 1,384 dwellings. As a result of the increase in population there will be more demand on services such as health services, schools, child care, and emergency services, confirming the need for additional school infrastructure. The plan notes the State Government's commitment that there will be a high school in Bungendore to cater for the increased demand of the growing population. The high school will complement the existing primary school.
Crime Prevention Through Environmental Design (CPTED) Principles	The proposal has been assessed against the four key principles of CPTED including surveillance, access control, territorial reinforcement and space management. Refer to the CPTED Report at **Appendix 30** for further discussion.
Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)	This policy sets out the NSW Government's position on design in the urban environment. It provides clarity on what the NSW Government means by good design and functions to assist in the design and assessment of projects. The policy includes seven applicable objectives: • Better fit – contextual, local and of its place; • Better performance – sustainable, adaptable and durable; • Better for community – inclusive, connected and divers; • Better for people – safe, comfortable and liveable; • Better working – functional, efficient and fit for purpose; • Better value – creating and adding value; and • Better look and feel – engaging, inviting and attractive. In accordance with these objectives, the proposal is sustainable, functional, sensitive to its context and visually distinctive. Notably, the design has been reviewed by the Government Architect NSW as discussed at section 6.2, **Appendix 4** and **Appendix 23** of the EIS.

Strategic plan	Purpose
Healthy Urban Development Checklist	The purpose of the Healthy Urban Development Checklist is to assist health professionals in providing advice on urban development proposals. The proposal is consistent with the Checklist as it will provide for a new development characterised by well-designed open spaces, quality environment, opportunity for social cohesion, healthy food and high quality learning facilities.
Draft Greener Places Design Guide	The Draft Greener Places Policy aims to guide the planning, design and delivery of Green Infrastructure in urban areas across NSW. The Policy is centred around the following four guiding principles: • Principle 1 – Integration; • Principle 2 – Connectivity; • Principle 3 – Multifunctionality; and • Principle 4 – Participation. In accordance with these principles, the proposal successfully integrates building form and green open space; provides for a series of accessible connected open space; features multifunctional green space that simultaneously provides environmental performance and enhances facility amenity; and incorporates the needs of various stakeholders including students, staff, community and local Aboriginal stakeholders. Canopy coverage within the main school grounds (excluding the Ag Plot) will nearly double. The canopy will increase from 2,946m^2 (11.9% of site area) to 5,727m^2 (23.2%).

5 Statutory context

5.1 Planning approval pathway

The SRD SEPP nominates certain types of development as SSD. Under clause 15(1) of Schedule 1 of the SRD SEPP, development for the purpose of a new school, regardless of CIV, is categorised as SSD.

SSD applications for government schools are determined by the Minister for Planning and Public Spaces or their delegate. If the proposal is not supported by the council or where there are more than 50 objections or where the applicant has disclosed a reportable political donation, the Minister will determine the application.

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

5.2 Permissibility of the proposed development

The site is currently zoned part RE1 Public Recreation, part SP2 Infrastructure and part R2 Low Density Residential under the *Palerang Local Environmental Plan 2014* (PLEP 2014). Educational establishments are prohibited in all three zones under PLEP 2014.

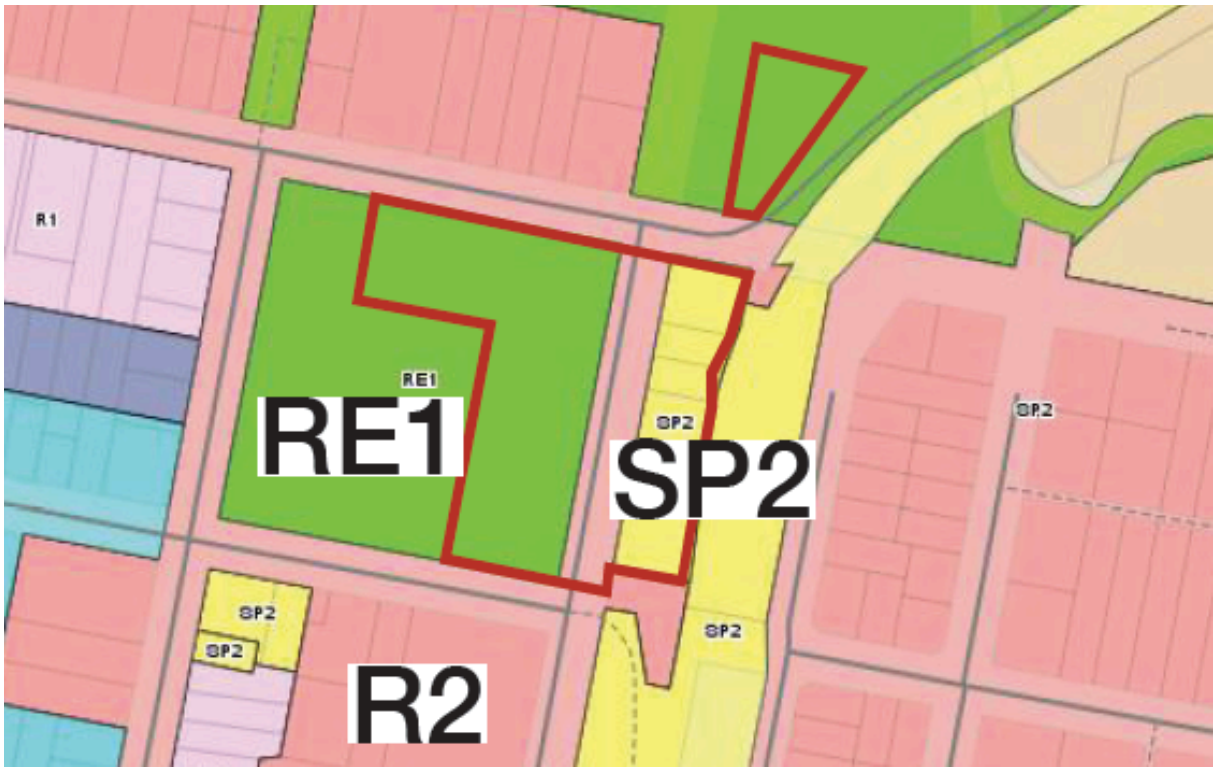


Figure 5-1 Zoning map
Source: PLEP 2014 mapping tool with TKD overlay

However, Clause 35(1) of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (Education SEPP) states that development for the purpose of a school may be carried out by any person with development consent on land in a 'prescribed zone'. Part 4 of the Education SEPP defines R2 and SP2 land uses zones as being 'prescribed zones'. As such, the proposal is permitted with consent in the R2 and SP2 zones.

In regards to the RE1 land, consent can be granted to the proposal pursuant to clause 4.38(3) of the EP&A Act, which allows for consent to be granted to partly prohibited SSD. Clause 4.38(3) states:

> *(3) Development consent may be granted despite the development being partially prohibited by an environmental planning instrument.*

Accordingly, development consent may be granted for the proposal despite part of the site being zoned RE1. Consideration of the RE1 zone objectives is provided at section 5.9.1 of this EIS.

5.3 Site acquisition and community land classification

At the date of lodgement of this EIS, the land on which the school will be located is not currently owned by the applicant. Owner's consent is not required to lodge a Crown development application under clause 49(2) of the Regulation, which states:

> *(2) The consent of the owner of the land is not required for a development application made by a public authority, or for a development application for public notification development, if the applicant instead gives notice of the application—*
>
> *(a) to the owner of the land before the application is made, or*
>
> *(b) by publishing a notice no later than 14 days after the application is made—*
>
> *(i) in a newspaper circulating in the area in which the development is to be carried out, and*
>
> *(ii) in the case of an application made by a public authority, on the public authority's website, or, in the case of public notification development, on the NSW planning portal.*

The applicant has given notice of the application to the owner of the relevant land, being QPRC and Crown Lands.

The Minister for Education is in the process of acquiring the relevant land by agreement but notes that, pursuant to the authority under section 125 of the *Education Act 1990* and in accordance with the procedure prescribed under the *Land Acquisition (Just Terms Compensation) Act 1991* (Just Terms Act), it could be acquired by agreement or compulsory process under the Just Terms Act.

The applicant is aware that, of the land the subject of this development application:

- Lot 701 DP 1027101 (Mick Sherd Oval) and Lot 701 DP 96240 (Bungendore Common, location of the proposed Ag Plot) are effectively classified as "community land", as it is Crown land managed by Council in accordance with Division 3.4 "Crown land managed by Councils" of the *Crown Land Management Act 2016* (CLM Act). The relevant provisions of that Division provide that a Council manager of dedicated or reserved Crown land:

  > *(a) must manage the land as if it were community land under the Local Government Act 1993, and*
  >
  > *(b) has for that purpose all the functions that a local council has under that Act in relation to community land (including in relation to the leasing and licensing of community land).*
  >
  > (see section 3.22(1) of the CLM Act).

- Lot 701 in DP 96240 (Bungendore Common) is currently subject to an undetermined Aboriginal land claim.

In relation to the effective "community land" classification of the Oval and Ag Plot, it is noted that, following the completion of the acquisition process and the vesting of the land in the Minister for Education, the land will no longer be classified as "community land". For land to be "community land", it must either be owned by the Council (i.e., classified as public land under the *Local Government Act 1993*), or be Crown land managed by the Council in accordance with the CLM Act. Following the land acquisition and the vesting of the Oval and Ag Plot in the Minister for Education, the land is no longer public land so the "community" or "operational" classifications no longer apply. Instead, the land is simply held by the Minister and is subject to the RE1 Public Recreation zoning classification under PLEP 2014.

In relation to the Aboriginal land claim which exists over the Ag Plot, the applicant is managing the issue with Crown Lands but is aware that the acquisition of that land cannot occur until the Aboriginal land claim is determined. The applicant is also in the process of consulting with the maker of the land claim.

5.4 Environmental Planning and Assessment Act 1979

The table below provides consideration of the proposal in the context of the objects of the EP&A Act.

Table 5-1 Objects of the EP&A Act

Objects of the EP&A Act	Comments
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources	The proposal provides important social infrastructure to the Bungendore area which directly responds to the growing demands for a high school in Bungendore.

Objects of the EP&A Act	Comments
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,	The proposal incorporates a range of ESD measures as outlined in section 7.5 of the EIS.
(c) to promote the orderly and economic use and development of land	The proposal promotes the orderly and economic use of land by placing a new school on relatively unconstrained land to cater for the future population increase.
(d) to promote the delivery and maintenance of affordable housing	This objective is not applicable to the proposal.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats	The proposal has been designed to avoid impacts on the environment. The accompanying Biodiversity Development Assessment Report (BDAR) at **Appendix 10** has concluded that the proposal will result in minor and acceptable impacts on the site's biodiversity.
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)	The built and cultural heritage of the site and adjoining properties has been considered as part of this EIS. As discussed in sections 7.6 and 7.7, the proposal would have no unacceptable heritage impacts.
(g) to promote good design and amenity of the built environment	The proposal features a high quality design that provides high amenity for users.
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants	The proposal has been designed in compliance with relevant Building Code of Australia (BCA) and Disability Discrimination Act (DDA) standards for building construction.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State	Prior to lodgement, consultation was carried out with a range of State government agencies and the QPRC as detailed in section 6 of this EIS. Also refer to the consultation report at **Appendix 23**.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	The local community and other stakeholders were consulted prior to lodgement as discussed in section 6 of this EIS, and the community will be able to provide further input during the formal exhibition process.

5.5 Environment Protection and Biodiversity Conservation Act 1999

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

The proposal is not likely to have a significant impact on MNES, and therefore no referral is required.

5.6 Biodiversity Conservation Act 2016

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

Clause 7.9 of the BC Act requires any application for SSD to include a biodiversity development assessment report (BDAR). Accordingly, a BDAR has been prepared for the proposal and is attached at **Appendix 10**. The results of the BDAR are discussed at section 7.10 of the EIS.

5.7 Roads Act 1993

The *Roads Act 1993* (Roads Act) sets out the rights, procedures and regulations related to the provision of roads in NSW.

The proposal relies upon the partial closure of Majara Street between Turallo Terrace to the north and Gibraltar Street to the south. This road closure is being progressed by Council pursuant to Section 38A of the Roads Act under a separate process (not part of the subject SSD).

It is noted that, pursuant to Section 38B of the Roads Act, the proposed road closure was notified between 3 February and 3 March 2021. Council is continuing to progress the road closure. Council considered road closure at 28 April 2021 meeting, resolving to, inter-alia, authorise the CEO to execute the necessary documentation to effect the closure of the road.

Separately, a permit under Section 138 of the Roads Act will be required for various off site works (as described in section 3.15 of this EIS). It is noted that Section 4.42 of the EP&A Act identifies that a Section 138 permit cannot be refused if it is necessary for carrying out an SSD.

5.8 State Environmental Planning Policies

The relevant State Environmental Planning Policies (SEPPs) are addressed in the table below.

Table 5-2 SEPP assessment

SEPP	Comment
State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)	Clause 15 of Schedule 1 of the SRD SEPP identifies that development for the purpose of a new school (regardless of CIV) is SSD. The proposal is for the purposes of a new school and is therefore classified as SSD.
State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)	Clause 84 of the ISEPP requires referral to the rail authority for development that involves a "likely significant increase in the total number of vehicles or number of trucks using a level crossing". The proposal is located near a level crossing over the railway and will result in additional vehicles and trucks using the crossing; however, the increase is not considered to be significant. As estimated in the traffic report at **Appendix 6a:** • In the AM peak 82 vehicles will traverse the rail line from the east and 33 vehicles will traverse the rail line from the west; and • In the PM peak 70 vehicles will traverse the rail line from the east and 70 vehicles will traverse the rail line from the west. In the Construction Traffic Management Plan at **Appendix 6b**, the majority of light and heavy vehicles are expected to come from the nearby centres of Canberra, Queanbeyan and Goulburn. None of the routes from these centres require vehicles to cross the rail line. Consultation on this issue has occurred with representatives of John Holland, manager of the Country Regional Network, who have noted they are of the view that an Australian Level Crossing Assessment Model (ALCAM) is not required. Given the above, it is considered that the proposal will not result in a "significant increase" in vehicles or trucks using the level crossing, and therefore a referral to the rail authority is not required under clause 84.
	The proposal is for the purposes of an educational establishment and is adjacent to a rail corridor. Accordingly, under clause 87 of the ISEPP the consent authority must take into consideration Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning, 2008). The Guideline has been considered during preparation of the EIS, and it has been found that the proposal is capable of complying with the relevant internal noise levels. Refer to the acoustic report at **Appendix 12** for further detail.

SEPP	Comment
	As demonstrated in the earthworks plans at **Appendix 15**, the proposal involves no excavation of 2m or greater within 25m of the rail corridor, and therefore it is considered that the proposal does not trigger a requirement for concurrence from the rail authority under clause 86 of the ISEPP. Representatives from John Holland have also advised that concurrence under clause 86 would not be triggered.
State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP)	The Education SEPP aims to facilitate the effective delivery of education establishments and early education and care facilities across the State. Part 4 of the Education SEPP contains specific development controls relating to schools. Clause 35(1) of the Education SEPP states that development for the purpose of a school may be carried out by any person with development consent on land in a prescribed zone. The proposal seeks consent for a new school across the following zones: • R2 Low Density Residential; • SP2 Infrastructure; and • RE1 Public Recreation. Two of the three zones, being R2 and SP2, are "prescribed zones" pursuant to clause 35(1) and permit the development of an educational establishment. As such, the proposal is partially prohibited development under the Education SEPP. Notwithstanding this, clause 4.38(3) of the EP&A Act identifies that development consent may be granted for an SSD despite part the site being partially prohibited. Refer to section 5.2 of the EIS for further details regarding permissibility of the proposal. Schedule 4 of the Education SEPP outlines design quality principles for schools which are to be addressed by the proposal. These are addressed in the Design Report in **Appendix 4** of this EIS. Clause 42 of the Education SEPP, identifies that development consent may be granted for development for a school that is SSD even though the development would contravene a development standard imposed by an environmental planning instrument. The proposal relies on this clause as it seeks a maximum height that contravenes the standard in PLEP 2014. This is discussed further in section 5.9.1. Clause 57 of the Education SEPP, which relates to traffic-generating development, is applicable given the

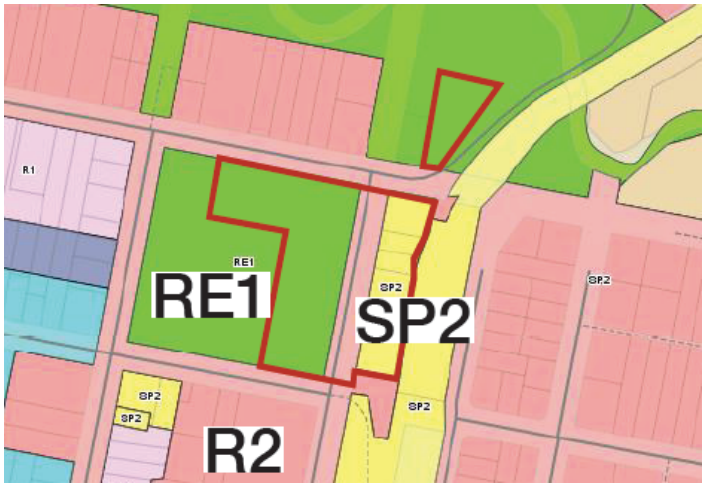
SEPP	Comment
	proposal will accommodate more than 50 students at a new premise. As such, the proposal is to be referred to Transport for NSW by the consent authority in accordance with clause 57(2).
State Environmental Planning Policy (Koala Habitat) Protection 2019 (Koala SEPP)	The Koala SEPP replaces SEPP 44 – Koala Habitat Protection and applies to Queanbeyan-Palerang LGA under Schedule 1. The consent authority must therefore be satisfied that the land is not core koala habitat. The provisions of the Koala SEPP apply to determinations made by councils and therefore do not apply to this SSD application. Nonetheless, it is noted that the submitted BDAR at **Appendix 9** concludes that the vegetation on site consists of planted native vegetation, planted exotic vegetation and managed exotic grassland, and does not meet the criteria for Core Koala Habitat or Potential Koala Habitat, as defined in Part 2 of the SEPP.
State Environmental Planning Policy No 64—Advertising and Signage (SEPP 64)	SEPP 64 applies to all signage that can be displayed with or without development consent under another environmental planning instrument that relates to signage and is visible from any public place or public reserve. Two signs are proposed as part of the application including a digital pylon sign (4.35m high) and a wall sign (4.54m x 1.23m). An assessment against the general criteria in Schedule 1 of the SEPP is provided at **Appendix 28** of the EIS.
State Environmental Planning Policy No. 55 Remediation of Land (SEPP 55)	Clause 7 of SEPP 55 requires that the consent authority consider whether the land is contaminated and whether it is or can be made suitable for the proposed use. Contamination is discussed in section 7.15.3 of the EIS. In summary, it has been found that the site is suitable for the proposed use subject to mitigation measures including further detailed investigation over the Ag Plot land.
Draft State Environmental Planning Policy (Educational Establishments and Child Care Facilities)	DPIE is currently conducting the first review of the Education SEPP since its introduction in 2017 and recently sought feedback on proposed amendments to further streamline planning processes and ensure consistency in the delivery of schools, child-care, TAFEs and universities. The proposed amendments aim to streamline the approval processes, as well as other changes related to tertiary and child-care centres and other existing policy anomalies.

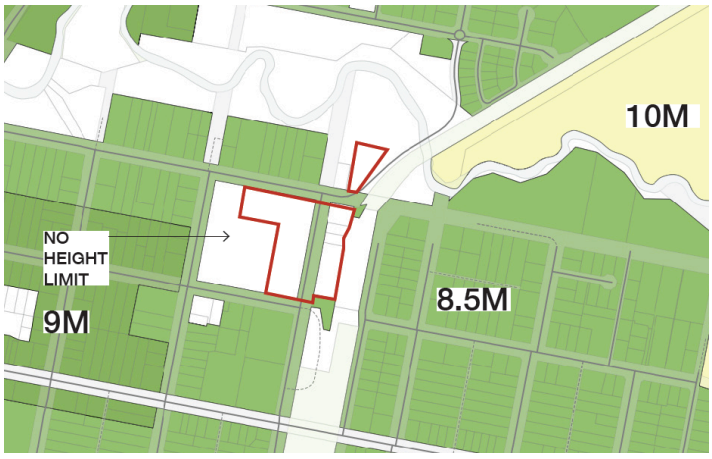
SEPP	Comment
	Whilst the proposed amendments would enable more streamlined approval processes to build new facilities in the future, the proposal for a new high school would still require approval via the SSD application pathway given its CIV is over $20 million. The proposal would be able to comply with any relevant future provisions.
Draft State Environmental Planning Policy (Remediation of Land)	The Explanation of Intended Effect (EIE) for the draft SEPP was on exhibition from 31 January 2018 until 13 April 2018. The draft SEPP will retain the key operational framework of SEPP 55 and add new provisions relating to remediation works. If any remediation works are required as part of the proposal, it is anticipated the works will be generally consistent with the EIE.
Draft State Environmental Planning Policy (Environment)	The draft Environment SEPP consolidates and simplifies seven existing SEPPs. The EIE for the draft Environment SEPP was on exhibition from 31 October 2017 until 31 January 2018. None of the SEPPs to be consolidated are applicable to the proposal. **SEPP (Drinking Water Catchment)** The SEPP (Sydney Drinking Water Catchment) requires a consent authority for all development under Part 4 of the Act in the Sydney Drinking Water Catchment, to be satisfied that the proposed development will have a neutral or beneficial effect on water quality. It also requires authorities undertaking activities under part 5 of the Act to consider if the activity would have a neutral or beneficial effect on water quality. The site is not identified within a catchment boundary under the SEPP. **SEPP No. 19 (Bushland in Urban Areas)** SEPP No. 19 (Bushland in Urban Areas) requires that a consent authority must not consent to carrying out of development that disturbs bushland zoned or reserved for public open spaces purposes, unless it has considered a range of matters consistent with the SEPP. Apart from the land to the north of Turallo Crescent which is to accommodate the agricultural plot and support building, the site is largely developed. We are not aware of the site being identified as bushland zoned for public open space purposes or a bushland reserve for public open space purposes. A review of the updated Draft Environment SEPP mapping confirms the site is not identified as bushland.

5.9 Palerang Local Environmental Plan 2014

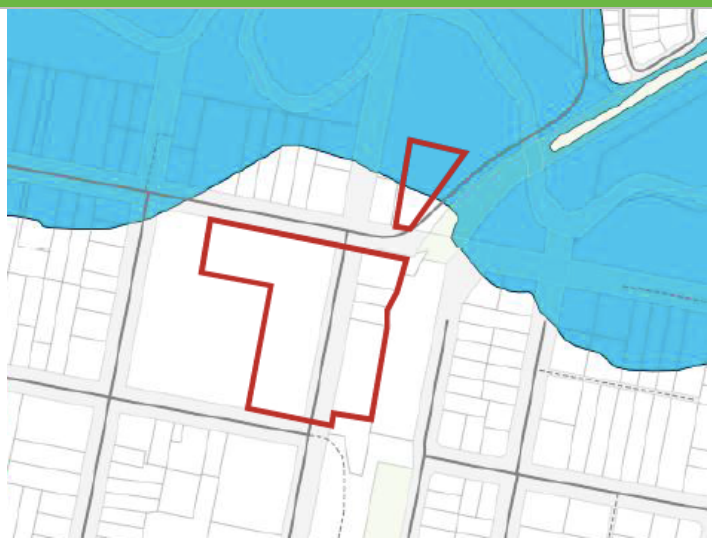
The PLEP 2014 applies to the site. The table below addresses key sections of the PLEP 2014.

Table 5-3 PLEP 2014 assessment

Clause	Comment
Land use table	The site is zoned part R2 Low-Density Residential, part SP2 Infrastructure and part RE1 Public Recreation. Educational establishments are prohibited in all three zones under PLEP 2014. However, as previously discussed in section 5.2 of this EIS, the proposal is permissible within the R2 and SP2 land use zones under the Education SEPP, and therefore the proposal is identified as being partially prohibited. Development consent may be granted for partially prohibited SSD under clause 4.38(3) the EP&A Act 1979. 
Zone objectives	Majara Street is zoned R2. The R2 zone objectives are: • *To provide for the housing needs of the community within a low density residential environment.* • *To enable other land uses that provide facilities or services to meet the day to day needs of residents.* • *To ensure that new development complements the scale, density and form of existing development.* The SP2 zone objectives are: • *To provide for infrastructure and related uses.* • *To prevent development that is not compatible with or that may detract from the provision of infrastructure.* The RE1 zone objectives are:

Clause	Comment
	• *To enable land to be used for public open space or recreational purposes.* • *To provide a range of recreational settings and activities and compatible land uses.* • *To protect and enhance the natural environment for recreational purposes.* • *To protect and enhance the environment generally and to ensure that areas of high ecological, scientific, cultural or aesthetic values are protected, managed and restored.* Consistent with the R2 and SP2 objectives, the proposal provides important school infrastructure to support the growing need in Bungendore. The proposal will not impact any significant natural environment and provides a development which is compatible with the surrounding development and enhances recreational and community facilities for the community. Further discussion regarding the objectives of the RE1 zone is provided below the table.
4.1 Minimum subdivision lot size	N/A. No minimum lot size applies to the site.
4.3 Height of buildings	Part of the site (Majara Street) contains a maximum building height of 8.5m whilst the rest of the site has no maximum height of building control. As a result of the project requirements, a section of the of the new buildings (B and D+E) will exceed the 8.5m LEP height limit which currently applies to Majara Street between Turallo Terrace and Gibraltar Street. The contravention is allowed under clause 42 of the Education SEPP. Further discussion is provided below the table. 

Clause	Comment
4.4 Floor space ratio	N/A. No FSR control applies to the site.
5.1 Relevant acquisition authority	LEP mapping does not identify any part of the site as land reserved for public purposes.
5.10 Heritage conservation	The site contains two locally listed heritage items: • Local Heritage Item 199 Bungendore Soldiers Memorial, Gibraltar Street, Lot 701DP 1027170 • Local Heritage Item 243 Bungendore Common, off Turallo Terrace, Lot 701 DP DP 96238; Lot 701, DP 96239; Lot 701, DP 96240; Lot 1, DP 46300 There are also a number of heritage items located adjacent to or in the vicinity of the site. The site is not located in, or adjacent to, any heritage conservation areas.  Heritage impacts are discussed at section 7.7 and **Appendix 7**. Overall it has been found that the proposal will result in no unacceptable impacts on the significance of the items on site or the surrounding items.
6.1 Earthworks	The proposal includes bulk earthworks as described at section 3.3. The earthworks are not likely to adversely affect drainage patterns, soil stability, potential relics or waterways. Any excess cut material will be assessed in accordance with the relevant waste classification guidelines and disposed of appropriately off site.
6.2 Flood planning	Part of the site is identified as flood planning land.

Clause	Comment
	 **Flood Planning Land** Flood Planning Area A flood assessment has shown that the site is primarily unaffected by flooding in all events up to and including the probably maximum flood (PMF) level. As such, the proposal is consistent with the objectives of clause 6.2.
6.3 Terrestrial biodiversity	A small portion of the proposed Ag Plot is identified as terrestrial biodiversity.  A BDAR has been prepared to assess the proposal's impacts on biodiversity. Overall it has been found that the proposal will result in no unacceptable adverse impacts. Refer to section 7.10 and **Appendix 10** for further details.

Clause	Comment
6.4 Drinking water catchments	The site is not located in a drinking water catchment.
6.5 Riparian lands and watercourses	A watercourse is mapped as being within the lot boundary of the proposed agricultural plot. The agricultural plot, however, is located to the south of the watercourse identified in the mapping. Consistent with the objectives of this clause, the proposal has been designed and sited to avoid adverse impacts to the water course. 
6.6 Salinity	The site is not identified as containing areas of any salinity.
6.7 Highly erodible soils	The site is not identified as containing any areas of erodible land.
6.7A Slopes over 18 degrees	The site is not identified as containing any areas with slopes over 18 degrees.

5.9.1 RE1 zone objectives

As discussed above, despite the proposal being prohibited in the RE1 zone, consent can be granted to the proposal as partially prohibited development under clause 4.38(3) the EP&A Act 1979. Notwithstanding, under section 4.15(1)(a)(i) of the EP&A Act, the consent authority is required to take into consideration any environmental planning instrument, which includes PLEP 2014. Clause 2.3(2) of PLEP 2014 states:

> *The consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone.*

On this basis, it is acknowledged that the consent authority must have regard to the objectives of the zones in which the land is located in its assessment of the application, including the RE1 zone.

The objectives of the RE1 zone under PLEP 2014 are as follows:

- *To enable land to be used for public open space or recreational purposes.*
- *To provide a range of recreational settings and activities and compatible land uses.*
- *To protect and enhance the natural environment for recreational purposes.*
- *To protect and enhance the environment generally and to ensure that areas of high ecological, scientific, cultural or aesthetic values are protected, managed and restored.*

Discussion regarding the objectives is provided below.

Objective: To enable land to be used for public open space or recreational purposes

The proposal will likely result in Mick Sherd Oval being used exclusively by DoE during school hours under a joint use arrangement. This will result in a loss of public recreation access during much of the day on weekdays. However, while use of Mick Sherd Oval will be restricted during the day, residents will continue to have access to a large area of neighbouring open space. Warren Little Oval and Park is located immediately opposite Mick Sherd Oval, within 200m walking distance. It provides approximately 10ha of public open space including an oval, waterways, picnic areas and grassed spaces. The park therefore provides a large area of open space suitable for a range of structured and unstructured recreation activities. Given the functionality, size and proximity of Warren Little Oval and Park, it is likely that the casual daytime recreation needs of the community can be accommodated by this space.

Other regular users of Mick Sherd Oval include local sporting teams, such as the Bungendore Rugby Football Club. Oval access to these organisations will be maintained for weekend and after school use. SINSW has consulted with these groups and made design changes to accommodate their needs, including installing flood lights. The Oval will also be realigned as required.

Students at Bungendore Public School are also unlikely to be impacted, with the school's intermittent use of Mick Sherd Oval expected to be maintained under the proposed joint use arrangement. DoE will also be constructing a new playing field on the primary school site as part of a separate proposal to help improve recreation access for primary students.

The proposal also includes the demolition of Bungendore Pool, which is located on RE1 land. To help mitigate this loss, a new pool is planned as part of the Bungendore Sports Hub. Council has secured funding for the hub and, as of June 2021, is finalising the Request for Quotation for the design of the new pool. The new eight-lane outdoor swimming pool will be of a significantly higher quality than Bungendore Pool and is expected to provide an improved recreation experience. The new pool will also remain accessible to the population, being less than 1km from the existing Bungendore Pool. The new pool is not proposed under this application but rather is to be delivered separately by Council.

The new pool is expected to be operational by the 2022 – 2023 summer season, the same year as the school. If both construction timelines are realised, the Bungendore community would be without a public pool for only a limited time period.

Overall, it is considered that the physical and operational changes to Mick Sherd Oval and the demolition of Bungendore Pool will have no unacceptable adverse impact on the community's access to public open space and recreational facilities.

Objective: To provide a range of recreational settings and activities and compatible land uses.

The proposal provides for a compatible land use (school) that enables co-share and joint-use arrangements with the existing Bungendore Public School and Bungendore community. As noted above, the community will continue to have access to Mick Sherd Oval on weekdays out of school hours and on weekends.

Objective: To protect and enhance the natural environment for recreational purposes.

The proposal will not result in any significant impacts to the natural environment and will re-vegetate the site through considered landscape design with significant new tree plantings. The BDAR by Eco Logical at **Appendix 10** confirms that the proposal will result in no serious and irreversible impacts, and that the only direct biodiversity impacts will occur to planted species, with no ecosystem or species credits required.

Objective: To protect and enhance the environment generally and to ensure that areas of high ecological, scientific, cultural or aesthetic values are protected, managed and restored.

The proposal is designed to be sympathetic to, and embracing of, the existing cultural and aesthetic values of the site.

The proposal will have no unacceptable adverse impacts on the site's listed heritage items or any surrounding heritage items, as discussed in the Statement of Heritage Impact and Archaeological Assessment by Eco Logical at **Appendix 7**. Eco Logical considers that the proposal is in keeping with the character of the town and that no direct or indirect impacts will occur to heritage items on the site or in the surrounding area.

The visual impact assessment prepared by TKD Architects (refer to Appendix 4) considers that the proposal aligns with the scale of the immediate context. The VIA finds that the proposal does not adversely impact views or overshadow surrounding local landmarks or neighbouring residences. Large landscape setbacks are also provided between the proposed buildings and adjacent site boundaries, helping to retain the open space character of the town, and reducing the overall bulk and scale of the proposal.

TKD considers there to be a sufficient distance between the proposed school buildings and the War Memorial. This retains the War Memorial as the prominent feature along Gibraltar Street and reduces the potential of the proposal to detract from its significance.

In response to early community feedback on the proposal, The Balladeers Place Memorial (Poets Corner) and rotunda will be relocated to the south east of the site to retain this visual feature and social setting for the community. This relocation was supported by the Aboriginal Education Consultative Group (AECG).

The proposal has also been designed to integrate with the existing visual character of the area, aligned with the visual character principles of the Bungendore Structure Plan 2048. Materials have been selected to reflect the heritage character of the town, including the use of textured fibre cement and metal roofing. Extensive landscaping has been proposed throughout the site, including mature trees, grassed verges and planting.

5.9.2 Building height

Part of the site (Majara Street) contains a maximum building height of 8.5m, whilst the rest of the site has no maximum height of building control. Portions of Buildings B and D+E will exceed the 8.5m LEP height limit.

More specifically, Building B has a maximum height of approximately 9.8m within the height limit area and will therefore exceed the limit by approximately 1.3m or 15%. Building D+E, which features a slightly higher form due to the nature of the facilities, has a maximum height of approximately 11.3m within the height limit area and will therefore exceed the limit by approximately 2.8m or 33%. It should be noted that the roof eaves of both buildings have been designed to be below the height limit.

Diagrams illustrating the height exceedances are provided below.

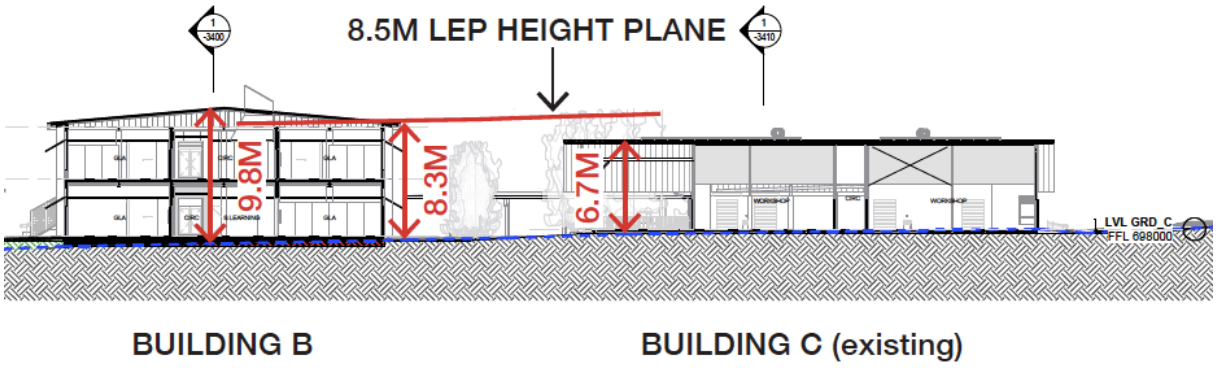


Figure 5-2 E-W section – Building B
Source: TKD Architects

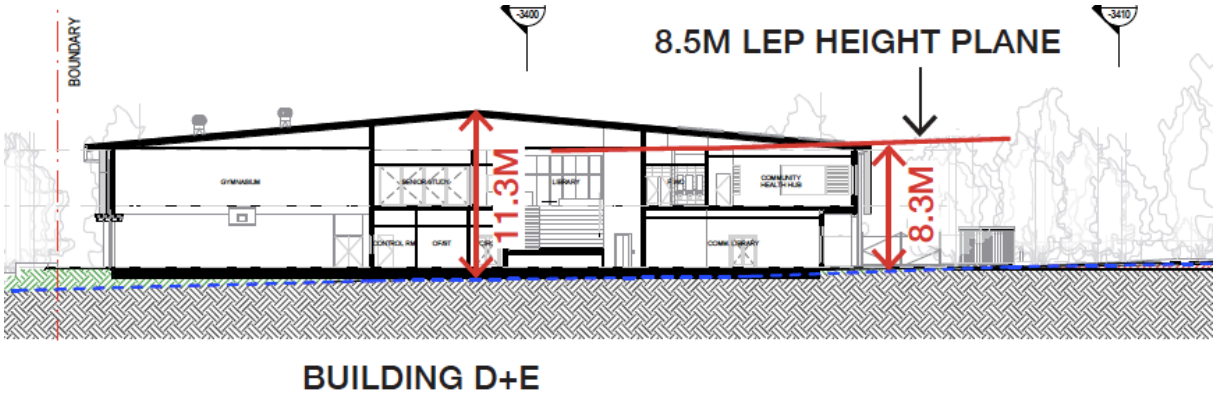


Figure 5-3 E-W section – Building D+E
Source: TKD Architects

Clause 42 of the Education SEPP identifies that development consent may be granted for development for a school that is SSD even though the development would contravene a development standard imposed by an environmental planning instrument. Accordingly, the proposal can be approved despite the variation to the height standard, with no formal clause 4.6 variation request required.

Nonetheless, justification structured generally in accordance with the requirements of clause 4.6 of PLEP 2014 and associated case law is provided below.

Compliance with the height standard is considered unreasonable and unnecessary because the objectives of the standard are achieved notwithstanding the non-compliance (as per item 1 of the Wehbe test (*Wehbe v Pittwater Council [2007] NSLEC 827*)). The objectives of the height standard under clause 4.3 of PLEP are addressed below.

Objective (a) to enhance the natural character and landscape of Palerang

The proposal will enhance the natural character and landscape of Palerang through provision of significant tree plantings (146 new trees) and a high quality building design that is compatible with the local character. The proposal retains large, landscaped setbacks to adjoining boundaries which enhance the natural character and landscape of the town.

Objective (b) to protect residential amenity and solar access,

The additional height will have no adverse privacy impacts. As discussed in section 7.3.1 of the EIS, the proposed school buildings are low in scale and well separated from surrounding residential land, affording no opportunity for overlooking.

The additional height will have no significant overshadowing impacts. As discussed in section 7.3.2 of the EIS, the school buildings are well separated from surrounding development and will cause no more than marginal overshadowing of neighbouring buildings and Mick Sherd Oval. There will be no notable overshadowing to any residential areas.

Objective (c) to manage the visual impact of development,

Visual impacts have been assessed in section 7.3.3 and Appendix 4. It has been determined the proposal will have no unreasonable visual impacts. The proposal will not block any important view or dominate the surrounding area visually.

Objective (d) to reflect the predominantly low-rise character of development in Palerang.

The proposal provides for a generally low-scale built form that is compatible with the local character and generally consistent with the two-storey scale of existing surrounding buildings including the existing Council building, former St Joseph's Convent, neighbouring primary school and Scout Facility.

In addition to the proposal being consistent with the objectives of the standard, there are sufficient environmental planning grounds for the variation, as set out below:

- The height variation is relatively minor in extent, being limited only to a narrow portion of the site (existing Majara Street road reserve only).
- The additional height will cause no unreasonable privacy or overshadowing impacts.
- The additional height will allow for pitched roof form suited to the character of the area.
- The additional height is not conspicuous or notably out of character with the local area; as noted above, the height is generally consistent with nearby buildings such as the existing Council building, Scout Facility, primary school and former St Joseph's Convent have a similar two storey scale.
- As discussed in section 7.7 and **Appendix 7**, the proposal will have no adverse heritage impacts, including no impacts on views to heritage items.

The proposal is in the public interest because it is consistent with the objectives of the height standard (as discussed above) and the relevant zone objectives (as discussed at section 5.9).

5.10 Palerang Development Control Plan 2015

Clause 11 of the SRD SEPP states that Development Control Plans (DCPs) do not apply to SSD applications. However, the project SEARs require the application to address the Palerang Development Control Plan (PDCP) 2020 as a relevant policy. (Note: It is assumed the SEARs intended to refer to PDCP 2015 (Version 2), which came into force in 2020.)

The PDCP 2015 contains general controls for all development in the LGA and area specific controls specific to Bungendore, which are addressed in the table below.

Table 5-4 PDCP 2015 assessment

Provision	Comment
Part B General Provisions	
B1 site analysis	A site analysis and site plan of the proposal is provided within the Architectural Drawings and Architectural Design Report in **Appendix 3** and **Appemed 4**, respectively, which are generally in accordance with the requirements of the DCP.
B2 Accessible Design	A BCA and Access Assessment Report is attached at **Appendix 25.** The report identifies the extent to which the design complies with the accessibility provisions of the BCA. The report concludes that the proposal is capable of complying with the accessibility provisions of the BCA, either by meeting the deemed-to-satisfy requirements or via a performance-based approach.
B3 Flora, fauna, soil and watercourses	The proposal's biodiversity impacts are addressed at section 7.10 and in the BDAR at **Appendix 10** of the EIS. Direct and indirect impacts have been avoided and minimised where possible. A range of mitigation and management measures have been incorporated into the project to reduce impacts on biodiversity during construction phase.
B4 Bushfire Prone Land	The proposal is not identified as bushfire prone land. Refer to section 7.12 of the EIS for further details.
B5 Crime Prevention Through Environmental Design	The proposal has been designed to incorporate the four key principles of CTPTED. This is further discussed at **Appendix 26** of the EIS.
B6 Development on ridges and prominent hills within 200 metres of a classified road	The proposal is not located on a notable ridge or prominent hill within 200m of a classified road.
B7 Engineering requirements	The proposal's car parking and access, which are addressed in section 7.4 and **Appendix 6a and 6b** of this EIS, generally accord with the DCP requirements. Stormwater and water sensitive urban design, which is addressed in section 7.11 and **Appendix 15** of this EIS, generally accord with the DCP. The proposal's utilities, which are addressed in section 7.17 and **Appendix 13**, generally accord with the DCP.
B8 Erosion and Sediment control	The proposal's sediment and erosion control measures, which are addressed in section 7.14 and **Appendix 15,** generally accord with the DCP.

Provision	Comment
B9 Flood planning	The site is not identified as being flood prone. This is addressed further at section 7.13 of the EIS.
B10 Heritage – European (non-Indigenous), Aboriginal, (Indigenous), and Natural	Aboriginal cultural heritage is addressed at section 7.6 and **Appendix 8** of the EIS. In summary, no direct impacts from on Aboriginal cultural heritage have been identified as a result of the proposal. Heritage impacts are addressed at section 7.7 and **Appendix 7**. In summary, the assessment has found the proposal will not directly or indirectly impact on the locally listed heritage items within the vicinity of the site.
B11 Social and economic impact assessment	Social impacts are addressed at section 7.8 and **Appendix 9** of this EIS.
B12 Landscaping	The proposed landscape plan, which is discussed at section 3.7 and attached at **Appendix 5a and 5b** of this EIS, generally accords with the DCP's requirements.
B13 On-site system of Sewage Management	N/A
B14 Potentially contaminated land	Contamination is addressed at section 7.15.3 and **Appendix 18** of this EIS. In summary, it has been found that the site can be made suitable for the proposed school subject to further investigation and subsequent remediation or management if necessary.
B15 Waste management	The proposal's waste management measures, which are addressed at section 7.15 and **Appendix 19** and **Appendix 20** of this EIS, generally accord with the DCP's requirements.
B16 Greywater reuse	A recycled water tank is included in the design in accordance with the EFSG requirements which is consistent with Council's DCP requirements.
B17 Rainwater tanks	Rainwater tanks are proposed as part of the EIS in order to reduce potable water consumption from the mains water supply and will generally accord with DCP requirements.
Part C Development Specific Provisions	
C17 Lighting	A lighting advice report has been prepared by Norman Disney and Young and is provided in **Appendix 24** of the EIS. The report states that external lighting will be designed to comply with the required standards,
C19 Directional Signage	Direction signage is identified within section 3.13 and is generally consistent with the DCP's requirements.

Provision	Comment
C22 Filling of land	Full details of earthworks proposed are outlined within the Structural Report in **Appendix 14**, Civil Drawings in **Appendix 15** and Geotechnical Report in **Appendix 17**. The proposed earthworks are generally in accordance with the DCP.
C23 Demolition of Buildings or Structures	Required demolition works are proposed to be undertaken in accordance with the with the Australian standards and are described further in section 3.1 of the EIS. A construction and demolition waste management plan is also provided in **Appendix 19** which is generally in accordance with the DCP.
Part D Area Specific Provisions	
D1 Bungendore	The proposal provides for a low scale design which is consistent with the surrounding town and rural landscape. Landscaping will be consistent with the desired future characteristics of Bungendore and comprise of mix of native and exotic trees and shrubs. The proposal has been designed to respect the heritage significance of local heritage items and is sympathetic to the form and external materials reflected in the town.

5.11 Development contribution plans

The site is subject to Bungendore Section 7.11 Contributions Plan No 8 – Provision of Pathway Network.

It is understood that the following contributions relating to Bungendore do not apply to the site:

- Bungendore Section 7.11 Development Contributions Plan for Car Parking Facilities 2021 (because this plan does not apply to RE1- or SP2-zoned land and because the site's R2-zone land is not included on the plan's application map); and
- Bugendore Section 7.11 Contributions Plan No 9 – Street Upgrading (because the proposal does include subdivision of land that creates lots with new building entitlements, does not include the erection of more than one dwelling, and does not include business, commercial or industrial development that causes can increase in traffic).

Council notes in Plan No 8 that it may consider contribution exemptions for developments such as nursing homes and non-residential developments that do not cause a demand on the public facility for which the contribution has been set.

In response, it is noted that, the SSDA includes key upgrades to the footpath network as detailed in section 3.15 of the EIS. Accordingly, it is considered that the

proposal will not cause a significant demand on the footpath infrastructure proposed under Plan No 8 and that a contribution exemption should be granted.

It is further noted that the proposal provides for social infrastructure on behalf of the Crown, and therefore it is considered it should not be subject to development contributions. This is consistent with the advice from DPIE in Circular D6 "Crown Development Applications and Conditions of Consent". This circular notes that Crown activities provide facilities which lead to significant benefits for the public in terms of essential community services and employment opportunities, and the activities are not likely to require the provision of public services and amenities in the same way as development undertaken with a commercial objective.

The circular recommends that, where the applicant is a Crown authority and the development is for educational services, no contributions should be collected for open space, community facilities, parking, and general local and main road upgrades.

5.12 Additional approvals required

As noted above, a permit under Section 138 of the Roads Act will be required for various public domain upgrade works. It is noted that Section 4.42 of the EP&A Act identifies that a Section 138 permit cannot be refused if it is necessary for carrying out an SSD.

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

6 Consultation

Consultation has been undertaken in accordance with SEARs requirements with government authorities, service providers, community groups, relevant special interest groups including Aboriginal land councils and registered Aboriginal stakeholders and affected landowners. In particular, the SEARs have required evidence of consultation with:

- Queanbeyan-Palerang Regional Council;
- Government Architect NSW (through the NSW SDRP process);
- Transport for NSW; and
- John Holland Rail, manager of the Country Regional Network.

A comprehensive Consultation Report is attached at **Appendix 26** of the EIS. Key consultation activities and outcomes are outlined below.

6.1 Community engagement

DoE conducted the following community engagement activities prior to lodgement:

- Online community survey from 14 August 2020 to 11 September 2020, which received 710 responses;
- SINSW held a Community Engagement Hub across four days in September 2020 at Bungendore Primary School, which included 120 people across the four sessions;
- A survey was offered to all registered attendees at the conclusion of their time at the Community Engagement Hub, and 63 responses were received; and
- SINSW held an information hub on Tuesday 11 May 2021 at Bungendore Primary School, which included approximately 80 people.

Targeted consultation with potentially impacted groups including landowners, community special interest groups and the general public was also undertaken throughout the EIS process to address areas of concern and identify appropriate forums in order to provide feedback, raise questions and comments.

Key feedback from the community included:

- 79% of survey respondents expressed positive sentiments about building a new high school in Bungendore;
- 74% of survey respondents felt that the site was an appropriate location for the school;
- General support for the provision of shared community access to improved and modern facilities;

- Concern raised over the use of Mick Sherd Oval and Bungendore Park for school use and potential loss of public access;
- Support for the proposal to acknowledge and be developed in consultation with the traditional landowners of the site;
- Questions raised around how safe pedestrian and traffic access would be managed and any potential infrastructure upgrades;
- Questions raised on impacts to existing community facilities and replacement as a result of the proposal;
- Concern around the lack of consultation around the site selection process and the feasibility of the site to accommodate a new school; and
- Concern around how pedestrian and traffic movements would be managed around the site.

SINSW has sought to address these concerns through the release of public information about the due diligence process and amendments to the design. Key amendments to the design that have occurred following community feedback include:

- Retaining the Bungendore Primary School Library as is, opposed to relocating the library to the new high school site as originally proposed.
- Keeping Gibraltar Street open for public access and including a new pedestrian crossing to enable safe access between the primary and high schools;
- Including a new, two storey building on site for community use, which is intended to house a community centre, library and Council kiosk; and
- Limiting the use of fencing around Mick Sherd Oval to maximise community access. A low fence is proposed to separate the school grounds from the Oval but will not fully surround the oval.

6.2 Public authority engagement

6.2.1 Government Architect NSW

The proposed design has been prepared through consultation with Government Architect via the NSW State Design Review Panel (SDRP).

A full response to the Government Architect's advice is addressed in section N of the Architectural Design Report at **Appendix 4**, with key comments addressed in the table below.

Table 6-1 GANSW engagement outcomes

SDRP Comment	Response
Connection to Country A deeper understanding of Country can inform richer and more responsive design solutions. The project is well positioned to respond to the Draft Connecting with Country Framework.	The design of the proposed high school has been developed to consider the key outcomes and the Draft Connecting to Country Framework to create a strong, place driven identity that will help instil pride in the school and community. Country has been embedded within the campus design and explored within the landscape through the concept of water, responding to the adjacent creek and flood prone lands to the north. Spatially, this concept has been developed to provide gathering spaces which lend the opportunity for indigenous learning, the ability to gain nourishment from the land and to learn to manage the land. Endemic planting, indigenous foods and medicinal plants further strengthen these opportunities. Architecturally, Connection to Country has been explored through connections to sky, internal planning, materials, colours and providing physical and visual connections to land. The project seeks to further connect with Traditional Custodians through a number of opportunities which include further collaboration to develop the integration of interpretive signage, artwork and place names, and possibilities to learn from cultural practices and cultural land management.
Masterplan and Landscape As articulated by the design team, the new high school provides a unique opportunity to contribute to the future development of the town. Yet, this is not fully realized. The project has the potential to respond to the specificity of place and the unique qualities of the town.	The masterplan, siting of buildings, massing, bulk and scale have been carefully considered through a detailed site analysis of the site and its context. New buildings proposed have been located to provide a large setback from site boundaries and provide an alignment which generally follows the alignment of the existing street grid, retaining its thoroughfare and visual connection between Gibraltar Street and Turallo Terrace. The siting and massing of the new buildings are designed to allow permeability throughout the campus, connecting the new school plaza with the western campus and Mick Sherd Oval beyond. Sheltered breaks in the building line provide both visual and physical connections, drawing users through the site. Community facilities and shared facilities for community use are located to the northern end of the campus, with legible and visible public access provided from Turallo Terrace.

SDRP Comment	Response
	Landscape design has been developed in accordance with the landscape design principles of Identity, Access, Green Amenity and Diverse Space. The provision of diverse spaces for the new high school are designed to encourage a range of activities for students and provide areas of respite and foster moments of curiosity. These are provided through a variety of spaces designated for individual study, small groups and large classes as well as passive and active recreation. Active Transport and parking strategies have been developed to consider the reuse of existing infrastructure and recommended for improvements to the existing Bungendore Active Transport Network to improve pedestrian amenity and provide safe walking, bicycle and scooter routes for the school and community.
Buildings The scale, location and bulk of the proposed buildings should be reviewed and reduced as much as possible. Relocating the buildings off the Majara Street axis will enable the original street grid and visual connections to be maintained	The siting of the buildings have been developed from a detailed site analysis, investigation of functional relationships and outdoor play space requirements. To the southern and northern boundaries, large setbacks have been provided from the street to the built form, creating new public spaces and high quality landscaped streetscape in keeping with the town's open character. The new high school buildings are of one and two storey scale and are driven by the requirement to cater for predicted student numbers and forecasted population growth of the town, as well as incorporate. new community facilities within the campus and retention of the existing Mick Sherd Oval. Each building is articulated individually, each responding to their slightly different context, but with a shared use of a restrained palette of materials which express a unified architectural response to the new campus. General learning spaces are designed around a central shared learning space with large glazed doors connecting one to another and to the central space to provide flexible learning settings with good connections and visual surveillance. The landscape design has been developed with principle of diverse spaces. These include outdoor learning spaces, breakout space, gathering spaces and spaces for spectating and respite.

6.2.2 NSW Department of Planning, Industry and Environment

A meeting was held with representatives from the DPIE Southern Region team and SINSW on Friday 31 July 2020. The meeting provided DPIE with an overview of the site selection process and the intended planning pathway to enable feedback on these aspects of the proposal. Key areas of discussion included the existing site land classification and potential planning pathways.

6.2.3 Queanbeyan-Palerang Regional Council

There has been regular engagement and contact with Council throughout the EIS process. Some of this occurred through formal meetings or email correspondence for relevant planning matters.

The formal consultation activities included:

- Project overview meeting held on August 2020 with representatives from Council and SINSW, at which an overview of the proposal was provided to Council and key issues were discussed including the proposed planning pathway, the road closure process, existing site land classification and intended timing;
- Attendance at the Transport Working Group (TWG) meetings, as described below; and
- Discussions regarding delivery of infrastructure to the site (e.g., potable water).

6.2.4 Transport for NSW

Consultation with TfNSW has occurred through TWG meetings held on three occasions between April and July 2021 between TfNSW, QPRC and SINSW. Key matters discussed within the TWG meetings and SAP working group meetings included:

- The Majara Street Road closure conditions;
- Proposed access arrangements to the school including bus bays, drop off zones and parking provisions;
- The expected peak travel times of the schools and appropriate mitigation measures to minimise any impacts to the surrounding road and pedestrian network;
- Management of safe pedestrian and traffic access to the site and the creation of new pedestrian crossings and roundabouts to facilitate this;
- The expected mode share targets for the school population and level of service analysis for the school development; and
- Review of the draft Transport Assessment for input before finalising.

Key issues and outcomes of these meetings has been addressed within the Transport Assessment provided in **Appendix 6a.**

6.2.5 John Holland Rail

SINSW consulted with TfNSW and John Holland in response to Item 5 of SEARs. This consultation primarily occurred via email from March 2021 to June 2021. This consultation was targeted at understanding potential compliance issues per clause 86 of the Infrastructure State Environmental Planning Policy (Infrastructure) 2007 (ISEPP).

Upon review of the site documentation in June 2021, representatives from John Holland advised that:

- The development would not trigger the rail authority's concurrence under clause 86 of the ISEPP;
- The proposal is unlikely to impact on the rail corridor from a stormwater management perspective; and
- The proponent must provide details regarding the waste and recycling enclosure to confirm that there are no issues regarding excavations in accordance with clause 86 of the ISEPP.

These matters were resolved, and the EIS has progressed based on this advice.

Feedback was also sought from John Holland regarding the rail crossing near the site and the requirement for an ALCAM. John Holland advised in August 2021 that, based on the estimated additional vehicles using the nearby level crossing, they are of the view that an ALCAM assessment is not required.

6.2.6 Other public authorities and stakeholders

Details regarding consultation with other public authorities and stakeholders is provided in Table 6-2.

Table 6-2 Public authority and stakeholder engagement outcomes

Agency	Issues discussed	Response
Ngambri Local Aboriginal Land Council and Registered Aboriginal Stakeholders	The Ngambri Local Aboriginal Land Council and other Aboriginal stakeholders have registered their interest as a Registered Aboriginal Party (RAP) in the preparation of the ACHAR.	No responses to the draft ACHAR were received from the RAPs.
Heritage NSW	Heritage NSW provided several comments for consideration in the reports. This included comments around the report structure, the inclusion of new reference statements and ensuring key	Comments raised by Heritage NSW have been considered by Eco Logical Australia and have informed the final Statement of Heritage Impact and Historical Archaeological Assessment provided in **Appendix 7**.

Agency	Issues discussed	Response
	SEARs items had been addressed.	
Essential Energy	Applications for decommissioning and connection have been submitted and are currently with Essential Energy.	As discussed in the infrastructure management plan at **Appendix 13**, an application is currently under evaluation with Essential Energy.
nbn	Applications for decommissioning and connection to nbn communication services have been submitted and are currently NBN.	As discussed in the infrastructure management plan at **Appendix 13,** an application is currently under evaluation with nbn.

6.2.7 Project Reference Group

A Project Reference Group (PRG) was established at the start of the project to provide feedback into the design process. The PRG is attended by representatives from DoE, the principal of Bungendore Primary School and a community representative. The PRG has met approximately six times from October 2020 to July 2021.

Key areas of discussion have included:

- Changes to the internal building layouts and access to maximise learning outcomes and student safety;
- The capacity of the school to cater for the open space needs of all students;
- The proposed access arrangements between Bungendore Primary School and the new high school, as well as transport options for the incoming students;
- The proposed fencing and maintenance strategy for the school site;
- The expected planning timeframes and enrolment opening dates; and
- Support for retaining the Bungendore Primary School Library as is, opposed to relocating the library to the new high school site.

7 Assessment of key issues

This section contains an assessment of the key issues identified in the project SEARs. It is informed by, and should be read in conjunction with, the specialist reports and drawings appended to the EIS.

7.1 Built form and urban design

7.1.1 Methodology

An Architectural Design Report prepared by TKD Architects is attached at **Appendix 4**. The report explains the proposal's design rationale based on analysis of the site and context, and comments on the proposal's consistency with relevant guidelines and principles. Key points from the report are outlined below.

It is noted that section 3.4 of this EIS contains a description of the proposal's layout, height, bulk and scale, density, setbacks, facade articulation, and external finishes and materials.

7.1.2 Existing environment

The site is in a relatively central location in the town and located to the western edge of the historic portion of the town. Newer medium density residential suburbs are located to the north across Turallo Creek and west across the railway line.

The site typically falls from south to north west towards Turallo Creek. To the main school site, the site has a 2m east to west fall from the railway line to the new boundary on the Mick Sherd Oval, and a 1.5m fall from Gibraltar Street to Turallo Terrace.

7.1.3 Relationship to surrounding development, topography and streetscape

Relationship to surrounding development

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

- The proposal includes large setback areas to neighbouring properties and key heritage elements to minimise impacts of overshadowing, massing and density;
- The proposal consists of a one and two storey scale which reflects the low-density scale of the township;
- The proposal has been designed to achieve a strong relationship to the adjoining primary school to the south;
- The proposal has been designed to connect to the future shared use playing field to the north, with a north-south pedestrian connection between Burroway Road and the playing field.

Relationship to topography

The proposal proposes cut and fill to achieve the required building platforms and play areas. Refer to section 3.2 for further discussion on the proposed earthworks.

A series of ramps and landscape batters address level differences between the raised paving areas to the west and the existing levels of the Mick Sherd Oval, while providing equality of amenity for all capabilities.

Relationship to streetscape

Buildings have been sited to respond to the town's urban grid, provide significant setbacks from the adjacent boundaries to retain the open character of the town and provide new high-quality landscape, streetscapes and public spaces.

7.1.4 Access to daylight, ventilation, acoustic separation

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

Learning spaces and common spaces are oriented to achieve high levels of natural daylight and feature large external glazed windows and doors, and operable windows to provide high quality physical and visual connections to outside and high levels of daylight and natural ventilation inside.

Acoustic internal sliding doors, wall and ceiling treatment will provide acoustic control to learning spaces.

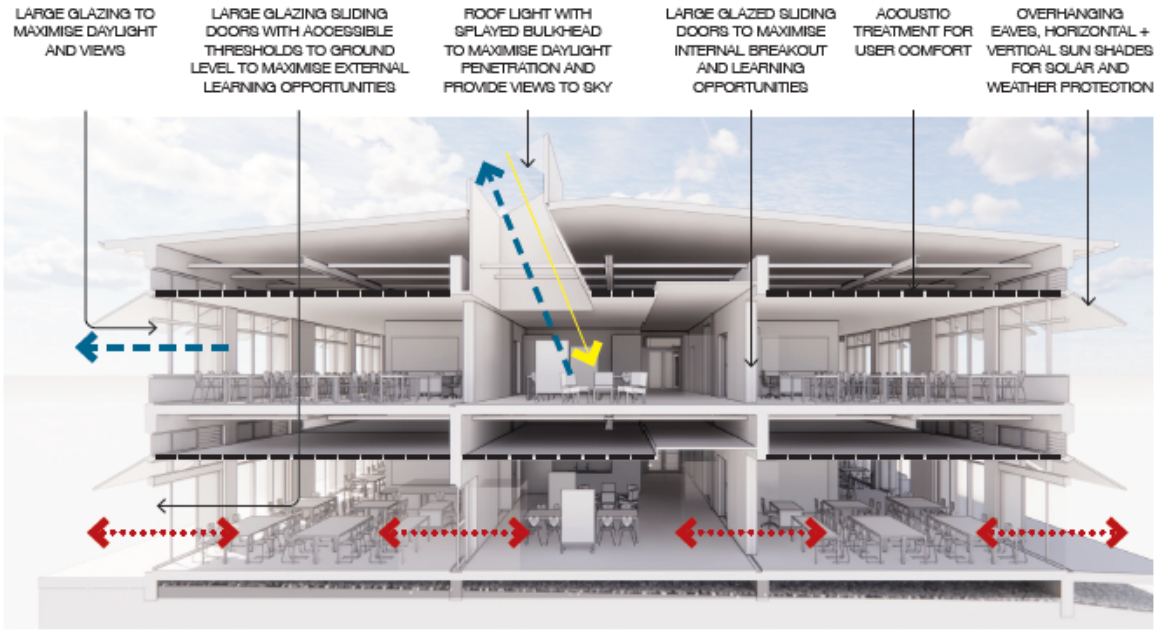


Figure 7-1 Perspective section – building amenity
Source: TKD Architects

7.1.5 Access to landscape and outdoor spaces

The proposal has been sited to maximise landscape and outdoor spaces across the site. The landscape and open spaces have been designed to break down the overall built form of the proposal and provide opportunities for physical and visual connections to open spaces between buildings. The orientation of Building B creates

opportunities for classes to spill out to external areas to foster greater learning opportunities.

Refer to the landscape package at **Appendix 5a and 5b** for further detail.

7.1.6 Education SEPP design quality principles

The proposal has been suitably designed in accordance with the design quality principles for schools (Schedule 4) of the Education SEPP. Each of the design quality principles are discussed in detail the Architectural Design Report in **Appendix 4** (chapters F-M), with a summary provided below.

Principle 1: Context, built form and landscape

The proposal's scale and materiality respond to the local context. The siting, bulk, scale and urban design response are sympathetic to the adjacent buildings and surroundings and the town's open character. Circulation routes, open spaces and landscaping between buildings provide permeability throughout the campus, creating strong connections with the existing Oval and providing an open and low density response in keeping with the town's context.

Principle 2: Sustainable, efficient and durable

The project has been developed using the principles of ESD to create a site-wide strategy and has been assessed against a suitable accredited rating framework (Green Star). The project is expected to achieve a high level of environmental sustainability and is targeting a 4-star Green Star rating (Australian Best Practice) as certified by the Green Building Council of Australia. Refer to section 7.5 and **Appendix 27** for details on how the proposal addresses ESD principles.

The project is to be delivered via MMoC in line with SINSW DfMA (Design for Manufacture and Assembly) Guidelines. The DfMA Guidelines have been developed to facilitate and contribute to the DoE's sustainability objectives and "Sustainability Pillars of the Department of Education".

The approach has been identified to improve sustainability through reduced CO2 emissions, material and water waste; improve health, safety and productivity; and make design efficiencies and allow for future adaptability and flexibility.

Principle 3: Accessible and inclusive

Accessibility and inclusivity have been factored in from the earliest stage of the design to ensure that the building is suitable for students with differing needs and capabilities.

The new high school campus will provide access for people with a disability and provide a continuous accessible path of travel, clear way finding guidance and the equitable provision of accessible facilities.

Principle 4: Health and safety

The new high school in Bungendore proposes to optimise natural ventilation and natural light while balancing thermal comfort and energy efficiency to benefit the

health and well-being of building occupants. The proposal supports generous pedestrian entries into the proposed high school connecting the new school entries with each of the buildings to create a safe, legible, attractive network for the school.

The proposal incorporates CPTED to create a safe and secure environment that is consistent with the four main principles of natural surveillance, access control, territorial reinforcement and space management.

Principle 5: Amenity

The proposal has been developed to act as an integral part of the Bungendore community with facilities that benefit the school and consider opportunities for the wider community. The siting and design of the proposal have been appropriately considered to provide pleasant and engaging spaces whilst minimising adverse impacts on the amenity of neighbouring properties and the public domain.

Principle 6: Whole of life flexible and adaptive

The design of the school affords the opportunity for flexible learning environments and spaces that can accommodate a variety of uses for high school, primary school and community needs.

The ESD principles adopted by the project will contribute to the conservation of resources and future resilience across the whole life cycle of the project.

The proposal has been designed as a stream 3 high school with core 4 facilities, with part of the site earmarked to accommodate additional learning spaces, which would bring the school up to a core 4 facility should it be required in the future.

Principle 7: Aesthetics

The design of the school responds to the local context in terms of scale and materiality.

Each building is articulated individually, each responding to their slightly different context, but feature shared materials which express a unified architectural response to new campus.

Through materiality, shading devices and window proportions, the articulation of buildings is broken down to closer reflect the immediate historic and contemporary context.

7.2 Tree removal

7.2.1 Methodology

An Arboricultural Impact Assessment Report is attached at **Appendix 10** of the EIS. The report identifies the species, location dimension, condition and significance of the site's trees, and assesses the impacts and retention value of the proposed works on each tree. The subject trees are assessed in accordance with a stage one visual tree assessment.

The report also includes tree protection zones (TPZs) and protections specifications for the trees to be retained.

7.2.2 Existing environment

The arborist assessed a total of 171 trees located in or near the site in July 2020, ranging in height from 3m to 21m.

7.2.3 Impacts

The landscape design has been developed to maximise the retention of existing trees and incorporate them into the design where possible. Due to the limited size of the site and its topography, several trees are proposed to be removed to accommodate the required buildings. In particular:

- A total of 76 trees will be highly affected (greater than 20% encroachment of TPZ or a SRZ encroachment) by the proposed development and cannot be retained, including 6 high retention value trees, 42 medium retention value trees and 28 low retention value trees; and

- A total of 108 trees are proposed to be retained, including 13 high retention value trees, 72 medium retention value trees and 23 low retention value trees.

The removal of the 6 high retention value trees is considered acceptable in the context of the overall design. The buildings have been located so that the majority the site's high retention value trees, located in the northeastern corner of the site and to the southwest of Building D, have been retained. Furthermore, the proposal includes a total of 146 new tree plantings, more than double the number removed.

A tree impact assessment diagram is provided below (refer to the arborist report for a high quality version).

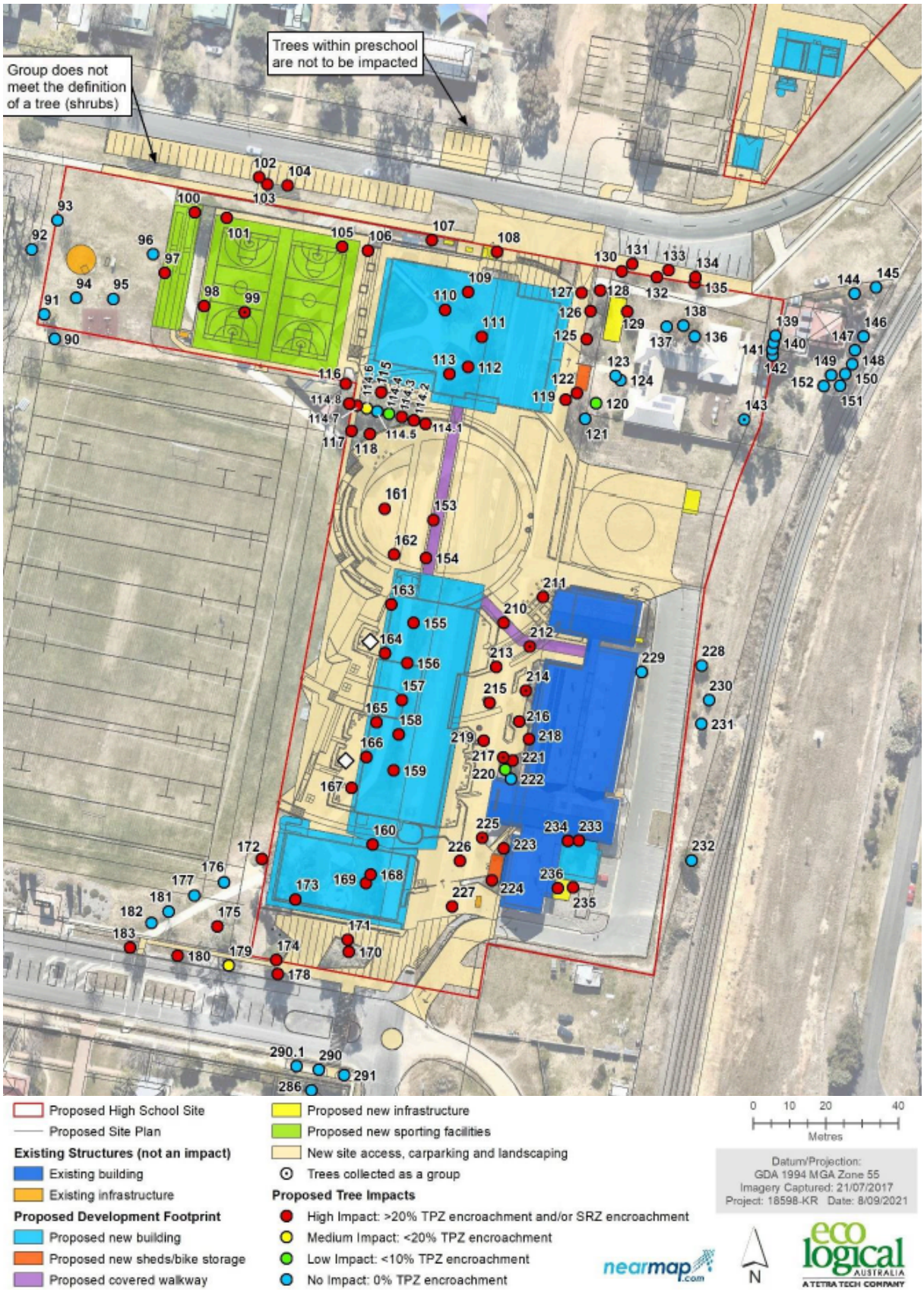


Figure 7-2 Tree impact diagram
Source: Eco Logical

7.2.4 Mitigation measures

Section 4 (Tree Protection Plan) and Appendix E (Tree Protection Guidelines) of the arborist report outline a number of tree protection measures for ensuring the protection of the trees to be maintained, including:

- All tree pruning and removal is to be carried out by an arborist with a minimum AQF Level 3 qualification in Arboriculture;
- All tree work must be in accordance with Australian Standard AS 4373-2007, Pruning of Amenity Trees and the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998);
- Permission must be granted from the relevant consent authority prior to removing or pruning of any of the subject trees. Approved tree works should not be carried out before the installation of tree protection measures; and
- Any additional construction activities within the TPZ of the subject trees must be assessed and approved by the project arborist and must comply with AS 4970-2009 - Protection of trees on development sites.

Additionally, a total of 146 trees are proposed to be planted as part of the landscape plan for the site to offset the loss of trees identified for removal.

Trees identified to be retained will be subject to tree protection measures summarised in Table 7-1 below and provided in further detail in Appendix E of the Arborist report (**Appendix 10**).

Table 7-1 Summary of tree protection measures

Type	More Details	Comment
Signage	Appendix E1	Prominently sign posted with 300 mm x 450 mm boards stating, "NO ACCESS - TREE PROTECTION ZONE".
Tree protection fencing	Appendix E1	Protective cyclone chain wire link fence to be erected around the TPZ to protect and isolate retained trees from the construction works. Existing boundary fencing may be used.
Crown protection	Appendix E2	Where required, crown protection may include the installation of a physical barrier, pruning selected branches to establish clearance, or the tying/bracing of branches.
Trunk and branch protection	Appendix E3	When fencing is not practical or prior to any activities within the TPZ, trunk protection is required and consist of a layer geotextile fabric or similar followed by 1.8 m lengths of softwood timbers spaced evenly around the trunk and secured with a galvanised hoop strap.

Type	More Details	Comment
Ground protection	Appendix E4	Install and maintain 100mm thick layer of mulch around tree in TPZ. For machine or vehicle access within TPZ geotextile fabric beneath crushed rock or rumble boards may be required.
Soil moisture	N/A	Soil moisture levels should be regularly monitored by the project arborist. Temporary irrigation or watering may be required within TPZ.
Root Protection and investigation	Appendix E5	If incursions/excavation within the TPZ are unavoidable, root investigation may be needed to determine the extent and location of roots within the area of construction activity using non-destructive excavation (NDE) methods.
Underground services	Appendix E6	All underground services should be routed outside of the TPZ. If underground services need to be installed within the TPZ, they should be installed using horizontal directional drilling (HDD), non-destructive excavation (NDE) methods such as hydro-vacuum, Air Spade or manually excavated trenches.

7.3 Environmental amenity

7.3.1 Overshadowing

The buildings are single and double storey in scale and are well separated from adjoining development. As demonstrated in the mid-winter (worst-case) shadow diagrams below, no adverse overshadowing impacts from the proposal to adjacent neighbours. The proposal will only cause marginal overshadowing to run-off and spectator areas of Mick Sherd Oval between 9am and 12pm.

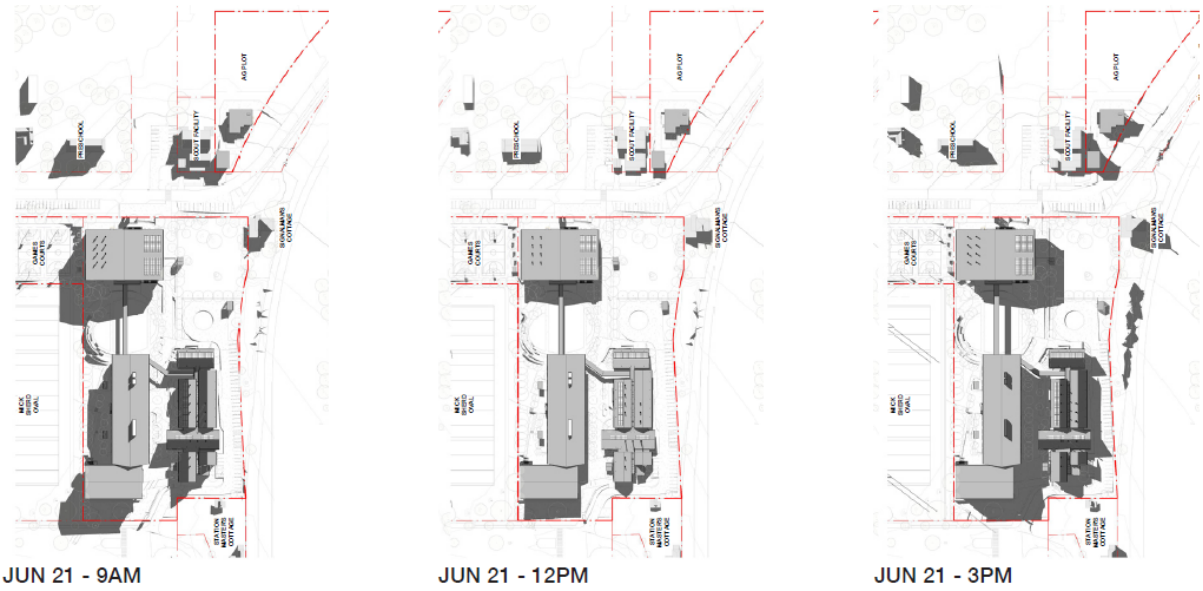


Figure 7-3 Shadow diagram – Mid-winter 9am – 3pm
Source: TKD Architect

7.3.2 Visual privacy

The new buildings are located a significant distance neighbouring residential properties and generally buffered from residential land by road reserve/rail corridor. There is no notable opportunity for overlooking. The existing solid metal fencing to No. 63 Turallo Terrace is proposed to be retained.

It is not envisaged the project will result in adverse visual privacy issues. No mitigation measures regarding privacy impacts have been identified as being necessary.

7.3.3 View impacts

Methodology

View analysis has taken the form of a review by the planner supported by site photographs and renders of the proposal prepared by the architect. The proposed buildings are of one and two storey scale, and there are no significant views that cross the site. Specialist analysis is therefore considered unnecessary.

Existing environment

The site is situated in a relatively central location of Bungendore. The surrounding area is generally characterised by low density residential uses, civic and public buildings, and recreational open space. The site is not located on a ridge, knoll or other local high point, and there are no significant views identified in Council's DCP or other planning document that cross the site.

The proposal is located within the heritage curtilage of the Bungendore Soldier's Memorial (LEP I199) and the Bungendore Common (LEP I243). There are a number of other structures and buildings identified of local heritage significance within the vicinity of the site.

Viewpoints and 3D perspectives

The architect has prepared 3D perspectives to demonstrate how the proposal will appear from key viewpoints in the surrounding streets. Screenshots of the perspectives are provided below, while the full high-quality versions are contained within the Architectural Design Report at **Appendix 4**.

Figure 7-4 View 1 and 2 – Majara Street looking north
Source: TKD Architects

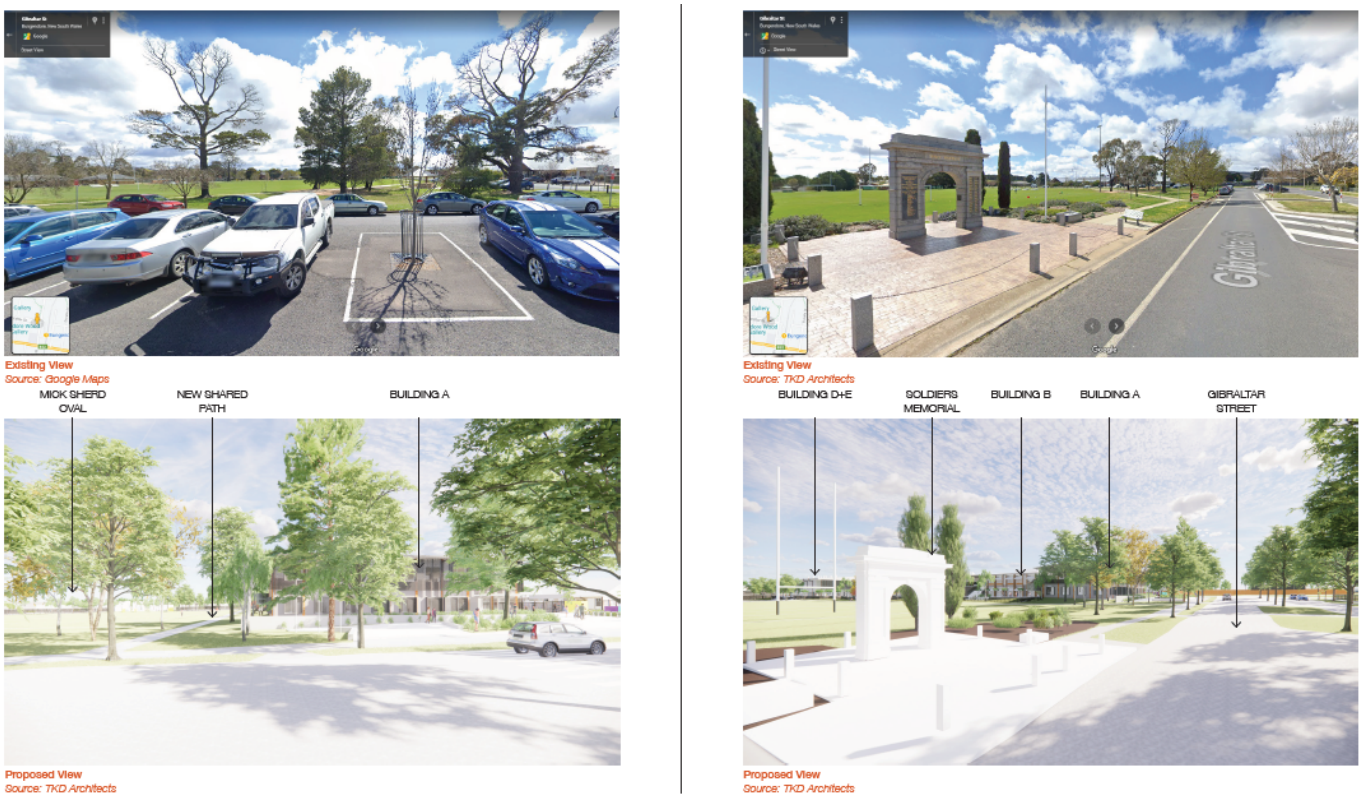


Figure 7-5 View 3 and 4 – Gibraltar Street looking north and northwest
Source: TKD Architects

Figure 7-6 View 5-6– Turallo Terrace looking south east and east
Source: TKD Architects

Figure 7-7 View 7-8 – Turallo Terrace looking south east and south
Source: TKD Architects

Figure 7-8 View 9-10 – Turallo Terrace looking south and south west
Source: TKD Architects

Figure 7-9 View 9-10 – Turallo Terrace looking south and south west
Source: TKD Architects

Impacts

The proposal will introduce new built form visible from the surrounding public domain, but no notable adverse visual impacts are anticipated. The built form will be of a one to two storey scale, consistent with the low density scale of the town. The proposal will not block any important view or dominate the surrounding area visually.

There are no significant views to or from the site, and views to or from heritage items in the vicinity will not be impacted due to the flat topography and current vegetation screening around the park and along the main streets. The new buildings are set back from Turallo Terrace, Gibraltar Street and heritage items in the vicinity allowing continued appreciation.

As shown in the 3D perspectives above, the development will appear relatively unobtrusive in the visual context with its low scale with low-pitched roofs. New soft landscaping within the setback areas of the site will provide a generous landscape buffer which will soften the built form of the proposal and provide visual screening and privacy to surrounding development.

Mitigation measures

No mitigation measures regarding view impacts have been identified.

7.3.4 Lighting

A lighting advice report has been prepared by Norman Disney and Young and is provided in **Appendix 24** of the EIS. External lighting will be designed to comply with the following standards:

- AS/NZS 4282 – Control of the obtrusive effects of outdoor lighting; and
- AS/NZS 1158.3.1 – Pedestrian area (Category P) lighting – Performance and design requirements.

The lighting will give due consideration to CPTED principles and minimisation of light spillage to surrounding sensitive receivers. The following approaches will be incorporated into the external lighting design to minimise obtrusive lighting:

- Selection of luminaires with tight beam control;
- Where applicable Luminaires are to be mounted on adjustable brackets;
- Luminaires that are dimmable;
- Where applicable glare shields such as back shields or louvres; and
- The use of timers to automatically turn off or dim lighting system as required.

7.3.5 Wind

Given the low height of the proposal and lack of known acute wind issues affecting the site, it is considered that the proposal will not result in any unacceptable adverse wind impacts. Specialist input is considered unnecessary.

No special mitigation measures have been identified, although it is anticipated that the proposed landscaping will assist in buffering outdoor spaces from adverse wind conditions.

7.4 Transport and accessibility

7.4.1 Methodology

A Transport Assessment prepared by GHD is attached at **Appendix 6a**. The purpose of the report is to:

- Assess multimodal access to the school;
- Set a base case for student travel demand;
- Identify potential travel impacts of the proposed school; and
- Propose solutions to mitigate identified impacts.

The report utilises SIDRA analysis to determine potential traffic impacts. Traffic count surveys were undertaken on 5 November 2020.

7.4.2 Existing environment

Existing traffic conditions

Traffic count surveys were undertaken on 5 November 2020 during AM and PM peak periods from 8am-9:30am and 2:30pm-4pm at the following intersections (illustrated in Figure 7-10):

- Turallo Terrace/Butmaroo Street;
- Turallo Terrace/Majara Street;
- Gibraltar Street/Butmaroo Street;
- Gibraltar Street/Majara Street;
- Kings Highway/Butmaroo Street; and
- Kings Highway/Majara Street.

SIDRA analysis has shown that the intersections operate with a good level of service (LoS) and minimal delays during peak periods of school activity.

Figure 7-10 Surveyed intersections
Source: GHD

Active transport

Within the 1,200m pedestrian catchment area, footpaths and shared paths are typically discontinuous or absent. Many footpaths in Bungendore are old with inconsistent treatments, particularly at road crossings.

With the exception of school crossing points in proximity to the primary school, there are no facilities that provide pedestrians with priority over vehicles.

The bicycle network in proximity to the school is limited. While some shared paths are provided in proximity to the school site, they are disconnected.

The Bungendore Bicycle and Pedestrian Facilities Plan (prepared by AECOM for QPRC in 2017) proposes improvement in the active transport network in Bungendore and includes the provision/extension of footpaths and shared paths to various streets within proximity to the proposal.

Existing public transport

The current bus services at the primary school serve the township of Bungendore and other small population centres such as Wamboim, Tarago, Hoskintown and Butmaroo.

Public bus services include three weekday services from Bungendore to Queanbeyan and two weekday services from Queanbeyan to Bungendore. Stops are located on Gibraltar Street between Mick Sherd Oval and the primary school.

Bungendore Station is located on Majara Street opposite Bungendore Public School and operates train services between Sydney and Canberra, including three services per day to Canberra and three services per day to Sydney.

7.4.3 Traffic generation and impacts on network

Based on conservative journey-to-work data (discussed section 4.2 of the Traffic Assessment), it is estimated that the school will generate:

- 450 trips in the AM peak (inbound and outbound); and
- 368 trips in the PM peak (inbound and outbound).

Traffic impacts have been modelled using SIDRA 9 to determine the proposal's potential impacts on the surrounding intersections. The modelling considers the scenarios of the completed school in 2023 (year of opening) and the completed school in 2033 including background growth.

The 2023 scenario (see table 4-6 of the traffic report) indicates that the six intersections of interest are expected to operate with spare capacity with a Level of Service (LoS) A (highest rating) during peak periods.

The 2033 scenario (see table 4-7 of the traffic report) indicates that the intersections with Kings Highway, Butmaroo Street and Majara Street are expected to change from LoS A to LoS B (from 2023 to 2033). The minor reduction in LoS can be attributed to the

wide growth of the Bungendore township. Notwithstanding, LoS B is considered to be good with acceptable delays and spare capacity.

It is noted that the traffic modelling has utilised conservative assumptions with respect to trip generation, background growth and trips associated with new subdivision in the locality.

7.4.4 Access arrangements

Pedestrian

The main pedestrian access to the high school will be provided on Gibraltar Street, with an additional pedestrian access point provided on Turallo Terrace. Several upgrades to the pedestrian network are proposed to facilitate safe movement in and around the school. These are detailed at section 7.4.6 below.

Bus zone

High school students will share the primary school bus zone, which is currently located on the western side of Majara Street. In accordance with suggestions from QPRC, the bus zone will be relocated to the southern side of Gibraltar Street, adjacent to the primary school. Furthermore, the primary school pick-up/drop-off zone will be relocated to the western side of Majara Street.

Pick-up/drop-off

The high school student pick-up/drop-off zones will be on the northern side of Gibraltar Street (15 spaces) and the southern side of Turallo Terrace (3 spaces), adjacent to the high school site.

The pick-up/drop-off zones will be controlled by No Parking signage (8:00am to 9:30am and 2:30pm to 4:00pm school days) to encourage vehicle turnover. Outside of these periods, the pick-up/drop-off zone can be used for parking by the general public.

The agreed mode share target for students being dropped off is 18% of the student population, which is 85 students. Assuming that the school peak will occur over a 15-minute period and a conservative allowance of approximately 60 seconds for a student to embark or disembark a vehicle, each space would turn over approximately 15 times. Therefore, the proposed 18 spaces accommodate up to 270 vehicles in the peak 15 minutes of school activity. Accordingly, 18 spaces is appropriate to accommodate the expected demand and minimise the risk of vehicle queuing on Turallo Terrace and Gibraltar Street and impacts on through-travel movements.

Vehicular access into site

Vehicular access will be provided via the northern leg of the proposed roundabout at the intersection of Gibraltar Street and Majara Street.

Only teachers, staff and waste collection vehicles will have access to the closed section of Majara Street, which will be controlled via a gate and a reader/intercom. There will be opportunities for parents/guardians with special needs children attending the high school and minibuses associated with the NSW's Government ASTP to

pickup/drop-off their children within the staff parking. While no dedicated bays will be provided for such pick-up/drop-off, provision of ASTP and special needs access within the staff park will provide separation from other parental pick-up/drop-off activity and occur behind gates, significantly reducing student safety risks.

7.4.5 Parking

Car parking for staff

The proposal will retain the existing staff parking at the QPRC building, which will be allocated to school staff. The current supply (44 parking spaces including 2 for the mobility impaired) will be sufficient to accommodate the parking demand for the teachers and staff at the school.

PDCP 2015 does not specify a parking rate for high schools. Nonetheless, the provision of 44 spaces is considered acceptable as all staff will be able to park within school grounds.

Access to the car park will be controlled via a boom gate with entry via the proposed roundabout at Gibraltar Street and Majara Street.

Car parking for community

The proposal will result in the loss of informal and formal parking (approximately 60 total spaces) currently provided on Majara Street between Gibraltar Street and Turallo Terrace. This will be partially offset by the provision of 35 parking spaces along the southern side of Turallo Terrace and 5 spaces on the northern side of Turallo Terrace.

Bicycle parking and end-of-trip facilities

The proposal will provide 76 bicycle parking spaces, which will be located at the northern and southern pedestrian entries of the school. PDCP 2015 does not specify a bicycle parking rate for high schools. The provision for 76 bikes is consistent with the target mode share scenario for cycling, as detailed in the Traffic Assessment Report (**Appendix 6a**).

Additionally, 4 bicycle parking spaces for staff in proximity to Building A, separate from the student parking.

All bike parking will be provided within the secured, fenced boundary of the school.

Three unisex shower/change cubicles will be provided near Building A (for use by staff only). The teaching staff at the nearby primary school will also be able to use these facilities.

7.4.6 Upgrades to active transport network

The proposal requires the following upgrades to the active transport network in proximity to the site:

- New wombat/school pedestrian crossing on Gibraltar Street to replace existing school crossing to support the safe and efficient movement of students, staff and guardians accessing and egressing the school;
- Pedestrian crossing across Turallo Terrace to support safe movement of pedestrians between school and Ag Plot and Scout Hall.
- The relocation of the bus zone to the southern side of Gibraltar Street will require minor relocation of the current school crossing location to maximise length of kerb for bus zone and balance pedestrian desire lines between high and primary school, Mick Sherd Oval and bus zone;
- Realignment of shared paths within and in proximity to Mick Sherd Oval and the proposal site. This will include:
    - Link to shared path on Turallo Terrace (east of Butmaroo Street) to the shared path on Turallo Terrace to the south-west of Turallo Creek; and
    - New shared path to the west of Mick Sherd Oval, connecting the shared path on Turallo Terrace to Gibraltar Street.

7.4.7 School Transport Plan

A School Transport Plan is included in the Transport Assessment at **Appendix 6a**. The School Transport Plan is a tool designed to promote increased sustainable mode share for staff and students commuting to the proposed new high school in Bungendore.

The mode share targets for the new high school in Bungendore have been developed as part of scenario testing undertaken in the transport assessment and are displayed in Table 7-2.

Table 7-2 Mode share targets

Mode	Student Target		Staff Target	
	Students	Mode share	Staff	Mode Share
Walk, incl ped scooter	113	25%	4	10%
Bicycle	68	15%	4	10%
School bus	167	37%	-	5%
Kiss-and-drop	81	18%	-	-
Drive themselves	23	5%	-	-
Car as driver	-	-	29	70%
Car as passenger	-	-	4	10%

Mode	Student Target		Staff Target	
Total	450	100%	41	100%

A summary of the proposed transport management strategies for the day-to-day school operations are outlined in Table 7-3.

Table 7-3 Transport Plan management strategies

Facility	Management Strategies
Site entries, pedestrian and vehicle	All pedestrian entry/exit into the school will be controlled using gates, which will close outside of school periods to prevent unauthorised entry. Access to the car park will be controlled by a gate and a card reader/intercom. Only authorised vehicles (staff and waste collection vehicles) will be issued with a card to open the gate. A security fence will be provided around the perimeter of the school to: • Restrict activity to the designated entry points for pedestrian, bicycle riders and vehicles; and • Direct students to the designated pedestrian points on Gibraltar Street and Turallo Terrace. Waste collection will be scheduled to occur outside peak periods of school activity in order to support the safety of students and their parents/guardians moving around the high school. Deliveries will be scheduled to occur outside peak periods of school activity (i.e., no deliveries will be scheduled from 8:00am to 9:30am or from 2:30 pm to 4:00 pm).
Active transport	Communicate the ways students can get to school, emphasising active and public transport, through a Transport Access Guide. All individuals will be responsible for locking their bikes at the designated bike rack. Advanced cycling and bike maintenance classes will be provided to high school students.
Kiss-and-drop including Assisted School Transport Program	Staff will not manage/supervise the operation of the school's pick-up/drop-off facilities. There will be opportunities for parents/guardians with special needs students attending the high school and minibuses associated with the NSW Government ASTP to pick-up/drop-off their students within the staff parking. The pick-up/drop-off zone will be controlled by 'No Parking' signage (8:00 am to 9:30 am and 2:30 pm to 4:00 pm school days) to encourage vehicle turnover. Outside of these periods, the pick-

Facility	Management Strategies
	up/drop-off zones could potentially be used for parking by the general public. Preparation of a Transport Access Guide detailing expected student and parent behaviours at the pick-up/drop-off facilities.
Buses	Staff at the high school will manage/supervise the operation of the school's bus zone. Communication of bus routes serving the school, timetables and School Student Transport Scheme criteria through a Transport Access Guide. Buses for excursions (or similar) will use the school's designated bus zone. Review bus patronage on an annual basis to ensure that there is sufficient capacity for primary and high school students. Review the school bus routes in the context of student addresses (using the depersonalised household data) and coordinate/ advocate for better bus service design to pick up kids closer to where they live.
Car Parking	Gates providing access to the car park to be kept closed at all times, unless being used by the school. Time restrictions will not be applied to the relocated parking bays on Turallo Terrace.

In addition to the above mode-specific strategies, the Transport Plan recommends a number of general strategies for promoting and educating staff about sustainable travel, including:

- Distribute a transport access guide to all staff, parents/guardians and students;
- Communication plan for stakeholders to converse and champion sustainable travel behaviour;
- Periodical review of Travel Plan every two years;
- Annual survey;
- Appointment of a travel coordinator; and
- Form internal and external group to manage the implementation of the transport plan.

7.4.8 Construction traffic management

A Preliminary Construction and Pedestrian Traffic Management Plan (CTMP) has been prepared by GHD and is attached at **Appendix 6b.** The report addresses the location

of the work zone, construction routes, on-site parking arrangements, emergency service arrangements, measures to manage any potential traffic, pedestrian and bicycle impacts. Key items from the plan are outlined below.

Construction vehicle access route

Access to the construction compound will be provided via the site access points on Turallo Terrace. Egress from the construction compound will be provided via Gibraltar Street/Majara Street) and Turallo Terrace.

In determining haulage routes:

- Vehicles will utilise the Kings Highway and Molonglo Street as the primary access/egress route aligning with the road state/regional road hierarchy amend authorised B-double route;
- Vehicle activity on the township's collector and local road network will be minimised, with site vehicles travelling on Gibraltar Street and Turallo Terrace local road network to directly access/egress the site; and
- During school peak pick up and drop off periods, heavy vehicle movements will be restricted to Turallo Terrace only, to provide improved safety to Bungendore Public Schoolool students on Gibraltar Street and Majara Street.

The primary designated haulage routes to and from the construction compound are detailed in Figure 7-11.

Figure 7-11 Primary designated haulage routes
Source: GHD

Construction Parking

Heavy vehicle activity (e.g., deliveries and waste collection) will occur within the construction compound. Heavy vehicle arrivals will be coordinated to avoid queuing of vehicles outside the site, as queuing of vehicles is not permitted on the public road network or in a position that will cause obstruction or safety issues to vehicles (or occupants), pedestrians or cyclists.

Approximately 100 light vehicles are expected to access the construction compound. The existing QPRC building parking will be available to workers, with approximately 50 vehicles required to find alternative parking arrangements. These may include informal parking on Turallo Terrace and Butmaroo Street, as well as other designated parking areas in proximity to the site.

Traffic management

Vehicles will be permitted to travel past the worksite on Turallo Terrace, Butmaroo Street and Gibraltar Street, with traffic signage in accordance with a traffic guidance scheme to be developed in accordance with Transport for NSW Traffic Control at Works Sites Technical Manual (Version 6, 2020) and AS1742.3 – Traffic Control for Works on Roads. This will advise motorists of changes in the road network or vehicle movements to/from the site, including any truck turning activity.

Pedestrian and bicycle management

The general public will not be allowed into the construction area. Traffic controllers will monitor the site during construction deliveries entering and exiting from the site at each of the access/egress gates to ensure that people in the vicinity of the site are protected from heavy vehicles movements into and out of the construction compound.

Impacts to public transport

No changes to existing bus operations are required to facilitate construction works. The bus stop and bus zone adjacent to the primary school on Gibraltar Street will remain operational at all times.

The majority of light and heavy construction vehicles are expected to access/egress the construction compound via Queanbeyan and Canberra and therefore will not be required to traverse the level crossing of the rail line servicing Bungendore Station.

Storage of materials

All construction storage containment will occur within the construction compound located within the site.

7.4.9 Mitigation measures

It is recommended that the measures in the Traffic Plan and Preliminary CTMP be implemented. No other mitigation measures have been identified.

7.5 Ecologically sustainable design (ESD)

An Ecologically Sustainable Development Statement (ESD) has been prepared by Norman Disney Young and is attached at **Appendix 27.**

The ESD has been prepared to assess the proposal against the requirements set out in the SEARs (SSD-14394209), EFSG Design Guides, Design Guide for Schools and Environmental Design in Schools Manual and NSW Government Resource Efficiency Policy 2019.

The ESD initiatives of the proposed development will be verified through a Green Star Design & As Built v1.3 formal certification from the Green Building Council of Australia. The development is targeting a 4 Star rating, which is deemed to represent an Australian Best Practice development.

7.5.1 Principles of ESD

There are four ESD principles defined by cl. 7(4) of Schedule 2 of the EP&A Regulation that must be considered in the assessment of the proposal. These are addressed in the table below.

Table 7-4 ESD principles assessment

Principle	Description	Comment
Precautionary principle	The precautionary principle says that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.	The ESD initiatives proposal aims to reduce the environmental impacts typically associated with buildings during the construction and ongoing operation of the building. Sustainability measures have been incorporated, spanning across the proposal's design, construction and operations, based around the core principles of: • Efficient use of resources (energy, water and materials); • Enhancing indoor environment quality and occupant comfort; and • Minimising ecological impacts. A climate change risk assessment has been completed to assess the anticipated impacts of climate change and implement design strategies to mitigate these impacts.

Principle	Description	Comment
Intergenerational equity	The principle of intergenerational equity says that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.	Student and staff health has been considered through the incorporation of indoor environmental quality design features such as daylight and glare analysis for natural lighting, best practice lighting design, indoor air quality, thermal comfort assessment, acoustic design, and responsible material selection to reduce internal pollutants and resource depletion for future generations.
Conservation of biological diversity and ecological integrity	This principle says that conservation of biological diversity and ecological integrity should be a fundamental concern.	The proposed design has considered design strategies to minimise the urban heat island effect and improve ecological value of the site, such as the use of light-coloured external finishes and landscaping including native vegetation. Access to views will be considered to increase student engagement with the natural environment.
Improved valuation, pricing and incentive mechanisms	This principle says that environmental factors should be included in the valuation of assets and services.	Total cost of operation will be reduced through sustainable considerations to reduce energy, water and waste requirements, taking into consideration whole-of-life costing. The project will ensure sustainable principles are extended to include value for money, fit for purpose, long term reliability/resilience and flexibility. Designing with the long-term operation of the building in mind will create further buy-in and cooperation from the operating stakeholders. Strategies to reduce operational waste have been considered such as the development of an operational waste management plan and separation of waste streams.

7.5.2 ESD measures

The table below summarises general ESD principles which have been adopted for the project, with a focus on conservation of resources and future resilience. The ESD statement at **Appendix 27** provides further detail on these strategies.

Table 7-5 ESD measures

Theme	Recommendation for incorporation at detailed design stage
Management	• Preliminary consideration of the building design and its resilience to climate change impacts; • Commissioning and tuning of building systems to ensure systems are operating as intended; • Metering and monitoring to capture consumption trends; and • Building information to facilitate operator understanding, and separation of waste streams (e.g., to facilitate reuse, recycling, composting and overall reduction of waste to landfill).
Indoor Environment Quality	• Passive design analysis in early design phase; • Preliminary daylight and glare analysis for natural lighting, energy-efficient best-practice lighting; • Thermal comfort assessment; • Acoustic design; and • Responsible material selection to reduce indoor pollutants.
Energy	• The building will comply with NCC 2019 Section J minimum requirements; • Passive design features including high performing building fabric and integrated shading to reduce mechanical energy consumption; • High efficiency air conditioning and LED lighting; • Climate projections analysed to support an adaptable and climate responsive design, solar PV on roof spaces to reduce grid energy consumption; • High performance building sealing; and • Minimum energy efficiency targets for appliances.
Transport	• Encourage active and public transport, bicycle parking for staff and students as well as change facilities for staff are provided to the development.
Water	• Selection of water efficient sanitary fixtures, fittings (high WELS ratings), and appliances; • Water meters installed for monitoring;

Theme	Recommendation for incorporation at detailed design stage
	• Waterwise landscaping principles; and • Rainwater collection from the roof and stored for use on-site.
Materials	• A significant portion of construction waste generated from the demolition works will be reused or recycled, to limit the amount of waste going to landfill; • Strategies to reduce natural resource consumption (e.g., exposed services or prefabricated components) will also be considered in developed design; and • Low-carbon products and materials to be specified.
Land Use and Ecology	• Proposed design will include light-coloured roof, integrated shading and overhangs, landscaping, and the minimisation of hardscaping where possible to minimise the urban heat island effect and improve ecological value of the site.
Emissions	• Landscaping and rainwater harvesting will be implemented to support Water Sensitive Urban Design and limit stormwater pollutants leaving the site; and • High efficiency lighting and appropriate light zoning will reduce light pollution.

7.5.3 Assessment against accredited rating scheme

The development will be verified through a Green Star Design and As-Built v1.3 formal certification, targeting a 4 Star rating. In addition to the rating tool, the project will seek to implement best practice ESD features that will support the outcomes intended by Green Star.

7.5.4 Climate Change Resilience

A climate change risk assessment was undertaken for the proposal in accordance with AS 5334-2013 and Green Star Design & As Built v1.3 requirements. Expected impacts from climate change were identified with reference made to both CSIRO projections for the East Coast (South) sub-cluster and the NSW Government's NSW and ACT Regional Climate Modelling (NARCliM) projections. The results identified the following impacts for consideration by the proposal:

- Extreme temperatures are projected to increase with very high confidence, with substantial increases in temperatures reached on hot days, plus increased frequency of hot days;
- Average temperatures will continue to increase in all seasons (very high confidence);
- Generally, less rainfall is expected in winter (medium confidence), but the intensity of extreme rainfall events is projected to increase (high confidence);

- There is high confidence that climate change will result in a harsher fire-weather climate in the future; and
- Time spent in drought projected to increase (medium confidence) over the course of the century.

A climate change risk analysis was completed to assess the design's responsivity to the above impacts. The analysis identified no High or Extreme risks due to the climate change impacts after design elements were considered this project. All risks, including existing controls, were identified as being either Low or Medium.

Several residual risks were selected, and mitigation strategies were implemented into the building to reduce these risks to increase building resilience for future climate change. These included:

- Design of mechanical heat rejection systems to operate above current peak ambient temperatures to accommodate increased likelihood of extreme temperatures;
- Spare capacity in electrical site substation to accommodate increased load as a result of extreme weather;
- Surge protection and best-practice earthing to mitigate risk of lighting strike as a result of increased intensity of storm events;
- Provision of landscaping, covered outdoor areas and selection of light-coloured materials to mitigate heat gains and heat island effect;
- Selection of endemic, local and native landscaping to accommodate increased risk of drought; and
- Selection of high-efficiency air filtration and building sealing to accommodate increased risk of dust storms and bushfire smoke.

7.5.5 GANSW Environmental Design in Schools Manual

The project has adopted environmentally conscious design initiatives including air quality, ventilation, natural lighting, thermal comfort, and acoustic performance to benefit teacher wellbeing and student attentiveness, attendance, and overall performance. The ESD principles embedded in the proposed design satisfy the environmental and passive design elements in the GANSW Environmental Design in Schools Manual and the GANSW Design Guide for Schools.

The project will incorporate passive design elements, systems with high energy and water efficiency, and technology to ensure that the development is both sustainable and durable. Likewise, the spaces are designed with inclusivity and accessibility in mind through good indoor environment quality; this will, in turn, provide healthy environments with high levels of amenity for students and staff. Furthermore, renewable energy technologies, high performance building facades, and sustainable product selection on the project support the development's aims to reduce impact on natural resources, whilst maintaining a flexible and adaptive design.

7.6 Aboriginal cultural heritage

7.6.1 Methodology

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Eco Logical and is attached at **Appendix 8**. The ACHAR has been prepared in accordance with the project SEARs, Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010b) (the Code), Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011) (the Guide), The Burra Charter and Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010) (OEH consultation requirements).

7.6.2 Existing environment

The site is situated within the Monaro subregion of the South Eastern Highland bio region across three soil profiles; Millpost, Bungendore and Hoskinstown. A first order stream (Turallo Creek) passess through the north eastern corner of the proposed site area.

The site comprises, and is surrounded by, a highly modified landscape. The town itself comprises residential, commercial and community facilities. Much of the landscape outside the township has been cleared for agricultural use. The site is currently used as a recreational area including Mick Sherd oval, tennis courts, pool, playground and associated amenities, park furniture, lighting and car park.

The northern most section of the site (referred to as survey unit 1 in ACHAR) is situated on a terrace above the flood plain, south of Turallo Creek. The landform slopes south-north towards the creek line and has been modified during the construction of surrounding roads and the drainage line has been modified to redirect water. The northernmost section has been previously cleared of vegetation, though there are remnant native trees along the creek line, none of which exhibit signs of maturity or cultural scarring.

The southernmost section of the site (referred to as survey unit 2 in ACHAR) consists of a relatively flat topography with gentle east-west sloping. The area has been previously cleared of vegetation and modified by Mick Sherd oval, pool, tennis courts, amenities, playground and car parking with ground disturbance also occurring for the installation of lighting and associated subsurface cables surrounding the oval.

A review of spatial data was also completed with earliest aerial imagery of the site dating back to 1961. The aerial shows that the area has been largely cleared of vegetation and identifies Mick Sherd Oval and Bungendore Public School.

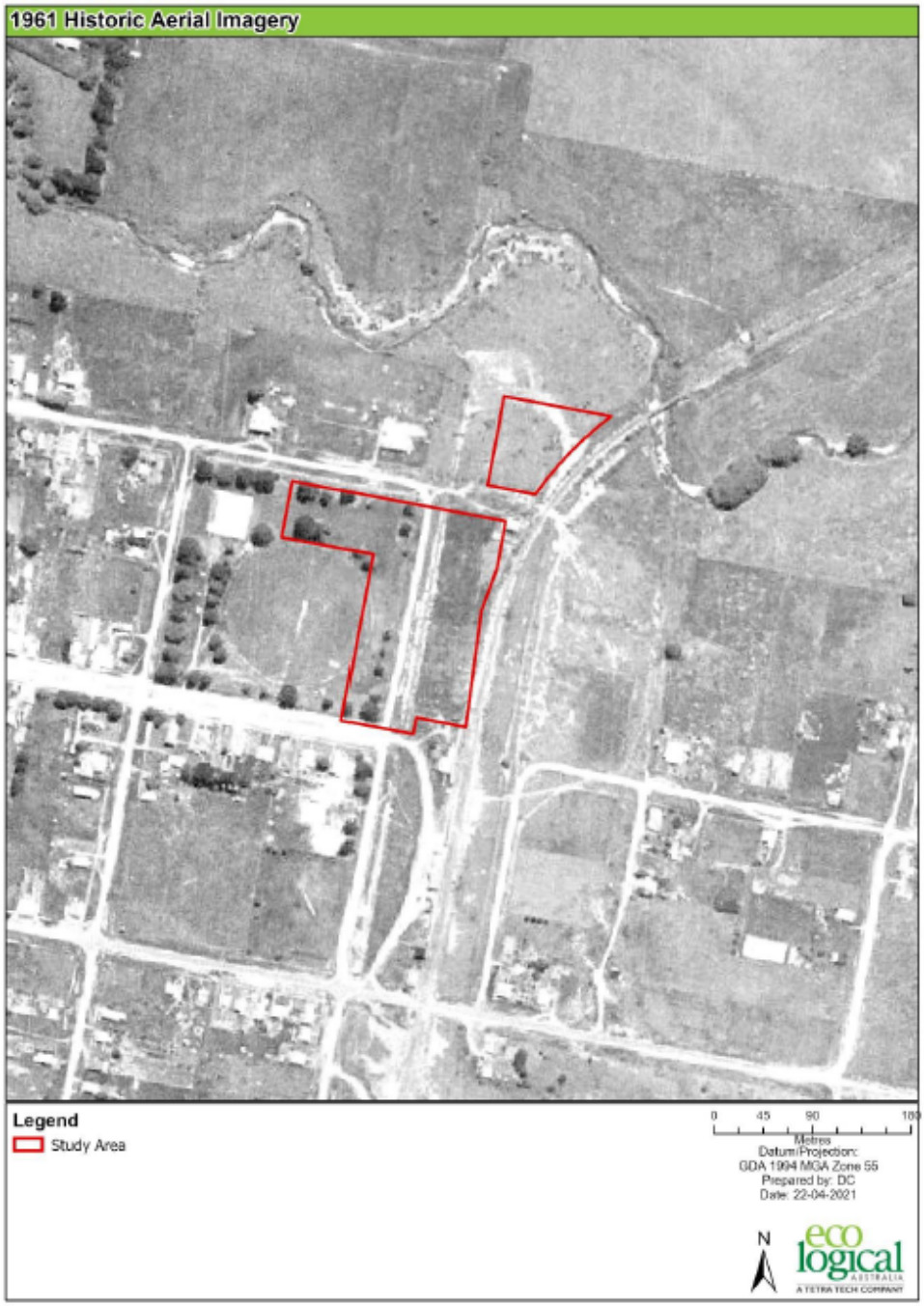


Figure 7-12 1961 aerial imagery
Source: NSW Historical Imagery – modified by Eco Logical

7.6.3 Archaeological investigations

A search of the AHIMS database was conducted on 30 June 2020 to identify if any registered sites were present within, or adjacent to, the site. The search found 102 Aboriginal sites recorded and 1 Aboriginal place declared within an 8km radius of the site; however, no Aboriginal sites have been previously recorded within the site.

The site was surveyed in accordance with Heritage NSW Code or Practice on 28 January 2021.

A majority of the site has undergone disturbance through the installation of services, bulk earthworks, and the construction of buildings. The overall landform has been heavily modified for the construction of roads, the railway, the sports field, an in-ground swimming pool and for flood mitigation management. No intact soil deposits were identified within the site. No artefacts were identified during the field survey.

Figure 7-13 AHIMS sites in proximity to the site
Source: Eco Logical

7.6.4 Consultation

Consultation was carried in four stages:

1. **Notification of project proposal and registration of interest:**

   In accordance with consultation guidelines, relevant bodies and known Aboriginal stakeholders were notified of the development, requesting registration of interest in the project. Additionally, a public notice was placed in the Bungendore Regional Independent on 20 January 2021. A total of 8 Aboriginal stakeholders registered their interest.

2. **Presentation of information about the project:**

   Following the registration of Aboriginal parties, Ecological presented the proposed project information and survey methodology. The project information pack was sent to the 8 registered Aboriginal parties (RAPs) on 19 March 2021.

   No responses were received regarding the methodology.

3. **Gathering information about cultural significance:**

   A field survey was undertaken by ELA Archaeologists Jennifer Norfolk and Charlotte Bradshaw, accompanied by Ngambri LALC Heritage Officer Arnold Williams on 28 January 2021.

4. **Review of draft ACHA report:**

   The draft ACHAR was sent to the RAPs on 29 April 2021. No responses were received from the RAPs.

7.6.5 Impact assessment

An assessment of the potential impacts of the proposal are summarised below:

- No Aboriginal sites were identified within the site;
- All sections of the site have been subjected to high levels of ground disturbance;
- Most sections of the site have already undergone development as part of the construction of existing facilities;
- All sections of the site were found to have a low archaeological potential;
- No direct impacts from the project on Aboriginal cultural heritage have been identified; and
- Ngambri LALC participated in the site survey and had no comment on the significance of the site.

7.6.6 Mitigation measures

No further archaeological assessment is required for the site, although general measures will need to be undertaken, including:

- Further investigation is required if the proposed works encounter intact soil deposits or if further works outside the assessment boundary are undertaken;
- Heritage induction is recommended for early demolition and construction works before works commence; and
- Standard unexpected finds protocol is to be implemented.

7.7 Heritage and archaeology

7.7.1 Methodology

A Statement of Heritage Impact Assessment (SoHI) inclusive of an Archaeological Assessment (AA) has been prepared by Eco Logical Australia and is attached at **Appendix 7**. The report identifies and assesses any potential impacts to the heritage significance of items in the site and in the vicinity of the proposal. The report is informed by desktop investigation and site survey. Key points from the report are outlined below.

7.7.2 Heritage context

The proposed new high school buildings are located within the heritage curtilage of the Bungendore Soldier's Memorial (LEP I199). The heritage curtilage of the Memorial item includes the whole Bungendore Park. The curtilage does not reflect the location of the heritage item or its significance and includes non-significant items such as Mick Sherd oval, tennis courts, pool, parking and various park amenities.

The proposed agricultural plot to the north east of Bungendore Park is located in a small portion of the Bungendore Common heritage curtilage (LEP I243) and will remain an open vegetated area and inclusive of two single storey sheds.

Another 10 heritage items are located in very close proximity to the site including the State heritage listed curtilage of the Bungendore Train Station (State Heritage Register 01105).

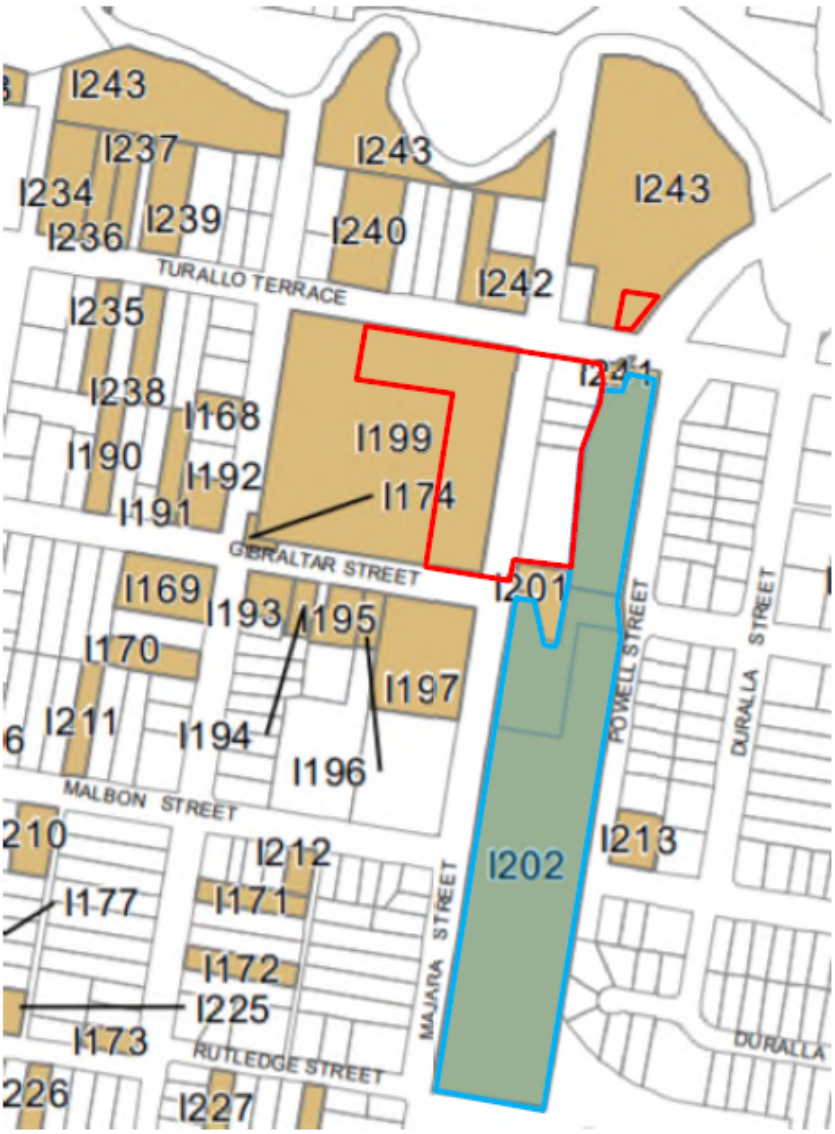


Figure 7-14 Surrounding heritage items
Source: Palerang LEP 2014 Heritage Map 004A – modified by Eco Logical)

7.7.3 Archaeological impacts

A site survey was carried out on the 13th of August 2020. Anecdotal evidence maintains that a "grave" was present in the park; however, no reliable maps, records or photographic evidence exist to prove the presence of a grave.

The site is assessed as having low archaeological potential and significance under the *Heritage Act 1977* and *National Parks and Wildlife Act 1974*, as any surviving archaeological resource located within the site would be unlikely to meet the threshold for State or local significance historically, socially, aesthetically and scientifically, nor would it be rare or representative.

7.7.4 Heritage impact assessment

Bungendore Soldier's Memorial (all of Mick Sherd oval) Gibraltar Street, LEP item I199

Erected in 1922 following approval by Public Memorials Advisory Board, the Bungendore Soldier's Memorial is historically important at National, State, Regional and community levels as a record of district participation on World War One. In its location and design, it remains important in demonstrating the principal characteristics of the siting of war memorials and is highly valued by the community for its spiritual, symbolic, cultural and social associations.

The new high school buildings are proposed to be located within the curtilage of Soldier's Memorial. The curtilage includes the entirety of Bungendore Park, including Mick Sherd oval, parking, pool, tennis and cricket facilities, playground and amenities. The Memorial Arch and plantings only comprise a small footprint on Gibraltar Street, and the heritage curtilage does not reflect the location or significance of the item.

The proposed new high school is not considered to have a direct or indirect impact on the locally listed Memorial Arch and plantings.

Bungendore Common, off Turallo Terrace, LEP item I243

Bungendore Common is a public use open space area. In 1901, five trustees were nominated to oversee the common which was land set aside for public use with a good supply of firewood and building stone in addition to a good reserve for agistment. The common is cleared and vacant land predominately following Turallo Creek. No significance assessment is available on the State Heritage Register; however, it is clear that the land is locally significant as the land has remained set aside for public use since the early 20th century.

The open space of the Bungendore Common will remain open space and the proposed agricultural plot will occupy a very small portion of the heritage curtilage and remain an open vegetated space. The proposal will not demolish or move any heritage items and is not considered to impact on the identified heritage significance of the Bungendore Common.

Bungendore Railway Station and yard group Precinct, Majara Street (SHR 01105)

The Bungendore Railways Station and yard group comprises a State significant late nineteenth century rail station and partly intact yard, including the 1885 roadside station building, the 1885 goods shed and jib crane. The extent of the railway buildings and structures are important elements within the wider townscape of Bungendore and are good representative examples of a series of similar items located on the Main Southern Line and Bombala Lines.

The proposal is not considered to have any direct or indirect impacts to the significance of the state listed Bungendore Train Station or its curtilage.

Heritage items in proximity to the proposal

The proposal is located in proximity to a number of other local heritage items; however, no heritage items will be directly or indirectly impacted by the works. In addition, it is identified that no significant views will be obscured by the proposal and no heritage items will be impacted directly or indirectly by the proposal.

The form, siting, proportion and design has been considered to facilitate the requirements of the school while complimenting the low scale and character of the surrounding town. The new buildings are set well back from the main thoroughfare and the majority of the heritage items allowing continued appreciation. The public and users of the item, such as the primary school, train station and post office, will still be able to view and appreciate their significance.

Consequently, the heritage impact of the proposal is considered negligible.

7.7.5 Mitigation measures

The SoHI recommends a number of mitigation measures to ensure heritage impacts are minimised including:

- Location of site storage, parking, compounds, stockpiles, etc. should not be located within the curtilage of any local or State heritage item;
- Consideration should be given to colours and materials as well as tree screening and the nature of landscaping surrounding the new buildings to ensure an appropriate landscape response to the character of the area; and
- A standard unexpected finds process should be adopted.

The report also recommends that the heritage curtilage of the Soldier's Memorial be reduced to reflect the significance and location of the item and not the entire Oval and associated facilities. The Memorial has significance for the local population, but this significance does not extend to the entire park. This reduction in heritage curtilage is not being proposed as part of the proposal and does not need to be carried out for the proposal to be approved. It would need to be pursued separately in consultation with Council through an amendment to PLEP 2014.

7.8 Social impacts

7.8.1 Methodology

A Social Impact Assessment (SIA) has been undertaken by Urbis and is attached at **Appendix 9**. The assessment identifies and analyses the potential positive and negative social impacts associated with the proposal. The assessment was prepared using the following methodology:

- Background review of surrounding land uses, relevant state and local polices and analysis of relevant data from desktop and site investigations;
- Identification and analysis of potential social impacts of the development, from the points of view of the affected community and other relevant stakeholders;
- Assessment of significant impacts considering management measures; and
- Provision of recommendations to enhance positive impacts, reduce negative impacts and monitor ongoing impacts.

7.8.2 Social baseline

The site is currently occupied by various community, recreational and civic facilities including Mick Sherd Oval, Bungendore Swimming Pool, Bungendore Community Centre, part of the Turallo Terrace dog off leash area and the Bungendore offices of QPRC.

The site is also located close to other significant community facilities, including Bungendore Public School, Bungendore Library, Bungendore Police Station and Bungendore Park Tennis Club. The Bombala rail line between Sydney and Canberra runs is adjacent to the site in the east, with Bungendore Station located immediately to the southeast.

Key characteristics of the community include:

- Close to half of all Bungendore households are couple families with children (45.9%), which is significantly higher than in the LGA (32.8%) and across regional NSW as a whole (25.4%);
- Over three quarters (75.9%) of employed Bungedore residents travel to work by car, and there is minimal public transport use, with fewer than 1% of employees travelling to work via public transport;
- By 2036, the population of Bungendore is expected to increase by 17.5% to 5,066 people; and
- By 2036, the proportion of people aged 35 – 49 years is forecasted to increase by 6.5%, and the population aged 0 – 19 years is expected to decrease by 7.6%.

High school students in Bungendore currently to travel to Queanbeyan or Canberra to access secondary education. Queanbeyan High School is the only existing NSW high school that includes Bungendore in its school catchment area.

Enrolment data from the NSW Government Centre for Education Statistics and Evaluation and Australian Curriculum, Assessment and Reporting Authority indicate that Queanbeyan High School has seen growth in student numbers over the last decade and is currently at capacity. The school has a capacity of 524 students, with 524 students enrolled in 2020.

7.8.3 Engagement

Engagement was undertaken with several agencies and community groups to inform them of the project and provide an opportunity for feedback on the proposal. This engagement has been documented within the Consultation Outcomes Report (prepared by Urbis) accompanying the EIS.

7.8.4 Social impact assessment

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

Table 7-6 Social impact assessment

Impact category	Potential social impact	Assessment
Neutral to low impacts		
• Way of life • Surroundings	Potential for increased noise and vibration during the construction and operation of the school	The proposal utilises DfMA whereby elements of the building are constructed offsite in a controlled factory environment and lifted into place onsite. Maximising off-site fabrication results in a reduction in construction amenity impacts onsite such as noise and vibration. The Noise and Vibration Assessment prepared by Acoustic Logic assesses the potential amenity impacts from the proposal on surrounding neighbours against relevant EPA and acoustic guidelines. Provided the recommendations of the Noise and Vibration assessment are adopted, the proposal will not adversely impact the surrounding properties and acoustic amenity of surrounding receivers.
Moderate to high impact		
• Culture	Engagement and integration of Aboriginal culture	As identified by Council's LSPS and the Government Architect of NSW, it is important for people to work closely with Aboriginal communities to ensure Indigenous heritage values are recognised and protected during development. The proposal has engaged with Aboriginal communities throughout the design process and has incorporated several design elements which aim to protect, enhance and integrate the Aboriginal values on site.
• Way of life • Community	Improved access to education	There are currently no high schools in Bungendore, with all students required to travel to Queanbeyan or Canberra to access school. However, recent changes to the ACT enrolment policy and population growth are increasing the demand for local enrolment places. The provision of a new high school in Bungendore will help meet this demand and is expected to have a positive impact on the community.
• Way of life • Health and wellbeing • Community	Access to open space and recreation facilities	Access to open space and recreation facilities is vital to the liveability and wellbeing of communities. The site is currently occupied by open space areas and recreation facilities including Bungendore Pool, the eastern section of Mick Sherd Oval and the Turallo Terrace dog off leash area. The proposal seeks to demolish Bungendore Pool, restrict access to Mick Sherd Oval and reduce the size of the Turallo Terrace dog off leash area. Consultation undertaken by

Impact category	Potential social impact	Assessment
		SINSW indicates there are community concerns about these components of the proposal.
• Way of life • Health and wellbeing • Community	Access to community infrastructure	The site is occupied by various social infrastructure including Bungendore Community Centre. The Bungendore Scout Hall is also located adjacent to the site. The proposal will include the demolition of the Bungendore Community Centre and the development of a new community centre. Given the essential service these facilities provide, this has potential to positively impact on the wellbeing of the community.
• Way of life • Community	Access to Council services	The site contains the Bungendore Council building, one of three Council buildings across the LGA. The proposal will repurpose the entirety of the Council building for school uses. While a Council kiosk will remain on site, its significantly smaller size means it is likely there may be a reduction in the number of services provided.
• Community • Surroundings	Change to character	Bungendore is a rural town with strong visual links to its surrounding natural landscapes. The site is co-located with historic structures at Mick Sherd Oval, including the Bungendore War Memorial and The Balladeers Place (Poet's Corner), and is also in proximity to other historic structures in the town. Concerns published by the community online indicate there are concerns the proposal may overshadow and diminish the significance of these items.
• Accessibility • Surroundings	Pedestrian safety and access	Due to the site's location with other social infrastructure, it is typically subject to higher volumes of pedestrian movements than other parts of the town. The proposal is expected to increase the number of pedestrians accessing the site. During consultation of the proposal there were questions and concerns raised about how safe student access will be provided to the site. This extended to public access to and around the site, with consideration to the proposed community uses and Oval access.
• Accessibility • Surroundings	Traffic generation	The site is on a block bounded by Majara Street, Gibraltar and Butmaroo Streets and Turallo Terrace. As a new land use, the proposal will generate increased traffic and parking movements around the site. A Transport Assessment was undertaken to assess the potential travel impacts of the proposal. Consultation on the proposal indicates there is a perception among some community members that the proposal will increase traffic and negatively impact on the town's road network.

Based on this assessment and the above social impacts, the SIA concludes the proposal will create a low positive impact on the community. This is influenced by the

provision of accessible, local education places and the development of high-quality social infrastructure facilities for the community.

This SIA identified two key impacts which are likely to have a considerable change on the community's way of life. This includes impacts around access to open space and access to Council services. The overall impact of the proposal could be further enhanced through the implementation of the SIA recommendations, particularly those targeted at reducing and mitigating these impacts.

7.8.5 Mitigation measures

The following mitigation measures are recommended by Urbis:

- Implement the recommendations provided by the AECG, as outlined in the Architectural Design Report. This includes measures such as:
    - Encouraging opportunities to name the school buildings after bird species significant to the area to promote cultural connection and awareness of local fauna;
    - Seeking expertise on local plant species throughout the development of the landscape design and planting selection;
    - Ensuring the agricultural plot has a connection with the existing Scout building to forge further social links within the community;
    - Holding a smoking ceremony prior to the construction of the school;
    - Encouraging opportunities to share school facilities with the community as a means of fostering social connections and inclusivity within the community;
- Maintain consultation with Aboriginal and Torres Strait Islander communities to keep them informed of the final design and to allow for further opportunities for input as the proposal progresses;
- Aim for the catchment area for the new school to encompass the entire suburb of Bungendore, including growth areas on the edges of the town;
- Clearly communicate the catchment area to all existing and prospective families in the broader Bungendore area, as well as providing information around intake years and curriculum offerings;
- Communicate clearly about the use of Mick Sherd Oval after school hours to ensure community members feel comfortable using the oval. This may include design measures, such as the provision of signage around the oval, or communication measures, such as advertisements in the local newspaper or targeted door knocks when the school is operational;
- Work with Council to develop and fund a maintenance schedule for Mick Sherd Oval to protect the field from overuse and ensure it is of a high playing quality all year round;

- Develop an Operational Plan of Management which outlines the hours of operation for each use on site, dedicated access requirements and safety procedures for school and non-school users;

- Consult with the existing users of the Bungendore Community Centre to keep them informed of potential changes to their service delivery and expected construction timelines, particularly if there are any changes to the construction schedule throughout the project;

- Continue to communicate with Council to finalise the lease and/or shared use arrangements around the new community building;

- Consider developing shared use arrangements for other school facilities, such as the school hall, to allow for community use outside of hours.

- Prioritise the inclusion of the existing Bungendore Community Centre uses/services within the new community centre to maintain a continuation of services to the community. This will be the responsibility of Council to manage;

- It is recommended that, prior to repurposing the Council building, SINSW strongly advocate for Council to:

    - Communicate clearly with the Bungendore community on future plans for Council services within the town;

    - Ensure all Council staff within the existing Council building on Majara Street are regularly informed, and preferably consulted, about the proposed changes to Council services;

    - Develop and implement a change management plan, which includes giving Council staff maximum notice about any changes to their roles;

- Prioritise the selection of native species across the site to better integrate with the existing natural landscape;

- Develop a maintenance schedule to ensure the grounds and landscaping are maintained to a high standard and to not detract from the visual amenity of the surrounding areas;

- Implement the recommendations outlined in the CPTED assessment;

- Continue to communicate with the community about proposed access routes to the site, particularly with the closure Majara Street and new pedestrian crossings;

- Consider providing access information as part of the enrolment information pack for commencing high school students; and

- Continue to communicate with the community about the closure of Majara Street and subsequent traffic movements. Consideration should be given to advertising the final findings of the Transport Assessment to the community to enable and promote transparency about potential traffic impacts.

7.9 Noise and vibration

7.9.1 Methodology

A Noise and Vibration Assessment prepared by Acoustic Logic is attached at **Appendix 12.** The report assesses the impacts associated with noise emissions from the site during the construction and operational phases and potential impacts from surrounding environmental noise sources.

Unattended noise monitoring was conducted from 27 April 2021 to 10 May 2021, using Acoustic Research Laboratories monitors. The monitoring locations were selected to represent the background noise level at the potentially most impacted receivers.

Logger 2, Logger 3, and Logger 4 monitors could not be placed closer to the proposed school site due to the existing school being close by. The monitoring location used is considered to be closely representative of the "true" ambient noise.

Following the collection survey data, Acoustic Logic has identified noise emission criteria applicable to the proposal and predicted operational noise emissions and assessed them against the acoustic criteria.

7.9.2 Existing conditions

The surrounding area generally includes low density residential developments to the north and west, an existing rail line to the east and Bungendore Public School and the Bungendore train station to the south and southeast respectively.

The Bungendore Local centre is located approximately 400m southwest of the school site which includes a mix of cafes and restaurants, retail, accommodation, supermarket and accommodation land uses.

7.9.3 Noise emission from school

Operational noise

Key sources of noise emissions from operation of the future school include use of the hall/gym for presentations or performances, the public address (PA) system, school bell, mechanical services, and any out of hours community use of school facilities.

Regarding the mechanical services, detailed information is not available at this early stage of the project design. However, given the proposed buildings are remote from existing and future residential buildings, it is both possible and practical to treat noise from the operation of the proposed mechanical equipment to comply with the applicable Noise Policy for Industry (NPfI) noise criteria using standard acoustic treatments such as lined ductwork, silencers, screens and the like.

Regarding the school bell/PA system, the system should minimise noise spill to adjacent properties by positioning/locating speakers to reduce noise spill to neighbouring properties.

The primary period of traffic generation on Kings Highway and Gibraltar Street is the AM peak period. A total of 330 vehicle movements are expected to be generated by the development, with approximately 77% of these expected to use Kings Highway and Gibraltar Street. Assuming a 50/50 split of vehicles heading east/west, it would be expected that the noise level at the façade of the Kings highway and Gibraltar Street residences would be up to 55dB(A), which is quieter than the 60dB(A) limit for road traffic noise generation on Kings Highway and Gibraltar Street.

Regarding outdoor activities, the predicted noise levels exceed the rating background level by up to 16dB(A), which is greater than the standard "background + 5dB(A)" noise emission criteria. The most impacted residential receivers will be those to the north of the site having direct line of sight to parts of the Oval and courts. The remainder of the residential receivers would have much lower levels of noise exposure.

The exceedance, however, is considered reasonable in the circumstances of this case for the following reasons:

- It is not uncommon for school development to be located in residential areas and exceed the "background + 5dB(A)" noise emission criteria;
- In Meriden v Pedavoli [2009 NSWLEC 183], the NSW Land and Environment Court noted that "All noise that emanates from the normal activities at a school is not offensive";
- Further to the above, the Court had regard to the fact that there was other school development in the local government area in which playgrounds adjoin residential development and the fact the proposed use was permissible in the zone (which is consistent with the proposed development);
- Noise from the existing primary school playground and sporting field are already a part of the normal noise environment; and
- There is significant distance and separation between playground areas and residential boundaries.

Noise from internal spaces including learning, administration spaces and school hall is not anticipated to exceed noise emissions criteria.

Construction noise

Predicted noise levels from construction activities have been calculated, and the results are provided at section 13.5 of Noise and Vibration Assessment. The greatest noise impact will be at residences immediately to the north, east and west of the site. Noise will generally exceed the noise management level but (except for brief periods where the loudest plant will be operating at the northern school boundary) will be less than the "highly noise affected" level. Reasonable and feasible mitigation should be applied in accordance with the Control of Construction Noise and Vibration – Procedural Steps" outlined in the Noise and Vibration Assessment.

Exceedances of "noise affected" levels are typical of construction sites in suburban areas, as background noise levels tend to be relatively low. Further, since all

construction works are restricted to take place only during the daytime, noise impacts will not be experienced during the most sensitive time period (i.e., night-time).

A detailed noise management plan should be developed by the main contractor that describes in detail the construction phases, programme, processes and equipment used, noise impact assessment and proposed mitigation and management. A complaint's handling procedure should also be adopted for construction works.

Construction vibration

There are no significant sources of vibration envisioned. Given the distance from nearby receivers, vibration impacts on all receivers is expected to be within the recommended levels.

7.9.4 Noise intrusion into school spaces

The proposed school is not impacted by any local environmental noise source except local traffic on surrounding streets and the rail line to the east. The most impacted buildings would be those facing the rail line to the east.

Long term monitoring found the measured train noise to be 53dB(A) when averaged during the daytime periods. Based on these measurements, with standard windows the noise level in the classrooms would be expected to be reduced by at least 20 dB(A), meaning the proposal would be consistent with the 40 dB(A) criterion identified within the Development Near Rail Corridors and Busy Roads – Interim Guideline. Noise levels at other buildings and facades would be lower and would clearly comply with this criterion.

7.9.5 Mitigation measures

The following mitigation measures are recommended:

- Operation of the school should be limited to the activities and times of operation indicated in Table 2 of the report, subject to additional mitigation of noise for certain activities and operating times as indicated below;
- Detailed acoustic review of all external plant items should be undertaken following equipment selection and duct layout design. All plant items will be capable of meeting noise emission requirements of Council and the EPA Noise Policy for Industry (2017) Trigger Levels, with detailed design to be done at CC stage;
- External speakers for PA and bells should designed to minimise noise spill, be directional facing away from residential receivers to comply with EPA Noise Policy for Industry (2017) guidelines;
- Refer to section 6 of the noise report for noise mission trigger levels for air condition, ventilation plant, etc and PA and school bell systems;
- Waste removal times should be scheduled between 7:00am and 6:00pm;

- Ground maintenance should only occur between 7:00am and 6:00pm, Monday to Friday;
- Where music practice occurs within a school classroom outside of normal hours the windows of the rooms should be kept closed;
- The glazing to teaching spaces directly facing the future rail corridor should have a minimum Rw 22 transmission loss; and
- Construction noise impacts should be managed as outlined the noise and vibration report.

7.10 Biodiversity

7.10.1 Methodology

A Biodiversity Development Assessment Report (BDAR) prepared by Kleinfelder Australia Pty Ltd is attached at **Appendix 10**. The BDAR includes information in the format detailed in the BC Act (s.6.7), Biodiversity Conservation Regulation 2017 (s6.8) and the Biodiversity Assessment Method (BAM). The author of the report is BAM-accredited. The purpose of the report is to document the finds of an assessment undertaken for the project in accordance with Stage 1 (Biodiversity Assessment) and Stage 2 (Impact Assessment) of the BAM. Key findings from the report are outlined below.

7.10.2 Existing environment

The site is relatively flat and contains a park and maintained landscaped areas as well as the existing Council building.

The site is characterised by managed exotic grassland (i.e., lawns and oval), gardens, and planted native and exotic trees. These areas are subject to significant disturbance by their regular use by the public (i.e., high pedestrian traffic, use of sporting fields and open space), and continual maintenance of the vegetated areas (i.e., mowing of lawns and garden maintenance).

A third order stream (Turallo Creek) is located over 60m to the north of the site. The project has avoided impacts to the waterbody and the vegetated riparian zone.

The various vegetation and the stream are identified in Figure 7-15.

Figure 7-15 Planted vegetation diagram
Source: Kleinfelder

Given the vegetation type, it was determined that the BAM streamlined assessment module for planted native vegetation is appropriate for the BDAR. Justification for the use of the streamlined module is presented in Section 3.2.1 of the BDAR.

7.10.3 Impacts

Impacts on native vegetation and habitat

The proposal will have a direct impact on approximately 0.12ha of planted native vegetation, 0.21ha of planted exotic vegetation and 1.46ha of managed exotic grassland identified within the site.

The proposal has the potential for edge effects on the adjoining vegetation. Potential indirect impacts include:

- Increased weed invasion and potential spread or introduction of pathogens from the site to adjacent vegetation;
- Accidental incursions during clearing; and
- Reduced viability of adjoining habitats due to increased noise, dust or light spill.

Impacts on threatened species and their habitat

No threatened flora species were identified within the site. Additionally, no threatened flora species have been previously recorded within the locality to have a moderate or high likelihood of occurrence within the site.

One bird species was determined to have a moderate likelihood of occurrence in the Site, the Gang-gang Cockatoo (Calyptorhynchus lathami). This species has previously been recorded immediately west of the site. However, the lack of suitable nesting hollows within the site suggests that the species' utilisation of the site would likely be restricted to occasional foraging within planted vegetation as part of a broader range.

Serious and irreversible impacts

No serious and irreversible impacts were found to occur on the site.

Impacts requiring offsets

There are no offset requirements associated with the proposed development.

The proposed development will result in the clearing of 0.12ha of planted native vegetation, 0.21ha of planted exotic vegetation, and 1.46ha of managed exotic grassland. Therefore, there are no ecosystem credit requirements.

No species credit species were identified within the site, and therefore there are no species credit requirements.

Indirect Impacts

Other potential indirect impacts to land adjacent to the site include:

- Increased levels of dust during construction;

- Increased levels of noise;
- Increased levels of light; however, the majority of operations are expected to be during the day, so increased light levels would be minimal;
- Erosion and sedimentation; and
- Transfer of weeds and pathogens.

7.10.4 Mitigation measures

The BDAR recommends the following mitigation measures to manage potential impacts:

Measures to mitigate direct impact

- The area of disturbance should be kept to the minimum required;
- Where practicable, canopy-layer vegetation within the maintenance areas should be pruned/lopped and any unnecessary clearing or tree removal should be avoided;
- Clearly delineate the boundaries of the site to ensure no accidental incursions within retained vegetation;
- Identify and clearly mark No-Go Zones (retained vegetation and site boundary);
- Ensure vehicle and equipment parking areas and stockpile areas are identified and sited to avoid areas containing ecological value wherever practicable;
- Speed limits within the site will be limited to 40km/hr. This limit should be clearly signed at all entry points to site;
- Limit vehicle entry into the site where possible; and
- A pre-clearance survey should be conducted prior to the commencement of vegetation clearing, and if habitat features are identified within proposed vegetation clearing, clearance supervision is recommended.

Measures to mitigate indirect impact

- All plant, machinery and equipment to be used for vegetation clearing should be washed down before entering and leaving the site to prevent the spread and establishment of weeds, or fungal pathogens;
- Restriction to designated roads (out of No-Go Zones);
- All exotic vegetation removed from the site to be disposed of off-site;
- Weed infestations should be controlled as required during and following construction works;

- Identify and clearly mark No-Go Zones (retained vegetation and site boundary);
- All personnel onsite to be made aware of the sensitivity of the surrounding environmental features (e.g., vegetation to be retained);
- Limit exposure of bare ground during clearing;
- Reduce machinery noise where possible during clearing;
- Dust suppression measures such as water to be utilised, as necessary;
- Limit construction to daylight hours to limit light pollution on nocturnal fauna;
- Erosion and sedimentation mitigation measures to be put in place prior to commencement of tree clearing works to prevent sedimentation into retained vegetation (e.g., bunds or sediment fencing);
- Waste management procedures to be identified prior to commencement of works;
- Spill Response Procedures to be in place and spill kits to be present during clearing works; and
- All general waste to be removed from site.

Additionally, general recommendations regarding protection of existing trees are provided in the arborist report in Section 7.3 and 7.4 of the arborist's report at **Appendix 10.**

7.11 Stormwater drainage

7.11.1 Methodology

A Civil Schematic Design Report prepared by M+G Consulting is attached at **Appendix 15**. The report outlines the stormwater management strategy for the site and includes concept stormwater plans.

7.11.2 On-site detention

QPRC requires that an on-site detention (OSD) system is required for any development with additional impervious surface area to ensure there is no adverse impact from increased stormwater runoff on downstream properties as a result of new developments or redevelopments during all storm events up to and including the 100-year Annual Recurrence Interval (ARI) event. The OSD storages are to be designed to meet the permissible site discharge as indicated in Table D5.5 of QPRC Drainage Design guidelines.

The existing site is approximately 50% impervious. The development increases impervious area based on the proposed schematic design details. An underground OSD system will therefore be required to limit the post-development flows to the pre-

development conditions. The preliminary analysis undertaken using DRAINS computer software indicates a volume of approximately 100m^3 of detention storage is required

7.11.3 Major/minor system

QPRC guidelines require that new developments provide a stormwater major/minor system. The "major" system shall provide safe, well-defined overland flow paths for rare and extreme storm runoff events while the "minor" system shall be capable of carrying and controlling flows from frequent runoff events.

The proposal's major system will be designed to convey flows surcharged from the underground drainage system for storm events up to 100-year ARI. The overland flow will be directed away from the buildings and carparks and towards the public road kerb and gutter.

No drainage is proposed to be discharged towards the existing rail corridor, and therefore no adverse impact on rail infrastructure is expected.

Additionally, as outlined in the Educational Facilities Standards & Guidelines (EFSG), the proposed development is required to install/upgrade the minor stormwater drainage system including pits, underground pipes and kerb and gutter to cater for storm events up to the 20-year ARI.

7.11.4 Stormwater quality management

To protect the existing ecology, the development will be required to satisfy the water quality requirements over the full range of rainfall events. The Council's Development Design Specification D7 – Erosion Control and Stormwater Management outlines that any development except for single dwelling houses and dual occupancy housing must undertake a stormwater quality assessment to demonstrate that the development will achieve the post development pollutant load standards indicated below:

- Suspended solids: 80% retention of average annual load;
- Sediment: 100% retention of sediment greater than 0.125mm for flows up to the 3-month ARI peak flow;
- No visible oil flows up to the 3-moonth ARI peak flow;
- 100% retention of litter greater than 5mm for flows up the 3-month ARI peak flow;
- 65% retention of total phosphorus average annual load; and
- 65% retention of total nitrogen average annual load.

Proprietary water quality treatment products including Litter Baskets and Filtration cartridges within the OSD tank are proposed for the site as water quality treatment devices. MUSIC software by eWater Pty Ltd will used to assess the performance of the treatment devices in achieving the pollution reduction targets outlined in Council's DCP.

7.11.5 Mitigation measures

It is recommended that the stormwater management system be implemented in accordance with the measures outlined in the civil report. No other mitigation measures have been identified.

7.12 Bushfire

7.12.1 Methodology

A Bushfire Protection Assessment has been prepared by Eco Logical is attached at **Appendix 21**. The report addresses bushfire hazard and the requirements for special fire protection purpose development as detailed in Planning for Bush Fire Protection 2019 (PBP).

The Bushfire Protection Assessment has been assessed over two (2) parcels of land as shown in Figure 7-16. Parcel 1 is mapped as being bushfire prone land by the QPRC Bush Fire Prone Land map; however, Parcel 2 is not mapped as bush fire prone land.

Note**:** A school is a special fire protection purpose under section 100B of the *Rural Fires Act 1997*. Schools affected by bushfire hazard are generally required to obtain a bush fire safety authority (BFSA) from the Rural Fire Service and are also "integrated developments" under section 4.45 of the EP&A Act. However, SSD projects are exempt from requiring a BFSA and are not integrated development.

7.12.2 Bushfire hazard assessment

For the purposes of the Bushfire Protection Assessment, Parcel 1 refers to the new Agricultural Plot site, whilst Parcel 2 refers to the main high school site (See Figure 7-16 below).

Parcel 1

Bush fire prone vegetation within 140m of Parcel 1 is located to the east adjacent to the rail corridor and consists of unmanaged grassland paddocks which have been classified as "grassland" in accord with the PBP. The effective slope falls within the category of "all upslopes and flat land".

To the north, there is a narrow corridor of vegetation along Turallo Creek containing a mix of native and exotic species with grassy understorey. The riparian corridor currently ranges in width from 25-35m and is therefore classified as 'low hazard vegetation' by PBP; however, being located more than 100m from the proposed development, the riparian corridor is not considered to be a bush fire threat.

Parcel 2

The only bush fire prone vegetation within 140m of Parcel 2 is the grassland north-east of the site which is greater than 50m away. Therefore, Parcel 2 is not considered to be a bush fire threat in accordance with the PBP.

Figure 7-16 Bushfire hazard assessment
Source: Eco Logical

7.12.3 Mitigation measures

The following bushfire protection measures are recommended to ensure compliance with PBP:

- No specific APZ is required as the proposed development is located greater than 50m from the grassland hazard and greater than 100m from any other;
- It is recommended that future landscaping meets the requirements of PBP listed in Appendix A of the Bushfire Protection Assessment;
- The proposed development is exposed to BAL-LOW (insufficient risk to warrant specific bushfire construction standards);
- The proposed development is accessed via existing road network;
- The proposed development is serviced by a reticulated water supply which is compliant with PBP;
- Electricity services to the proposed development are located underground which is compliant with PBP;
- Gas services are to be installed and maintained in accordance with AS/NZS 1596:2014; and
- The proposed development is subject to BAL-LOW; however, the broader landscape bushfire risk should be considered in any emergency planning.

7.13 Flooding

7.13.1 Methodology

A Flood Assessment is attached at **Appendix 16**. The assessment provides specialist advice regarding potential flood risk at the site. The following actions were undertaken as part of the assessment:

- Prepare a hydrologic model (RAFTS) for the 1% annual exceedance probability (AEP) flood (with and without climate change) and probable maximum flood (PMF) events;
- Prepare a hydraulic model (TUFLOW) for the site under existing and proposed conditions and validate against available flood data;
- Prepare relevant flood maps including flood extents, depths, levels, velocities, hazards and impacts; and
- Analyse flood characteristics and model outcomes in existing and proposed conditions.

7.13.2 Existing environment

The west side of the site is grassed and contains several structures including a swimming pool and associated buildings, and public carpark. Majara Street runs through the site connecting Turallo Terrace and Gibraltar Street. The west side of the site contains existing Council buildings which are to be retained. The north side of the site is grassed and does not contain any structures.

The site is approximately 695m AHD at the western boundary and 692m AHD at the northern boundary, rising to approximately 700m AHD at the eastern site boundary.

7.13.3 Flood Modelling

The DRAINS software package was used with the RAFTS hydrological engine to assess the 1% AEP flood (with and without climate change) and PMF peak flow rates for a range of storm durations between 10 minutes and 18 hours. The results of the peak flow rates for catchments arriving at the site for the critical duration 1% annual expected probability (AEP) flood event with climate change to be a total of 36m^3 per second.

The TUFLOW hydraulic model was also used to determine flood characteristics including flood extents, levels, depths, velocities and hydraulic hazard for the critical 1% AEP flood with and without climate change and PMF events for existing conditions.

The results of the hydraulic modelling found that the proposed flooding conditions are largely unchanged from existing conditions with all proposed development elements raised above the floodplain, and are not affected by flood waters in all events up to and including the probable maximum flood (PMF) level.

7.13.4 Impacts

Based on hydraulic and hydraulic modelling conducted, the proposed flooding conditions are expected to be unchanged from existing conditions, with differences due to the proposed development considered negligible. The assessment concluded that:

- The proposed development area is predominately flood free with all building finished floor levels above the 1% AEP flood (with climate change) and PMF levels;
- The proposed high school development would have acceptable offsite flood impacts;
- Flood risks to life on site are low, and both evacuation and shelter-in-place emergency response strategies are available to further mitigate flood risks;
- All building finished floor levels are above the FPL and PMF levels; and
- Compliance with Council flood planning level are achieved.

7.13.5 Mitigation measures

Whilst the proposed development is not affected by flood hazards during all events up to and including the PMF event, it is recommended that school management

subscribes to the relevant flood warning systems and maintain communication with SES and local police at all times with respect to flood emergency response.

The proposed development has been designed to ensure compatibility with the existing floodplain environment. As the proposed development has been designed to achieve QPRC requirements, no further recommendations are considered necessary.

7.14 Soil and water

7.14.1 Impacts on groundwater

Groundwater is considered in the contamination report at **Appendix 18.**

No free groundwater was encountered during the drilling and coring of the boreholes; however, it is noted that the use of drilling fluids in the cored boreholes precluded any direct observation during deeper drilling. It is also noted that groundwater conditions rarely remain constant and can change seasonally due to variations in rainfall, temperature and soil permeability.

During drilling there were no other apparent observations of visual or olfactory evidence (e.g., staining, odours, free phase product) to suggest the presence of contamination within groundwater.

Based on the preliminary contamination assessment, a groundwater investigation is not recommended. A groundwater investigation may be recommended at a later stage depending on the results future soil sample assessment. (Refer to the contamination discussion at section 7.15.3 of this EIS for recommendations for further sampling.)

7.14.2 Impacts on surface water

Sediment and erosion control measures will be applied prior to the commencement of construction and maintained throughout construction in order to minimise the potential for sediment pollution of surface water.

Special consideration has been given to water quality impacts on the environmental values of the Lake George catchment during the construction phase of the proposed works. Sediment and erosion control measures will be design in accordance with the recommendations presented in Managing Urban Stormwater – Soils and Construction Volume 1 by Landcom (2004) in order to minimise the water quality impacts on the catchment, including:

- Design structures to minimise land disturbance;
- Pass any potential sediment-laden stormwater runoff through a trap or basin;
- Where possible, do not construct sediment basins on line on a watercourse;
- Design of any sediment retention basins to ensure that water is not diverted from its intended flow path;

- Where practical, place sediment control measures:
    - So that only waters polluted by on-site land disturbance activities enter them;
    - Off-line, so that trunk drainage carries only relatively clean water;
    - Away from normal construction operations; and
    - Upstream of any receiving waters.
- Ensure that the design of sediment control measures have adequate capacity to trap and store sediment and allow for adequate time for the settlement of desired particle sizes; and
- Do not decommission temporary sediment control measures until the permanent works have been completed and fully stabilised for more than 90% of the contributing catchment.

Refer to the sediment and erosion control plan in the civil engineering package at **Appendix 15** for further detail. Provided that these measures are in place prior to construction, no adverse impacts on surface water are anticipated.

7.14.3 Salinity and acid sulphate soils

The preliminary contamination report at **Appendix 18** considers salinity and raises no concerns regarding the salinity of the site's soils. Accordingly, a salinity management plan has not been prepared.

As noted in the preliminary contamination report at **Appendix 18,** CSIRO's Atlas of Australian Acid Sulfate Soils online mapping portal indicates that the site has a low probability of acid sulfate soils to be present. The report raises no further concerns regarding acid sulphate soils. Accordingly, an acid sulphate soils management plan has not been prepared.

7.14.4 Dust

There is some potential for dust from construction activities to impact the air quality of surrounding receivers. This will be effectively mitigated through standard mitigation measures to be detailed in the future construction environmental management plan (CEMP) to be prepared by the main contractor.

7.15 Waste

7.15.1 Demolition and construction waste

A Construction Waste Management Plan prepared by Hindmarsh is attached at **Appendix 19**. The report outlines the estimated quantity and type of waste that will be generated during the construction stage and provides details on servicing arrangements, and roles and responsibilities. Expected waste quantities are detailed in the tables below.

Table 7-7 Demolition waste

Waste type	Recycling	Disposal
Concrete brick block-work and tile	50m^3	-
Ashphalt	20m^3	-
Metals	2m^3	-
Timber off-cuts	15m^3	-
Cardboard	-	-
Plasterboard	20m^3	-
General waste	-	40m^3

Table 7-8 Excavation waste

Waste type	Reuse	Recycling	Disposal
Excavated natural material	2,490m^3	800m^3	-

Table 7-9 Construction waste

Waste type	Reuse	Recycling	Disposal
Concrete brick block-work and tile	-	165m^3	Nil
Metals	-	85m^3	-
Timber off-cuts	-	175m^3	-
Cardboard	-	142m^3	-
Plasterboard	-	165m^3	-
Plastics, plastic package, pain drums, containers	-	75m^3	30m^3
Pallets and reels	65 units	-	-
Liquid waste	-	-	20m^3
General waste	-	-	151m^3

7.15.2 Operational waste

An Operational Waste Management Plan is attached at **Appendix 20**. The report considers the proposal's waste generation, waste storage requirements, and collection arrangements.

The predicted waste generation of the proposal is outlined in the table below.

Table 7-10 Operational waste details

Waste type	Waste generation	Required bins
General waste	945L/week	1 x 1100L
Paper cardboard	668L/week	1x 1100L
Mixed recycling	748L/week	1 x 1100L
Soft plastic	721L/week	1 x 1100L
Organics	134L/week	2 x 120L
Return and earn	80L/week	1 x 120L

The nominated waste storage area is located to the north of the carpark closest to Building C as shown in Figure 7-17. The room is sized to accommodate the bins required.

A contract with a licensed waste contractor for the removal of all waste will be arranged prior to an occupation certificate or commencement of use (earlier of the two). The contract should also include provisions for the collection of potentially hazardous waste including e-waste.

On the day of service, a private waste collection vehicle will enter the site from main vehicle access point off Majara and Gibraltar Street and collect the bins directly from the waste collection point, adjacent to the waste storage area. Once the bins are serviced, the collection vehicle will exit the site onto Majara Street/Gibraltar Street in a forward direction.

It is recommended that the proposal comply with the waste management measures contained in the waste management plan. No other mitigation measures have been identified.

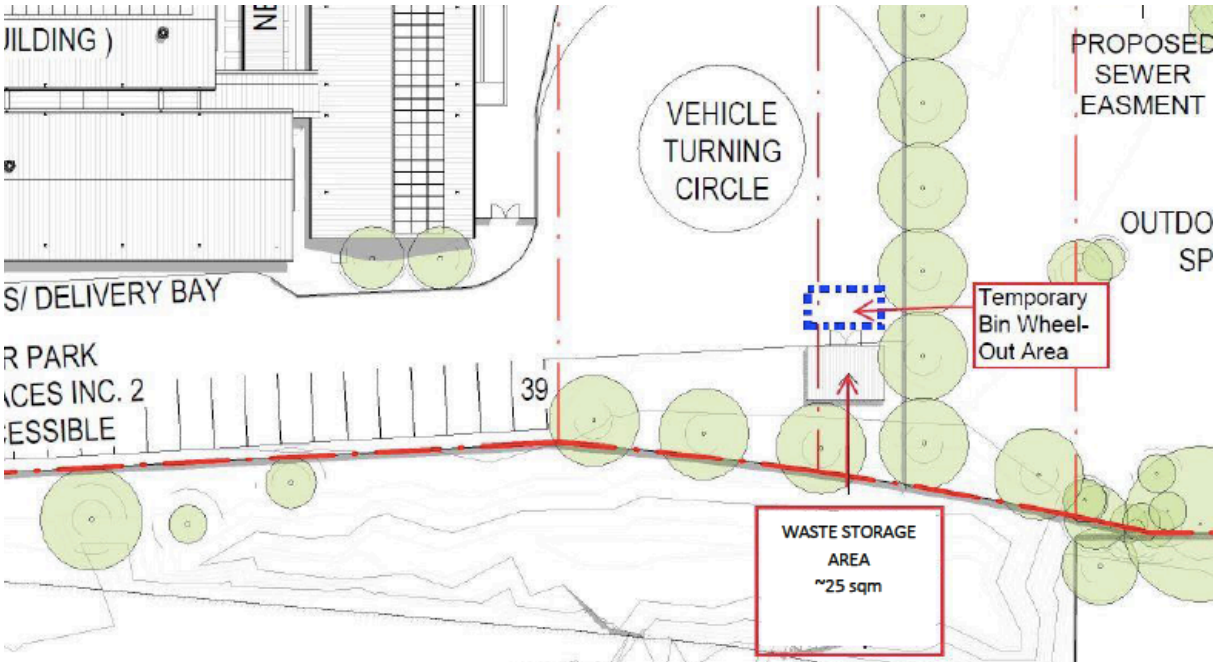


Figure 7-17 Waste storage area
Source: EcCell

7.15.3 Hazardous materials survey

The project SEARs require a detailed HAZMAT survey to be provided for any aboveground building to be demolished or altered. However, DoE does not have ownership of the site and therefore cannot vacate the existing buildings to perform a detailed HAZMAT survey at this stage. Accordingly, a detailed HAZMAT survey will be undertaken for the existing Bungendore Community Centre and existing Council building once the buildings has been vacated by staff.

(Note: As discussed at section 3.10 above, the Bungendore Community Centre will not be vacated and demolished until the new community centre is constructed and operational. Accordingly, there will be no period of time during which community centre operations are discontinued.)

7.16 Contamination

7.16.1 Methodology

A Preliminary Site Investigation with Limited Sampling prepared by Douglas Partners is attached at **Appendix 18**. The objective of the report is to assess the potential for contamination at the site based on past and present land uses and to determine whether further investigation and remediation are needed.

The site assessment criteria (SAC) applied in the investigation comprise levels adopted for a generic low-density residential space with garden/soil access (including primary schools/childcare centres) land use scenario. A conservative approach has been adopted due to the proposed Ag Plot that is planned to be located within the northern portion of the site (garden/soil access).

Intrusive investigations conducted as part of the investigations comprised the drilling of twelve boreholes. It is noted that borehole drilling has not yet occurred on the Ag Plot portion of the site.

7.16.2 Existing environment

The site historical title information suggests that the site was used for recreational and railway purposes from at least 1884.

Aerial photographs from between 1961 and 1985 indicate that the site was mostly vacant with some ground disturbance noted across the site at times.

Aerial photographs from 1985 and 1992 indicate that placement of fill had occurred within the tributary of Turallo Creek, located in the northern portion of the site.

An aerial photograph from 1992 suggests that sometime between 1985 and 1992, the swimming pool and community centre were also constructed.

The satellite image from 2007 indicates ground disturbance and placement of fill had occurred north of the Council offices where construction for those offices had established sometime before 2007.

Planning searches indicated no known sources of contamination across the site, and a search of the EPA's database also indicated that no contaminated sites are located within the current site of investigation.

7.16.3 Impacts

During borehole drilling there were no other apparent observations of visual or olfactory evidence (e.g., staining, odours, free phase product) to suggest the presence of contamination within the soils or groundwater encountered during this investigation.

No asbestos was observed during the course of the investigation. However, it should be noted that the small footprint of borehole drilling limits the ability to observe potential asbestos in soils, and it cannot be assumed that there is no asbestos present at the site.

Analytical results of soil samples were generally within the adopted investigation and screening levels for low-density residential land use and primary schools with the exception of:

- Nickel in samples BH05/3m at 10mg/kg, BH06/3m and BH10/5m at 9mg/kg and BH10/0.5m at 8mg/kg exceeded the EIL of 7mg/kg. Notwithstanding, samples BH05/3m, BH06/3.0m and BH10/5m are below the top 2m of soil where likely root zones and animal habitation zones are likely to be located and are considered not to be of concern. Furthermore, there was no sign of stressed flora and fauna within the site.

A calculation of the 95% upper confidence limit (UCL) average using ProUCL software was undertaken for nickel samples within the upper 2m of the soil and where

concentrations above the laboratory Practical Quantification Limit (PQL) were reported. The 95% UCL average was then compared to the assessment criteria. The 95% UCL average for nickel at the site was calculated below the assessment criteria.

Soil results for all cadmium and mercury and a number of arsenic results were less than PQL.

While analytical results of soil samples were generally within the adopted SAC, given the limited nature investigation, it is considered appropriate that further intrusive investigation should be undertaken within areas of the site that have not undergone intrusive works and where potential sources of contamination may be present, namely the Ag Plot.

Overall, based on the results of the preliminary investigation, it is considered that the site can be made suitable for the proposed school development, subject to the mitigation measures outlined below.

7.16.4 Mitigation measures

The contamination report recommends the following mitigation measures:

- Further intrusive investigation should be undertaken within areas of the site that have not undergone intrusive works, namely the Ag Plot;
- Subsequent remediation or management (remedial action plan) should be carried out if considered necessary based on the findings of the further investigation;
- A detailed HAZMAT survey will need to be undertaken for existing structures to be demolished; however, the buildings will need to be vacated completely before any detailed HAZMAT survey can be undertaken (Note: As discussed at section 3.10 above, the Bungendore Community Centre will not be vacated and demolished until the new community centre is constructed and operational);
- A Construction Environment Management Plan (CEMP) should also be prepared before future development works including an unexpected finds protocol and asbestos finds protocol and implemented during the works;
- Should suspected asbestos be encountered at the site, the affected area should be fenced off and assessed by an NSW licensed asbestos assessor; and
- Should any fill material be required to be disposed off-site, the material must be assessed in accordance with NSW EPA Waste Classification Guidelines Part 1 Classifying Waste (2014) and assigned a formal waste classification prior to off-site disposal.

7.17 Utilities

An infrastructure Management Plan prepared by Norman Disney and Young is provided at **Appendix 13**. The existing site infrastructure and need for upgrades are summarised in the table below.

Table 7-11 Utilities details

Utility	Existing	Required upgrades
Sewer	The site has frontage to: • Sewer mains terminating within the site adjacent the south western and north eastern boundaries; and • Sewer main reticulating with Majara Street and Turallo Terrace located towards the northern verge of the road.	It is proposed that this existing line from the Council building connection (now school building) back to the main line in Turallo Terrace is privatised for the school to utilise. The sewer drainage from the proposed buildings are proposed to be connected to the existing QPRC sewer main reticulating within Majara Street. Additionally, the sewer main terminating within the site adjacent to the north eastern boundary is also available for connection and appears to have adequate capacity.
Potable water	The site is serviced by incoming water mains.	The closure of Majara street will require a permanent easement to be created for existing QPRC water main. A new potable water connection shall be made to the existing water main north-east of the site, adjacent to Building A.
Gas	The site is serviced by natural gas mains within Turallo Terrace and Gibraltar Street.	The existing Evoenergy natural gas mains within Turallo Terrace and Gibraltar Street appears to have adequate capacity to service the proposed development works subject to preliminary service advise from Evoenergy.
Electricity	There are multiple existing power supplies to the existing lots and an existing underground high voltage cabling in Majara Street.	The existing substation that currently services the existing Council building will be upgraded to a new larger Essential Energy kiosk substation. Additionally, the closure of Majara street will require the: • Establishment of a permanent easement through the school site for the existing underground HV cabling route;

Utility	Existing	Required upgrades
		• Decommission the low voltage supply for the street lighting; • Decommissioning of the existing pool electrical supply; and • Decommissioning of the existing supply to the council building.
Photovoltaic Solar Power (PV system)	NA	A 70kW PV solar power grid-connect rooftop system shall be provided to offset power consumption costs at the school.
Telecommunications	There is an existing Telstra/NBN pit in Turallo terrace in front of Buildings D and E.	The proposal will connect to the existing infrastructure as required.

8 Assessment of other issues

8.1 Geotechnical

A Report on Geotechnical Investigation is attached at **Appendix 16**. The report provides the results of geotechnical investigations undertaken to inform the schematic and detailed design of the proposal. The report concludes that the site is geotechnically suitable for the proposed development and provides comments regarding earthworks and site preparation, site classifications, groundwater considerations, foundations with suggested allowable base bearing pressures and pavement design considerations.

8.2 BCA and accessibility

A BCA and Access Assessment report is attached at **Appendix 23**. The assessment confirms that the proposal is capable of complying with the relevant requirements of the BCA, subject to resolution of several minor items. These minor items do not require changes to the overall design and can be addressed at the construction certificate stage either by meeting the deemed-to-satisfy requirements or via a performance-based approach.

9 Environmental risk assessment

The following table sets out the anticipated impacts, the level of impact in terms of severity (low, medium, high), mitigation measures, and residual risk after mitigation is applied (low, medium, high).

Table 9-1 Risk assessment and mitigation measures

Impact Theme	Impact Detail	Level of Impact	Mitigation Measures	Residual Impact
Transport and accessibility	Potential conflict between construction vehicles and other vehicles/pedestrians	Low	Finalise and implement the construction traffic management plan	Low
	Surrounding intersections are expected to operate with spare capacity and at an acceptable level of service with the trips generated by the new high school and background traffic growth in 2030	Low	Implement the School Transport Plan to encourage sustainable transport modes	Low
Heritage	No adverse impacts on the significance of the site's heritage items or surrounding heritage items have been identified The site has low potential for archaeological artefacts	Low	Implement unexpected finds protocol	Low
Aboriginal heritage	The site has been identified as having no Aboriginal heritage significance and low potential for archaeological artefacts	Low	Implement unexpected finds protocol	Low
Noise and vibration	Construction noise is expected to exceed the "noise affected" level at nearby residences but not exceed the "highly	Medium	Implement reasonable/feasible noise management measures during construction	Low

Impact Theme	Impact Detail	Level of Impact	Mitigation Measures	Residual Impact
	noise affect level" at any residence		Contractor is to prepare and implement detailed noise management plan	
	Noise from outdoor play areas will exceed noise emissions criteria at nearby residential receivers	Low	No special mitigation measures are considered necessary given the noise is not notably offensive	Low
	The school's PA system, bell and plant are not expected to exceed the relevant noise criteria	Low	Select and design bell, PA system and plant to achieve the relevant external noise levels identified in the acoustic report	Low
Contamination	Analytical results of soil sampling were generally below the adopted SAC; however, further investigation is necessary for the Ag Plot, where intrusive investigation has not yet been undertaken.	Low	Undertake detailed investigation for areas of the site not yet subject to intrusive investigation, namely the Ag Plot Implement the general recommendations in the preliminary contamination report, including preparation of a HAZMAT survey, preparation of a CEMP, protocols for asbestos discovery and classification of any fill material for off-site disposal	Low
Bushfire hazard	The site is exposed to low bushfire risk	Low	No APZ is required Implement standard mitigation measures identified in bushfire report	Low
Biodiversity	Minor direct impacts on native vegetation including removal of planted vegetation	Low	Implement standard mitigation measures as recommended in the BDAR (e.g., delineate site boundaries, minmise areas of disturbance and identify no-go zones	Low

Impact Theme	Impact Detail	Level of Impact	Mitigation Measures	Residual Impact
			around vegetation to be retained)	
	Minor indirect and impacts on biodiversity (e.g., increased dust and noise) due to construction activities	Low	Implement standard construction management measures as recommended in the BDAR	Low
Tree protection	Potential construction impacts on trees to be retained	Low	Implement standard tree protection measures in arborist report for trees to be retained	Low
Soil and water	Erosion and sediment runoff during construction	Low	Implement standard measures as set out in the sediment and erosion control plan	Low
	Potential dust impacts on surrounding properties resulting from construction activities	Low	Implement standard mitigation measures to be detailed in future CEMP	Low
Social impacts	Reduced access to open space and recreation facilities, in particular the community pool The level of impact largely depends on the timeline for removal and replacement of the pool It is expected that the level of impact will be high initially (during the time the community is without a pool) but minor once the new pool opens	High	Extent of impact dependent upon timing of delivery of the new pool at the Bungendore Sports Hub (to be carried out separately by Council) If delivery occurs close to opening of the school, the impacts will be minor; if delivery occurs later, the impact will be greater	Medium-Low
	Potential reduced access to Council services	Medium	Council to communicate clear plans to the Bungendore community and Council staff regarding closure of the existing community	Low

Impact Theme	Impact Detail	Level of Impact	Mitigation Measures	Residual Impact
			centre and opening of the new Council kiosk	

10 Mitigation measures

The table below provides a consolidated list of recommended mitigation measures.

Table 10-1 Mitigation measures

Item	Impact Detail	Mitigation Measures
Transport and accessibility	Potential conflict between construction vehicles and other vehicles/pedestrians	Finalise and implement the construction traffic management plan
	Surrounding intersections are expected to operate with spare capacity and at an acceptable level of service with the trips generated by the new high school and background traffic growth in 2030	Implement the School Transport Plan to encourage sustainable transport modes
Heritage	No adverse impacts on the significance of the site's heritage items or surrounding heritage items have been identified The site has low potential for archaeological artefacts	Implement unexpected finds protocol
Aboriginal heritage	The site has been identified as having no Aboriginal heritage significance and low potential for archaeological artefacts	Implement unexpected finds protocol
Noise and vibration	Construction noise is expected to exceed the "noise affected" level at nearby residences but not exceed the "highly noise affect level" at any residence	Implement reasonable/feasible noise management measures during construction Contractor is to prepare and implement detailed noise management plan
	Noise from outdoor play areas will exceed noise emissions criteria at nearby residential receivers	No special mitigation measures are considered necessary given the noise is not notably offensive
	The school's PA system, bell and plant are not expected to exceed the relevant noise criteria	Select and design bell, PA system and plant to achieve the relevant external noise levels identified in the acoustic report

Item	Impact Detail	Mitigation Measures
Contamination	Analytical results of soil sampling were generally below the adopted SAC; however, further investigation is necessary for the Ag Plot, where intrusive investigation has not yet been undertaken.	Undertake detailed investigation for areas of the site not yet subject to intrusive investigation, namely the Ag Plot Implement the general recommendations in the preliminary contamination report, including preparation of a HAZMAT survey, preparation of a CEMP, protocols for asbestos discovery and classification of any fill material for off-site disposal
Bushfire hazard	The site is exposed to low bushfire risk	No APZ is required Implement standard mitigation measures identified in bushfire report
Biodiversity	Minor direct impacts on native vegetation including removal of planted vegetation	Implement standard mitigation measures as recommended in the BDAR (e.g., delineate site boundaries, minmise areas of disturbance and identify no-go zones around vegetation to be retained)
	Minor indirect and impacts on biodiversity (e.g., increased dust and noise) due to construction activities	Implement standard construction management measures as recommended in the BDAR
Tree protection	Potential construction impacts on trees to be retained	Implement standard tree protection measures in arborist report for trees to be retained
Soil and water	Erosion and sediment runoff during construction	Implement standard measures as set out in the sediment and erosion control plan
	Potential dust impacts on surrounding properties resulting from construction activities	Implement standard mitigation measures to be detailed in future CEMP
Social impacts	Reduced access to open space and recreation facilities, in particular the community pool The level of impact largely depends on the timeline for	Extent of impact dependent upon timing of delivery of the new pool at the Bungendore Sports Hub (to be carried out separately by Council) If delivery occurs close to opening of the school, the impacts will be minor;

Item	Impact Detail	Mitigation Measures
	removal and replacement of the pool It is expected that the level of impact will be high initially (during the time the community is without a pool) but minor once the new pool opens	if delivery occurs later, the impact will be greater
	Potential reduced access to Council services	Council to communicate clear plans to the Bungendore community and Council staff regarding closure of the existing community centre and opening of the new Council kiosk

11 Conclusion and justification

This EIS is submitted to the Minister for Planning to accompany an SSD application for establishment of a new high school and community facilities in Bungendore, NSW.

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

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

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

- The proposal will provide for a new high school facility to meet the growing demand of high school students in Bungendore;
- The proposal will provide for new community facilities, including a community library, Council shopfront and community health hub, for the benefit of the local community;
- The proposal will generate jobs, both short-term and ongoing;
- The proposal's design is the result of detailed analysis of the site and consultation with the community, DoE, GANSW and Aboriginal stakeholders;
- The potential environmental impacts of the proposal can be satisfactorily mitigated subject to the recommendations of the technical supporting documentation accompanying this EIS;
- If the proposal is not approved, an important piece of social infrastructure will not be delivered, and many current and future high school students in the area will have to travel unreasonable distances to attend school;
- The site is suitable for the proposal in that allows for well-designed, fit-for-purpose high school that results in no unacceptable environmental impacts and no unacceptable social impacts on the community; and
- The proposal is in the public interest in that it delivers on the NSW government's announcement of a new high school in Bungendore, which will serve as an important social infrastructure, and provides for new community facilities that will benefit the local community.

Suite 1204B, Level 12, 179 Elizabeth Street
Sydney, New South Wales 2000

info@mecone.com.au
mecone.com.au