Vincentia High School Upgrade

Architectural Design Report for Review of Environmental Factors

For NSW Department of Education

Document Quality Control

Project:	Vincentia High School Upgrade
Client:	NSW Department of Education
Project No:	7068VI01

This document has been prepared by:

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NOTES:

Quality Assurance

The information below is used as document quality control under Fulton Trotter Architects' Quality Management System. The accuracy of this document cannot be controlled once this document has been printed.

Revision History

Issue	Date	Revision Details/Status	Prepared by:	Approved by:
A	24.01.25	Draft Issue	JH/HC	GI
B	26.02.25	Draft Issue	JH/HC	GI
C	31.03.25	REF Issue	JH/HC	GI

CURRENT ISSUE: C
Document Quality Control

Fulton Trotter Architects acknowledge the people as the traditional custodians of the land upon which the **Vincentia High School** stands. We recognise their continuing connection to land, waters and culture and pay our respects to their Elders past, present and emerging.

Table of Contents

1. Introduction

1.1 OUTLINE

This Architectural Design Report has been prepared to support a Review of Environmental Factors (REF) for the NSW Department of Education (DoE) for Vincentia High School upgrade (the activity).

The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by *State Environmental Planning Policy (Transport and Infrastructure) 2021* (T&I SEPP) as "development permitted without consent" on land carried out by or on behalf of a public authority under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The activity is to be undertaken pursuant to Chapter 3, Part 3.4, Section 3.37 of the T&I SEPP.

This document has been prepared in accordance with the *Guidelines for Division 5.1 assessments* (the Guidelines) by the Department of Planning, Housing and Infrastructure (DPHI) as well as the *Addendum Division 5.1 guidelines for schools*. The purpose of this report is to:

- Provide an overview of the proposed design strategy.
- Outline a response to State Environmental Planning Policy (Transport and Infrastructure) 2021, Schedule 8 Design Quality Principles in Schools (Chapter 3).
- Response in relation to Better Placed Design Guide for Schools (Government Architect NSW Issue 2 2018).
- Consider visual impact.
- Note approach to Connecting with Country.
- Complement architectural drawings as part of the submission.

Project Name:	Vincentia High School upgrade
Proponent:	The NSW Department of Education (DoE) is the proponent and determining authority pursuant to Section 5.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act).
Landowner:	The Minister for Education and Early Learning

1.2 PROPOSED ACTIVITY DESCRIPTION

The proposed activity relates to upgrades to Vincentia High School. Specifically, the proposed activity comprises the following:

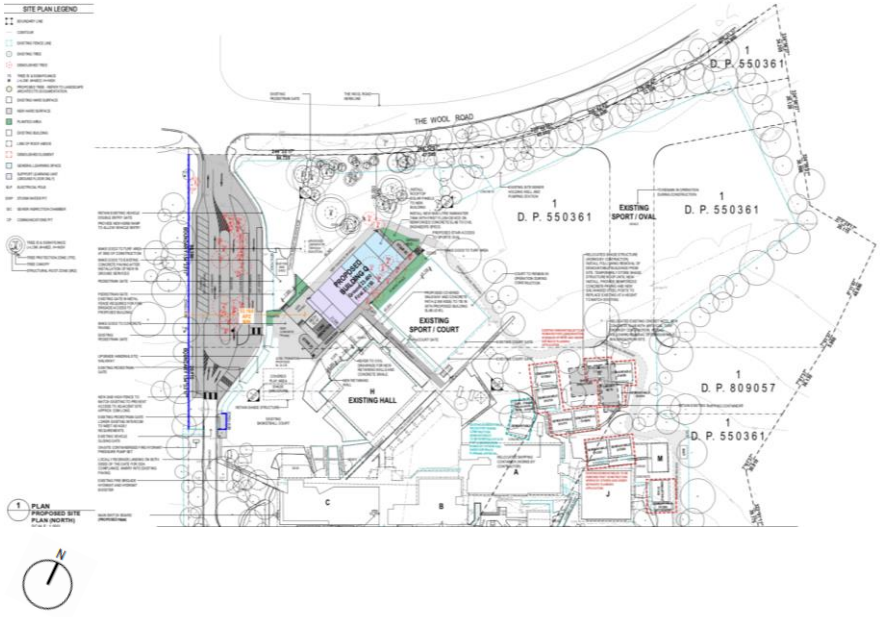
- Construction of a new two-storey home base building.
- Installation of solar panels.
- Construction of new stairs and covered walkways.
- Internal road upgrade which involves providing a new drop off zone, parking spaces and pedestrian pathway.
- Relocation of existing shade structure.
- External landscape works.
- Tree removal.

Any works relating to the existing demountables or associated with substations will be undertaken via a separate planning pathway. Figure 2 provides an extract of the proposed site plan.

Figure 1 Perspective view of Proposed Building from existing Block H

Source: Fulton Trotter, 2024

Figure 2 Site Plan



Source: Fulton Trotter, 2025

1.3 DESIGN STATEMENT

1.3.1 Design Process Undertaken

- Master Plan Validation
    - Fulton Trotter Architects were engaged by the NSW Department of Education and School Infrastructure (SI) to design the redevelopment of Vincentia High School.
    - This process includes identifying key issues identified in the Masterplan Feasibility Report by NBRS and the due diligence reports prepared by various consultants and initial site inspection findings.
    - The preferred architectural masterplan option was presented to the school and SI and was endorsed.
- Concept Design
    - Fulton Trotter Architects and the design team continued to develop the endorsed planning option. This phase looked further into the EFSG requirements and functional relationships of the proposed schedule of accommodation.
    - The final Concept Design Report was presented to the school and SI and was endorsed.
- Schematic Design
    - The endorsed Concept Design has been further developed in conjunction with the design team to show a high-level strategy on how the project will be built
    - The final Schematic Design was presented to SI for the purpose of approving the design to date and preparing documents for a tender package.

1.3.2 Key Design Considerations

- State Environmental Planning Policy (Transport and Infrastructure) 2021 ‘Design Quality Principles’ and ‘Design Guide’.
- SI Pattern Book and Educational Facilities Standards and Guidelines (EFSG) SI.
- Asset Management Unit (AMU) SI existing works and upgrades.
- Maintaining a minimum 10m^2 of outdoor space per student across the site.
- Educational Rationale (SI engaged the school to focus on a desirable outcome in the design to compliment the schools pedagogical approach and broader community engagement objectives).
- Consideration of indigenous artwork opportunities in keeping with current school initiatives to further strengthen Connection to Country.
- Connection to the existing school facilities.
- Maintaining existing buildings noting allowance for the removal of demountable classrooms at the end of the construction project.
- Appropriate design taking into account bushfire considerations and authority requirements.

2. Site Context / Description

2.1 SITE DESCRIPTION

The site is located at 142 The Wool Road, Vincentia, NSW, 2540 and has an approximate site area of 8.09 hectares. The site is comprised of two lots, legally referred to as Lot 1 Deposited Plan P809057 and Lot 1 Deposited Plan 550361 and is located within the Shoalhaven Local Government Area (LGA). An aerial photograph of the site is provided at **Figure 3.**

The site is zoned SP2 Educational Establishment and existing activity comprises various buildings, a car park, landscaping, a sports field and sports courts associated with Vincentia High School. Vincentia High School currently comprises 49 permanent teaching spaces (PTS) and 17 demountable teaching spaces (DTS). The eastern portion of the site contains natural bushland.

The site is an irregularly shaped lot. Vehicle access is provided to The Wool Road via a driveway that connects to a driveway that connects to a signalised intersection. There is a footpath and cycleway along The Wool Road. The surrounding land consists of extensive natural bushland (Jervis Bay National Park).

Figure 3 Aerial Photograph of the Site

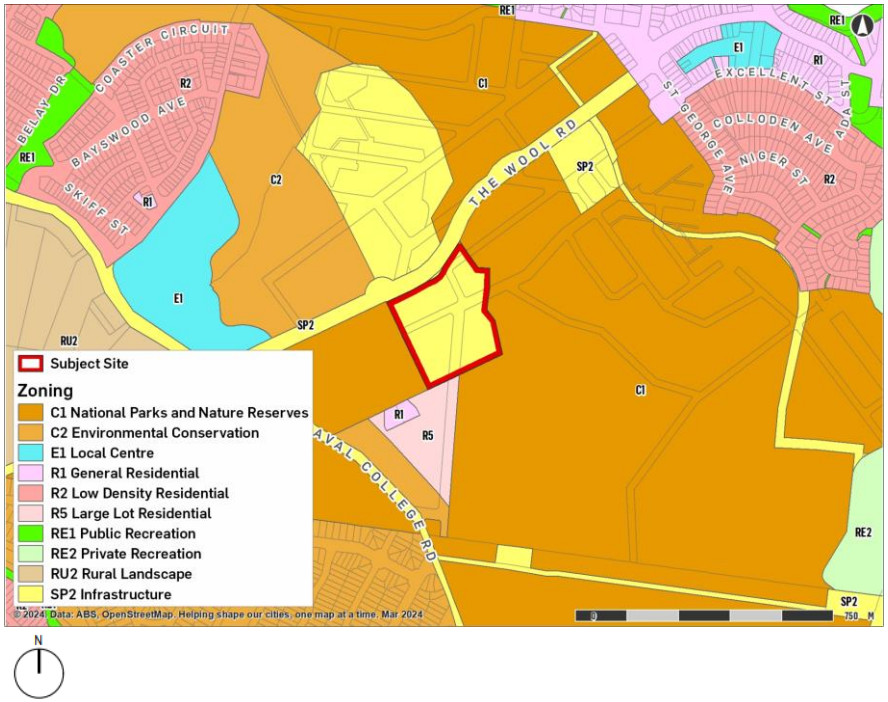
Source: Urbis, January, 2024

Figure 4 View toward proposed site and adjacent courts and Hall

Source: Fulton Trotter Architects, 2024

2.2 ZONING MAP

Figure 5 Zoning Map



Source: Urbis, 2025

2.3 RELEVANT PLANNING FRAMEWORK

Land Zoning	SP2 Educational Establishment in accordance with Shoalhaven Local Environmental Plan 2014 (the SLEP2014)
Easements / Site Servicing	An existing gravel driveway is maintained to provide access to the southern part of the site by maintenance and emergency vehicles.
Floor Space Ratio	No FSR applicable to the site.
Height	No maximum building height applicable.
Environmental Constraints	The site is identified as containing Vegetation Buffer and Category 1 Bush Fire Prone Land (BFPL).

2.4 OPPORTUNITIES AND CONSTRAINTS

Key site issues identified during a site visit undertaken by Fulton Trotter Architects are tabled below.

Opportunities

- Upgrade existing drop off area
- Compliant access connection from drop off area
- With the exception of bushfire, there are no other significant environmental constraints

Constraints

- Site is Bushfire Prone Land (BPL)
- Existing Sports Shade structures are close to the new building
- Existing trees are close to the new building footprint
- Existing inground services within the new building footprint
- Cricket nets to be relocated

Figure 6 Existing Hall

Source: Fulton Trotter Architects, 2024

3. Design Statement

3.1 URBAN BUILT FORM

- The new building has been positioned to suit the required bushfire Asset Protection Zone (APZ).
- The new building is set back from The Wool Road and buffered from view by existing vegetation.
- The school has principal pedestrian access points from the internal roadway drop off area which is connected to The Wool Road. The entry points and connecting accessways are to undergo DDA upgrade works to achieve compliance to AS1428.1:2009 to the maximum extent possible.
- The new building faces the existing Hall and sports courts to tie into established circulation routes.
- The building western frontage has been articulated with sun shading.
- The materiality has considered the existing context.
- The pattern book design template for the building planning has considered future adaptability of these learning spaces.

Figure 7 Accessibility and wayfinding (principal entry) DDA (indicative plans)

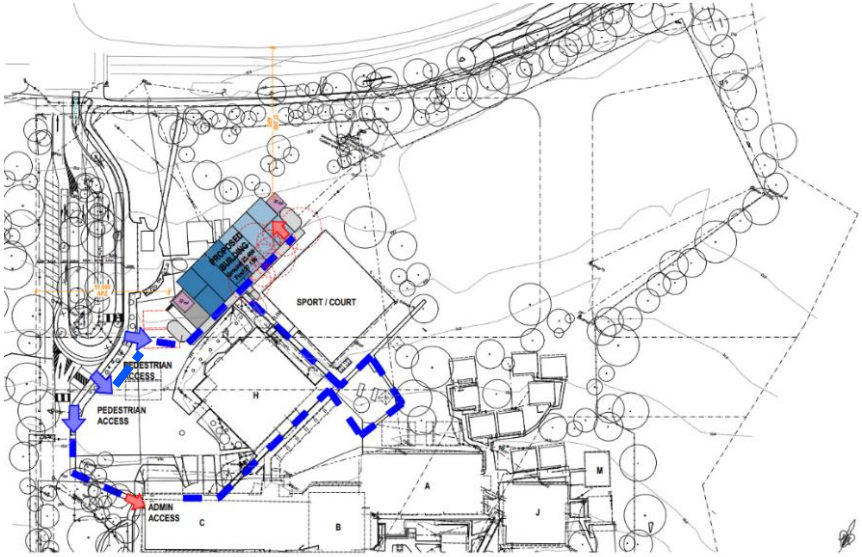
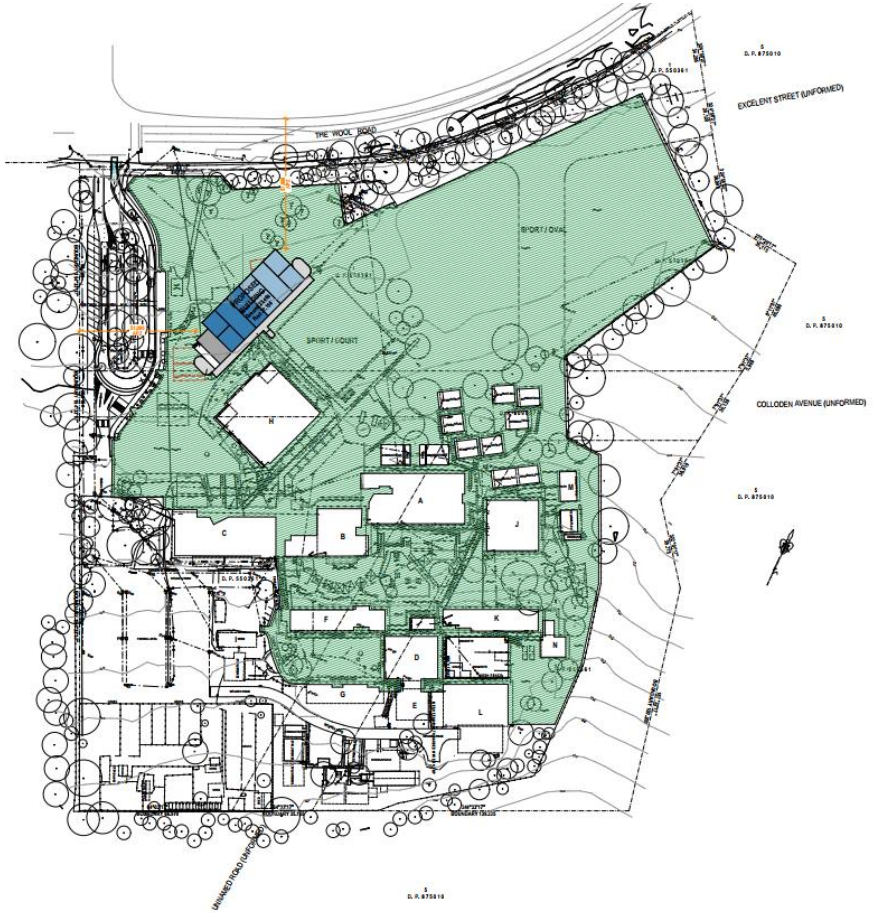


Figure 8 Open Space (indicative plans)



PROPOSED PLAYSPACE AREA CALCULATIONS

ZONE	AREA	STUDENTS/SQM
PROPOSED OUTDOOR PLAYSPACE AREA	35,521m²	35.55m²/STUDENT*

*STUDENT/SQM CALCULATION IS BASED ON A EXISTING STUDENT POPULATION OF 999
*STUDENT NUMBERS TO BE CONFIRMED

Source: Fulton Trotter Architects, 2024

3.2 OPTIONS CONSIDERED

Two options were considered (Option 1 and 2).

Option 1 was generally based on the Masterplan Feasibility Report proposal by NBRS. The proposed building is aligned to be parallel to the kiss and drop area and maintains min 12m separation from the existing hall to meet NCC Spec 43 requirements. The building footprint minimises impact to existing trees. However, in this option, the bushfire Asset Protection Zone (APZ) encroaches onto unmanaged bushland outside of the subject site to the north of The Wool Road.

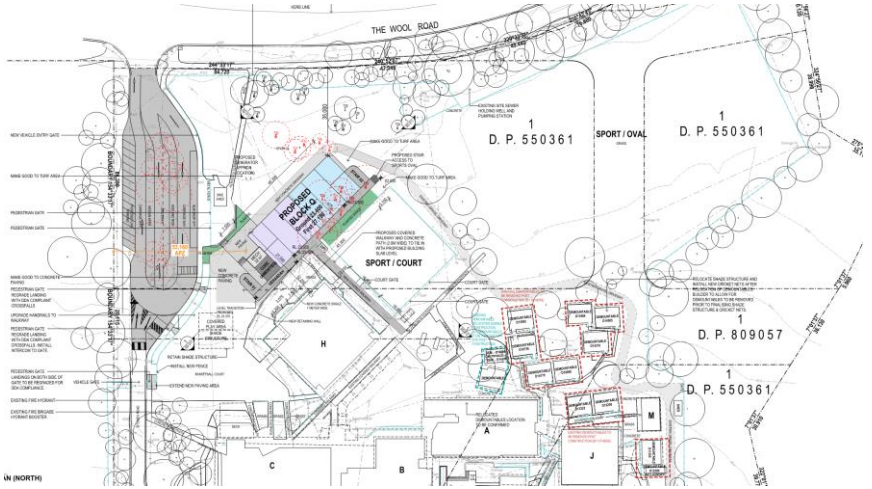
Option 2 was developed in the Concept Design Phase with the building reoriented to be parallel to the existing Block H and Sports Court. This is to suit the required bushfire APZ which does not encroach onto unmanaged bushland to the north of The Wool Road. This option also maintains the min 12m separation from the existing hall.

Option 2 was endorsed by the client.

Figure 9a - Option 1 New building parallel to Internal Road Drop Off Area (indicative plan)

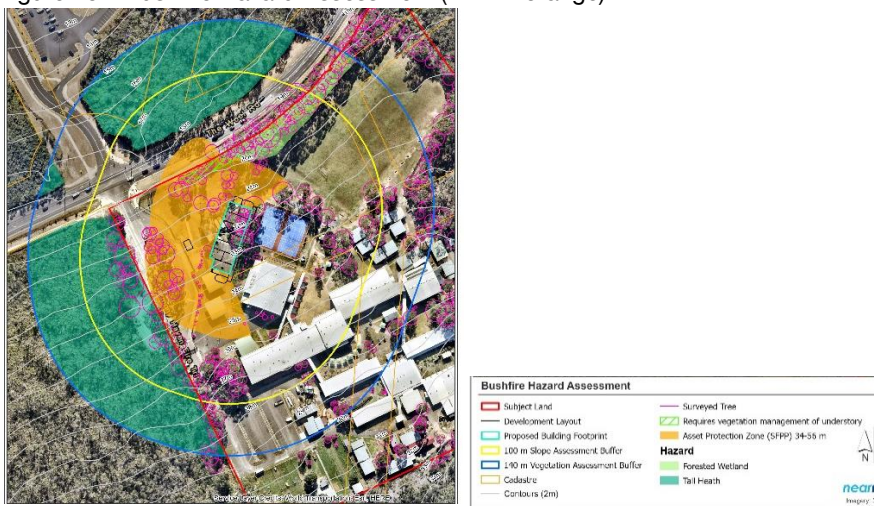
Source: Fulton Trotter Architects: Master Plan Validation Report, 2024

Figure 9b - Option 2 New building parallel to Sports Court (indicative plan)



Source: Fulton Trotter Architects: Schematic Design drawings, 2024

Figure 10 – Bushfire Hazard Assessment (APZ in orange)



Source: Eco Logical Australia, 2024

4. Architectural Response

4.1 DESIGN RESPONSE

The architecture of the proposed building is based on the SI Pattern Book. The facade design is based on a standard modular system which presents both internally to the school and to the surrounding context. The modular system contains typical components such as cladding, windows, doors, natural ventilation louvres, mechanical louvres, framing elements and sunshades. The composition of the facade components is designed by the project team based on specific project requirements.

The architecture of the proposed building takes cues from the existing building forms on the site. The existing buildings are generally two-storey highly connected buildings, and so the new building positions the access points on the eastern side of the building, allowing connection to the rest of the school. The western facade with colourful sun hoods and framing elements is oriented towards the main site entry from The Wool Road.

Figure 11 - Site Plan

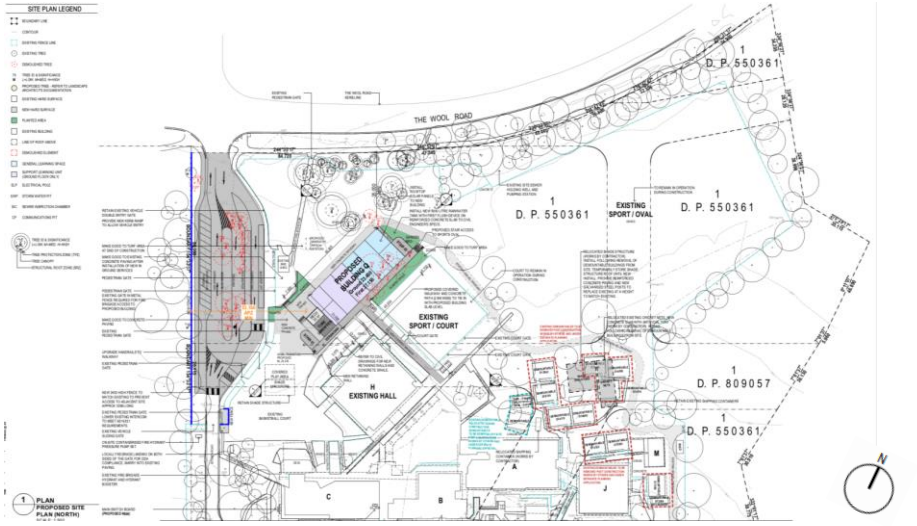


Figure 12 - External Works Plan

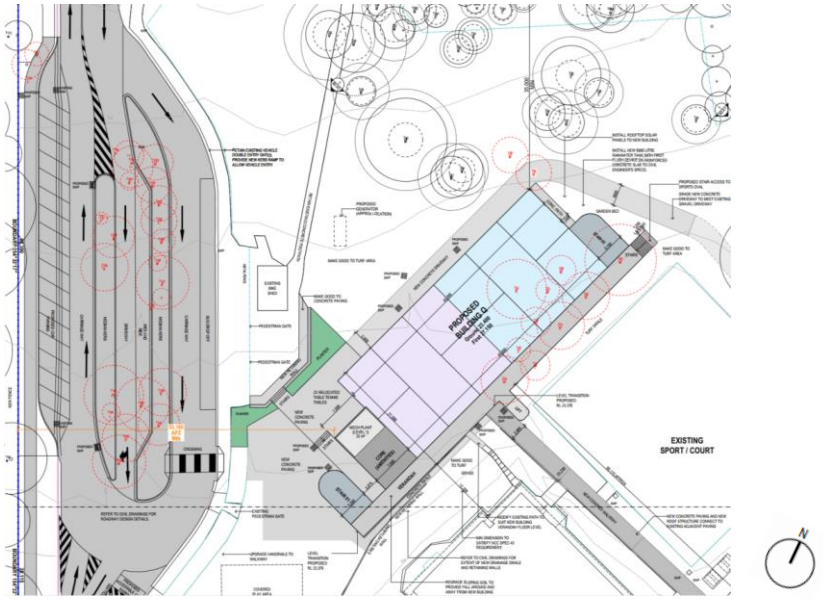


Figure 13 - Site Section from existing sports courts to new building

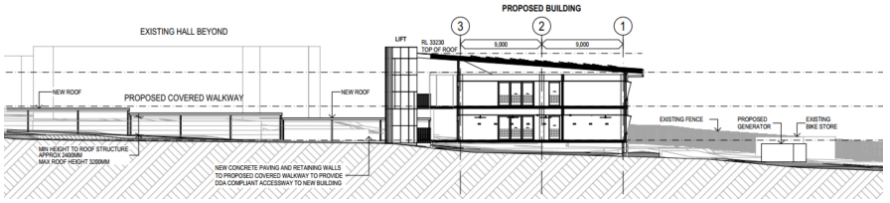


Figure 14 - Western Elevation / view from The Wool Road / drop off

Source: Fulton Trotter Architects: Schematic Design drawings 2025

4.2 MATERIALITY

Materials and finishes are outline in Figure 16 and have been selected on the principles of contextuality, durability, local & economical. The colour combination is based on project specific local context.

Figure 15 a & b – Perspective views from car park (above) and sports courts (below)

Source: Fulton Trotter Architects, 2025

Figure 16 – External materials and finishes. West elevation (above) and east elevation (below).

Roof – metal roof sheeting
Walls – compact fibre cement, brick and blockwork
Soffits – external grade fibre cement
Stairs – off-form concrete and perforated metal sheeting
Balustrades – galvanised steel
Windows and doors – aluminium framed glazing, solid core timber doors
Window awnings, louvres – commercial grade powder-coated aluminium

Source: Fulton Trotter Architects, 2025

4.3 VISUAL IMPACT ASSESSMENT

In addition to the items discussed below related to SEPP Transport and Infrastructure 2021, a summary of visual impact is as follows:

View – The Wool Road – looking South. The proposed building is set back from the street and partly shielded by existing mature trees along the front alignment. Some of these trees will need to be removed for the proposed building. The trees immediately adjacent to the street boundary will be retained. There is minimal impact on the views to the school from the street. There are no surrounding dwellings.

Figure 17 - Location Plan.

Source: Sixmaps 2024

Figure 18 - View from The Wool Road to school entrance – extent of building noted in orange.

Image Source: Sixmaps 2024

4.4 OVERSHADOWING ASSESSMENT

Shadow studies were conducted for both Summer and Winter. While there is some shadowing of the sport court, the shadows of the new building do not impact the neighbours.

Figure 19a - June 21 9am

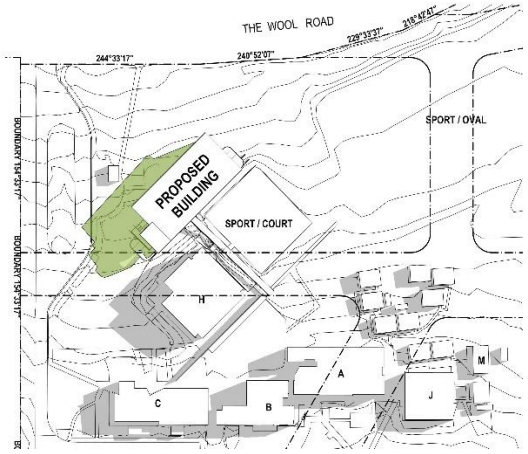


Figure 19b - June 21 11am

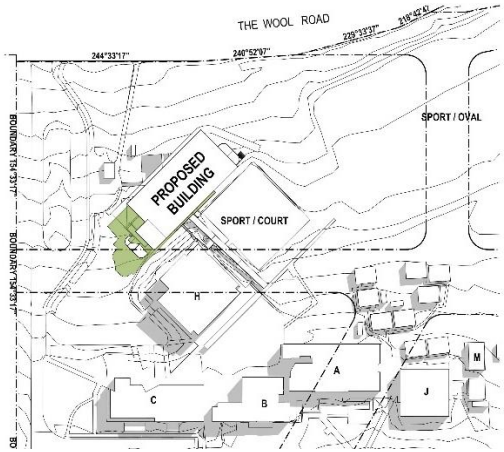


Figure 19c – June 21 1pm

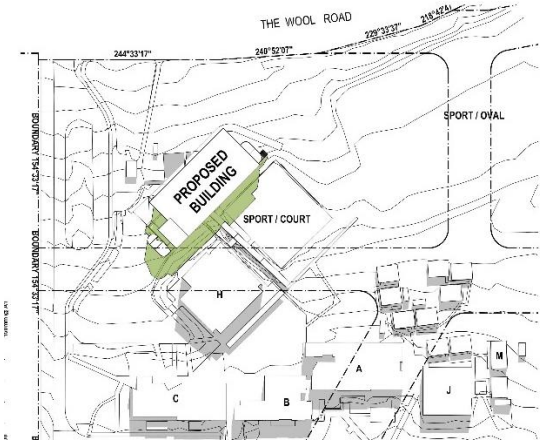
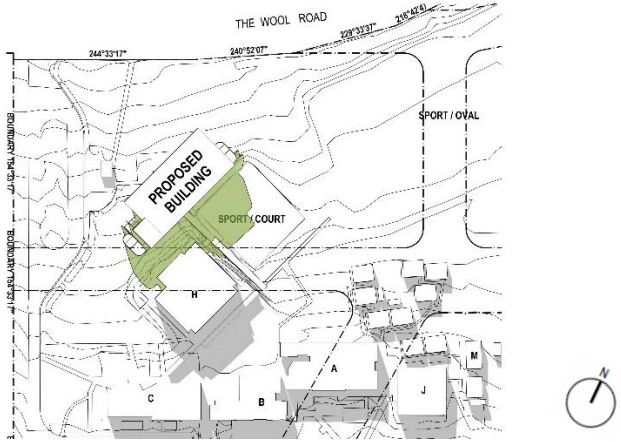


Figure 19d – June 21 3pm



Overshadowing of the Sports Court is limited to after 11.30am on June 21.

Figure 19e - Dec 21 9am

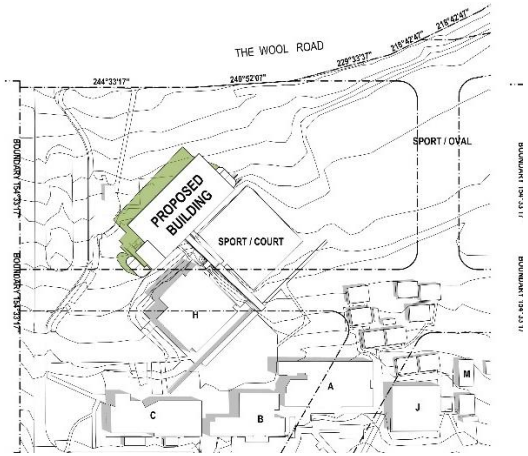


Figure 19f - Dec 21 11am

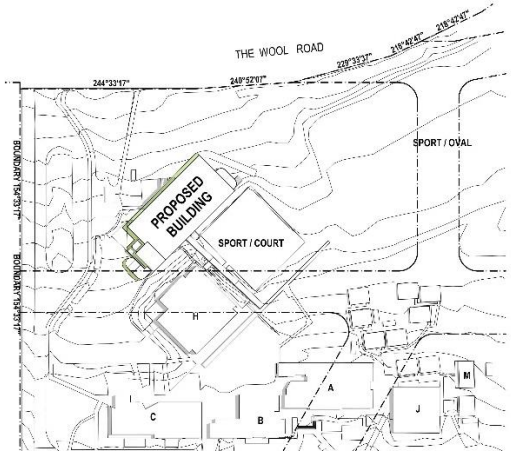


Figure 19g - Dec 21 1pm

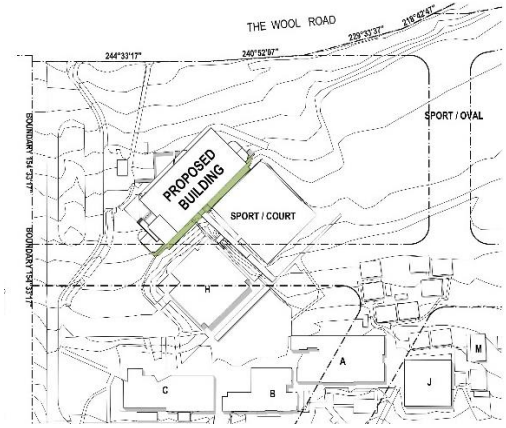
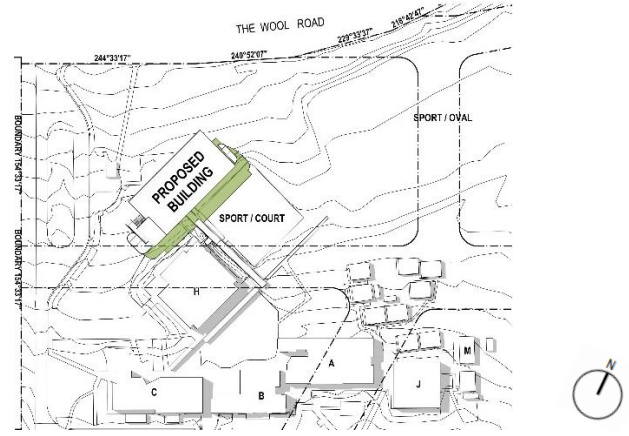


Figure 19e - Dec 21 3pm



Source: Fulton Trotter Architects: Schematic Design drawings 2025

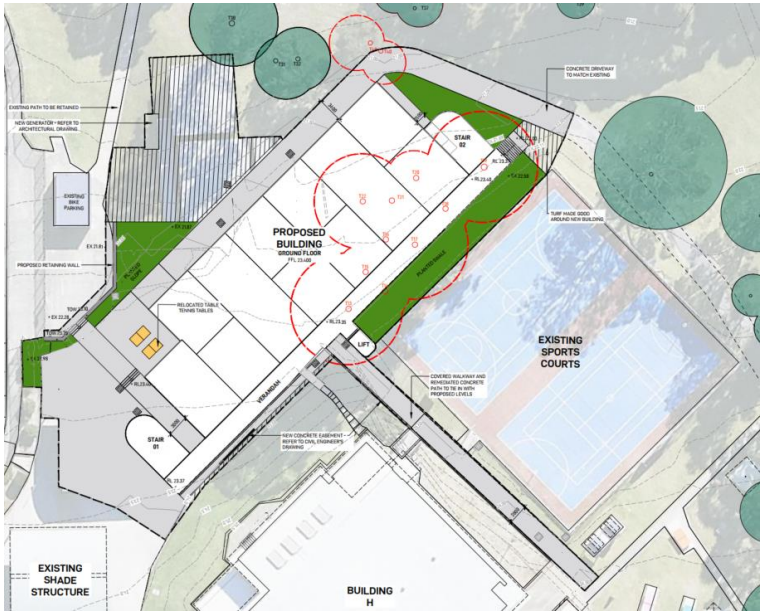
Overshadowing of the Sports Court is limited to after 1.00pm on Dec 21.

4.5 LANDSCAPE

The landscape design for the scheme is intended to integrate the proposed building works with the existing school grounds. Existing trees are to be protected and retained where possible, and adjacent landscape is to be remediated. Garden beds have been utilised where appropriate to soften the building interface and facilitate drainage.

Species selection has taken into account the existing character of the school grounds, as well as the need for safe and low maintenance planting in the learning environment. Native planting has been prioritised where appropriate to tie into the endemic plant communities and provide an opportunity for learning about the local ecosystems

Figure 20 - Landscape Concept Drawing



Source: Ground Ink Landscape Architects, 2025

4.6 CONNECTING WITH COUNTRY

The project has followed a simple approach in relation to Connecting With Country where the design aims to extend existing arrangements that the School currently has. The project will include indigenous artwork opportunities to internal and external areas of the building that continue existing Indigenous programs at the school.

Figure 18 Internal Artwork (extent in red, artwork to be confirmed)

Source: NSW Department of Education Pattern Book Volume 2, 2024

5. Response to State Environmental Planning Policy (Transport and Infrastructure) 2021

Schedule 8 Design Quality Principles in Schools (Chapter 3)

The following is a summary of the responses to the Design Quality Principles in Schools requirements in the State Environmental Planning Policy (Transport and Infrastructure) 2021.

In providing the design response to the 7 Design Quality Principles, consideration has also been given in relation to Better Placed Design Guide for Schools (Government Architect NSW Issue 2 2018) as follows:

- Education SEPP Design Quality Principles
- Design Considerations regarding how to meet the Education SEPP Design Quality Principles
- Integration of the Design Quality Principles with the School Infrastructure Pattern Book

Principle 1—Responsive to context

Schools should be designed to respond to and enhance the positive qualities of their surroundings.

In designing built forms and landscapes, consideration should be given to a Country- centred approach and respond to site conditions such as orientation, topography, natural systems, Aboriginal and European cultural heritage and the impacts of climate change.

Landscapes should be integrated into the overall design to improve amenity and to help mitigate negative impacts on the streetscape and neighbouring sites.

The proposed activity seeks to address this principle as follows:

- Keeping to the maximum two-storey scale of existing buildings on the site
- The building sits comfortably to meet existing ground levels for accessibility, while minimising the extent to which the ground floor level is above existing ground
- Being set back considerably from the Wool Road frontage and maintaining the general landscaping streetscape between the road and the building.
- Positioning and orienting the building to suit bushfire asset protection zone requirements and building separation, while minimising removal of existing trees
- Retention of the existing natural bushland to the perimeter of the site
- Maximising the logical connection between the new building and existing adjacent Hall and Sports Courts.
- Additional landscape treatment that compliments the existing.

Principle 2— Sustainable, efficient and resilient

Good school design combines positive environmental, social and economic outcomes and should align with the principles of caring for Country.

Schools should be designed to be durable and resilient in an evolving climate.

Schools and their grounds should be designed to minimise the consumption of energy, water and other natural resources and reduce waste.

The proposed activity seeks to address this principle as follows:

- Building orientation with the main long elevation to the north and a high level of façade sun shading to minimise heat gain.
- Passive cooling using a high window area for natural ventilation, with adjacent proposed trees.
- Landscaping to external areas

- Regular column grid and open floor plates for maximum flexibly of layout in the future. Long life, loose fit.
- Robust, low maintenance materials.
- The external materials themselves are the final finish - no need for painting.

Principle 3— Accessible and inclusive

School buildings and grounds should be welcoming, easy to navigate and accessible and inclusive for people with differing needs and abilities.

Schools should be designed to respond to the needs of children of different ages and developmental stages, foster a sense of belonging and seek to reflect the cultural diversity of the student body and community.

Schools should be designed to enable sharing of facilities with the community and to cater for activities outside of school hours.

The proposed activity seeks to address this principle as follows:

- Part of design to provide safe and equitable access to the new building and to adjacent buildings on the site
- Providing ramp, stair and lift access for full accessibility.
- The activity does not change the ability for the school facilities to be shared with the community.

Principle 4— Healthy and safe

Good school design should support wellbeing by creating healthy internal and external environments.

The design should ensure safety and security within the school boundaries, while maintaining a welcoming address and accessible environment.

In designing schools, consideration should be given to connections, transport networks and safe routes for travel to and from school.

The proposed activity seeks to address this principle as follows:

- Part of design to provide safe and equitable access to the new building and to adjacent buildings on the site
- A layout that allows for good supervision.
- Internal spaces allowing supervision and visual connection.
- Building has high visibility

Principle 5— Functional and comfortable

Schools should have comfortable and engaging spaces that are accessible for a wide range of formal and informal educational and community activities.

In designing schools, consideration should be given to the amenity of adjacent development, access to sunlight, natural ventilation, proximity to vegetation and landscape, outlook and visual and acoustic privacy.

Schools should include appropriate indoor and outdoor learning and play spaces, access to services and adequate storage.

The proposed activity seeks to address this principle as follows:

- Consistent layout of learning spaces and learning commons offering opportunities in furniture for different levels of openness or insularity.
- Sliding doors between spaces to increase flexibility of uses and spaces.
- Designated storage areas to minimise clutter.
- Clear circulation paths.
- Abundant natural light.

- Opportunity for natural as well as mechanical ventilation.
- A new building in an area of existing mature trees of a scale that is complementary to the surrounding area.

Principle 6— Flexible and adaptable

In designing schools, consideration should be given to future needs and take a long-term approach that is informed by site-wide strategic and spatial planning.

Good design for schools should deliver high environmental performance and ease of adaptation and maximise multi-use facilities.

Schools should be adaptable to evolving teaching methods, future growth and changes in climate, and should minimise the environmental impact of the school across its life cycle.

The proposed activity seeks to address this principle as follows:

- Regular column grid and open floor plates- maximum flexibly.
- Rational circulation.
- Consolidation of services and wet areas.
- Long life, loose fit.
- Sliding doors to increase flexibility of uses and spaces.
- Robust, low maintenance materials.
- The external materials themselves are the final finish- no need for painting.
- Abundant natural light.
- Natural as well as mechanical ventilation.

Principle 7— Visual appeal

School buildings and their landscape settings should be aesthetically pleasing by achieving good proportions and a balanced composition of built and natural elements.

Schools should be designed to respond to and have a positive impact on streetscape amenity and the quality and character of the neighbourhood.

The identity and street presence of schools should respond to the existing or desired future character of their locations.

The design of schools should reflect the school's civic role and community significance.

The proposed activity seeks to address this principle as follows:

- In keeping with the scale of neighbouring buildings on the school site.
- The articulation of the structure, glazing and cladding to internal and external areas allows for variety within a consistent grid approach.
- The long elevations are designed with a depth of façade and a variety of materials which breaks down the scale of the building.
- The proposed building will have well-articulated elevations comprising a simple unobtrusive contemporary aesthetic with colours and materials relating to existing buildings and will sit comfortably in the setting.