New high school for Schofields and Tallawong

REF Submission: Architectural and Landscape Design Report

Part 201 Guntawong Road
Tallawong NSW 2155

January 2025

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Document history, status and distribution

Version	Revision	Date	Reviewed	Approved	Issued To
01	Final Draft Issue	26/11/24	TD	TD	Urbis, TSA
02	Final Issue	16/12/24	TD	TD	Urbis, TSA
03	Final Issue	10/01/25	TD	TD	Urbis, TSA
04	Final Issue	22/01/25	TD	TD	Urbis, TSA
05	Final Issue	29/01/25	TD	TD	Urbis, TSA

DJRD Architects acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Owners of Country. We pay our respects to the Gadigal people whose land our studio sits on and extend this respect to their families and leaders, Ancestors and Elders. We recognise their continuing connection to land, sea and sky, over many thousands of years and place our trust in their guidance, wisdom and care, as we live and enjoy the gifts they have passed on to us

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EXECUTIVE SUMMARY

1.1 Introduction

Introduction

This Architectural and Landscape Design report has been prepared to support a Review of Environmental Factors (REF) for the Department of Education (DoE) for the construction and operation of the new high school for Schofields and Tallawong (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 3.37A as per new legislation 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). The purpose of this report is to outline in detail how Schofield and Tallawong new high school has been developed to provide a new contemporary educational campus for approximately 1000 students.

This REF Architectural Design Statement is to be read in conjunction with drawings and other consultant reports as part of the REF Submission.

Site Description

The site is known as Part 201 Guntawong Road, Tallawong, NSW, 2762 (the site), and is legally described as part of Lot 1 in Deposited Plan 1283186. The site is located at the corner of Guntawong Road and Clarke Street, Tallawong and is approximately 4 hectares in area. The site has an approximately 100-metre-long frontage to Guntawong Road along its northern boundary. Nirmal Street provides a partial frontage along the eastern boundary of the site with plans to extend Nirmal Street to provide a future connection to Guntawong Road.

The site consists of grassland with several patches of remnant native vegetation particularly within the northern portion of the site. As a result of precinct wide rezonings, the surrounding locality is currently transitioning from a semi-rural residential area to a highly urbanised area with new low to medium density residential development with supporting services. The site is located approximately 1.5km to the north west of Tallawong Metro Station and is also serviced by an existing bus stop along Guntawong Road.

Figure 1 right provides an aerial image of the site.

Figure 1 Aerial Photograph of Site

Figure 1

Source: Urbis, 2024

1.2 Proposed Activity & Scope

Proposed Activity Description

The proposed activity is for the construction and operation of a new high school known as Schofields - Tallawong High School. The new high school will accommodate up to 1,000 students. The school will provide 49 permanent teaching spaces (PTS), and 3 support teaching spaces (STS) across three buildings.

The buildings will be three-storey in height and will include teaching spaces, specialist learning hubs, a library, administrative areas and a staff hub. Additional core facilities are also proposed including a standalone school hall, a carpark, a pick up and drop off zone along Nirmal Street, two sports courts and a sports field.

Specifically, the proposal involves the following:

- Three learning hubs (three-storeys in height) accommodating 49 general teaching spaces and 3 support learning units (SLUs).
- Other core facilities including amenities, library, staff hub and administrative areas.
- Standalone school hall.
- Separate carpark with 72 spaces.
- Kiss and drop zone along Nirmal Street.
- Open play space including sports courts and sports field.
- Public domain works.

The proposed site access arrangements are as follows:

- Main pedestrian entrance to be located off Nirmal Street.
- Kiss and drop zone proposed along Nirmal Street.
- Onsite parking access via Nirmal Street.

Figure 2 provides an extract of the proposed site plan.

Scope

Number of buildings	4
Height of buildings	up to 3 storeys
Permanent Teaching Space (TS)	49
Support Teaching Space (STS)	3
Teaching spaces (total includes GLS and Support GLS)	52
Specialist (labs/ workshops/ kitchens)	9 - Science - Health and PE - Performing Arts - Visual Arts - Foodtech
Additional Learning Unit (ALU) selections	Movement Studio inc. Hall Stage and VET Kitchen

Figure 2
Proposed Site Plan

1.3 Design Statement

Local Authority: Blacktown
Aboriginal Country: Dharug

Site Selection

The site is approximately 50km north west of Sydney CBD and 4km west of Rouse Hill Town Centre within the North West Growth Area of Sydney. The North West Growth Area is experiencing significant housing and population growth with existing schools in the area facing capacity pressure. A draft ILP has the site for the new school identified within the Blacktown LGA in the north western end of the suburb of Tallawong. The proposed school catchment will be serviced by existing and future high to medium density residential that has been proposed on all sides of the site as part of the Riverstone East Stage 03, see 2.2 Urban Context for greater detail.

Site Constraints

The site has existing ecological communities that include the Cumberland Shale Plains and is in vicinity to bushfire prone land. The proposed design mitigates these constraints through the design response by prioritising tree retention and in establishing off-site Asset Protection zones, see Arborist report and Bushfire report for further detail.

Design Objectives

The new high school for Schofields and Tallawong will meet the enrolment demand of the rapidly growing and developing suburb. A number of design priorities informed the development of the preferred masterplan including:

- A strong street presence actively contributing to the Public Domain
- Main entries and alternate entries located to prioritise safe transport, green travel and community engagement
- Opportunities for community and shared use maximised through the considered location of the Hall and carparks
- Meaningful Connecting with Country engagement informs the Designing with Country response
- Environmentally Sustainable Design principles
- Response to steep topography to minimise cut & fill
- Prioritise tree retention
- The site is characterised by existing overland flow paths that fall towards First Ponds Creek, the landscape design seeks to embed learning opportunities within the Water Sensitive Urban Design

Connection

Current site access is from Guntawong Rd to the north and Nirmal St to the east. As part of the activity Nirmal St, which is currently a half width road will be widened to accommodate on-street kiss & drop and a new footpath along the School boundary. Transport Working Group meetings including TfNSW and Blacktown City Council have been undertaken to review the extent of the road works. Nirmal St will also be extended to connect to Guntawong Rd. Bus stops are proposed on Guntawong Rd and on-site bike parking is provided to encourage green travel mode shares.

Urban Design

Key urban design responses include:

- Proposed built form addresses both Guntawong Road and Nirmal Street - the key nexus of student and visitor arrivals
- Building levels step down the falling topography to simplify indoor/ outdoor connections
- Separation of buildings with external circulation links to alleviate the bulk of the built form and provides visual connections into the site in response to existing urban street patterns
- Landscape design responds to topography and overland flow
- Tree retention prioritised
- ‘Cranked’ building forms alleviate the perception of a solid street wall and responds to prevailing residential street setbacks
- Required vehicle access to the site eg. carparking, waste, and deliveries is separated from pedestrian circulation
- Good solar access and clear supervision of outdoor playspaces is prioritised

Built form

- Three storey built form is efficient and ensures groundplane is returned to playspace
- Buildings are lower than Nirmal St finished levels diminishing visual impact of built form from the street and neighbouring properties
- Selection of materials and finishes considered to provide facade articulation and reduce perceived bulk & scale

Sustainability + Landscape

The new high school for Schofields and Tallawong will be designed to achieve 5 Star Certification with Green Star Buildings v1 in alignment with NSW GREP 2019. Key measures include:

- Sustainable transport initiatives encouraging walking & cycling with EOT facilities and bike-parking
- Reduce energy consumption and include Photovoltaic arrays
- Improve indoor and outdoor comfort
- Heat island effect reduction through tree retention and increased tree planting
- Water-sensitive urban design principles
- Rainwater collection for onsite re-use
- Consideration of climate adaptation and building resilience
- Create new Outdoor learning spaces which are responsive to the building program eg. sensory respite gardens near the Support learning Unit, kitchen gardens near the food tech unit
- Games courts and field near the Hall supported by change rooms and stores
- WSUD and sustainability – rainwater collection, plant species selection, learning opportunities

Amenity - Visual impact, Overshadowing

The design response has been considered to ensure that there are no adverse visual and environmental impacts on adjoining properties see also following sections of this report for further analysis:

5.1 Visual Impact Assessment
5.2 Shadow diagrams

Evaluation of Environmental Impacts

The proposed activity has been designed to incorporate the required mitigation measures and recommendations part of the REF submission. The proposed design responds to key environmental issues and design principles and is considered not to be a significant impact to urban and site context. This REF report expands further on design responses related to the new High School for Schofields and Tallawong.

Design Verification + Connecting with Country

The new high school for Schofields and Tallawong was reviewed by the GANSW State Design Review Panel on 23rd October 2024. Both the SDRP comments and DJRD responses can be found in section 7.0 of this report. As outlined in the GANSW Connecting with Country Framework consultation has informed the design response, see appendix report prepared by Yerrabingin for further details.

02

CONTEXT & SITE ANALYSIS

2.1 Urban Context - Timeline

Governor Phillip and a support party were the first white visitors to the Hills District in 1788, four months after European settlement. Their aim was to find new country for settlement and farming to feed the struggling Sydney colony (The Hills Sydney's Garden Shire 2019)

early 1800s
In 1816 Richard Rouse was given a grant of 450 acres (later extended to 1,200 acres) at Vinegar Hill, later named Rose Hill.

1864
The railway line from Blacktown to Windsor opened. Schofield station opens as siding

1900s
Pastoral & Agricultural Lands

2011
The new Schofields Train station is built. Tracks duplicated. New Bus connections.

2017
2017 Schofield Town Centre Priority Precinct within the North West Growth Area

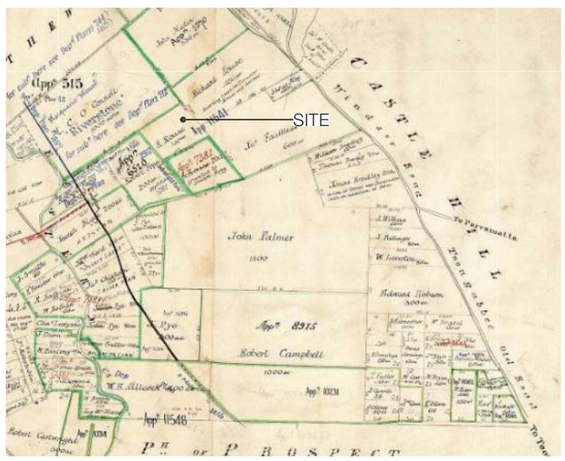
2020
The suburb boundaries of Schofields were changed in November 2020

2021
The suburb is on the rural-urban fringe of Sydney, and is expanding rapidly. It is in the NSW Government's North West Growth Area

2023
2023 Plan illustrating urbanisation and residential development

2024
Schofields and Tallawong HS Project starts

2027
Schofields and Tallawong HS programmed to open 2027



1884

Parish of Gidley, County of Cumberland, 1884. NSW LPI Parish Maps collection: 140686.

1955

Source: NSW Historical Imagery

1975

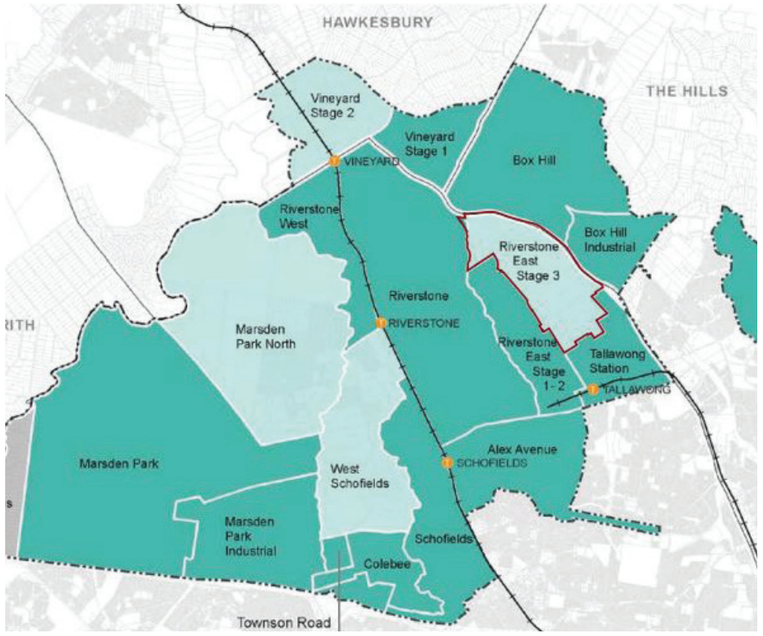
Source: NSW Historical Imagery

2024

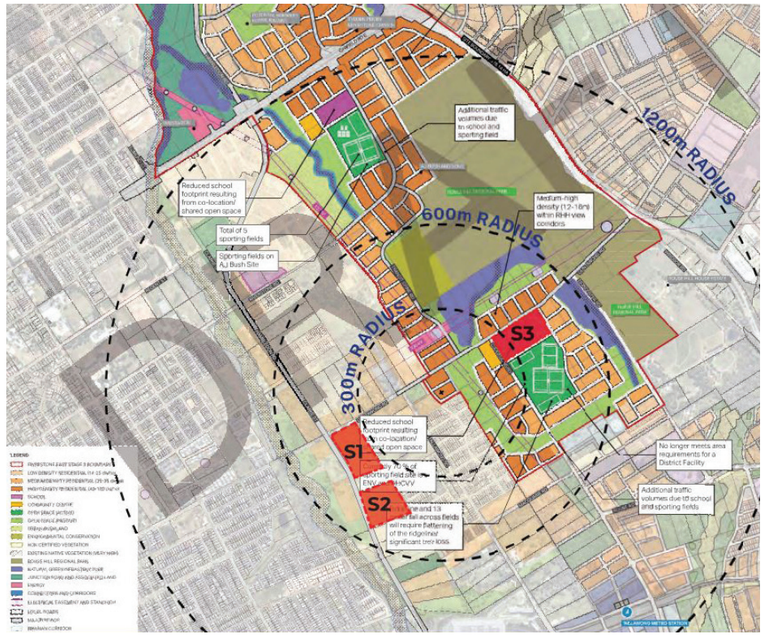
Source: Nearmaps

2.2 Urban Context - Greater Site

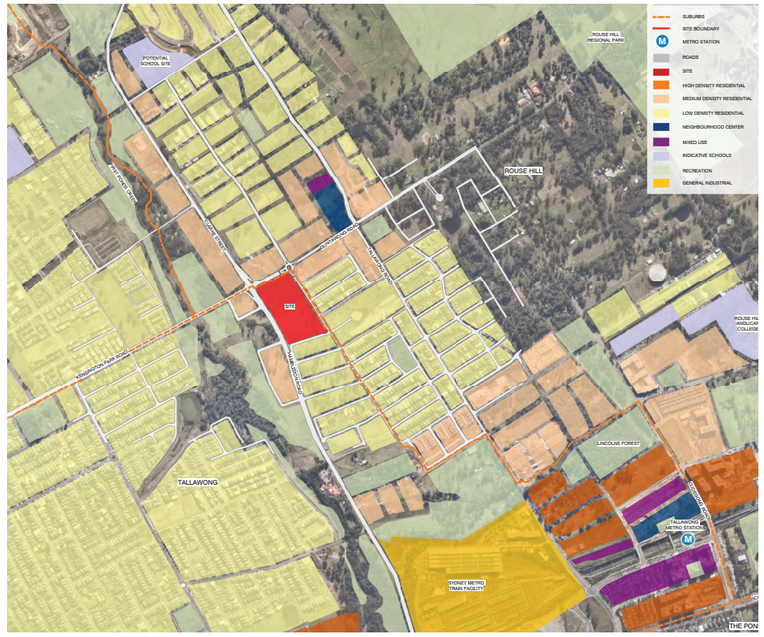
Draft ILP - Northwest Priority Growth



Draft ILP - Riverstone East Stage 3 (S1 - Selected Site)



Proposed Land Use - Site



Within the North West Priority Growth Area, new communities will progressively develop with access to schools, parks, community facilities, jobs, roads and public transport. Over the next ten years, 33,000 homes will be provided and the growth area will be home to around 92,400 people. The Land Use and Infrastructure Implementation Plan provides a robust framework to grow new communities in line with the provision of infrastructure. (North West Priority Growth Area, Land Use and Infrastructure Implementation Plan, 2017)

The Department of Planning, Housing and Infrastructure, in collaboration with the Blacktown City Council (BCC), has prepared the Riverstone East stage 3 draft indicative layout plan (ILP). The draft ILP supports the development of housing within the area which covers approx 175Ha, is bound by Windsor Road, Rouse Hill Regional Park, the Tallawong Station Precinct, Riverstone East stages 1 and 2 and First Ponds Creek.

BCC's Local Strategic Planning Statement (2020) have identified several aspirations for the Riverstone Precinct. Improvements to public transport in this area will connect Tallawong Station with business hubs in Western Sydney including Rouse Hill Strategic Centre and Western Sydney Airport within 30 minutes. (Riverstone East Stage 3 ILP and Urban Design Report, 03/10/2023)

The proposed site is bordered by Guntawong Road to the north and Nirmal Street to the east. The ILP proposes future additional street frontages to the site including Hambleton Road to the west and an additional road along the south boundary. The construction of low density residential developments to the east of the site are substantially complete with additional developments underway. Residential developments to the north have planning approval but have not yet commenced construction.

There is an opportunity for Riverstone East Stage 3 to provide a diverse range of greenfield housing opportunities as part of the NWGA and support the revitalisation of Riverstone Town Centre as a Strategic Centre. (Riverstone East Stage 3 ILP and Urban Design Report, 03/10/2023)

2.3 Urban Context - Site

The School Catchment includes three suburbs: Schofields, Tallawong and Rouse Hill on eastern part of the catchment area. The investigation is to be considered as part of broader educational infrastructure improvements within the expansive High School Catchment. (Schofields & Tallawong HS Concept Mater Plan options for new school, April 2024 rev1)

The site is situated at the intersection of Guntawong Road and Clarke Street in Tallawong, covering an area of approximately 4 hectares. Guntawong Road forms the northern boundary and on the eastern side, Nirmal Street offers partial frontage.

SCHOOL CATCHMENT

Subject Lot

Subject Site

N

2.4 Urban Context - Existing Site & Surroundings

The site consists of grassland with several patches of remnant native vegetation particularly within the northern portion of the site. Due to recent precinct-wide rezonings, the surrounding area is transitioning from a semi-rural residential zone to a more urbanised setting, featuring new low to medium-density housing and supporting infrastructure.

1 Adjacent residential development at Guntawong Road

2 Marchant Street

3 Overland flow path at southern site boundary

4 Overland flow path at western site boundary

5 Surrounding site from western site boundary

6 Clarke Street and Guntawong Road

7 Overland flow path within site

8 Along overland flow path within site

9 Schofields High School - existing

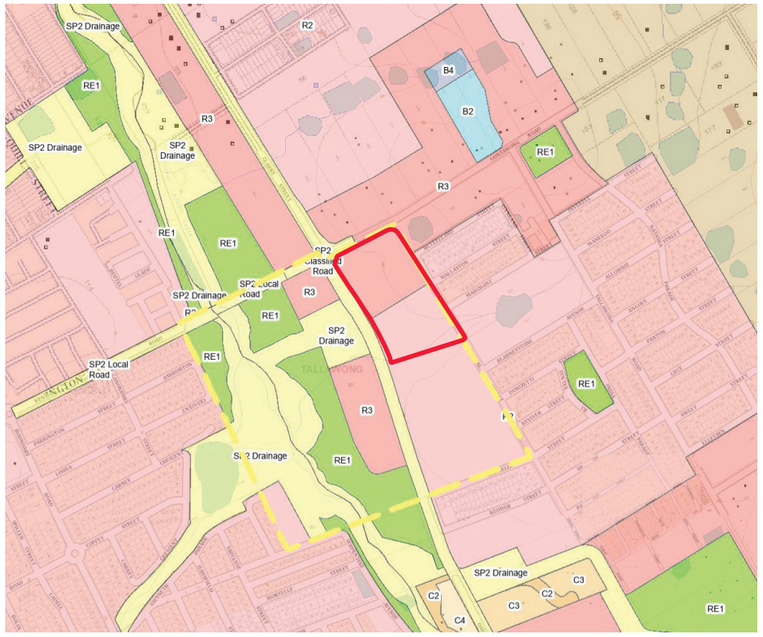
10 From site facing Nirmal Street

11 Along overland flow path within site

12 From eastern site boundary near Marchant Street

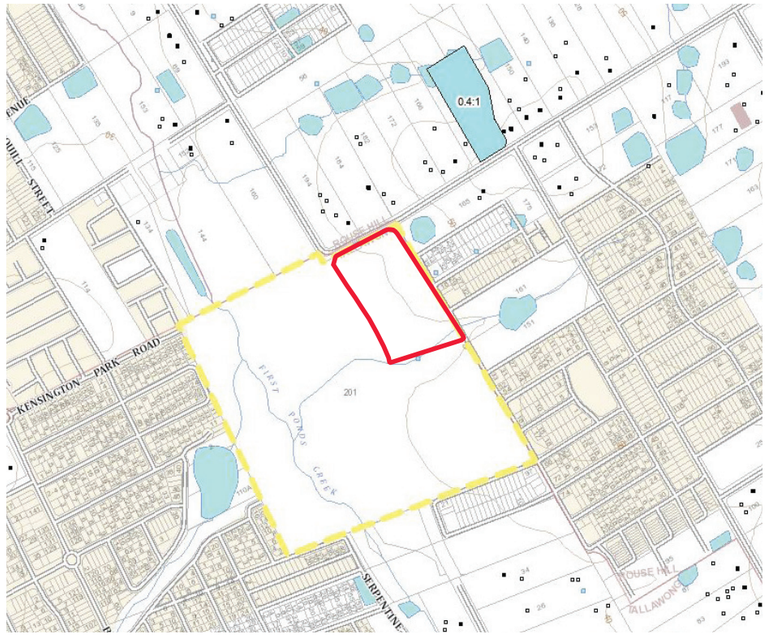
2.5 Statutory Planning Control - Local

Zoning



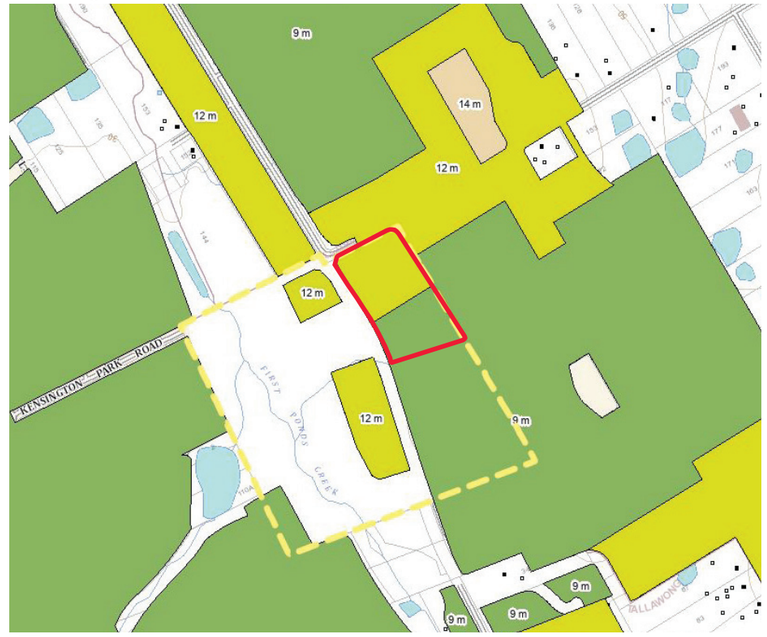
An Educational Establishment is permissible with consent in the R2 Low Density Residential and R3 Medium Density Residential zones under the provisions of the Central River City SEPP.

FSR



Floor Space Ratio: N/A
No floor space ratio is identified in the planning maps for the site.

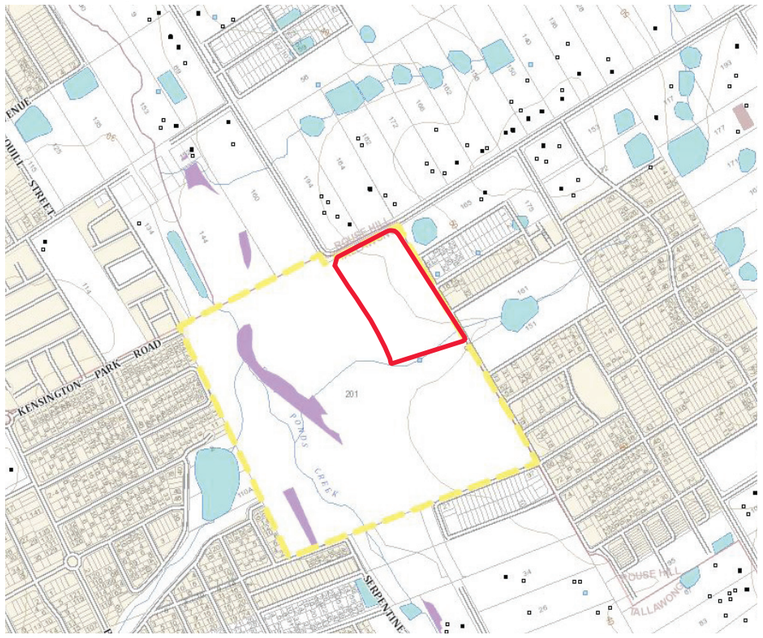
Building Height



Height limits of 12m (north) and 9m (south) apply to the site. Proposed buildings are single and three-storey.
4 storey maximum height permitted under SEPP, Part 3.4, Section 3.37A (item 2)

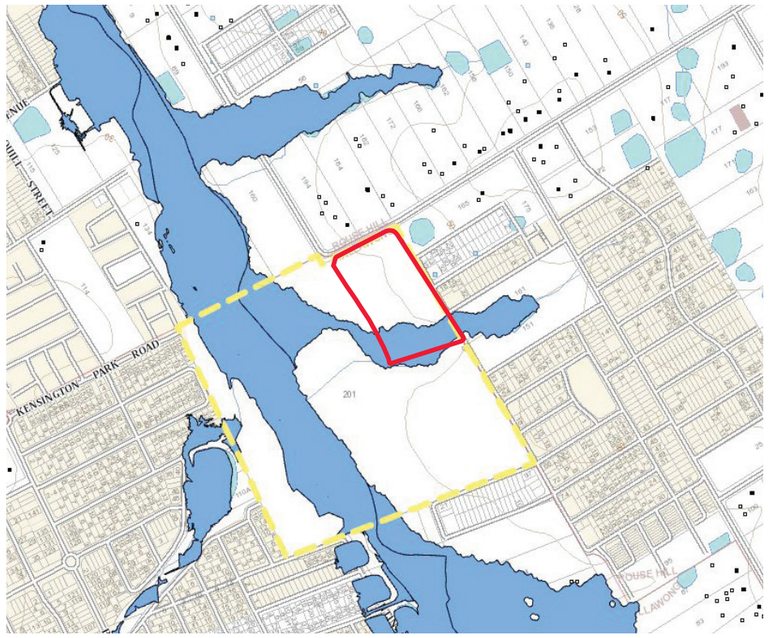
2.5 Statutory Planning Control - Local

Biodiversity



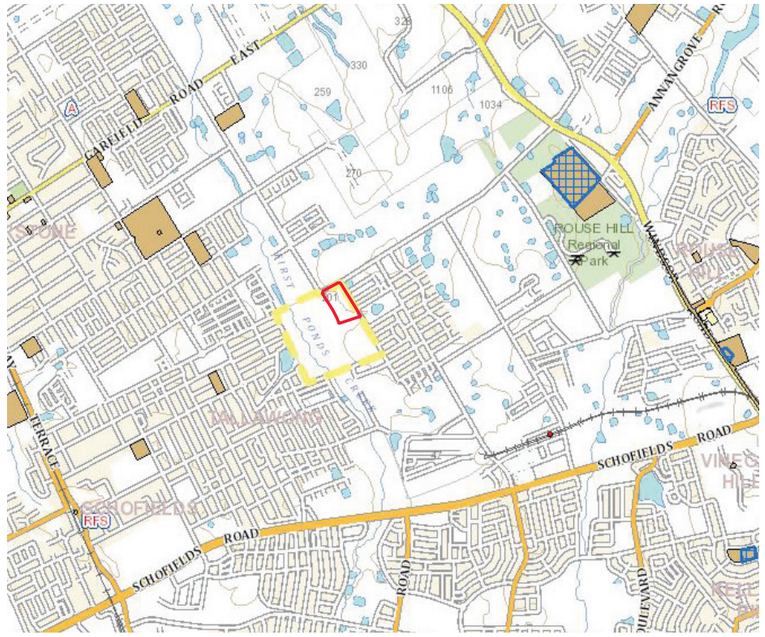
- Biodiversity Values
- Biodiversity Values added days

Flooding



- Flood Planning Level (1:100 ARI)
- Land Identified in Section 3.27
- 1 in 100 AEP Flood Extent
- Area 1
- Flood Planning Area
- Flood Prone and Major Creeks Land
- Cultural Heritage Landscape Area
- Transitional Land
- <all other values>

Heritage & Archaeology



- Aboriginal Object
- Aboriginal Place of Heritage Significance
- Conservation Area - Aboriginal
- Conservation Area - Archaeological
- Conservation Area - General
- Conservation Area - Landscape
- Heritage Conservation Area
- Item - Aboriginal
- Item - Archaeological
- Item - General
- Item - Landscape
- Local Heritage - General

The subject site does not contain mapped Biodiversity Values.

A Flora & Fauna Assessment report was completed in January 2025 by Water Technology Consultants, which confirms the subject site falls within existing certified land part of the North-West Growth Area. The land is certified and therefore does not trigger further assessment for biodiversity.

The Flood Impact Risk Assessment by TTW (January 2025) identifies that the southern portion of the site is flood-affected during events as frequent as the 20% AEP event due to a first-order creek directing overland flow to First Ponds Creek. Post-construction modelling with mitigation measures shows only partial overland flow at the southern boundary, with floodwaters not reaching the carpark or proposed school buildings during the PMF. The activity is considered to result in negligible offsite impacts and no significant adverse effects on the locality, community and environment. Potential impacts can be managed through recommended mitigation measures outlined in the TTW report.

While not identified on the LEP maps, the Aboriginal Cultural Heritage Assessment and Archaeology Report by Biosis (December 2024) and prior studies by Kelleher Nightingale Consulting identify Aboriginal archaeological sites (GR2 and GR4) on the study area.

No non-Aboriginal heritage values are known to exist across the subject site or lot.

2.6 Statutory Planning - SEPP

Response to Schedule 8 Design quality principles in schools—Chapter 3

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 proposal envisages a strong response to the future expanding residential context, new roads and expressive open green areas including the First Ponds Creek on the southern boundary.

Three buildings are strategically sited in close proximity to the future urban fabric, including existing and future residential development blocks, roads and infrastructure. The school's main entrance is set back to create a public domain, which will facilitate community engagement, particularly during school pick up and drop off times.

The proposed scheme provides a strong school identity based on the Connecting with County theme of native trees, with the new entry forecourt on corner of Nirmal St and Guntawong Rd. This native trees theme is continued in the materiality and colour themes of the buildings themselves - neutral coloured brick with varying browns and greens hues.

The proposed scheme provides a strong school identity along Nirmal Street and Guntawong Road. The architectural language is refined by generous landscaped areas along both street setbacks. Endemic tree planting will soften the three storey buildings along both street facades and the school centre will be physically and visually connected to green areas on the southern boundary.

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 school has been designed to achieve 5-star Green Star Certification and aligns with SINSW Sustainability Framework. The design pursues buildings that are easy to construct, durable, resilient and adaptable. Built on a modular grid, the buildings will be flexible in the future allowing different functions as needed, reconfigurability of internal walls can easily be achievable.

Caring for Country is embedded in the design via the Connecting with Country process and aims to create opportunities for learning and appreciation of Country via initiatives such as, indoor and outdoor connection, different learning spaces and gathering areas - from quiet and intimate to communal, colour scheme inspiration by ground, trees & sky (eucalyptus colours) and landscaping planting strategy to incorporate native species.

Positive environmental measures promote passive design principles, such as indoor air quality, natural lighting, cross ventilation, thermal and acoustic comfort. Practical solutions such as façade screening, shading devices responsive to façade orientation will minimize glare, solar gain and reduce heat load on the buildings. Material selection addresses durability, sustainability, embodied energy and life cycle.

On-site renewable energy generation with 99kW solar photovoltaic system will be installed on the roof of Building C with optimum north-west orientation. The site has extensive areas for deep soil planting and rainwater harvesting and integrated storm water management including rainwater tanks and onsite retention basin.

Principle 3—Acessible 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 school has been designed to be accessible and inclusive to all teachers, students and the community.

The proposed school forecourt on the corner of Nirmal St and Guntawong Rd provides a welcoming entry to the site to encourage Community interaction through meeting and gathering. The identity of the school though use of colour, Connecting with Country design with waiting, meeting and learning spaces creates a sense of place and belonging to its community and children of all ages.

There are accessible entry points to the school site from existing and proposed roads. The Hall is easily accessible by the community from Nirmal Street and will have dedicated after hours access.

Covered walkways, ramps and stairs are proposed throughout the campus and ensure access to all buildings and external grounds, assembly area and the Hall. Lift access to all levels of three storey buildings is provided.

2.6 Statutory Planning - SEPP

Response to Schedule 8 Design quality principles in schools—Chapter 3

Principle 4—Health 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 proposal ensures good relationship between buildings and the external environment, creating opportunities for connection between indoor and outdoor learning spaces.

A number of safety measures have been proposed such as higher balustrades and full height screening devices on staircases. Students' circulation or walkways wraps around buildings facing internal gathering spaces and play areas, avoiding students' exposure towards the street.

The site will have a perimeter high palisade fence, excepting the public domain, plus pedestrian and vehicles auto-gates acting as control entry points for student safety and school's asset protection. Passive surveillance and anti-bullying measures have been considered; most toilets will be 'air-line style' with their own basin in each cubical. Also, internal fencing will restrict and separate areas with limited supervision, vehicle movement, car parking and deliveries.

Nirmal Rd will be widened to accommodate on-street kiss & drop and a new footpath along the School boundary. School entries are located for easy and safe route for travel, drop off zones and public transport. Bus stops are proposed on Guntawong Rd and on-site bike parking is provided to encourage green travel mode shares.

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 character of the residential development and green areas surrounding the site assist in providing socially and environmentally responsive solutions, promoting pleasant spaces for education and the community. The school will create a strong identity and sense of community.

The buildings are placed on site facing the internal courtyard, play spaces and green open areas creating a pleasant environment for the school community, a variety of outdoor spaces and expansive views. The landscape design and planting selections will enhance local biodiversity.

Shadow diagrams have been produced and show no impacts on neighbouring properties. Each learning space has access to natural light and ventilation, outlook and privacy as required within the EFSG. Furthermore, the site is not subject to major noise issues due to surrounding residential areas.

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 design provides for future needs, environmental performance, flexibility of space and ease of adaption. Modular grid provides flexibility allowing future internal reconfigurability and function change.

The classrooms are designed in hubs of four with access from and to a central shared learning space that includes a multi-purpose space. Walls are fixed and sliding glass panels offer flexibility and visual connection. When all opened the hub can be a teaching space for four classes or a large group and when closed suitable for smaller groups, offering a variety of team teaching scenarios or separate quiet rooms without interruption.

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 proposal identifies a number of opportunities for Connecting with Country artworks and experience with Country. Metal screening and facade elements will express relevant patterns, colours related to site context and aboriginal heritage.

Generous landscaping and native planting will break up the built form and contribute to overall aesthetic of the school and the streetscape.

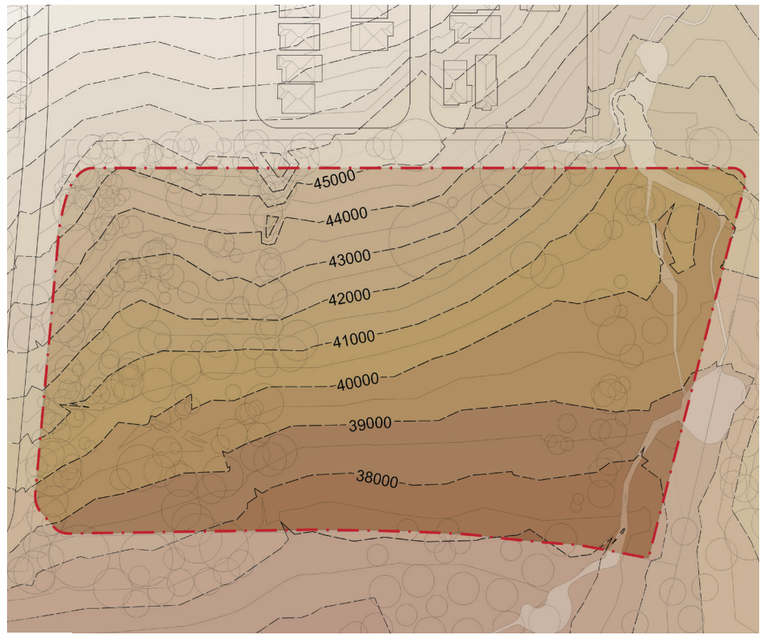
2.7 Site Analysis

Aboriginal Cultural Heritage

Tree Canopy

0 - 10 %
10 - 20 %
20 - 30 %
30 - 40 %
40 - 100 %

Topography



Site Boundary Line

500mm Contour Line

While not identified on the LEP maps, the Aboriginal Cultural Heritage Assessment and Archaeology Report by Biosis (December 2024) and prior studies by Kelleher Nightingale Consulting identify Aboriginal archaeological sites (GR2 and GR4) on the study area.

Following Aboriginal cultural heritage investigations, impacts to the archaeological site GR2 have been reduced through redesign (source: Biosis ACHAR December 2024)

A pre-development Tree Assessment was completed by Arborsaw in January 2025. The activity area is a green field site that contains a large paddock, a creek line, forested areas, open paddock areas, a dam and old farm infrastructure. The tree assessment revealed;
39 High (A) Retention Value trees,120 Medium (B) Retention Value trees, 196 Low (C) Retention Value trees, 49 (R) Remove trees in poor condition
The proposed School Buildings have been sited to minimise removal of high value retention trees.
The site has a 15% canopy cover restriction for the management of the Bushfire Asset Protection Zone. Refer also the Landscape Section of this report.

The site has a significant 9 metres fall from north-eastern boundary to south-western boundary, with the highest point being 46.00AHD at Nirmal St and lowest point 37.00AHD.

The northern boundary along Guntawong Rd in particular has significant fall to the west of greater than 5m along its 100m length. The eastern boundary along Nirmal St on the other hand is relatively flat to the north and begins to slope more significantly in the south eastern area of the site.

2.7 Site Analysis

The site is located northwest of Sydney within NCC Climate Zone 6 with four distinct seasons; experiences mild and lower diurnal temperature, mild to cool winters with low humidity, hot to very hot summers, moderate humidity.

Summer and winter temperatures vary significantly as well as throughout the day, and both heating and cooling are required. The existing site is aligned in a north-west and south-east orientation. Due to this aspect buildings are typically facing northeast and northwest, and external circulation faces southeast and southwest. Prevailing summer breezes are usually common from northeast and southeast directions, while westerly winds are common in winter.

SITE BOUNDARY

FOREST 100m APZ

GRASSLAND 50m APZ

MANAGEMENT AREA Specification 43

BUILDINGS STAGE 1

PROMINENT SITE CORNER

VIEWS TO LANDSCAPE
South-West | First Ponds Creek | Western Tributary

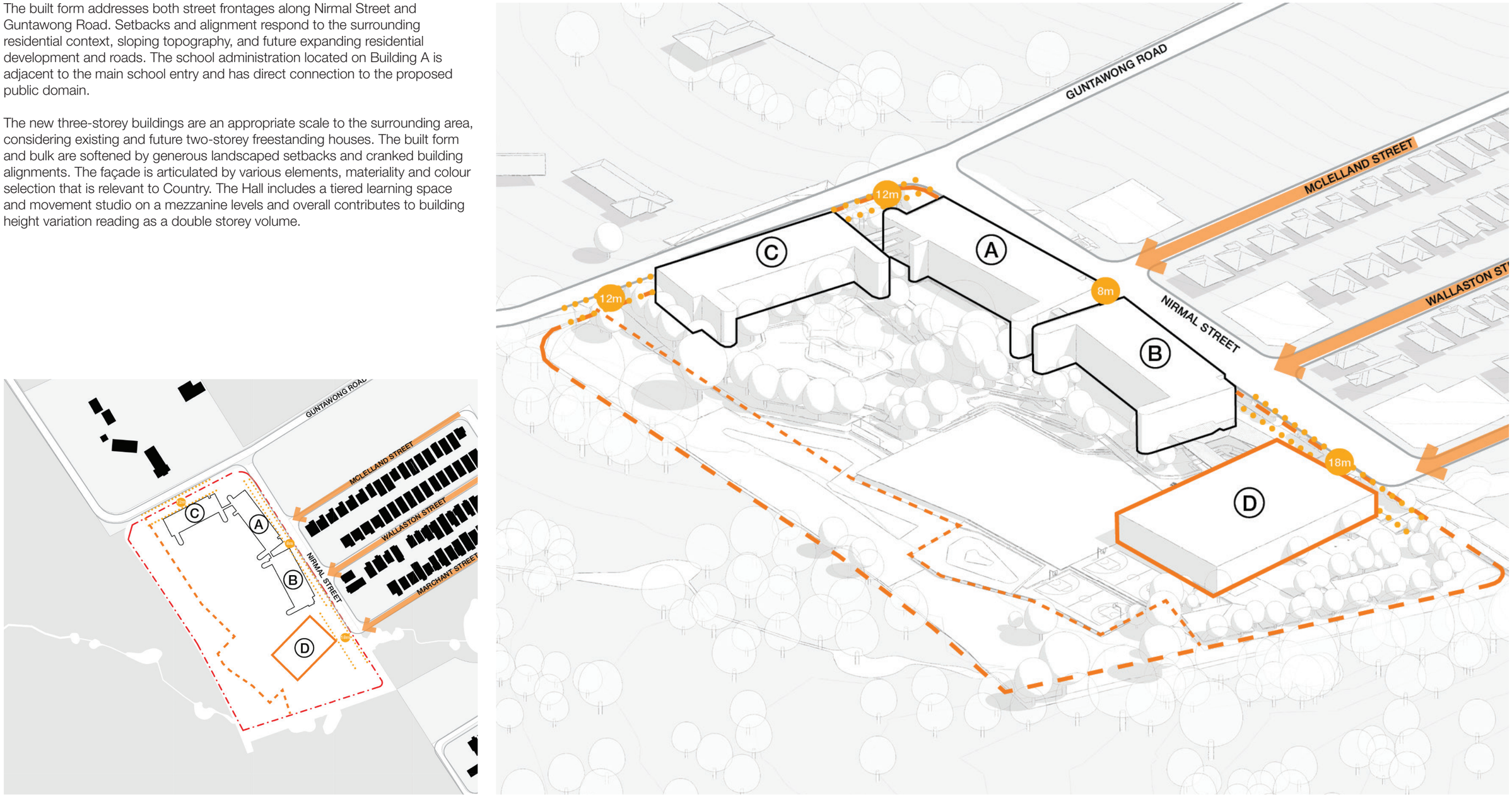
03

DESIGN CONCEPT

3.1 Urban & Built Form

The built form addresses both street frontages along Nirmal Street and Guntawong Road. Setbacks and alignment respond to the surrounding residential context, sloping topography, and future expanding residential development and roads. The school administration located on Building A is adjacent to the main school entry and has direct connection to the proposed public domain.

The new three-storey buildings are an appropriate scale to the surrounding area, considering existing and future two-storey freestanding houses. The built form and bulk are softened by generous landscaped setbacks and cranked building alignments. The façade is articulated by various elements, materiality and colour selection that is relevant to Country. The Hall includes a tiered learning space and movement studio on a mezzanine levels and overall contributes to building height variation reading as a double storey volume.



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STREET SIGHTLINE RELATIONSHIP
Break in building facade

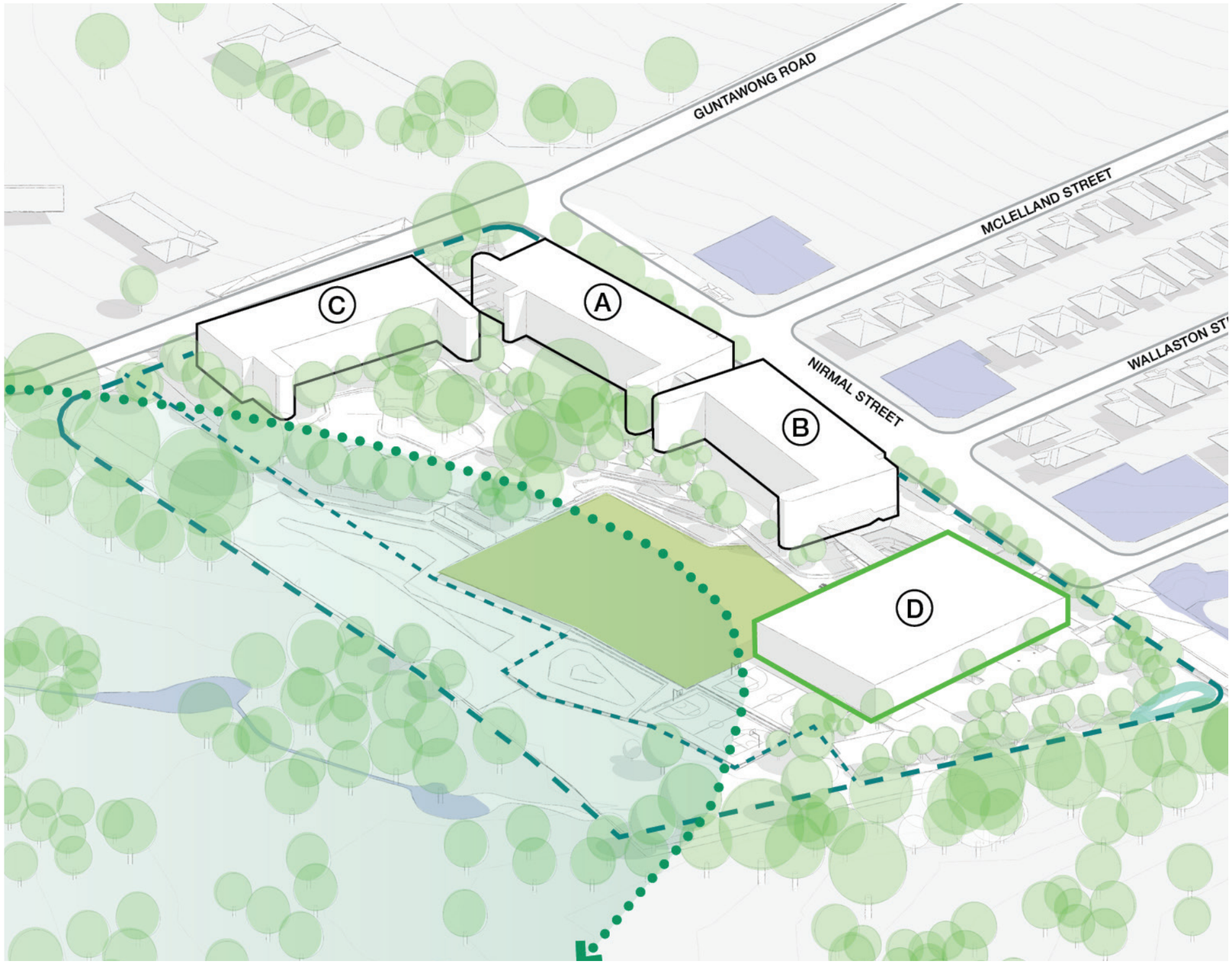
Setbacks

Internal Fence

Perimiter Fence

3.2 Relationship to Open Space

While the buildings holding the street edge responds to the surrounding built context a visual and physical connection is proposed from the centre of the school to the First South Creek area on the southern boundary. Outdoor play spaces such as the field and games courts are centrally located and have clear sightlines for supervision. Retention of mature trees and additional tree planting ensures that natural shade is provided especially around hard paved areas such as the assembly plaza. The integrated response to indoor and outdoor learning spaces connects both built and natural environment.



N

FIRST PONDS CREEK

NATURAL CONNECTION
To Passive Open Spaces & Urban Bushland

LANDSCAPING
Site Periphery & Internal

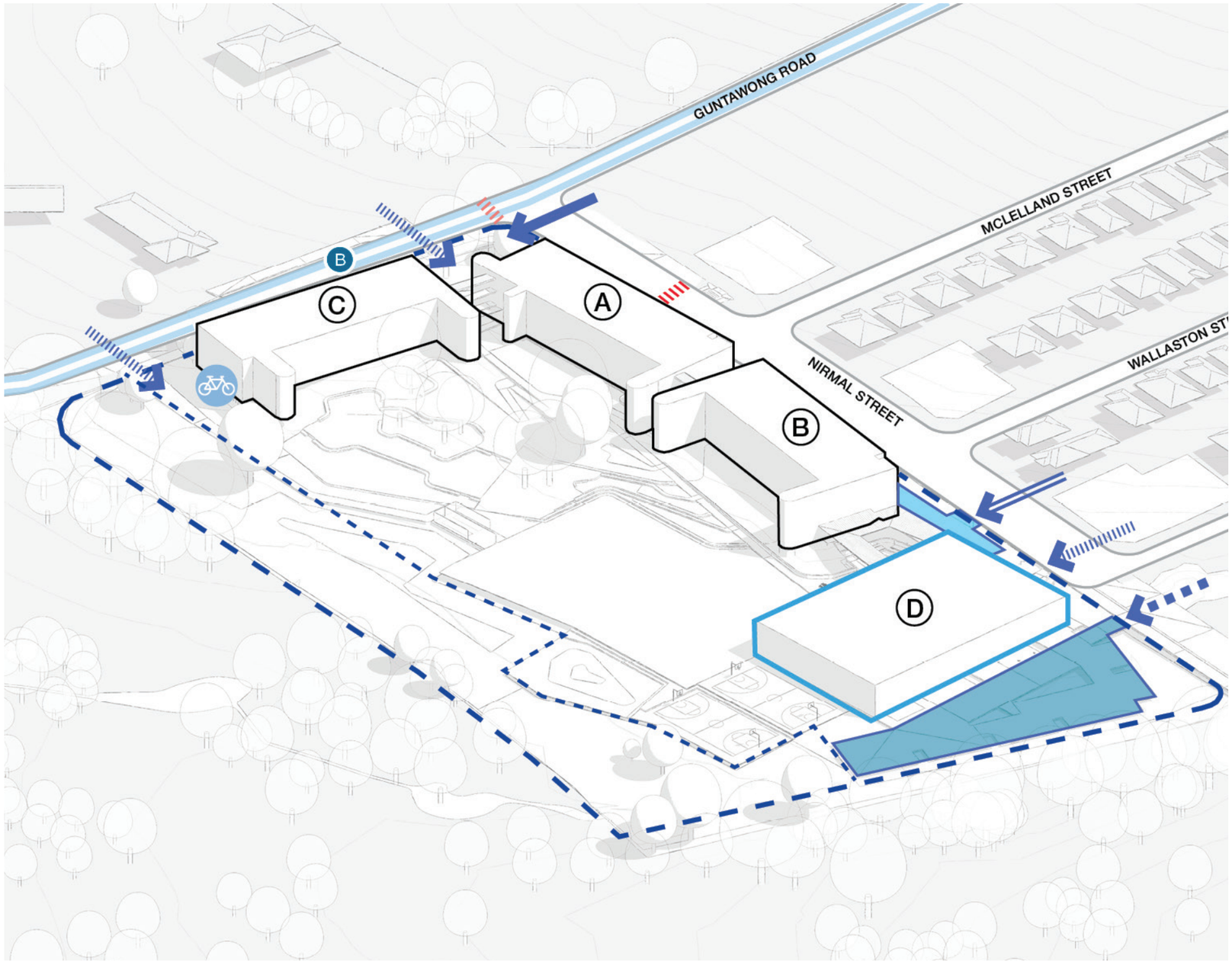
Fence

3.3 Traffic, Access & Circulation

The school campus is designed to prioritise safe and efficient vehicle movement, pedestrian access and circulation. The main School entry is conveniently located at corner off Guntawong Road and Nirmal Street near drop-off zones and public transport, and provides clear arrival points for students, staff, and visitors.
The green travel plan promotes pedestrian and cycling access. Connection to shared path cycling Network and on-site bike parking encourages this mode of travel.

By incorporating secondary pedestrian entries on both roads, the campus ensures greater permeability for access to public transport and the surrounding neighbourhood. Dedicated vehicle entries from Nirmal Street provide access to the staff car park and delivery areas.

A series of outdoor covered walkways connect all buildings and the Hall, providing sheltered access for students, staff, and visitors. For vertical movement, staircases offer access between levels within three-storey buildings, while lifts ensure accessibility to all floors.



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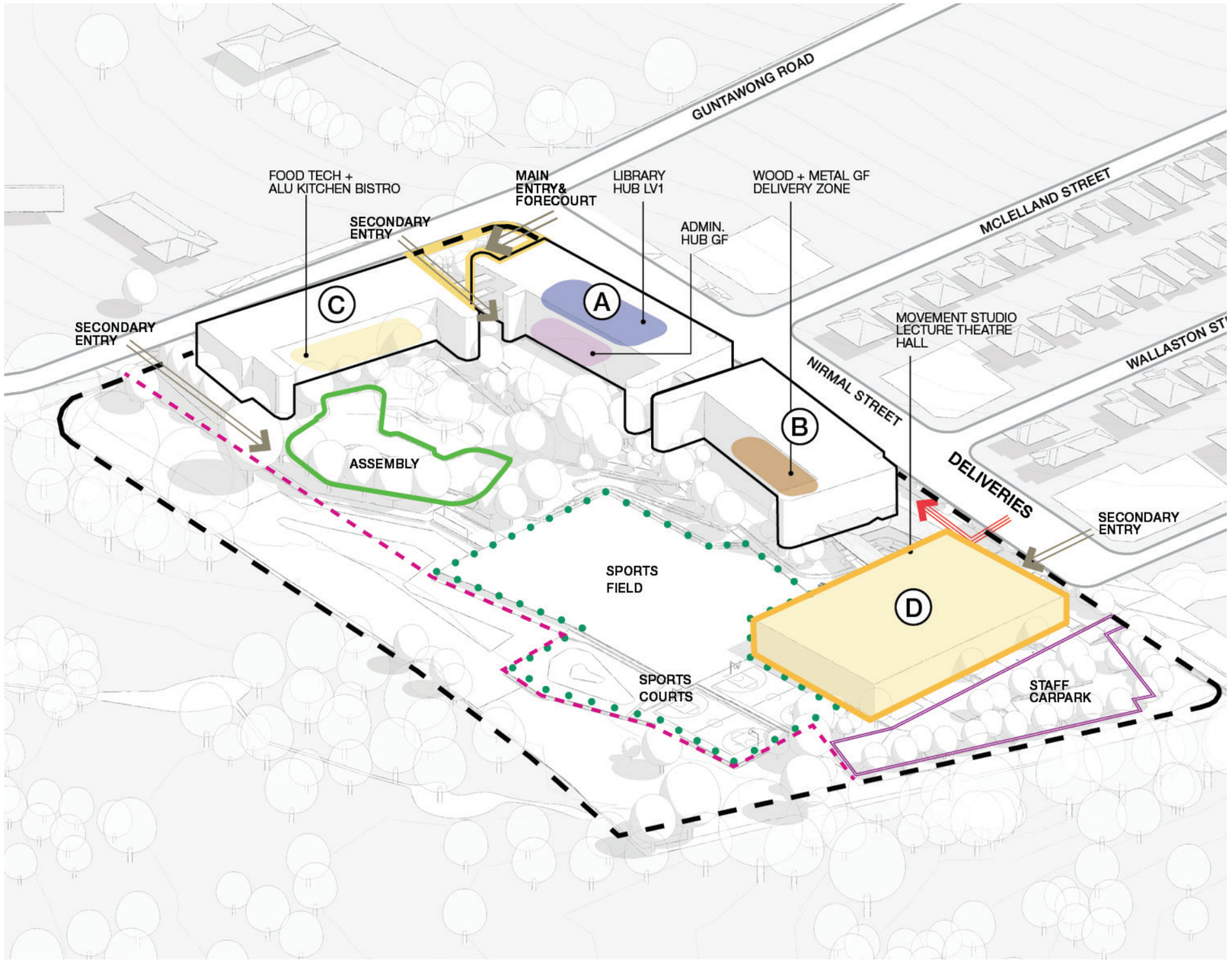
Main Entry
Vehicular Access
Kiss n Drop
Bicycle Parking
Primary Pedestrian Crossing
Secondary Entry
Deliveries Access
SHARED PATH
Pedestrian & Cycle Network
Car Park
Secondary Pedestrian Crossing

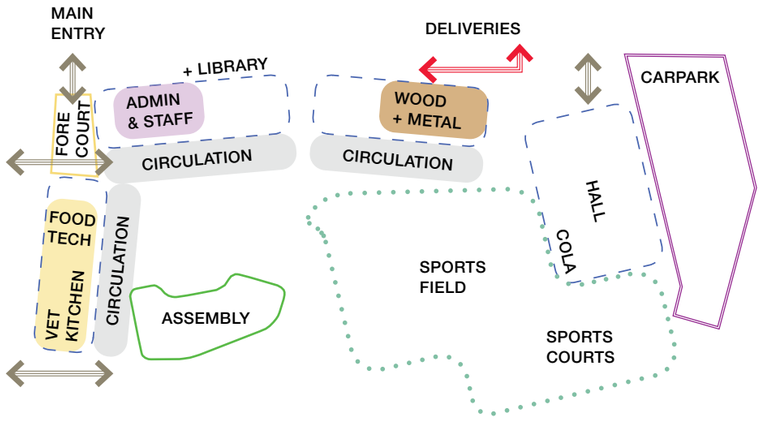
3.4 Functional Relationships

The main school entry serves as the primary access point, connecting directly to the public reception and administration hub within Block A. This central hub, adjacent to the forecourt or public domain, provides a welcoming entrance for students, staff and community. The Library is located on Level 1 of Block A, well centred to school campus. The location of the lift has been considered to directly connect the Support learning unit on Ground with the Library above.

The Hall, a significant communal space, is easily accessible from Nirmal Street's secondary entry. It has direct access to sports fields and hard courts and is conveniently located close to the car park for staff and visitors.

To ensure smooth operations, deliveries are directed to dedicated areas adjacent to Blocks B (Wood + Metal) and D (Hall/Canteen).

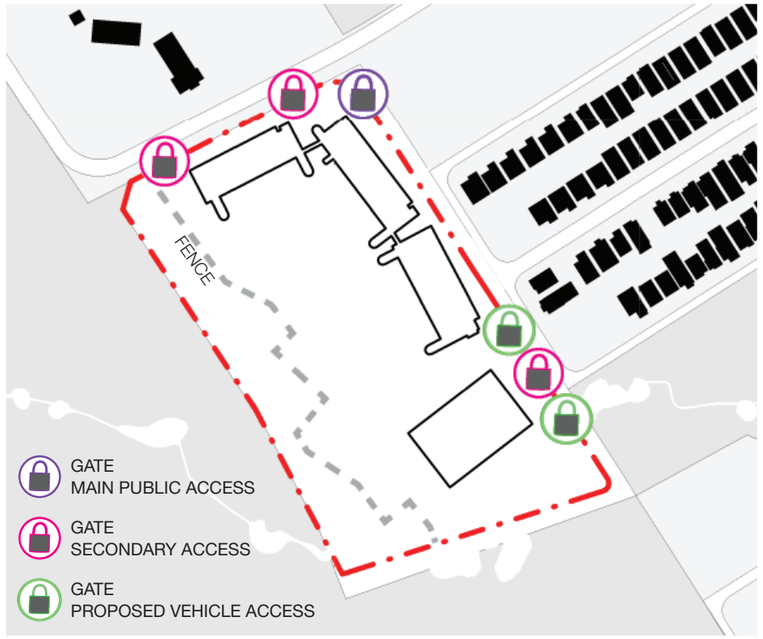




PUBLIC ACCESS
Hall Community Use & Public Reception

FORECOURT | PUBLIC DOMAIN
Main Entry | School Interface with Public Domain

Perimeter Security & Access Control

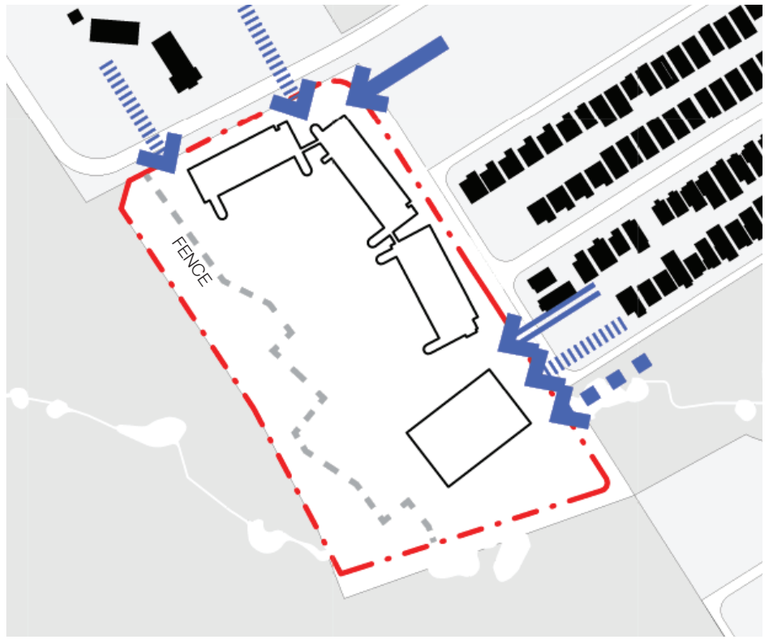


The School's main entry and forecourt will present a welcoming landscaped area improving the engagement of the School with the public domain, which aims to establish a civic front for the school. Outside of this entry area the School site will be secured by palisade fence around site perimeter with access controlled gates for entry into the school.

The main school entry is from Nirmal Street and Guntawong Road near the pedestrian crossing. This is a secure entry with video intercom connection to the administration.

There are alternative entries from other roads that surround the site which are are open during peak arrival and departure times but are not operational during School hours. Vehicle access to car park and delivery zone are provided off Nirmal Street. After school hours access is provided via a secondary entrance in close proximity to Hall and staff car park.

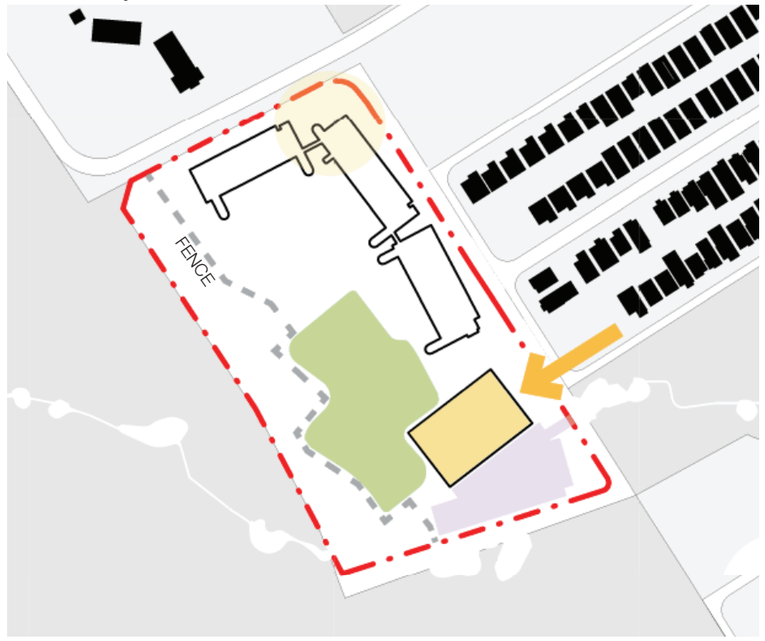
Entries & Access



Multiple access points are provided all with clear sightlines and safe lighting. Additional CPTED design principles around entries and circulation include:

- Entry forecourt has good sightlines from both Nirmal Street and Guntawong Road
- The new reception is located with clear sightlines to the Main Entry allowing for passive surveillance
- Safe lighting will be provided along pathways and increased lighting at Main and After-hours entry points
- Circulation is rationalised with primary access along wide, open circulation spines that connect directly to vertical circulation nodes or external staircases
- Constrained, dead-end corridors are minimised
- Student amenities are located to maintain passive surveillance and allow safe use by different age groups and genders
- All stairs are located externally, with good supervision of the stair wells and are used for both egress and general circulation

Community Use & Territorial Reinforcement



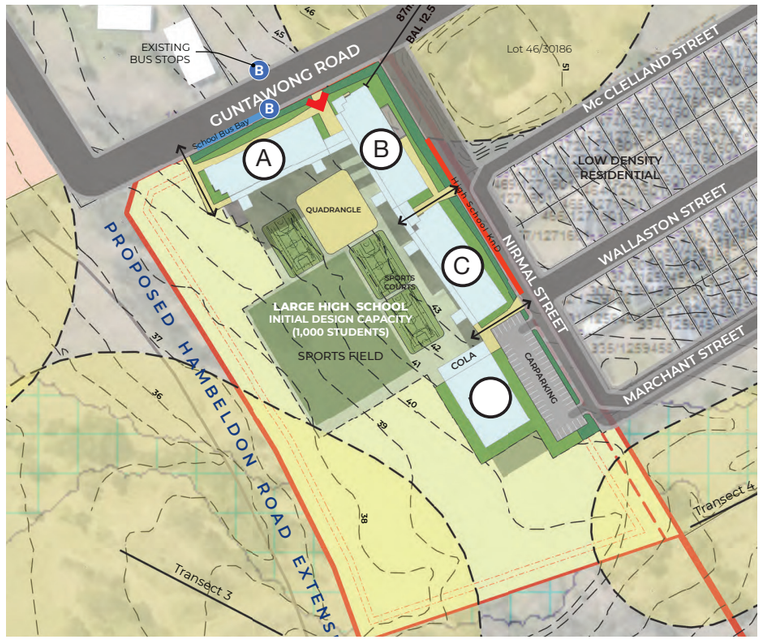
The proposed Hall which has a internal basketball court, stage, movement studio and lecture theatre, has many opportunities for shared community use. Public access and afterhours access to Hall is off Nirmal Street secondary entrance. Both the after-hours and main entries are designed to be welcoming while clearly demonstrating territorial reinforcement principles:

- The School name features prominently at the Main entrance
- The School grounds are fenced and access control monitored
- Areas will be well-maintained and well-used to generate a feeling of 'ownership'

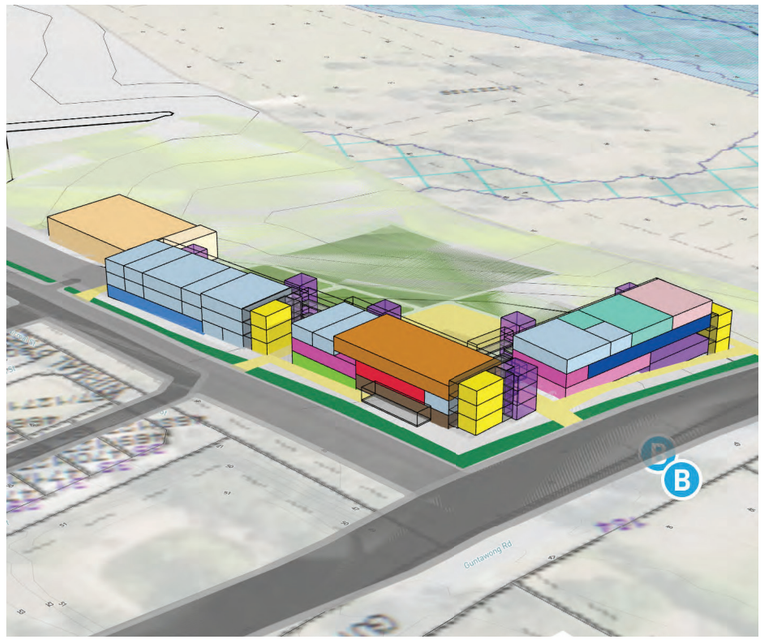
A well-maintained asset sends the message that people notice and care about what happens in an area. This, in turn, discourages vandalism and other crimes. The selection of materials has considered firstly reducing the likelihood of graffiti and vandalism, but also the ease of removal to facilitate ongoing maintenance.

3.6 Masterplan Options

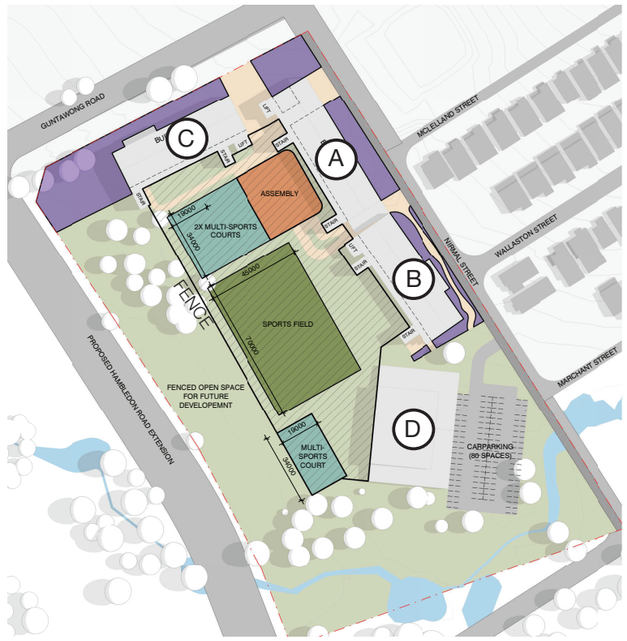
DoE Masterplan



Masterplan verification



Final Masterplan option



The SINSW masterplan which was included with the Final Business Case included the following key design principles:

- Key Main entry off Guntawong Road
- Kiss & Ride off Nirmal Street
- Onsite parking access off Nirmal Street
- The building footprint setback to allow for half road reserve along Nirmal St
- The layout of the buildings frame around the edge of play space to allow for passive surveillance

While the majority of the masterplan design principles were supported, during the masterplan verification undertaken by DJRD a number of additional considerations were raised:

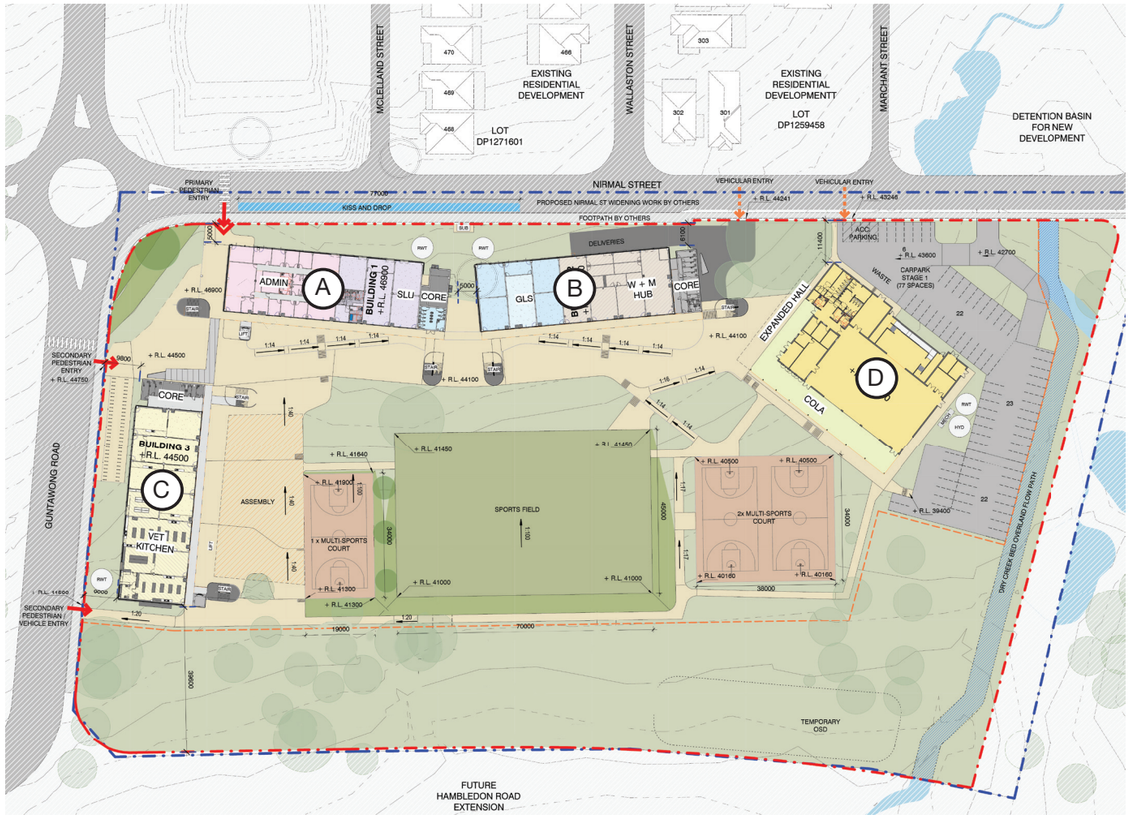
- Guntawong Rd steep topography and proposed future upgrades unsuitable for Main Entry
- Nirmal St relative flat topography better suited for kiss & drop and Main entry including Support Unit drop-off.
- Stepped floor plate of building A limits expansion options
- COLA on the short end of the Hall does not produce the best functional layout

The Masterplan Sketch remains largely in line with the original general design principles, however, the following design recommendations were made:

- Building locations swapped to better respond to topography, ground floor building program and access considerations
- Future-proof building setbacks for proposed roadworks (by others)
- Hall rotated to better respond to EFSG functional relationships

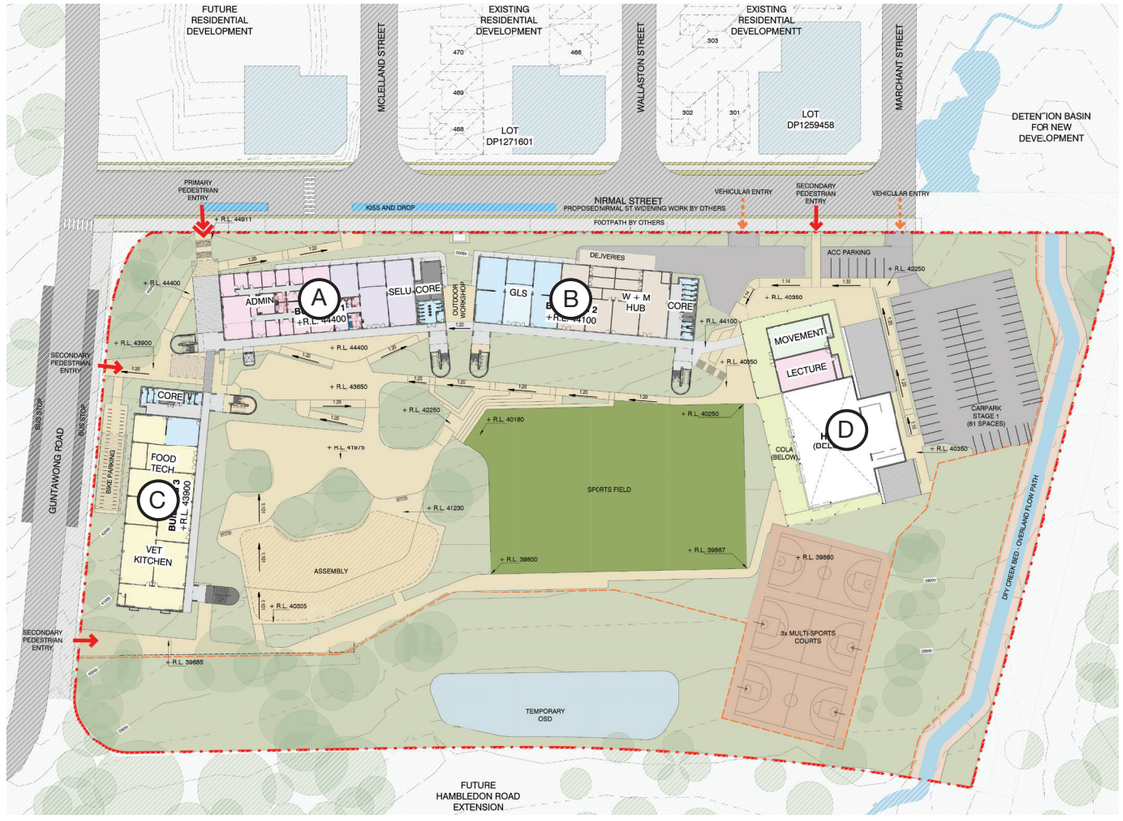
3.7 Concept Design options

Previous Concept Design option



The initial Concept Design option largely developed the final masterplan option with little change to the spatial layouts on the site. However, as it became clear through better understanding of the surrounding infrastructure proposals and timelines, as well as onsite conditions such as the high value existing tree locations and topography, some design features were questioned eg. location of the courts + field, response to locate the lecture unit underneath the Hall, and the setback of buildings A + B from Nirmal St.

Final Concept Design option



The final Concept design option greatly improved the overall retention of trees and extent of earthworks. The slight amendments to Buildings A, B and D, location and orientation also assisted in managing the level transitions from the street/ boundary to the building bench levels. The improvements made to this layout in Schematic design were largely informed by the SDRP review and include:

- Courts and field locations and orientation
- Carparking layout
- Stormwater overland flow and OSD response

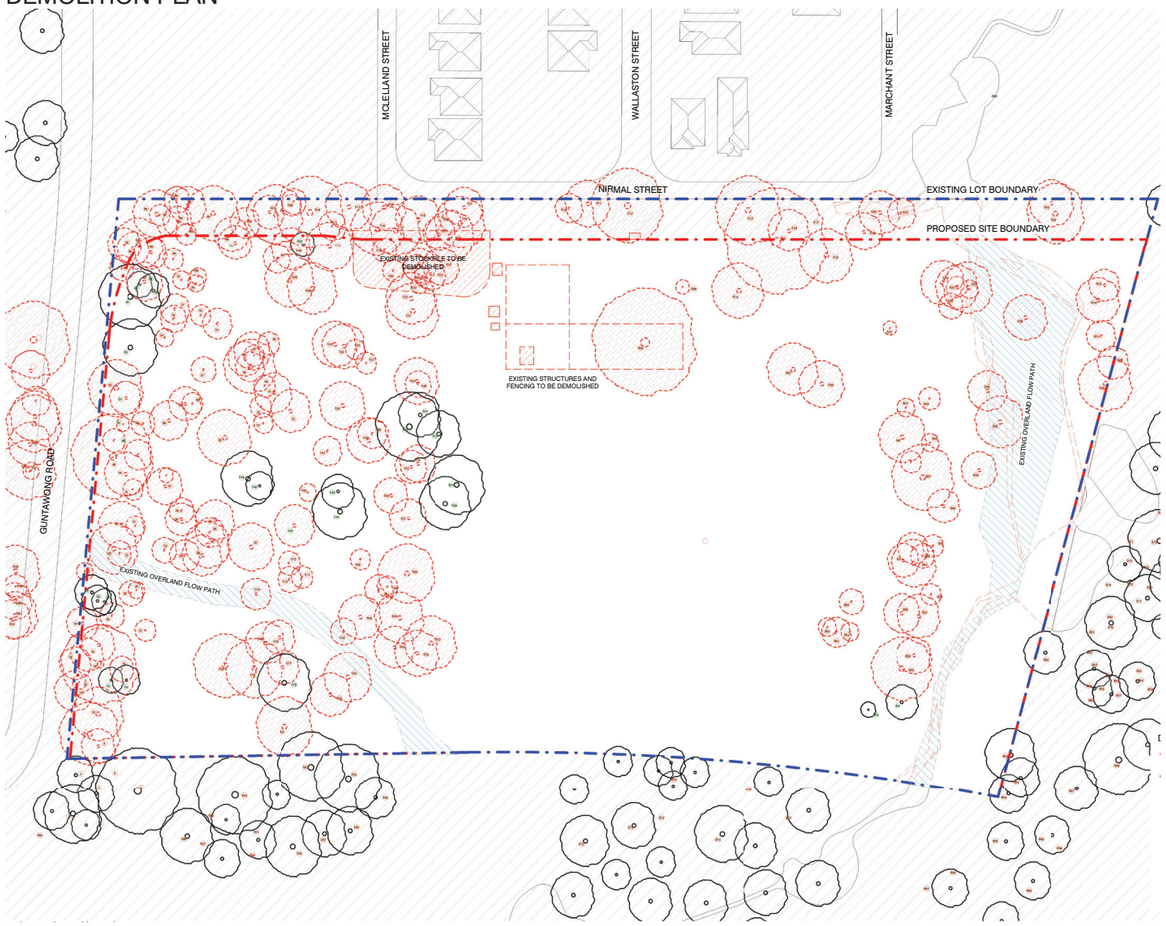
04

ARCHITECTURAL RESPONSE

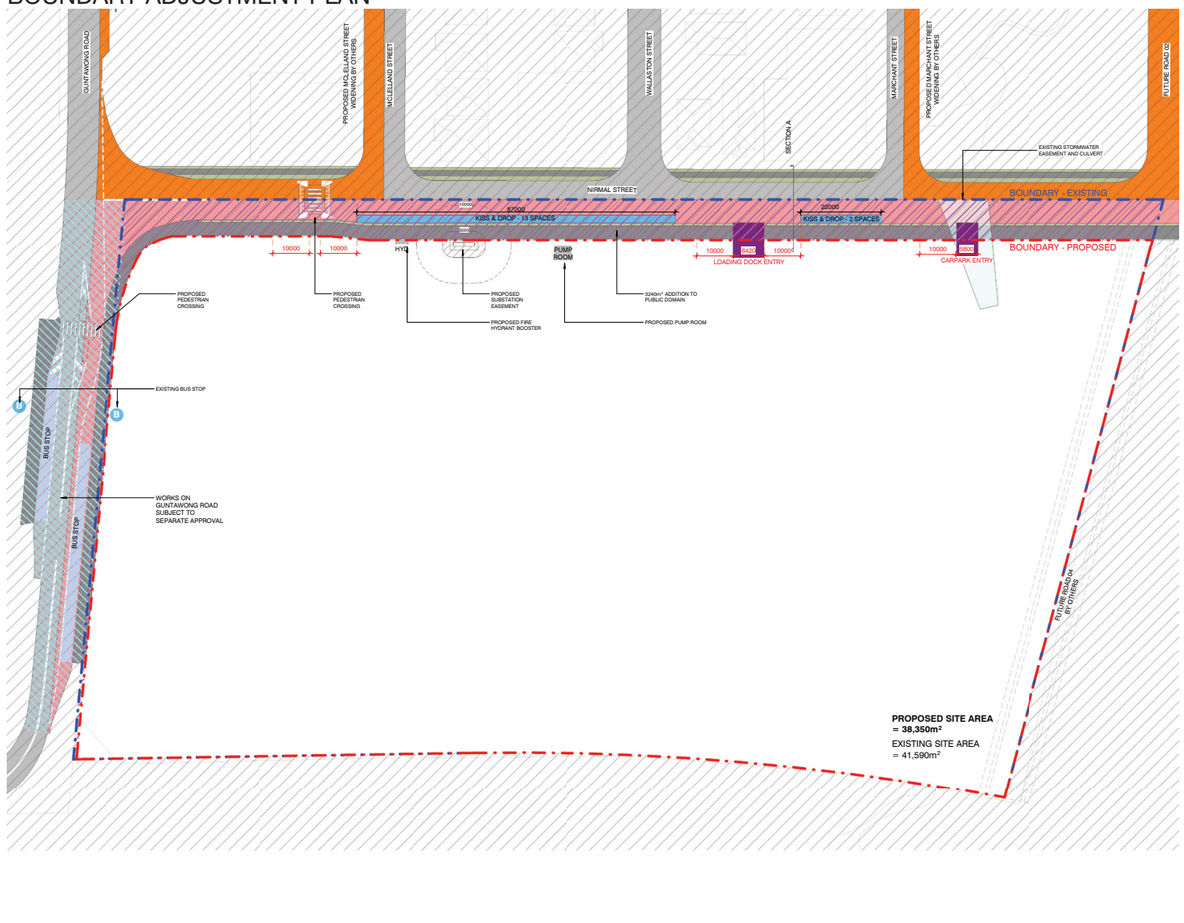
4.1 Overall Site Plans

School buildings have been sited to minimise removal of trees, however existing trees affected by the proposed school development and site boundary adjustment will need to be removed.
In addition, demolition of former residence, removal of existing livestock infrastructure; garage, animal shelter, shed and existing rural stockpile are required.
Boundary Adjustment includes works to existing Nirmal Street widening, provision of Kiss and Drop, public domain works, pedestrian crossing and vehicle entry & exit. Works on Guntawong Road are subject to a separate approval.

DEMOLITION PLAN



BOUNDARY ADJUSTMENT PLAN



N

4.1 Overall Site Plans

LOWER GROUND FLOOR

GROUND FLOOR

N

4.1 Overall Site Plans

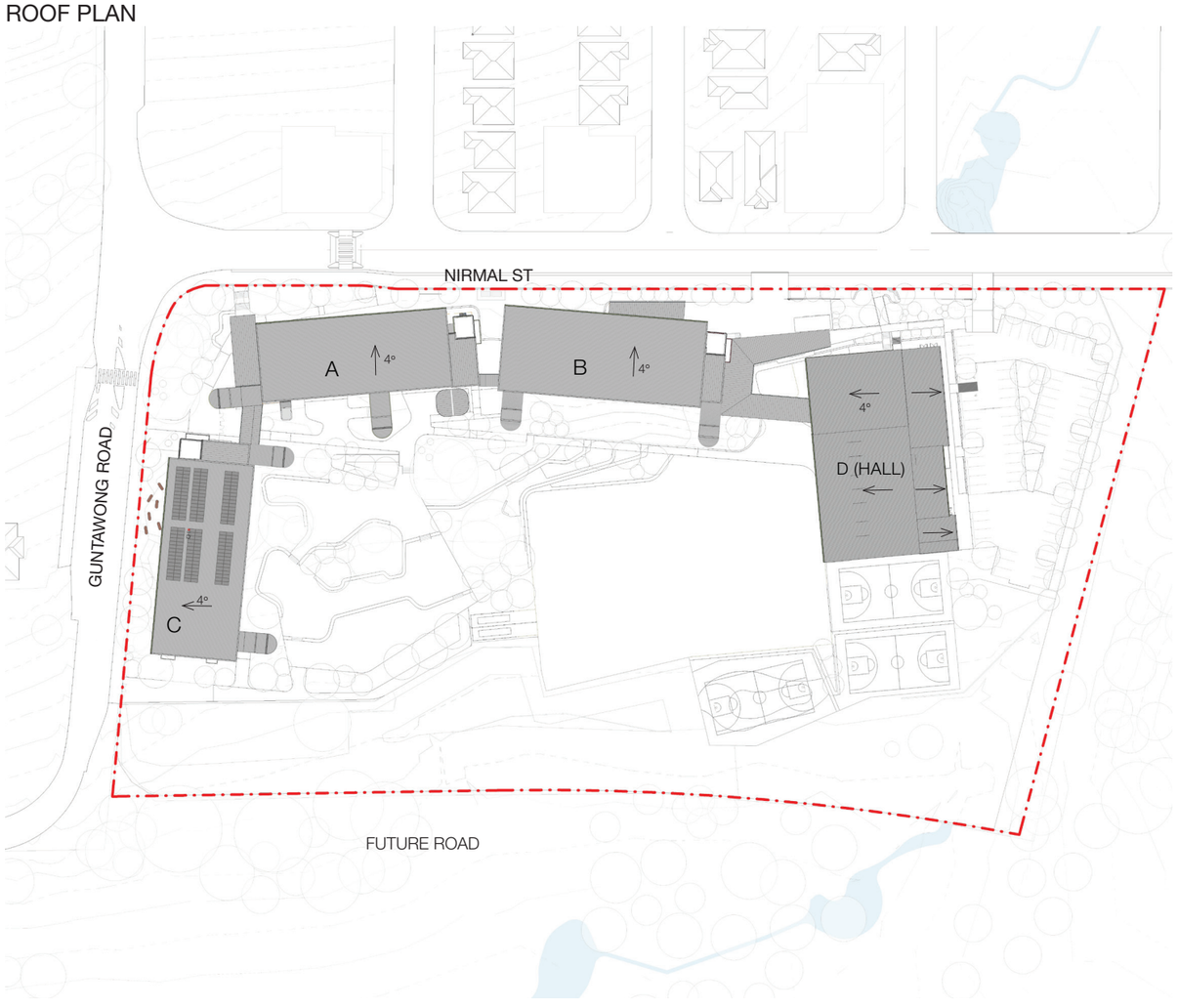
FIRST FLOOR

SECOND FLOOR

N

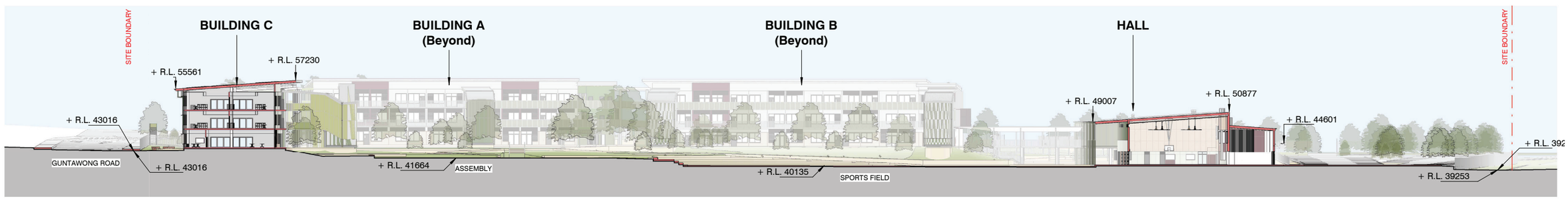
4.1 Overall Site Plans

ROOF PLAN

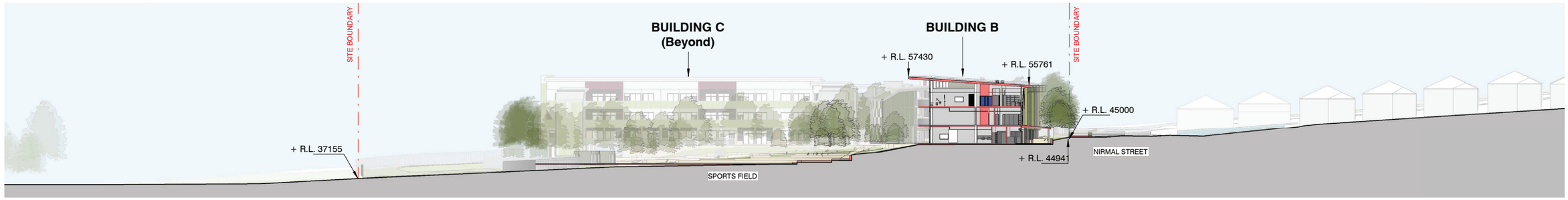


N

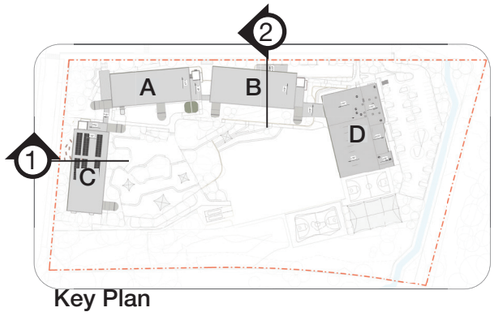
4.2 Site Sections



1 101500 SITE SECTION 01
1 : 500



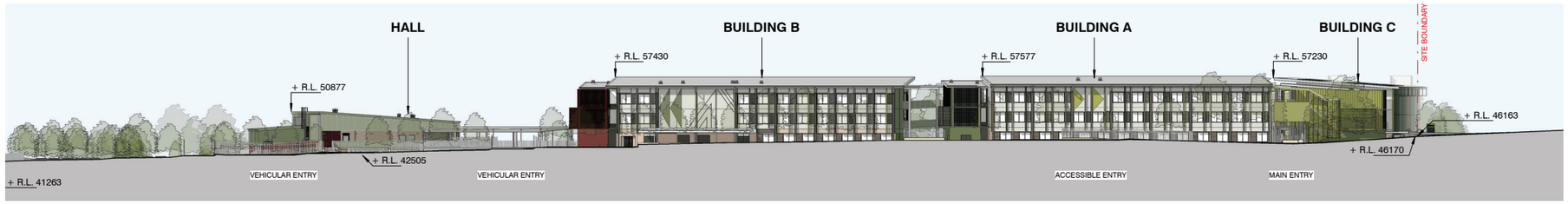
2 101500 SITE SECTION 02
1 : 500



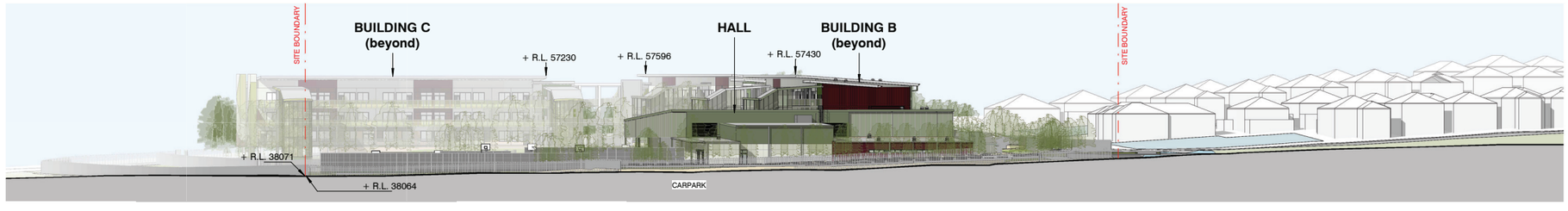
Key Plan

N

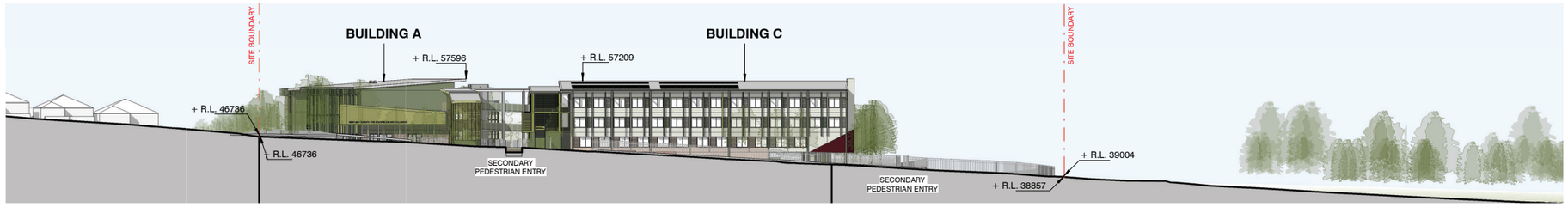
4.3 Site Elevations



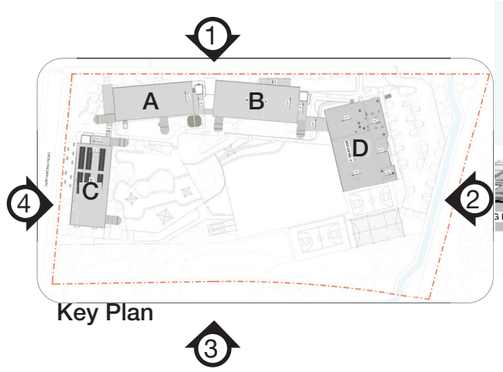
1 201900 SITE ELEVATION - EAST (NIRMAL STREET)
1 : 500

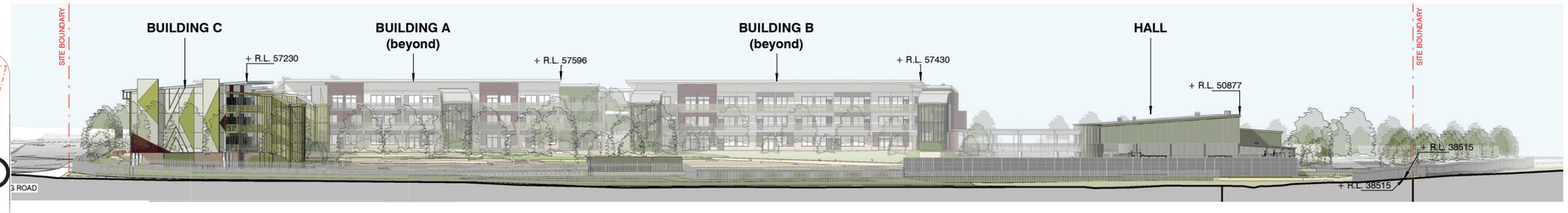


2 201900 SITE ELEVATION - SOUTH
1 : 500



3 201900 SITE ELEVATION - NORTH (GUNTAWONG ROAD)
1 : 500



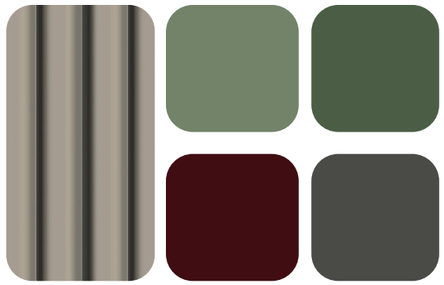


4 201900 SITE ELEVATION - WEST
1 : 500

N

DURABLE CLADDING - UPPER

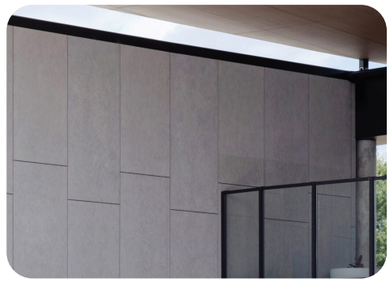
For areas where students will not come in contact with cladding eg. upper Hall profiled prefinished metal cladding is proposed



Prefinished Metal Wall Cladding

DURABLE CLADDING - LOWER

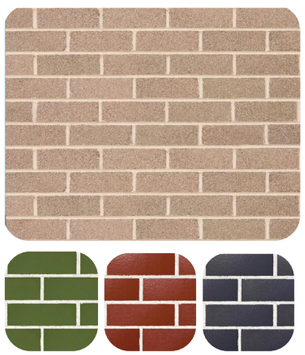
For areas where students will come in contact with facade cladding but are not subject to the same high traffic as the ground plane a durable pre-finished, colour-through CFC is proposed



Through coloured CFC cladding

ROBUST BASE - HIGH TRAFFIC AREAS

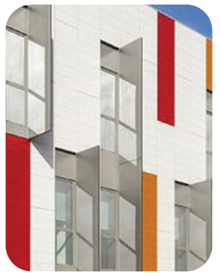
For high traffic locations on ground floor of all buildings including Hall a facebrick is proposed



Neutral brick & Feature Brickwork

SUNSHADES + FACADE ARTICULATION

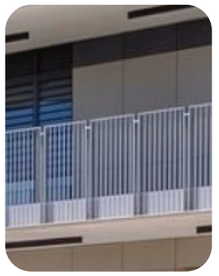
Where sunshades are required and for facade articulation fins - prefinished colour



sample colours

PERFORATED METAL FALL PROTECTION

Selected stair cores and balustrades



4.5 Indicative Elevations

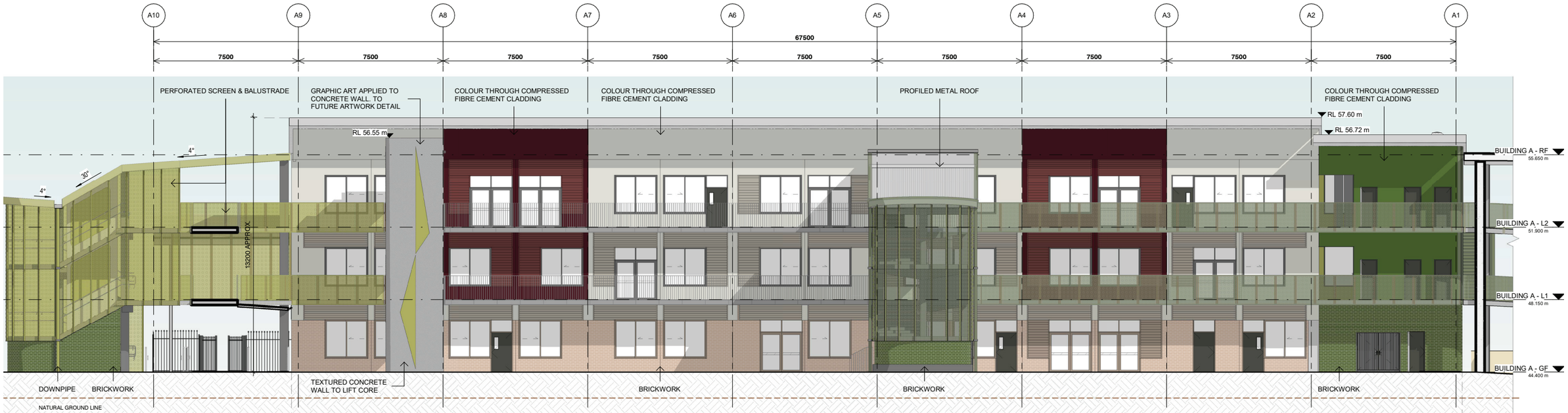
Block A Street Facade

1 BUILDING A - EAST ELEVATION
1 : 100

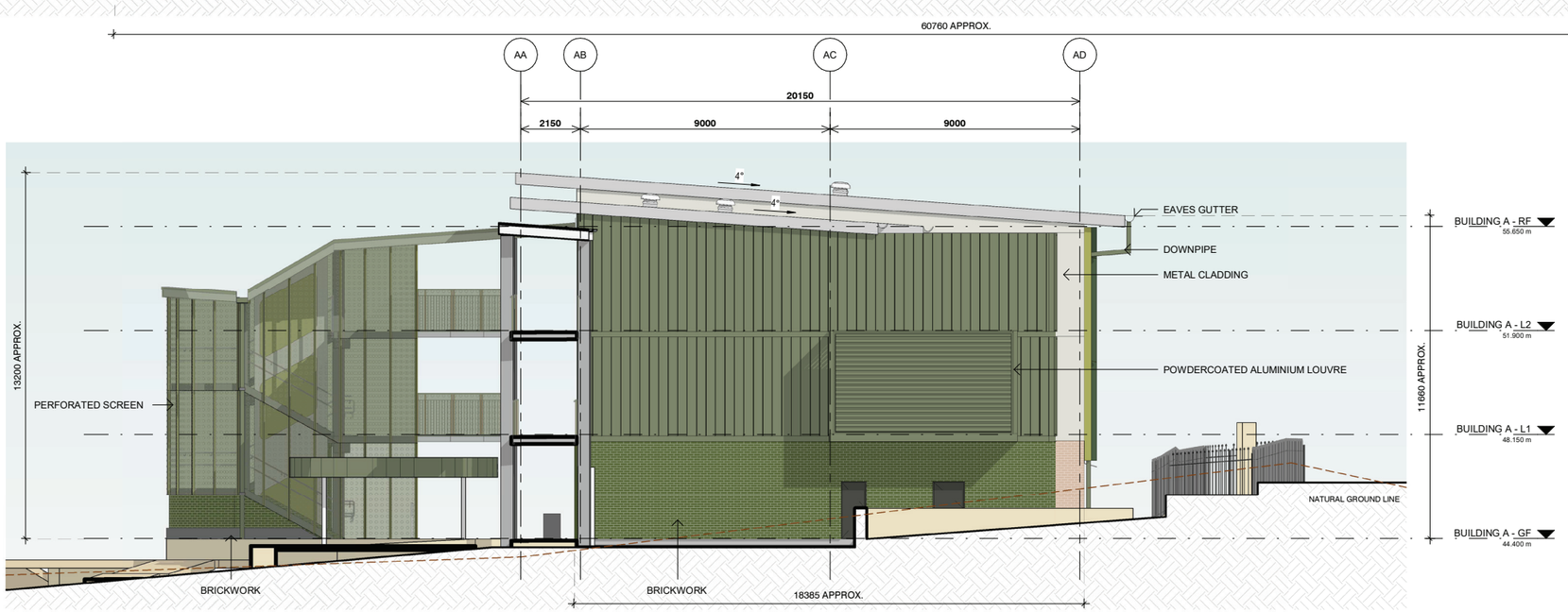
3 BUILDING A - NORTH ELEVATION A
1 : 100

4.5 Indicative Elevations

Block A Courtyard Facade



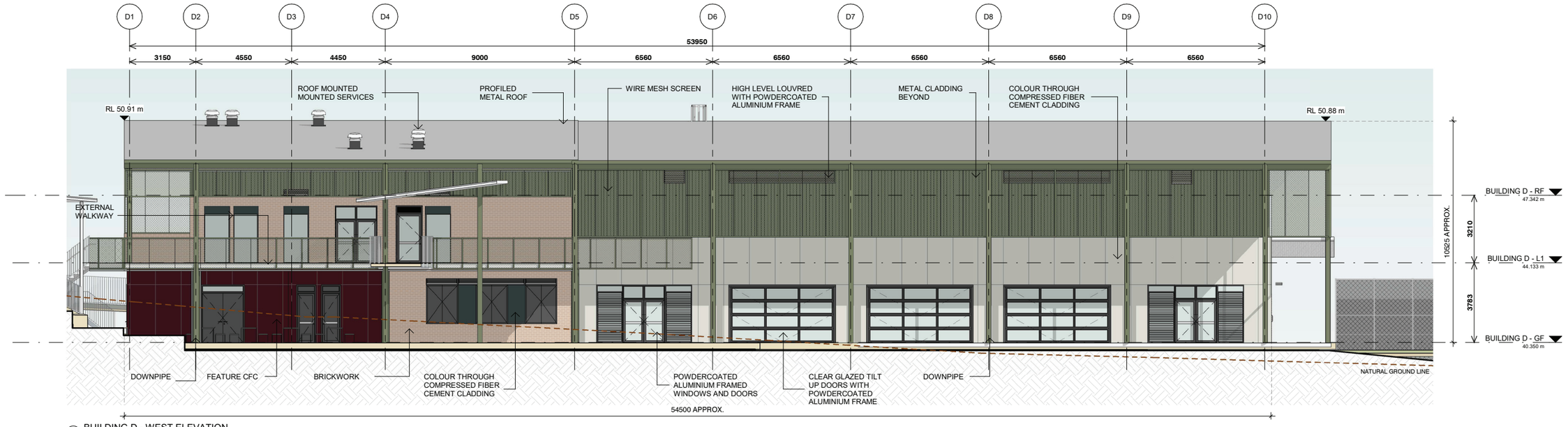
② BUILDING A - WEST ELEVATION
1 : 100



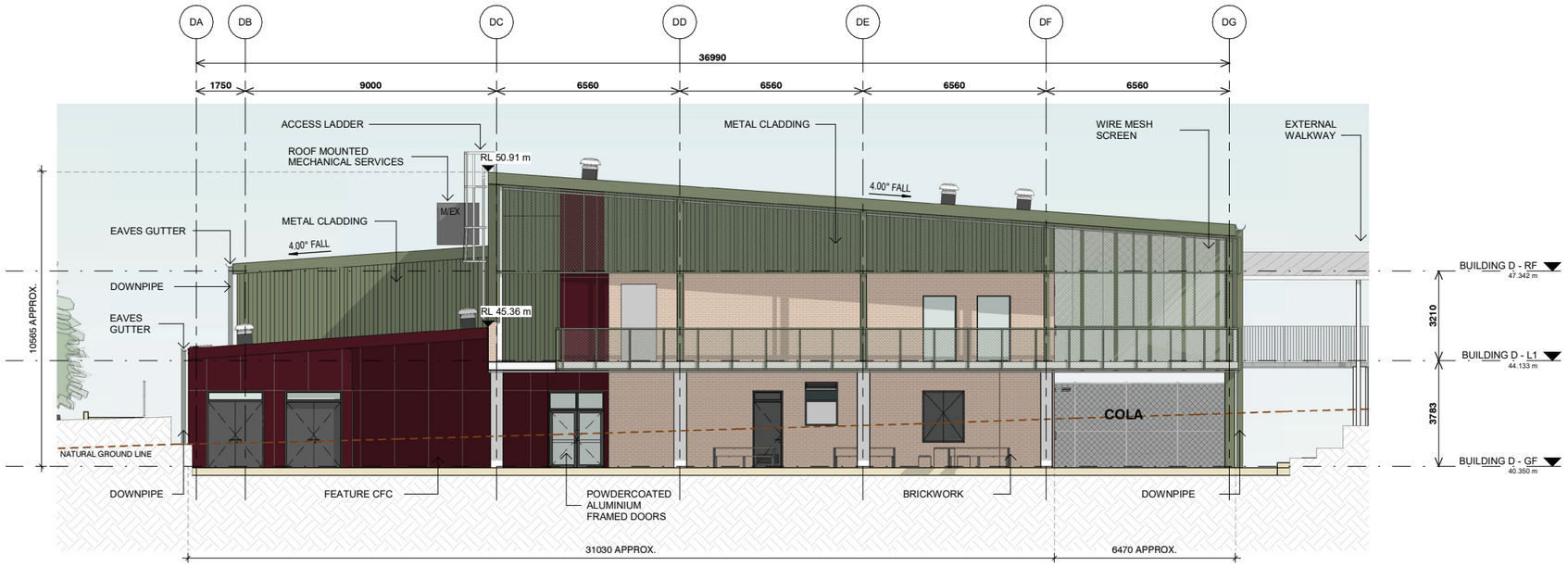
① BUILDING A - SOUTH ELEVATION A
1 : 100

4.5 Indicative Elevations

Hall



1 BUILDING D - WEST ELEVATION
1 : 100



2 BUILDING D - NORTH ELEVATION
1 : 100

4.6 Renders

Aerial View

4.6 Renders

Public Domain - School Entry

4.6 Renders

School Main Entry

A new individual letter school signage is proposed in the main entry awning, creating a strong school identity. A secondary school entry signage is proposed to be digital electronic LED sign.

Acknowledgement of country sign will be incorporated into into a co-designed art piece/ seating wall, design subject to CwC artist engagement.

Way finding signage will incorporate key directional signage, including building, department and room identification. Signage drawings have been included in the architectural drawing pack as part of the REF submission.

New School Signage Awining (Feature)

CwC Sign (Feature)

Directional Signage

Main Digital Eletronic School Sign

Public Domain Sign
Kiss n Drop, School Parking Hours

Vehicle Entry / Exit Sign

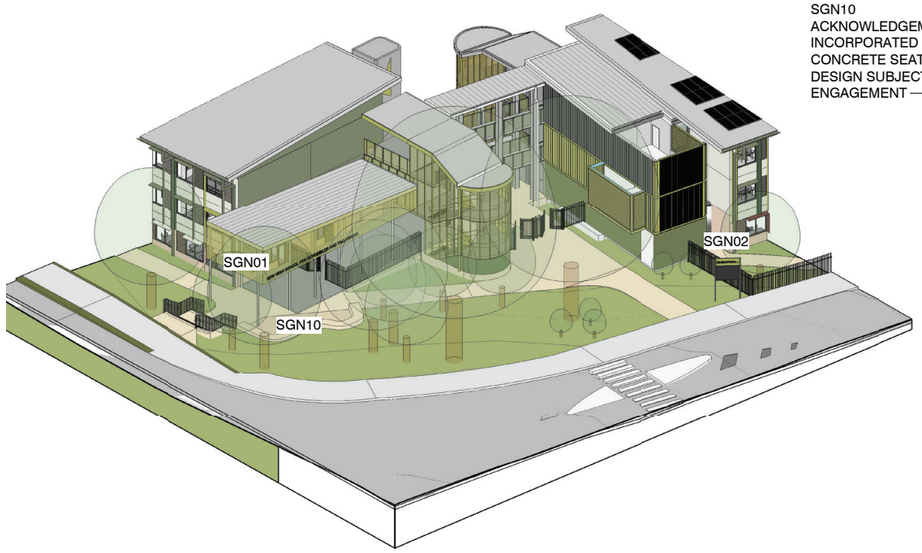
Secondary School Entry

Building Signage

Department Signage
+ EFSG Signage for every room

4.7 Signage | Wayfinding

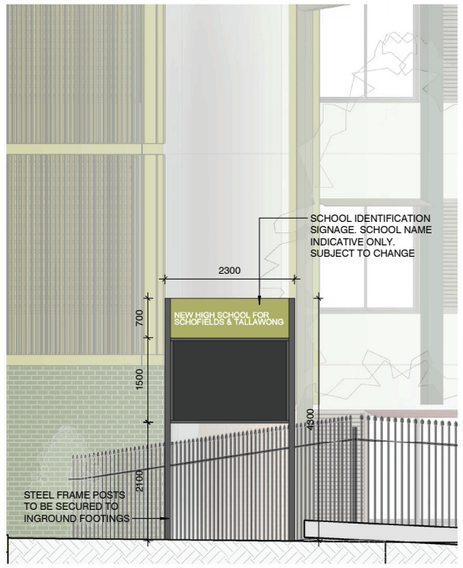
1 ENTRY ELEVATION - NORTH (GUNTAWONG ROAD)
1 : 100



2 ENTRY FORECOURT AXONOMETRIC

SGN10
ACKNOWLEDGEMENT OF COUNTRY INCORPORATED INTO IN SITU CONCRETE SEATING WALL
DESIGN SUBJECT TO CWC ARTIST ENGAGEMENT

ACKNOWLEDGEMENT OF COUNTRY SIGNAGE



3 SGN02 - ELECTRONIC DISPLAY SIGNAGE
1 : 50

05

ENVIRONMENTAL RESPONSE

5.1 Visual Impact Statement

A number of views have been reviewed from major intersections towards the new School site.

The governing design principle for siting buildings was to address the streetscape and keep minimal impact towards The First Ponds Creek reserve. The massing of the 3 storey buildings plus the Hall is split into four separated buildings plus inclusion of the entry forecourt and central courtyard. Buildings are sited lower than Nirmal Street levels and front setback varies in order to break up the bulk and height impact on surrounding future major residential development.

The existing First Ponds Creek green areas and generous landscape design will reduce the impact of the scale of the building from surrounding streets.

In the following visual impact studies, landscape has not been illustrated so that visual impacts can be annotated.

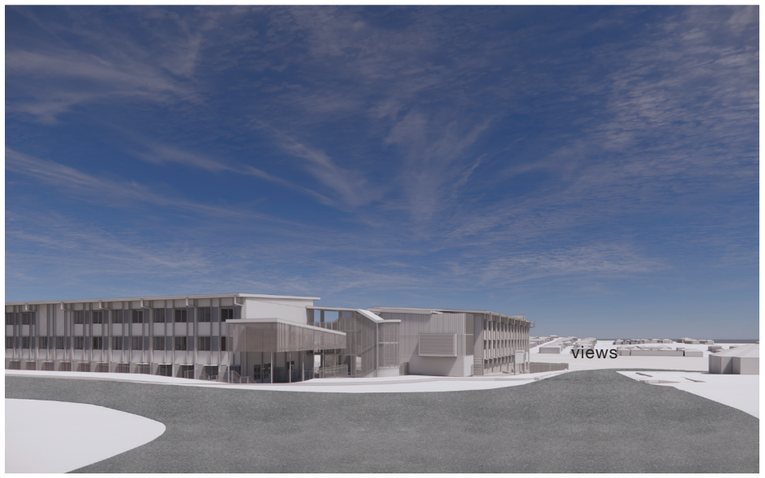
Key Plan

A View from Guntawong Road

B View from Nirmal Street

C View from Clarke Street

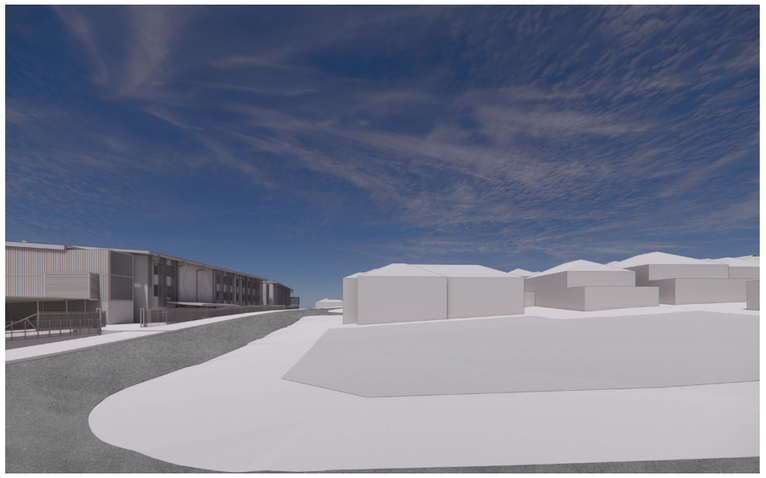
View A View from Guntawong Road



Viewed from Guntawong Road towards school main entry at corner with Nirmal Street.
Buildings are sited lower than Nirmal Street levels to reduce height and bulk impact to the streetscape. Views to First Ponds Creek Reserve are maintained on western side of site.

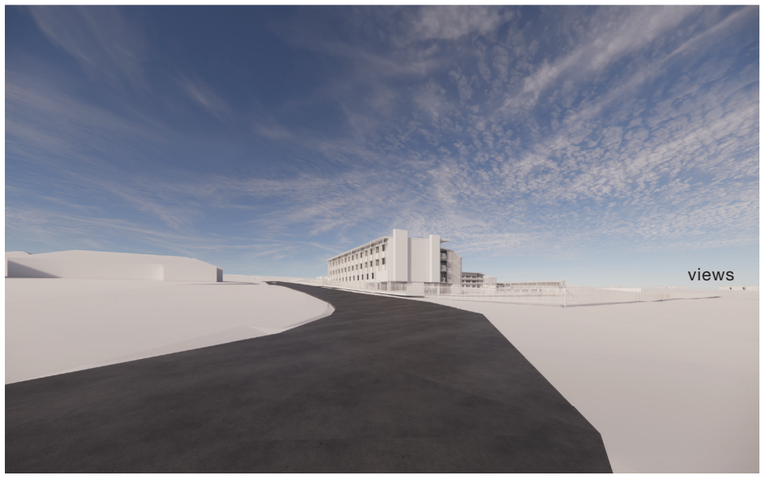
5.1 Visual Impact Statement

View B from Nirmal Street



View from Nirmal Street intersection with Marchant Street, the proposed buildings sit along the streetscape. The Hall has a generous front setback allowing views to First Ponds Creek Reserve.

View C from Clarke Street



View from Clarke Street, the school is setback significantly allowing full views to First Ponds Creek reserve.

5.2 Overshadowing

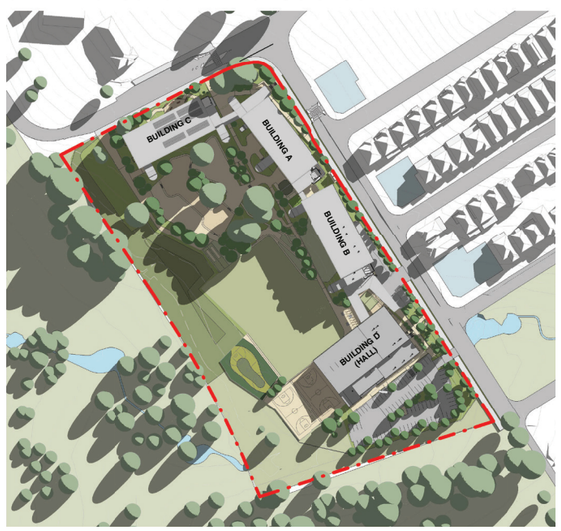
The shadows generated by the proposed buildings, specially in winter, do not impact neighbouring properties. Central play areas including assembly will have good direct solar access except early in the morning and later in the afternoons.

9AM 21st December - Summer Solstice

12PM 21st December - Summer Solstice

3PM 21st December - Summer Solstice

9AM 21st June - Winter Solstice



12PM 21st June - Winter Solstice

3PM 21st June - Winter Solstice

N

5.3 Sustainability Strategies Overview

The following strategies and mitigation measures are based on Steensen Varming's Sustainability approach which is included in the REF submission.

Minimisation of Waste

- Collection of separate waste streams and efficient access to waste and storage areas.
- Construction waste: Aim for 90% recycling benchmark.
- Builder or head contractor to develop and implement an environmental management plan to cover the scope of construction activities.

Passive Design

- Glazing has been strategically placed in spaces which can allow for more relaxed environmental conditions and that can benefit from access to daylight, views and natural ventilation.
- Where required the windows are designed to have appropriate shading or be of high performance to control heat gains and glare.
- The building will be tested for airtightness. This will ensure a well-constructed façade and will prevent unwanted heat transfer to the exterior.
- Occupancy sensors are considered for all non-critical spaces, to ensure the artificial lighting system is only activated when the space is occupied and remain turned off at all other times.

Energy Efficiency

- Implement an "energy hierarchy" methodology in order to reduce the buildings energy consumption: optimisation of the building massing and envelope, efficient services and renewable energy generation on site.
- Goal to exceed 10% improvement over NCC (BCA Consultant to confirm if NCC 2022 will apply and assess implications).
- Onsite renewable energy by PV System 99kW with required roof space of 693sqm of Building C.
- The main switchboard will be designed in accordance with NCC 2022 Section-J requirements, to allow for PV and future battery installation.
- A BMS system as per NCC requirements will be included in the project.
- All external lights to comply with Upward Light Output Ratio below 5%.

Water

- Rainwater collection and reuse for irrigation and toilets; size and locations to be considered.
- No water-based heat rejection.
- Promote water drinking with accessible, filtered water dispensers through the site.
- Water efficient fixtures and fittings certified under the WELS rating scheme will be specified for the project.
- Rainwater harvesting is incorporated and will be reused for landscape irrigation.
- Efficient water management through an automatic water meter monitoring system will be installed.

Embodied Emissions

To support a reduction in the embodied emissions for the project, the following measures are to be considered:

- Material reduction through efficient design layouts, structure and façade;
- Prioritising prefabricated and modular components;
- Specification of low carbon materials;
- Sourcing of local products;
- Substitution of raw materials with recycled or reclaimed alternatives;
- Design for disassembly & repurposing of demolition waste.

Climate Adaptation

Implementation of a climate adaptation plan considering items such as:

- Increased rainfall gutters to be sized appropriately;
- Façade design;
- Provide shading in outdoor areas to reduce the impact of higher outdoor temperatures;
- The design of the mechanical systems to consider future increase in temperatures.

Resilience

Key Climate Change risk mitigation strategies includes:

- Active design systems: Increase in plant capacity in buildings to accommodate higher ambient temperatures.
- Landscape strategy to include:
  - » Provision of trees, planting, covered walkways for shading;
  - » Outdoor spaces connected with buildings;
  - » Inclusion of waterbodies;
  - » Use of soft landscape, hardscaping and roofing materials with high Solar reflectance index to reduce the heat island effect and improve outdoor thermal comfort.
- Vegetable gardens for school (WELL N12).
- Reduced stormwater runoff through rainwater harvesting from roofs

Selection native species with low irrigation (potable water) demands.

Green Star Certification

GBCA's Green Star Buildings v1.0 evaluation tool has been used to inform the project design, with a requirement to achieve a 5-star rating.

Sustainable Transport

- Develop Transport assessment plan. Aim to include EOT (Cycling) / High pedestrian access and mobility.
- Encourage cycling for students and staff; provide electric vehicle infrastructure; reduce car parking onsite; secure and accessible bicycle storage provided onsite; lockers and shower facilities provided for staff.

Community Benefits

- Include school spaces which can be used as community spaces (Hall space / Sports Field / Outdoor Areas).
- Collaboration with local aboriginal community groups to embed significant traditional elements in the design of the building and landscaping.

06

LANDSCAPE STRATEGY

6.1 Landscape Masterplan

The new high school at Schofields Tallawong shall be sited carefully considering topography, existing trees and the newly built urban context. The undulating site, while posing design challenges, have created opportunities for a highly amenable landscape and to Design with Country. Respecting the site's existing hydrology and enhancing it, has been a key driver to the land-scape design and the broader siting of buildings.

Main entry to the school is proposed on the corner of Nirmal Street and Guntawong Road flanked by existing Eucalypts. The building arrangement creates a partly enclosed large assembly, seating, sports and outdoor learning areas. An existing water course shall be enhanced and replanted with native species – guided by Connection with Country codesign and knowledge sessions.

Sports, outdoor learning, pathways, gathering spaces have all been considered within the topographical challenges of the site, with access and wayfinding considerations. Additional tree planting shall add to the biodiversity of the site, while providing important shade amenity. Water management basins shall be carefully integrated and provide a green and natural setting in a fast-developing growth area of Sydney.

6.2 Landscape | Planting Strategies

Native Vegetation Communities

The Schofields planting strategy has been developed through the use of local plant communities - Cumberland Shale Plains Woodland and Cumberland Red Gum River Flat Forest.

In addition, plant species of local indigenous significance are featured which were used for tool making, traditional food and medicine.

Entry Planting

- Native species
- Colour and texture in foliage
- Heights to maintain sight lines for surveillance

Assembly and School Heart

- Canopy trees for shade
- Low height understory

Dry Creek Bed and Embankment

- Native grasses to batter
- Resilient to flooding events

Boundary Planting & Carpark

- Clear trunked canopy trees for softening and maintaining sightlines
- Low understory planting

Basin Planting

- Native Grasses to Batter
- Biofiltration species

Cumberland Shale Plains Woodland

Dry Creek Bed Planting

Feature Planting Xanthorhoea sp.

Cumberland Red Gum River Flat Forest

Large Canopy Trees for Shade Amenity

Tree Species with Traditional Food

Canopy cover has been developed to maximise tree planting and shading to hardstand areas, in particular to the assembly and court to provide shade amenity for users. Canopy cover is to be no more than 15% of the whole site, as the site is to be maintained as an inner protection zone to PBP2019 guidelines.

ADVANCED CANOPY COVER

Site Area	38350 sqm
Existing Tree Retained Canopy	1687.55 sqm (4.40%)
Year 5 Tree Canopy	1117.85 sqm (2.92%)
Total Canopy	2805.40 sqm (7.32%)

CANOPY COVER AT MATURITY

Site Area	38350 sqm
Existing Tree Retained Canopy	1687.55 sqm (4.40%)
Mature Tree Canopy	3928 sqm (10.24%)
Total Canopy	5615.55 sqm (14.64%)

07

DESIGN VERIFICATION

RESPONSE TO SDRP REVIEW PANEL 1

STATE DESIGN REVIEW PANEL REVIEW & COMMENTS	RESPONSE
Connecting with Country	
The 3 focus areas of regeneration are strongly supported as central to good design and sustainability outcomes for water, trees and vegetation, biodiversity and opportunities for community. Refer to the Site Strategy and Landscape sections for expanded commentary.	Noted
1. To embed regeneration of Country into the design and school identity, ensure integration of Country expertise with the site planning, sustainability, and landscape/ WSUD design through co-design.	Noted. Design has been further developed taking input from landscape architect, ESD and civil consultants.
2. Have Yerrabingin work closely with the design team and the necessary subject matter experts at all key project stages to ensure outcomes for Country are deliverable, enduring and impactful.	Noted. Refer Yerrabingin report included as an Appendix to this report.
3. Investigate opportunities to share first nations knowledge and care for Country via school / local community environmental programs, e.g. planting and maintenance along the dry creek-bed flow path.	Noted. Refer Yerrabingin report included as an Appendix to this report.
4. At the next SDRP session, provide an update on the future workshops, co-design outcomes and an overview of how regeneration is manifest in the design.	Noted. Refer Yerrabingin report included as an Appendix to this report.
5. Continue to refer to the 'Connecting with Country framework' and case studies on the GANSW website for information and guidance.	Noted. Refer Yerrabingin report included as an Appendix to this report.
Site Strategy and Landscape	
The complexity of responding to staging and infrastructure delivery at the Hambledon Road/First Ponds corridor is acknowledged. Concerns are raised that the positive and impactful elements of Country, sustainability and the desired school identity risk being significantly eroded during infrastructure delivery and development of the future Stage 2 of the school.	Noted. The activity which is the purpose of this REF submission - a school for up to 1000 students - has been sufficiently demonstrated to have capacity for expansion in future stages should the need for additional capacity arise. Any potential future stages will be designed with full consideration of the surrounding infrastructure both available and planned at that juncture.
6. Regarding integration of the WSUD design with delivery of precinct stormwater infrastructure, collaborate with Council, delivery partners and government agencies to ensure the proposed school (Stage 1) WSUD design can be retained and contributes to this finalised infrastructure – e.g. its potential to benefit the overall system by alleviating load in peak periods.	Noted. Extensive and ongoing consultation with Blacktown City Council has been undertaken and will continue through subsequent design and development phases to deliver fit-for-purpose stormwater solutions that respect the landscape design intent.
7. Ensure the retention and compatibility of the WSUD design between the school stages. Avoid locating key elements within future building footprints – e.g. bio-retention basins.	Noted, however, on-site bio-retention basins are unlikely to be required when a centralised stormwater solution is delivered per indicative layout plans.

RESPONSE TO SDRP REVIEW PANEL 1

STATE DESIGN REVIEW PANEL REVIEW & COMMENTS	RESPONSE
8. Respond to the following in developing the WSUD design:	
a. adopt the guiding principles below at all design stages: - make it safe and ecological - ensure a low flow route through the site	Noted. See also response for point 7.
b. increase the width of the creek bed zone to maximise planting and minimise the impacts of fencing	The 'creek bed' is an engineered stormwater channel which is required to be fenced off to address any safety issues during high-volume flow events.
c. increase the separation between the creek bed and the southern portion of car park	See earlier response. Note also tree planting has been included in carpark design to soften edges and reduce heat island effect.
d. provide filtration from the carpark to the creek bed to mediate reliance on a fully engineered solution	Noted. To be further explored in Schematic design finalisation.
e. increase areas of permeable paving as feasible.	Noted. To be further explored in Schematic design finalisation.
Continue to develop the key moves of the site plan in response to the following:	
9. For arrival and wayfinding, adopt an approach of simple and clear connections, treating the site as if it were a public building.	Refer to Section 4.7 Signage and Wayfinding.
Continue to develop the key moves of the site plan in response to the following:	
10. Review the site connectivity to factor-in connections to the Metro station and impacts and benefits from the future Hambledon Road.	Refer Traffic Impact assessment completed by SCT Consulting for scenario testing noting that current designs for Hambleton Road will have no direct connection to the school site given the function of this road as an arterial connector road.
11. Ensure mid-winter sun to various gathering spaces across the site (as a grouping) during key times of the school day.	Mid-winter sun is provided to key spaces including assembly area, fields and courts at key times of the school day. Refer to Section 5.2 Overshadowing
12. Optimise the courtyard configuration by maximising activation of ground floor spaces and providing landscape spaces compatible for indoor-outdoor use.	The connection between ground floors and courtyards has been considered to maximise indoor-outdoor use for the school. Refer to Landscape section 6.0
Continue to refine building levels and develop spaces between buildings, to minimise streetscape impacts, better integrate the landscape design, and provide comfortable level transitions and high-amenity outdoor spaces for various uses.	Noted. Design has been refined and developed since SDRP review to better co-ordinate building levels, civil design and landscape interface.
13. Review locally lowering the buildings or increasing setbacks to optimise the outcomes listed above.	Further to response above, in particular Building A + B levels and setbacks were reviewed in greater detail to improve level transitions
14. At the main entry develop iterations to address the following:	
a. balance and optimise CPTED and security with a welcoming and engaging street entrance	Refer to Section 3.5 Security, Access & CPTED
b. ensure high visual permeability and generous lighting to the entry stair element and its surrounds.	Refer to Section 4.7 Signage and Wayfinding also 4.6 Renders which demonstrate visual permeability at entry

RESPONSE TO SDRP REVIEW PANEL 1

STATE DESIGN REVIEW PANEL REVIEW & COMMENTS	RESPONSE
c. continue to provide amenity for informal gathering and arrival - e.g. shade structures and weather protection	Noted. An additional weather protected outdoor structure has been provided for the Support Learning Unit and the design of the entry canopy has been further expanded and resolved.
d. maximise the active frontage at the ends of buildings to avoid large portions of blank facade.	Noted the end facades of the buildings, where prominent, have been articulated and earmarked for large-scale artwork to be further resolved through co-design and Community workshops
15. Relocate the substation from its prominent location between buildings, noting the limitations of the cable run.	Alternatives for the substation were explored however the costs to locate nearer to the carpark included large additional expense for extension of high-voltage cabling. Location closer to the main entries would result in lesser additional costs but would be more visible and intrusive within the main entry circulation paths. Additional 3D view analysis was undertaken to inform these decisions. Therefore the current location of substation has been assessed as having both the least detrimental impact on the streetscape and most-value-or money outcome and has been retained.
The retention and health of the existing trees is a key design outcome.	Noted. Tree retention has been and remains a core principle underpinning the final design response. See also Arborist report.
16. Protect trees within their dripline through low scale planting, to enable shade while protecting the tree base and root zone. Design landscape in this zone to eliminate the risk from falling branches.	Noted. To be further explored in Schematic design finalisation.
Sustainability	
19. Demonstrate how sustainability targets will be achieved and how initiatives are integrated into the site planning and design of buildings.	Refer to Section 5.3 Sustainability Strategies overview
20. Consistent with the sustainability principle of High Outdoor Comfort Levels, provide a strategy for outdoor shade that factors-in the long lead times for mature tree canopy growth.	Retention of existing mature high-value trees will provide immediate shade cover. Additionally procurement strategies are in place to purchase advanced trees for new tree planting and weather protection has been incorporated into the design.

RESPONSE TO SDRP REVIEW PANEL 1

STATE DESIGN REVIEW PANEL REVIEW & COMMENTS	RESPONSE
21. Illustrate how the project will contribute to NSW's Net Zero emissions goal by 2050. Refer to 'NSW, DPIE, Net Zero Plan, Stage 1: 2020-2030' for further information.	Steensen Varming have prepared a Net Zero Energy Statement that outlines the following initiatives that have been incorporated into the project: 1. The implementation of passive design principles and Green Star certification 2. Improved energy efficiency (through specification of energy efficient light fittings, equipment, appliances etc.) 3. Electrification of assets (LPG bottles in liue of natural gas) 4. Inclusion of onsite renewable energy generation (solar PV) Further strategies include: 1. The use of low carbon materials (noting GS materials credits targeted) 2. Minimisation of construction waste and thereby embodied carbon (MMC techniques) 3. Support for sustainable transport options - i.e. walkable school catchment areas, safe pedestrian access
Requests for further information	
22. In addition to addressing the advice and recommendations above, please provide the following at the next SDRP session:	
a. an update of any discussions held with Council, Landcom or other precinct delivery partners, including the approach to Aboriginal archaeology, stormwater management, public domain impacts and benefits	Refer to Stakeholder consultation in the REF Report and Social Impact Assessment
b. a set of architectural general arrangement plans from the pattern book design to give logic to the outdoor spaces, site connectivity and the like.	Refer Section 4.1 Overall Site plans
c. details of the facade strategy and its colour and material selections	Refer Section 4.4 Materiality and Section 4.5 Indicative Elevations
d. details of the site fencing strategy for this greenfield site as an outcome of collaboration with SINSW in-house security expertise.	Refer to Section 3.5 Security, Access & CPTED
e. key details for future community or after-hours uses, including, parking, security, extent of shared uses.	Refer to Section 3.5 Security, Access & CPTED

08
APPENDIX

NEW SCHOFIELDS TALLAWONG HIGH SCHOOL

CONNECTING WITH COUNTRY

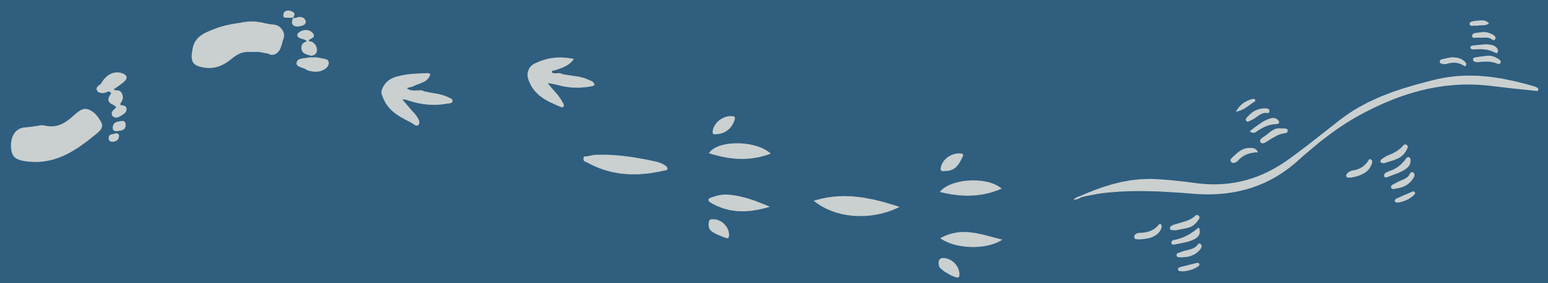
CWC DESIGN REPORT - DRAFT | NOVEMBER 2024

YERRABINGIN

Aboriginal and Torres Strait Islander peoples should be aware that this document may contain voices, images, names of people who have passed away.

We acknowledge the Cultural Landscape that we are working upon, and the Traditional Custodians of the Country where the New Schofields Tallawong High School project is located.

We acknowledge all First Nations people and their ongoing connection to culture, lands and waters and their valuable contribution to the community. We recognise, acknowledge, and extend our respects to many others who have custodial obligations for Country who have been connected to Country for many generations, including their Elders past, present and emerging.



Yerrabingin is an Aboriginal owned design studio. At the core of our work is custodianship and care for Country. Our expertise encompasses Designing with Country, landscape architecture and urban design. We are recognised for our Collaborative Design approach, bringing together cultural knowledge and sustainable design solutions. We walk together to amplify the powerful language of Country for the betterment of our collective future.

We are guided by the inspiration of Country, the stories and knowledge a place contains and gifts us. We acknowledge its contribution to wellbeing both mental and physical, providing a refuge and safe place to learn and share.

Our Vision is that sensing and caring for Country is something that transcends cultural differences and highlights the many values that are similar across the cultures of our contemporary communities, supporting a socially inclusive, resilient, and innovative community based on, and honouring the wisdom and kinship of all cultures, captured through the lens of custodianship.

Figure.1 - *Aerial photo of site location | Nearmap*

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YB_CWC_DES_0177_DRAFT	REV A	2024 11 19

AUTHORSHIP

At Yerrabingin, we acknowledge and respect the traditional custodians and ancestors of the lands we walk across.

The terms First Nations, Indigenous and Aboriginal are used interchangeably throughout this report. When referring to a specific group or individual, nation or language group names are used.

This report includes reproduction of words and descriptions in historic quotes written in the past that may be confronting and would be considered inappropriate today.

Permission to publish the graphic materials from archival collections and previous publications has not been obtained as part of this study. Permission should be sought from copyright holders if the report is published with the graphic material or the graphic material is used for other purposes.

Cover and Back Image - Nirmal Street, Rouse Hill | Yerrabingin

Figure.2 - *Remnant vegetation captured on site visit | Yerrabingin*

GLOSSARY

Key Words and Terms

To better understand key terms referenced throughout the report, please consult the glossary.

The following terms derive from the GANSW (2023) Connecting with Country Framework.

- **Aboriginal Community:** Within the context of Sydney, the Aboriginal Community refers to a range of peoples that often include Traditional Custodians, Knowledge Holders, Elders, RAPs (Registered Aboriginal Parties), LALC (Land Councils), and local Aboriginal members of the community.
- **Built Environment:** Understood as distinct from the natural environment. It includes all aspects of our surroundings made by people. The built environment encompasses cities and towns, neighbourhoods, parks, roads, buildings, infrastructure, and utilities like water and electricity.
- **Country:** Country includes Earth, Waters, Sky and our Non-human Kin. It encompasses tangible and intangible aspects, knowledge and cultural practices, belonging and identity, well-being and relationships. People are inhabited by Country and Country inhabits us.
- **Design:** Design is both a process and an outcome - a way of thinking and a result of making. It involves a combination of creativity and problem-solving skills to generate ideas and concepts, followed by a systematic and often iterative process to develop those ideas into a tangible form.
- **Engagement:** When a particular group is engaged to gather their input in relation to a proposal, challenge, or outcome.
- **First Nations:** Is an encompassing term that acknowledges the diversity of Aboriginal Communities, while also communicating that sovereignty was never ceded. This term is growing in preference for First Nations Australians but may also be interchanged with Aboriginal and Indigenous in this report.
- **Knowledge:** Aboriginal knowledge comes from different nations and family groups. Knowledge is multifaceted and may incorporate many different views. It encompasses the information and skills that people accumulate over time, enabling them to comprehend the world, make informed decisions, and solve problems.
- **Peoples**: Peoples is used in plural to reference First Nations peoples, recognising that there are many nations and family groups.
- **Place:** A social and physical concept, a physical setting, point, or area in space conceived and designated by people and communities. In this sense, place can describe different scales of the built environment; for example, a town is a place, and a building can be a place.
- **Practices:** Practice or cultural practice refers to the various customs, traditions, rituals, behaviours, and activities that are collectively shared and passed down within a specific cultural group, serving as a means of expressing identity, values, beliefs, and social cohesion

EXECUTIVE SUMMARY

The document has been developed by Yerrabingin following our Collaborative Design process, in partnership with School Infrastructure New South Wales, TSA Riley, DJRD Architects, Site Image Landscape Architects and Aboriginal community members through the Walk on Country, Collaborative Workshop and meetings. The purpose of this document is to share the findings and design recommendations from our Collaborative Design process.

The opening section - Connecting with Country Design - provides an introduction to how we understand Country and what Country means to us. We then introduce the Connecting with Country Framework created by the Government Architect New South Wales and the outcomes that can be used to guide this project.

The second section - Contextual Analysis - provides a recap of the scope and intent of the Schofields Tallawong High School project. We then introduce the sites place in Dharug Country and explore the context of the site within the wider Cumberland Plain cultural landscape.

The third section - Collaborative Design - firstly recounts our design methodology and then shares a summary of each step in the process, including the How Might We Session, Walk on Country and the Collaborative Workshop. For each engagement, we include a description of the engagement and a summary of the findings. A community feedback session is planned for early 2025 to complete the Collaborative Design process.

The fourth section - Ideation Development - recounts the targeted design team workshop and captures the tangible design outcomes created based on the activities of the Collaborative Workshop. We explore the Community Driven Design Principles developed following the Collaborative Design Workshop - Water is Our Healer, Non-Human Kin are Our Peers, and Country is Our Teacher. We discuss how each Principle could be activated at the site.

The final section explores the next steps of our design methodology, completing the current Connecting with Country design scope for Schofields Tallawong High School.

Figure.3 - *Existing site canopy and shadowing | Yerrabingin*

CONNECTING WITH COUNTRY DESIGN

INTRODUCTION TO CWC DESIGN

Beginning with Country

Country is our mother, our teacher, our library and our kin; it sustains us, inspires us and surrounds us. The experience of Country is both individual and collective, both new and familiar. From her we learn, share and flourish. Continuing to care for Country is central to our being and our identity.

Christian Hampson, Yerrabingin

Country reaches into and across the earth and into the sky. The unique and distinctive elements of Country are connected, and open to everyone. They are the connective tissue, the interstices, the flow between Water, Earth, Sky, our Non-Human Kin, and ourselves. In this way, we are part of the system of Country and have a responsibility to future generations. Our actions must always be Country positive.

Country-centric

We inhabit and are inhabited by Country. To inhabit Country and connect with Country is to be grounded in the landscape and to practice the cultural knowledge stored within it. This encourages physical and emotional wellbeing for people and Country.

The innate symbiosis of being connected to Country moves us into being Eco or Country centric, rather than being Human centric. This connection and position in relation to Country is a central component of Aboriginal people's ideology. It is a cultural value that places humans within the ecological and landscape system, not as dominators but as caretakers and custodians. This function requires constant interaction and observation, being tuned in to reactive requirements and response.

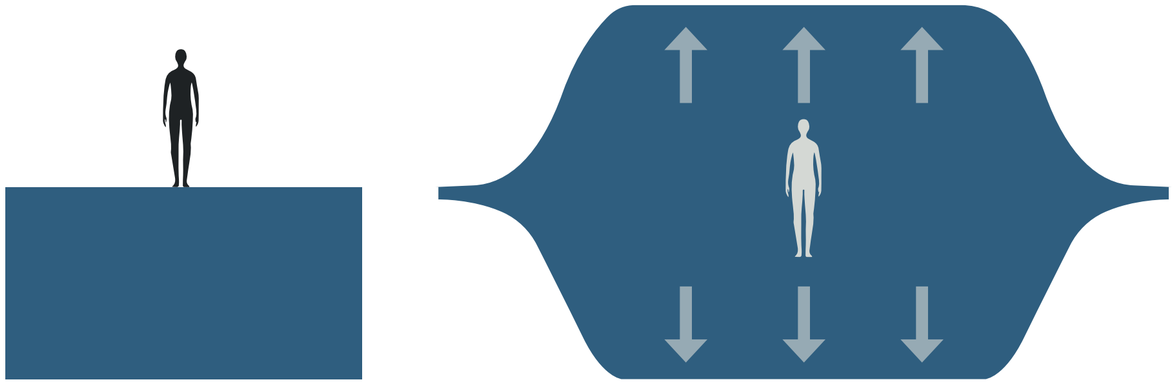


Figure.4 - *We inhabit and are inhabited by Country | Yerrabingin*

GANSW CONNECTING WITH COUNTRY FRAMEWORK

Policy Context

In 2023 the Government Architect New South Wales released the Connecting with Country Framework to guide Designing with Country projects in NSW. The Framework covers several areas of Designing with Country work, including:

Practices for taking a Country-focused approach

Combining traditional cultural knowledge and practices with a behavioural science approach to create a system of Communing with Country / Thinking, Sensing Country / Feeling, and Being on Country / Behaving to guide projects. The image to the right illustrates this relationship.

Guidance on design considerations

Considering the project scale to determine what design considerations should be factored into decision making and design. This project is building scale, therefore we are taking a contextual and site specific perspective.

Outcomes for Country

The Framework describes five Outcomes for Country to help project teams focus on their commitment to Country. The outcomes are: Healthy Country, Healthy Community, Protecting Aboriginal cultural heritage, Cultural Competency and Better Places.

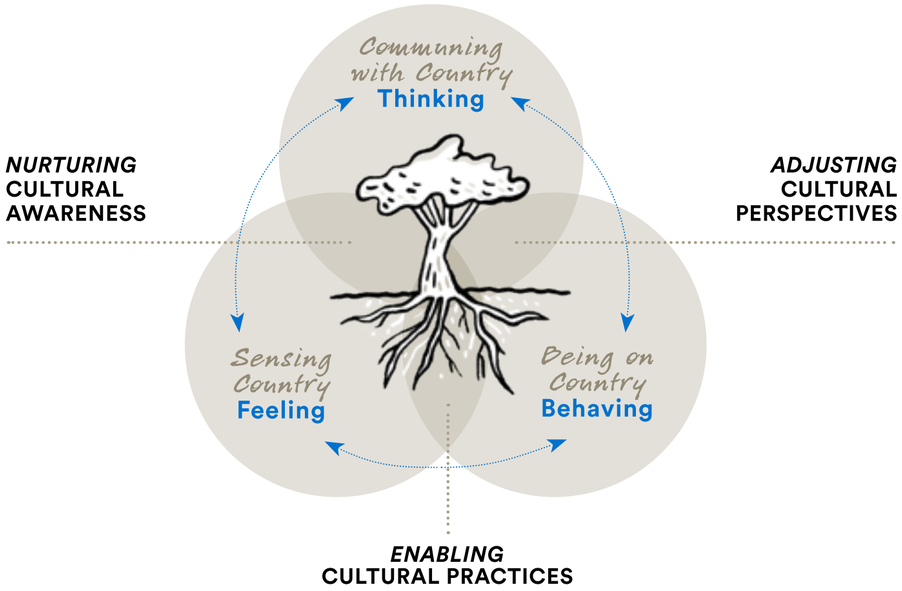


***Figure.5** - Combining cultural practice and behavioural change systems | GANSW*

YERRABINGIN PILLARS

What guides our work

Yerrabingin has four pillars that guide our work. The pillars link together our values, Country, culture, professional practice, and cultural practice.

Each pillar is one part of the larger task of caring for Country. Together they contribute to a holistic commitment to care and design for Country. The pillars are Custodianship, Innovation, Legacy and Regeneration. The New Schofields Tallawong High School project offers an opportunity to work with the following pillars -

- Innovation
- Custodianship
- Regeneration
- Legacy

Innovation

We are a transformative force for change. We draw on ancient wisdom, guided by ecological kinship, to share the powerful voice of Country and disrupt conventional systems and perceptions. Inspired by Country, we take a holistic view, centring creativity, adaptation and reciprocity. Our work propels us towards a collective future that considers the life of all kin.

Regeneration

We deeply understand the connections between all things and work towards balance. We overcome limitations in conventional design thinking by centring the needs of Country and all kin. We create places for people to experience the many ways Country sustains and holds them, to connect them with their role in the system of their place. Learning from Country, we take a long-term view, with the knowledge that health and healing will come, given the right conditions of care.

Custodianship

We are custodians of Country. We draw on cultural knowledge to advocate and care for Country. It is our responsibility to improve the health of Country and our diverse communities through our work. In our role as designers, we listen deeply to the needs of Country and walk together with our partners to foster connection. Country benefits and grows in our care.

Legacy

Our works sits at the intersection of culture and design. We are industry leaders in Collaborative Design, bringing together First Nations communities and built environment professionals for an enduring conversation. By introducing people to Country, we transform the experience of belonging and connection to place in Australia. We show people that if we care for Country, she will care for us in return. Healthy Country and connected communities are our legacy.

YERRABINGIN COLLABORATIVE DESIGN METHODOLOGY

Our Design Process

Our design methodology is informed by components of design thinking, user-centred design and Connecting with Country design disciplines to create our Country-focused, Collaborative Design approach.

Country-focused
What sets us apart from conventional built environment design is our recognition of the interconnection of Country with human activity and our imperative to consider the needs of Country in the design solution. Empathetic observation and consideration of Country is central to our approach.

The outcome of our Country-focused approach is that Country is designed for and cared for, allowing Country to care and provide for future generations.

Collaborative
Inspired by the natural processes of fostering and sustaining life on Country, our design methodology follows a cyclical, collaborative process: we collect, plant, nourish and tend.

The Connecting with Country Design Report – Draft contributes to the Nourish / Iterate stage in our methodology. In this stage, we share the outcomes of the Collaborative Design workshops, then develop solutions and concepts further based on feedback from the design team. We nourish in design workshops with the project team and community. Our output of this stage is this report – the Connecting with Country Design Report – Draft.

Design Methodology Stages
Collect - First, we collect by empathising with our project partners and with Country. We gather ideas, inspiration, facts, desires, research and limitations. This occurs in the discovery and 'How Might We' session.

Plant - After understanding the design challenge, we plant. Collaborative Design workshops involve First Nations peoples and the wider team involved to generate diverse and innovative design solutions.

Nourish - Following the Collaborative Design sessions, we nourish through iteration. We share the collaborative outcomes to develop design solutions and concepts further based on feedback.

Tend - Finally, we tend to our creation. We tend by ensuring that the partnerships and outcomes created are sustainable and have ongoing positive outcomes for Country and communities.

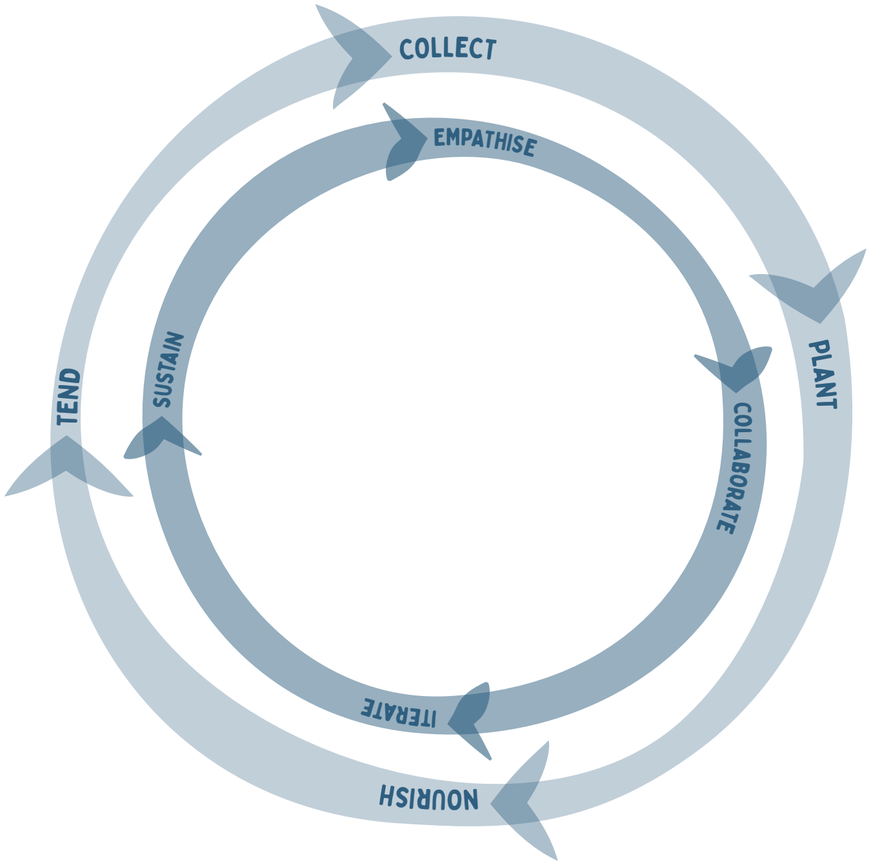


Figure.6 *- Methodology Process | Yerrabingin*

COLLECT / EMPATHISE

CONTEXTUAL ANALYSIS

INTRODUCTION

Project Overview

The New Schofields Tallawong High School Project will see the design and development of a new high school facility. SINSW are working with Landcom on the design of this project. This site is situated on Dharug Country and is currently characterised as a forested area, providing a unique backdrop for an educational facility. The project aims to implement a modular architectural scheme for the new high school, which suggests a focus on flexible and adaptable design solutions.

As part of this significant educational development, SINSW has engaged Yerrabingin to undertake the Designing with Country scope. This collaboration reflects a commitment to incorporating Aboriginal perspectives and knowledge into the design process, ensuring that the new high school respects and reflects the cultural significance of the Dharug land in which it will be built.

This project represents a significant investment in the educational infrastructure of the area, with the potential to serve as a model for culturally responsive and environmentally integrated school design.

The Guntawong Road site, where the new high school will be located, offers an opportunity to create an educational space that not only meets the functional needs of students and staff but also acknowledges and celebrates the culture Dharug peoples. The forested nature of the site presents both challenges and opportunities for integrating the built environment with the natural landscape, potentially allowing for innovative approaches to outdoor learning spaces and environmental education.

The project is currently in concept design stage, with this report assisting in the proposal process. The Connecting with Country approach will inform a site narrative that can be applied across the two stages to consistently express the pillars of innovation, regeneration, custodianship and legacy.

Figure.7 - *First Ponds Creek vegetation | Yerrabingin*

DHARUG COUNTRY

Place in Country

The Guntawong Road Precinct, nestled within the gently undulating terrain of the Cumberland Plain, tells a story of deep connection between land, water, and people that spans millennia.

This physiographic region of the Sydney Basin is underlain by Bringelly and Ashfield shales, with an interface of Minchinbury sandstone, all part of the Wianamatta group of sedimentary shales (Clark and Jones, 1991). This geological foundation has given rise to two primary soil landscapes: the residual Blacktown soil landscape on the rises, and the fluvial South Creek soil landscape associated with active floodplains (Bannerman et al., 1990).

Dharug peoples understanding of Country extends beyond the terrestrial landscape to encompass the sky and wind, forming an intricate tapestry of knowledge that has guided their life for millennia.

The gently undulating terrain of the Guntawong Road Precinct, with its low rises and spurs, provides ideal vantage points for observing both the surrounding landscape and the sky, connecting terrestrial and celestial realms in Dharug cosmology (Bodkin & Robertson, 2019).

At Tallawong, this connection to Sky Country is deeply intertwined with the Dharug people's understanding of the landscape and seasonal cycles. The Emu in the Sky, a dark constellation formed by the cosmic dust clouds of the Milky Way, holds particular significance in Dharug astronomy. This celestial Emu, visible in the night sky over Tallawong during certain times of the year, plays a crucial role in Dharug calendar systems and resource management practices. Its appearance and position in the sky correlate with the breeding cycle of terrestrial emus and signal the appropriate times for egg collection and other seasonal activities (Fuller et al., 2014).

Figure.8 - *First Ponds Creek at Riverstone | Watershed Ecology*

Figure.9 - *Calotis lappulacea / Yellow burr-daisy | Botanic Gardens of Sydney*

YERRABINGIN PILLAR

Site Specific Opportunities

The Tallawong site has several pressing needs that Yerrabingin's pillars can address. The restoration of the Cumberland Plain Woodland ecosystem is paramount, given its critically endangered status and cultural significance to the Dharug peoples. Protection and enhancement of First Ponds Creek is crucial, not only for its ecological value but also for its cultural importance as a water source and potential site for traditional practices. Embedding Dharug cultural systems is essential for maintaining the areas cultural integrity and need to care for Country. Additionally, the site requires strategies to mitigate the urban heat island effect, a growing concern in the increasingly urbanised Cumberland Plain. Lastly, there's a critical need to improve biodiversity and habitat connectivity, addressing the fragmentation of ecosystems caused by urban development.

The integration of Dharug knowledge into the curriculum presents a powerful way to ensure cultural continuity and foster cross-cultural understanding. The creation of outdoor learning spaces can provide hands-on experiences with local ecosystems and traditional land management practices. The implementation of water sensitive urban design aligns with both environmental needs and traditional Dharug values regarding water management. Finally, the development of a community cultural centre within the school can serve as a hub for knowledge sharing, language revitalisation, and strengthening community connections.

Climate change resilience should be a key consideration in the design process. Traditional Dharug knowledge, which has enabled sustainable management of Country for millennia, can offer valuable insights for developing climate-adaptive strategies. Incorporating this knowledge into the school's design and ongoing management can enhance its long-term sustainability and resilience.

By embracing the Yerrabingin pillars, the school project at Tallawong has the potential to become a benchmark for culturally and ecologically responsive development. It can create a space where the Dharug peoples can strengthen their connection to Country, where ecosystems can regenerate and thrive, and where all members of the community can develop a deeper understanding and appreciation of the rich cultural and natural heritage of this significant place.

Figure.10 - *Untitled* | Cumberland Plain Conservation Plan


PLANT / COLLABORATE
COLLABORATIVE DESIGN

COLLABORATIVE DESIGN METHODOLOGY

Process and Progress

As described above in the introduction to Yerrabingin's Collaborative Design Methodology, our design process is made up of four stages, Collect / Empathise, Plant / Collaborate, Nourish / Iterate and Tend / Sustain. Each project is unique, and we tailor our design approach within each of the four stages for each project.

Our Progress

We have completed the Collect / Empathise and Plant / Collaborate stages and we are now working on the Nourish / Iterate stage.

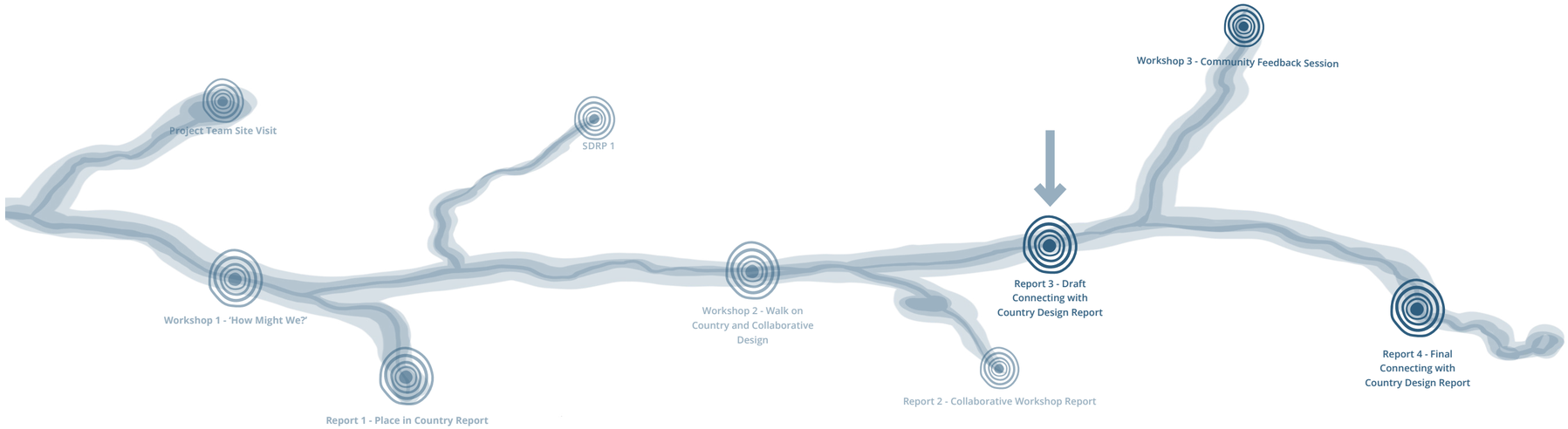


Figure.11 - *Project Timeline| Yerrabingin*

HOW MIGHT WE?

Our Design Challenge

In the How Might We Session, we worked with the project team to learn as much as we could about the aims of the project and to introduce the design team to our process. We created the following How Might We statement for the project:

How Might We be guided by the significance of this place and Water Country, to create connected, inspiring and immersive learning environments?

We use the How Might We statement to understand the design team's thoughts on the project users, impact, connection and value. By gaining as much information as we can from the beginning, we aim to ensure that we can direct the project more accurately and generate more impact. We use the How Might We statement to define our design challenge.

The overarching themes of enriching educational development and a Country integrated strategy were clear. The opportunity for this project to improve water quality, habitat and corridors toward First Ponds Creek and beyond was a strong theme. Staff, students, parents and the general community should be constantly learning about the function and benefits of healthy Country.

Figure.12 - *Rice Flower, sparking curiosity | Wikipedia*

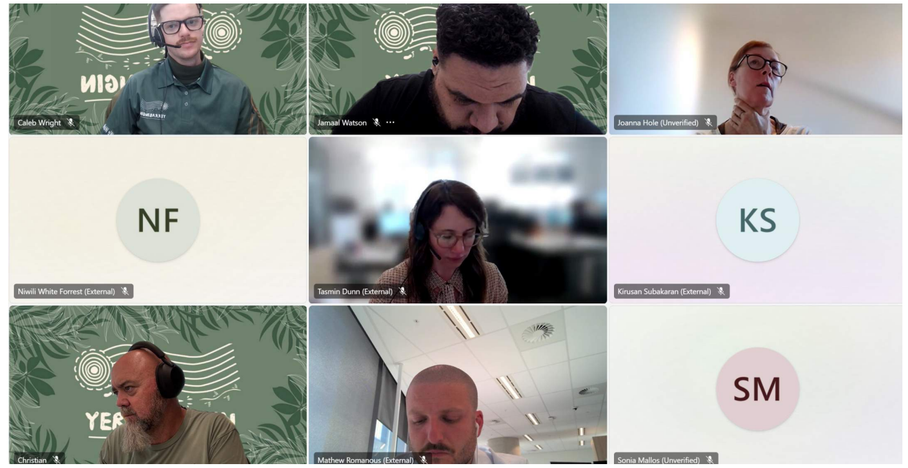


Figure.13 - *How Might We session participants | Yerrabingin*

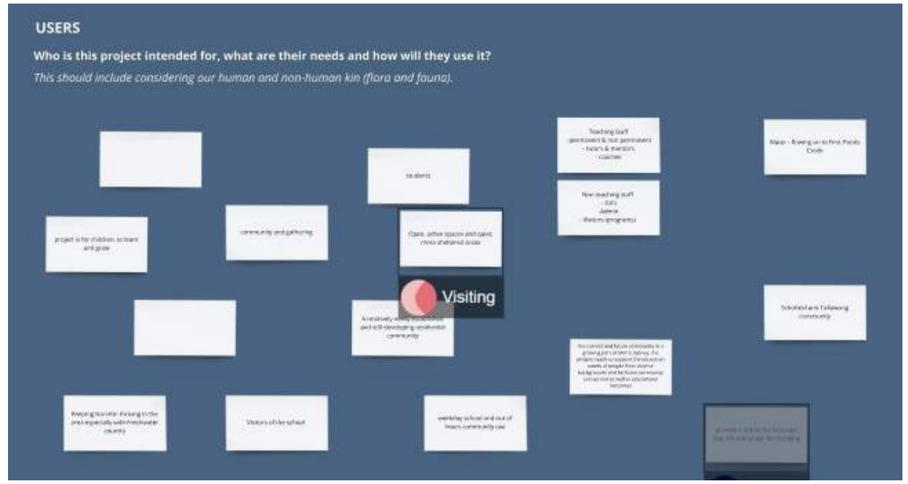


Figure.14 - *How Might We session exercise | Yerrabingin*

WALK ON COUNTRY

Listening to Country

The Walk on Country was completed as part of our Collect stage. We visited the site of the project with the project team and community members to understand the context of the site, the needs of Country in this place, and to get to know each other.

When: Tuesday 15th October, 2024
Where: 201 Guntawong Rd, Tallawong
Who:

- 8 x First Nations community members
- 2 x SINSW (Sonia Mallos, Alyce Haast)
- 2 x DJRD staff (Tasman Dunn, Niwili White Forrest)
- 1 x Site Image (Jane Dumbleton)
- 4 x Yerrabingin staff (Christian Hampson, Kerrie Shepherd. Jamaal Watson, Grace Lee)

It is noted that the proposed site at 201 Guntawong Road was identified by some community members to be a site of cultural significance. Discussions were had during the Walk on Country around the topic of the site being deemed sacred and regarded as of high importance to Dharug peoples and culture.

It is Yerrabingin's recommendation that further investigation into the site's Aboriginal Cultural Heritage be undertaken. This will ensure continued initiation of respectful conversations regarding the significance of this site and the cultural sensitivities that are within this site.

***Figure.15** - Collage of Walk on Country attendees | Yerrabingin*

COLLABORATIVE DESIGN WORKSHOP

Discussion and Findings

Participants of the collaborative workshop each took part in activities around two focus areas:

Activity 01 : This Country

This focus area explored how the development could express and celebrate the unique features of the Country it sits on.

Activity 02 : Connected and Inspiring Places

This focus area challenged the relationship between users, built form and Country.

The outcomes of the activities are summarised in the adjacent diagram, and in full in the Collaborative Design Workshop report.

This Country

Ensure the New Schofields Tallawong High School reflects the unique and specific elements of Country on which it is located. Opportunities identified in the collaborative workshop include maximising native planting species across the site, promoting educational opportunities and creating designated spaces for Non-Human Kin. The significance of water and the specific seasonal flourishes of this Country are also further opportunities to ensure the development responds to this Country.

***Figure.16** - Lomandra longifolia | West Star Nurseries*

Connected and Inspiring Places

This idea recognises the opportunity for the design of the New High School in Tallawong to improve the health of Country through design interventions. This could include encouraging the presence of Non-Human Kin through habitat creation, the use of the unique terracing of the site to create spaces to view and connect users to Sky Country and introducing water sensitive urban design and revealing the hydrology of the site as a way to improve water quality, as well as an education tool.

***Figure.17** - Outdoor classroom | Encounter Lutheran Collage*

NOURISH / ITERATE

IDEATION DEVELOPMENT

IDEATION DEVELOPMENT WORKSHOP

Discussion and Findings

Following the Collaborative Design Workshop with Aboriginal community members and the project team, we held an Ideation Development Workshop with the project team. The aim of this session is to review the summary of outcomes of the Collaborative Design Workshop and investigate ideation opportunities. This expansion of thinking assists in understanding site constraints and limitations and collectively developing the next stages of the Connecting with Country design work.

The discussion and findings under the topic areas explored is as follows:

This Country

- Opportunity to re-naturalise First Ponds Creek. Precedent project of Johnstons Creek re-naturalisation. Safety considerations of waterways within school grounds was discussed. The OSD area within the design would need to be controlled access. Options for utilising decks and balustrades to make this area safe. Educate on the fluctuating water levels
- Embedding curriculum in the creek design and encouraging supervised access to the waterway. Reno mattress / thin gabion wall / blanket allows plants to grow through but is an alternative to concrete channel
- Explore the colour scheme of native trees which have been felled on the site, re-use the trees into habitat and design elements
- Retention of trees has been a key spacial driver for the project. Precedent project of this is Bilya Marlee - UWA School of Indigenous Studies. Community raised the concern in another high school project of ensuring large pot sizes are used to promote established trees for shade and habitat ASAP
- Work with the natural grade of the site, minimise engineered channels and teach students about the movement of water across the site
- High corner of the site is a key entry point to invite community into the school with species of Country. School should be a native pocket accessed by the community

Connected and Inspiring

- Outdoor classrooms adjacent to the water, for education and investigation of students
- A variety of different sized gathering areas - from quiet and intimate to communal and large
- Buildings colour scheme to blend between ground, trees & sky (eucalyptus colours)
- Main entry canopy has the opportunity to reflect local artworks and motifs
- Shaded resting spot for public at the corner of Guntawong and Nirmal

***Figure.18** - Reno mattress example | Geofabrics* ***Figure.19** - First Nations art on canopy | Balarinji* ***Figure.20** - Fluid canopy and bio-mimicry | JPE*

DESIGN DEVELOPMENT

Water is Our Healer

The design development to date for the Connecting with Country design has integrated the findings from the place analysis, Collaborative Design Workshops and Ideation Workshop into three key Connecting with Country opportunities for the New Schofields Tallawong High School: *'Water is Our Healer', 'Non-Human Kin are Our Peers', 'Country is Our Teacher'.*

Opportunities

This opportunity highlights the cultural, ecological and spiritual significance of Water Country across this unique landscape.

- Allow the existing water courses on site to inform the placement and orientation of built form, landscape elements and gathering areas. Let Water Country inform the user journey.
- Integrate water sensitive urban design initiatives within the built form and landscape, and include water capturing, guiding and treatment systems across the site. Remind students and teachers of their contextual location close to the Eastern and First Ponds Creeks
- Provide safe hangout areas and outdoor classrooms within the proximity of water to encourage students, staff and visitors to dwell amongst Water Country.
- Explore how themes of Water Country and aquatic flora/fauna can be expressed metaphorically through the built form and landscape.

Answering the How Might We

This opportunity looks at the significance of Water Country, and how it can provide the invitation for human kin to connect, learn from and be inspired by the crucial role water plays in the health of Country.

Yerrabingin Pillars

Regeneration: Going beyond sustainable water management practices to result in a positive impact on the greater water system of the area.
Custodianship: Creating an invitation for users to understand, empathise and care for Water Country.

Element of Country

Water Country, Move with Country, Non-Human Kin Country.

Users

Students will be able to gain a deeper understanding and respect for the water systems of Country, aquatic Non-Human Kin will have a safer environment to dwell within.

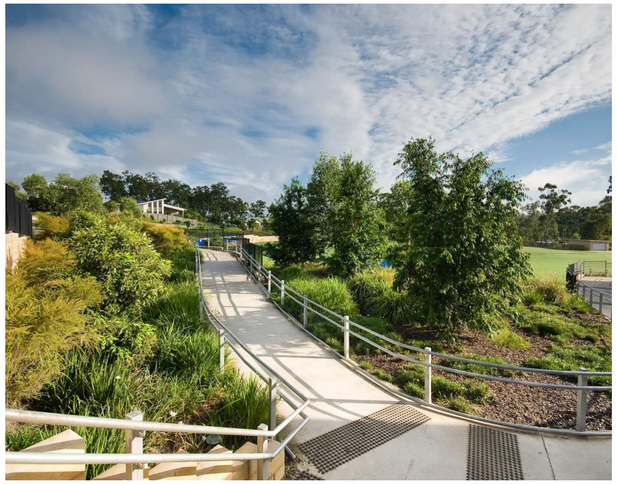


Figure.21 *- Outdoor study activities in Water County | Water use it wisely*
Figure.23 *- WSUD elements within High School | Citicene*

Figure.22 *- Liquid glass as biomimicry of ripples | Material District*

DESIGN DEVELOPMENT

Non-Human Kin are Our Peers

Opportunity

This opportunity encourages human kin of the site to view Non-Human Kin as equals, peers and fellows in Country. This ensures eco-centric perspectives, rather than ego-centric.

- Incorporate materiality and colour palette that compliments and blends into Country, rather than competes or contrasts.
- Empathise with Non-Human Kin when designing built form and landscape elements - what impact will this have on Non-Human Kin? How can this element improve the wellbeing of Non-Human Kin?
- Re-use materials such as felled trees and geological resources to provide habitat for Non-Human Kin within the built environment.
- First Nations design, art and patternation which reflect locally native ecologies expressed within the landscape and built form.
- Encourage built form design elements which practice biomimicry, with forms and details inspired by forms and processes occurring naturally in Country.

Answering the How Might We

The significant role which the flora and fauna of this Country play in sustaining it's wellbeing is essential. Highlighting these keystone species within the site will inspire human users to view Country through a more connected and immersive lens.

Yerrabingin Pillars

Regeneration: Inviting Non-Human Kin to dwell within the site through restoring habitat and creating more diverse ecologies on site.

Custodianship: Creating an invitation for users to understand, empathise and care for Non-Human Kin as equal stakeholders within the high school.

Element of Country

Non-Human Kin Country

Users

Students, staff and visitors will be given the opportunity to dwell alongside Non-Human Kin, Non-Human Kin will have a restored environments to dwell within.

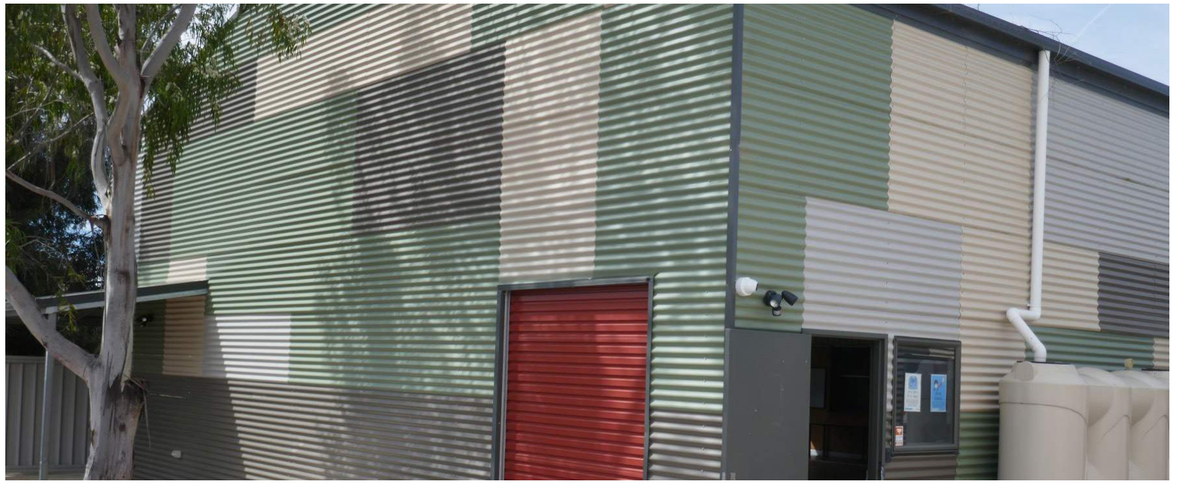


Figure.24 *- Provide dwelling areas for Non-Human Kin | Coffs Botanic Garden* ***Figure.25*** *- Story-telling in built form and landscape | Alan J. Duffy*
Figure.26 *- Built form facades reference tones of Non-Human Kin | 1st Bungendore Scout Hall*

DESIGN DEVELOPMENT

Country is Our Teacher

Opportunity

This opportunity grounds education experiences in Country through facilitating moments for active and passive learning.

- Learn the relationship between flora, fauna and everchanging seasons of Country.
- Areas where the cultural uses of plants can be shared and integrated into the built environment.
- Connect to Sky Country in areas of the built form and landscape.
- Explore how the sun, moon and shadows can provide learning opportunities.
- Providing internal and external hangout areas which are culturally safe for Koori students.
- Integrate a variety of outdoor and indoor learning spaces which connect to the unique features of Country.
- Incorporate cultural artworks / motifs throughout the design to encourage staff to educate students and visitors on aspects of Country.
- Create a welcoming invitation at the frontage / key entry of the school which embodies the elements of this unique Country.

Answering the How Might We

The provision of opportunities within the design to allow Country to educate human kin, as well as human kin to educate eachother within the high school results in all elements of Country to be learning opportunities, as the lead teacher.

Yerrabingin Pillars

Legacy: Creating a legacy for Schofields Tallawong High School to be a leader in education.

Custodianship: Provide opportunities for students, staff and community to connect to Country and become advocates and carers for Country.

Element of Country

Move with Country, Deep Country, Non-Human Kin Country, Water Country, Sky Country, Wind Country

Users

Human kin building their relationship with the living, breathing entity of Country.

***Figure.27** - Outdoor learning spaces | LPA Design Studios* ***Figure.28** - Indoor learning opportunities | MHNSW* ***Figure.29** - Student involvement | Storylines*

TEND / SUSTAIN

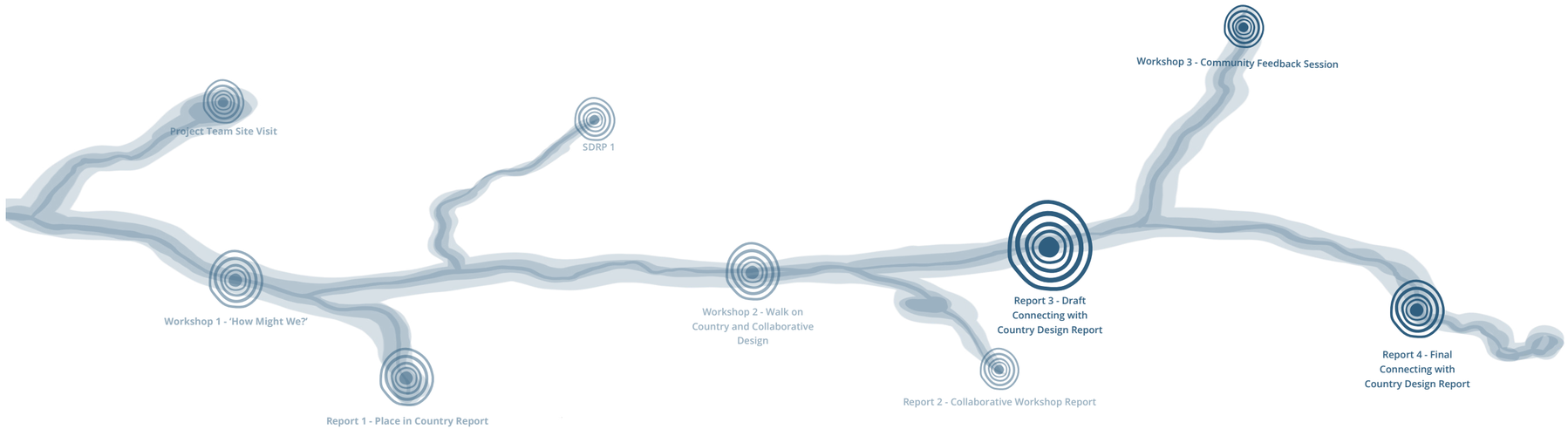
TOWARD FINAL DESIGN- SCHOFIELDS TALLAWONG HIGH SCHOOL

COLLABORATIVE DESIGN METHODOLOGY

Steps to Completion

The Connecting with Country design opportunities shared in this report are our first step towards answering our How Might We statement. The next steps towards finalising our Connecting with Country design work include incorporating these ideas into the project team's work, gathering feedback on these ideas from community and the project team and where required, completing targeted design workshops to gather information for particular areas of the design (and participating in SDRP meetings, if required).

After receiving feedback from the project team and community, we will incorporate feedback and develop our final Connecting with Country design solutions. If necessary, we will complete an assessment of our Connecting with Country design solutions for this project against the GANSW Connecting with Country Framework Outcomes for Country.



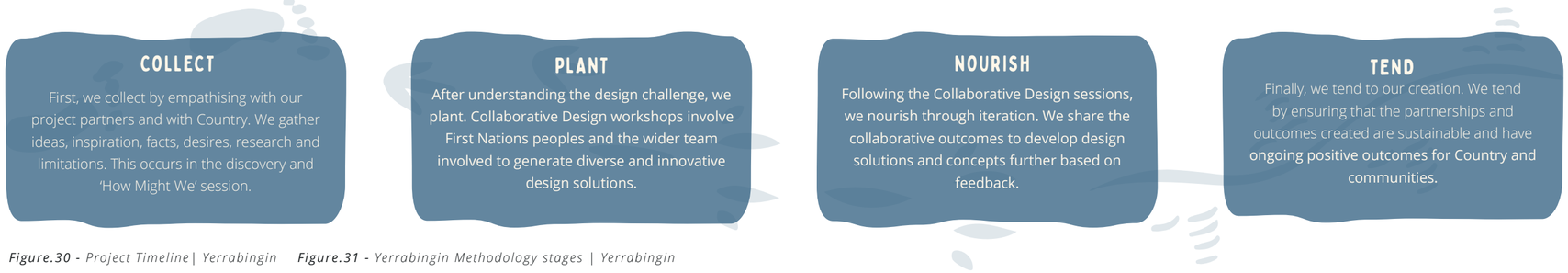


Figure.30 - *Project Timeline| Yerrabingin* ***Figure.31 -*** *Yerrabingin Methodology stages | Yerrabingin*

FIGURES LIST

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YERRABINGIN
WE ARE YERRABINGIN. WE WALK TOGETHER.