

ARCHITECTURAL DESIGN REPORT Gillieston Public School Redevelopment and New Public Preschool

Schematic design for a (736 student) Primary School at Gillieston Heights, NSW







Quality Assurance

Summary of Revisions

No	Drn	Chk	Date	Content
Α	KR	EB	17.09.24	SCHEMATIC DESIGN REPORT - DRAFT
В	KR	EB	24.09.24	SCHEMATIC DESIGN REPORT - DRAFT
С	KR	EB	04.10.2024	SCHEMATIC DESIGN REPORT
D	KR	EB	23.10.24	REF REPORT
E	KR	EB	13.01.25	REF REPORT

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Checked By: EB

Nominated Architect Justin Hamilton (6160)

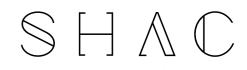
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Author: KR

Ref: 4814.515.14 Gillieston PS Concept Design.SDR.pln

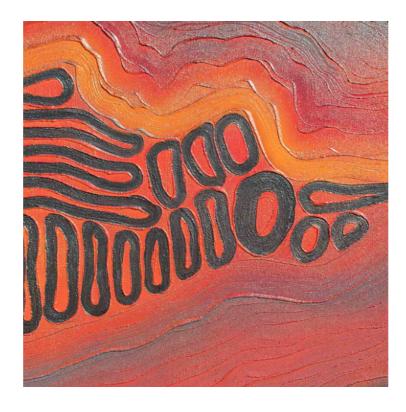






"This piece is part of my Formation series. A series inspired by the formation of the land. It depicts layers of sand, stone, rock and coal. Each layer of the earth telling its own story, witnessing its own past present and future. The dotted lines pay tribute to my great, great grandfather, a proud Wiradjuri man who worked as a tracker. The lines represent his tracks and those of the generations before us on the same land. This style of painting is featured throughout most of my work connecting my art to my family and people."

Lauren Freestone; a contemporary Indigenous artist based in Newcastle.



"My love of culture, country and community are reflected within my work.

My passion is to share our unique and invaluable culture through authentic, engaging and thought evoking fine artwork and visual design that welcomes all and enhances connection to spirit and country.

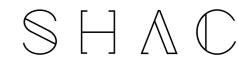
Saretta Fielding is a Wonnarua woman of the Upper Hunter Valley through her grandmother and an Anaiwan woman of the New England area through her grandfather.

Acknowledgement of Country

SHAC acknowledges the Traditional Custodians of the land, the Awabakal & Worimi people, upon which this document was created, as well as the land where this document now rests in your hands. We pay respect to Elders past, present and emerging, and we honour Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place, and their rich contribution to our society. To that end, all our work seeks to uphold the idea that if we care for Country, it will care for us.

SHAC acknowledges the **Wonnarua** peoples as the Traditional Custodians of the land we speak of within this document. We acknowledge their ancestors who defended, walked and managed this land, who have left a legacy of strong culture, wisdom and knowledge embedded within that we endeavour to respect and understand. We acknowledge their Elders who are the knowledge holders, teachers and pioneers. We endeavour to hold space for the **Wonnarua** peoples to empower the existing and future community who are our hope for a brighter and stronger future and who will be future leaders.







1. Knowing



2. Sensing



3. Shaping



4. Designing



5. Appendices

Layout Name

Appendix D - Schedules

Appendix A - Functional Design Brief

Appendix B - Architectural Drawing Set

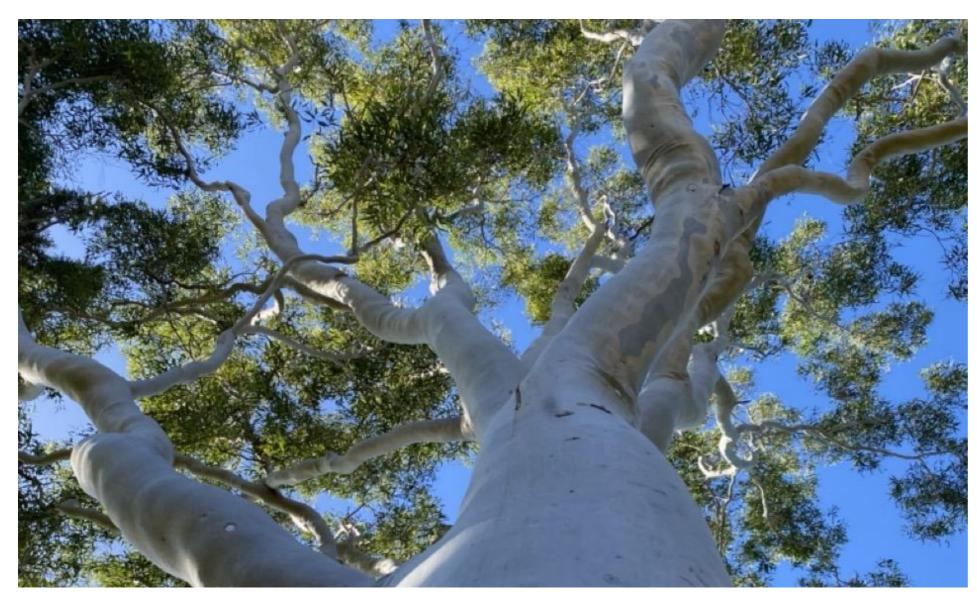
Appendix C - Consultants Advice & Concept

No	Layout Name	Rev	No	Layout Name	Rev	No	Layout Name	Rev	No	Layout Name	Rev
1101	Preamble	С	2101	SEPP Design Policy Principles	Α	3101	Existing Infrastructure / Demolition	В	4001	Reflect Country & Materiality	Α
1102	Brief	В	2102	Federal, State, and Local Government	Α	3102	Site Analysis	Α	4002	Integration of Culture	Α
	Educational Principles		2103	Government Architect NSW	Α	3103	Proposed Site Plan	В	4003	Aboriginal Education	Α
1103	•	Α .	2104	GANSW - Connecting with Country Framework	Α	3201	Lower Ground Floor Plan	В	4101	Landscape Design	Α
1104	Unique Context Drivers	Α	2105	Approach to Indigenous Culture & Heritage	Α	3202	Ground Floor Plan	В	4102	Landscape Design	Α
1105	Site Context	В	2106	Green Star	A	3203	First Floor Plan	В	4103	Landscape Design	В
1106	Site Context	Α	2107	Mechanical and Environmental Sustainability	A	3204	Second Floor Plan	В	4104	Canopy Coverage	В
1107	Photographic Analysis - Site Edges	Α		Design						.,	
1108	Photographic Analysis - Outlook & Aspect	Α	2108	Terras - Landscape Vision	Α	3205	Proposed Floor Plans Building A & B	В	4201	Existing Material Study	Α
1109	Photographic Analysis - Existing Built Form	Α	2109	Colour Theory	Α	3206	Proposed Floor Plans Building C	В	4202	Proposed Exterior Material Tones and Palette	Α
1110	Photographic Analysis - Elements & Artefacts	Α	2110	Biophilic Design	Α	3207	Proposed Floor Plans Building C	В	4203	Proposed Interior Material Tones and Palette	Α
1201	Preferred Masterplan Option Summary	A	2111	EFSG Planning	Α	3301	Proposed Elevations Building A+B	В	4301	Reference Precedents	Α
1202	Preferred Concept Design Option Summary	A	2201	Motif: Eastern Rosella	Α	3302	Proposed Elevations Building C	В	4302	Signage Reference Precedents	Α
	Response to SDRP01 Feedback		2202	Motif: Peaks & Valleys	Α	3401	Proposed Site Sections	В	4303	Form & Facade Idea	Α
1301	·	В	2203	Motif: Seasonal Place of Abundance	Α	3501	Public Domain and Community	В	4304	Shadow Diagrams	В
1302	Response to SDRP02 Feedback	В	2204	Macro Site Design Principles	A	3502	Transport and Parking	Α	4305	Shadow Diagrams	В
1303	Better Placed	С	2205	Micro Site Design Principles	A	3503	Access and Security	В	4401	Perspectives	A
1304	Design Response	С					•			·	
1305	Design Response	С	2206	CPTED	Α	3505	Circulation Strategy	Α	4402	Perspectives	Α
1306	Design Response	С	2207	Building Envelope Concept	Α	3506	Outdoor Play Space	Α	4403	Perspectives	Α
1307	Design Response	С				3507	Services Plan	Α	4404	Perspectives	Α
	•								4405	Perspectives	Α
									4406	Perspectives	Α

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Executive Summary

SHAC have been engaged by the NSW Department of Education to complete masterplan, concept design and now schematic design phases on the proposed expansion and permanent facility establishment for existing Gillieston Public School site. SHAC have also been given the opportunity to engage with the existing school community, executive staff and Indigenous Community members as part of this project.

The current design has been completed in accordance with the relevant education rationale and considers opportunities and constraints inherent in the schools unique site. The project includes demolition of existing structures, excepting the original brick cottage, as new school construction with administration, staff, hall canteen, OOSH, library, 32 GLA spaces and 3 support learning spaces, COLA, public preschool, associated car parking, landscape and service upgrades.





1. KNOWING - Project Drivers The consistant purpose guiding the path forward



Preamble

Activity

The Gillieston Public School have been identified by the NSW Department of Education (DoE) as requiring redevelopment. The activity is driven by service need including increase in expected student enrolments and removing demountable structure and replacement with permanent teaching spaces.

The activity comprises the following:

- Demolition and removal of existing temporary structures.
- Site preparation, including demolition, earthworks, tree removal.
- Construction of new:
 - 32 permanent general learning spaces and 3 support teaching spaces
 - Administration and staff hubs
 - Hall, canteen and library
 - Out of school hours care
 - Public preschool (standalone building for 60 places)
 - Covered Outdoor Learning Areas (COLAs)
 - Outdoor play areas, including games courts and yarning circle
 - New at-grade car parking
 - Extension of the existing drop-off / pick-up area and new bus bay
 - Realignment of the existing fencing
 - Associated stormwater infrastructure upgrades
 - Associated landscaping
 - Associated pedestrian and road upgrade activites

Significance of Environmental Impacts

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

The architectural design process identifies and addresses an extensive number and type of 'potential impacts' which have mitigation measures applied as part of the design process. Major 'potential impacts' and their mitigation measures that have been addressed in the design stage of the project are captured in the architectural Schematic Design Report.

Site Description

The Site is identified as 100 Ryans Road, Gillieston Heights (Lot 51 DP1162489) and 19 Northview Street, Gillieston Heights (Lot 2 DP1308605).

The Site is located within the Maitland Local Government Area (LGA) and is zoned RU2 Rural Landscape and R1 General Residential zone under the provisions of the Maitland Local Environmental Plan 2011 (MLEP2011).

Existing attributes of the subject site are noted as follows:

- The subject site exhibits an area of approximately 23,385m² and is located in the suburb of Gillieston Heights:
- The subject site has a frontage to Ryans Road to the east, Gillieston Road to the north, and Northview Street to the south:
- In its existing state, the subject site comprises the existing Gillieston Public School. Existing school buildings are primarily located in the west portion of the subject site with a large area of open space situated in the eastern portion. There are limited permanent structures located on the subject site with thirteen (13) existing demountable classrooms currently occupying the subject site. Permanent buildings consist of the Main Administration Building, Original Brick Cottage, Library and GLS building located in the centre of the subject site; and
- Carparking is provided from Gillieston Road for staff.
 Pedestrian access is available via this main entrance from Gillieston Road and via a separate pedestrian-only access gates on Northview Street and Ryans Road.

The existing site context is shown in Figure 1 and Figure 2.



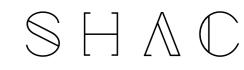
Figure 1 – Cadastral Map (Source: NSW Spatial Viewer, 2024)



Figure 2 - Site Aerial Map (Source: Near Map, 2024)

SOURCE: Johnstaff, 240919_GPS REF Preamble V2, 19 September 2024





Brief

Project:

Project Overview

Gillieston Public School Redevelopment

and New Public Preschool

Client: NSW Department of Education (DoE)

Address: 100 Ryans Road and 19 Northview Street,

Gillieston Heights, NSW 2321

Site Area: 23,385 sqm

Current School: 1 permanent heritage building

2 semi-permanent buildings16 temporary demountables

339 students

20 FTE (Full Time Equivalent) Staff

New School: 35 GLS in phase 1,including learning

support hubs

736 students 50 staff **Project Scope**

This report accompanies an Application which seeks consent for the construction of a new public school with a capacity of up to approximately 736 students in a series of two and three-storey buildings, sporting fields and a Public Preschool, and associated civil and utilities activities. A summary of the:

- 32 general learning spaces and 3 support teaching spaces
- administration and staff hubs
- hall, canteen and out of school hours care
- library
- public preschool
- covered Outdoor Learning Areas (COLAs)
- outdoor play areas, including games courts and yarning circle
- new at grade parking
- extension of the existing drop-off / pick-up area and bus bay
- realignment of the existing fencing
- associated stormwater infrastructure
- associated landscaping
- pedestrian and associated road upgrades to adjoining roads

Rationale for the Project

Gillieston North is progressively being developed into an urban neighbourhood with areas surrounding the subject site being part of a greenfield land release. These new homes will place substantial demand for primary school student places in the area. The existing primary school does not have sufficient capacity to cater for the increase in demand.

Accordingly, there is a need to respond to population growth in the area and otherwise there is the potential to lead to a decline in education outcomes. The proposed activity will ensure the growing primary school and pre-school educational needs of the incoming population are met.

Consultation

Project Team	Role
NSW Dept of Education	Client
SHAC Architects	Architect, Interior Design
Terras Landscape Architects	Landscape Architect
Willowtree Planning	Planner
ADW Johnson	Surveyor
Muller Partnership	Quantity Surveyor
Umwelt	Environmental Consultant
EMM Consulting	Aboriginal and Cultural Heritage
Eco Logical Australia	Bushfire Consultant
ARBPRO	Arborist
Stantec	Geotechnical and Contamination
ACOR Consultants	Engineering - Structural and Civil
ACOR Consultants	Engineering - Hydraulic and Fire
Arcadis Australia Pacific	Mech, Electrical, ESD, Acoustic Eng.
Bitzios Consulting	Rapid Transport Assessment
GHD	Biodiversity Consultant
City Plan Services	BCA / DDA Consultant
Charter Keck Cramer	Property Advisor
DHIIRA	Designing w/ Country Consultant

SOURCE: Willowtree Planning, Project/Consultant Brief for the Proposed Gillieston Public School Redevelopment, 14 August 2024





Educational Principles





NSW DoE GENERAL EDUCATION PRINCIPLES

1: First + foremost, focus on the **needs of learners and learning**.

- 2: Build community & identity, & create a culture of welcome, inclusion & belonging that reflects & respects diversity within the school's community.
- 3: Be aesthetically pleasing.

4: Provide **contemporary**, **sustainable learning environments** that:

- Promote learning for through collaboration, social interaction & active investigation.
- Encourage learner self-management & self-direction.
- Support a full range of teaching strategies from direct explicit instruction to facilitation of inquiry & authentic project & problem based learning.
- Facilitate learning & connection anywhere, anytime.
- Be integrated into, & maximise the use of the natural environment
- Enable aspects of the buildings, building design & outdoor spaces to be learning tools in themselves
- Are age and stage appropriate
- **5:** Embed the potential for **re-configurability**, both in the present for multi-purpose use & over time for changing needs

SCHOOL VISION STATEMENT

"At Gillieston Public School we are committed to nurturing, challenging, and inspiring our students in an environment where every child is known, valued and cared for. Our students will develop the foundation skills in literacy, numeracy with strong content knowledge and the ability to learn, adapt and be responsible citizens. Our teachers, parents and the wider community take shared responsibility for student improvement and contribute to a continuous learning culture. Strong strategic and effective leadership will drive a schoolwide culture of high expectations and shared responsibility for student engagement, learning and development and success."

Strategic Direction 1 - Student Growth and Attainment

Strategic Direction 2 - High Expectation and a Continuous Improvement Culture

Strategic Direction 3 - Postive School Culture - Student Wellbeing, Attendance and Engagement

This information was gathered from the Gillieston PS '2021-2024 Strategic Improvement Plan'.



SOURCE: Gillieston Public School Website





Unique Context Drivers

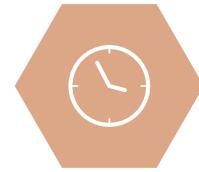












1. Indigenous Connection:

The development of the design must acknowledge the importance of a rural NSW environment that has an enduring connection and ancient Indigenous history.

2. Rural Character:

The design should embrace the rural setting and connection to the environment in which the school is placed to create various indoor and outdoor learning opportunities.

3. Community Asset:

The project is an opportunity to enhance the strong connection to the community and be an integral community asset for Gillieston Heights as the area continues to develop.

4. Sense of Place:

It is important for the project to encompass a sense of place for the Gillieston Heights community, in turn nurturing an enduring sense of ownership and pride.

5. Site Constraints:

Work with site constraints including traffic, accessibility, flooding and low-lying lands with existing table drains, and various approved developments surrounding the school which may disrupt future operation.

6. Population Growth:

Upgrading the school's facilities and core community assets is critical to supporting the forecasted population growth for Gillieston Heights.

7. Asset Suitability:

Without intervention, the current and future students and staff of Gillieston Public School are at risk of having no suitable or permanent school facilities in their community.





Site Context

LOCALITY

European settlement of the Maitland area began with farmers in the early 1800s, leading to unplanned growth that contributes to its charm. The area's prosperity, driven by its river location, is reflected in its ornate Victorian facades and buildings that adorn the locality today. Maitland is strategically located 170 kilometres north of Sydney and 41 kilometres from Newcastle at a rail and highway junction. Its proximity to the Hunter River has led to repeated flooding, including the major 1955 flood that was the first Australian natural disaster covered internationally, where waters reached 12.5m and caused catastrophic damage. The Maitland Levee flood embankment was completed in 1980.

Gillieston Heights was established following the discovery of high-quality coal. The East Greta Coal Mining Company was established in 1851 with a rail line linking the area to Maitland of which some remanences are still operational. Mining operations ceased in 1929 due to a strike and also subsidence caused by flooding in 1930. The area remained as a small village of miner huts and agricultural land, until recent population expansions and housing developments. From 2005 to 2011 the population of Gillieston Heights doubled and continues to grow.

Gillieston Public School is located at 100 Ryans Road Gillieston Heights, NSW 2321 on Wonnarua Country. The site is Lot 51 DP 1162489 and Lot 2 DP1308605, has an approximate area of 23,385 m² and is within the Maitland City Council Area and Mindaribba Local Aboriginal Land Council. The site is surrounded by residential development with approved development applications to the North and Western sides.

KEY PLANNING CONTROLS

Land Zoning: R1 - General Residential + RU2 - Rural Landscape

Acid Sulphate Soils: Class 5

Bushfire Zone: Vegetation Buffer Zone applies to the site

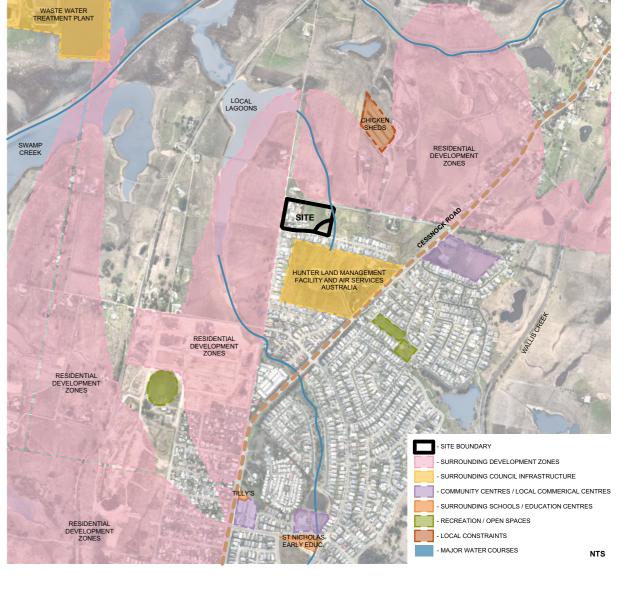
Flooding: Flooding does not directly effect the site

Heritage: Whilst not linked, the site contains an existing heritage building as the original brick

cottage as well as a located milky quartz subject verified as of Aboriginal Origin.

Mines: Potential non-active underground mine workings.









Site Context

LOCALITY

The Wonnarua people are the traditional custodians of Boun - the 'place of the Bittern' - which today is known as Maitland. Their traditional territory, estimated to comprise an area extending over 5,200 km2, spreads from the Upper Hunter River above Maitland, west to the Great Dividing Range, towards Wollombi.

As part of their belief system, Baiami, is the creator of all things and the Keeper of the Valley, for the Wonnarua. Baime also created Kawal, (the wedged tail eagle) to watch over the people, and the mighty river, Coquun to sustain them. The ethnographic literature from the 1800s, describes the vegetation of the Maitland area as 'luxuriant' rainforest and thick scrub flanking the Hunter River; tracts of dense brush and forest with overlapping canopies and vine thickets.

References were also made to the rich fertility of the alluvial soils of the floodplain and to the various aquatic habitats such as open swamps and wetlands, oxbows, natural levees, silted flood channels, and a network of lagoons that fed into the Hunter River.

In the hinterland and further up the Valley, the landscape was more open, characterised by extensive, park-like grasslands and open woodland. Coupled with its warm-temperate climate, mild winters and reliable rainfall, the landscape of the Maitland region would have been highly conducive to the hunter-gatherer lifestyle of the Wonnarua prior to colonisation.

The Mindaribba Local Area Land Council, now administers the interests of the Wonnarua in the Maitland area.

















Photographic Analysis - Site Edges

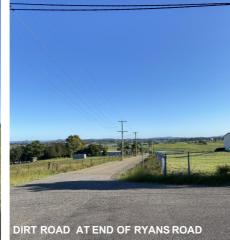




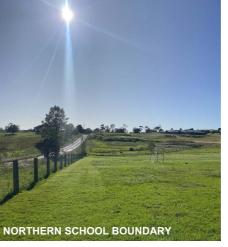


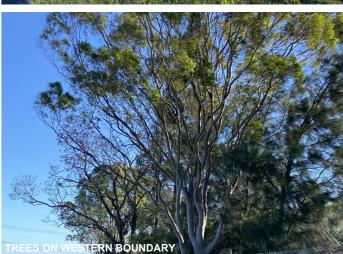
















Photographic Analysis - Outlook & Aspect





















Photographic Analysis - Existing Built Form























Photographic Analysis - Elements & Artefacts

























1201 Preferred Option Summary

Preferred Masterplan Option Summary



Masterplan Option 15 - Preferred

Within this option, the linear and separated footprint of the modular structure allows for plenty of well-lit playspace to stitch the site together, while the strategic use of level changes over the site keeps the multistorey buildings at a manageable and unimpeded height for neighbouring space and internal playspace.

Departures from the Masterplan

Throughout the concept design process, the project has continued to evolve, with feedback from meetings including Project Reference Group (PRG), Project Community Group (PCG), Expert Review Group (ERG) and Technical Stakeholder Group (TSG), all playing a key role in shaping the new primary school unique to Gillieston Heights character. Departures when transitioning from masterplan to concept design stemmed from tying together the myriad of requirements identified within these meetings.

SHAC have deliberately followed the confines set by the MMoC 7500x9000mm grid, to ensure staging of construction and delivery can stay consistent with estimates of the masterplan report. To that end, minor departures in area have resulted in prioritising the efficiencies of MMoC.

Through explorations of key site constraints, there have been controlled departures from the Masterplan in order to achieve a robust solution. Options of school layouts were further tested to meet the needs of both the unique site and school community.

SHAC issued Masterplan dated 09.08.2023.





1202 Preferred Option Summary

Preferred Concept Design Option Summary



Concept - Preferred

EFSG LARGE PRIMARY SCHOOL LEARNING SPACES (32 GLS) + CORE FACILITIES

The concept design utilises the natural fall of the land to place built form along the northern and southern edges of site. The buildings enclose a large open space with flat and terraced landscaping for outdoor activity, learning and travel.

Departures from the Concept Design

- Consolidated GLS's to North
- Connection to heritage building
- Open natural drainage pattern to Northeast
- Removed building from highpoint ridge of site to establish a Cultural Zone
- Consolidated carparking
- Alignment of the Hall and Public Preschool's large wide building footprints across contours using the site levels
- Acquired site to Southeast
- Inclusion of Public Preschool in scope

SHAC issued Concept Design dated 28.03.2024.





Response to SDRP01 Feedback

	NSW SDRP 01 ADVICE - 15th May 2023	DESIGN RESPONSE	REFERENCE
CO	NNECTION WITH COUNTRY		
1	Prioritising and sustaining the strong relationship with the local Aboriginal community is strongly supported.	Connection with Country meeting undertaken on the 28th June 2023 with members from Dhiira Aboriginal Consultants to reestablish this process to be maintained. Further community consultation undertaken in August 2024. Retaining existing connections with the local Aboriginal community will be of utmost importance, with the proposed new school providing physical, emotional, and educational connections back to Aboriginal land and culture.	
2	Caring for water and supporting its natural movement across the site. Consider above ground, landscape solutions which may be more cost effective, environmentally sustainable and enable better learning opportunities.	Thorough collaboration with a Landscape Architect will aim to celebrate the natural paths of water through the site, and will be further explored in the future design phases. Incorporation of landscape elements such as swales, ponds, rocks, and native grasses can provide valuable learning opportunities for students.	
3	The views of the mountains have been identified as a keyway to place the site within Country, to support this consider the following:		4001 - 4003
а	Views from classrooms, open spaces, and external corridors. See the Melonba and Marsden Park School project as an example.	Further design development of facade reticulation and openings has been undertaken with direct reference to capturing views and Connecting with Country for both internal and external spaces.	
b	Reconsider current layout of classrooms on the slope facing away from the mountains and whether there is another strategy or location, for example up the site, which can offer a stronger Connection with Country (see point 5 below).	Layout of Block C was adjusted following this advice in SDRP01, with the main building now aligned across the northern boundary, allowing for stronger link to urban environment, as well as distant views	
4	When developing the landscape plan consider the deep time history of the site and the original fauna and flora endemic to this area.	Integrated Cultural Education Walk: To be co-designed with local Aboriginal knowledge holders. This walk will feature student-developed signage and focus on native bush, food, and medicines. Wetland/Retention and Ecological Play	
SIT	E STRATEGY AND LANDSCAPE		
5	GANSW strongly recommends that classrooms running north/south on the eastern end of the site are moved up the hill to be co-located next to the heritage building – as drawn in option 7 on the Masterplan Options. This move would:	The design places Building C (classroom building) along the northern elevation, adjacent to the existing heritage building, with space reserved for a future 12GLS extension.	3103
а	. Keep the flat open space for active play.	A flat open playspace is proposed on the western side of the site, transitioning to a terraced playspace through the center, leading to a flat assembly area on the eastern side.	3506
b	Improve hydrology on the site as water can then flow freely down the site.	Landscape elements have been incorpoarted within this zone to further articulate the natural flow of hydrology across the site.	4102 -4103
С	Increase potential for students to have views of mountains especially from corridors.	The Practical Activity Area (PAA) provides focused vantage points to engage students in geography.	3206 - 3207, 4001 - 4003
d	. Reduce the inefficiency of corner classrooms.	The GLS Hub offers adaptable spaces that can meet the needs of both students and staff. It can be configured for large group teaching or private small group learning. All four classrooms open onto a central learning commons area and connect to the adjacent GLS.	3206 - 3207
е	. Reduce complexity of level changes.	Utilising site transition as playspace to create defined flat playspaces.	3506, 4102 - 4103
f	Reduce the distance students will walk from drop off to classrooms.	Agreed and now reflected in adjusted layout of buildings.	3206 - 3207, 3505

6	Please provide more information about how the 30% canopy target will be achieved.	Addressed in SDRP02 presentation, as well as landscape documentation submitted as part of the Schematic Design.	4104
7	Replace active with quiet play space next to the library.	Addressed in SDRP02 presentation, as well as landscape documentation submitted as part of the Schematic Design.	3506, 4 4103
8	Further develop the fencing strategy to ensure the least possible impact:	Addressed in SDRP02 presentation, as well as security & access diagrams documentation submitted as part of the Schematic Design. SINSW SSU agreed to softening of the boundary fence alignment at the northern and southern entries. All other boundaries will have fencing to protect assets.	3503
a.	Reduce the extent and height of retaining wall to ensure any fencing required is kept to a minimum.	Addressed in SDRP02 presentation, in coordination of landscape and civil design development.	4101 -41
b.	Consider where buildings can act as the security line, esp. along the kiss-and-drop area. Refer to examples such as Telopea PS where this is being proposed.	Addressed in SDRP02 presentation, as well as security & access diagrams documentation submitted as part of the Schematic Design. SINSW SSU agreed to softening of the boundary fence alignment at the northern and southern entries. All other boundaries will have fencing to protect assets.	3503
9	Consider the relationship with the private property adjacent to SW corner of site. If this property could be purchased, it would provide an opportunity to improve the overall site masterplan.	Addressed following SDRP01 presentaiton, with SINSW purchasing adjacent lot and the site masterplan being adjusted accordingly to take advantage of this additional parcel of land and street frontage.	3103
ARC	CHITECTURE		
10	There is very limited consideration of outdoor learning which is a critical part of pedagogy for primary school students and in developing a relationship with local ecologies and Country. Review the designs to include:		
a.	Adjacent outdoor spaces on ground floor rooms especially on the northside of classroom buildings. Refer to John Palmer Public School as a good example of this.	Addressed in SDRP02 presentation, as well as landscape documentation submitted as part of the Schematic Design.	3506, 41 4103
b.	Creating larger corridor spaces on elevated walkways to support outdoor learning and connected views to mountains. Refer to John Palmer PS and Darcy Road PS for examples.	The addition of Outdoor Learning Areas on the first and second floors will provide students with easy access to outdoor spaces from above-ground teaching hubs. These areas will support atneed students, including First Nations and other minority groups, by offering private spaces away from common learning areas for use by students and support staff. Additionally, the Outdoor Learning Areas will offer focused vantage points that enhance student engagement in geography.	3206 - 3: 4001 - 40
c.	Develop outdoor 'rooms' for learning in the landscape.	Addressed in SDRP02 presentation, as well as landscape documentation submitted as part of the Schematic Design.	4101 -41
11	Consider different age groups in the layout of the site and how spaces, and collections of rooms can support the different development stages to give them a sense of belonging and welcome to the school. Develop strategies that work for the diverse needs of students.	Addressed prior to SDRP02 with the age-based allocation of classroom spaces within the main building with younger aged students located closer to the ground. Shared spaces such as the library, learning support and administration are also located at ground level for ease of access. Landscape design has been completed with definition of spaces, in age-approriate zones for defined areas of use.	3206 - 3: 4101 -41
SUS	TAINABILITY AND CLIMATE CHANGE		
	Illustrate how the project will contribute to NSW's Net Zero		





Response to SDRP02 Feedback

	NSW SDRP 02 ADVICE - 6th September 2024	DESIGN RESPONSE	REFERENCE
1	Continue to engage with Indigenous Knowledge Holders to provide advice and direction to the development of the site strategy, landscape, architecture and artwork.	Connection with Country meeting undertaken on the 28th June 2023 with members from Dhiira Aboriginal Consultants to reestablish this process to be maintained. Further community consultation undertaken in August 2024. Retaining existing connections with the local Aboriginal community will be of utmost importance, with the proposed new school providing physical, emotional, and educational connections back to Aboriginal land and culture.	4001 - 4003
2 SIT	Continue to identify and develop opportunities to heal Country through landscape, management of water, deep soil, tree canopy and supporting local ecologies. E STRATEGY AND LANDSCAPE	This will be developed and incorporated into the landscape design as the project progresses. The connection with country reporting is currently being developed as additional consultation with the local community is being undertaken.	4001 - 4003, 4101 - 4104
3	The site strategy and approach to landscape is generally supported, however further refinement is recommended on the following areas:		
a.	The landscape area between the preschool and the carpark.	A landscape buffer is located internally to the preschool to provide visual and acoustic screening. On the lower level a garden bed is located to support tree canopy cover over the carpark and accommodate for level changes. It is not anticipated this area be used for active play as there are visibility / supervision issues.	
b.	The southern entrance between the hall and preschool.	This area is identified for future.	4101 - 4104
C.	The terraces sloping away from the open area in front of the	Generally, the terraced solution to retaining walls and garden beds is limited due to the requirement to achieve 10,000m2 active play space.	
d.	The larger landscape area on the western end of the site and integration of Connecting with Country.	This area is identified for future. The progression / outcomes of the connection with country process will be required to inform this area.	
4	Ensure shade is provided for all students:		
a.	Long-term, by providing sufficient tree canopy and appropriately locating trees to ensure shading in summer months	New tree planting has been provided to achieve 30% canopy cover. Most of the existing trees are being retained.	4104
b.	Immediately after opening, by providing shading devices.	Structural shade will be considered as the design develops.	3505
5	The site slopes considerably and attention to levels is critical to ensuring the success of the project:		
a.	Continue to ensure accessibility is prioritised while minimising the impact of extensive handrails and retaining walls.	The central play area is accessible via ramp and stairs from the central access path. It is only accessed via stairs from the lower assembly area	3505
b.	Integrate slopes, stepping and retaining walls to provide opportunities for student engagement, interaction, and nature play.	Generally, the terraced solution to retaining walls and garden beds is limited due to the requirement to achieve 10,000m2 active play space.	3506, 4101 - 4104
6	Further develop water sensitive urban design initiatives and integrate these into the project:		
a.	Consider hydrology and express the movement of water and waterways, including dry bed, as part of the Connecting with Country strategy.	This is identified for future. The progression / outcomes of the connection with country process will be required to inform this area.	4001 - 4003, 4101 - 4104
b.	Create opportunities for student learning experiences through the movement of water.	Noted. As above	
7	Consider relocating the sports court so existing trees can be saved.	Confirmation received that the shrubs noted on the site plan for removal have already been removed from site. Hardcourt construction does not require any tree removal.	4104

AR	CHITECTURE		
	The strong architectural language and strategy of wrapping the façade around and over the main learning hub is generally supported.		
8	Ensure the location and size of openings on the north façade balances protection from sun with access to views, and that the space feels open and not closed in.	Noted and considered. The full height perforated screen allows for view through the screen to distant views, as well as daylight access with out excessive heat gain. The number and size of opening meets all required daylighting area compliance requirements.	2106, 3302, 4303
9	Consider more expression and articulation at the building ends including:		
a.	The COLA	Explored following SDRP02, however level of expression is impacted by budget considerations for project moving forward.	2106, 3302, 4303
b.	The eastern end of the main learning hub.	Articulation of the eastern end extended with consideration of additional sunshading to eastern decks. Limited expression possible due to budget considerations.	2106, 3302, 4303
10	Consider increasing the width of walkways to accommodate outdoor learning areas on the upper floors. This might include introducing a curve to align the form with the landscape.	Circulation width is dictated, to a certain extent, by the SINSW standard hub layouts, and structural impacts of extended the walkways which are preferred to cantilever so as not to introduce additional column structures.	3505





Better Placed

The following section lists the Education SEPP Design Quality Principles to be used when designing new schools and school building upgrades. These principles are a set of values that enable a common understanding between school developers, design teams, school staff, students and the community when designing new school buildings or upgrades



Schools should be designed to respond to and enhance the positive qualities of their setting, landscape and heritage, including Aboriginal cultural heritage

design and spatial organisation of buildings and the spaces between them should be informed by site conditions such as topography, orientation and climate

Landscape should be integrated into the design of school developments to enhance on-site amenity, contribute to the and mitigate streetscape negative impacts neighbouring sites

School buildings and their grounds on land that is identified in or under a local environmental plan as a scenic protection area should be designed to recognise and protect the special visual qualities and natural environment of the area, and located and designed to minimise the development's visual impact on those qualities and that natural environment.



Good design combines positive environmental, social and economic outcomes. Schools and school buildings should be designed to minimise the consumption of energy, water and natural resources and reduce waste and encourage recycling

Schools should be designed to be durable, resilient and adaptable, enabling them to evolve over time to meet future requirements.



School buildings and their grounds should provide good wayfinding and be welcoming, accessible and inclusive to people with differing needs and capabilities(Note: Wayfinding refers to information systems that guide people through a physical environment and enhance their understanding and experience of the space)

Schools should actively seek opportunities for their facilities to be shared with the community and cater for activities outside of school hours.



Good school development optimises health, safety and security within its boundaries and the surrounding public domain, and balances this with the need to create a welcoming and accessible environment.



Schools should provide pleasant and engaging spaces that are accessible for a wide range of educational, informal and community activities, while also considering the amenity of adjacent activity and the local neighbourhood

Schools located near busy roads or near rail corridors should incorporate appropriate noise mitigation measures to ensure a high level of amenity for occupants

Schools should include appropriate, efficient, stage and age appropriate indoor and outdoor learning and play spaces, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage and service areas.



School design should consider future needs and take a wholeof-life-cycle approach underpinned by site wide strategic and spatial planning

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

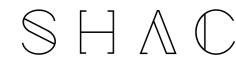


School buildings and their landscape setting should be aesthetically pleasing by achieving a built form that has good proportions and a balanced composition of elements

Schools should respond to positive elements from the site and surrounding neighbourhood and have a positive impact on the quality and character of a neighbourhood

The built form should respond to the existing or desired future context, particularly, positive elements from the site and surrounding neighbourhood, and have a positive impact on the quality and sense of identity of the neighbourhood.



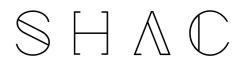


Design Response

BETTER FIT CONTEXT, BUILT FORM & LANDSCAPE	DESIGN RESPONSE	REFERENCE
Respect and respond to its physical context, neighbourhood character, streetscape quality and heritage	The complete nature of the surrounding context of this project is not yet known. Surrounding residential activity releases are underway, but currently only one boundary has activity adjacent as a frame of reference. It is assumed that the remaining portions of activity will remain as 1-2 storey residential, making the school activity the focus of local infrastructure in the immediate context. Consideration has been made to the existing heritage building onsite, with reestablishment of gardens and screening to the large built form of the new construction.	3301 - 3302 , 4303, 4401 - 4406
Consider interpretation of Aboriginal cultural heritage within the design of buildings and open spaces in consultation with local Aboriginal community	The project team, including representatives from the School, have and will continue to actively consult with local Indigenous parties that have registered their interest in the project.	4001 - 4003 Design with Country Report
Respond to its natural environment including scenic value, local landscape setting and orientation neighbouring properties	Building alignment allows for the existing watercourse flows to remain onsite from the high point in the SW corner across the site to the NE corner. The large northern building, with decks and picture windows allows for clear connection to the distant mountain ranges, waterways and Connection with Country.	Design with Country Report
Retain existing built form and vegetation where significant	Where possible existing vegetation has been maintained, mainly in the western portion of the site. Existing brick cottage onsite retained with all other demountable and school related buildings being removed as part of project activity.	
Include tree planting and other planting that enhances opportunities for play and learning	This is addressed in the landscape design completed by Terras.	Landscape Package
Ensure landscaping improves the amenity within school grounds and for uses adjacent to the school	This is addressed in the landscape design completed by Terras.	Landscape Package
Be informed by a current Conservation Management Plan (CMP) and consider local heritage items both on the school site and in the local neighbourhood	The site is not located in a heritage zone, but does include both and Indigenous Artefact, and European heritage item within its boundaries. Both items have been addressed in reporting with the Indigenous item to be removed from site and returned to Community, and for the existing brick school building to be connected within the site with future school uses.	
Take advantage of its context by optimising access to nearby transport, public facilities and local centres	The proposed activity will maintain its existing connection to nearby transport, public facilities, & local centres, with its 3 main boundaries.	3501
Consider height and scale of school development in relationship to neighbouring properties	The existing neighbourhood has yet to be developed, however the building form is stepped across the site to take advantage of the slope of the site to provide a balanced approach to the height and bulk across the site.	3301 - 3302, 4303, 4401 - 4406

BETTER PERFORMANCE SUSTAINABLE, EFFICIENT & DURABLE	DESIGN RESPONSE	REFERENCE
Be responsive to local climate including sun, wind and aspect	The built form has been orientated to provide the shorted building elevation to the western aspect on the main building, and a large roof overhang with the COLA on the hall building.	2106, 4303
Select materials and approaches to detailing that are robust and durable	Material selection will ensure durability, as per the EFSG, this will be addressed further during design development & documentation.	4202, 4203
Integrate landscape, planting and Water Sensitive Urban Design (WSUD) principles to enhance amenity and building performance	The landscape design includes extensive planting to provide shade to the play spaces & enhance amenity, as well as constructed shade structures to provide additional shade to the site.	3505 Landscape Package
Include deep soil zones for ground water recharge and planting	This is addressed in the landscape design completed by Terras.	Landscape Package
Minimise reliance on mechanical systems	The teaching spaces are located on the perimeter of the building maximising natural daylighting. Furthermore each classroom's fenestration includes operable louvres allowing for natural ventilation, as well as full height sunshading to the northern elevation to reduce the solar heat gain along this full facade.	2106, 3205 - 3207
Include initiatives to reduce waste, embodied energy and emissions, through passive design principles and the use of advanced energy production systems where possible	Strategies to reduce waste & minimise the embodied energy in the materials will be further explored during design development & documentation. For further information refer to the ESD report.	2106
Maximise opportunities for safe walking, cycling and public transport access to and from the school	The location of the main entrance along Gillieston Road, away from the intersection, is in close proximity to the bus stops & ensures pedestrian/bicyclist safety of students. Storage onsite for bikes & scooters has been included in a secure, but still visible area of the site.	3205 - 3207 3501, 3502





Design Response

BETTER FOR COMMUNITY ACCESSIBLE & INCLUSIVE	DESIGN RESPONSE	REFERENCE
Establish security requirements early to ensure any required secure lines can be designed and integrated with built form	The School has a main entry from the north off Gillieston Road, which has direct access to the school Administration area, as a point for secure control. A second southern public access point is provided from the southern boundary, aligning to the proposed kiss & drop zone, allowing for access to the OOSH and public preschool outside of school hours, and for the main pick up and drop off times.	3503
Balance security with accessibility and inclusiveness by minimising the use of fencing particularly along street frontages	Due to the surrounding context and tight site a boundary fence along the street frontages is required, however the proposed strategy includes niches in the fencing to provide planting to soften the barrier.	3503
Engage students, educators and the community in development of the vision and design brief for the school	The design team has also held consultation sessions with the community and local Indigenous knowledge holders. Public information sessions were also completed throughout masterplan & concept design development.	4001 - 4003 Design with Country Report
Allow for passive and dynamic play of different age groups	The landscape design includes a variety of outdoor spaces that account for active play on the hardstand areas and open turfed spaces, as well as passive play on the site.	3506
Provide school frontages and entrances that are visible, engaging and welcoming	The pedestrian entrances on both Gillieston Road, and Northview Street include public plazas that provides a sheltered place to wait for buses, and invites parents and visitors to dwell.	3301 - 3302, 4303, 4401 - 4406
Encourage access for members of the community to shared facilities after hours	The entry to the southern boundary provides direct access to the school hall, which is likely to be the main building utilised for community use outside of school hours. There are also discussions underway in terms of the shared use of the hardcourts, which will be secured from the remaining school site.	3501
Ensure clear and logical wayfinding across the school site and between buildings for all users including after hours community users	All the building and paths on site lead to the central play area, making wayfinding clear.	3505
Ensure accessibility for all users of the site	All buildings are provided with equitable access, either through ramps of via lifts to upper floors. With such a large site crossfall, providing access to all landscape areas have been difficult but still achieved, although some areas may require an alternate path of access between spaces using the building lifts to move between levels in the landscape.	3505 Landscape Package

BETTER FOR PEOPLE HEALTH & SAFETY	DESIGN RESPONSE	REFERENCE
Locate buildings and design facades that optimise fresh air intake and access to daylight	The classrooms are located on the perimeter of the building maximising natural daylighting. Furthermore, each classroom's fenestration includes operable louvres allowing for natural ventilation.	2106, 2205
Prioritise pedestrians and avoid conflicts between vehicles and people	Pedestrians & bicyclists will enter from all three active road frontages, while the vehicular entry is located off Gillieston Road (for Primary School) and Northview Street (for public preschool). The gates to the driveway will be closed outside of drop-off & pick-up times to maximise the safety of the students, with access granted only via intercom. Bicycle parking is provided adjacent to the Ryans Road.	3502
Provide covered areas for protection from sun and rain	The covered decks spaces provides all weather use, maximising the functionality.	3205 - 3207, 3505
Support safe walking and cycling to and from school through connections to local bike and foot paths and the provision of bike parking and end of journey facilities	As the suburb hasn't reached full development the project proposes shared pathways to all three boundaries of the site, noting that future activities should connect into this established pathways.	3502
Support passive surveillance, including through the location of toilets and areas for communal use outside of school hours	All amenities open onto public corridors and circulation zones. To ensure visibility of amenities is maintained on upper levels, amenities are provided, not as consolidated toilet banks, but as individual airline style cubicles.	3205 - 3207, 3503
Incorporate Crime Prevention Through Environmental Design (CPTED) principles	CPTED principles have be incorporated.	2206
Clearly define access arrangements for after school hours	The access to the school site is managed directly by the school, but the public access buildings such as the library & hall are located on the site's boundaries.	3503
Consider location and number of toilet facilities to allow safe use by different age groups and genders	Each storey of the proposed building includes student & staff amenities divided into two banks. This ensures that the toilets are being used by students of the same age group, as well as having direct access from both internal teaching spaces & external playgrounds.	3205 - 3207





BETTER WORKING

may be necessary to ensure acoustic levels can be maintained along with cross flow ventilation and

natural light.

Design Response

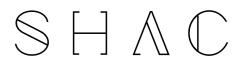
DESIGN RESPONSE

AMENITY		REFERENCE
Be integrated into, and maximise the use of the natural environment for learning and play	The landscape design proposes a variety of outdoor learning spaces.	Landscape Package
Ensure access to sunlight, natural ventilation and visual outlook wherever possible.	The facade screen is perpendicular to the facade to maintain views to the mountain range and existing agricultural lands to the north. The teaching spaces are located on the perimeter of the building to maximise the natural daylighting & ventilation.	2106, 2205
Facilitate flexible learning by providing access to technology	As part of the Inquiry Based Learning pedagogy, a high level of technology access is provided to all interior & exterior functional areas.	
Seek opportunities for buildings and outdoor spaces to be learning tools in themselves	The geometry of the facade screen can be used as a learning tool. The inclusion of native planting provides an opportunity to learn about bush tucker, bush medicine & how the natural environment can be used as tools.	4303 Landscape Package
Provide a diversity of indoor and outdoor spaces to facilitate informal and formal uses	The formal teaching spaces are complimented by the central learning commons, outdoor decks & landscape areas which can be used for formal & informal activities.	3205 - 3207 Landscape Package
Provide buffer planting in setbacks where appropriate to reduce the impact of new development	Buffer planting is provided in selected setback locations.	3103 Landscape Package
High rise schools should consider and seek to minimise the negative impacts of overshadowing and wind on surrounding built form and open space, and on school grounds.	N/A however, proposed buildings do not significantly overshadow the site & surrounding buildings.	4304 - 4405
Ensure outdoor play ground space is sufficient to accommodate the student population including future growth.	3-4 storey building forms have been utilised for the main building footprint to ensure that as much open playspace is available. Future growth of additional 12 classrooms has also been considered and the footprint of this expansion to the west of Block C noted on plans.	3506
Locate buildings away from noisy roads and other noise sources to ensure acoustic levels within teaching and learning spaces are acceptable	The buildings have been located to the boundaries to provide an open, protected internal school space on the site. Acoustics of the buildings will be addressed as per the Acoustic Engineer's report requirements.	
Where teaching and learning spaces must be located alongside noise sources, arrange built form to ensure dual aspect that will allow for natural ventilation away from the noise source. In extreme cases, mechanical systems and other technologies may be necessary to ensure acoustic levels can be	Noted & included in the design services approach.	

REFERENCE

BETTER VALUE WHOLE OF LIFE, FLEXIBLE & ADAPTIVE	DESIGN RESPONSE	REFERENCE
Allow for future adaptation to accommodate demographic changes, new teaching and learning approaches and the integration of new technologies	The regular structural grid allows for flexibility & future adaption of the floor plate, as well as SINSW standard hub layouts, which allow for future flexibility and new technologies to be added.	3205 - 3207
Be based on a masterplan of the school site that includes the testing of options for future potential growth	Future growth of additional 12 classrooms has also been considered and the footprint of this expansion to the west of Block C noted on plans.	3205 - 3207
Take a whole-of-lifecycle approach when considering cost and consider wider public benefits over time	Sustainability Assessment has been undertaken by Arcadis. The proposed design will achieve the required equivalent 4-stars.	2106
Provide capacity for multiple uses, flexibility and change of use over time	With the use of mobile furniture, the teaching & makerspaces maximise their flexibility.	
Respond to the findings of a site appraisal including in-ground conditions, contamination, flora and fauna, flooding, drainage and erosion, noise and traffic generation	Refer to flooding & geotechnical reports.	
Understand the potential impacts of future local projected growth	Future growth of additional 12 classrooms has also been considered and the footprint of this expansion to the west of Block C noted on plans.	3205 - 3207
Design learning spaces to cater for a range of learning styles and group sizes	The flexibility of the teaching spaces provides the opportunity to cater to a range of learning styles & group sizes	
Consider providing areas for collaboration, group learning, presentations, specialised focus labs, project space and wet areas, display areas, student breakout, teacher meetings, and reflective / quiet spaces.	This requirement is inherent within the Standard Hub layout policy from SINSW, and therefore reflected in the design.	3205 - 3207





Design Response

BETTER LOOK & FEEL AESTHETICS	DESIGN RESPONSE	REFERENCE
Reflect a commitment to and investment in design excellence	This commitment is illustrated with our 2 presentations to the SDRP, taking on their advice on both occasions.	1301 -1302, 4401- 4406
Create engaging and attractive environments	The coordination between the architectural, landscape architects & the School.	
Achieve a purposeful composition of materials and elements through a rigorous design process	The material palette has been carefully chosen to achieve the desired aesthetic while optimising the building's thermal performance.	4202, 4303
Provide an engaging environment for pedestrians visually and materially along public street frontages	Footpaths have been provided to the full extent of the existing public domain areas surrounding the site. The fence line also steps back from the boundary at the main public entries to signify the area for access but also for community to engage within the space.	4303
Seek opportunities to enhance public facing areas with landscaping and ensure landscape and building design are integrated	SHAC and Terras have worked together closely to ensure that the landscape & building design work together symbiotically.	3301 - 3302, 4303, 4401 - 4406
Integrate service elements with the building design	Early involvement of service engineers has enabled the service requirements to be integrated into the building design.	3103, 3507
Balance internal spatial requirements with an external mass and scale that responds to its environment	EFSG dictates the internal spatial requirements of the school, which we satisfy without over supplying. The project has sought to balance, internal spatial needs, future expansion, height and bulk as well as outdoor play space.	2111
Avoid long stretches of security fencing to public facing areas through arrangement of building edges, landscaping, gates and other openings.	SINSW SSU provides direction on the alignment of the boundary fences to ensure protection of assets, however they have agreed to a softening of this approach at the two main entry points to the school.	3503 Landscape Package
Look for opportunities to include public art.	Art is to be incorporated into the undercroft space at the main entry as well as on the internal facing screens to stairs and decks. Further opportunities will be investigated through the design development process & through further consultation with Indigenous Representatives.	4001 - 4003, 4303





SENSING - Project Drivers
WALKING COUNTRY AND LEARNING ABOUT THE SITE BY SENSING PLACE - Navigating, Experiencing, Understanding and

WALKING COUNTRY AND LEARNING ABOUT THE SITE BY SENSING PLACE - Navigating, Experiencing, Understanding and Recording IMPORTANT & significant FEATURES of the site landscape & surrounding environment.





2101 Design Strategies

SEPP Design Policy Principles

BETTER PLACED

EDUCATION SEPP DESIGN QRUALITY PRINCIPLES:

The following section lists the Education SEPP Design Quality Principles to be used when designing new schools and school building upgrades. These principles are a set of values that enable a common understanding between school developers, design teams, school staff, students and the community when designing new school buildings or upgrades.

SHAC have continued to consider the Education SEPP Design Quality Principles as part of a holistic and integrated project design and review process to ensure the delivery of 'better' design.

SOURCE: Information & icons adapted from Better Placed: Design Guide for Schools by Govt



CONTEXT, BUILT FORM AND LANDSCAPE

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Federal, State, and Local Government



Green Schools - Green Building Council of Australia

The GBCA report outlines the benefits of green schools, and shares the practical experience of ministers, education departments, principals, and teachers in embracing the Green Star - Education rating tool.

Crime Prevention Through Environmental Design (CPTED)

The report assesses the school activity against CPTED principles.



Educational Facilities Standards & Guidelines

The Educational Facilities
Standards and Guidelines (EFSG)
are intended to assist those
responsible for the management,
planning, design, construction, and
maintenance of new and
refurbished school facilities.



SEPP - Educational Establishments and Child Care Facilities (2017)

The State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (the Education SEPP) has provisions that facilitate the effective delivery of educational establishments and early education and care facilities across the State.



Local Environmental Plan (LEP) & Development Control Plan (DCP)

LEP's provides framework in guiding planning decisions in each local government area through zoning and development controls.

DCP's contain detailed planning and design guidelines to support the provisions set out in the LEP, providing guidance in carrying out development under a development or modification application.





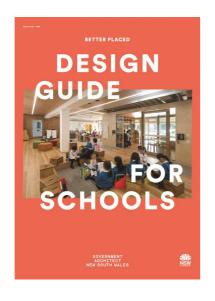
2103 Design Strategies

Government Architect NSW



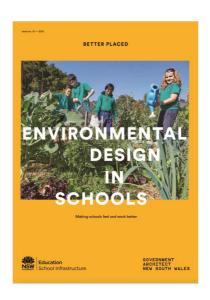
Better Placed

An integrated design policy for the built environment of NSW.
The seven principles of Better Placed have been used throughout the briefing, consultation and design process.



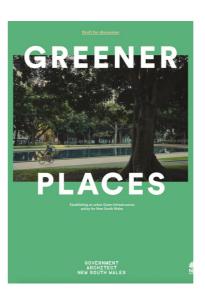
Better Placed - Design Guide for Schools

A design guide to support the delivery of good design for new school development and upgrades in NSW and accompanies the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 (Education SEPP).



Better Placed -Environmental Design in Schools

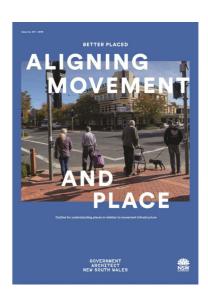
A practical manual to engage and enthuse school communities to make sustainable interventions in schools.



Greener Places

The Greener Places design framework has been produced by GANSW to guide the design, planning and delivery of green infrastructure across NSW.

Well-designed green infrastructure responds to four key principles.



Better Placed - Aligning Movement and Place

This outline sets out a better approach to aligning movement and place in the design, planning, construction and operation of NSW's overall transport network.



Design Guide for Heritage

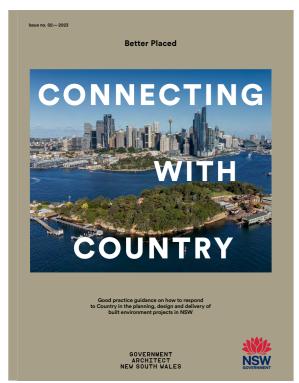
This outline offers a resource to help ensure we have good design in heritge buildings, sites and precincts.

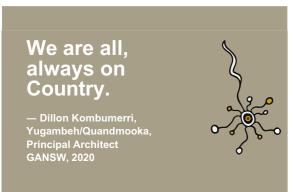




2104 Design Strategies

GANSW - Connecting with Country Framework





SOURCE: Government Architect NSW, Better Placed - Connecting With Country, 2023

The Connecting with Country Framework is a framework to care for Country when designing built environments. It embraces the Aboriginal philosophy that 'If we care for Country, Country will care for us'.

The framework provides good practice guidance on how to respond to Country in the planning, design and delivery of built environment projects in NSW. It is informed by the wider context of First Nations rights recognition, social policy, legislation, design standards and research, embracing the lived experience of the First Nations peoples who have contributed to the development of the framework.

The Connecting with Country Framework is intended to augment and support the work of Aboriginal colleagues and community leaders who have developed protocols and policies for engaging with Aboriginal communities, providing Aboriginal employment opportunities, designing with Country, and protecting Aboriginal cultural heritage.

Connecting with Country is intended to help all of us – Aboriginal and non-Aboriginal people – to work together collectively, respectfully, and with open minds to unite our complementary knowledge.

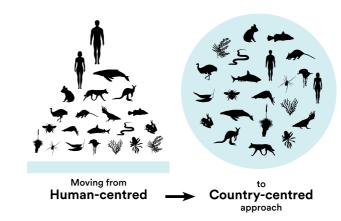


Connecting with Country Framework

What is Country?

Country encompasses everything. It includes both living and non-living elements. It holds everything within the landscape, including Earth, Water and Sky Country, as well as people, animals, plants, and the stories that connect them.

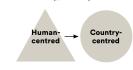
Country (capital 'C') has specific and significant meaning for Aboriginal peoples. Country relates to the nation, cultural group and region that Aboriginal people belong to, yearn for, find healing from and will return to. Country is the literal place of origin for Aboriginal peoples. Aboriginal peoples' deep and personal relationships with Country are expressed in multiple ways. The lore of Country is expressed through songlines, stories, art and ceremony. Language, including the names of Aboriginal groups and placenames, are another means of expressing relationships with Country. There is no universal way of defining Country. Descriptions of Country, particularly traditional associations, will differ from individual to individual, depending on the associations passed down through the family and community.



Guided by Aboriginal community

The commitment

All NSW built environment projects will be developed with a Country-centred approach guided by Aboriginal people, who know that if we care for Country, Country will care for us.



Practices

Reframing our way of working Changing our approach and processes to support a Country-centred approach



Actions

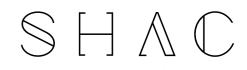
Implementing the framework
Project life cycle from
an Aboriginal perspective



Outcomes for Country

Healthy Country
Healthy Community
Protecting Aboriginal cultural heritage
Cultural competency





Approach to Indigenous Culture & Heritage

WONNARUA, COQUUN & BOUN PEOPLE, RIVER, PLACE

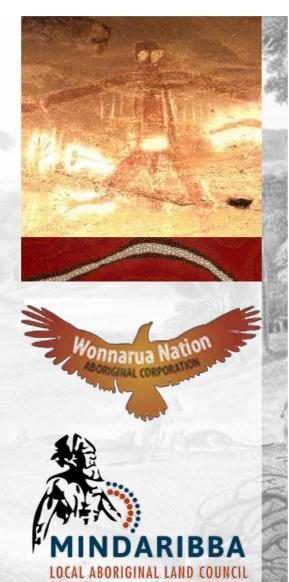
The Wonnarua people are the traditional custodians of Boun - the 'place of the Bittern' - which today is known as Maitland. Their traditional territory, estimated to comprise an area extending over 5,200 km2, spreads from the Upper Hunter River above Maitland, west to the Great Dividing Range, towards Wollombi.

As part of their belief system, Baiami, is the creator of all things and the Keeper of the Valley, for the Wonnarua. Baime also created Kawal, (the wedged tail eagle) to watch over the people, and the mighty river, Coquun to sustain them. The ethnographic literature from the 1800s, describes the vegetation of the Maitland area as 'luxuriant' rainforest and thick scrub flanking the Hunter River; tracts of dense brush and forest with overlapping canopies and vine thickets.

References were also made to the rich fertility of the alluvial soils of the floodplain and to the various aquatic habitats such as open swamps and wetlands, oxbows, natural levees, silted flood channels, and a network of lagoons that fed into the Hunter River.

In the hinterland and further up the Valley, the landscape was more open, characterised by extensive, park-like grasslands and open woodland. Coupled with its warm-temperate climate, mild winters and reliable rainfall, the landscape of the Maitland region would have been highly conducive to the hunter-gatherer lifestyle of the Wonnarua prior to colonisation.

The Mindaribba Local Area Land Council, now administers the interests of the Wonnarua in the Maitland area.



Designing with Country is emphasised throughout the design process through workshops with the Local Aboriginal Land Council and community groups. Dhiira was engaged by SHAC in June 2023 who has recommended the following dominant design themes be incorporated into the project moving forward:

REFLECT COUNTRY

Notions of creative application, reflecting the significance of country and storytelling are embedded into the built environment, through subtle and direct means

ABORIGINAL EDUCATION

Co-designing space and place for Aboriginal, and all students to learn under the Aboriginal terms of reference

INTEGRATION OF CULTURE

How the local Aboriginal community will use, interact and participate in the space both through social and economic interests

MATERIALITY

Aboriginal-led co-design principles of managing material, culture and heritage and sourcing of material

An **Aboriginal Heritage Due Diligence Assessment** was undertaken on 16/03/23 by EMM Consulting. A summary of the findings is below:

- There are no registered Aboriginal Heritage sites within the study area, however, there are 36 registered sites, objects or places within the region
- Potential Aboriginal objects and sites may occur in the study area
- The potential for Aboriginal objects is reduced due to the level of land disturbance that has occurred within the study area
- An isolated milky quartz flake was identified during site inspection which was verified to be of Aboriginal Origin
- The proposed activities is considered to have a low risk of harming Aboriginal Objects, but activities must proceed with caution
- The site of the identified Aboriginal object must be avoided by the proposed activies or have further assessment completed

A summary of the consultation process to date is below:

01 March, 2023 - Initial contact made with Sonia Sharpe, Aboriginal Community Liason Officer for the Department of Education

27 April, 2023 - First meeting with Key Aboriginal Stakeholders and project team.

12 May, 2023 - Walk on Country scheduled with Key Aboriginal Stakeholders and project team.





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Green Star

Green Star is an internationally recognised rating system developed by the Green Building Council of Australia, that delivers independent verification of sustainable outcomes throughout the life cycle of the built environment.

Green Star - Design & As Built:

Is a holistic rating tool for the design and construction of new buildings and major refurbishments. It assesses the sustainability attributes of a building through the following nine categories.

'Green Star - Design & As Built v1.3' certification identifies projects that have demonstrated the achievement of a specific level of sustainability. The rating describes to the industry the sustainability attributes of the project in terms that are widely understood and accepted.

DESIGN PRINCIPLES ACHIEVED:

- Short elevation to west
- Sunshading to northern elevation, outside external envelope
- Addressing heat island affect in landscape
- Section J targets
- ✓ Targeting a Green Star 4 Star rating
- Targeting a 10% reduction in green house gas emissions associated with energy use on the project (Energy modelling is currently being undertaken). This is being done my incorporative passive design principles, energy efficient lighting and control, use of efficient HVAC systems and equipment
- Solar PV system to be incorporated with battery storage
 - High level of daylight in all primary occupied spaces (Daylight modelling currently being undertaken)
- Good level of thermal comfort in permanent learning spaces and libraries (Thermal modelling currently being undertaken)
- ✓ Climate Change mitigation measures incorporated in design
- Inclusion of rainwater harvesting and tank storage
- Fostering connections through community use of the facilities and provision of open play spaces for outdoor learning
- Use of low carbon materials for reduced embodied carbon on the project



MANAGEMENT

Aims to encourage and reward the adoption of practices and processes that support best practice sustainability outcomes throughout the different phases of a project's design, construction and ongoing operation.



TRANSPORT

Aims to reward projects that facilitate a reduction on the dependency of private car use as an important means of reducing overall greenhouse gas emissions, as well as to encourage the provision of alternative forms of transportation.



LAND USE & ECOLOGY

Aims to reduce the negative impacts on sites' ecological value as a result of urban development and reward projects that minimise harm and enhance the quality of local ecology.



INDOOR ENVIRONMENT QUALITY (IEQ)

Aims to encourage and reward initiatives that enhance the comfort and well-being of occupants. The credits within this category address issues such as air quality, thermal comfort and acoustic comfort.



WATER

Aims to encourage and reward initiatives that reduce the consumption of potable water through measures such as the incorporation of water efficient fixtures and building systems and water re-use.



EMISSIONS

Aims to assess the environmental impacts of 'point source' pollution generated by projects and reduce their effects on the atmosphere, watercourse and native animals.



ENERGY

Aims to reward projects that are designed and constructed to reduce overall greenhouse emissions from operations by addressing energy demand reduction, use efficiency and generation from alternative sources.



MATERIAL

Aims to address the consumption of resources for the project, by encouraging the selection of low-impact materials.



INNOVATION

Aims to recognise the implementation of innovative practices, processes and strategies that promote sustainability in the built environment.





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Mechanical and Environmental Sustainability Design



SOURCE: Environmentally Sustainable Development Report - ARCADIS September 2023

Proposed Initiatives:

Arcadis has prepared a Sustainable Development Plan (SDP) - Phase 3 Schematic Design which outlines potential ESD opportunities which considers requirements under the EFSG, NSW Government Net Zero Plan, GREP, and Green Star Buildings Framework. These opportunities are outlined below:

1. Indoor Environment Quality

- Low VOC paints
- Optimised building insulation
- Low-e, double-glazed window systems
- Natural ventilation where possible

2. Water

- Landscape with native species which are drought tolerant
- Efficient water fixtures and appliances to meet prescribed WELs ratings

3. Energy

- Optimised building insulation
- Low-e, double-glazed window systems
- Smart monitoring systems to control lighting and mechanical systems

4. Waste

- Labelled waste collection facilities throughout site

5. Materiality

- Recycled and reused materials
- Appropriate material selection to reduce absorption of heat

6. Connection to Country

- Native plant species that are Indigenous to Wonnarua Country and provide habitat and food for native fauna

7. Climate Change

- Climate Change Risk Assessment attached to project
- Preparation of climate change adaption and resilience plan

SOURCE: Environmentally Sustainable Development Report - ARCADIS September 2023





Terras - Landscape Vision



CONNECTION TO COUNTRY



As a landscape architecture practice that deals with land, places, culture, history and the natural environment, everything we do is on Country and it is our responsibility to care for country. We are committed to understand more about the Traditional Owners of this land, and their deep cultural connections to Country. Our ambition is to:

- Reduce the impacts of natural events through sustainable land and water use practices
- Value and respect Aboriginal cultural knowledge and language and engage with truth
- Ensure Country is cared for appropriately and sensitive sites are protected

HUMAN CONNECTIONS



Provide legible and easily accessible links through the site at a human scale to encourage walking and cycling. Creating opportunities for active and passive recreation and a variety of recreation experiences.

The environments in which we live profoundly affect us. Positive relationships and connections to natural and built landscapes impact our health and well-being in a variety of ways. Including reducing stress and minimizing anxiety.

It is our intention to foster connections for the people to Live, Work, Play, Gather, and Learn.

CLIMATE POSITIVE DESIGN



As stewards of the environment, landscape architects must advocate for climate positive outcomes. As designers of the built environment we need to ensure the future of our planet by reducing carbon footprints and increasing sequestration. Climate Positive Design

- Retention of as many trees on site as possible
- Reduce demolition and recycle and reuse materials
- Reduce the extent of high carbon elements
- Maximise soft surfaces and soil root plate volumes
- Increase biodiversity
- Design for longevity
- Utilise WSUD principles

SITE SPECIFIC DESIGN



Design which preserves, enhances, and creates strong visual and physical connections to the natural features inherent to the site ,whether they are a stand of trees, the topography of a site, a body of water, or a distant view.





COLOUR APPROACH



In education facilities, function trumps fashion when selecting colour. It's also important to consider what are the children's needs?

This is an extract from SHAC's Colour in Schools Theory Research which "is not a recipe but a guide". This research guides the educational work that SHAC produces.

The following principles form SHAC's Colour in Schools Theory guide all educational work that we put forward.

- Colour Approach
- Colours in Combination
- Symbolic Meaning of Colours
- Colour and Activity
- 60 / 30 / 10 Rule

SOURCES:

https://efsg.det.nsw.edu.au/

www.colorobjects.com/en/color-columns/the-colour-real/item/357-psychology-of-colour-in-theowlcation.com/academia/The-Top-Color-Schemes-for-a-School-Classroom

geiendorsed.com/blog/learning-environment/the-best-color-for-your-classroom

www.dunnedwards.com/colors/specs/posts/back-to-school-colors-for-the-classroom www.sherwin-williams.com/architects-specifiers-designers/education/project-profiles/sw-article-pro-

Mahnke, F. 1996 Color, Environment & Human Response

COLOURS IN COMBINATION



In beige or white environments, we are under stimulated, which can be just as unpleasant as being overstimulated. In both cases we can become restless and have trouble concentrating and also makes us extremely emotional.

Colours are usually used in combination, and the contrast between those colours influences us psychologically. When several colours are used in combination, the pairing is more pleasant the larger the contrast in brightness between the colours with roughly the same saturation. We recommend a balance between subtle tones and a touch of dynamic colour.

COLOUR AND ACTIVITY



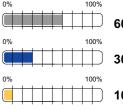
The way colour is used in a space directly influences how we move through it. Activity level in a space can be readily predicted from how energizing the colours in a space are. Select colour based on area / use of room, orientation, climate, age and how many students in the room. Colours can be used to encourage a desired activity or to provide an anecdote for that activity. For example, imagine a playroom space where children will be active-it can be painted an energizing colour to encourage play or a relaxing colour to help manage the play-generated excitement of the children. The designer (and the parents of those children) must identify and encourage the desired behaviour. When selecting colours also consider eye strain eg creams, off whites and beiges over stark white, creating surroundings that are conductive to study, and promoting physical and mental health. Lighting is a factor which also needs to be considered.

60 / 30 / 10 GUIDE



An equilibrium must be struck, we recommend the 60 / 30 / 10 guide. 60% main colour or neutrals, 30% as a dynamic opposite to the main colour and 10% as a dash of an accent colour or finish.

The bar chart below demonstrates the 60/30/10 guide as implmented in photo 04.



60% main colour

30% opposite of the main colour

10% dash of an accent colour or finish

- 01 St Patrick's Primary School, Lochinvar, SHAC
- 02 St Philip's Christian College, Senior Building, Cessnock, SHAC
 03 St Philip's Christian College, Senior Building, Port Stephens, SHAC
- 04 St Bede's Catholic College, Chisholm, SHAC





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Biophilic Design

Biophilic Design is the expression of the inherent human need to affiliate with nature in the design of the built environment. The design method stems from biophilia, our inherent biological connection with nature. It considers the actual contact to environmental features, the organic, non-living and implied elements of nature in a space.

Within a school context, connection with nature provides mental relief and feelings of wellbeing. Biophilic design is consider and various scales, impacts, locations and types including landscape strategies, building from, pathway, moment and finishes.

1. Environmental Features

- Surrounding waterways, tributaries & fertile soils
- Local ecologies
- Capturing surrounding geological memories

2. Place-based Relationship

- Cultural history, significance and occupation of the site
- First Nations People connection to country: Capture the spirit of Country

3. Natural Patterns and Processes

- Sensory experience: Sight, touch, smell
- Growth, decay, change & rebirth
- Transitional

4. Natural Shapes & Forms

- Play with light, reflection, shadow
- Harmony of shapes & forms
- Spaciousness vs containment

5. Nature in Space

- Utilising local motifs, palettes & forms
- Inspiration of local flora & fauna in Architectural concept & form
- Direct & seamless integration of the interior & exterior

6. Natural Materials

- Low non-volatile organics
- Endemic species
- Low Carbon footprint / embodied energy
- recycled content
- Recyclable / life cycle

7. Evolved Human-Nature Relationship

- Prospect & refuge: Openness & retreat
- Order & complexity
- Exploration, discovery & spirituality

ENVIRONMENTAL FEATURES





NATURAL SHAPES AND FORMS

PLACE-BASED RELATIONSHIP





NATURE IN SPACE & NATURAL MATERIALS

NATURAL PATTERNS AND PROCESS





EVOLED HUMAN-NATURE RELATIONSHIP





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EFSG Planning

When planning the location of facilities, the EFSG provides relationship guidelines to highlight important connections and adjacencies which capture the following key considerations:

- Activate all street frontage for drop off, bus stop, pedestrian access and connection to adjacent Public School
- Multi-storey solutions should consider what functions need to be readily accessed from the entry and ground floor, including deliveries and heavy materials.
- Administration / Staff consolidation and proximity to entrance.
- Potential for controlled community use of Hall, Canteen and Library.
- Equitable access to learning spaces and library.
- Consolidation of precincts and connection to outdoor.

The following diagram is a product of EFSG Primary Site Relationship and SHAC's acquired knowledge of the project. It is therefore indicative only and is to be used as a guide when determining the layout and site relationships for the new school.

SHAC have been able to use the SINSW Standard Hub layouts as a starting point for the internal layout of buildings onsite. Where appropriate to the site, these have been adopted, noting departures on the hall layout in particular.



LIBRARY HUB



LEARNING SUPPORT HUB



ADMINISTRATION HUB



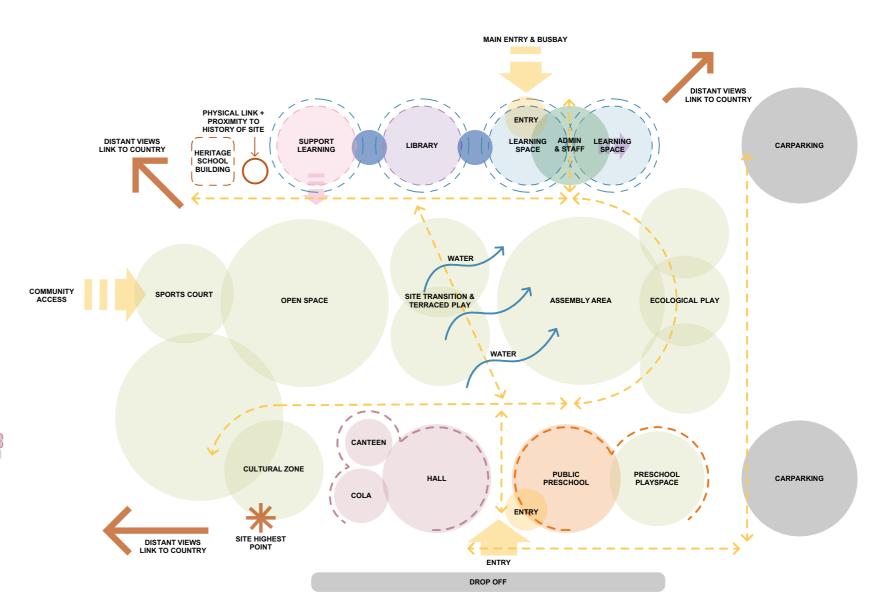
GENERAL LEARNING HUB



HALL, CANTEEN, OSHC & COLA



PUBLIC PRE-SCHOOL







Motif: Eastern Rosella

THE VIBRANT EASTERN ROSELLA IS CENTRAL TO THE GILLIESTON PUBLIC SCHOOL COMMUNITY. THEIR MASCOT CAPTAIN GILLO GOVERNS A SAFE, RESPECTFUL LEARNING ENVIRONMENT. THE EASTERN ROSELLA IS NATIVE TO THE SOUTHEASTERN COAST OF AUSTRALIA AND EMBLEMATIC OF RESILIENCE AND ADAPTABILITY.

The Eastern Rosella is a part of the parrot species and is easily identified for its white cheeks and vibrant red, yellow, green, blue and back colours. Typically found gliding between the trees, fanning their colourful wings and tails as they land, Eastern Rosellas tend to gather in small groups as they graze on seeds, fruit, insects and berries.

KEY TAKEAWAYS

Habitat

- School opportunity to repair, restore and embellish (trees, grasses, nature, fruits)
- Create a place with public and private spaces, serving as a central gathering point for the local and broader community

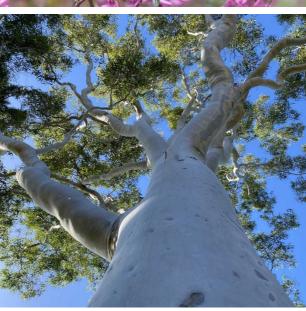
Colour

 Draw inspiration on colour/highlights for interior and exterior architecture to reflect the birds in a natural setting.

Nest

- Create a place that is a home away from home
- Foster identity, safety and comfort













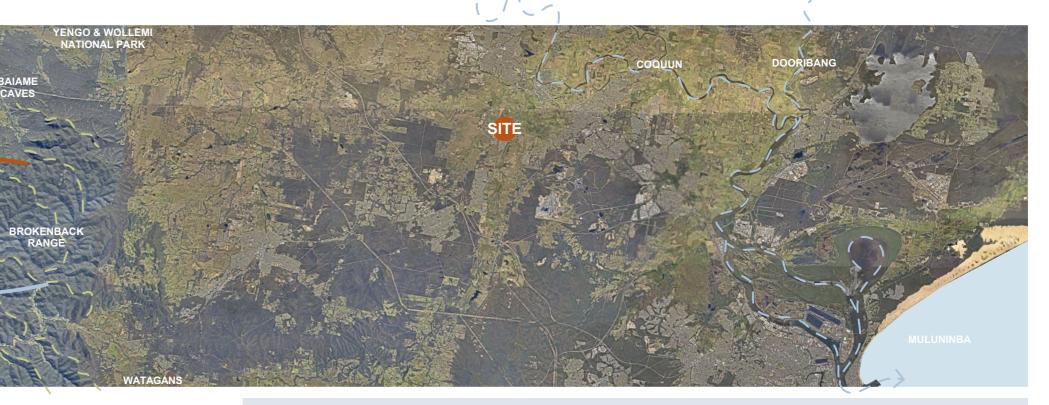




Motif: Peaks & Valleys







NESTLED WITHIN THE TOPOGRAPHICAL BACKBONE OF THE WATAGANS AND BROKENBACK RANGE, THE MOTIF OF PEAKS AND VALLEYS CAN BE APPLIED TO THE NATURE OF AN EDUCATIONAL SITE - GILLIESTON PS - A PLACE TO HOLD, RAISE AND NURTURE THE YOUNG.

Wollombi Brook and the Hunter River meander through the Valley, stitching the mountains to the coastline. A watershed; the dividing line of high ground; uniting sky and catchment basins; the nest.

A dreamtime story from the Wonnarua explains how the hills and rivers in the Hunter Valley were created by a spirit called Baiame. "The Valley was always there in the Dreaming, though mountains, trees, animals and people were not yet formed. Everything was sleeping. Until the Great Sky Spirit Baiame opened his eyes." - Wonnarua Dreamtime Legend.

KEY TAKEAWAYS

Ridges and Lagoons

- The distant ridgelines of the Hunter Valley viewed from the Gillieston site and the close connection to water
- Periodic flooding inundates the floodplain, nourishing it's systems, until eventually filtering back into the waterways

Topography

• Create an architectural form inspired by and working with the highs and lows of the land

Ecosystem/cycle

Opportunity for education embedded in the design





Motif: Seasonal Place of Abundance

PERIODIC CHANGES IN THE ENVIRONMENT ARE SYMBOLS OF SEASONAL VARIATION. USED FOR THOUSANDS OF YEARS BY INDIGENOUS AUSTRALIANS TO INDICATE MOVEMENTS, CULTURAL ACTIVITIES, AND HUNTING - OPPORTUNITIES TO REFRAME OUR UNDERSTANDING OF THE LAND AND ITS IMPACTS ON DESIGN AND THE LONGER-TERM OUTCOMES ON PEOPLE, CULTURE AND COUNTRY.

With the population in Gillieston Heights increasing, it boasts a strong local and rural identity featuring numerous waterways, an abundance of local native vegetation, highly valued land resources, as well as areas of cultural and scenic value.

Prior to European settlement, the banks of the Hunter River in the Maitland area were once lined with dense cedar forests and was known for its low-lying flood-prone land.

KEY TAKEAWAYS

Endemic Species

 Explore local flora and fauna and their applications, connecting to the traditions of the Wonnarua nation

Waterways

- Representing life, a place of gathering, purity, nutrients and cleansing
- Water contains diverse and natural environments that support domestic water use, agriculture, tourism and recreation, mining and the cultural values and practices of local Aboriginal Traditional Owners.

Climatic Response

 Work with Country and implement proper land and water management and sustainable practices











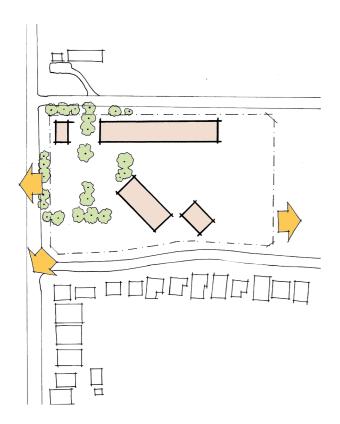






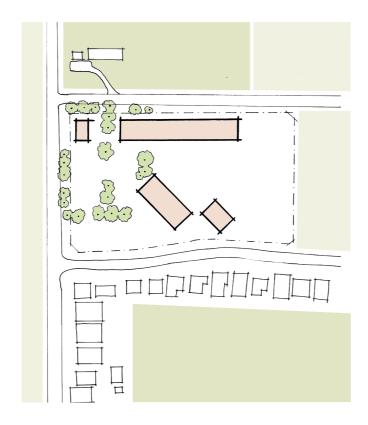


Macro Site Design Principles



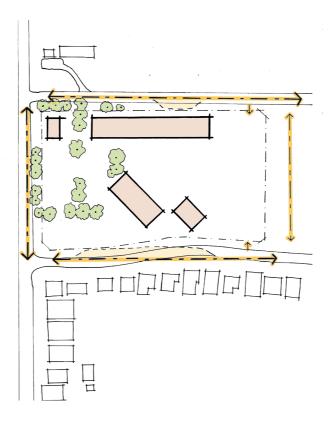


- Take advantage of Gillieston Heights Urban Release Area plans and create a street presence for the school
- Create a community interface along Northview street with access to shared facilities, and parking
- Celebrate school heritage and existing community connection



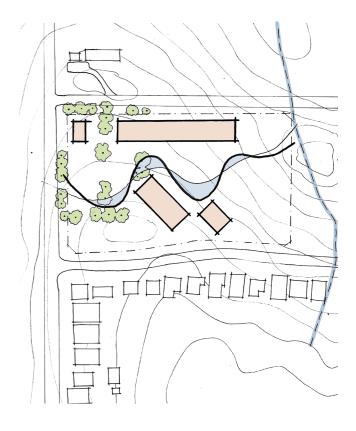
GREEN URBAN SPACES

- Tiered play spaces to suit site topography
- Create multiple play spaces for different purposes and student needs
- Protect and celebrate existing vegetation
- Outlooks to West towards the Broken Back Mountain Range and water courses



TRAFFIC AND ROAD SOLUTIONS

- Parking, kiss n drop and bus drop off zones on separate sides of the site to minimise congestion and increase traffic flow
- Provision of future road widening and infrastructure upgrades to suit area demand
- Equitable access to school from drop off and parking



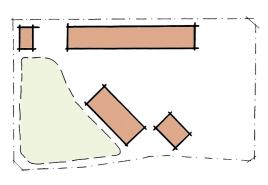
NATURAL DRAINAGE PATTERNS

- Natural slope down towards the north-east and northwest corners of the site
- Consideration of site topography and how it affects built form
- Existing drainage patterns respected
- Easement in NE corner utilised for drainage and carparking space



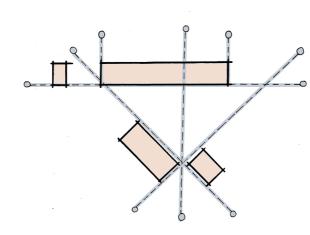


Micro Site Design Principles



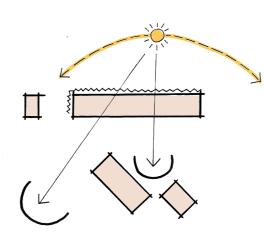
FORM & URBAN RESPONSE

- Repetition and economy of scale
- Simplified and repeated details
- Aesthetically pleasing



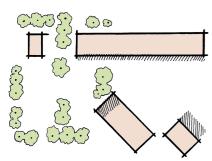
GRID & STRUCTURE

- Structural efficiency
- Rationalised structural spans



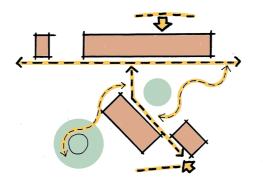
PASSIVE DESIGN

- Narrow linear forms allow good light and air penetration
- Central Courtyard with shade and shelter



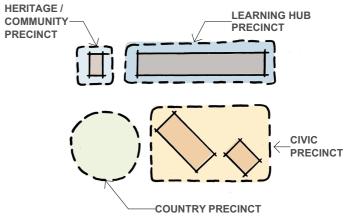
SHADE & SHELTER

- Utilise and celebrate existing vegetation on site
- Create ways to safely traverse across the site
- Protection from natural harsh climate



CONNECTIVITY

- Clear school precincts and progression
- Sense of place and purpose
- Allows safe access and



PRECINCTS

- Visual links to surrounding landscape
- Activation of circulation corridors
- Allows light and ventilation to penetrate
- Allow for future vehicle links





CPTED

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN PRINCIPLES (CPTED)

According to the Educational Facilities Standards and Guidelines (EFSG) "major problems affecting schools, with enormous cost, are arson, theft and vandalism. The impact of these activities is not only measured in financial terms but also in the effect on student learning outcomes, interruptions to operations and emotional trauma experienced by student, teachers and parents."

The security risk for all projects must be minimised.

Crime Prevention Through Environmental Design (CPTED) guidelines have been outlined by the Crime Prevention & the Assessment of Development Application report published in 2001 by the former Department of Urban Affairs & Planning, (now the Department of Planning, Industry and Environment)

CPTED seeks to influence the design of buildings & places to:

- increase the perception of risk to criminals by increasing the possibility of detection, challenge & capture
- increase the effort required to commit crime by increasing the time, energy, or resources which need to be expended
- reduce the potential rewards of crime by minimising, removing or concealing 'crime benefits'
- remove conditions that create confusion about required norms of behaviour

The four principles of CPTED are:

- 1. survelliance
- 2. access control
- 3. terrirorial reinforcement
- 4. space management

1. Surveillance

As well as deterring crime, surveillance is important for ensuring the safety of the students. Natural & technical surveillance

- staff to see what students are doing
- students to see what students are doing
- the community to detect potential trespassers out of hours

Window outlook from buildings in all directions of the site. Outdoor, centralised circulation spines and permeable barriers, fencing & building screening increases the perception of human presence and/or maximises visibility.

Design considerations that achieve deterrence in the GPS project include:

- S1 clear sightlines between public & private spaces
- S2 clear sightlines to toilets S3 effective lighting of public spaces S4 landscaping that makes the place attractive, but does not provide offenders with places to hide or entrap victims

2. Territorial Reinforcement

Areas that are well-maintained & well-used generate a feeling of "ownership" which encourages people to inhabit the space, reducing the opportunity for crime & increasing the risk to criminals. Community ownership also increases the likelihood that people who witness crimes will report it.

Zoning and fencing act as physical & symbolic boundary makers, helping to delineate space from shared, public space to private, school space. Meanwhile, the inclusion of Public Art and facade treatments express ownership & pride, consequently putting others on alert that the area is owned and cared for.

Territorial reinforcement included in this design are:

- TR1 design that encourages people to gather in public space & to feel some responsibility for its use & condition
- TR2 design with clear transitions & boundaries between public & private
- TR3 clear design cues on who is to use space & what it is to be used for

3. Access Control:

Physical & symbolic barriers can be used to attract, channel, or restrict the movement of people. They minimise the opportunities for crime & increase the effort required to commit crime.

Physical barriers (fencing, walls, locked doors etc.) & symbolic boundaries (landscaping, level changes etc.) are important to clearly indicate where people are & are not permitted to go. However, these barriers must not be overly hostile.

Fencing is the predominant feature to provide protection to the site boundary, with small zones of open public domain utilised as the access control to the main entry at Admin and out of hours entry to OOSH & Preschool. Other design methods such as secure gate lines & pathway configuration provide controlled access points. Cameras, colour, signage & lighting help further with site access orientation.

Effective access control will be incorporated on the GPS site by creating:

- AC1 landscapes & physical locations that channel & group pedestrians into targeted areas
- AC2 public spaces which attract, rather than discourage people from gathering AC3 restricted access to internal areas or high-risk areas

4. Space Management

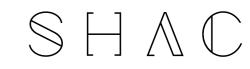
Related to territorial reinforcement, space management ensures that spaces are appropriately utilised & maintained.

The 'front of house' location of administration to lower ground level and the library to ground level provides casual supervision throughout the school during offsite hours. By pushing built form to the northern & southern boundaries ensures interior spaces are promoted with activities.

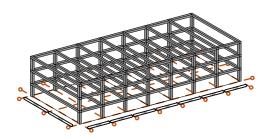
Space management strategies utilised in the GPS project include:

- activity coordination
- site cleanliness
- rapid repair of vandalism & graffiti
- the removal or refurbishment of decayed physical assets

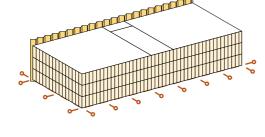




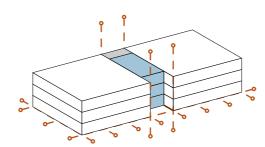
Building Envelope Concept



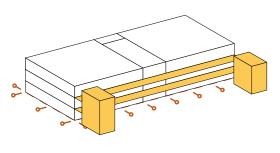
GRID & MODULES



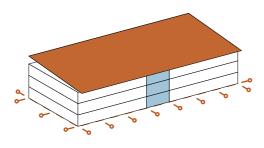
FACADE SYSTEM + SCREEN



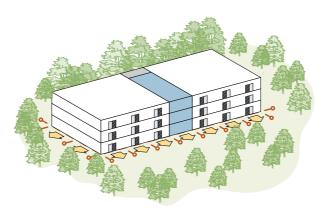
WET AREA & SERVICE CORES CREATE FACADE ARTICULATION



CIRCULATION & LINKS



ROOF DESIGN



INDOOR / OUTDOOR CONNECTION

KEY TAKEAWAYS

Grid & Modules

- The design has been developed using the MMoC standard hub layouts, based on the MMoC 9m x 7.5m grid structural and planning grid.
- The MMoC standard hub layouts have been adjusted where required due to site conditions, functional relationships, and service requirements.

Facade System + Screen

- The design has been developed using the standardised Wall panels approach which integrates framing, linings, insulation, windows and louvres to the northern facade. But with site specific EFSG compliant approach to the screening element. The design proposes the External Façade material to be brick & FC Panels, which meet the EFSG requirements for a "whole of life approach, off-the-shelf materials and standard colours", whilst allowing for movement, thermal and other environmental tolerances.
- The design proposes a full elevation perforated screen to provide consistent sun shading to the full
 extent of the northern facade, whilst still allowing for access to views from internal spaces

Wet Areas & Service Cores

- Amenities and services bays are located between GLS hubs for an even distribution of student
 amenities and service/storage areas. Unisex airline-style toilets are provided on upper floors, with
 segregated cubicle toilets provided on the ground floor to cater for increased playground access/usage.
- The step in the façade provides a balanced articulation, addressing SDRP concerns regarding building mass and its proximity to Gillieston Road.

Circulation & Links

Circulation across the site connects an established network of pedestrian, bicycle and drop-off
pathways, weaving between native ecological landscaping and open play spaces. Vertical circulation
connects ground floor levels to the upper floors of the GLS Hubs including stairs and lifts.

Roof Response

The design of the roof responds to the local climate and orientation of the sun, opportunities for solar, efficient hydraulic design and visual identity of the school.

Indoor / Outdoor Connection

 Opportunities to connect with Country and use the landscape to educate students about proper land and water management and sustainable practices.



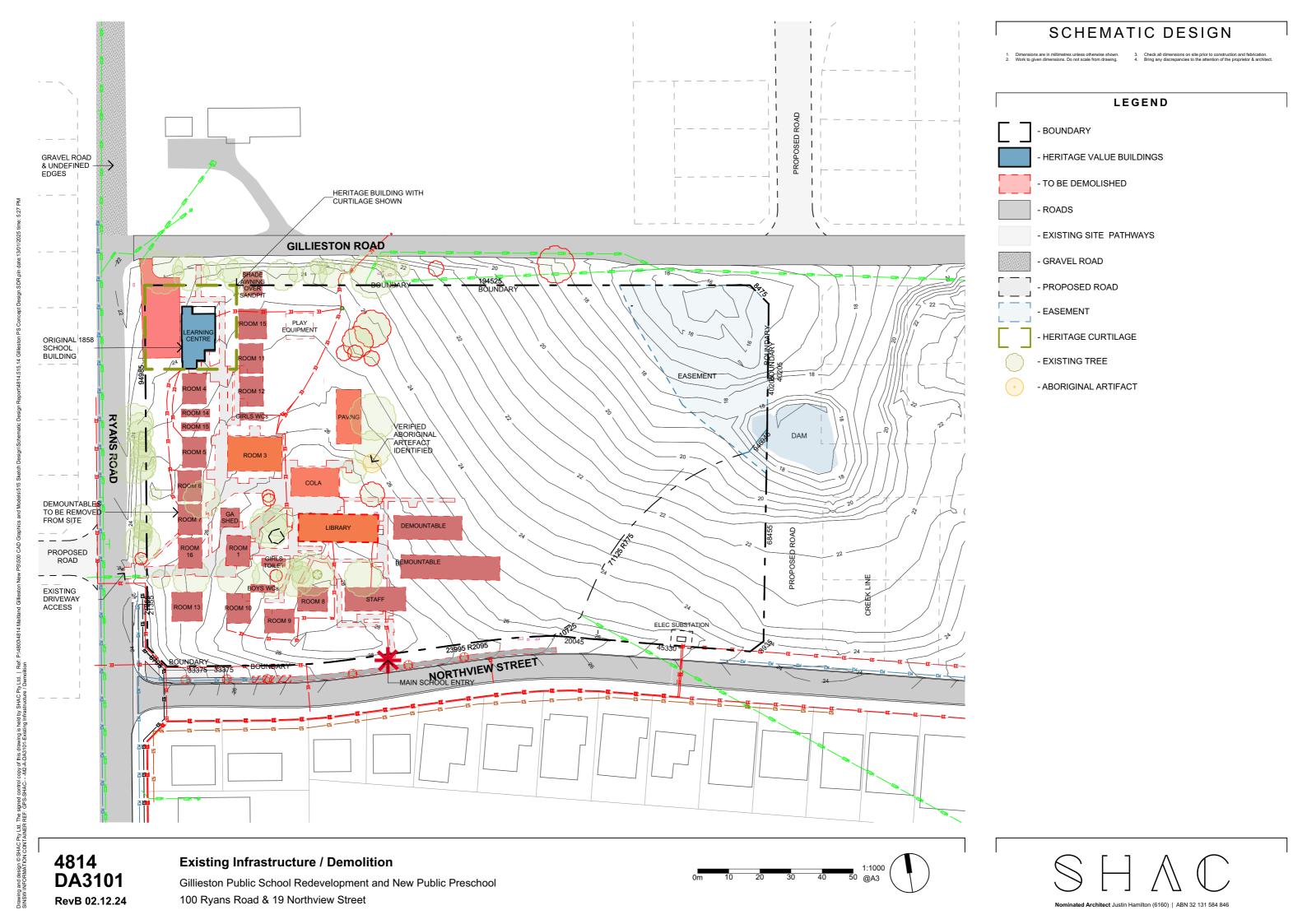


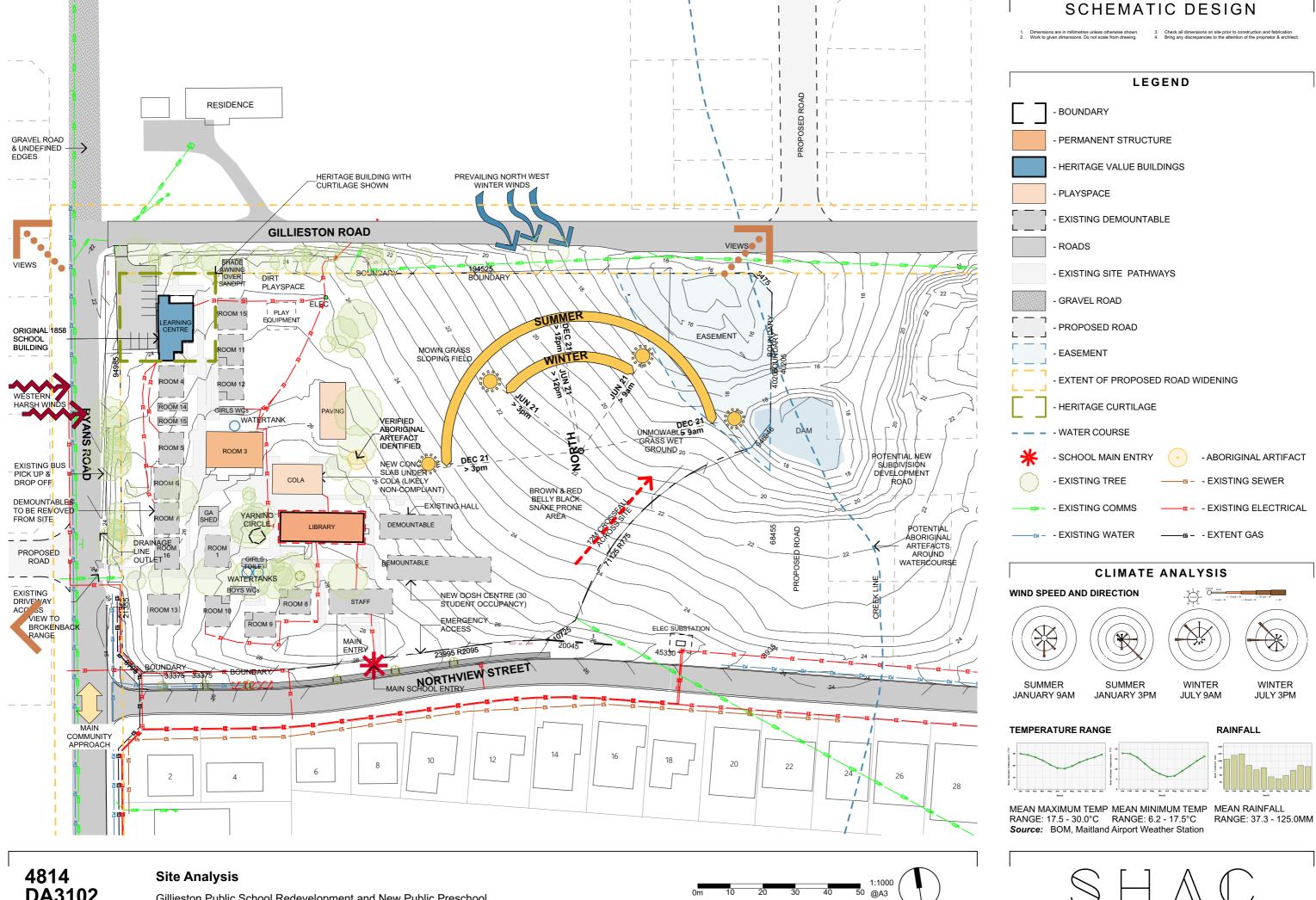
SHAPING - Placemaking

Masterplan options analysis exploring versions of site and building forms, placements, sensitivity, height, bulk, scale, proportion, circulation, site relationships and connections.

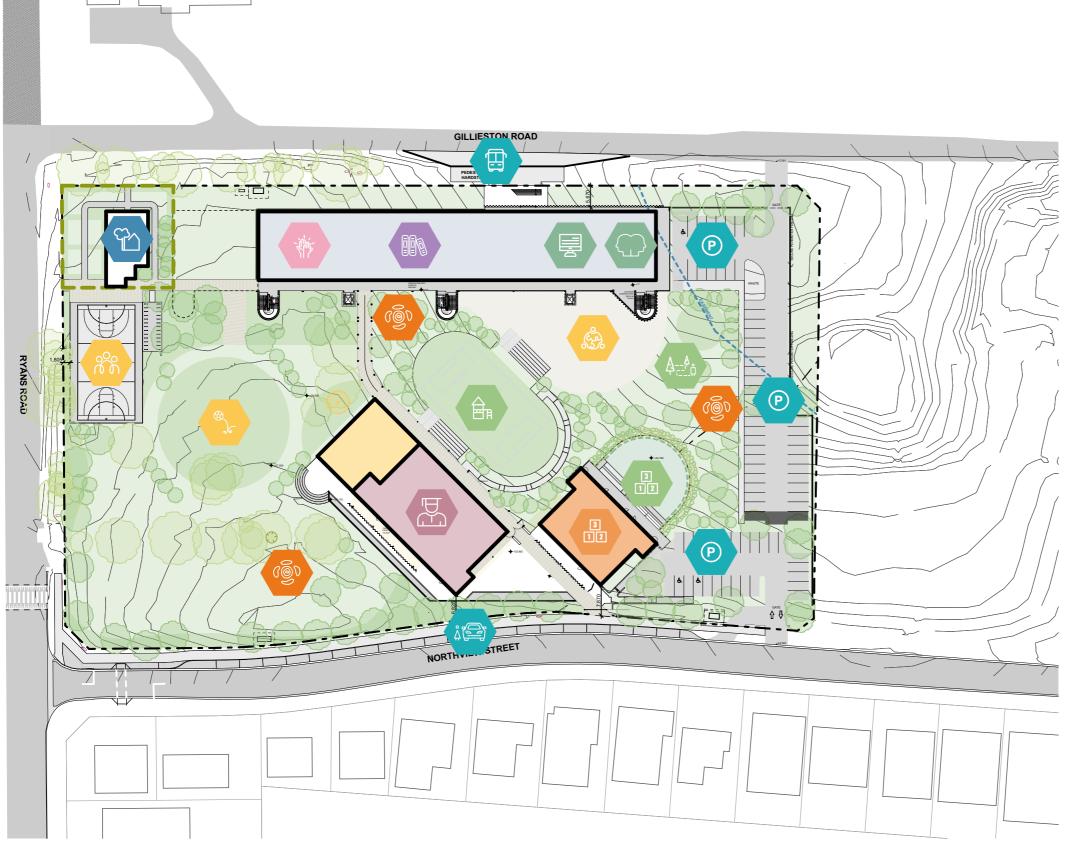








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LEGEND



PRESCHOOL



HALL, CANTEEN & OSHC



ADMINISTRATION



STAFF HUB



LIBRARY HUB



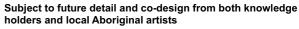
LEARNING SUPPORT



EXISTING HERITAGE BUILDING



CULTURAL ZONE / YARNING CIRCLE





PRESCHOOL PLAY



ECOLOGICAL PLAY



SITE TRANSITION & TERRACED PLAY



 ${\sf ASSEMBLYAREA}$



OPEN PLAY



SPORTS COURT - COMMUNITY USE



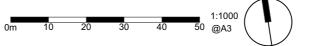
PARKING



KISS & DROP



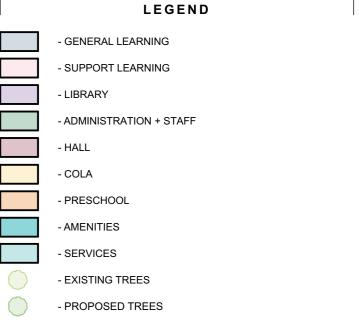
BUS BAY



PLANNING

LOWER GROUND FLOOR FACILITIES

- Busbay
- Amenities & Service Core
- Administration
- Special Programs Rooms
- Outdoor Assembly Area
- **Ecological Play**
- Carparking
- Covered & Uncovered Circulation



4814 **DA3201** RevB 23.10.24

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Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street





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PLANNING

GROUND FLOOR FACILITIES

- Kiss n Drop
- 2 x General Learning Hubs
- Support Learning Hub
- Amenities & Service Core
- Library
- Communal Hall & COLA
- Public Preschool
- Open Playspace
- Carparking
- Covered & Uncovered Circulation

- GENERAL LEARNING
- SUPPORT LEARNING
- LIBRARY
- ADMINISTRATION + STAFF
- HALL
- COLA
- PRESCHOOL
- AMENITIES
- SERVICES
- EXISTING TREES
- PROPOSED TREES

LEGEND

4814 DA3202 RevB 23.10.24

Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street





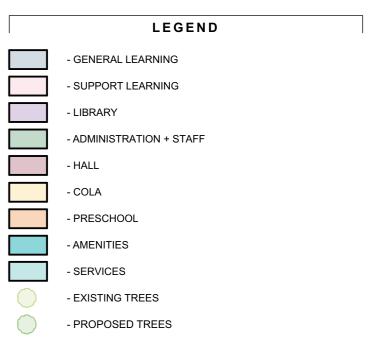
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PLANNING

FIRST FLOOR FACILITIES

- 4 x General Learning Hubs
- Amenities & Service Core
- Uncovered Circulation

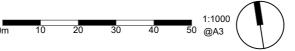


4814 DA3203 RevB 23.10.24

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First Floor Plan

Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street





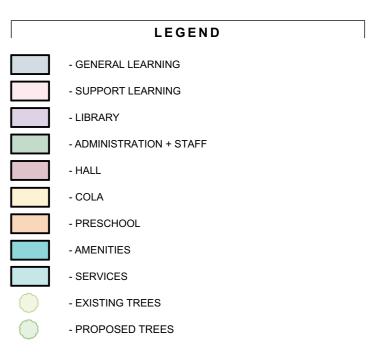
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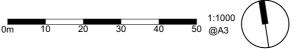
PLANNING

SECOND FLOOR FACILITIES

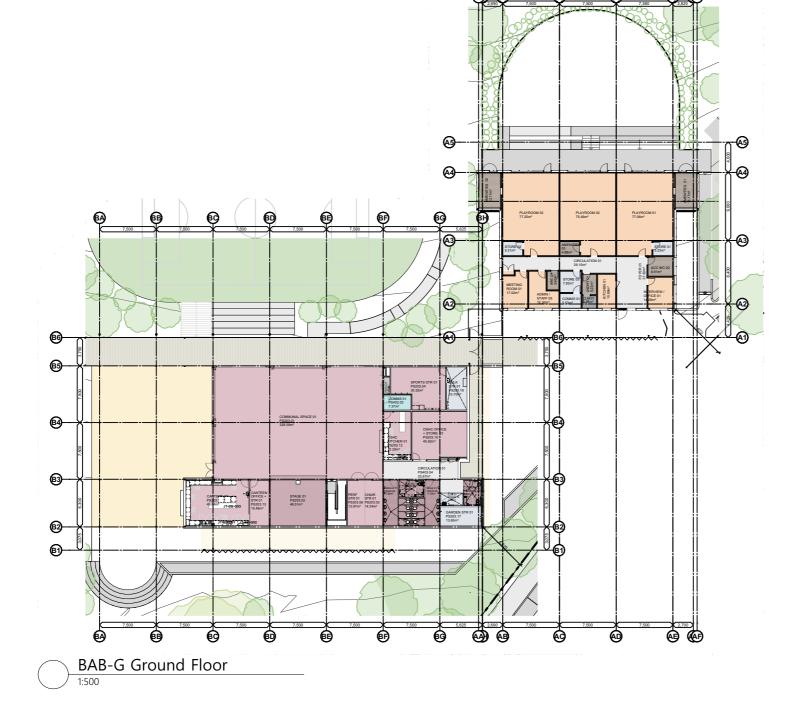
- 2 x General Learning Hubs
- Amenities & Service Core
- Uncovered Circulation



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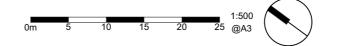








Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street



SCHEMATIC DESIGN

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	В	KR	EB	23.10.24	REF REPORT
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4814 3206 RevB 23.10.24

Proposed Floor Plans Building C

Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street





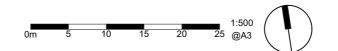
GLS 03 PS101.01 64.38m² GLS 15 PS101.01 64.25m² GLS 02 PS101.01 64.38m² GLS 04 PS101.01 63.91m² GLS 08 PS101.01 63.91m² GLS 16 PS101.01 63.78m² @ BC-L1 First Floor GLS 07 PS101.01 64.25m² GLS 04 PS101.01 63.91m² (B) (B) BC-L2 Second Floor

4814 3207 RevB 23.10.24

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Proposed Floor Plans Building C

Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street

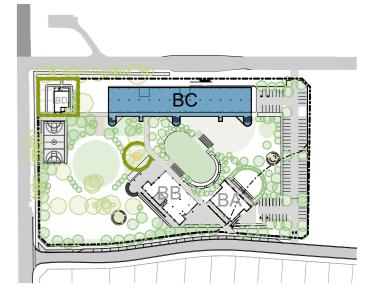


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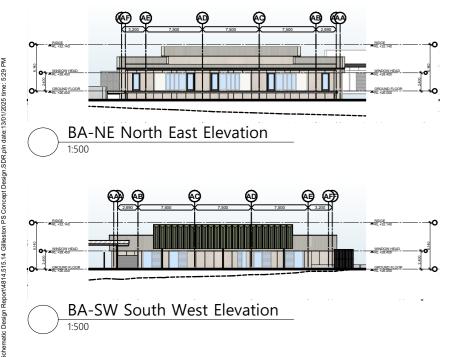
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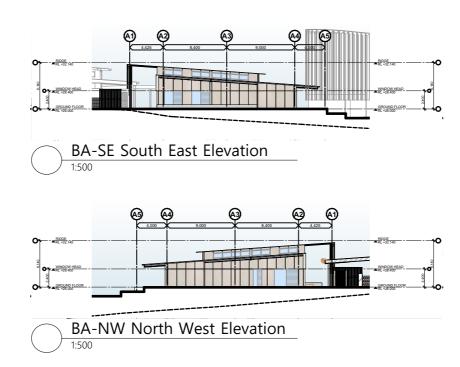
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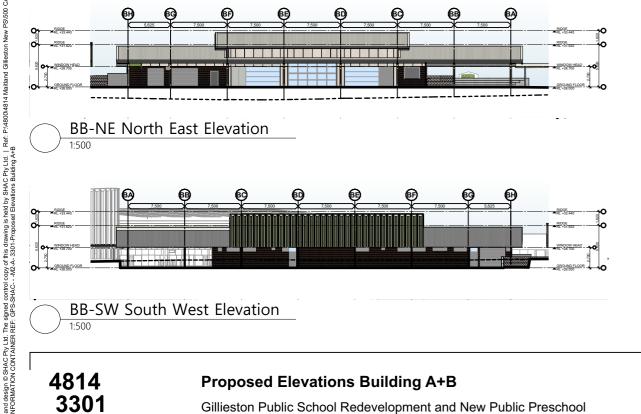
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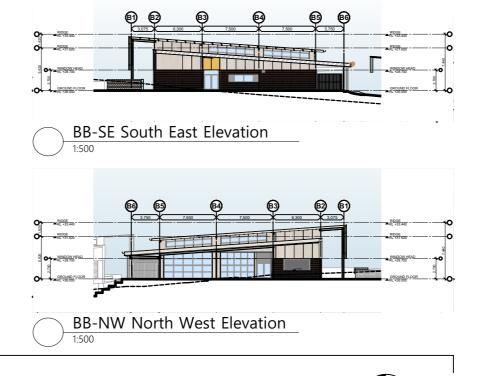








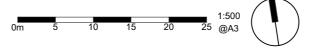




4814 3301 RevB 23.10.24

Proposed Elevations Building A+B

Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street



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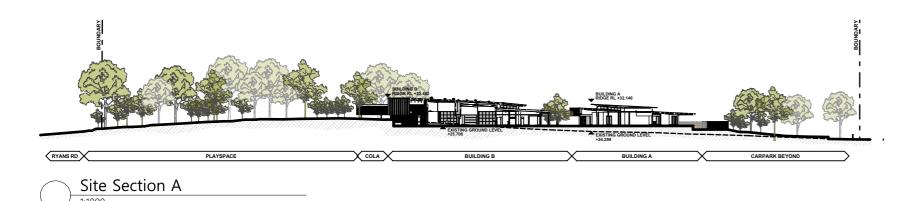


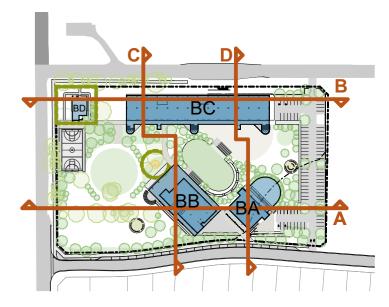


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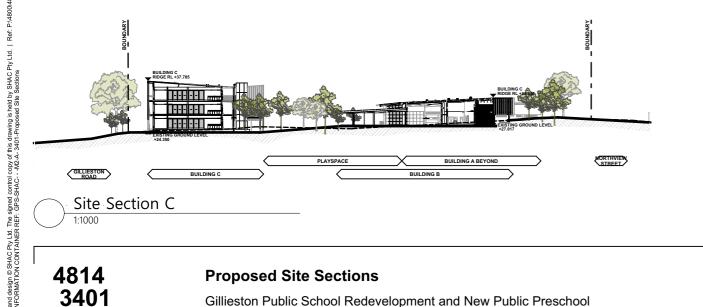








Site Section B



Site Section D

4814 3401 RevB 23.10.24

Proposed Site Sections

Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street





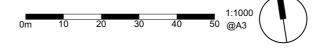
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Public Domain and Community

Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street

GILLIESTON ROAD

NORTHVIEW STREET



SCHEMATIC DESIGN

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TECHNICAL OVERLAY

Public Domain Elements

- New shared footpath on Northview Road
- Front entry forecourt on Northview Street & Gillieston Rd
- Shared Community Western Court and Heritage Building

Shared Community Uses

- Gillieston Public School has a sense of community ownership and pride which can be maintained through shared-use facilities on the school site, reinforcing the importance of community connection and the school as a public institution in a fast-growing neighbourhood.
- Shared use arrangements between SINSW and Maitland City Council TBC. Discussions on hardcourt use by public are underway with Council.
- Administration reception adjacent to the front of the school
- Community use of the hall and COLA space for public and school events to be confirmed
- Library on the lower ground floor, accessed via Gillieston Road school entry and open to community use.
- After hours access, signage and lighting TBC during later stages of the design

LEGEND



- NEW SHARED PATHS
- ENTRY FORECOURT



- HARD COURT AND OPEN PLAY SPACE



- CULTURAL ZONE



- SHARED COMMUNITY LIBRARY
- AFTER HOURS ACCESS TO HALL



- ADMINISTRATION ACESS & CONTROLLED ACCESS



- ENTRY



- SITE ACCESS



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TECHNICAL OVERLAY



Bus Stop

A new bus bay creates a new school entry point off Gillieston Road, providing equitable access for all students complying with AS1428.1 and the Disability Discrimination Act. If part of a new building proposal, lift and stair access to also be provided. Ramps will be required if added to existing campus without a new building.



Carparking

50 School Staff Carparking Space 15 Public Preschool Carparking Space (Staff calculation provided to SHAC by SINSW on 13.12.22)

The carpark in the NE corner of the site utilises the unused portion of the land, with immediate access off Gillieston Road and future access opportunities from the proposed link road. This relies on a connection to a new building and lift for full AS1428.1 access and to meet obligations under the Disability Discrimination Act. The carpark in the SE corner of the site is required to provide compliant AS1428.1 and Disability Discrimination Act access to the admin building. This could be a small visitor parking area, with staff and most school visitors being directed to the NE carpark and away from Northview Street. The carpark in the NW corner is to cater to UPS parking demands.



Kiss n Drop

11 spaces of kiss n drop zone located on Northview Street



Bicycles and Scooters

37 bicycle storage spaces located east of the Sports Court



Crossings and School Zones



Maintenance and Delivery Access

LEGEND



- FUTURE PROPOSED ROADS



- CAR PARKING



- KISS N DROP & QUEUING ZONE
- BICYCLE / SCOOTER PARKING



- MAINTENANCE / DELIVERY ACCESS



- ACTIVE TRANSPORT LINKS



- MULTIDIRECTIONAL CAR ACCESS



- NARROW CUL DE SAC
- BUSBAY DROP OFF



- ENTRY

4814 DA3502 RevA 17.09.24

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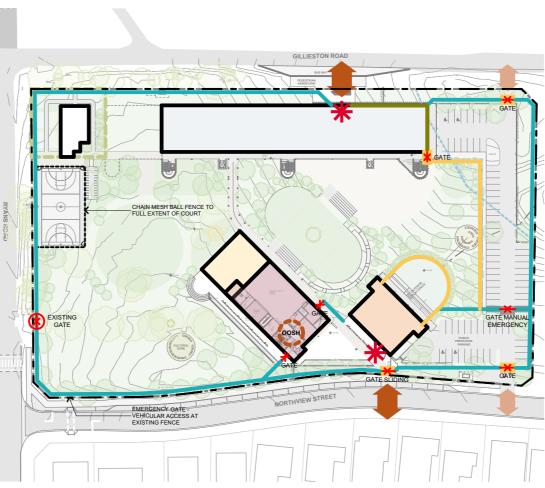
Transport and Parking

Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street





Lower Ground Floor Site Plan



Ground Floor Site Plan

4814 **DA3503** RevB 13.01.25

Access and Security

Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street



SCHEMATIC DESIGN

TECHNICAL OVERLAY

Access Control

- Security gates are located at school pedestrian and vehicular entries
- School visitors must enter through the administration reception area

Fencing Strategy

- 2150 high palisade fencing to surround areas of the school that are accessed by students during operation hours
- Lower secondary fencing and landscaping to protect students from entering restricted areas.
- Access gates are secure at all times at all entries and carparks

Operating Hours

Main School: 8:45am to 3:05pm 8:45am to 3:05pm Preschool: Before School Care: 6:00am to 8:35am After School Care: 3:05am to 6:00pm Vacation Care (during school hoildays): 6:00am to 6:00pm



BOUNDARY

2150 HIGH PALISADE FENCING

BUILDING AS FENCELINE

PEDESTRIAN ENTRY

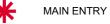
SECURITY GATE

LOW LEVEL FENCING - 1.2m HIGH

VEHICLE ENTRY

ACCESS CONTROL

AFTER HOURS USE





TECHNICAL OVERLAY

Circulation

- Front entry forecourt on Northview Street for Public Preschool + afterhours access to OOSH
- Front entry forecourt on Gillieston Rd for Main School
- Horizontal and vertical circulation along the southern face of Building C
- Cover walkway as the main circulation spine connecting Buildings A + B to Building C.
- Tiered site landscaping allows the site to be transversed across
- Vehicular access is provided from Northview Street and Gillieston Rd.

LEGEND

BOUNDARY

MAIN CIRCULATION SPINE

PRIMARY CIRCULATION SECONDARY CIRCULATION

ENTRY FORECOURTS

VERTICAL CIRCULATION

AFTER HOURS USE

PEDESTRIAN ENTRY

VEHICLE ENTRY





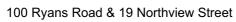


4814 **DA3505**

RevA 17.09.24

Circulation Strategy

Gillieston Public School Redevelopment and New Public Preschool





Outdoor Play Space

Gillieston Public School Redevelopment and New Public Preschool 100 Ryans Road & 19 Northview Street



SCHEMATIC DESIGN

TECHNICAL OVERLAY

Play Space

According to the EFSG, schools are required to have 10m2 of open space per student.

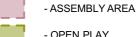
The Concept Design proposal includes a number of flat, terraced and landscaped open spaces designed in conjunction with Terras Landscape Architects. The spaces and their intended uses are outlined in Terras Landscape Architects Concept Design Report.

Total outdoor playspace: 10,227 Proposed Student population: 736 Playspace (m2) per student: 10.1

LEGEND



- ECOLOGICAL PLAY



- OPEN PLAY



- CULTURAL ZONE



- SPORTS COURT



- LEARNING SUPPORT OUTDOOR BREAKOUT SPACE

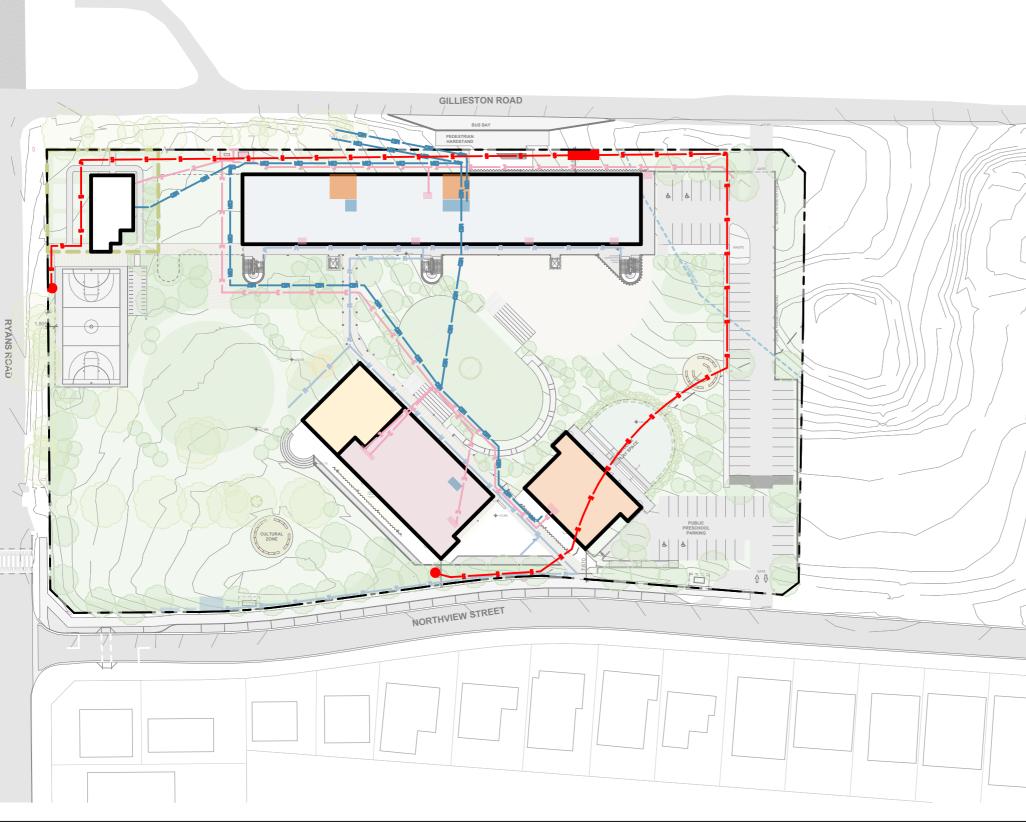


- LIBRARY OUTDOOR BREAKOUT SPACE



NORTHVIEW STREET

GILLIESTON ROAD



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TECHNICAL OVERLAY

Hydraulic

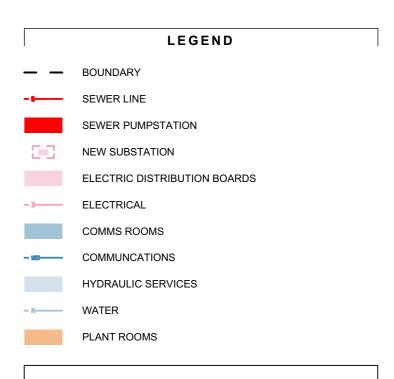
- Indicative of Hydraulic drawings provided by ACOR Consultants on the 28.08.24.
- Indicative of Sewer drawings provided by ADW Johnson on the 05.12.23.

Electrical

- Indicative of drawings provided by ARCADIS on the 28.08.24.

Mechanical

- Indicative of drawings provided by ARCADIS Consultants on the 28.08.24.







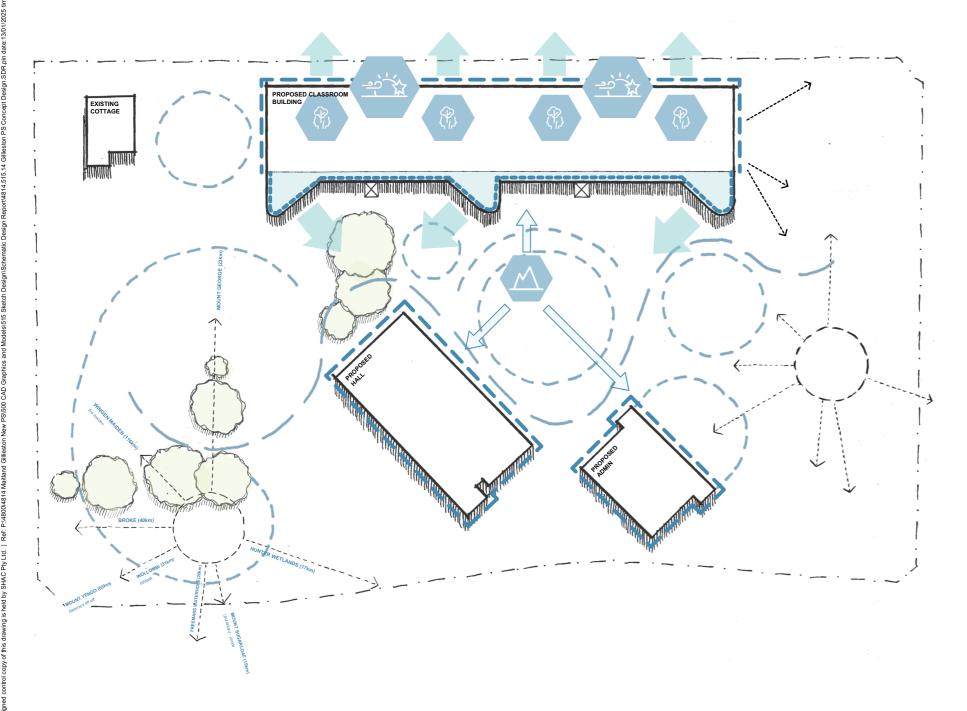






4001 Designing with Country

Reflect Country & Materiality



"Reflecting country via direct and indirect artistic application of architecture in the build and landscape of the development is encouraged"

- Dhiira (Designing with Country Report)



The building fabric looking into the site reflects the history of Country, via the Australian red cedar forest that was endemic to the site



Screens and balustrades are designed to reflect Country. Existing views of rolling hills, valleys, escarpments and mountain ranges are to be reflected in angular decks and curved screens, casting more natural shadows across the site.



External sun hoods and screens provide sun protection and filtered light internally, reflecting the protection of the forest



Picture windows to emphasise outlook, with an opportunity to glimpse an internal colour pallet reflective of native bird species (protected by the forest).



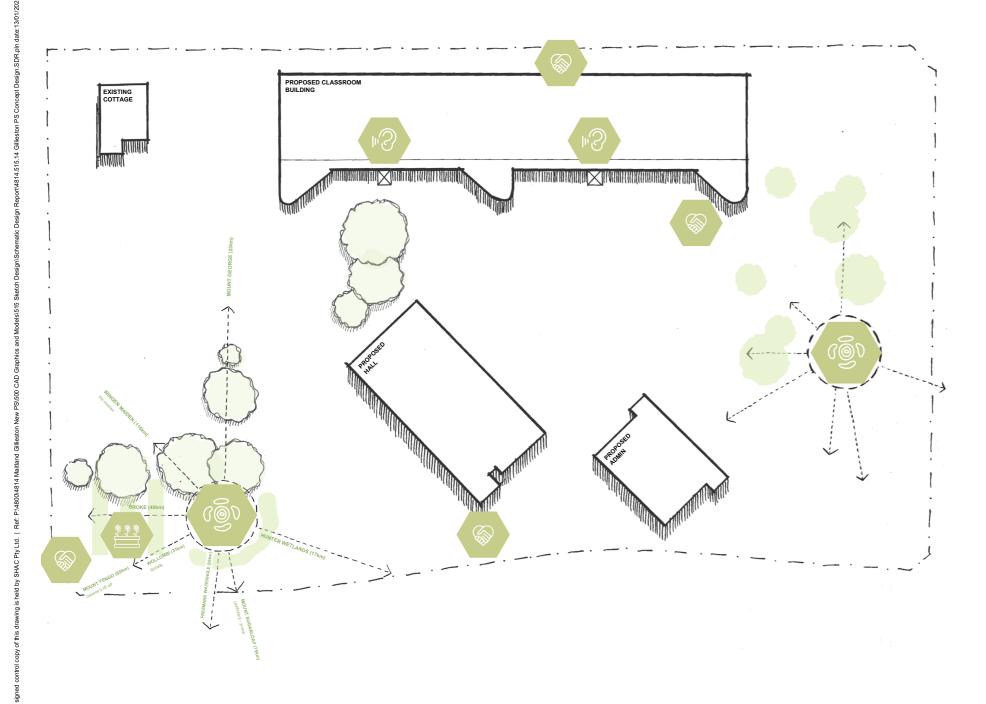
Focused vantage points provided from GLS hubs and Leaning Commons to engage students in geography





4002 Designing with Country

Integration of Culture



"Through working with local community and groups, develop ways in which culture, story and knowledge may be able to be embedded into the built environment"

- Dhiira (Designing with Country Report)



Potential cultural Mural WallSubject to future detail and co-design from both knowledge holders and local Aboriginal artists



Potential joint cultural and/or school signage



Raised garden beds and cultural education walk



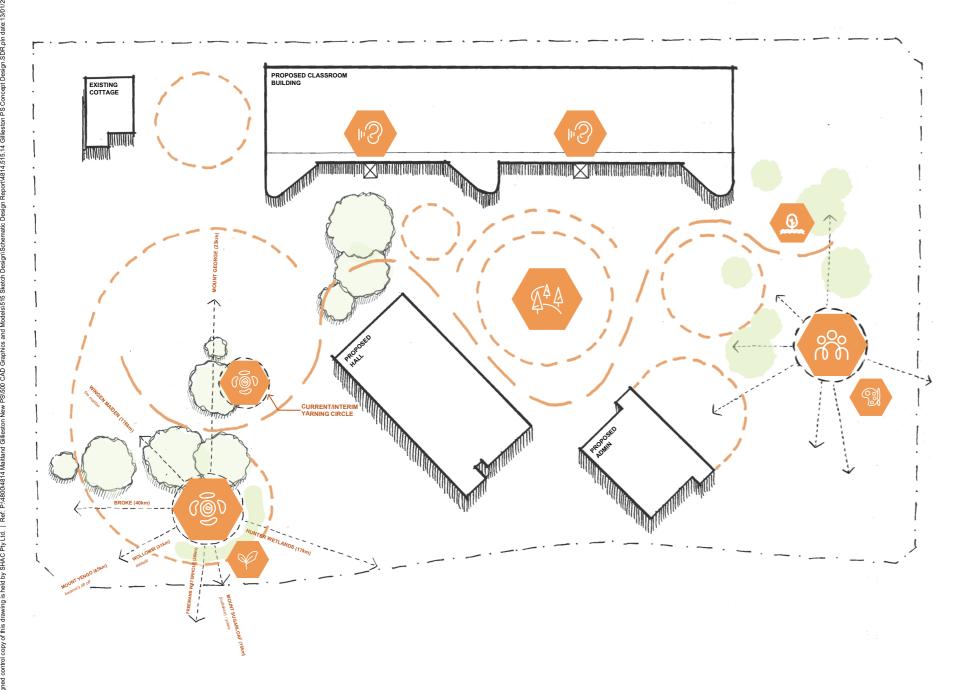
Capture vantage points to significant sites





4003 Designing with Country

Aboriginal Education



"Gillieston Public School engages in a broad range of cultural activities and programs for their large population of Aboriginal students. These programs, such as didge making, cultural excursions and other cultural activities require culturally informed spaces for kids to learn on Country".

- Dhiira (Designing with Country Report)



40-student yarning circle. Subject to future detail and co-design from both knowledge holders and local Aboriginal artists. Retain interim yarning circle until new circle screening is established



Tiered outdoor cultural whole class learning area.



Intergrated cultural education walk. Subject to future detail and co-design from both knowledge holders. Student-developed signage, native bush, food and medicines in conjunction with local Aboriginal knowledge holders



Wetland/retention and ecological play



Landscape Screen



Cultural mural wall

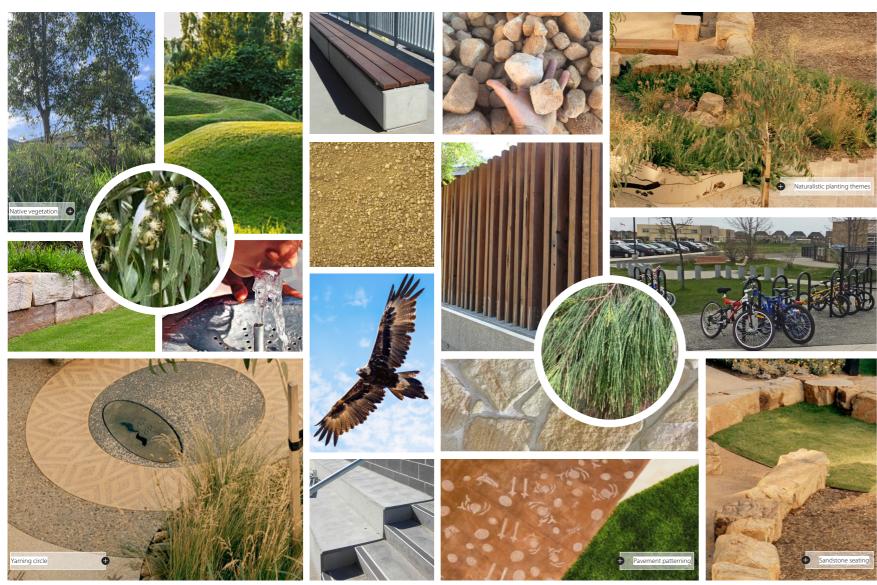


Student directed changeable mural wall





Landscape Design



SOURCE: Terras Landscape Architecture - Landscape Design Report



Connection with Country

Our ambition is to:

- Reduce the impacts of natural events through sustainable land and water use practices.
- Value and respect Aboriginal cultural knowledge and language and engage with truth.
- Ensure Country is cared for appropriately and sensitive sites are protected.

The proposed material palette is inspired by the history and heritage of the site and the use of materials relating to sandstone and cedar. Sourcing material from Country, with consent.

Sandstone is proposed to be used in a variety of ways throughout the site. Timber referencing Cedar from the banks of Wallis Creek may be used in feature walling.

Human Connections

Provide legible and easily accessible links through the site at a human scale to encourage walking and cycling. Creating opportunities for active and passive recreation and a variety of recreation experiences.

The environments in which we live profoundly affect us. Positive relationships and connections to natural and built landscapes impact our health and well-being in a variety of ways. Including reducing stress and minimising anxiety. CPTED principles shall also be included as per school design standards.

Active adventure play is inspired by the native bushland character. This will be incorporated into Nature play elements with active play features such as climbing, swinging, hanging,

balancing, jumping, sliding, and stepping. There will also be an inclusive play area accessible to all. Sensory and imaginative play is derived from natural elements.

Climate Positive Design

Retention of existing trees will be prioritized where possible to provide shade to play areas and promote a leafy feel of the campus. A number of additional trees will be planted to supplement those removed, create more passive recreation areas around the campus green and provide screening where

required. A target of 30% canopy cover has been established with species selected to ensure minimal ongoing maintenance and avoid the use of poisonous plants and potential weed species.

Site Specific Design

Design that preserves, enhances, and creates strong visual and physical connections to the natural features inherent to the site, whether they are a stand of trees, the topography of a site, a body of water, or a distant view.

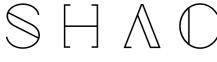
The proposed planting palette shall include predominantly native species with an emphasis on bush tucker. Species shall provide a variety of forms and textures for visual and tactile stimulation, whilst having demonstrated hardiness and low maintenance requirements.

Planting of endemic vegetation will help to create a sense of place unique to the site with swathes of native grasses proposed to reinforce movement and the site's relationship to water.

Given the significant level changes within the site, the landscape design has been developed in a way that maximizes the use of flat areas to facilitate open play space activities and works with the existing contours of the site terracing down towards the wetland / ecological play area. The transitional/terraced area maintains accessible paths of travel while also accommodating active play areas and bleachers.







Landscape Design



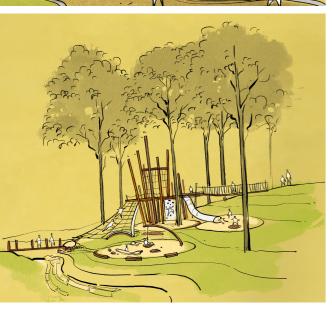






















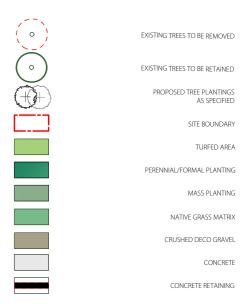


Landscape Design









- HARD PLAY SPACE AND ASSEMBLY AREA
- POTENTIAL FOR FUTURE OUTDOOR CLASSROOM AND PASSIVE
- POTENTIAL FOR FUTURE ECOLOGICAL PLAY SPACE
- VEGITATION BUFFER BETWEEN CHILDCARE AND GREATER PLAY SPACE TO INCLUDE ENDEMIC PLANTINGS.
- CONCRETE BLEACHERS
- ACCESSIBILITY RAMP FROM UPPER ACCESS TO BALL PLAY AREA
- 30 x 20m MULTI USE SPORTS FIELD, TURFED
- BATTERED MASS PLANTING
- MAIN NORTH/ SOUTH ACCESS PATH
- COLA BREAKOUT SPACE WITH CONCRETE BLEACHER SEATING
- GRAVEL TRANSITION SPACE
- WIND BREAK PLANTING OPEN GRASS SPORT FIELD

- POTENTIAL FOR FUTURE CULTURAL SPACE AND EXPLORITORY
- POTENTIAL FOR SCHOOL SIGNAGE AND PERIMITER CONOPY
- POTENTIAL FOR FUTURE PRODUCTIVE GARDEN AND BUSH TUCKER WALK
- MASS PLANTING AND TREES FOR HERITAGE BUILDING SPACIAL BUFFER
- LEVEL TURF SOFT PLAY SPACE
- PERIMETER MASS PLANTING TO ACCOMMODATE 2-3M SCREENING HEDGE PLANTS
- FORMAL GARDEN WITH CONNECTION TO HERITAGE BUILDING AND POTENTIAL FOR PUBLIC INTERACTION





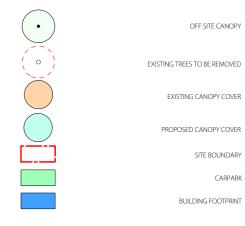
4104 Landscape Strategy

Canopy Coverage









SITE AREA: 23429m²

BUILDING FOOTPRINT: 5109m²

CARPARK: 2006m²

EXISTING CANOPY COVER: 1306m²

PORPOSED CANOPY COVER: 6232m²

TOTAL CANOPY COVER: 7538m² or 41.14% of external site (calculation excludes building footprint.)





4201 Material Study

Existing Material Study















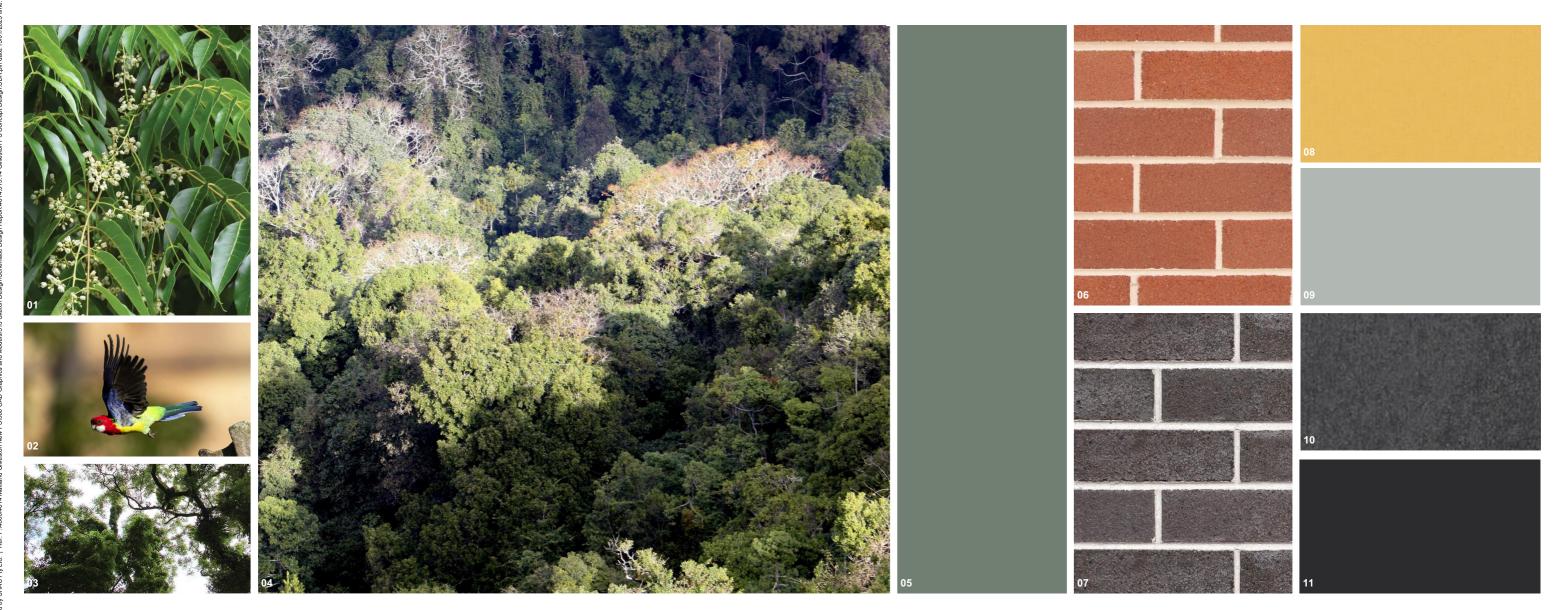


- 01 Site sloping towards Eastern Corner
- 02 Northern facade of heritage building
- 03 Outdoor play space
- 04 Demountables onsite
- 05 Southern outlook of school
- 06 Bell and flagpole
- 07 School Signage
- 08 School vegetable patch





Proposed Exterior Material Tones and Palette



- 01 Motif: Seasonal Place of Abundance palette inspiration
- 02 Motif: Eastern Rosella palette inspiration
- 03 Motif: Seasonal Place of Abundance palette inspiration
- 04 Motif: Seasonal Place of Abundance palette inspiration
- 05 Colorbond Pale Eucalyptus
- 06 Bowral Bricks Red Capital

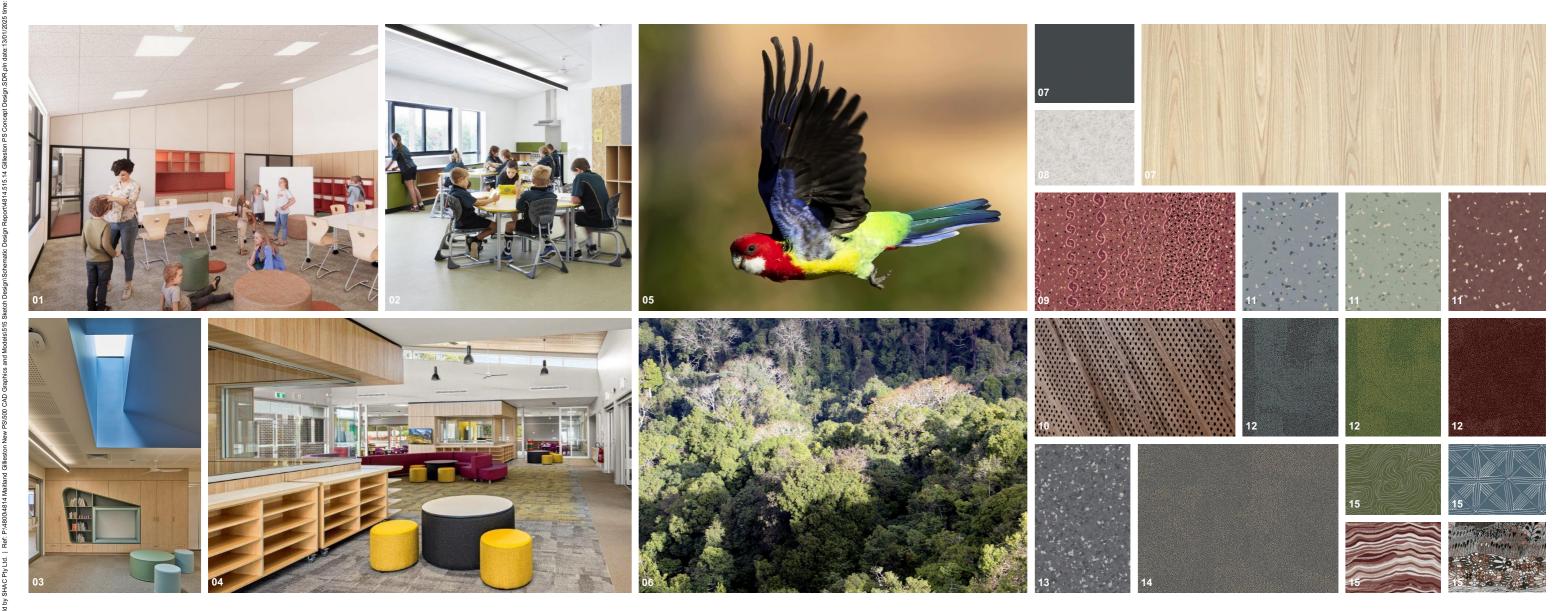
- 07 PGH Black Beau
- 08 Cemintel Maya
- 09 Colorbond Shale Grey
- 10 Cemintel Barestone
- 11 Colorbond Monument





4203 Material Study

Proposed Interior Material Tones and Palette



- 01 Hamilton Parklands by Gray Puksand
- 02 Kyneton Primary School, Kyneton by GrayPuksand
- 03 Tirriwirri SSP, Queanbeyan NSW by Hayball Architecture
- 04 Lake Cathie Public School, Lake Cathie NSW by SHAC
- 05 Motif: Eastern Rosella palette inspiration
- 06 Motif: Seasonal Place of Abundance palette inspiration
- 07 Laminate neutrals and timber drawing on biophilic design concepts
- 08 Pinboard neutral

- 09 Pinboard feature First Nation design
- 10 Acoustic Ceiling timber drawing on biophilic design concepts
- 11 Floor Vinyl learning areas selective use of block colours
- 12 Carpet learning areas selective use of block colours
- 13 Floor vinyl neutral
- 14 Carpet neutral
- 15 Furniture Fabrics First Nation design





4301 Envelope

Reference Precedents



















- 01 St Joseph's Primary, Melbourne by DKO Arcitecture
- 02 Holy Family School, Indooroopilly QLD by Ferrier Baudet Architects
- 03 Wee Waa High School, NSW by SHAC
- 04 Ngarala Public School, Epping NSW by Pedavoli Architects
- 05 HealthOne Port Stephens, NSW by SHAC



- 06 St Pius High School, Newcastle NSW by SHAC
- 07 Galungara Public School, Scholfields NSW by Group GSA
- 08 Tirriwirri SSP, Queanbeyan NSW by Hayball Architecture
- 09 Lake Cathie Public School, Lake Cathie NSW by SHAC
- 10 St Bede's Catholic College, Chisholm, SHAC





Signage Reference Precedents



















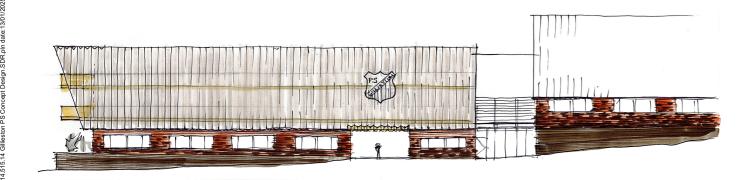
- 01 HIT3, Buenos Aires Argentina by Alejandro Gawianski
- 02 Landscape Signage Eco Trail including local Indigenous language, Lake Cathie Public School, Lake Cathie NSW by SHAC
- 03 Electrical & AC Signage Lake Cathie Public School, Lake Cathie NSW by SHAC
- 04 Local Indigenous artwork design TBC example by Westconnex, St Peters Sydney screen design by Indigenous artist Marilyn Russell and her Mother Aunt Esme Timber. Supplier Acadia
- 05 Vitrapanel Architectural image panels
- 06 Local Indigenous artwork design TBC example by Crookhaven Heads, Shoalhaven NSW
- 07 Interior super graphic example by Anna Higgie
- 08 Darling St, Hudson Group
- 09 Exterior super graphic example by Anna HiggieCreative City Hoarding by Eggpicnic

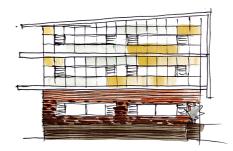




4303 Envelope

Form & Facade Idea

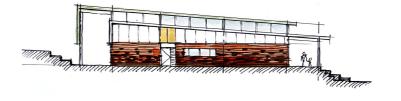














"Colour and application of colour to reflect the nature of the land i.e. cedar forest."

"Exterior facades have the opportunity to tell the story of country using material to represent the natural land forms and how the environment interacts with the material over time."

- Dhiira (Designing with Country Report)

To enhance the northern and northwestern facades of the building, an Aramax screen is employed to provide sun shading and to unify the visual identity of the site. The screen's eucalyptus colour and striation pattern are grounded by the red and charcoal gradient brickwork adorning the lower external facade. This earthy palette reflects the site's historical connection to the red cedar forest. The soothing tones are interspersed vibrant pops of colour inspired by the Eastern Rosella, the school's mascot, Captain Gillo. This playful and soothing colour pallet is designed to create a variety of physical and psychological benefits, particularly for primary school-aged children, enhancing both their learning environment and overall experience.

The perforated screens around the the stairs and PAAs are an opportunity for collaboration with and the engagement of local knowledge holders and First Nations artists to provide design consultation and artworks or patterns for the design of the perforations.

- 01 Building C Elevation Sketches
- 02 Building B Elevation Sketches
- 03 Motif: Seasonal Place of Abundance palette inspiration
- 04 Motif: Eastern Rosella palette inspiration



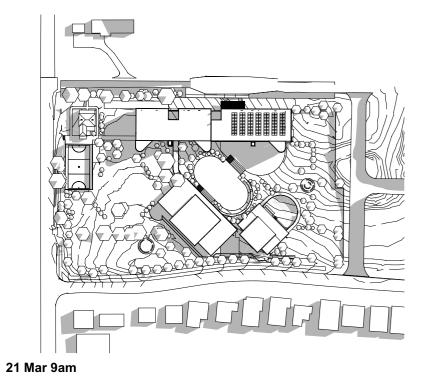


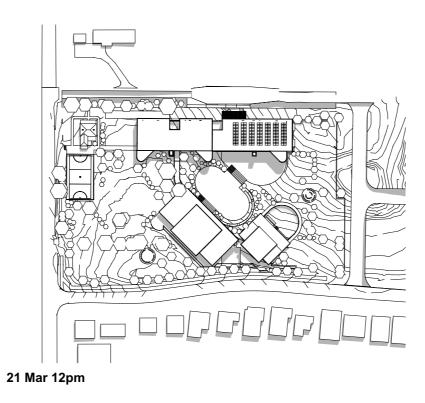
SCHEMATIC DESIGN

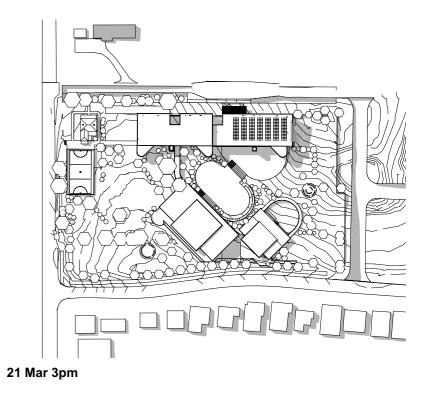
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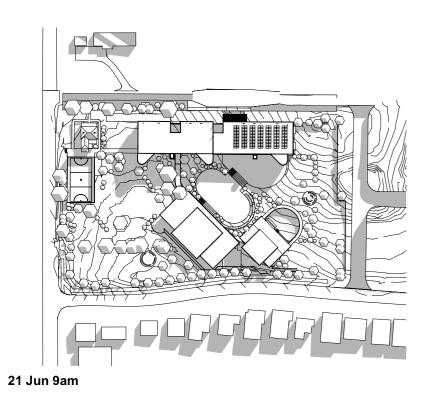
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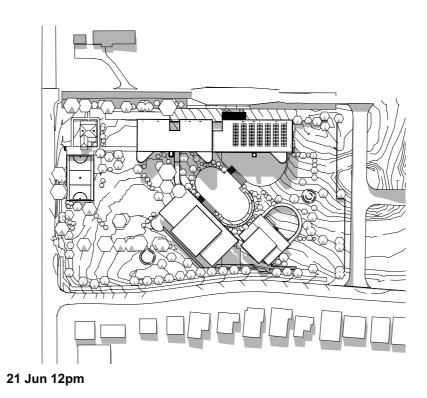
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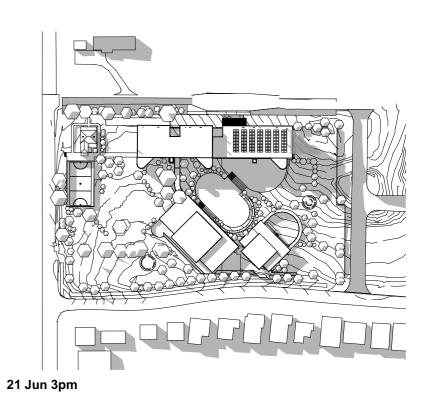












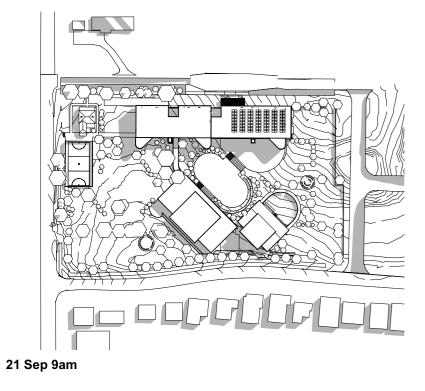


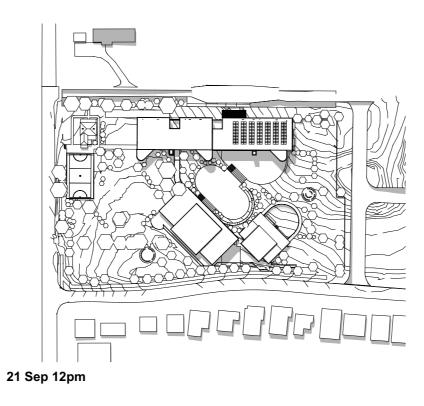


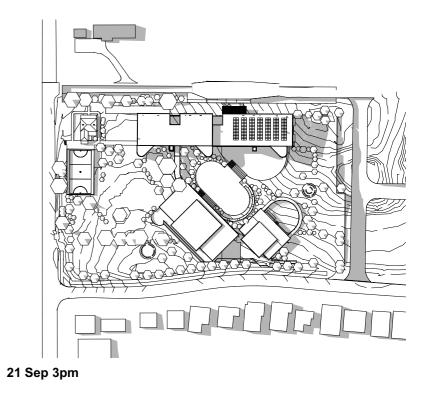
SCHEMATIC DESIGN

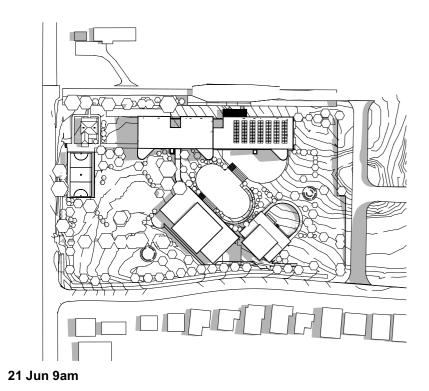
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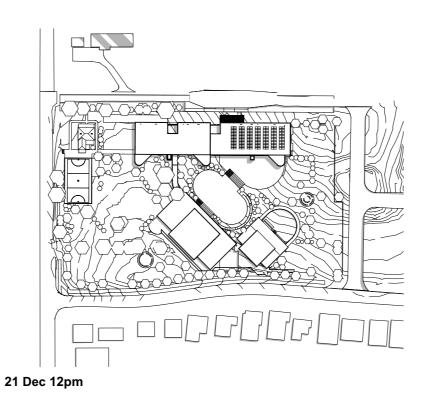
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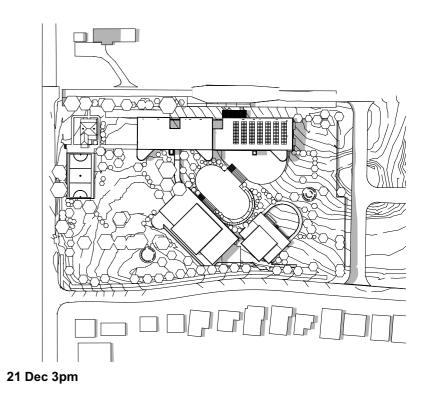


















Birdseye view from North looking South





Birdseye view from East looking West







View from Gillieston Road looking South





View from Gillieston Road looking Southwest





View from Northeast looking Southwest

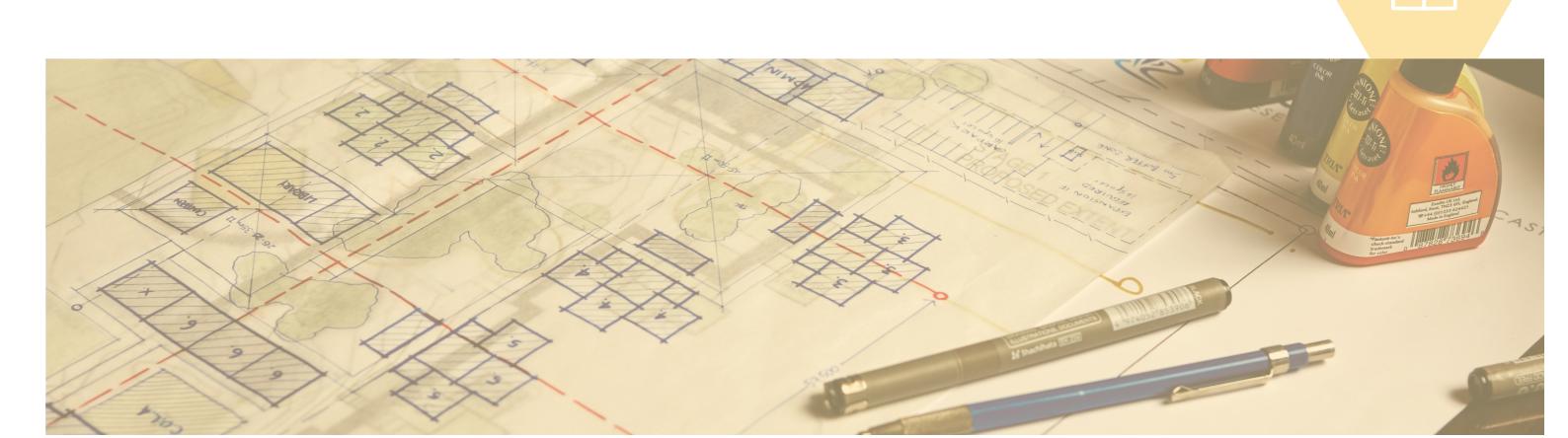




View from Northview Street looking Northwest

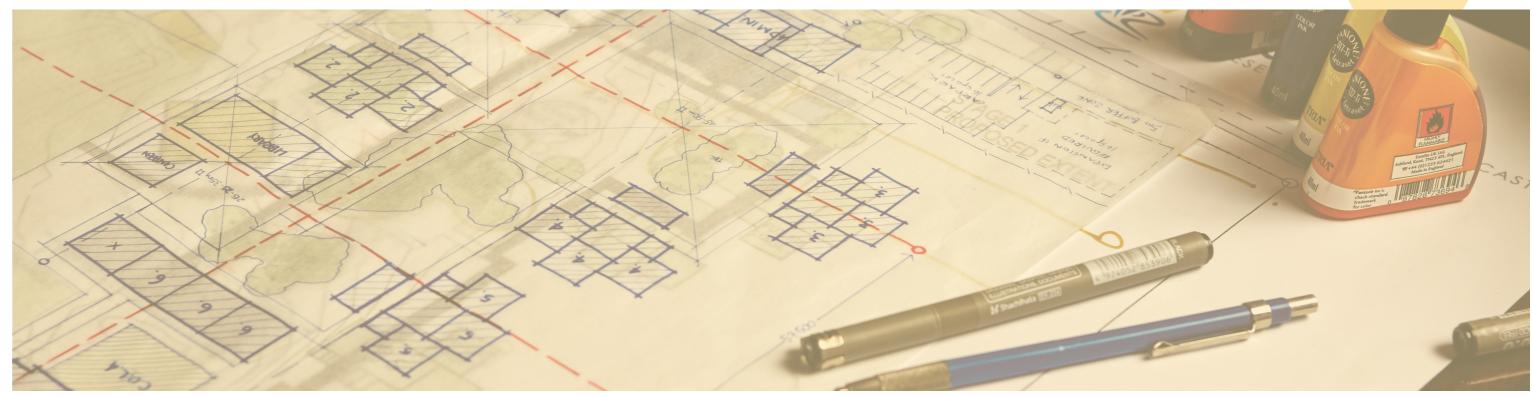


O5. Appendix A - Functional Design Brief



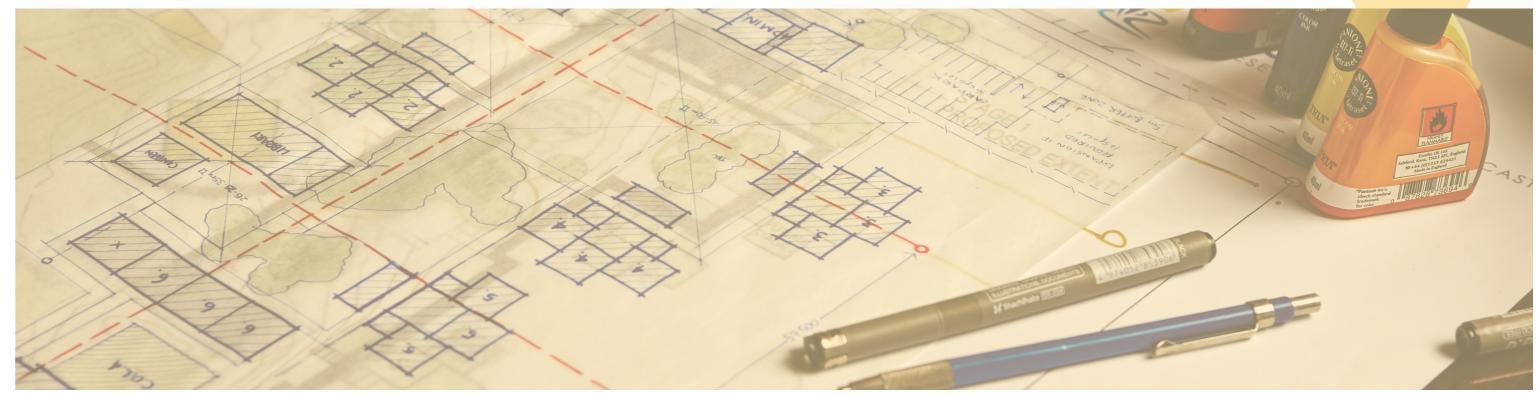
Appendix B - Architectural Drawing Set





Appendix C - Consultants Advice & Concept Design Reports





O5. Appendix D - Schedules



