Greenway Park Public School Upgrade
And New Public Pre School

# Architectural Design Report for Review of Environmental Factors

## Document Quality Control

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| **Project:** | Greenway Park Public School Upgrade and New Public Pre School |
| **Client:** | Department of Education NSW |
| **Project No:** | 7068GR01 |

This document has been prepared by:

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NOTES:

### Quality Assurance

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### Revision History

| Issue | Date | Revision Details/Status | Prepared by: | Approved by: |
|---|---|---|---|---|
| A | 28.01.25 | Draft Issue | LN | JW |
| B | 18.02.25 | Draft Issue | LN | JW |
| C | 25.02.25 | Draft Issue | LN | JW |
| D | 01.04.25 | REF Issue | LN | JW |

**CURRENT ISSUE:** D
**Document Quality Control**

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

# Contents

# 1 Introduction

This Architectural Design Report has been prepared to accompany a Review of Environmental Factors (REF) prepared for the Department of Education (DoE) relating to upgrades to Greenway Park Public School (the activity) under Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act) and State Environmental Planning Policy (Transport and Infrastructure) 2021 (SEPP TI).

This document has been prepared in accordance with the Guidelines for Division 5.1 assessments – Consideration of environmental factors for health services facilities and schools, October 2024 (the Guidelines) by the Department of Planning, Housing and Infrastructure.

This report examines and takes into account the relevant environmental factors in the Guidelines and Section 170, Section 171 and Section 171A of the Environmental Planning and Assessment Regulations 2021 (EP&A Regulation). Refer to **Table 1,** on next page.

The purpose of this report is to

- Outline the design responses to State Environmental Planning Policy (Transport and Infrastructure) 2021, Schedule 8 Design Quality Principles in Schools (Chapter 3)
- Consider the visual impact of the proposed works
- Note the approach to Connecting with Country (Refer to page 17)
- Complement the architectural drawings as part of the submission

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|---|---|
| Project Name: | Greenway Park Public School Upgrade and New Public Pre School |
| Proponent: | The Department of Education (DoE) |
| Landowner: | The Minister for Education and Training |

| **Table 1 – Summary of Relevant Section of the Part 5 Guidelines and EP&A Regulation** | | | |
|---|---|---|---|
| **Regulation / Guideline Section** | **Requirement** | **Response** | **Report Section** |
| Section 171 (2)(b) | Any transformation of a locality. | | |
| | (b1) Impact on the existing and future character of the neighbourhood, streetscape and local area | Relevant design guidelines have been addressed as per State Environmental Planning Policy (Transport and Infrastructure) 2021 and Design for Schools Guide. | Page 17 |
| | (b2) impact on the operation of existing and future surrounding uses, including industrial or agricultural land uses | | Page 13, 15 |
| | (b3) visual impact from key viewpoints and views to key viewpoints | | Page 17 |
| | (b4) cumulative impacts from the development, and other approved developments, on the locality | | Page 16, 17 |
| Section 171 (2)(d) | Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality. | | Page 17 |
| | (d1) impacts onto adjoining properties and public spaces (particularly in residential areas) such as lighting impacts and light spill, acoustic, visual privacy, noise and vibration (including from helicopters and ambulances), visual amenity, solar access, view loss and view sharing, vistas, overshadowing, local character, streetscape, weather factors such as wind impacts<br>(i) the above should be considered from any proposed development or activity on the development site, public-address system, ambulance siren, flashing signage, event, hours of operation, or out of hours use of school facility, helicopter facility, emergency facility, research centre where hazardous material is being used or stored and any potential incident, etc. | Relevant design guidelines have been addressed as per State Environmental Planning Policy (Transport and Infrastructure) 2021 and Design for Schools Guide. | Page 15, 17 |
| | (d2) impacts on connectivity, permeability and accessibility of public spaces and areas surrounding the development, this includes impacts on arterial and other thoroughfares and green corridors and wayfinding | Relevant design guidelines have been addressed as per State Environmental Planning Policy (Transport and Infrastructure) 2021 and Design for Schools Guide. | Page 14, 15 |
| | (d3) impacts on other aesthetic, recreational, scientific or other environmental quality or value of the locality not mentioned above or in (a) and the cumulative impacts | N/A | N/A |

| **Table 1 – Summary of Relevant Section of the Part 5 Guidelines and EP&A Regulation (continued)** | | | |
|---|---|---|---|
| **Regulation / Guideline Section** | **Requirement** | **Response** | **Report Section** |
| Section 171 (2)(r) | Any relevant environmental factors. | | |
| | (r2) developments compatibility with neighbouring land uses, including proximity to:<br>(i) restricted premises, injecting rooms, drug clinics, premises licensed for alcohol or gambling, sex services premises (for schools)<br>(ii) hazardous land uses, waste transfer depots or landfill sites, service stations, air pollutant generating uses, noise or odour generating uses, extractive industries, industrial uses<br>(iii) intensive agriculture, agricultural spraying activities and sources<br>(iv) adjacent to or on land in a pipeline corridor<br>(v) sites which, due to prevailing land use zoning, may in the future accommodate the above uses. | N/A | N/A |
| | (r3) noise/air pollution, vibration and safety impacts from the below on the proposed development:<br>(i) roads with higher traffic volumes, higher operating speeds and more heavy vehicles, freight traffic or used to transport dangerous goods or hazardous materials<br>(ii) rail lines<br>(iii) beneath flight paths<br>(iv) industrial and agricultural areas<br>(v) substations | N/A | N/A |
| | (r4) dangerous goods and hazardous materials (their storage, use, removal and disposal) associated with the development | N/A | N/A |
| | (r5) suitability and safety of drop-off and pick-up areas, including for emergency vehicles, safety and convenience of proposed parking areas and rates, and off-and-on street parking on school/hospital location, vehicle and pedestrian access, internal vehicle and pedestrian areas, provision of servicing, loading/unloading. | Preschool car parking provided for safe drop-offs and pick-ups and additional pedestrian entrances proposed on Chapman Street to redirect pedestrian traffic from Wyattville Street. | Page 14, 15 |
| | (r6) impacts of bushfire, flooding or land contamination, any soil and groundwater contamination, hazardous materials from demolition works on the proposed development | N/A | N/A |
| | (r7) any other relevant impacts | N/A | N/A |

# 2 Site Analysis / Description

The activity site is located on Wyattville Drive, West Hoxton and is legally described as:

- Lot 11 DP 858025; and
- Lot 20 DP 867282.

Greenway Park Public School is located on the south eastern side of Chapman Street and the north eastern side of Wyattville Drive. The surrounding context of the site is predominantly low density residential as well as a childcare centre to the north.

The site currently comprises an existing co-education primary (K-6) public school with nine (9) permanent buildings, 9 demountable structures, interconnected covered walkways, play areas, on-grade parking, sports court and green spaces with mature trees.

Buildings on site are 1 storey. Buildings are clustered to the south, east and west of the site, with the northern part comprising of a large play area/informal sports oval and a sports court to the north-east. Intermediate play areas are located between buildings (Block F and D; and, Block D & C).

Development surrounding the site includes:

- North: Kindergarten located on the corner of Watts Place and Chapman Street and a mix of residential dwellings of 1-2 storeys;
- East: Residential dwellings of 1-2 storeys;
- South: mix of 1-2 storey Residential dwellings; and
- West: Residential dwellings predominately of 2 storeys.

The site is zoned R2 Low Density Residential in accordance with Liverpool Local Environmental Plan 2008 (LLEP2008).

An aerial image of the site is provided in **Figure 1**.


*Figure 1: Aerial image of the site, indicatively outlined in red (Source: SixMaps 2024).*

# 3 Proposed Activity Description

The proposed activity for the Greenway Park Public School upgrade includes:

**Demolition/ earthworks**

a. Demolish part of boundary fence on Chapman Street for new vehicular crossover;
b. Demolish parts of boundary fence on Chapman Street for new gates;
c. Demolish shade structure and associated concrete slab and footpath;
d. Demolish footpaths;
e. Tree removal;
f. Trenching for underground services; and
g. Earthworks associated with new buildings and landscaping.

**Construction**

1. Construction and operation of single storey classroom building with associated
2. covered walkways;
3. Construction and operation of a new preschool building, including covered walkways,
4. new carpark (14 spaces and one (1) accessible space) and vehicular crossover to Chapman Street;
5. Installation of artwork on Block H and Block J façades, as well as a preschool retaining wall;
6. Laying of services within trenches;
7. New pedestrian entry points;
8. Fencing and gates;
9. Underground OSD tanks;
10. Rainwater tanks;
11. Shed for preschool;
12. Outdoor play equipment for the preschool;
13. New fire hydrant booster & associated building services connections;
14. Retaining walls associated with the preschool;
15. Signage;
16. Landscaping; and
17. Associated earthworks

The intent of the activity is to replace existing demountables with permanent teaching spaces (PTS). A 60 student capacity preschool is also proposed as part of this activity.

**Figure 2** on next page, shows the scope of works for the proposed activity**.**

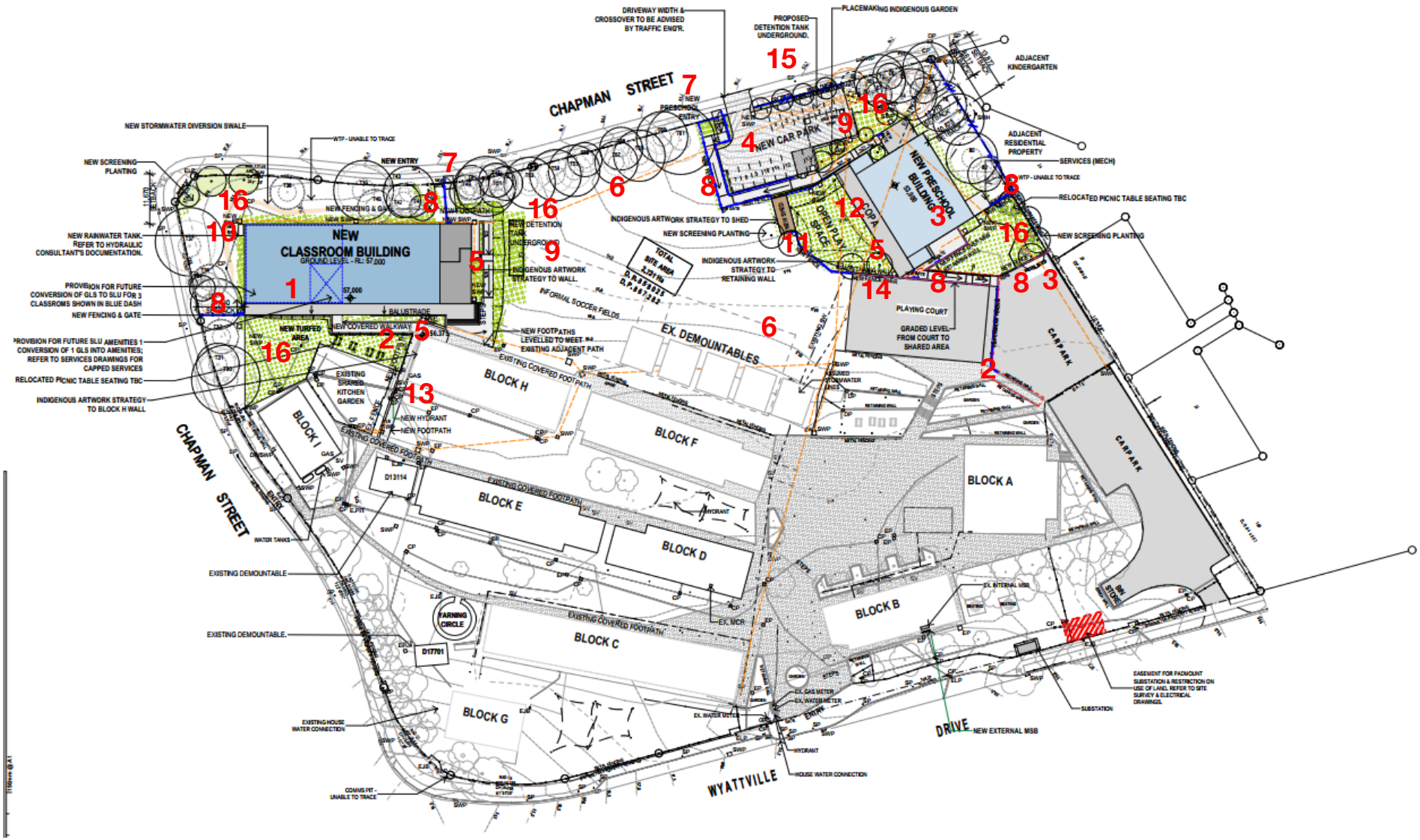


*Figure 2: Proposed Scope of Works (Fulton Trotter Architects, Proposed Site Plan, Rev 12 – note to scale).*

**Works to be undertaken under separate Planning Pathway (not part of this REF)**

After the completion of the proposed activity 5 existing demountables to be removed from site under a separate planning pathway.

# 4 Consultation

The project team has consulted with the relevant agencies and authority stakeholders to inform the proposed Greenway Park Public School Upgrade and New Public Pre School activity.

The following is a summary of all stakeholders who have been consulted and informed as part of the Greenway Park Public School Upgrade and New Public Pre School –

- Liverpool Council – Planning Department
- Transport Working Group
    - Transport for NSW
- Endeavour Energy
- Department of Education Technical Stakeholders
- Indigenous Consultation with local elder
- School Community

As a result of this consultation, the following changes were made to the proposed activity.

- Following consultation with the school, the siting of the Preschool building was located so that the Open Play Area was directly adjacent the main school oval.

*Figure 3: Artists Impression – View of proposed Classroom building from East (Source: Fulton Trotter Architects)*

*Figure 4: Artists Impression – View of proposed Preschool building from North (Source: Fulton Trotter Architects)*

# 5 Design Response

**Design Process Undertaken**

- Master Plan Validation
  - Fulton Trotter Architects were engaged by the NSW Department of Education and Department of Education NSW (SINSW) to design the redevelopment of Greenway Park Public School.
  - This process includes identifying key issues identified in the Masterplan Feasibility Report by NBRS and the due diligence reports prepared by various consultants and initial site inspection findings.
  - The preferred architectural masterplan option was presented to the school, NSW Department of Education technical stakeholders and the Project Control Group.

- Concept Design
  - Fulton Trotter Architects and the design team continued to develop the endorsed planning option. This phase looked further into the EFSG requirements and functional relationships of the proposed schedule of accommodation.
  - The final Concept Design Report was presented to the school, NSW Department of Education technical stakeholders and the Project Control Group.

- Schematic Design
  - The endorsed Concept Design has been further developed in conjunction with the design team to show a high-level strategy on how the project will be built
  - The final Schematic Design was presented to the school and NSW Department of Education for the purpose of exploring a tender package.

**Key Design Considerations**

- State Environmental Planning Policy (Transport and Infrastructure) 2021 'Design Quality Principles' and 'Design Guide'.
- Educational Facilities Standards and Guidelines (EFSG)
- Asset Management Unit (AMU) existing works and upgrades
- Maintaining a minimum 10m2 of outdoor space per student across the site
- Maintaining as much of the existing building stock as possible.
- Educational Rational – engage the school to focus on desirable outcomes in the design to compliment the schools pedagogical approach and broader community engagement objectives)
- Maintaining the Tree Protection Zones for the existing mature trees adjacent to the proposed buildings – to the North and North Western Boundaries. The building is located to create appropriate setbacks to the trees to create a minimal impact on the nominated tree protection zones. The height of the building has also been set to avoid excavation in the root zone of the trees.
- Maintaining separation from the existing classroom building adjacent (Block H)

*Figure 5: Existing trees to the north western boundary for the Classroom building (Source: Fulton Trotter Architects)*

# 6 Response to State Environmental Planning Policy (Transport and Infrastructure) 2021 and Design for Schools Guide

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

**Principle 1— Responsive to context**

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

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

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

The proposed activity seeks to address this principle as follows:

- The proposed classroom and preschool buildings are a single storey form – in keeping with the scale of the existing buildings on the school site.
- The buildings sit more than 300mm above the surrounding ground levels for accessibility and protection against overland flow flooring, while minimising the extent to which the ground floor level is above existing ground.
- Positioning and orienting the classroom building to suit building separation to existing adjacent buildings, while minimising removal of existing trees
- Positioning and orienting the preschool building to minimise removal of existing trees and minimise reducing main school's playing field.
- North facing long elevation for Classroom building for maximum climate control.
- Additional landscape treatment that compliments the existing.

**Principle 2— Sustainable, efficient and resilient**

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

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

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

The proposed activity seeks to address this principle as follows:

- Passive cooling using a high window area for natural ventilation, with adjacent proposed trees.
- Sunshading and generous roof overhangs are provided to protect the building from solar heat gain.
- Light coloured materials are applied to the façade to reduce the urban heat island effect.
- Regular structural grid and open floor plates for maximum flexibly of layout in the future.
- Robust and low-maintenance materials are used to ensure the longevity of the building.
- PV solar cells are provided to the roof of the new building.
- Robust, low maintenance materials.
- Social sustainability- outdoor spaces, collaboration spaces, retreat spaces.

**Principle 3— Accessible and inclusive**

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

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

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

The proposed activity seeks to address this principle as follows:

- Accessible path of travel into the site and the classroom and preschool buildings are provided from the proposed Chapman Street entrances.
- Accessible paths are provided to connect the proposed classroom building into the existing site path network adjacent to the existing Building H.
- Accessible paths are provided to connect the proposed preschool building into the existing site path network to the existing Block B.
- Ramps and walkways are integrated into the landscape to not feel like “wheelchair ramps” but part of the natural movement through the site.

**Principle 4— Healthy and safe**

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

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

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

The proposed activity seeks to address this principle as follows:

- The proposed activity maintains the existing boundary reinforcement and lines of security that are in place on the site.
- The building is provided with blinds and doorways that facilitate secure lockdown arrangements in the case of an emergency to protect staff and students at all times.
- The space is designed using ESD principles to ensure a high level of amenity and user comfort within the space. This includes acoustic quality, improved air quality (using low VOC and low formaldehyde materials) as well as the provision of high levels of natural light and natural ventilation.

**Principle 5— Functional and comfortable**

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

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

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

The proposed activity seeks to address this principle as follows:

- Variety of learning and teaching spaces offering different levels of openness or insularity.
- Operable walls to increase flexibility of uses and spaces.
- Designated storage areas to minimise clutter.
- Clear circulation paths to the new building.
- Generous windows to allow for natural light and natural ventilation.
- The proposed buildings are in an area of existing mature trees of a scale that is complementary to the surrounding residential area and the existing school.

**Principle 6— Flexible and adaptable**

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

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

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

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The proposed activity seeks to address this principle as follows:

- Regular column grid and open floor plates- maximum flexibly.
- Simple circulation using the external verandah space to the East
- Consolidation of services and wet areas.
- Variety of learning and teaching spaces offering different levels of openness or insularity.
- Operable walls to increase flexibility of uses and spaces.
- Use of robust and low-maintenance materials.
- Use of pre-finished materials or naturally finished materials that don't require ongoing painting

**Principle 7— Visual appeal**

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

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

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

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

The proposed activity seeks to address this principle as follows:

- Keeping to the scale of neighbouring buildings on the school site.
- The facade of the building features brickwork – creating a material and colour connection to the existing buildings on the site. Allowing the building to sit comfortably as part of the existing campus.
- Colours are used in the window framing and sunshading to provide visual interest and create connections to the colours of the existing buildings on the campus.
- The proposed building will have well-articulated elevations comprising a simple unobtrusive contemporary aesthetic and will sit comfortably in the streetscape and the existing campus.

**Connecting With Country**

The project has followed a simple approach in relation to representing Country and the inclusion of indigenous artwork. The project will include indigenous artwork opportunities to internal and external areas of the building and landscape that continue existing indigenous programs at the school. An indigenous consultation was carried out on site with local elder, Aunty Dot to identify opportunities to connect with country. These opportunities included:

- Connection with outdoors by providing sufficient windows for green outlooks from classrooms.
- Inclusion of native plants and incorporation of the site's totems, the Gymea Lily and Goanna.
- Opportunity for shading trees to be planted along the western site boundary to provide a green outlook for students where views to outside lack greenery.
- Maintaining connection and access to adjacent kitchen garden.
- Maintaining soft surfaces like grass in lieu of hard concrete.
- Engagement with Indigenous Community through artworks on buildings.

***Figure 6: Artists Impression – View of proposed Classroom building from South-west elevation (Source: Fulton Trotter Architects)***

**Visual Impact Assessment**

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

- The proposed classroom building is located to western end of Chapman Street behind existing mature trees and is setback from the street frontage with proposed planting in front of the building. The building is set lower than street level on Chapman Street to allow accessible paths to connect to existing adjacent pathways and buildings on site and to minimise visual impact on views from residential street frontages of Chapman Street.

- The proposed preschool building is located to the northern corner of site, behind existing mature trees and setback from the street frontage with car parking in front so it has minimal impact on the views to the preschool building from Chapman Street.

- The proposed buildings are single storey forms and is set back from the adjoining boundaries behind the existing mature trees. This minimises the visual impact on the adjoining residential properties.

Attached to this report are artist impression perspectives that indicate a realistic representation of the propose building in the proposed setting on the site.

# 7 Evaluation of Environmental Impacts

An evaluation of the environmental impact related to SEPP Transport and Infrastructure 2021 is concluded as follows:

2. The extent and nature of potential impacts are low and will not have significant impact on the locality, community and/or the environment.

2. Potential impacts can be appropriately mitigated or managed to ensure that there is minimal impact on the locality, community and/or the environment.

*Figure 7: Artists Impression – View of proposed Preschool building from South elevation Source: Fulton Trotter Architects)*