

LANDSCAPE ARCHITECTURE DESIGN REPORT - ADDENDUM 01

New Primary School in Mulgoa Rise

APPLICATION NO. SSD-11070211

Document Control

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1 Executive Summary

This LANDSCAPE Design Report – Addendum 01 has been prepared in response to agency comments to the proposed development and to highlight several design changes requiring endorsement from the various planning agencies & stakeholders.

This addendum must be read in conjunction to the LANDSCAPE Design Report dated August 2021 (SSDA 11070211) and the advice letters received during the public exhibition.

2 Agency Recommendations and Responses

The following table sets out the relevant Agency Recommendations and the Project response

AGENCY	ISSUE	AGENCY RECOMMENDATIONS	RESPONSES
Council GANSW	Landscape Design Considerations	- With respect to canopy coverage, it is requested that the proposal include a tree planting plan to understand siting of large canopy trees. This could be address via conditions of consent. It will be essential that all of the trees are provided sufficient root soil volume to ensure future health of the trees, capacity to reach maximise size and most importantly the stability & safety of the trees in school grounds, particularly in regard to the large canopy trees.	- Tree Planting plan has been included in the application, please refer Drawing L-SSDA-0010 for information. - Standard soil depth will apply to new trees to ensure sufficient soil volume for establishment and growth of trees.
		With respect to tree Species selection, it is recommended that alternative tree species be identified to replace Angophora costata. An alternate species is requested that is more consistent with Shale Plains woodland as Angophora costata will not thrive in this location. More broadly, it should be demonstrated that the selected species are compatible to local site conditions, specifically selecting species that are tolerant to Cumberland plain soils and Western Sydney heat.	- Noted. Eucalyptus crebra will be used. - Majority of the planting species selected are compatible to the site conditions of the Cumberland region, trees and planting species are based on Native Plant Species in <i>Street And Park Tree Management Plan</i> by Penrith City Council, for more information please refer to planting schedule on Drawing L-SSDA-0011.
		Synthetic turf and rubber soft fall are proposed and located such that they are very exposed, particularly to hot summer afternoon sun. Additional canopy should be provided for these areas, particularly along western edges. Alternatively, shade canopy/ structures should be provided over these surfaces to protect students from the extreme heat these materials can emit. Ideally the playground with playground mulch should also be provided with additional canopy.	- Shade structures have been indicatively shown and the school is to install these at a later date. - Synthetic turf and rubber Softfall play areas are proposed to allow for shade structures to be installed by school in the future. - Two shade structures have been proposed to the Mulched playground, please refer to Drawing L-SSDA-007; One shade structure proposed to the outdoor learning area to the Block 3.S Support Unit, please refer to Drawing L-SSDA-006.

EES	Site Landscaping / Habitat Improvement	- Any planting/ landscaping on the site or street associated with the SSD shall use a diversity of local provenance native trees, shrubs, and groundcover species (rather than exotic species or non-local native species) from the relevant native vegetation community that once occurred in this locality. - Tree planting shall use advanced and established local native trees with a minimum plant container pot size of 100 litres, or greater for local native tree species which are commercially available. Other local native tree species which are not commercially available may be sourced as juvenile sized trees or pre-grown from provenance seed. - A Landscape Plan is to be prepared and implemented by an appropriately qualified bush regenerator and include details on: a. the type, species, size, quantity and location of trees b. the species, quantity and location of shrubs and groundcover plantings c. a list of local provenance species to be used d. the quantity and location of plantings e. the pot size of the trees to be planted f. the area/space required to allow the planted trees to grow to maturity g. plant maintenance regime. The planted vegetation must be regularly maintained and watered for 12 months following planting. Should any plant loss occur during the maintenance period the plants should be replaced by the same plant species. - Habitat features shall be installed at the site to improve biodiversity such as logs, bee hotels and a range of artificial nest boxes suitable for native fauna likely to use the site.	- Noted, species that are local and comply with EFSG will be selected where possible and appropriate. - Tree planting are consistent with the requested sizes for priority area: 100L/75L. For less prominent areas trees have been reduced to 45L a. Refer L-SSDA-0010 b. Refer L-SSDA-0010 & 0011 c. a list of local provenance species has been included, Refer L-SSDA-0011 d. Refer L-SSDA-0010 & 0011 e. Refer L-SSDA-0011 f. Typical Tree Planting Details will be provided at detailed design stage to ensure area/space is sufficient for trees. g. Plant maintenance regime will be provided as part of the landscape technical specification. - Noted. Reclaimed logs, boulders and the use of native trees have been included to provide habitable spaces, other habitat features will be considered where appropriate
AGENCY	ISSUE	AGENCY RECOMMENDATIONS	• REPONSES
GANSW	Previous Unresolved SDRP Questions	A number of questions from the SDRP session remain unresolved: - the separation of the built form from landscape and an associated loss of high-quality sheltered outdoor learning spaces that was present in the initial master plan sketches. - whether the planned tree cover is appropriate in this location. - a lack of daylight in some teaching spaces. - consideration of climate impacts including increasing heat to the designs. - communication of how flooding levels inform the architecture and landscape strategy.	SDRP presentation held 20/10/21 to address these comments. Refer to latest comments and response below (GANSW-Round 2)
GANSW GANSW – Round 2	New SDRP Questions based off new Masterplan	The substantially changed proposal has created new questions that could impact on the quality of the design outcome: 8m or more separation between boundary and building edge and associated	SDRP presentation held 20/10/21 to address these comments. Refer to latest comments and response below (GANSW-Round 2)

		underutilization of space and visual disconnection from the community. • evidence of an appropriately considered response to Connecting with Country (aside from the inclusion of a central meeting place) and its integration with landscape, built form and experience of being a student at the school. • architectural expression and the consideration of appropriate material finishes for this context and for primary school teaching. • the removal of 8 trees on Deerbubbin Drive, along the northern edge of the site. • dominance of high steel fencing to achieve safety requirements and associated impact on the relationship with the community. • removal of the field from stage 1.	
	Site Strategy and Landscape	9. Establishing tree canopy with wide coverage is key to meeting ecological, comfort and civic outcomes for this project: a) Demonstrate tree canopy cover will meet 40% target as a minimum. The project should aim to exceed this target and create a lush green environment, encouraging use of outdoor spaces. b) Mulgoa Rise has a peculiar microclimate with high heat and low rainfall. Select tree species that will thrive in this environment and contribute to the regeneration of the Cumberland Plains ecology.	• 9a: 40.25% Canopy coverage is achieved based on the canopy coverage when matured (5563sqm) on Stage 1 site (13823 sqm). 9b: Noted. The majority of the selected tree species selected are suitable for the site conditions of the Cumberland Plains region are based on the <i>Native Plant Species in Street And Park Tree Management Plan</i> by Penrith City Council.
GANSW – Round 2	Site Fencing	10. The fencing diagram submitted as part of the EIS indicates a multiplicity of primary and secondary security lines and is not supported. a) Simplify and clarify the extent, height and necessity of fencing proposed. Review the role and size of the entry spaces and spaces between the street and buildings so that double fencing is not required. There should be a single line of security around the site. Buildings and landscape can be part of this line. b) The masonry fence on the corner of the site and fencing along Deerubin Drive are very high and create an imposing character to the street. Consider lowering the height of these where possible and/or softening their impact with landscape design.	• Fencing strategy Refer to Architectural Report • a) The areas between the boundary and the buildings have been designed to include intensive landscaping to soften the appearance of the fence and provide some shading to public footpath. • b) The diversion wall is required for mitigation of flood events. In general, the masonry diversion wall along Darug has been kept to a minimum with a palisade on top for security purposes. The higher part of the diversion wall, at the intersection of Deerbubbin and Darug, is proposed as a backdrop for a prominent school sign as per EFSG signage standards. • No change to the design is proposed.

In conclusion, the items raised in the above comments have been adopted and implemented where suitable where it aligns with the landscape design intent and meets the Educational Guidelines.

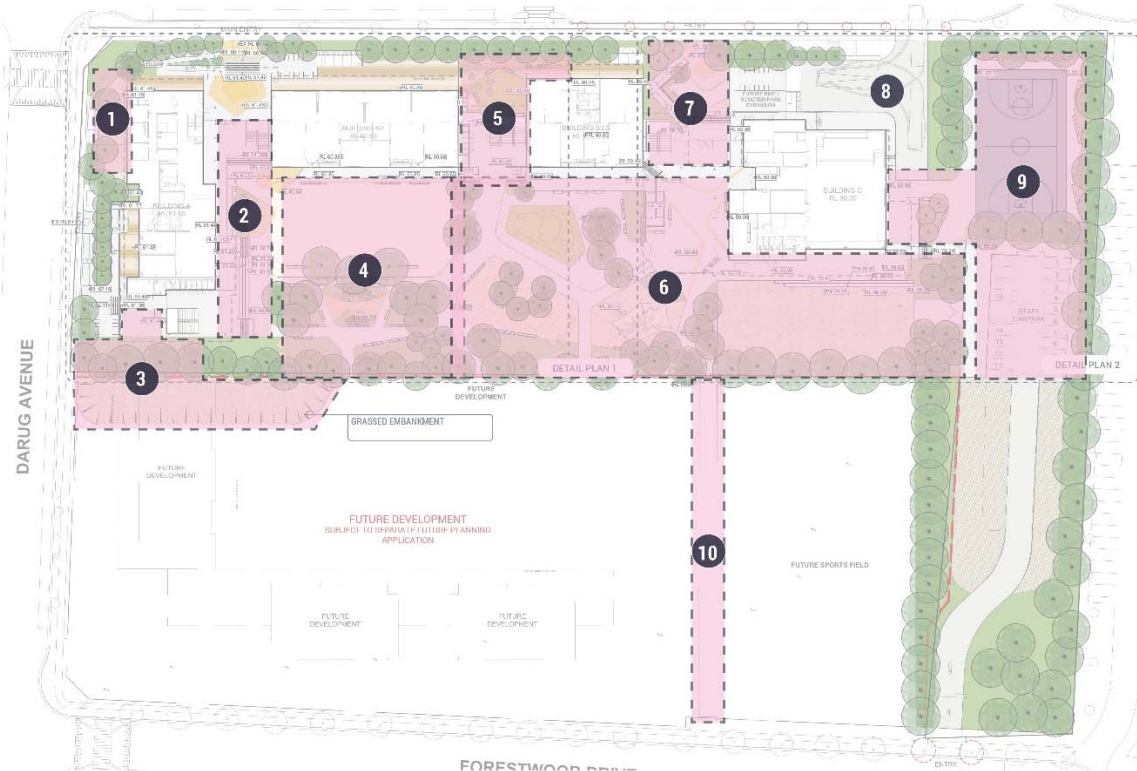
3 Landscape design changes

The project has progressed in Detailed Design since the SSDA was submitted. The overall design philosophy, general planning & aesthetic have been maintained throughout the design stages.

Understandably at this point of the projects, further design has been developed with more details and early input on constructability from the contractor, Richard Crookes Construction. Recent design development & ongoing consultation with stakeholders has result in the following design changes.

- Rationalisation of hard paved area
- Consolidated seatings
- Revised play areas
- Changes relevant to Building amendments
- Consolidated materials palette

The areas highlighted on the plans (page 8) illustrate the extent of change to the Landscape area, please refer to Legend on page 9 for details of each area (the plans are to be read in conjunction with the legend).



Landscape Plan - Previous SSDA (NTS)



Landscape Plan - Current Design (NTS)

Legend

1. Mechanical location revised; lawn area replaced with mass planting
2. Access to Block A from main entry, Block B2, B3S and Block C revised, details as follows
 - A. 1:14 ramp in lieu of 1:21 walkway (previously in front of Block A) to allow for a shorter route and more direct access
 - B. Increase in landscape area in lieu of 1:21 walkway
 - C. Bleacher seating omitted; stair width increased to accommodate for circulation.
3. Temporary landscaped embankment reduced in size, additional landscaped area in lieu of concrete paving to the west side of stair 1.
4. Assembly area developed
 - A. Pocket landscape area with trees introduced.
 - B. Interpretive Line marking incorporated
 - C. Outdoor learning area updated for Yarning Circle opportunities
 - D. Educational Trail / Explorative Play in lieu of concrete paths
5. Outdoor play area to support unit
 - A. Timber decking omitted
 - B. Access ramp revised to suit the new location of toilet block
6. Consolidated sensory play
 - A. Synthetic turf mound location revised
 - B. Yarning Circle opportunities included at mulched play area
 - C. Turf open play area increased
 - D. Revised Bleacher Seating to revised COLA extent
 - E. Incidental Nature play
7. New accessible ramp introduced to allow for a more direct access
8. Services area revised
9. Sports & Carpark
 - A. Hard paving reduced around basketball court
 - B. Coloured concrete finish for basketball court in lieu of plexipave
 - C. Emergency vehicle access revised
10. Access to Forestwood drive revised.