

LANDSCAPE DESIGN REPORT

The New Primary School in Mulgoa Rise



Document Control

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Table of Contents

1 EXECUTIVE SUMMARY 3

2 INTRODUCTION 4

2.1 Project Background 4

2.2 Concept & Design Principles 4

2.3 Landscape Design Response to SEARs 6

3 APPENDICES 9

1 EXECUTIVE SUMMARY

The Landscape design works have been carried out by **NBRS**ARCHITECTURE. This Landscape Architecture report has been prepared for the purpose of State Significant Development Application.

A Government election commitment in 2012 to build 190 new schools across the state, was implemented with the aim to address the issues of overcrowding and ensuring all students are given equal access to quality educational opportunities. School Infrastructure NSW has committed to building a new primary school in Mulgoa Rise/ Glenmore Park, one of 4 new schools in the Glenmore Park Primary School Community Group (SCG).

The landscape design has been inspired by the site history and cultural background of Mulgoa Rise where two indigenous nations intersect. The landscape design of the new Primary school in Mulgoa Rise aims to create the '**meeting place**' for students and local communities that celebrates the original characters and culture of the land, encourages active and passive recreations as well as knowledge sharing beyond the classroom

2 INTRODUCTION

2.1 Project Background

The Penrith region is experiencing rapid growth in development which is driven by State investments in infrastructure such as Western Sydney Airport and Aerotropolis, a developing technology industry and housing estate. Students who are currently living in the Mulgoa Rise area travel long distances to reach schools within the catchment area.

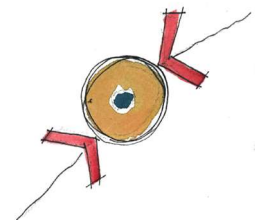
A Government election commitment in 2012 to build 190 new schools across the state, was implemented with the aim to address the issues of overcrowding and ensuring all students are given equal access to quality educational opportunities. School Infrastructure NSW has committed to building a new primary school in Mulgoa Rise/ Glenmore Park, one of 4 new schools in the Glenmore Park Primary School Community Group (SCG).

The new primary school in Mulgoa Rise /Glenmore Park is to be designed and built to significantly improve educational outcomes and address the capacity shortfall across the area for an approximate 414 students initially, with the potential expansion to 1000 as demand grows.

SINSW aims to "... make schools the centre of local communities through initiatives designed to bring people together and create opportunities for learning, work and play." (SINSW, 2021). The new Primary School in Mulgoa Rise will offer facilities that can be made available for community use such as a brand-new Community Hall, Sporting Facilities and a Library. At completion, the new primary school, will fill the gap for a centralise community hub.

2.2 Landscape Concept & Design Principles

Inspired by the site history and cultural background of Mulgoa Rise where two indigenous nations intersect. The landscape design of the new Primary school in Mulgoa Rise aims to create the '**meeting place**' for students and local communities that celebrates the original characters and culture of the land, encourages active and passive recreations as well as knowledge sharing beyond the classroom.



IDENTITY



INCLUSIVITY & ACCESSIBILITY



SUSTAINABILITY & RESILIENCE



PROGRAMMABLE SPACE

Four landscape design principles (based on Education SEPP Design Quality Principles and Educational Facilities Standard and Guidelines), are set as the foundation of the concept design to provide diverse learning opportunities and help facilitate the educational outcomes.

1. Identity

- Promote the identity of the place through design interpretations of the site history.
- Respect and celebrate the characters and culture of the land.
- Select materials that are robust and unique to the environmental setting.
- As a landmark within this new community.

2. Inclusivity and Accessibility

- Ensure the design presents an accessible, inclusive, and welcoming environment, both physically and culturally.
- Create a safe and pleasant environment which encourages outdoor learning and activities.
- Ensure equal access is provided and structured to allow for clear circulation and connections.
- Allow for passive/dynamic play and learning spaces for different age groups.
- Provide access and connections to the natural environment that encourages learning and interactions.

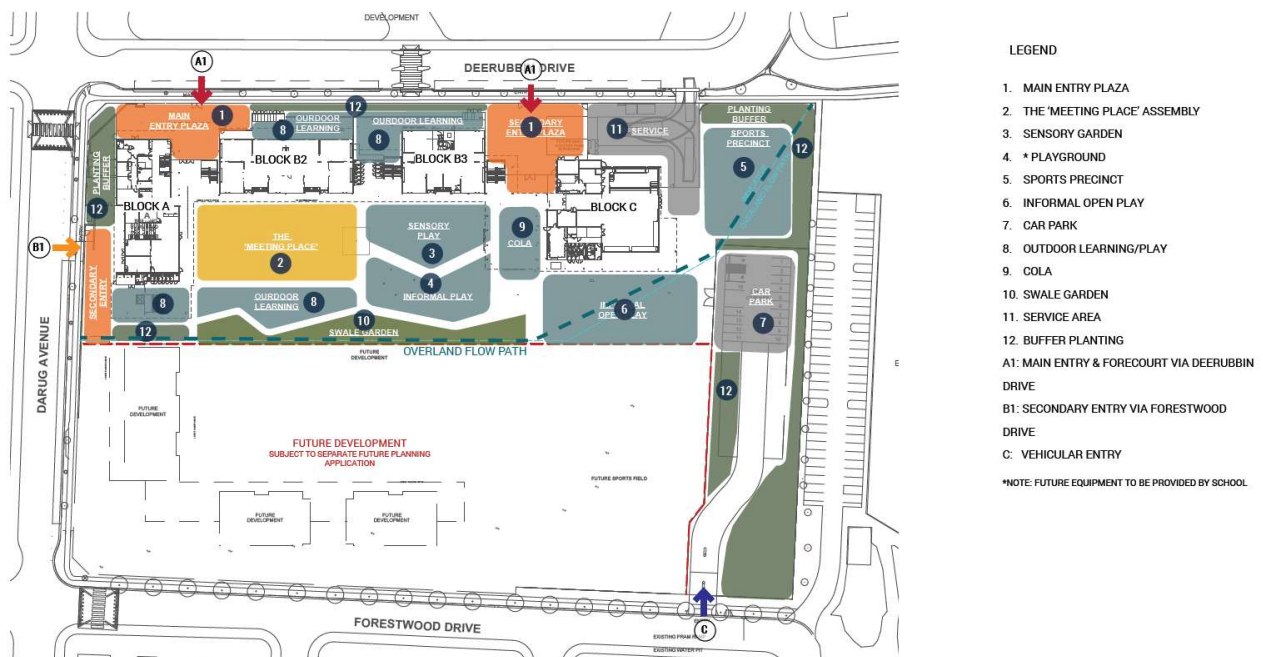
3. Sustainability and Resilience

- Planting selections are responsive to local environment, with opportunities to provide shade and reinstate the local habitat.
- 1in100 year flood risk is considered to achieve a resilient landscape.
- Accommodate the varying climate conditions.

4. Programmable Spaces

- Provide flexible and engaging outdoor spaces.
- Encourage outdoor learning and activities in groups or individually and interactions.
- Active and passive play areas are provided to cater for different users.
- A variety of spaces that can accommodate flexible functions and programmes.

FRAMEWORK DIAGRAM



The above diagram sets the framework that represents the landscape planning strategy. Please refer to the appended Landscape drawings for the detailed design. (NTS)

2.3 Landscape Design Response to SEARs

On the 02 December 2020, the Department of Planning, Industry and Environment (DPIE) issued Secretary's Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement for the proposed development. This report has been prepared having regard to the Urban Design specific SEARs encompassing Landscape design to address the following key landscape design related issues:

1. Contextual Planning
2. Built Form and Urban Design
3. Trees and Landscaping Design

The following table provides a breakdown of comments and responses relating to Landscape Design for the new Primary School in Mulgoa Rise.

| No | INITIATED BY | COMMENTS | RESPONSE |
|----|--------------|---|--|
| 1 | SEARs | Where street trees are affected by the proposed development, an arboricultural impact assessment prepared by a Level 5 (Australian Qualifications Framework) Arborist, which details the number, location and condition of trees to be removed and retained, includes detailed justification for each tree to be removed. | An arboricultural impact assessment has been prepared by Sturt Noble Arboriculture, refer appendix for the complete report. |
| 2 | SEARs | Provide a detailed site-wide landscape strategy, that: <ul style="list-style-type: none">o details the proposed site planting, including location, number and species of plantings, heights of trees at maturity and proposed canopy coverage. | For details of planting proposed on site, please refer to L-SSDA-0010 - 0011 |
| 3 | SEARs | considers equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography, and existing vegetation | Equity and amenity of outdoor play spaces are provided with equal access for different users. In addition, outdoors spaces are structured to create connections between buildings and structures. A combination of outdoor undercover area and vegetation shade is included in the design. |

| | | | |
|----|-------|---|--|
| 4a | SEARs | <p>Demonstrates how the proposed development would:</p> <ul style="list-style-type: none"> - contribute to long term landscape setting in respect of the site and the streetscape. | <p>This development will see the loss of 8 existing trees along the Deerubbin Drive. The trees are being remove to create accessible bays. Acknowledging the impact of tree loss to the street front, the school landscape design offers new line of trees that set back from the footpath. The new landscape will provide shade and compensate the loss of street trees, making a positive contribution to the streetscape.</p> <p>The proposed design aims to encourage a reinstated native landscape environment to provide habitat for native flora and fauna. Along the streets adjacent to the site, with a majority of native trees (medium to large sized) and shrubs are proposed to soften the interface of street and school boundaries, and to ameliorate the views of any elevated walkways from streets.</p> |
| 4b | SEARs | <ul style="list-style-type: none"> - mitigate the urban heat island effect and ensure appropriate comfort levels on-site. | <ol style="list-style-type: none"> 1. The urban heat island effect is minimised by providing natural shade of large canopy trees. 2. The use of planting coverage of grasses and groundcovers to minimise the use of hard surface pavement. 3. Dark coloured pavement is avoided where appropriate. 4. Shade structures are proposed to assist with the comfortable use of outdoor space. 5. Architecturally, light colour roof will be provided |
| 4c | SEARs | <ul style="list-style-type: none"> - contribute to objectives to increase urban tree canopy cover. | <p>Medium to large canopy trees are proposed to target the canopy coverage requirement. See below canopy coverage analysis.</p> |

| | | | |
|---|-------|---|--|
| 5 | SEARs | a detailed landscape plan prepared by a suitably qualified person | <p>The Landscape responses within this report and the appended Landscape Design Drawings are prepared by NBRS Landscape Studio.</p> <p>The Landscape design drawings are showing key levels (RLs), proposed shade structures, proposed materials and finishes, outdoor learning and play spaces, sports courts, and planting zone plan and planting schedule with locations of trees and planting types.</p> |
|---|-------|---|--|

TREE CANOPY COVERAGE

The following diagrams illustrate the adopted canopy coverage measurement strategy. The following diagram illustrates that the 40% canopy coverage requirement is achievable in the context of a school site when measured in proportion to the extent of the proposed landscape area.



Trees to be removed are marked "X" on the diagram to the right.

12,680 m² - External Uncovered Area (excluding carpark & driveways)
5110 m² - Estimated Canopy Area (excluding carpark & driveways)

Canopy Coverage (%)

40%

3 APPENDICES

The following supporting documents have been prepared by **NBRS**ARCHITECTURE to assist on the architectural design of the proposed development.

- LANDSCAPE DESIGN DRAWINGS

NEW PRIMARY SCHOOL IN MULGOA RISE

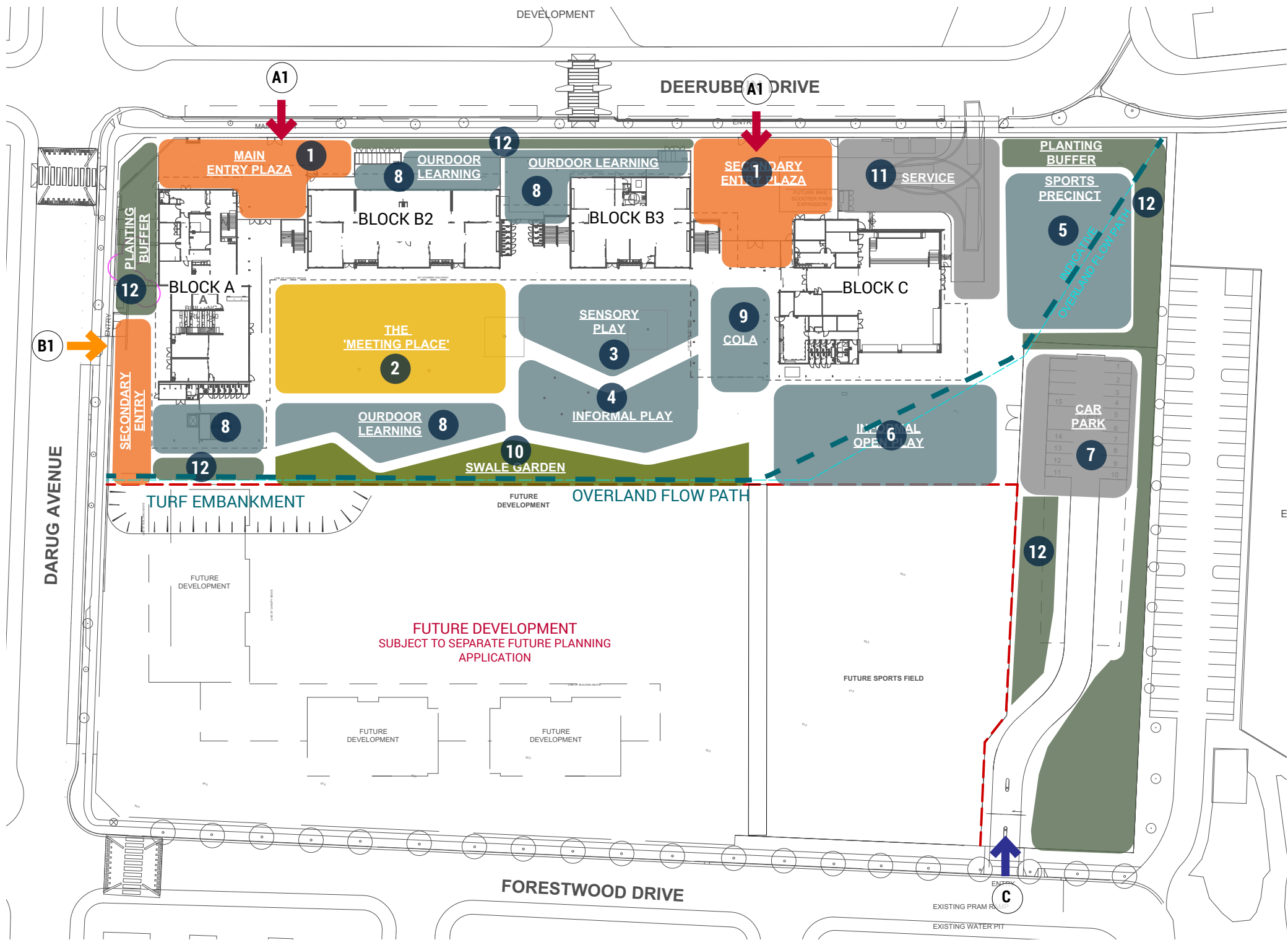
LANDSCAPE DESIGN DRAWINGS

SSDA/ August 2021

Document Control

| Revision | Date | Description | By | Approved |
|----------|----------|-----------------|----|----------|
| 1 | 05.05.21 | SSDA FOR REVIEW | MF | AL |
| 2 | 06.08.21 | SSDA FOR REVIEW | MF | AL |
| 3 | 11.08.21 | SSDA FOR REVIEW | MF | AL |
| 4 | 18.08.21 | SSDA FOR REVIEW | MF | AL |

FRAMEWORK DIAGRAM



LEGEND

- 1. MAIN ENTRY PLAZA
- 2. THE 'MEETING PLACE' ASSEMBLY
- 3. SENSORY GARDEN
- 4. * PLAYGROUND
- 5. SPORTS PRECINCT
- 6. INFORMAL OPEN PLAY
- 7. CAR PARK
- 8. OUTDOOR LEARNING/PLAY
- 9. COLA
- 10. SWALE GARDEN
- 11. SERVICE AREA
- 12. BUFFER PLANTING
- A1: MAIN ENTRY & FORECOURT VIA DEERUBBIN DRIVE
- B1: SECONDARY ENTRY VIA FORESTWOOD DRIVE
- C: VEHICULAR ENTRY
- *NOTE: FUTURE EQUIPMENT TO BE PROVIDED BY SCHOOL

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Drawing Title
FRAMEWORK DIAGRAM
SCALE:NTS

Project
NEW PRIMARY SCHOOL IN MULGOA RISE

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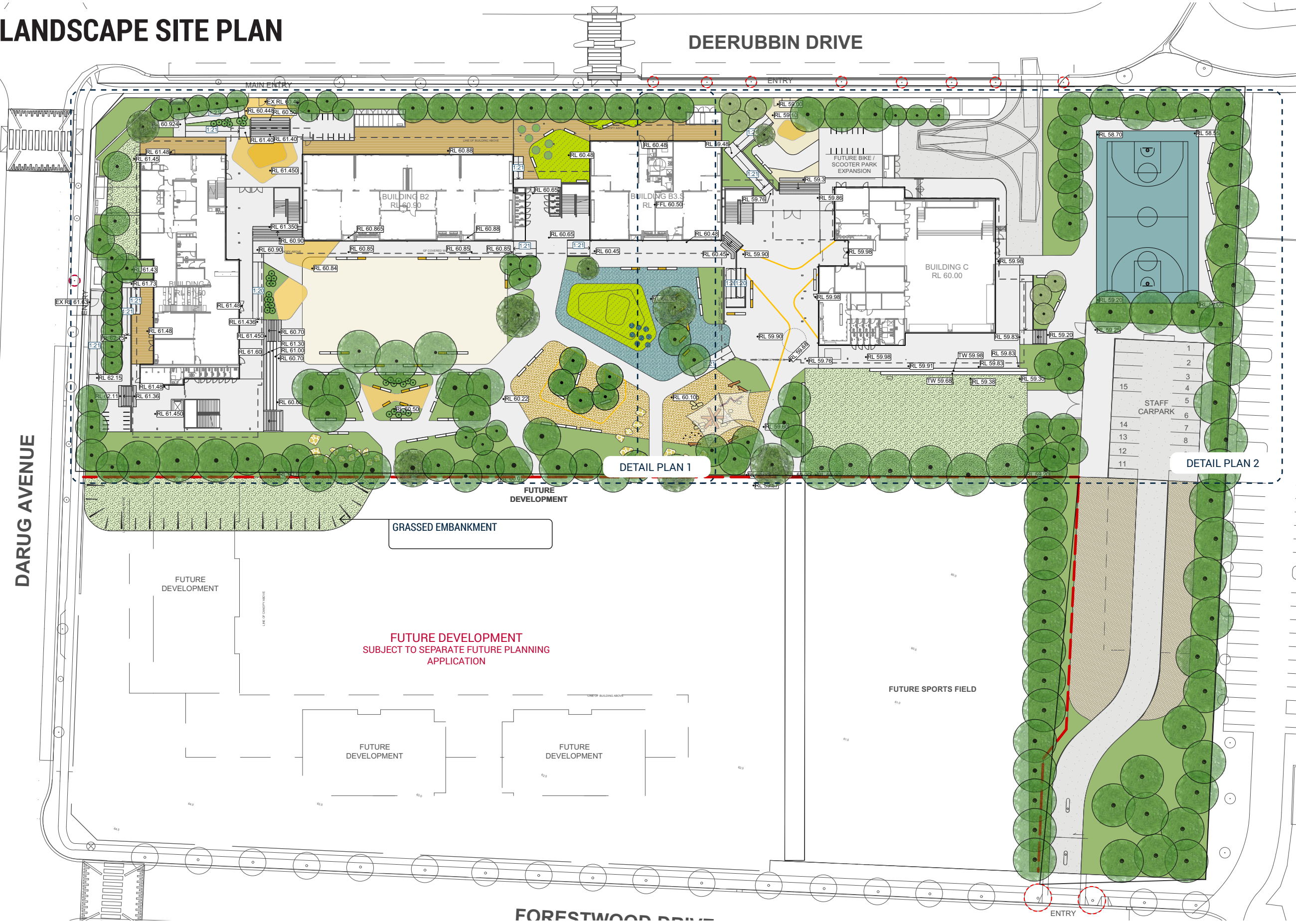
SSDA/ AUGUST 2021

Drawing Reference
L-SSDA- 004

Revision
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LANDSCAPE SITE PLAN



- LEGEND**
- SITE BOUNDARY
 - PROPOSED GROUND LEVEL
 - EXISTING GROUND LEVEL
 - TOP OF WALL HEIGHT
 - TREES TO BE REMOVED
 - EXISTING TREES
 - PROPOSED TREES
 - PAVING TYPE 1
STANDARD CONCRETE - BROOM FINISH
 - PAVING TYPE 2
COLOURED CONCRETE - ABRASIVE FINISH
 - PAVING TYPE 3
COLOURED CONCRETE - BROOM FINISH
 - PAVING TYPE 4
INTERPRETIVE LINE MARKING ON CONCRETE
 - PAVING TYPE 5
ASPHALT REFER TO ENGINEERS DETAILS
 - PAVING TYPE 6
SOFT FALL (2 COLOURS)
 - PAVING TYPE 7
PLAYGROUND MULCH
 - PAVING TYPE 7
PLEXIPAVE ON ASPHALT
 - PAVING TYPE 8
35MM SYNTHETIC TURF
 - PAVING TYPE 9
SANDSTONE STEPPING STONE
 - WALL TYPE 1
INSITU CONCRETE RETAINING WALL
 - WALL TYPE 2
INSITU CONCRETE HOB WALL
 - WALL TYPE 3
INSITU CONCRETE SEATING WALL
 - STAIR TYPE 1
INSITU CONCRETE STAIRS, HANDRAILS REFER TO ARCHITECTURAL DRAWING
 - CONCRETE TIERED SEATING
INSITU CONCRETE SEATING, HANDRAILS REFER TO ARCHITECTURAL DRAWING
 - TACTILES
 - OFF-SHELF PLANTER
 - MASS PLANTING
 - TURF
 - TIMBER PLAY ELEMENTS
TO BE INSTALLED BY SCHOOL
 - SHADE STRUCTURE
TO BE INSTALLED BY SCHOOL
 - BIKE RACKS
REFER ARCHITECTURAL DRAWINGS
 - FENCE AND GATE TYPES
REFER ARCHITECTURAL DRAWINGS

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LANDSCAPE SITE PLAN
SCALE: 1: 750 @ A3

Project
NEW PRIMARY SCHOOL IN MULGOA RISE

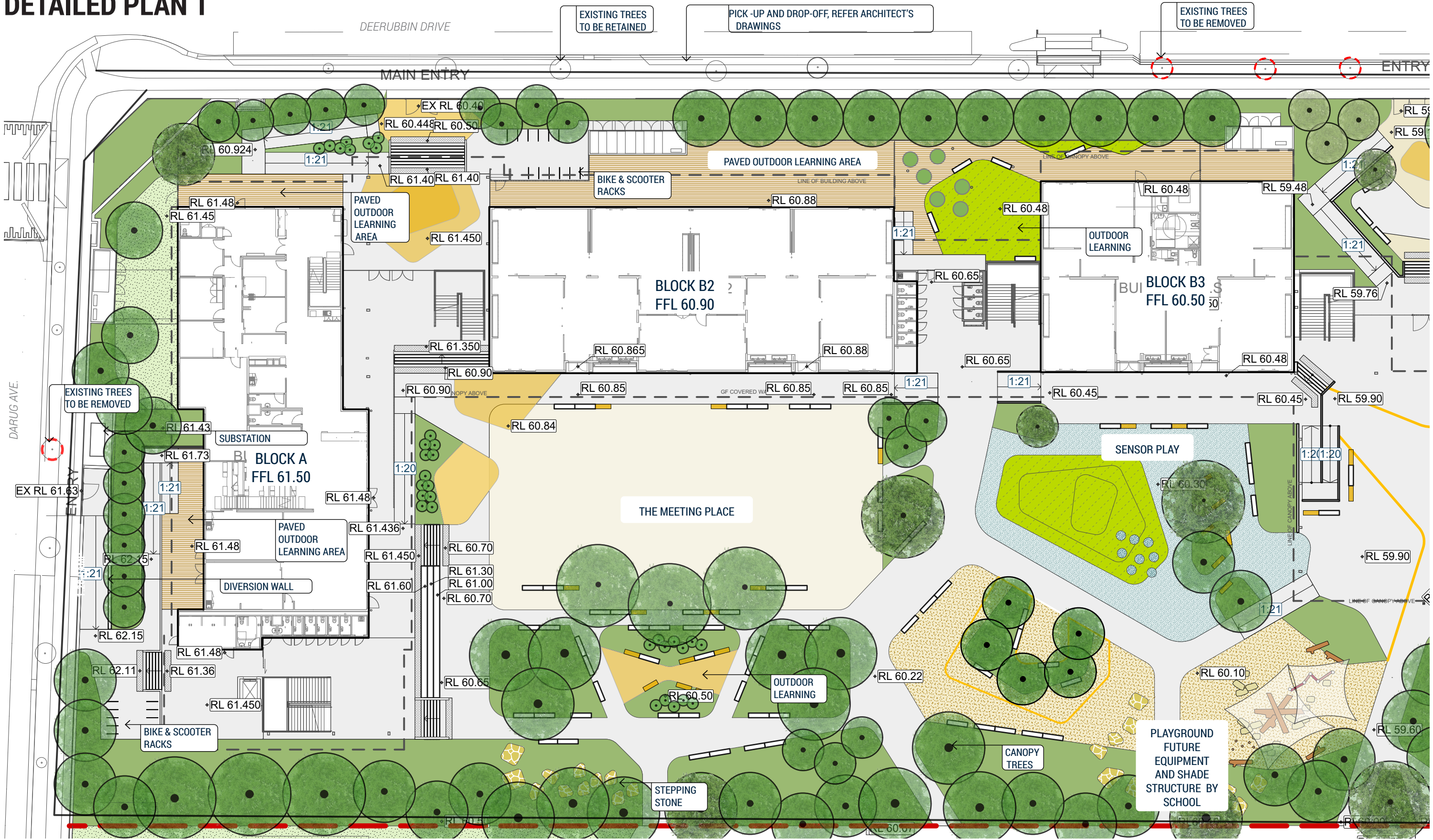


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L-SSDA- 005
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DETAILED PLAN 1



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DETAILED PLAN 1
SCALE: 1: 300 @ A3

Project
NEW PRIMARY SCHOOL IN MULGOA RISE



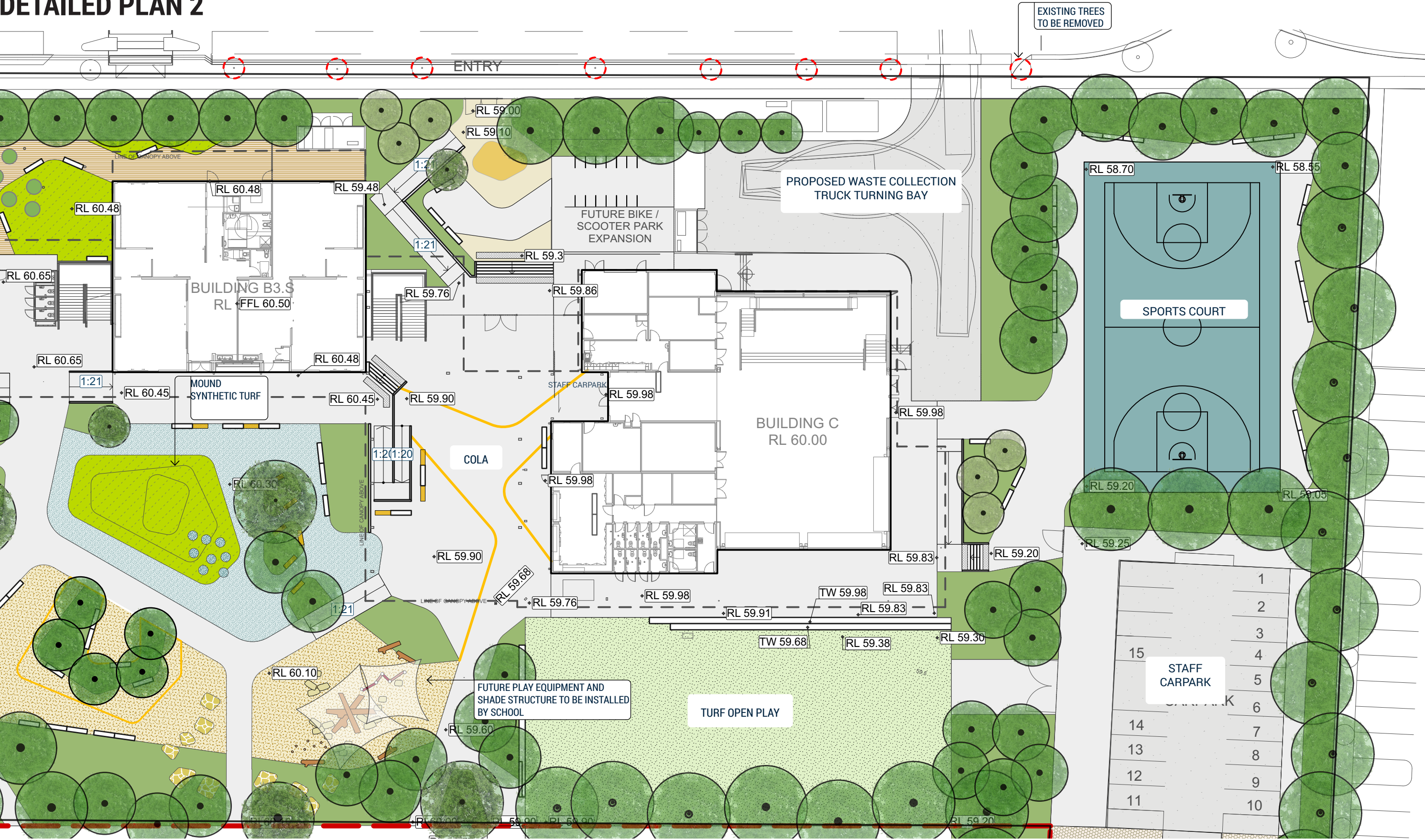
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DETAILED PLAN 2



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DETAILED PLAN 2
SCALE: 1: 300 @ A3

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NEW PRIMARY SCHOOL IN MULGOA RISE



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MATERIALS PALETTE



CONCRETE PAVEMENT BROOMED & EXPOSED AGGREGATE FINISH (SCHOOL ENTRIES)



COLOURED CONCRETE PAVEMENT- SUNDANCE



COLOURED CONCRETE PAVEMENT- TERRACOTTA



INDICATIVE COLOURED CONCRETE GRAPHIC



SYNTHETIC TURF



TIMBER FENCE
LOCATION REFER TO ARCHITECTURAL DRAWINGS



CONCRETE SEATING



MODULAR SEATING

PLANTING PALETTE

TREES



Angophora costata



Eucalyptus punctata



Banksia integrifolia



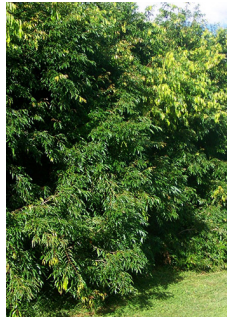
Tristaniopsis laurina



Lagerstroemia indica
'Natchez'



Callistemon viminalis



Waterhousea floribunda
'Sweeper'

SHRUBS



Xanthorrhoea australis



Banksia ericifolia



Banksia spinulosa



Bursaria spinosa



Doryanthes excelsa



Westringia fruticosa



Rhagodia spinescens



Westringia fruticosa 'Mundi'



Correa alba



Alpinia caerulea

GRASSES AND GROUNDCOVERS



Lomandra longifolia



Lomandra 'Tankia'



Lomandra 'Lime Wave'



Themeda australis



Casuarina glauca 'Cousin It'



Scaevola aemula



Sarcozona praecox



Microlaena stipoides



Senecio serpens

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PLANTING PALETTE

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0 10 20 30 40 50 60 70 80 90 100

PLANTING ZONE



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Drawing Title

PLANTING ZONE

SCALE:1: 1000 @ A3

Project

NEW PRIMARY SCHOOL IN MULGOA RISE



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PLANTING SCHEDULE

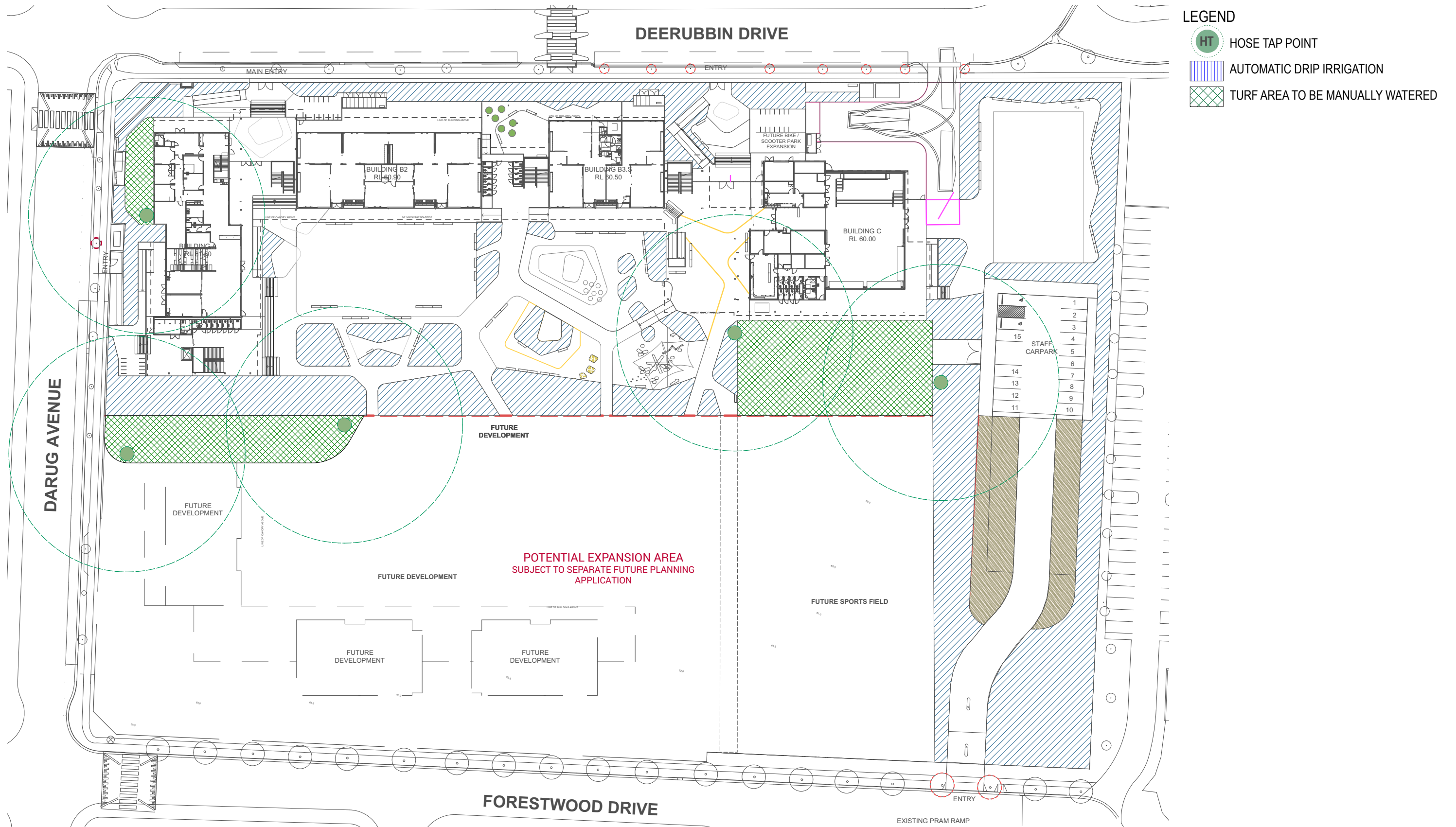
| ID | Botanic Name | Common Name | Pot Size | Density | Mature Height | Quantity 2* |
|-------------------|--------------------------------|------------------------|-------------------------|--------------|---------------|-------------|
| TREES (SITE WIDE) | | | | | | |
| ANGcos | Angophora costata | Smooth-barked Apple | 100L | As Indicated | 15 - 20m | 18 |
| ARAh | Araucaria heterophylla | Norfolk Island Pine | 100L | As Indicated | over 30m | 4 |
| BANint | Banksia integrifolia | Coastal Banksia | 100L | As Indicated | 5 - 10m | 16 |
| CALvim | Callistemon viminalis | Callistemon | 100L | As Indicated | 5 - 8m | 13 |
| CUPana | Cupaniopsis anacardioides | Tuckeroo | 100L | As Indicated | 10 - 15m | 18 |
| EUCpun | Eucalyptus punctata* | Grey Gum | 100L | As Indicated | 25 - 30m | 25 |
| EUCter | Eucalyptus tereticornis* | Forest Red Gum | 100L | AS indicated | over 30m | 21 |
| GLOfer | Glochidion ferdinandi | Cheese Tree | 100L | AS indicated | 5-10m | 2 |
| HYMfla | Hymenosporum flavum | Native frangipani | 100L | AS indicated | 20-25m | 5 |
| LAGnat | Lagerstroemia indica 'Natchez' | Crepe Myrtle | 100L | AS indicated | 5 - 10m | 5 |
| MELqui | Melaleuca quinquenervia | Broad-leafed Paperbark | 100L | AS indicated | 10 - 15m | 14 |
| SYZaus | Syzygium australe | Brush Cherry | 100L | AS indicated | 5 - 10m | 13 |
| TRIlau | Tristaniopsis laurina* | Water Gum | 100L | AS indicated | 5 - 10m | 9 |
| XANaus | Xanthorrhoea australis | Grass Tree | 1.0m Clear Trunk Height | As Indicated | 1.50 - 3m | 32 |
| TREES TOTAL | | | | | | 195 |

| ID | Botanic Name | Common Name | Pot Size | Density/m2 | Percentage of planted area** | Quantity2* |
|-------------------------------|-------------------------------------|------------------------|-----------|------------|------------------------------|------------|
| ZONE 1: ENTRY GARDEN PLANTING | | 646 | SQM | | | |
| Be | Banksia ericifolia | Heath Banksia | 200mm | 3 | 10% | 194 |
| Bs | Banksia serrata * | Old Man Banksia | 200mm | 2 | 2% | 26 |
| Bs | Banksia spinulosa | Hairpin Banksia | 200mm | 4 | 5% | 129 |
| Bu | Bursaria spinosa * | Blackthorn | 200mm | 4 | 3% | 65 |
| Cca | Callistemon citrinus 'Anzac' | Bottlebrush | 200mm | 4 | 5% | 129 |
| Cve | Callistemon viminalis 'Endeavour' | Bottlebrush | 200mm | 4 | 5% | 129 |
| De | Doryanthes excelsa | Gymea Lilly | 45L | - | - | 7 |
| Gj | Grevillea juniperina * | Juniper-leaf grevillea | 200mm | 4 | 10% | 258 |
| HV | Hardenbergia violacea | Flase Sarsparilla | 150mm | 4 | 5% | 129 |
| Lt | Leptospermum trinervium * | Slender Tea Tree | 200mm | 4 | 5% | 129 |
| Lc | Lomandra cylindrica 'Lime Wave' | Lomandra Lime Wave | tubestock | 8 | 10% | 517 |
| LI | Lomandra longifolia * | Spiny Mat Rush | tubestock | 8 | 10% | 517 |
| Lt | Lomandra tanika | Tanika Lomandra | tubestock | 8 | 10% | 517 |
| Lb | Leucophyta brownii | Cushion bush | 200mm | 4 | 5% | 129 |
| Rs | Rhagodia spinescens | Creeping Saltbush | 200mm | 4 | 5% | 129 |
| Wm | Westringia fruticosa 'Mundi' | Coast Rosemary | 200mm | 3 | 5% | 97 |
| Wf | Westringia fruticosa | Coast Rosemary | 200mm | 5 | 5% | 162 |
| | | | | Subtotal | 100% | 3,263 |
| ZONE 2: SWALE GARDEN PLANTING | | 465 | SQM | | | |
| Dic | Dichelachne crinita | Longhair Plumegrass | tubestock | 8 | 5% | 186 |
| Gs | Gahnia sieberiana | Red-Fruit Saw Sedge | tubestock | 8 | 10% | 372 |
| Ju | Juncus usitatus * | Common Rush | tubestock | 8 | 10% | 372 |
| Lc | Lomandra cylindrica 'Lime Wave' | Lomandra Lime Wave | tubestock | 8 | 15% | 558 |
| Lco | Lomandra confertifolia 'Little Can' | Dwarf Lomandra | tubestock | 8 | 10% | 372 |
| LI | Lomandra longifolia * | Spiny Mat Rush | tubestock | 8 | 15% | 558 |
| Lt | Lomandra tanika | Tanika Lomandra | tubestock | 8 | 10% | 372 |
| Ms | Microlaena stipoides | Weeping Grass | tubestock | 6 | 10% | 279 |
| Pp | Poa poiiformis 'Kingsdale' | Kingsdale Poa | tubestock | 7 | 5% | 163 |
| Ta | Themeda australis * | Kangaroo Grass | tubestock | 6 | 10% | 279 |
| Tt | Themeda triandra | Kangaroo Grass | tubestock | 6 | 5% | 140 |
| | | | | Subtotal | 100% | 3,092 |

| ID | Botanic Name | Common Name | Pot Size | Density/m2 | Percentage of planted area** | Quantity2* |
|--|-----------------------------------|------------------------|-----------|------------|------------------------------|------------|
| ZONE 3: CENTRAL PLAY & BUSH TUCKER PLANTIN | | 741 | SQM | | | |
| CA | Correa alba | White Correa | 150mm | 4 | 3% | 89 |
| Cag | Casuarina glauca 'Cousin It' | Dwarf Casuarina | 150mm | 4 | 3% | 89 |
| Cve | Callistemon viminalis 'Endeavour' | Bottlebrush | 200mm | 4 | 5% | 148 |
| Ch | Cissus hypoglauca | Cissus Vine | 150mm | 4 | 5% | 148 |
| GS | Grevillea Sandra Gordon | Sandra Gordon | 150mm | 4 | 5% | 148 |
| Gj | Grevillea juniperina * | Juniper-leaf grevillea | 200mm | 4 | 8% | 237 |
| Hp | Helichrysium petiolare | Licorice Plant | 150mm | 4 | 10% | 296 |
| Lc | Lomandra cylindrica 'Lime Wave' | Lomandra Lime Wave | tubestock | 8 | 12% | 711 |
| LI | Lomandra longifolia * | Spiny Mat Rush | tubestock | 8 | 15% | 889 |
| Lt | Lomandra tanika | Tanika Lomandra | tubestock | 8 | 10% | 593 |
| Tt | Themeda triandra | Kangaroo Grass | tubestock | 8 | 3% | 178 |
| Rop | Rosmarinus officinalis Prostratus | Creeping Rosemary | 150mm | 6 | 5% | 222 |
| SA | Scaevola aemula | Fairy Fan Flower | 150mm | 4 | 3% | 89 |
| SS | Senecio serpens | Blue Chalk Stick | 150mm | 4 | 3% | 89 |
| Sp | Sarcosoma praecox | Noon Flower | 150mm | 6 | 5% | 222 |
| Ts | Tetragonia spp. | New Zealand Spinach | 150mm | 6 | 5% | 222 |
| | | | | Subtotal | 100% | 4,372 |
| ZONE 4: PERIMETER PLANTING | | 2137 | SQM | | | |
| Cag | Carpobrotus glaucescens | Pig Face | 200mm | 4 | 5% | 427 |
| Hm | Hardenbergia violacea Meema | Purple Coral Pe | 200mm | 4 | 5% | 427 |
| Hp | Helichrysium petiolare | Licorice Plant | 150mm | 4 | 5% | 427 |
| Lc | Lomandra cylindrica 'Lime Wave' | Lomandra Lime Wave | tubestock | 6 | 10% | 1,282 |
| LI | Lomandra longifolia * | Spiny Mat Rush | tubestock | 6 | 10% | 1,282 |
| Lt | Lomandra tanika | Tanika Lomandra | tubestock | 5 | 10% | 1,069 |
| Ms | Microlaena stipoides | Weeping Grass | tubestock | 5 | 5% | 534 |
| PL | Poa labillardieri | Tussock Grass | tubestock | 5 | 5% | 534 |
| Ta | Trachelospermum asiaticum | Asiatic Jasmine | 150mm | 5 | 5% | 534 |
| Ta | Themeda australis * | Kangaroo Grass | tubestock | 5 | 5% | 534 |
| Rop | Rosmarinus officinalis Prostratus | Creeping Rosemary | 150mm | 6 | 10% | 1,282 |
| SA | Scaevola aemula | Fairy Fan Flower | 150mm | 3 | 5% | 321 |
| SS | Senecio serpens | Blue Chalk Stick | 150mm | 3 | 10% | 641 |
| Wm | Westringia fruticosa 'Mundi' | Coast Rosemary | 200mm | 3 | 5% | 321 |
| Wf | Westringia fruticosa | Coast Rosemary | 200mm | 3 | 5% | 321 |
| | | | | Subtotal | 100% | 9,937 |
| ZONE 5: SPORTS ZONE PLANTING | | 423 | SQM | | | |
| Cag | Carpobrotus glaucescens | Pig Face | 200mm | 4 | 10% | 169 |
| Hp | Helichrysium petiolare | Licorice Plant | 150mm | 4 | 5% | 85 |
| Hm | Hardenbergia violacea Meema | Purple Coral Pe | 200mm | 4 | 10% | 169 |
| Lc | Lomandra cylindrica 'Lime Wave' | Lomandra Lime Wave | tubestock | 8 | 20% | 677 |
| LI | Lomandra longifolia * | Spiny Mat Rush | tubestock | 8 | 15% | 508 |
| Lt | Lomandra tanika | Tanika Lomandra | tubestock | 8 | 20% | 677 |
| Ta | Trachelospermum asiaticum | Asiatic Jasmine | 150mm | 4 | 5% | 85 |
| PL | Poa labillardieri | Tussock Grass | tubestock | 8 | 10% | 338 |
| PA | Pennisetum alopecuroides | Swamp Foxtail | 150mm | 6 | 5% | 127 |
| | | | | Subtotal | 100% | 2,369 |
| MASSPLANTING TOTAL | | | | | | 23,033 |

*NOTE: Plant species as per Penrith City Council native species list
** NOTE: Plant quantities are subject to detail design and will change

PRELIMINARY IRRIGATION PLAN



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PRELIMINARY IRRIGATION PLAN

SCALE:1: NTS

Project

NEW PRIMARY SCHOOL IN MULGOA RISE



Landscape Architect

NBRSARCHITECTURE.

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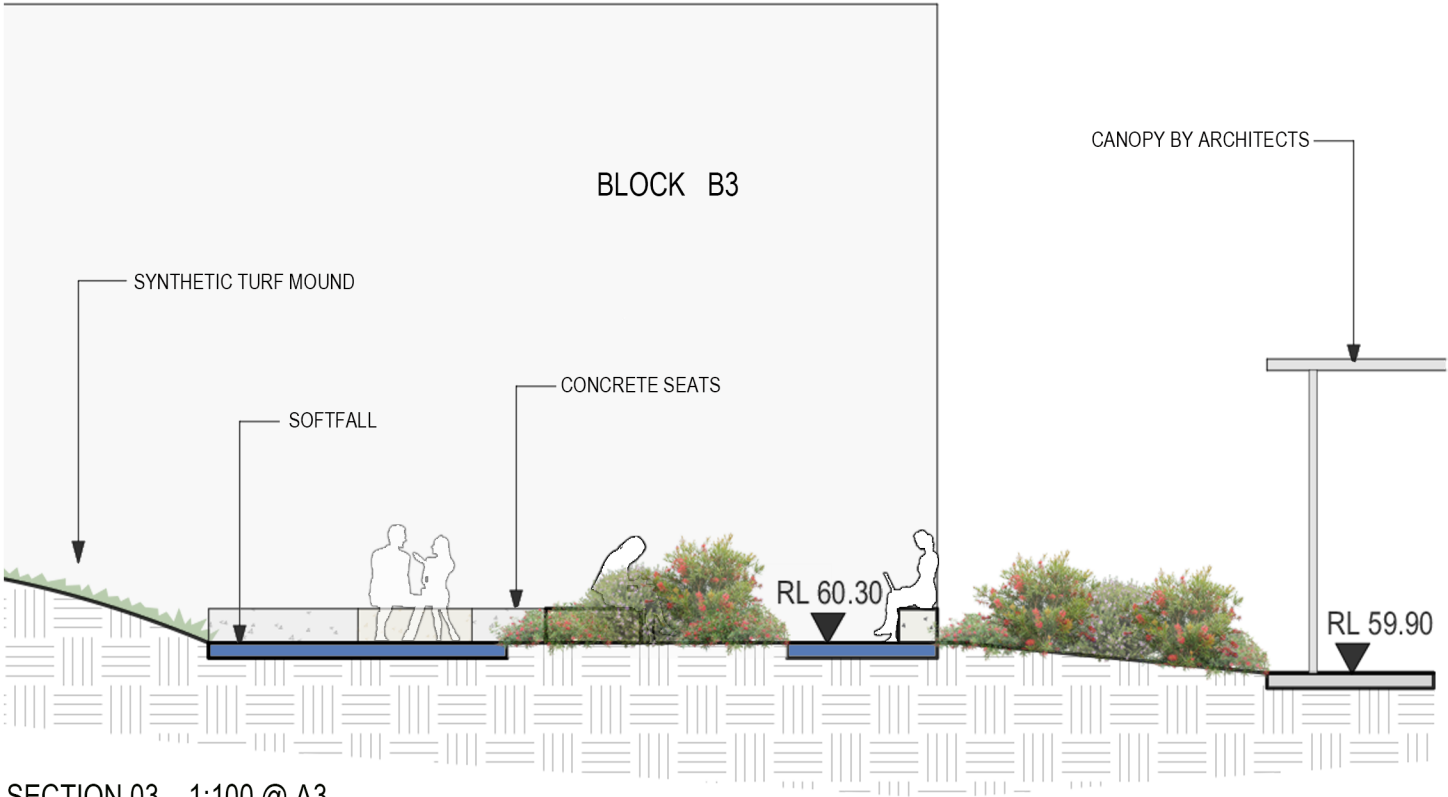
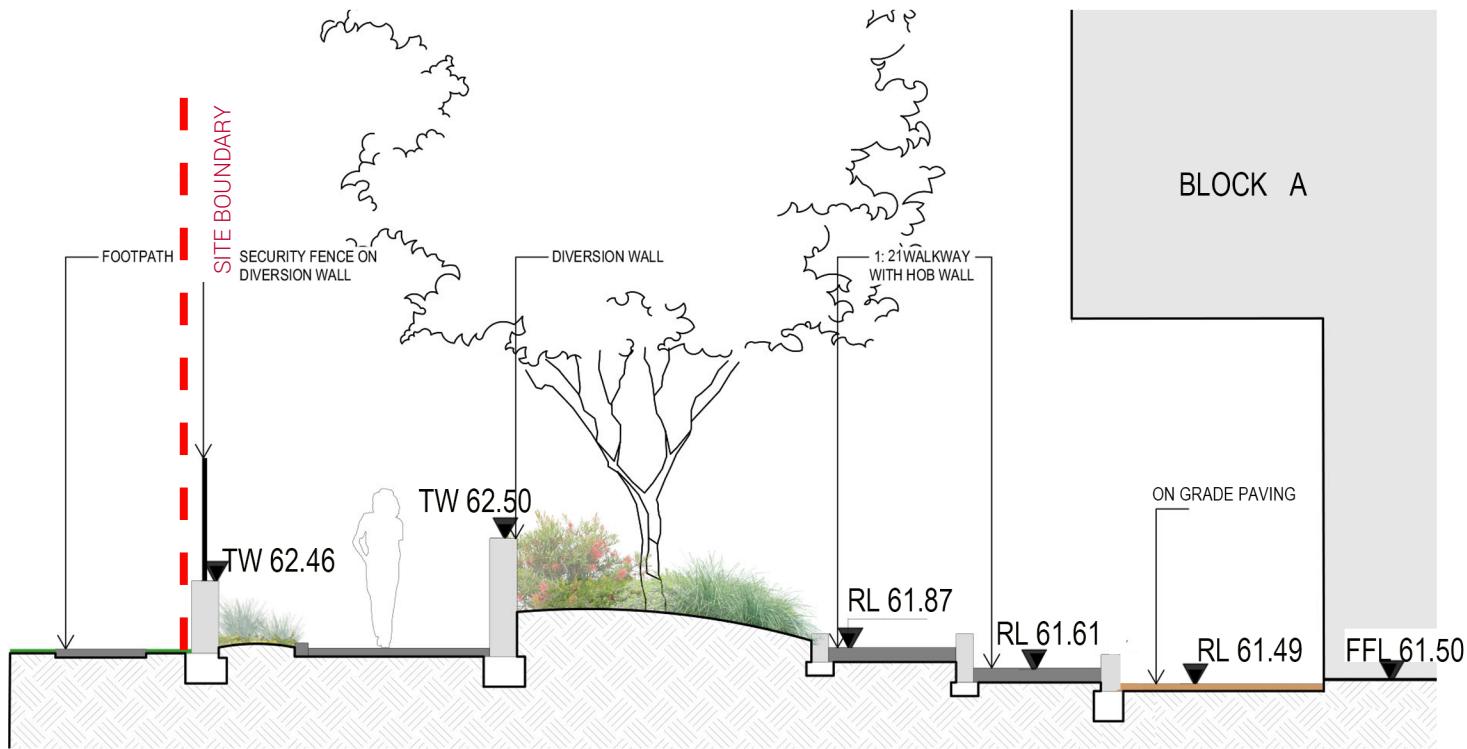
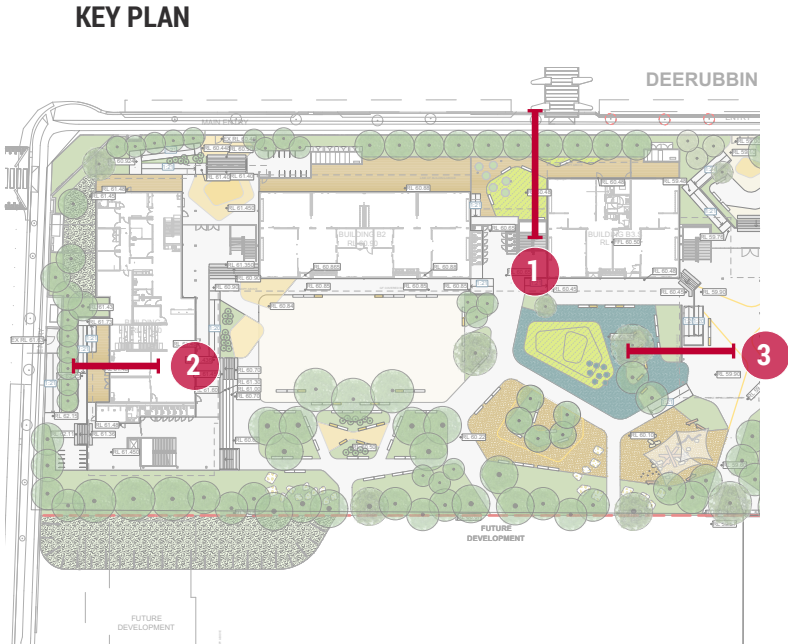
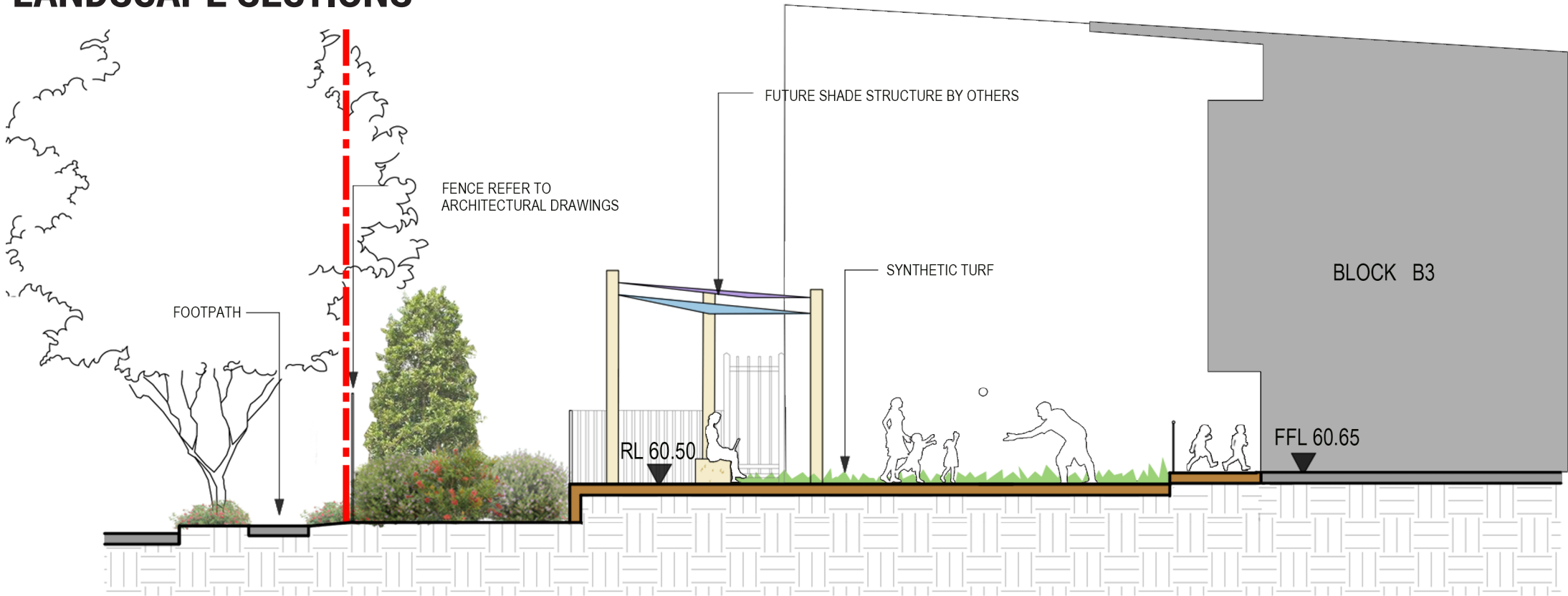
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LANDSCAPE SECTIONS



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Project
NEW PRIMARY SCHOOL IN MULGOA RISE

Landscape Architect
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03