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LEGACYPROPERTY

CADDENS STAGE 8 & 9

Landscape
Development Application
Prepared for Legacy Property

Project Number: 2521058
November 2021



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China
South East Asia

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Project number	2521058
Prepared for	Legacy Property
Authors	Baz Richards, Matthew Drury, Elia Naman
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Reviewed	Baz Richards
Approved	Nick Ison
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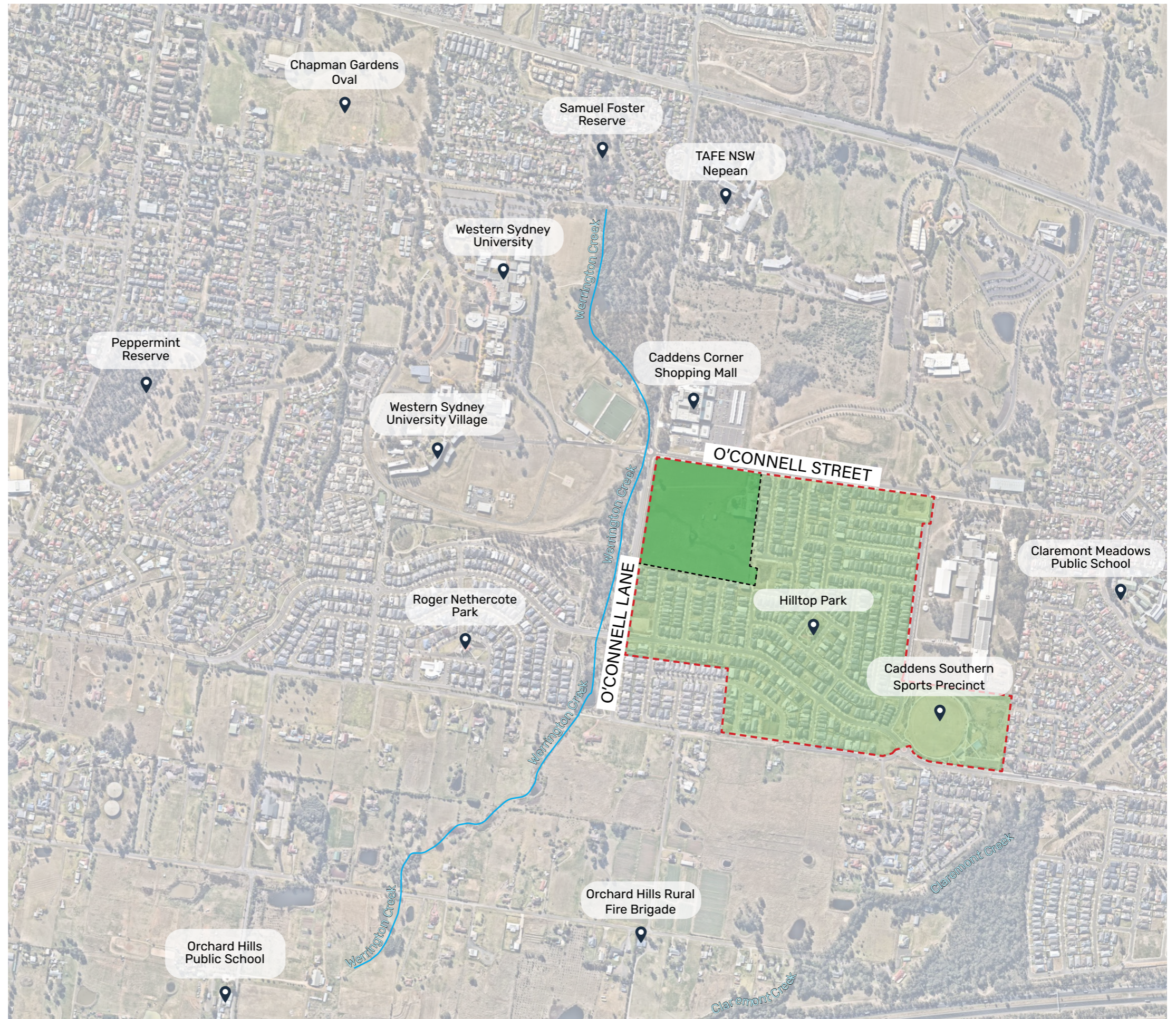
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1.1 Introduction and Site Context

Legacy Property have acquired the site at 89- 115 O'Connell Street, Caddens (corner O'Connell Street and O'Connell Lane). This parcel of land forms the final undeveloped holding of the Caddens Hill development. Stages 8 and 9 propose to construct 121 residential lots and 1 residue lot.

The landscape strategy for the precinct seeks to integrate green initiatives and a sustainable approach. The precinct will enhance biodiversity and ecological integrity of the development by providing a bio-retention basin and dense vegetation of native grasses, shrubs and trees.



LEGEND

- Extent of Works (Stage 8 & 9)
- Caddens Development (Other Stages)
- Caddens Development
- Werrington Creek



1.2 Site Analysis and Opportunities

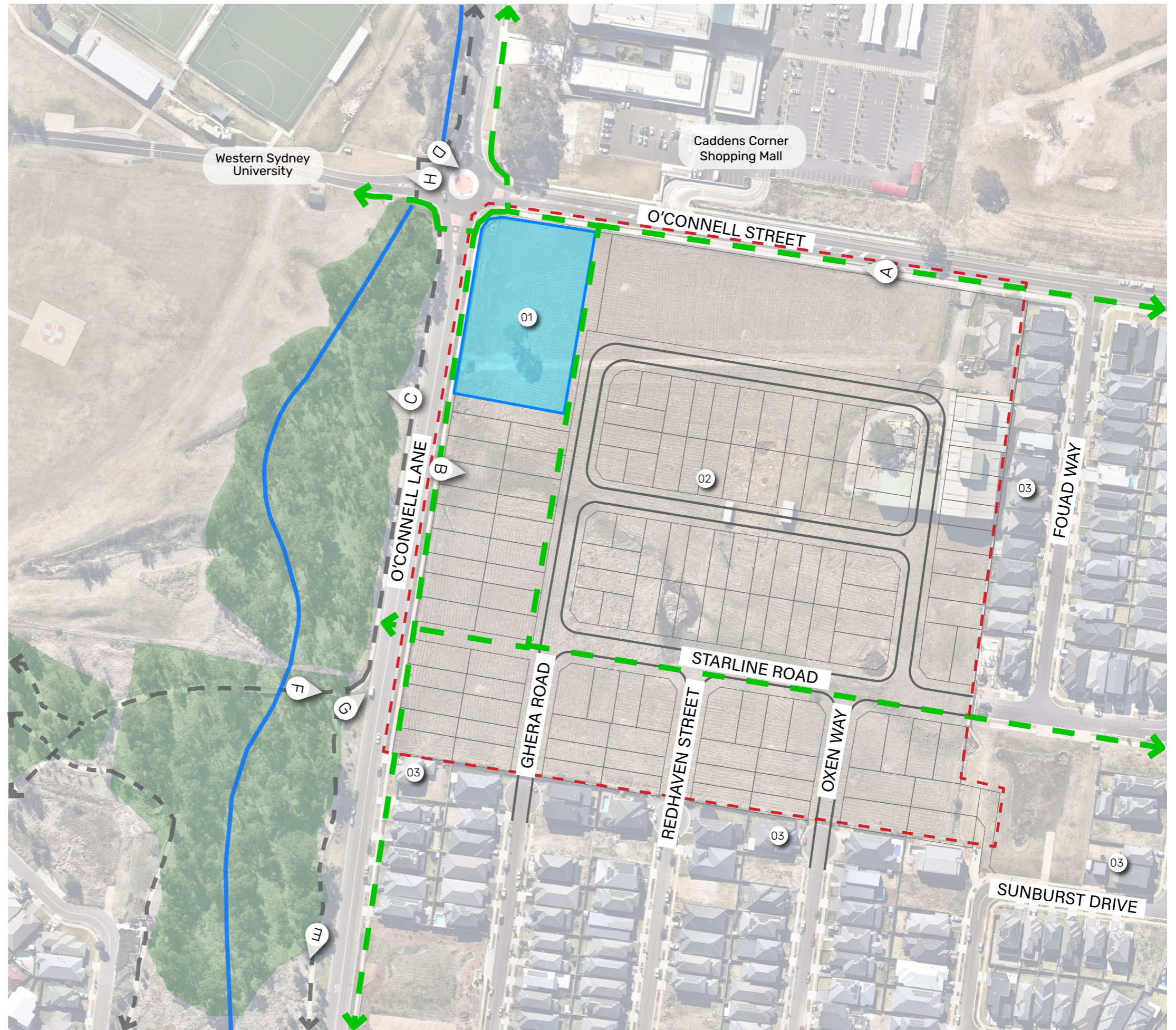
The development site is bound by O'Connell Street to the north, providing excellent connections to the Caddens Corner Shopping Mall and the Western Sydney University campus. To the west of the site is O'Connell Lane, flanked by strands of remnant River-flat Eucalypt Forest and Cumberland Plain Woodland. To the south and east of the proposed development site is the Caddens staged residential development. The development site slopes east to west, falling approximately 19m m from the high point of 65.00 in the east down to 46.00 in the north west corner. The proposed development structure provides opportunities to celebrate views of the world heritage Blue Mountains to the west.

The structure and layout of the development offers opportunities for precinct-wide activation (through careful consideration of key connections to the surrounding retail, education and high quality open spaces including the Caddens Hilltop Park to the east, and the Cardinal Path (recreational path) to the west.

The north-western corner of the development is the proposed location for a landscaped basin. This corner provides significant opportunities for high quality landscape embellishments with tree and shrub planting and landscape materials. This space has the potential to offer a green/blue gateway to the site at this prominent intersection between Western Sydney University and the Caddens Corner Shopping Mall.

LEGEND

- 01 Proposed Basin
- 02 Proposed Lot Subdivision
- 03 Existing Properties
- A Image Markers
- Existing Pedestrian Route
- Proposed Pedestrian Route (Green Link)
- Werrington Creek
- River-flat Eucalypt Forest and Cumberland Plain Woodland
- Basin



1.3 Site Photos



A. Elevated views to West



B. Site looking East from O'Connell Lane



C. Vegetation Apart of Werrington Creek



D. Facing Site from WSU Entrance



E. Cardinal Path (South)



F. Cardinal Path (East)



G. Cardinal Path (East 2)



H. Entrance to WSU

(Image labels shown in plan on page 5)

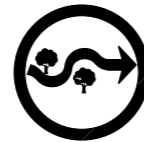
1.4 Design Principles

The following set of design principles have been prepared to ensure the development area responds to local needs and local context to support the growth of a sustainability community into the future.



Housing Diversity

Provide a variety of lot sizes, dwelling types and sizes to respond to the natural topography and cater for a wide range of housing needs



Provide A Well Connected Development

Create accessible, precinct-wide active connections (walking and cycling) through the development of a 'green link' that connects residential lots to public open space and adjacent community facilities



Celebrate Views

Create vantage points for sitting and resting at the high levels that respond to key view lines



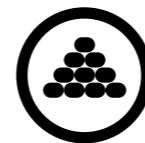
Feature Native Planting

Introduce a predominantly native street tree and shrub planting palette (particularly at key locations along O'Connell Street and O'Connell Lane) that provide a sense of arrival, reinforce local character and increase the ecological value of the area



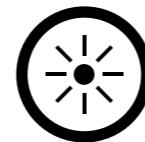
Create A Blue/Green Gateway At The Corner

Provide a naturalised, landscape-led design response to the basin (corner of O'Connell Street and O'Connell Lane) by creating a tiered landscape with high quality walling and planting, with seating areas and paths that provide additional passive recreation opportunities



Landscape Materials

Create a palette of hard landscaping materials (coloured concrete and timber) to soften any retaining elements, respond to the local character and improve sense of way finding



Solar Access

Consider tree species and strategic placement of deciduous trees that provide cooling in summer and solar gain during winter



Mitigate Urban Heat

Provide larger shade trees along key routes and connections that will increase canopy cover and improve thermal comfort by reducing urban heat

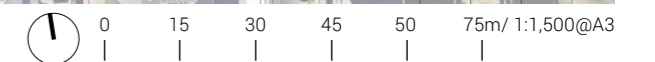


1.5 Master Plan

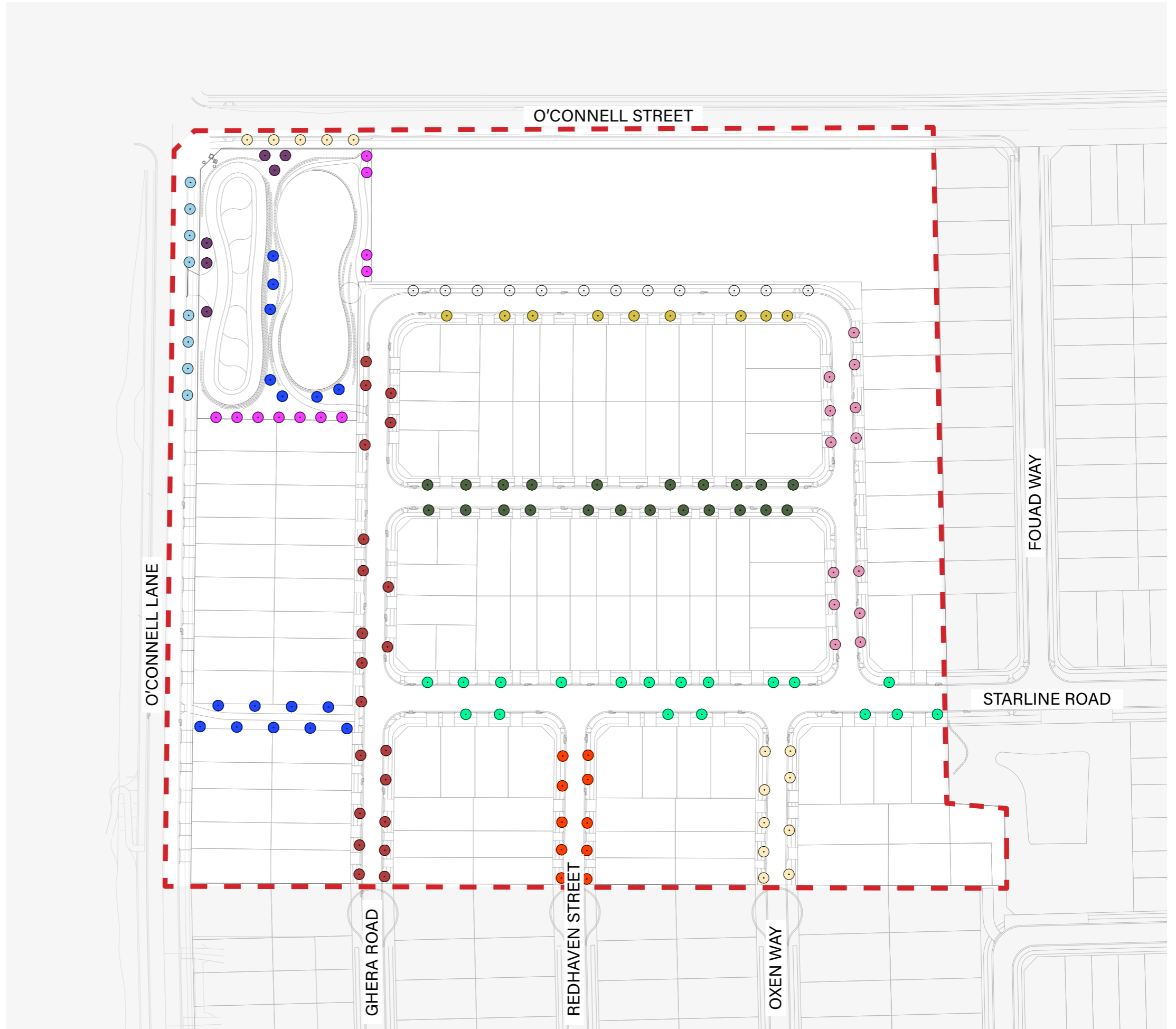


LEGEND

- - - Site Boundary
- 01 OSD Turf Basin
- 02 Rain Garden
- 03 Mass Planting (Low Shrubs and Grasses)
- 04 Lots
- 05 Street Tree Planting
- 06 Shared Path (2.5m Wide)
- 07 Elevated Viewing Platform With Seating
- 08 Retaining Walls - Feature Blocks or Similar
- 09 Dense Screening Planting
- 10 Maintenance Access Path



1.6 Tree Masterplan



LEGEND

- - - Site Boundary
- *Cupaniopsis anacardioides*
- *Elaeocarpus eumundi*
- *Lagerstroemia indica 'Biloxi'*
- *Lagerstroemia indica 'Natchez'*
- *Lophostemon confertus*
- *Tristaniopsis laurina 'Luscious'*
- *Waterhousia floribunda 'Green Avenue'*
- *Corymbia ficifolia*
- *Eucalyptus punctata*
- *Eucalyptus tereticornis*
- Indicative Future Tree Location



1.7 Detail Plan 01



LEGEND

- - - Site Boundary
- 01 OSD Turf Basin
- 02 Rain Garden
- 03 Mass Planting (Low Shrubs and Grasses)
- 04 Lots
- 05 Street Tree Planting
- 06 Shared Path (2.5m Wide)
- 07 Elevated Viewing Platform With Seating
- 08 Retaining Walls - Feature Blocks or Similar
- 09 Dense Screening Planting
- 10 Maintenance Access Path
- 11 Informal Access Path



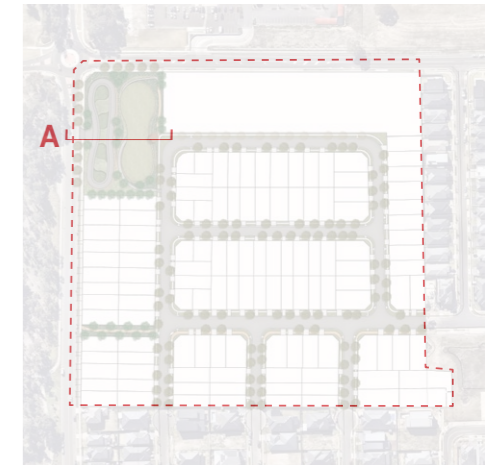
1.8 Detail Plan 02



- LEGEND**
- Site Boundary
 - 01 Mass Planting (Low Shrubs and Grasses)
 - 02 Lots
 - 03 Street Tree Planting
 - 04 Shared Path (2.5m Wide)
 - 05 Bench
 - 06 Cycle Barriers



1.9 Section A



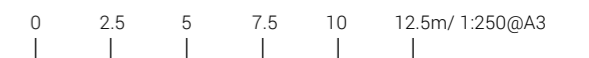
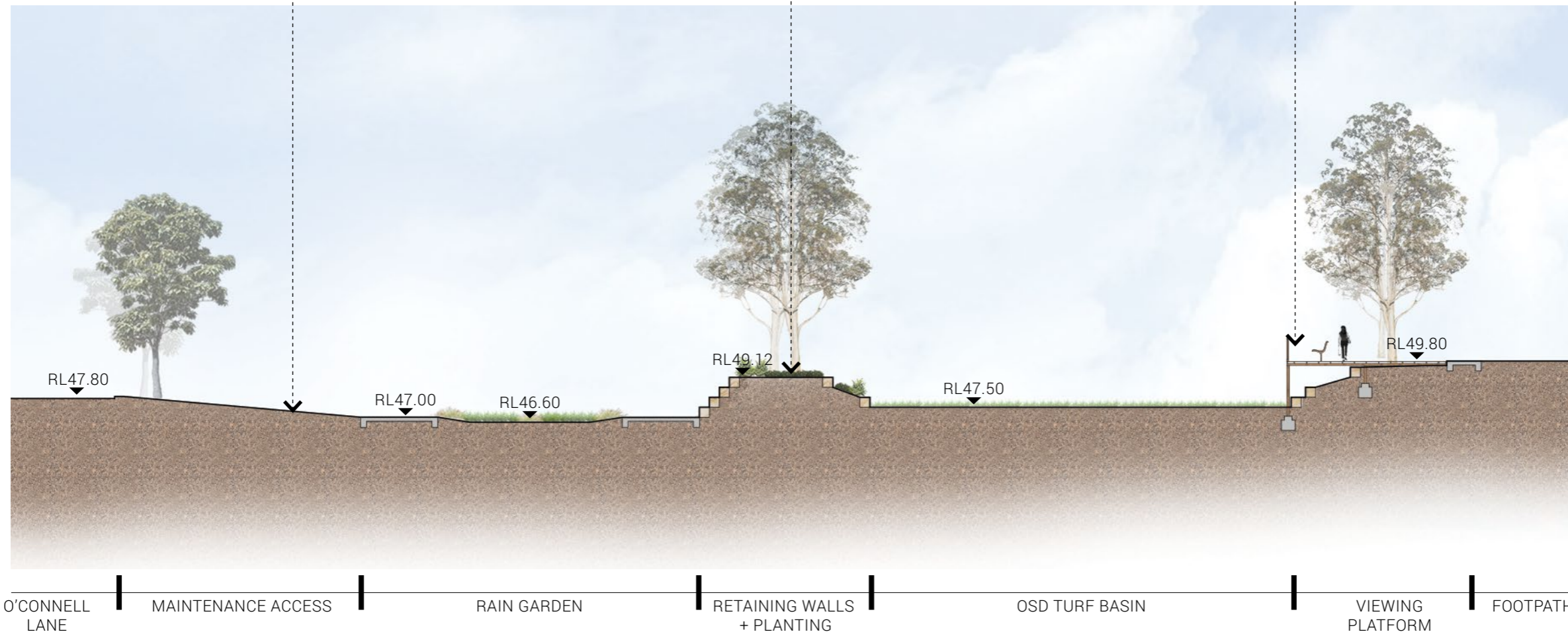
Pathways and Planting



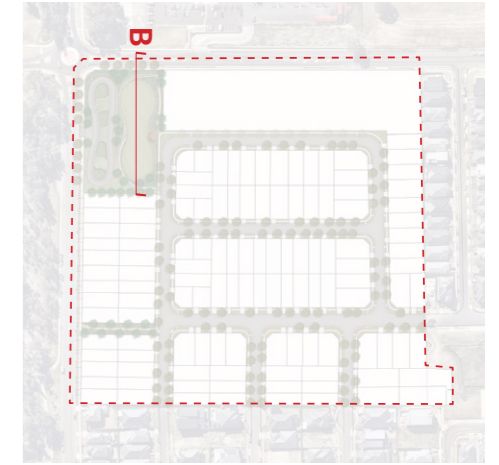
Retaining Walls and Planting



Viewing Platform and Seating



1.10 Section B



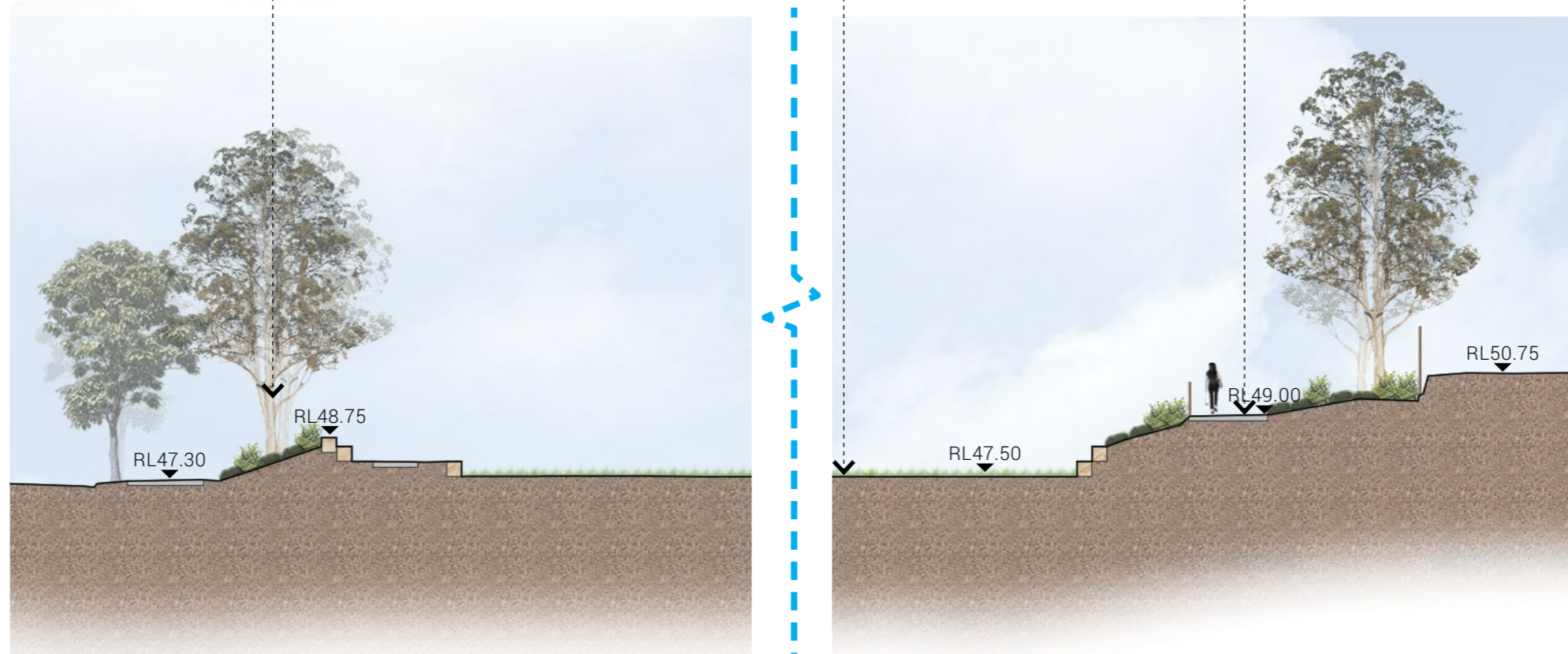
Street Tree Planting +
Batter



OSD Turf Basin



Basin Pathways and Planting



O'CONNELL STREET

PLANTED BATTER +
RETAINING WALLS +
ACCESS PATH

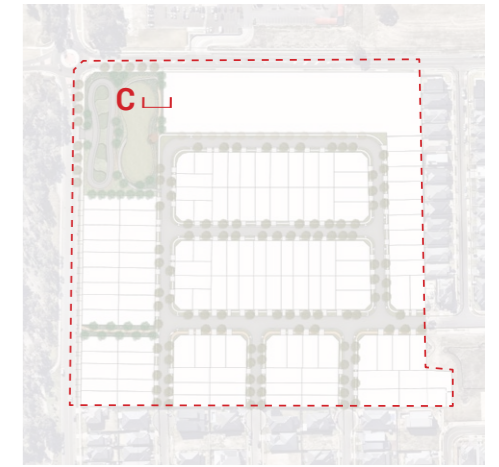
OSD TURF BASIN

PATHWAY AND PLANTING

ADJACENT
LOT



1.11 Section C



OSD Turf Basin



Tiered Walls and Planting



Basin Pathways and Planting



OSD TURF BASIN

RETAINING WALLS AND PLANTED BATTER

2.5M WIDE SHARED PATHWAY

PLANTING BUFFER

ADJACENT LOTS

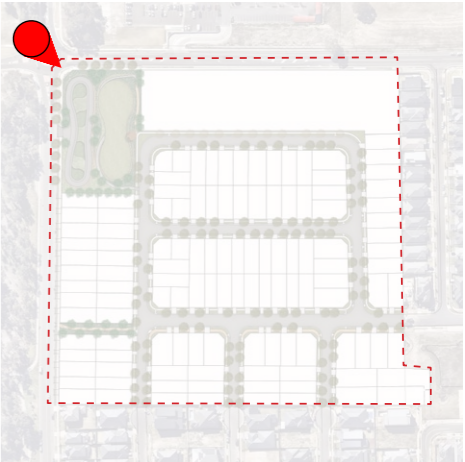
RL47.50

RL48.50

RL49.00

0 1 2 3 4 5m/ 1:50@A3

1.12 Elevation



0 1.5 3 4.5 6 7.5m/ 1:75@A3

1.13 Indicative Planting Schedule

Botanical Name	Common Name	Mature Height	Spread	Pot Size	Spacing/m2
STREET TREES					
<i>Cupaniopsis anacardioides</i>	Tuckeroo	8-15	5	100L	As shown
<i>Elaeocarpus eumundi</i>	Eumundi Quandong	10	4	100L	As shown
<i>Lagerstroemia indica 'Natchez'</i>	Crepe Myrtle	7	4	100L	As shown
<i>Lagerstroemia indica 'Biloxi'</i>	Crepe Myrtle (Pink)	8	4	100L	As shown
<i>Lophostemon confertus</i>	Queensland Brush Box	15	10	100L	As shown
<i>Tristaniopsis laurina 'Luscious'</i>	Water Gum	10	4	100L	As shown
<i>Waterhousia floribunda 'Green Avenue'</i>	Weeping Lily Pilly	8	5	100L	As shown
TREES					
<i>Corymbia ficifolia</i>	Flowering Gum	10 - 15	5	100L	As shown
<i>Eucalyptus punctata</i>	Grey gum	10 - 25	7	100L	As shown
<i>Eucalyptus tereticornis</i>	Forest red gum	20 - 50	10	100L	As shown
SHRUBS					
<i>Callistemon 'Better John'</i>	Dwarf Bottlebrush	0.6-1.2	60-90	200mm	4-6
<i>Doryanthes excelsa</i>	Gynea lily	1 (6m spike)	1	200mm	As shown
<i>Callistemon 'Slim' Slim Bottlebrush</i>	Slim Bottlebrush	3	0.7	200mm	4-6
<i>Melaleuca 'Claret Tops'</i>	Honey Myrtle	1	0.6	200mm	4-6
<i>Westringia 'Wynyabbie Gem'</i>	Coastal Rosemary	1	1.5-2	200mm	4-6
<i>Westringia 'Zena'</i>	Coastal Rosemary	0.6-0.9	0.9	200mm	4-6
GRASSES AND GROUNDCOVERS					
<i>Dianella revoluta 'Little Rev'</i>	Native Flax	1	2.5	150mm	4-6
<i>Dianella 'Little Jess'</i>	Flax lily	1	2.5	150mm	4-6
<i>Dichondra repens</i>	Kidney weed	0.1	5	150mm	4-6
<i>Liriope muscari 'Evergreen Giant'</i>	Evergreen Giant Lily Turf	0.5	0.5	150mm	4-6
<i>Lomandra longifolia</i>	Spiny Mat-rush	1.2	0.8	150mm	4-6
<i>Lomandra multiflora ssp. multiflora</i>	Many-flowered Mat-rush	0.9	0.5	150mm	4-6
<i>Lomandra tanika</i>	Tanika	0.5	0.6	150mm	4-6
<i>Oplismenus aemulus</i>	Basket grass	1.5	0.5	150mm	4-6
<i>Themeda australis</i>	Kangaroo grass	1.5	0.5	150mm	4-6
<i>Viola hederaceae</i>	Native Violet	0.3	0.6	150mm	4-6
SEDGES AND RUSHES					
<i>Ficinia nodosa</i>	Knobby Club Rush	1.2	0.5	150mm	6-9
<i>Juncus flavidus</i>	Mat Rush	1	0.5	150mm	6-9
<i>Juncus usitatus</i>	Mat Rush	1	0.5	150mm	6-9
<i>Carex appressa</i>	Sedge	1	0.5	150mm	6-9
<i>Lepironia articulata</i>	Grey rush	2	1	150mm	6-9
<i>Lomandra 'Shara'</i>	Lomandra Shara	0.5	0.5	150mm	6-9
<i>Lomandra 'Katie Belles'</i>	Lomandra Katie Belles	1.5	1.5	150mm	6-9
<i>Pennisetum 'Nafray'</i>	Swamp Foxtail Grass	0.6	0.6	150mm	6-9
<i>Poa eskdale</i>	Poa	0.6	0.5	150mm	6-9
TURF					
<i>Kikuyu Grass</i>	<i>Pennisetum clandestinum</i>				



Cupaniopsis anacardioides



Elaeocarpus eumundi



Lagerstroemia indica 'Biloxi'



Lagerstroemia indica 'Natchez'



Lophostemon confertus



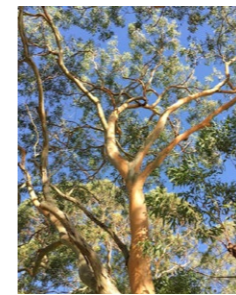
Tristaniopsis laurina 'Luscious'



Waterhousia floribunda 'Green Avenue'



Corymbia ficifolia



Eucalyptus punctata



Eucalyptus tereticornis



Callistemon 'Better John'



Doryanthes excelsa



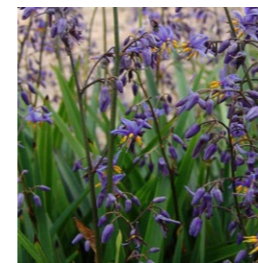
Melaleuca 'Claret Tops'



Westringia 'Wynyabbie Gem'



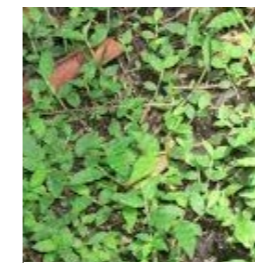
Westringia 'Zena'



Dianella 'Little Jess'



Liriope muscari evergreen giant



Oplismenus aemulus



Dianella 'Little Rev'



Themeda australis



Dichondra repens



Lomandra longifolia



Lomandra multiflora



Lomandra tanika

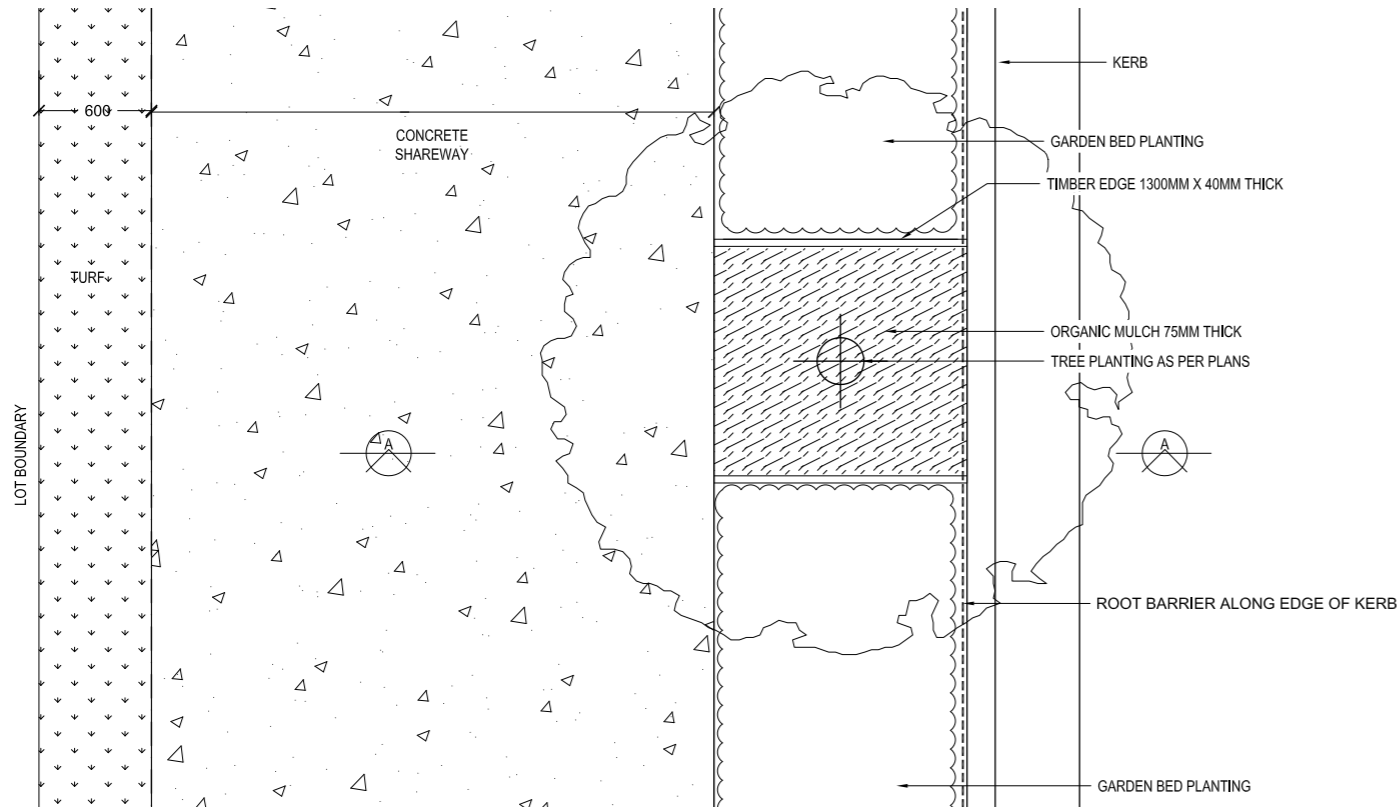


Juncus usitatus

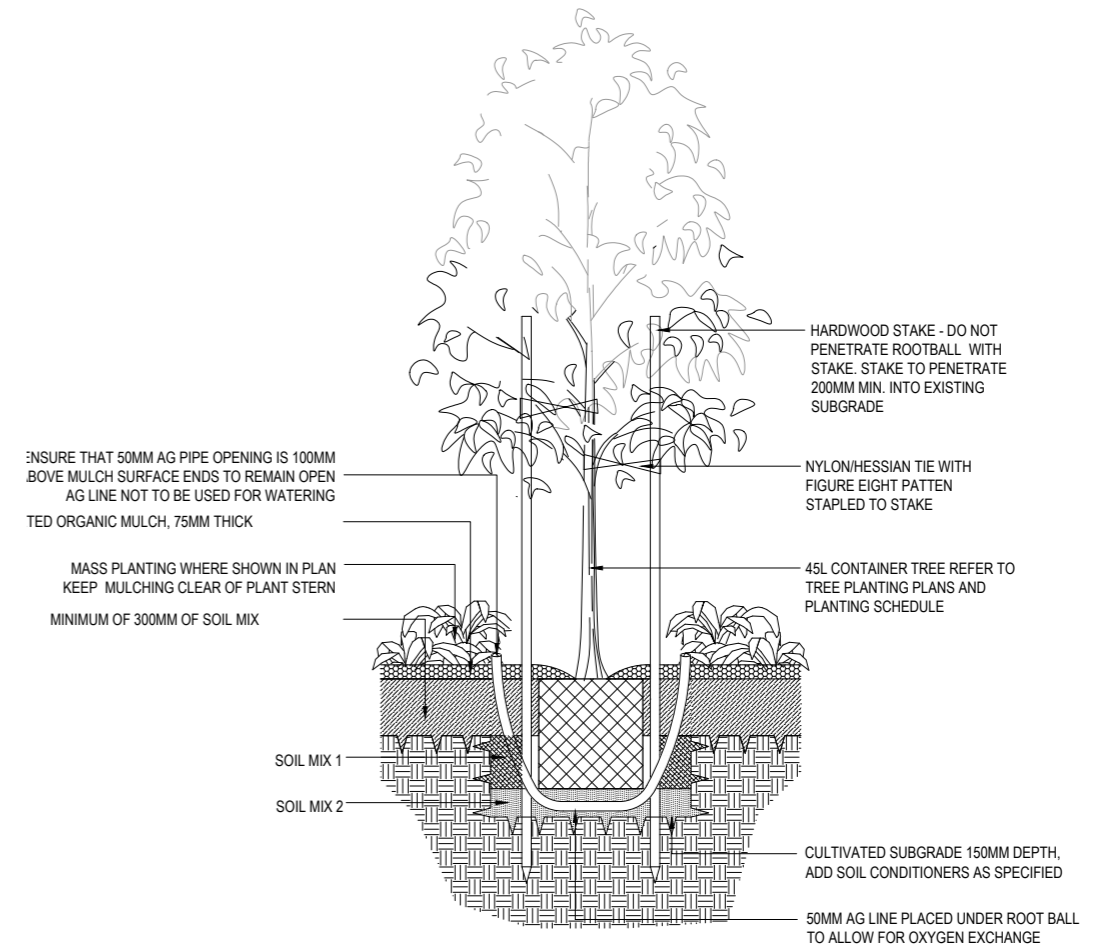


Poa eskdale

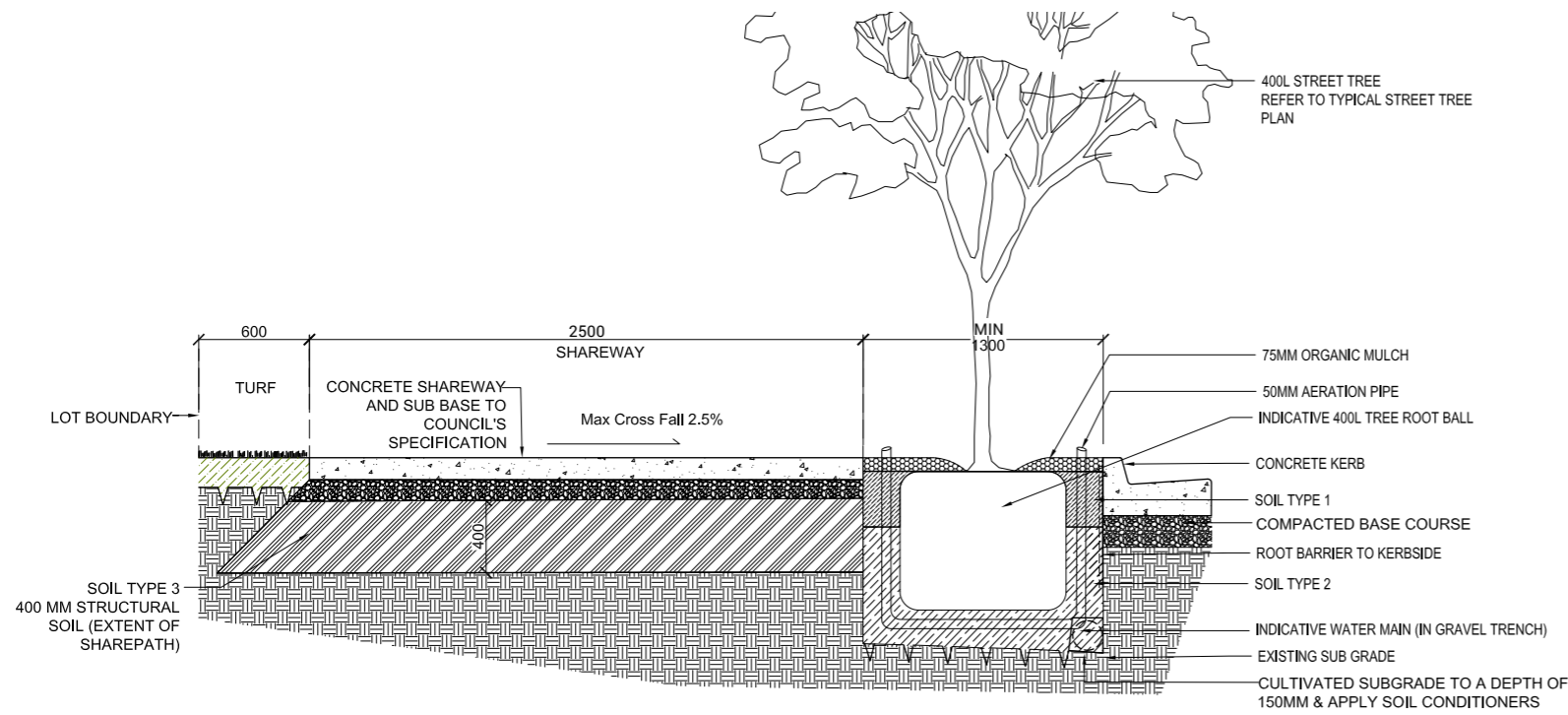
1.14 Landscape Details



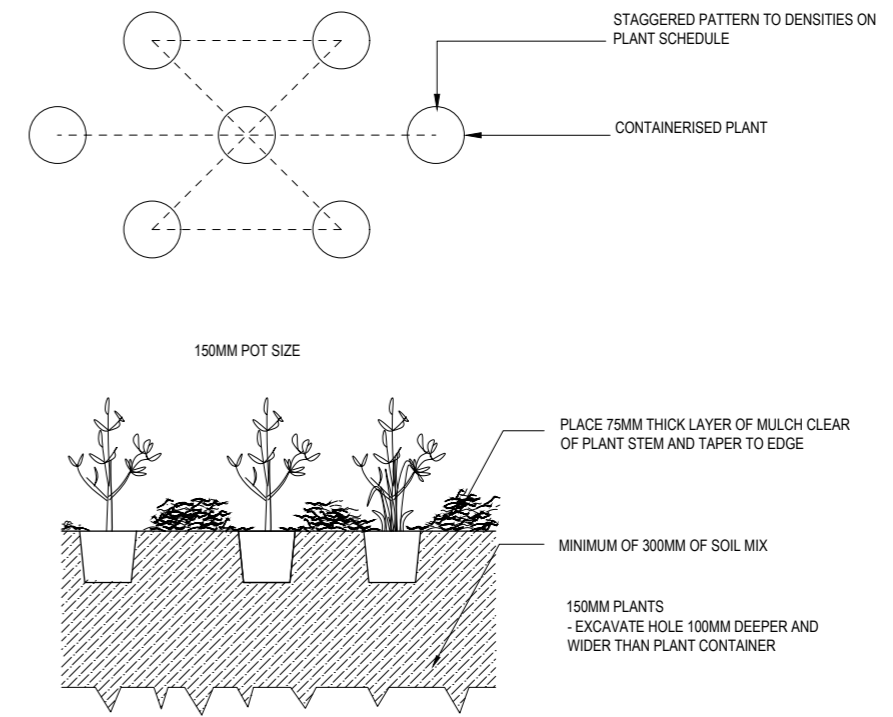
DETAIL 01 - TYPICAL TREE PLANING IN VERGE 1:40 @A3



DETAIL 02: TREE PLANTING ON GRADE 1:40@A3



DETAIL 01 - SECTION CUT



DETAIL 03: MASS PLANTING DETAIL 1:40@A3

1.15 Typical Landscape Maintenance

PLACE Design Group Pty Ltd		
PROPOSED MAINTENANCE SCHEDULE		
Client:	Legacy Property	
Project Name:	Stage 8-9 Caddens	
Precinct Name:	All streetscape zones, open spaces	
Works Description:	Maintenance of Soft Landscape areas	
Maintenance Period:	12 Months from Practical Completion	
SOFTSCAPE AREAS:		
TASK DESCRIPTION:	FREQUENCY: 0-6 Months	FREQUENCY: 6 - 12 Months
Trees		
Visual inspection of all trees	<i>Fortnightly in summer/Monthly in Winter</i>	Monthly in summer/Once in Winter
Manually inspect water levels to trees	<i>Fortnightly in summer/Monthly in Winter</i>	Monthly in summer/Once in Winter
Inspect damage to trees	<i>Fortnightly in summer/Monthly in Winter</i>	Monthly in summer/Once in Winter
Replace any taping to trees	<i>Fortnightly in summer/Monthly in Winter</i>	Monthly in summer/Once in Winter
Prune dead or damaged branches	<i>Fortnightly in summer/Monthly in Winter</i>	Monthly in summer/Once in Winter
Check for and report pests & diseases	<i>Fortnightly</i>	Monthly
Replace failed or damaged trees	<i>Fortnightly/As required</i>	Monthly/As required
Spray in accordance with manufacturers recommendations	<i>As required</i>	As required
Adjust &/or replace stakes & ties where necessary	<i>As required</i>	As required
Turf		
Mow all turf areas to maintain height between 25-35mm	<i>Weekly in Summer/Monthly in Winter</i>	Fortnightly in Summer/Every 2 Months in Winter
Trim edges of all turf areas	<i>Weekly in Summer/Monthly in Winter</i>	Fortnightly in Summer/Every 2 Months in Winter
Remove clippings from site	<i>Weekly in Summer/Monthly in Winter</i>	Fortnightly in Summer/Every 2 Months in Winter
Remove litter & debris from turf areas	<i>Weekly in Summer/Monthly in Winter</i>	Fortnightly in Summer/Every 2 Months in Winter
Check for and report pests & diseases	<i>Fortnightly</i>	Monthly
Spray in accordance with manufacturers recommendations	<i>As required</i>	As required
Monitor and apply fertiliser to turf areas	<i>6 month intervals - Autumn/Spring</i>	Yearly - Spring
Mulch		
Remove litter & debris from mulch areas	<i>Fortnightly</i>	Monthly
Remove weed growth in mulch areas	<i>Fortnightly</i>	Monthly
Top up mulch levels	<i>Annually</i>	Annually
Plants		
Check for and report pests & diseases	<i>Fortnightly</i>	Monthly
Spray in accordance with manufacturers recommendations	<i>Fortnightly</i>	Monthly
Prune damaged or dead branches	<i>Fortnightly</i>	Monthly
Remove weed growth in plant areas	<i>Fortnightly</i>	Monthly
Replace failed or damaged plants	<i>Fortnightly/As required</i>	Monthly/As required
Adjust &/or replace stakes & ties where necessary	<i>Fortnightly/As required</i>	Monthly/As required
General Watering to all street trees		
Irrigation by water cart or hosecock as required to maintain plant vigor & health	<i>Weekly first 6 months/Fortnightly there after dependent on rainfall conditions</i>	Monthly dependent on rainfall conditions
Urgent works		
Report any theft, damage or vandalism	<i>Weekly</i>	As required