



Oakdale South - MOD 4
Landscape
August 2017



TABLE OF CONTENTS

DWG NO.	DRAWING TITLE
LANDSCAPE REPORT	
LR-003	Landscape Concept Master Plan
LR-004	Landscape Site Section
LR-005	Southern Boundary Landscape Section
LR-006	Eastern Boundary Landscape Section
LR-007	Vegetation Typologies
LR-008	Indicative Species List and reference table
LR-009	Street Tree Master Plan
LR-010	Streetscape Typical Detail
LR-011	Landscape Node 1 – Plan
LR-012	Landscape Node 2 – Plan / Section
LR-013	Stage 1 Development - Landscape Scope of Works
ESTATE LANDSCAPE WORKS	
ELW-001	Estate Landscape Works - Scope of Works Plan
ELW-002	Estate Landscape Works - Plan
ELW-003	Estate Landscape Works - Plan
ELW-004	Estate Landscape Works - Plan
ELW-005	Estate Landscape Works - Plan
ELW-006	Estate Landscape Works - Plan
ELW-007	Estate Landscape Works - Plan
ELW-008	Estate Landscape Works - Plan
ELW-009	Estate Landscape Works - Plan
ELW-010	Estate Landscape Works - Typical Landscape Details
ELW-011	Estate Landscape Works - Typical Landscape Details
LANDSCAPE PRECINCT 1	
LP1-001	Precinct 1 – Landscape Plan
LP1-002	Precinct 1 – Presentational Frontage Plan
LP1-003	Precinct 1 – Presentational Frontage Plan
LP1-004	Precinct 1- Planting Palette

INTRODUCTION

This report has been prepared to support the proposed Section 96 revisions to the approved State Significant Development (SSD 6917) for the staged development of the Oakdale South Estate (OSE).

The aim of this report is to provide the revised concept landscape design response for the revised masterplan and Stage 1 DA. The report responds to the Secretary's Environmental Assessment Requirements (SEARs) as they relate to landscape architecture/ design specifically:

Urban Design and Visual: Suitable landscaping incorporating endemic species; This report supports an Environmental Impact Statement (EIS) prepared in respect of the proposal and should be read in conjunction with the EIS and development plans submitted with the SSDA. The SEARS relevant to this SSD have been considered and are addressed in this report as follows:

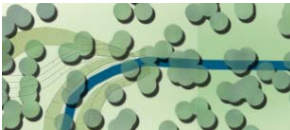
- The SSD approval sets out:
- An overarching planning framework to guide the staged development of the OSE including:
- An Indicative Master Plan and Structure Plan;
 - Development Controls for the OSE;
 - A Biodiversity Offset Strategy.
- Stage 1 Development of the Estate including:
1. A package of estate-wide site preparation works to be implemented in stages including:
 - Subdivision;
 - Bulk earthworks (including construction of detention basins); and
 - Construction of retaining walls, road and utility infrastructure/services.
 - Environmental management measures and protocols for the site.
 2. Development for the purposes of warehousing and distribution including:
 - The construction of warehouse buildings in Precincts 1;
 - The construction of hardstand, loading, car parking and landscaping in Precincts 1;
 - The fit out and use of buildings in Precincts 1 for generic warehousing and distribution uses.

Landscape Concept Master Plan

The landscape concept masterplan demonstrates the vision for the Oakdale South Estate (OSE). Various proposed landscape upgrades, rehabilitation and enhancements are proposed.



Bioretention basin



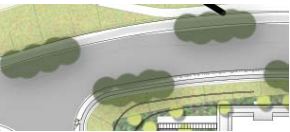
Creek & Riparian Zone



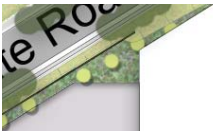
Biodiversity Zone



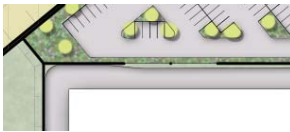
Landscape Node



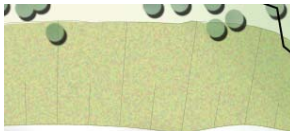
Estate Streetscape



On site presentational landscaping



On site buffer planting



Vegetated embankments



Typical Landscape Site Section

This section has been produced to graphically demonstrate the interfaces and relationship of intended landscape treatments across the subject site.



Defendable zone



Ecology fence



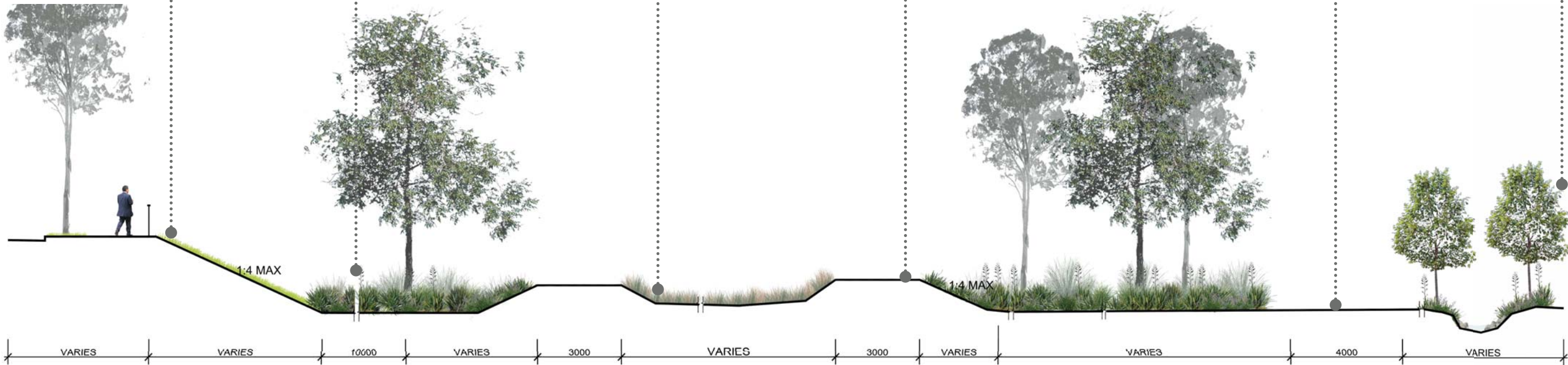
Bio-retention basin



Spray seal maintenance road
4m for Fire Service, 3m for basin and biodiversity



Riparian zone



SCALE 1:150

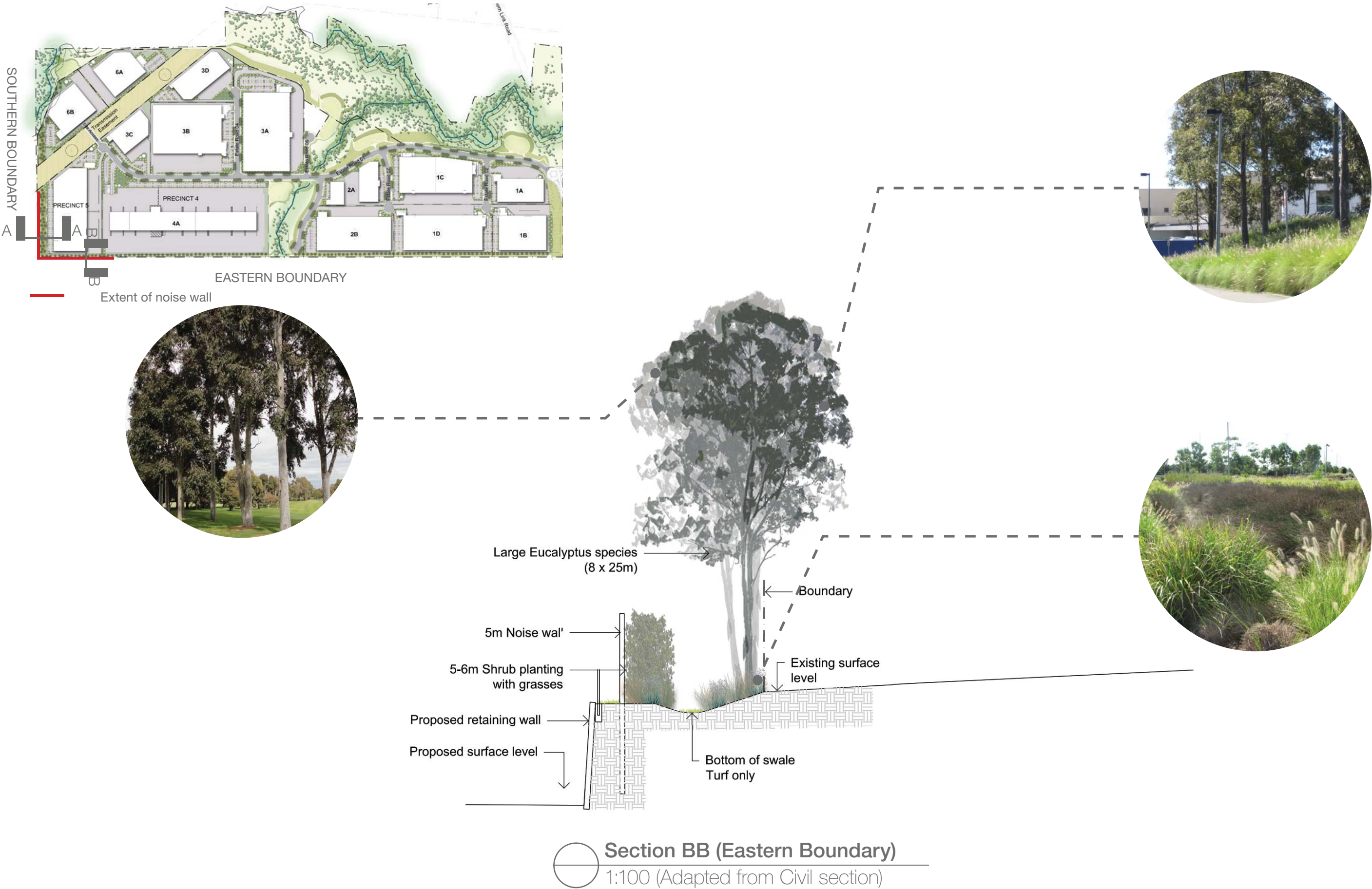
Southern Boundary Landscape Section



Section AA (Southern Boundary)
1:200 (Adapted from Civil section)

SCALE 1:200

Eastern Boundary Landscape Section

























SCALE 1:200

Vegetation Typologies



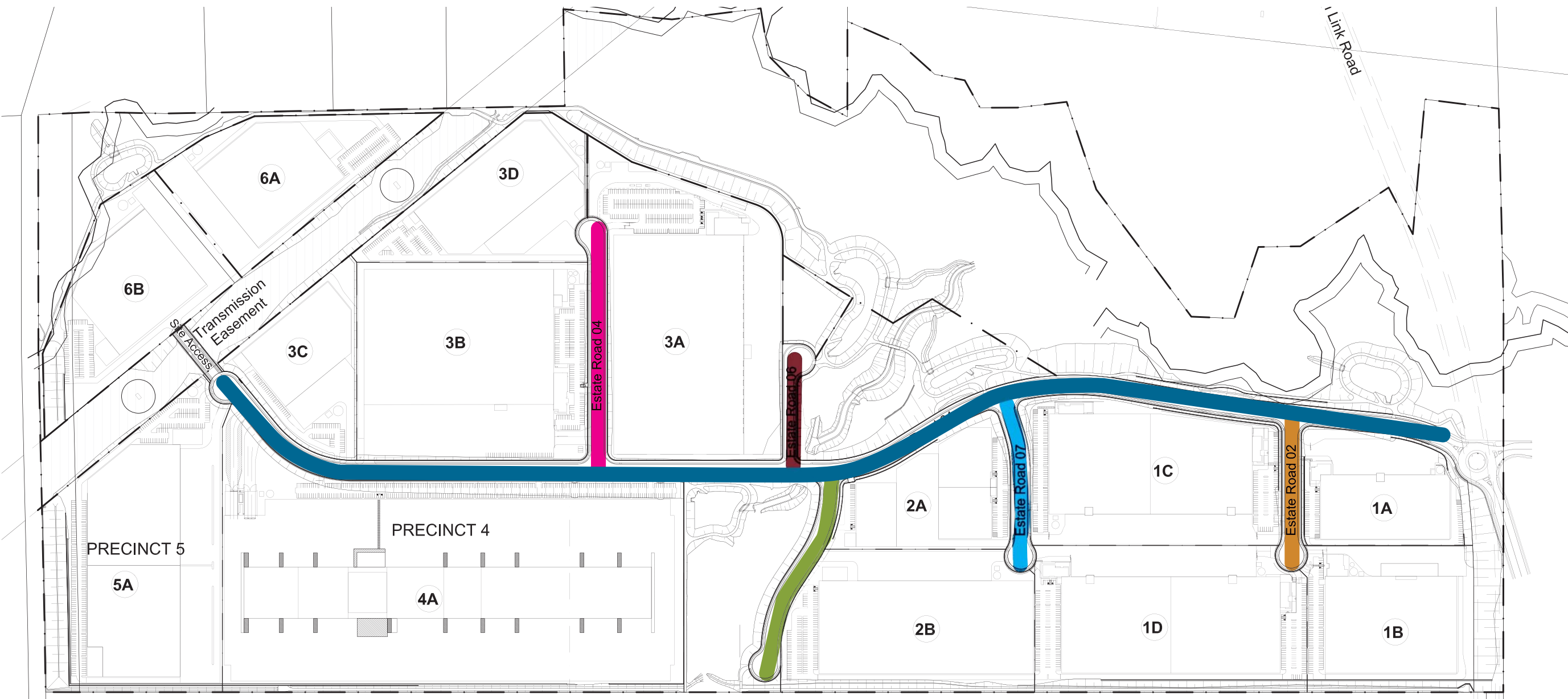
<p>Typology 1 Streetscape</p> <p>Refer to Street Tree Masterplan. Copse detail, ballast stone base.</p>	<p>Typology 2 Landscape Nodes</p> <p>Formalised planting to create legibility and amenity.</p>	<p>Typology 3 Basins</p> <p>Bioretention species in accordance with Penrith City Council WSUD Guidelines.</p>	<p>Typology 4 Biodiversity Zone</p> <p>Various rehabilitated plant communities, refer to AECOM documentation.</p>	<p>Typology 5 Riparian Zone</p> <p>Rehabilitation of creekline included in biodiversity offsets.</p>	<p>Typology 6 Defendable Zone</p> <p>Managed clear turf zone as stipulated by fire consultant</p>	<p>Typology 7 On Lot Landscaping</p> <p>Presentation landscaping, softening of built form and amenity creation</p>	<p>Typology 8 Existing Managed Grasses</p> <p>Powerline easement, retain existing pastoral grassses and reinstate as required by civil works</p>	<p>Typology 9 Embankment Turf</p> <p>Turf to civil embankment</p>	<p>Typology 10 Boundary Planting</p> <p>Screen planting to boundary</p>
--	---	--	--	---	--	---	---	--	--

Typical Species List and Reference Table

									
Typology 1	Typology 2	Typology 3	Typology 4	Typology 5	Typology 6	Typology 7	Typology 8	Typology 9	Typology 10
Streetscape	Landscape Node	Basins	Biodiversity Zone	Riparian Zone	Defendable Zone	On Lot Landscaping	Existing Managed Grasses	Embankment Turf	Boundary Planting
Refer to Street Tree Masterplan. LR-007	Indicative Plant List	Indicative Plant List	Refer AECOM VMP	Refer AECOM VMP	Managed clear turf zone as stipulated by fire consultant	Indicative Plant List			Indicative Plant List
Road 1 / Estate Road: - <i>Corymbia maculata</i>	Trees: - <i>Brachychiton acerifolius</i>	Basin Matrix Planting: - <i>Imperata cylindrica</i> - <i>Ficinia nodosa</i>				Trees: - <i>Cupaniopsis anacardioides</i>			Trees: - <i>Eucalyptus Crebra</i> - <i>Eucalyptus moluccana</i> - <i>Eucalyptus tereticornis</i>
Road 2: - <i>Eucalyptus crebra</i>	Shrubs & Accents: - <i>Doryanthes excelsa</i>	- <i>Juncus usitatus</i>				Shrubs & Accents: - <i>Doryanthes excelsa</i> - <i>Westringia fruticosa</i>			Shrubs & Accents: - <i>Acmena smithii</i> var. <i>minor</i>
Road 3: - <i>Angophora subvelutina</i>	- <i>Westringia fruticosa</i>	- <i>Poa siebreinan</i>				Grasses: - <i>Dianella 'Breeze'</i> - <i>Lomandra longifolia</i>			Grasses: - <i>Pennisetum 'Nafray'</i>
Road 4: - <i>Eucalyptus moluccana</i>	- <i>Juncea sp/</i>	- <i>Themeda australis</i>							
Road 5: - <i>Eucalyptus crebra</i>	Grasses: - <i>Poa 'Eskdale'</i>	- <i>Dianella caerulea</i> <i>Carex appressa</i>							
Refer to Street Tree Masterplan. Copse detail, ballast stone base.	Formalised planting to create legibility and amenity.	Mixed native grass planting in basin, potential expansion of biodiversity zone on batter.	Various rehabilitated plant communities, refer to AECOM documentation.	Rehabilitation of creekline included in biodiversity offsets.	Managed clear turf zone as stipulated by fire consultant	Presentational landscaping, softening of built form and amenity creation	Existing pastoral grasses, maintained under powerline easement.	Turf planting to embankment	Native screening to boundary
 		 							

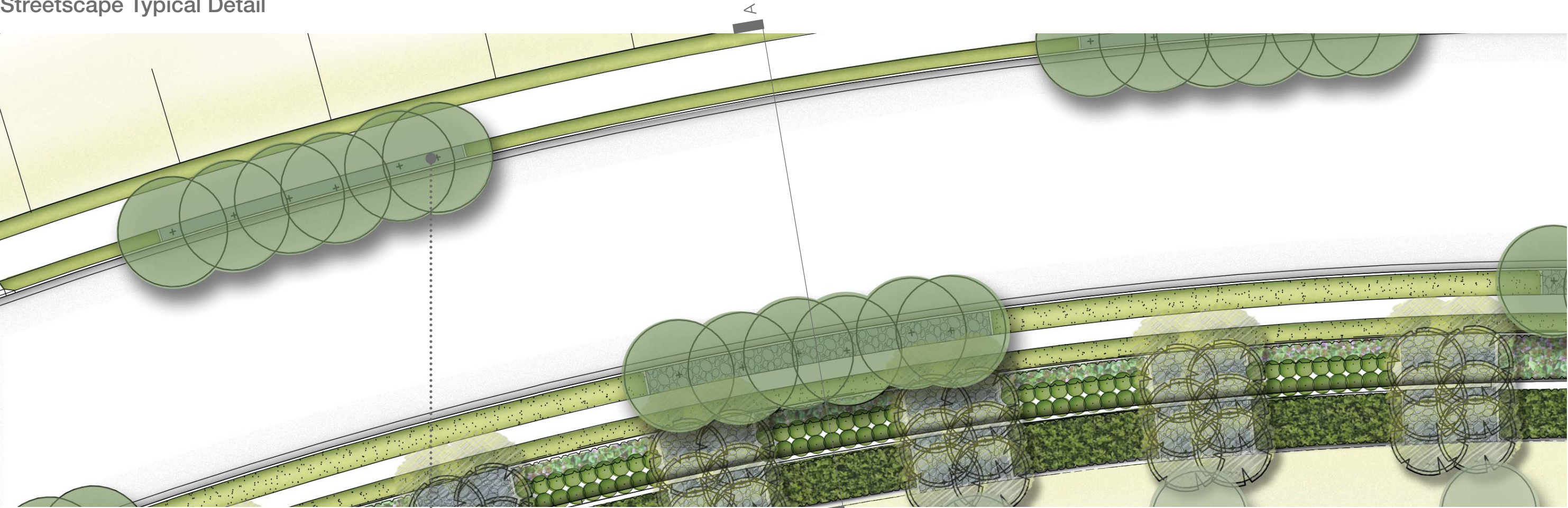
Street Tree Master Plan

This section has been produced to graphically demonstrate the interfaces and relationship of intended landscape treatments across the subject site.



<div>Estate Road (Road 1)</div> <div><i>Corymbia maculata</i> Spotted Gum 30m (h) x 8m (w)</div> <div></div>	<div>Road 2</div> <div><i>Eucalyptus crebra</i> Narrow-leaved Ironbark 15m (h) x 6m (w)</div> <div></div>	<div>Road 3</div> <div><i>Angophora subvelutina</i> Broad-leaved Apple 18m (h) x 8m (w)</div> <div></div>	<div>Road 4</div> <div><i>Eucalyptus moluccana</i> Grey Box 25m (h) x 6m (w)</div> <div></div>	<div>Road 6</div> <div><i>Eucalyptus crebra</i> Narrow-leaved Ironbark 15m (h) x 6m (w)</div> <div></div>	<div>Road 7</div> <div><i>Eucalyptus crebra</i> Narrow-leaved Ironbark 15m (h) x 6m (w)</div> <div></div>
---	---	--	---	--	--

Streetscape Typical Detail

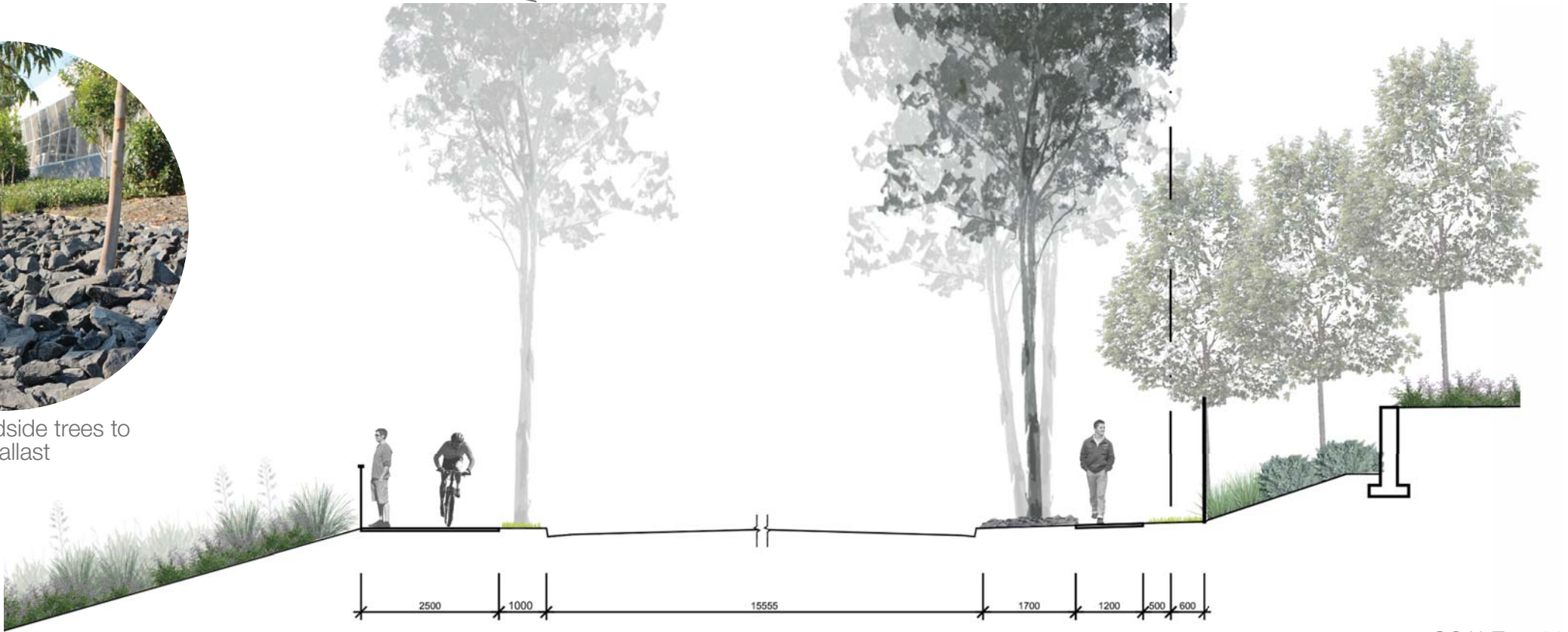


SCALE 1:250

Proposed trees flanking both side of all proposed streets. The main estate road shall consist of a 2.5m shareway for pedestrians and cyclists. Grass verge shall separate 'copse' street tree planting, based in ballast, with organic mulch underlay.

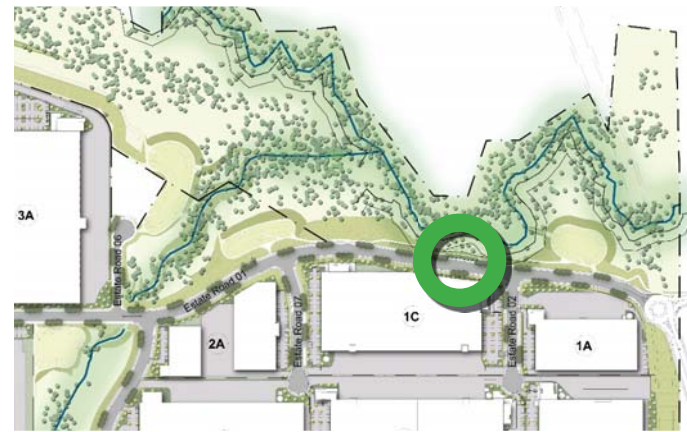


Copses of roadside trees to be in ballast



SCALE 1:100

Landscape Node 1 - Plan & Section



Block seating, potentially incorporating salvaged heritage items (circa. 1850 brickwork)

To ensure adequate respite and relaxation amenity, Landscape nodes are proposed along the main spine road, interfacing with natural biodiversity landscape works. These nodes shall provide shade, visual separation from vehicles, views, seating, and potentially host interpretive art of European historical artefact found on site.



Ballustrade on top of key stone wall (Detail Indicative)



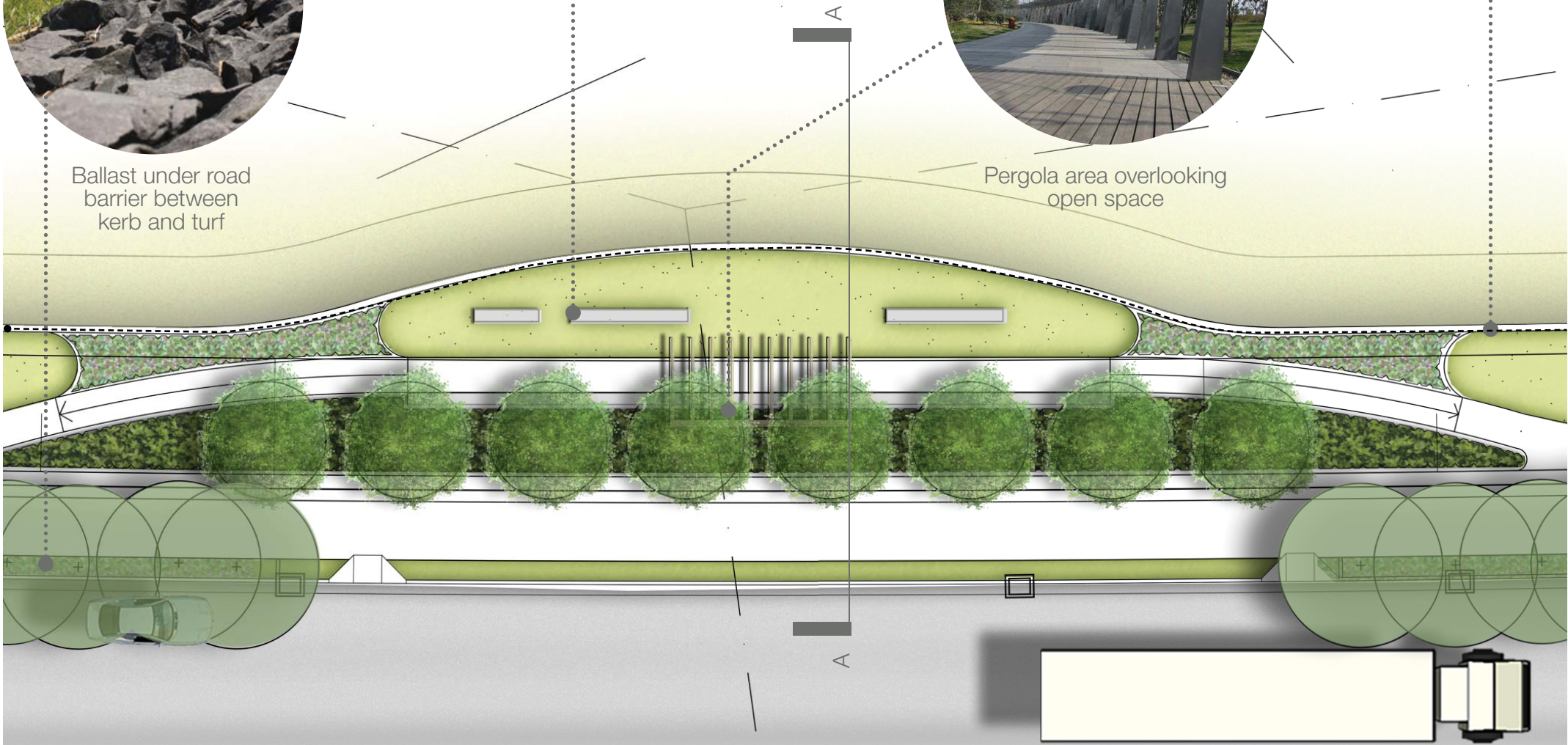
Feature native plantings to enhance wayfinding and legibility



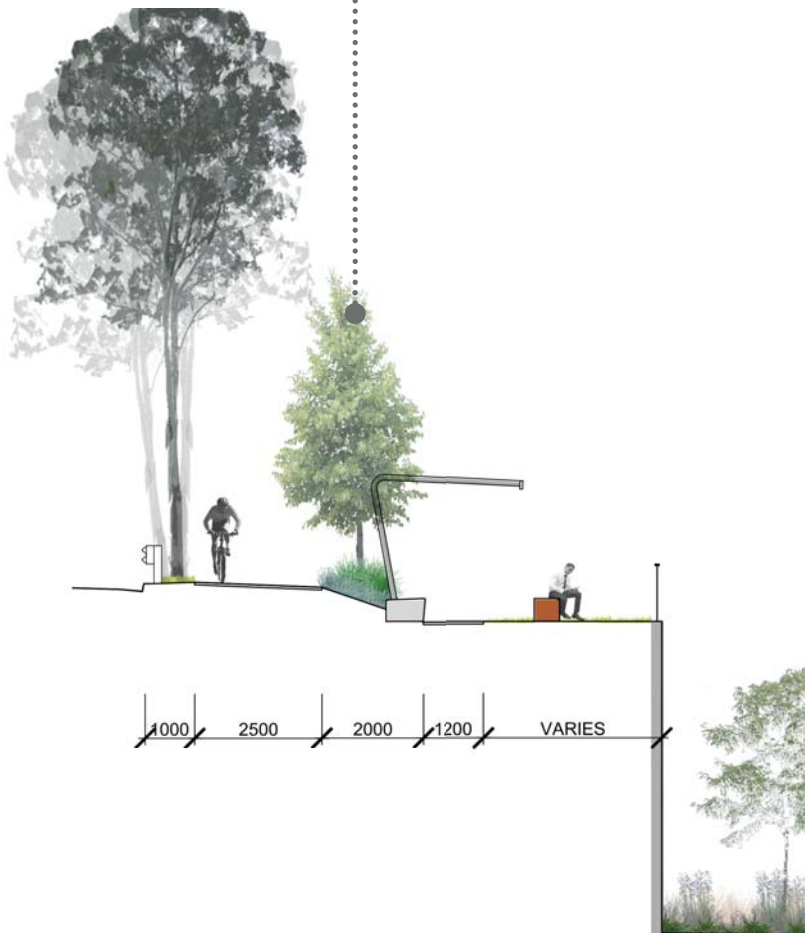
Ballast under road barrier between kerb and turf



Pergola area overlooking open space



SCALE 1:250



SCALE 1:75

Landscape Node 2 - Plan / Section



Nodes shall be strategically placed close to office administration areas, entries etc to 'cluster' activity, and provide convenience and accessibility for workers of nearby facilities.

Landscapes nodes shall also be used by pedestrians and cyclists, create a sense of place and legibility across the site.

The use of feature planting and pergola structures will further enhance these areas, and create a focal points for the greater estate



Planted embankment



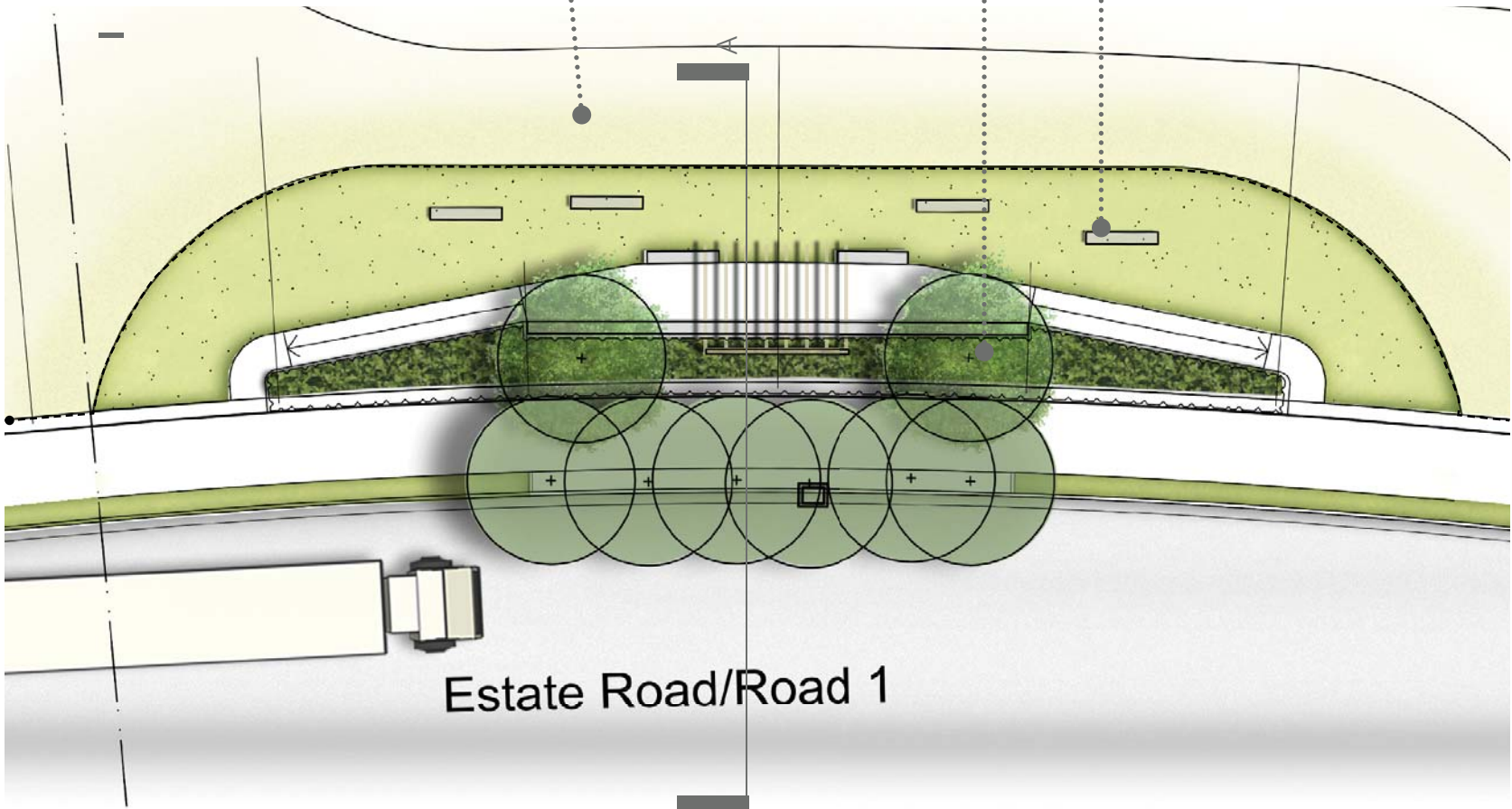
Presentational planting



Seating overlooking open space



SCALE 1:100



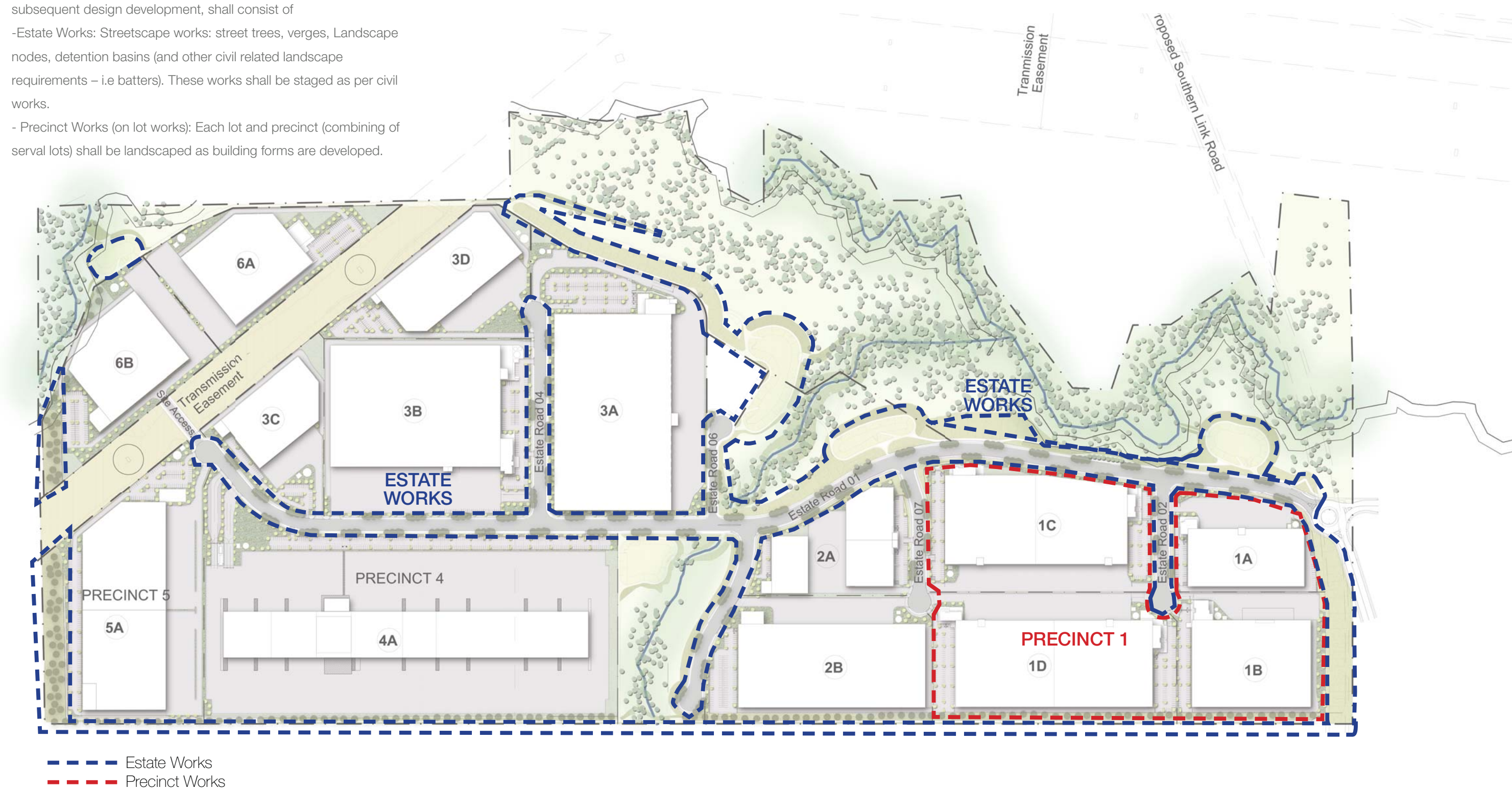
SCALE 1:250

Stage 1 Development

Landscape Scope of Works

The landscape works described specifically in this report, and subsequent design development, shall consist of

- Estate Works: Streetscape works: street trees, verges, Landscape nodes, detention basins (and other civil related landscape requirements – i.e batters). These works shall be staged as per civil works.
- Precinct Works (on lot works): Each lot and precinct (combining of serval lots) shall be landscaped as building forms are developed.





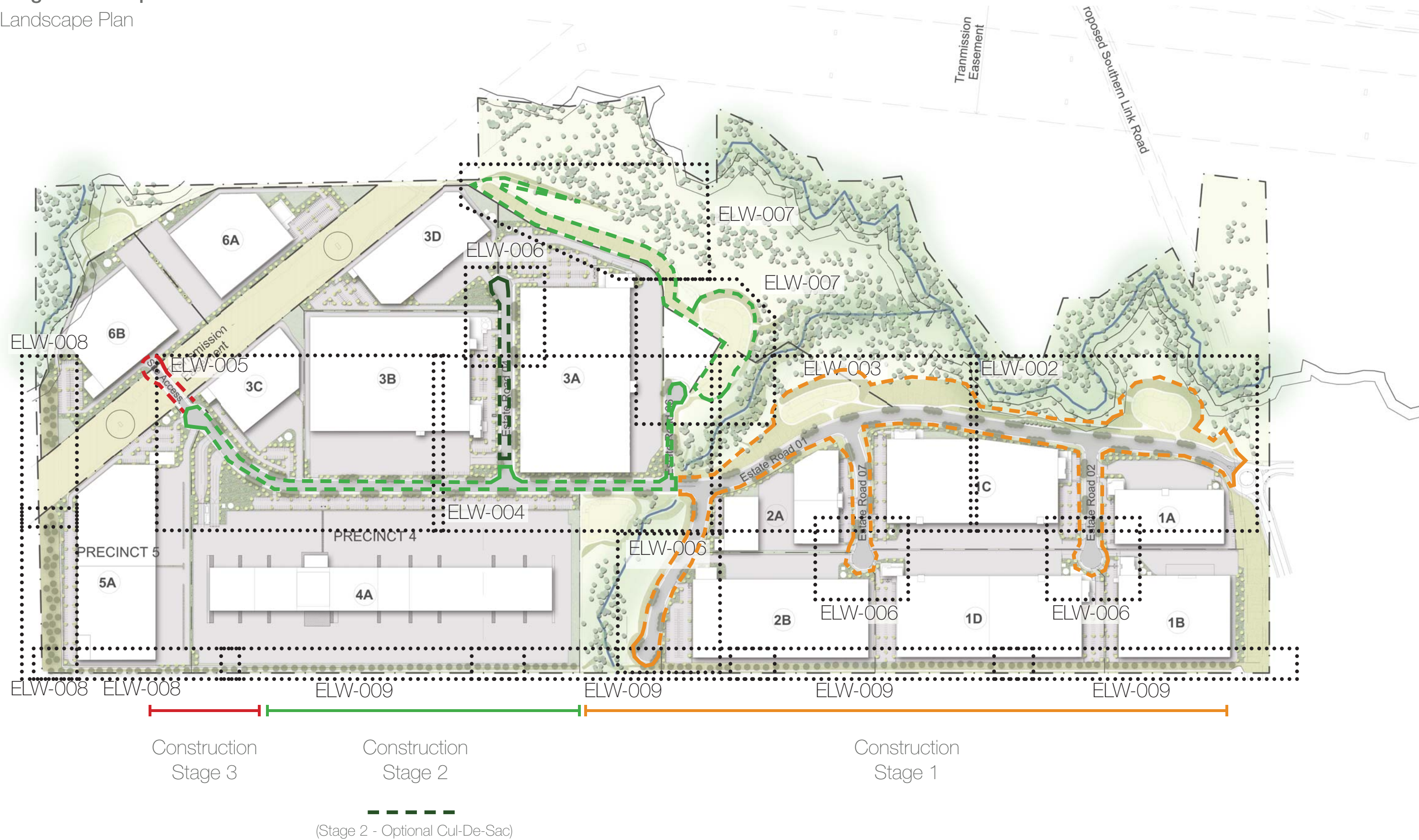
Oakdale South - MOD 4

Estate Landscape Works

August 2017



Stage 1 Development Works
Landscape Plan



Landscape Plan

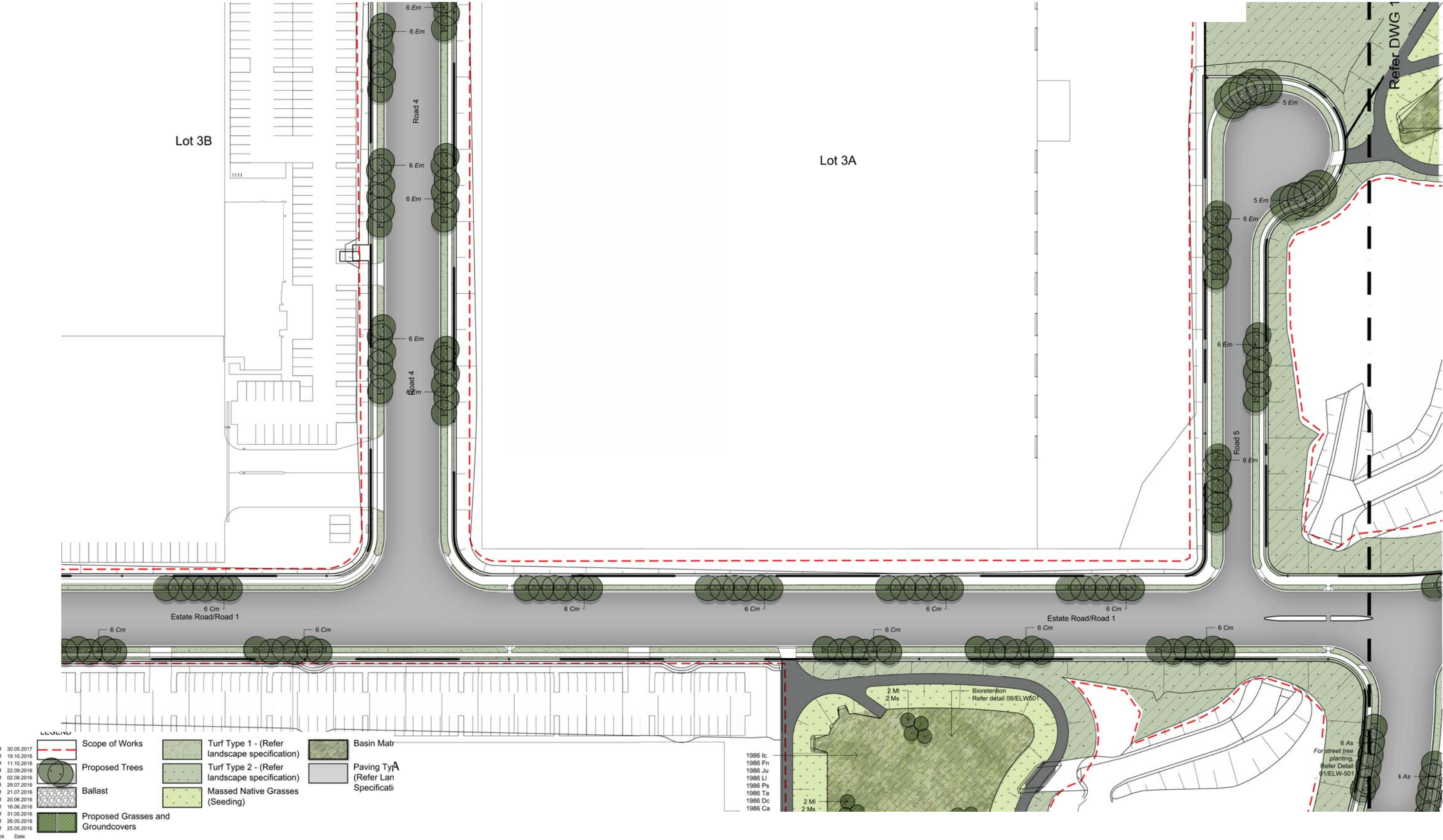


Oakdale South - MOD 4 | Landscape

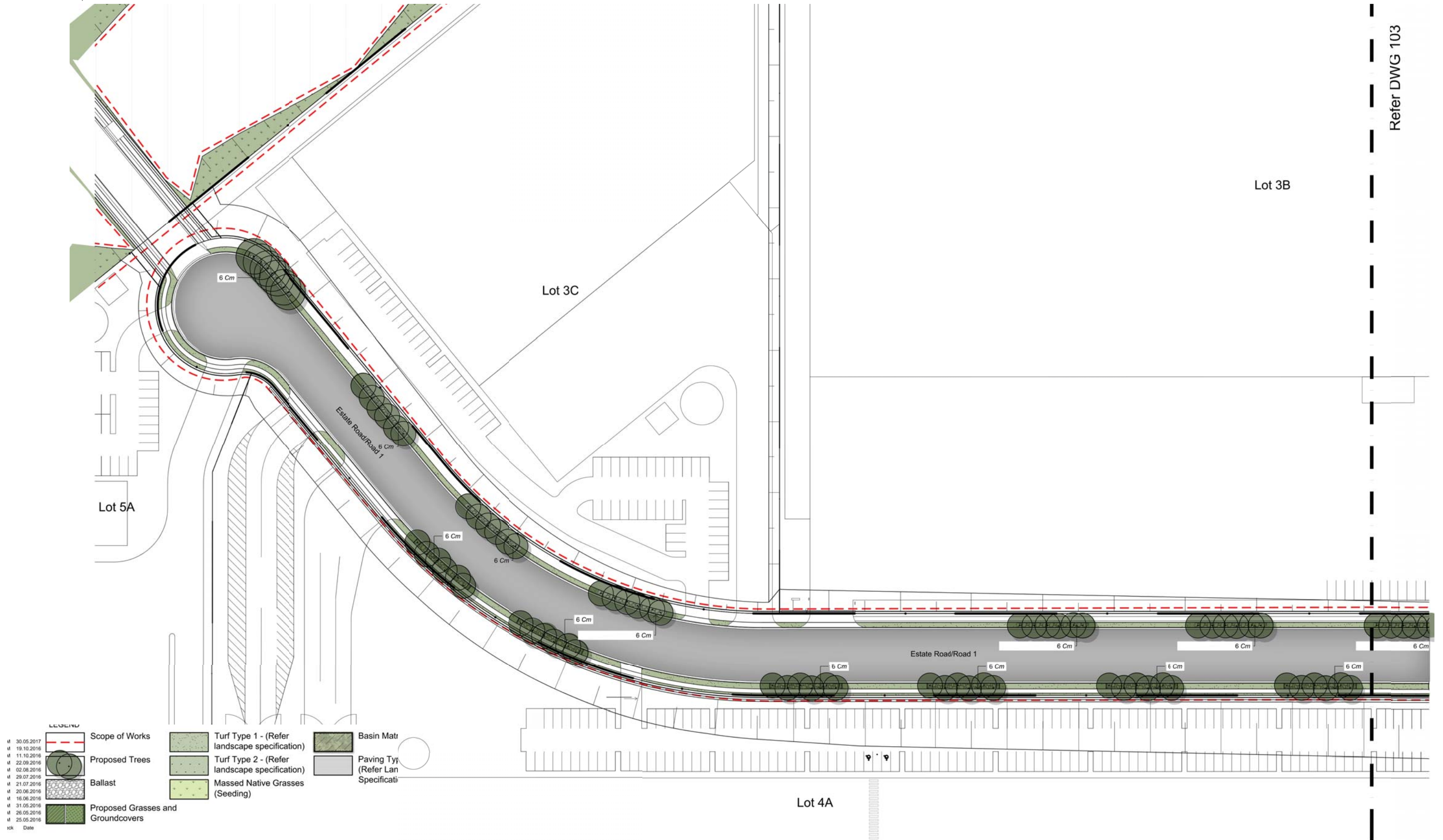


ELW - 003
K
10.08.2017

Estate Landscape Works
Landscape Plan

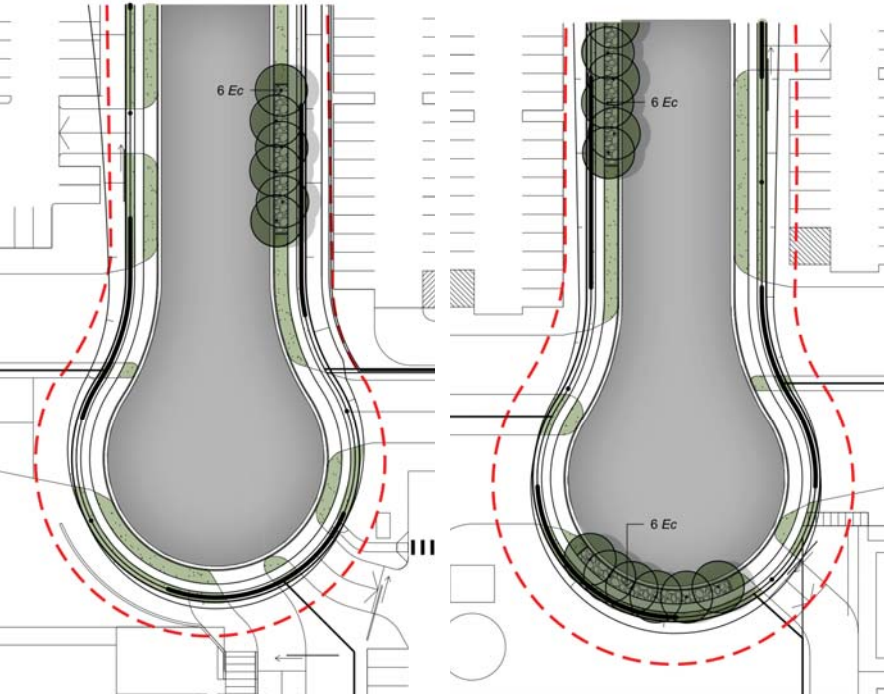
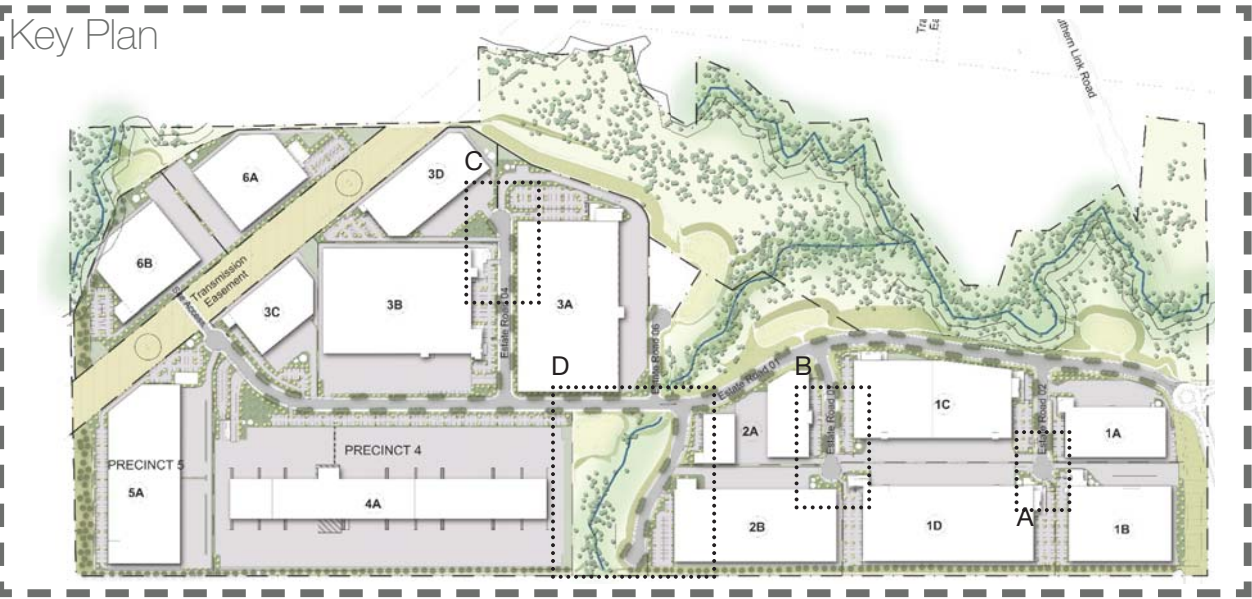


Landscape Plan



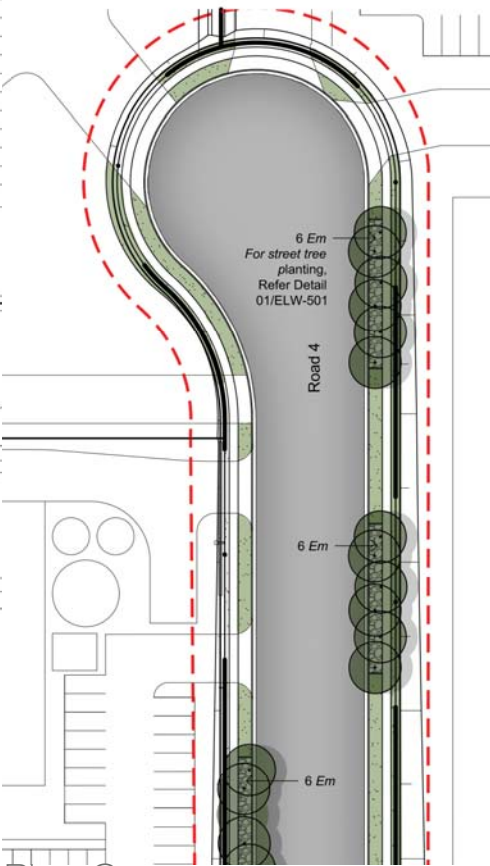
Estate Landscape Works
Landscape Plan

Key Plan



Plan A

Plan B



Plan C

LEGEND			
	Scope of Works		Turf Type 1 - (Refer landscape specification)
	Proposed Trees		Turf Type 2 - (Refer landscape specification)
	Ballast		Massed Native Grasses (Seeding)
	Proposed Grasses and Groundcovers		Basin Matrix Planting
			Paving Type 1: (Refer Landscape Specification)

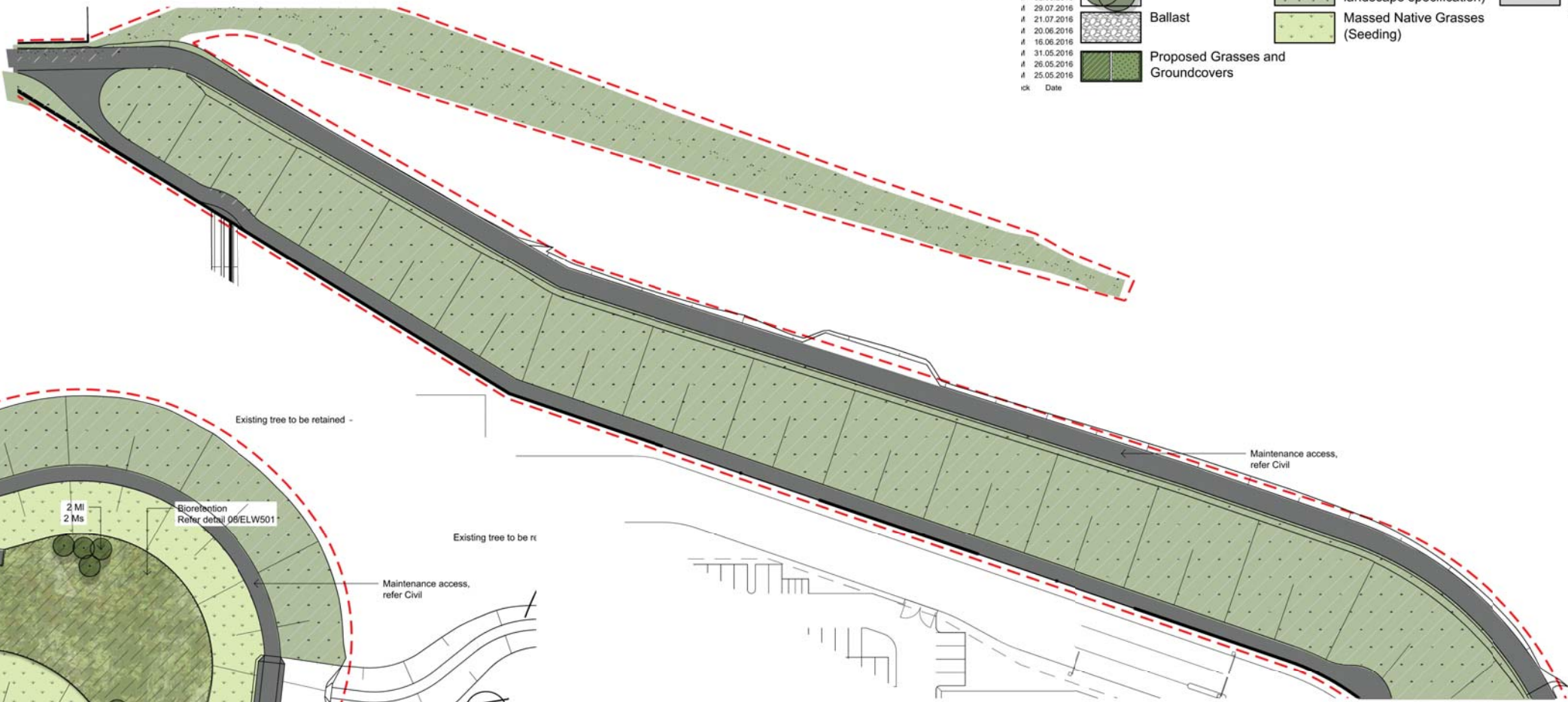
Plan D



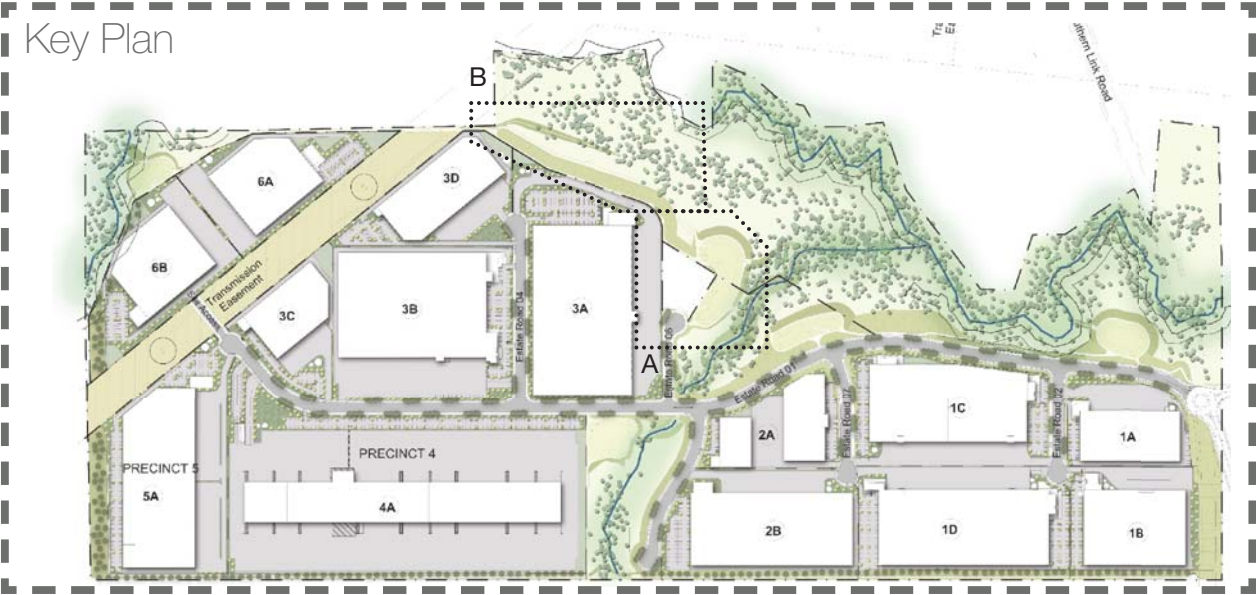
Estate Landscape Works
Landscape Plan



Plan A



Plan B



Key Plan

Landscape Plan

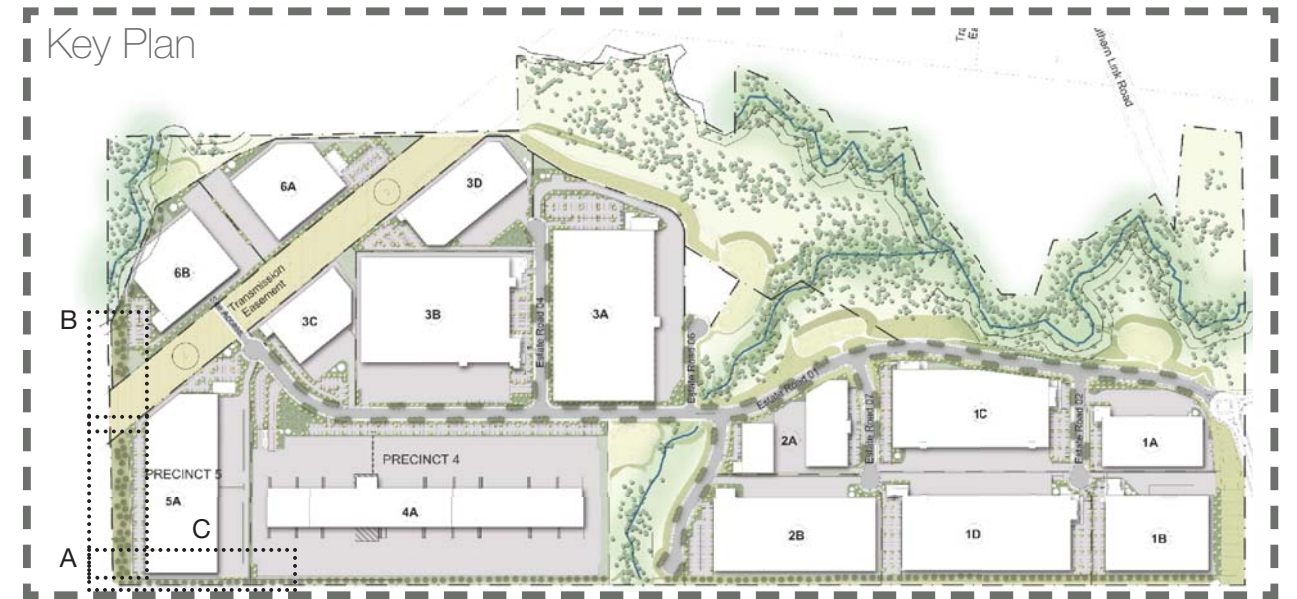
Plan B

Plan C

LEGEND

# 30.05.2017		Scope of Works		Turf Type 1 - (Refer landscape specification)		Basin Matr
# 19.10.2016		Proposed Trees		Turf Type 2 - (Refer landscape specification)		Paving Tyr (Refer Lan Specificati
# 11.10.2016						
# 22.09.2016						
# 02.08.2016						
# 28.07.2016						
# 21.07.2016						
# 20.06.2016						
# 16.06.2016						
# 31.05.2016						
# 26.05.2016						
# 25.05.2016						

ick Date



Landscape Plan

[illegible]

- LEGEND**

# 30.05.2017		Scope of Works		Turf Type 1 - (Refer landscape specification)		Basin Matr
# 19.10.2016		Proposed Trees		Turf Type 2 - (Refer landscape specification)		Paving Tyl (Refer Lan Specificati
# 11.10.2016			Massed Native Grasses (Seeding)			
# 22.08.2016		Ballast				
# 02.08.2016						
# 29.07.2016		Proposed Grasses and Groundcovers				
# 21.07.2016						
# 20.06.2016						
# 16.06.2016						
# 31.05.2016						
# 26.05.2016						
# 25.05.2016						

ick Date

This detailed plan view illustrates the layout of the green roof. It shows the arrangement of plant modules, labeled '1 Ea' and '1 Et', across the roof area. The modules are organized in rows, with '1 Ea' modules typically positioned in the upper rows and '1 Et' modules in the lower rows. A red dashed line indicates the boundary of the green roof area. The water storage tank is located in the upper right corner of the plan. The plan also shows the structural elements of the roof, including the walls and the access points for the water storage tank.

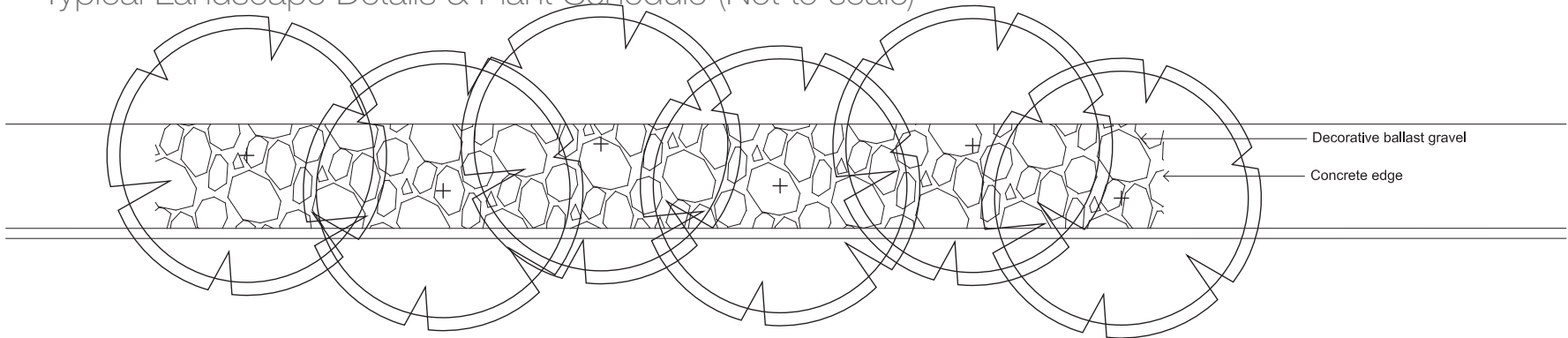
This diagram provides a detailed plan view of the road layout. It shows the alignment of the road and sidewalks, with trees planted in rows along the sidewalks. The trees are labeled with '1 Ea' and '1 Et' to indicate the number of trees of each type. The layout includes a central road section and a sidewalk section on the right, separated by a dashed line. The trees are planted in a staggered pattern, with some trees labeled '1 Ea' and others '1 Et'.

Estate Landscape Works

Typical Landscape Details & Plant Schedule (Not to scale)

01 Street Tree Planting Detail

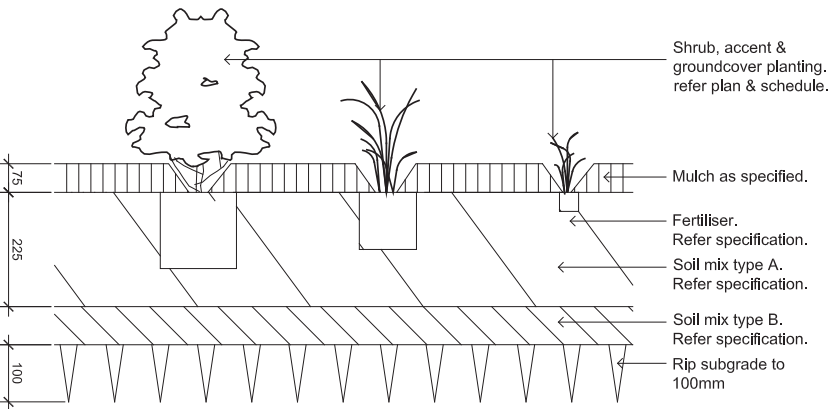
ELW-501



01

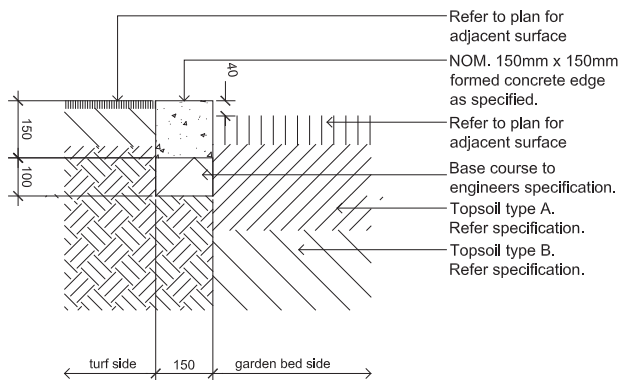
Street Tree Planting Detail

ELW-501



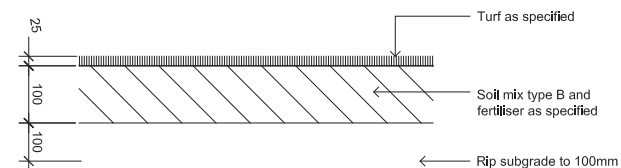
03 SHRUB, ACCENT & GROUNDCOVER PLANTING ON GRADE

ELW-501



04 TYPICAL CONCRETE EDGE

ELW-501

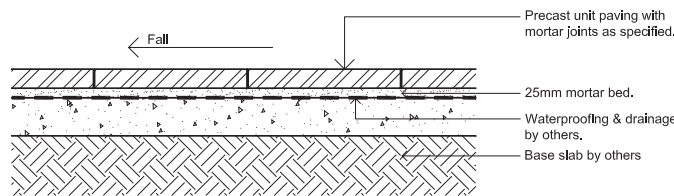


05 DETAIL -TURF ON EVEN GRADE

ELW-501

Code	Botanical Name	Common Name	Mature Height (m.)	Mature Spread (m.)	Spacings	Pot Size	CPW	Quantity
Trees								
As	Angophora subvelutina	Broad-leaved Apple	25	15	As Shown	75L	+	48
Ca	Cupaniopsis anacardioides	Tuckeroo	8	8	As Shown	200L		11
Cm	Corymbia maculata	Spotted Gum	15	7	As Shown	75L	+	303
Ea	Eucalyptus amplifolia	Cabbage Gum	30	8	As Shown	75L	*	143
Ec	Eucalyptus crebra	Narrow Leaved Ironbark	15	6	As Shown	75L	*	60
Em	Eucalyptus moluccana	Grey Box	20	8	As Shown	75L	*	82
Et	Eucalyptus tereticomis	Forest Red Gum	30	8	As Shown	75L	*	148
Li	Lagerstroemia indica 'Natchez'	Crepe Myrtle	8	6	As Shown	75L		2
Shrubs								
AsM	Acmena smithii var. minor	Dwarf Lillypillly	3	2	As Shown	300mm		1048
CE	Callistemon 'Endeavour'	Bottlebrush	2.5	2.5	As Shown	300mm		878
CLJ	Callistemon viminalis 'Little John'	Little John Bottlebrush	0.8	0.8	As Shown	300mm		86
GM	Grevillea Moonlight	Moonlight Grevillea	4	3	As Shown	300mm		250
NGS	Nandina 'Gulf Stream'	Nandina	0.75	0.5	As Shown	300mm		498
Ri	Rhapiolepis indica	Indian Hawthorn	2.5	2.5	As Shown	300mm		302
Groundcovers and Grasses								
PN	Pennisetum 'Nafay'	Nafay Pennisetum	0.6	0.6	5/m2	150mm		31883
TT	Trachelospermum jasminoides 'Tricolour'	Tricolour	0.5	2	5/m2	150mm		710
Basin Tree Planting								
MI	Melaleuca linariifolia	Flax Leaved Paperbark	10	4	As Shown	75L		24
Ms	Melaleuca styphelioides	Prickly Leaved Paperbark	10	3	As Shown	75L		24
Basin Matrix Planting								
Ic	Imperata cylindrica	Blady Grass	1	1	8/m2	75mm Tube		8251
Fn	Ficinia nodosa	Knobby Club Rush	1	1	8/m2	75mm Tube		8251
Ju	Juncus usitatus	Common Rush	1	0.5	8/m2	75mm Tube		8251
LI	Lomandra longifolia	Matrush	0.7	1	8/m2	75mm Tube		8251
Ps	Poa sieberiana	Grey Tussock Grass	0.4	0.3	8/m2	75mm Tube		8251
Ta	Themeda australis	Kangaroo Grass	1.5	0.5	8/m2	75mm Tube		8251
Dc	Dianella caerulea	Blue Flax-lily	1	1	8/m2	75mm Tube		8251
Ca	Carex appressa	Tussock Sedge	0.5	0.5	8/m2	75mm Tube		8251

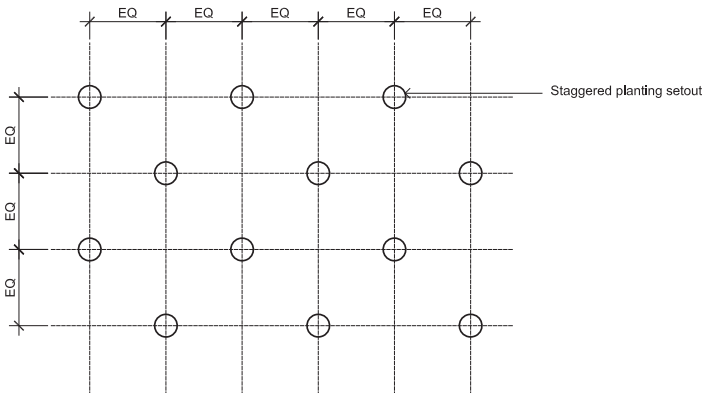
Plant quantities and arrangement subject to design development



06

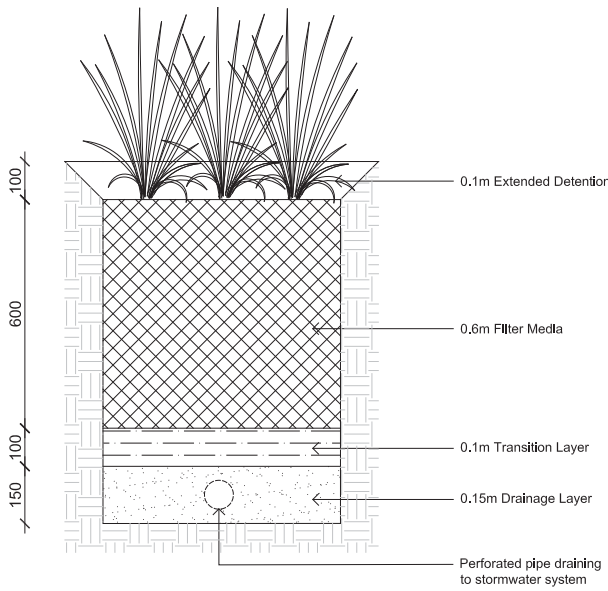
PRECAST UNIT PAVERS ON SUSPENDED SLAB

ELW-501



07 PLAN - MATRIX PLANTING SCALE N/A

ELW-501

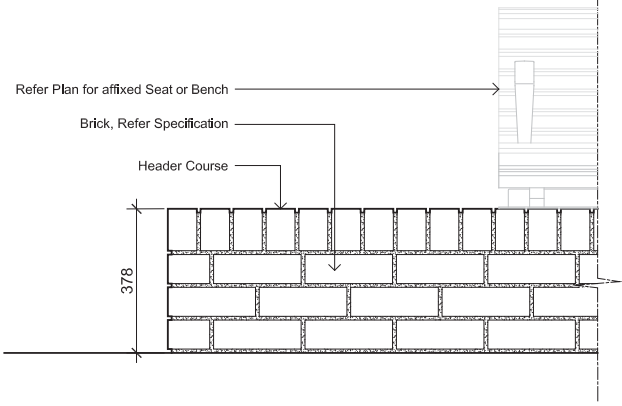


08 SECTION - BIORETENTION

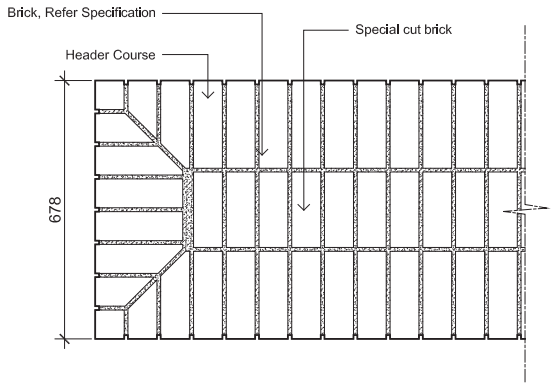
ELW-501

Estate Landscape Works

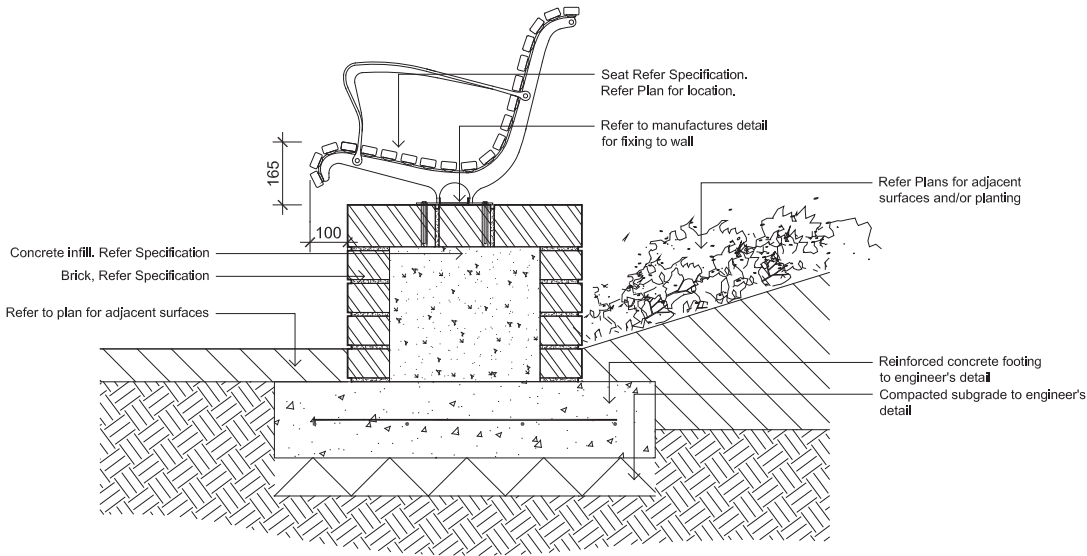
Typical Landscape Details (Not to scale)



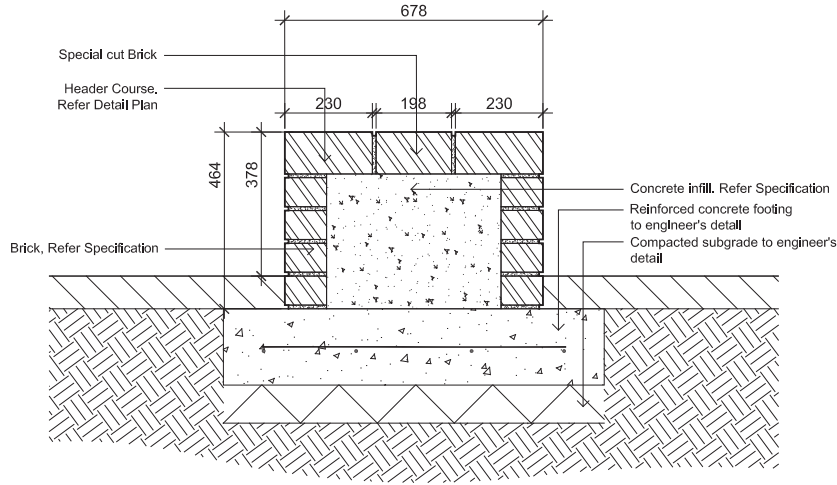
01 TYPICAL BRICK SEATING WALL ELEVATION
ELW-502



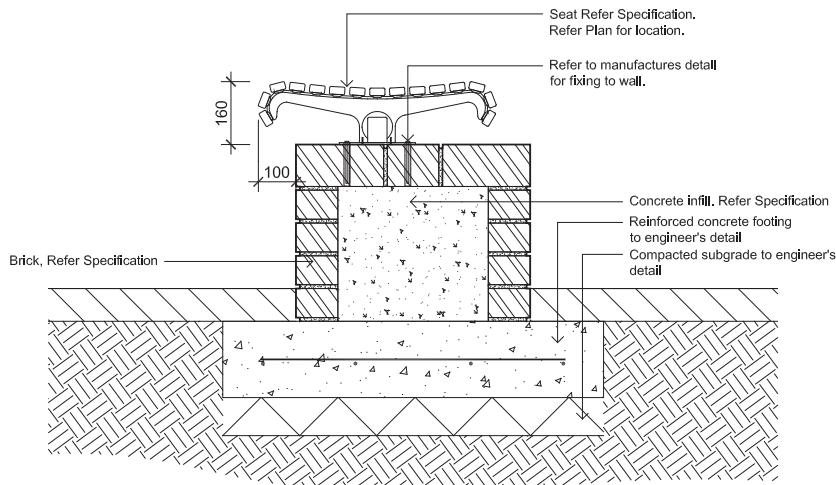
02 TYPICAL BRICK SEATING WALL PLAN
ELW-502



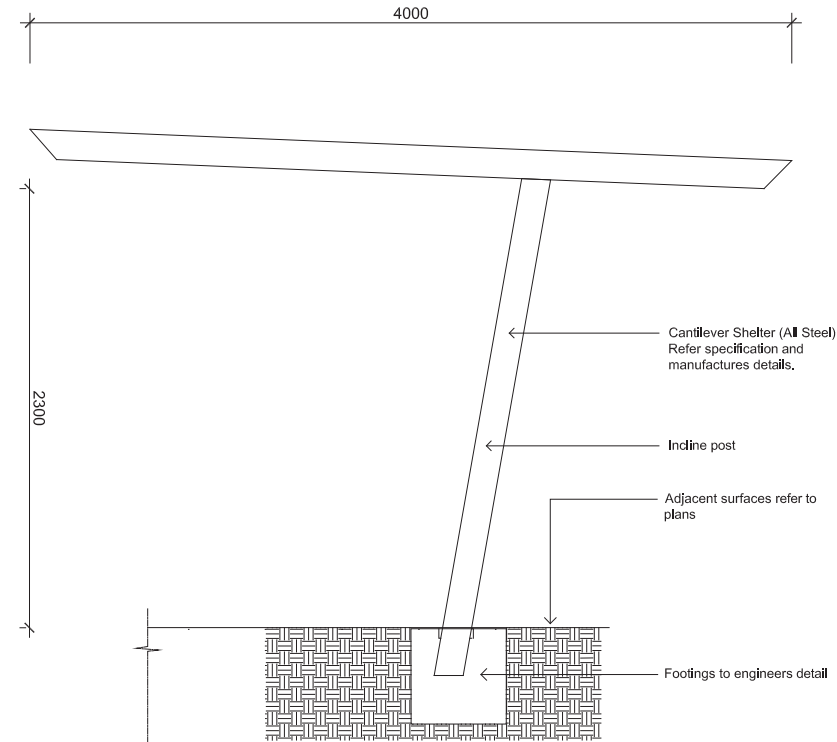
05 BRICK SEATING WALL WITH SEAT
ELW-502



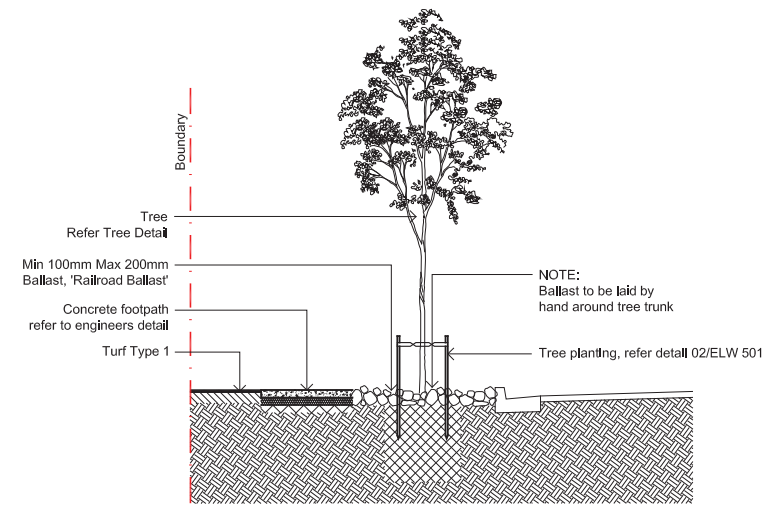
03 TYPICAL BRICK SEATING WALL
ELW-502



06 BRICK SEATING WALL WITH BENCH
ELW-502



04 PERGOLA
ELW 502



07 Street Tree Planting Detail
ELW-502

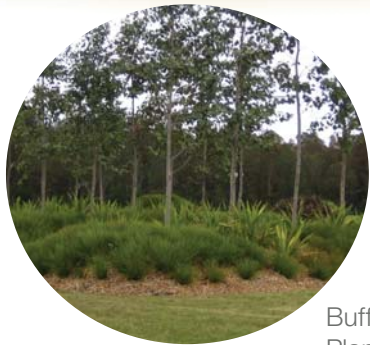
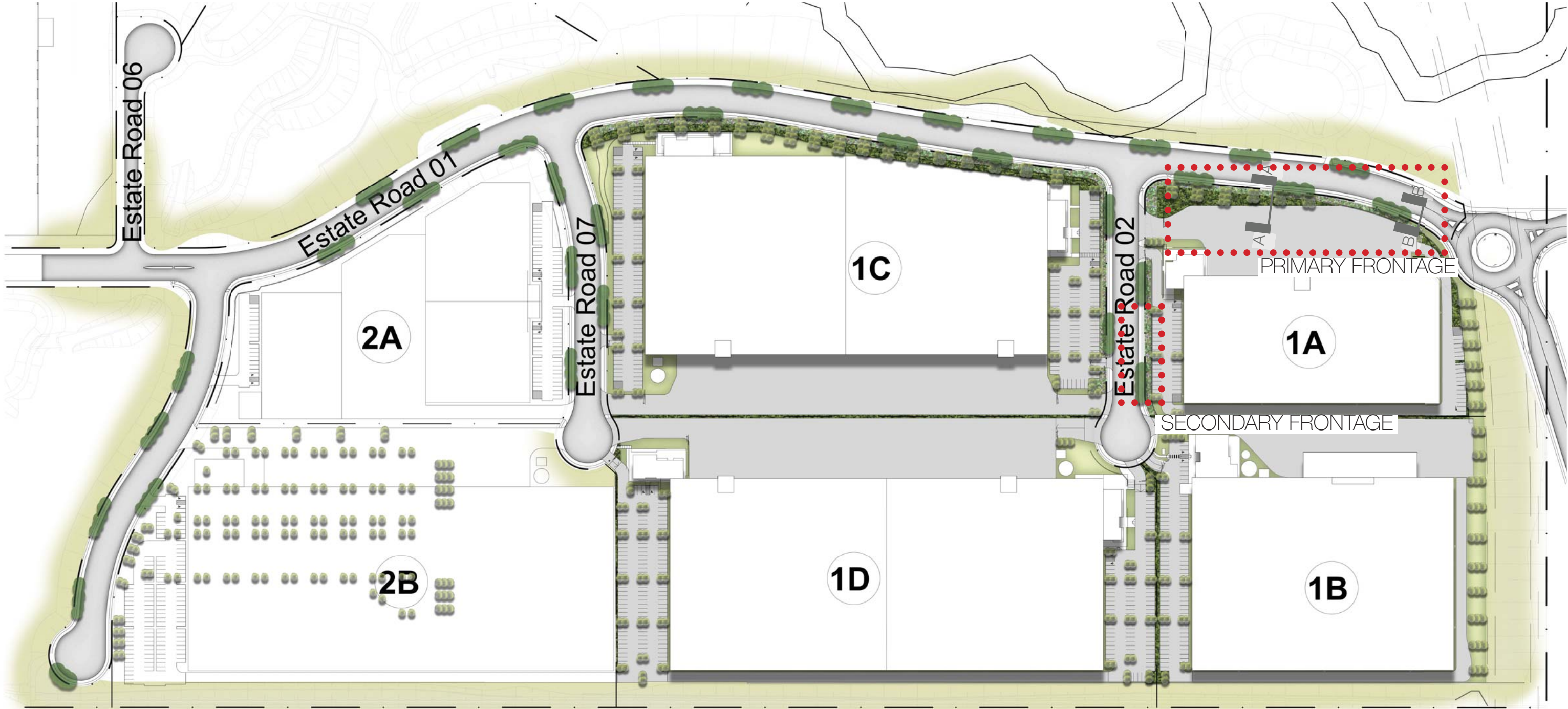


Oakdale South - MOD 4
Precinct 1 Landscape
August 2017

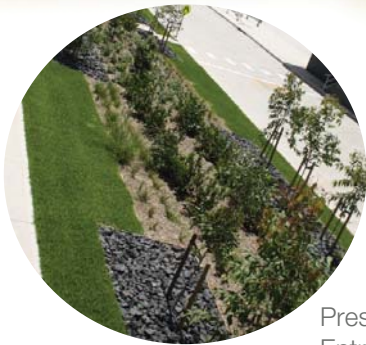


Lot Landscaping - Precinct 1

Landscape Plan (Not to scale)



Buffer / Screen
Planting



Presentation /
Entry Planting



Feature 'Railroad
Rock Ballast' Banding



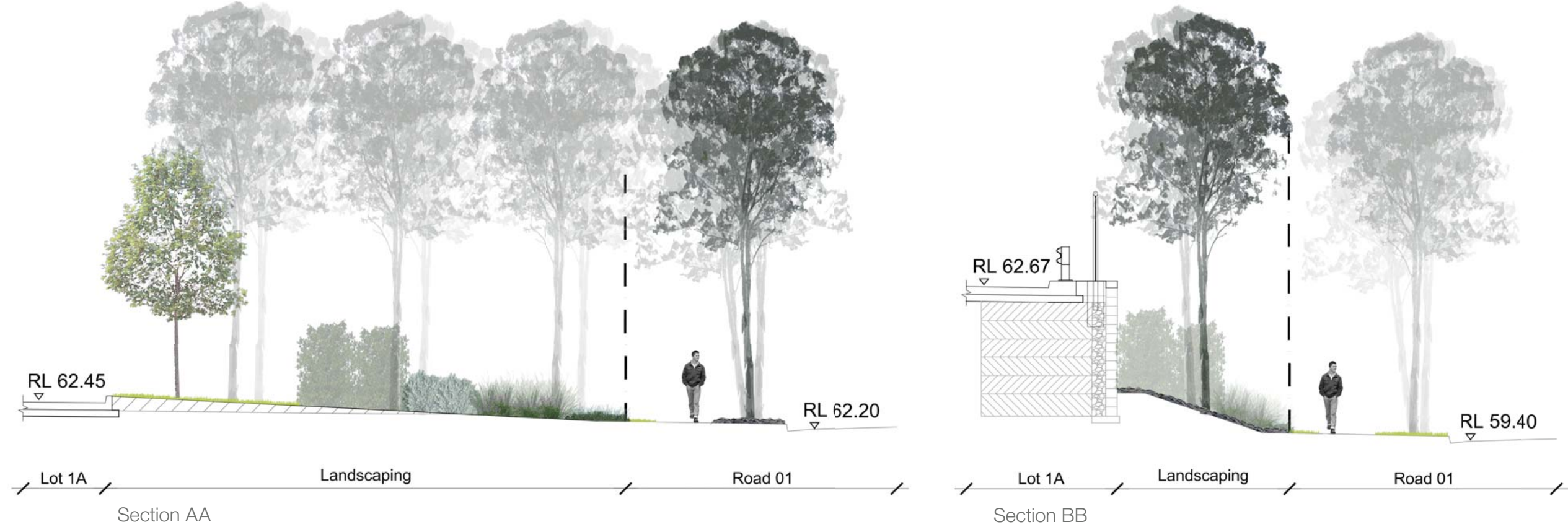
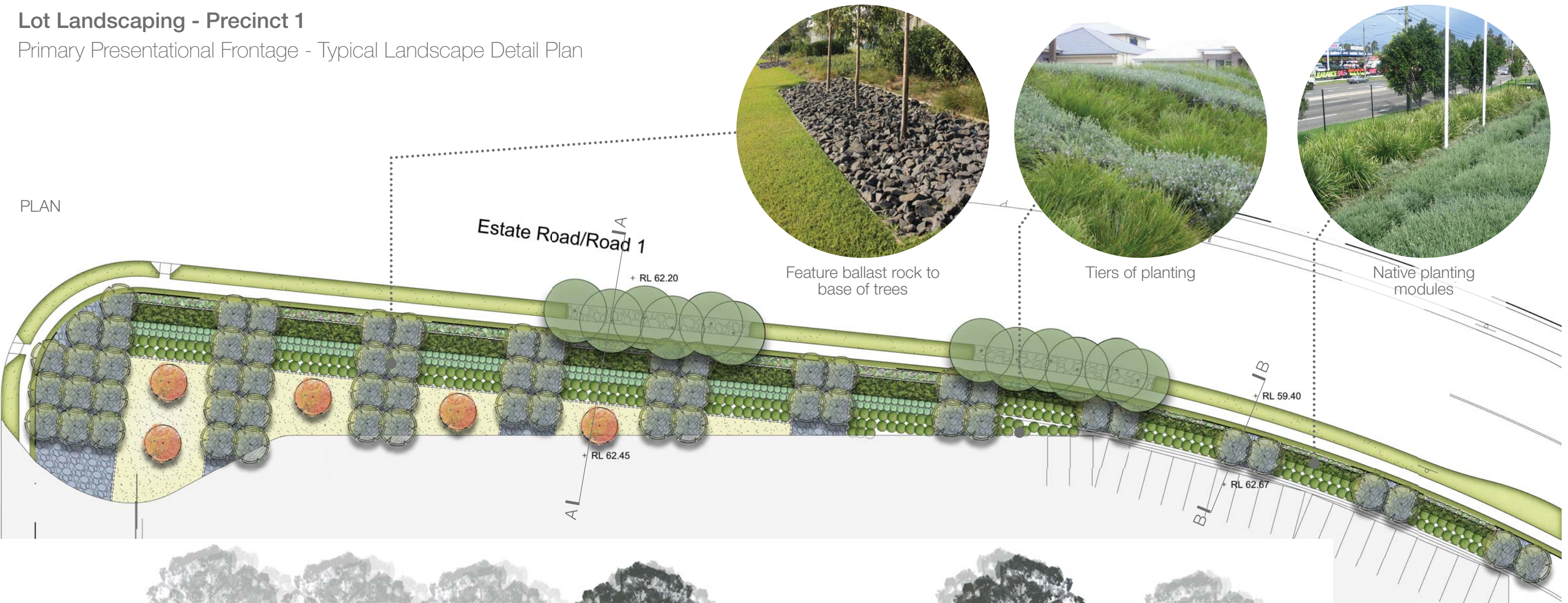
Secondary Planting
Zone - Grid of Trees in Turf



Carpark
Planting

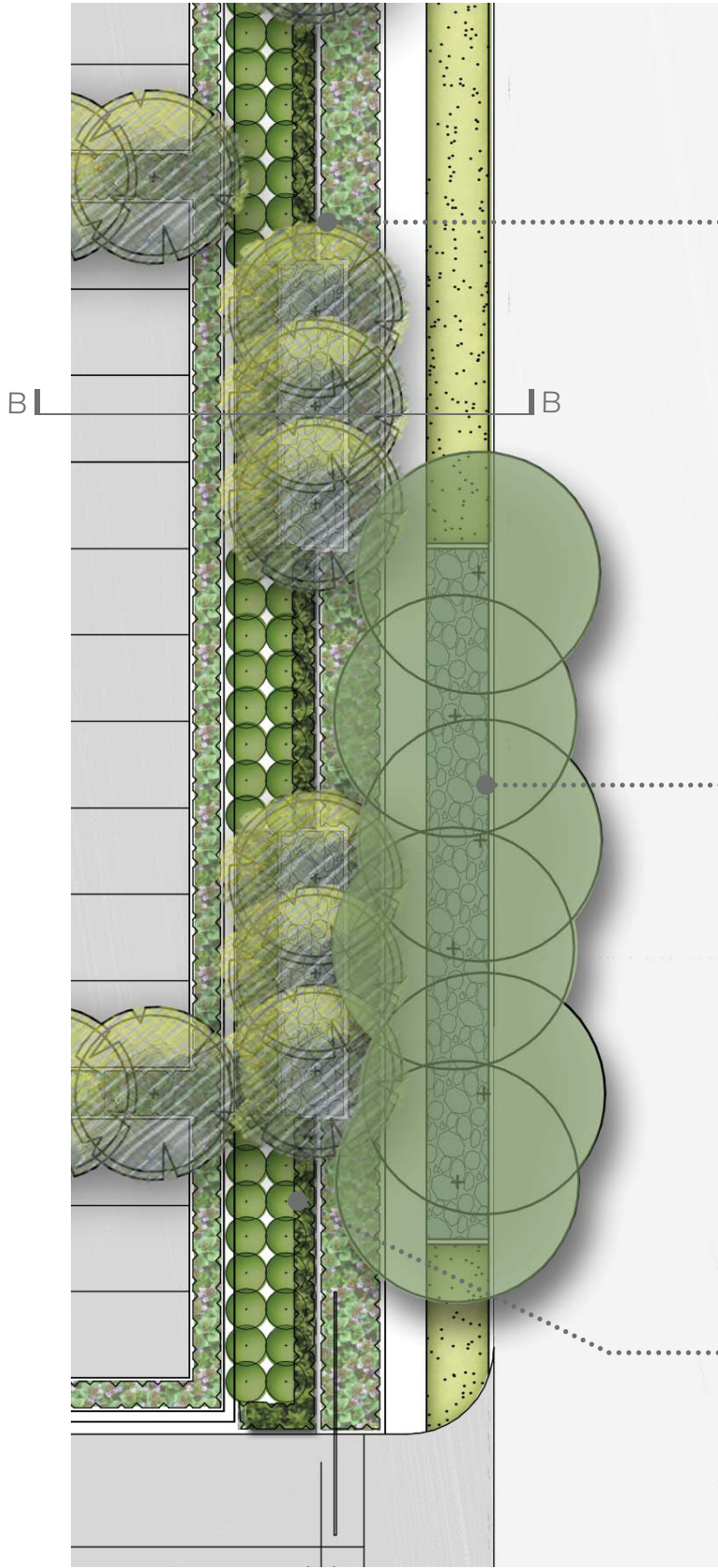
Lot Landscaping - Precinct 1

Primary Presentational Frontage - Typical Landscape Detail Plan





SECTION B | SCALE 1:100



PLAN | SCALE 1:200



Mass planted grasses



Ballast bays



Native hedges

Lot Landscaping - Precinct 1

Planting Palette

Botanical Name	Common Name	Mature Height (m.)	Mature Spread (m.)	Pot Size
Trees				
<i>Angophora floribunda</i>	Rough-barked Apple	20	8	75L
<i>Cupaniopsis anacardioides</i>	Tuckeroo	15	8	75L
<i>Corymbia maculata</i>	Spotted Gum	15	7	75L
<i>Eucalyptus amplifolia</i>	Cabbage Gum	25	8	75L
<i>Eucalyptus crebra</i>	Narrow Leaved Ironbark	15	6	25L
<i>Eucalyptus moluccana</i>	Grey Box	20	8	25L
<i>Eucalyptus tereticornis</i>	Forest Red Gum	30	10	75L
<i>Pyrus calleryana</i>	Callery Pear	11	7	75L
<i>Tristaniopsis laurina</i> 'Luscious'	Water Gum	9	8	75L
<i>Melaleuca decora</i>	White Feather Honeymyrtle	7	3	25L
<i>Melaleuca nodosa</i>	Ball Honey-myrtle	4	2.5	25L
<i>Melaleuca styphelioides</i>	Prickly Leaved Paperbark	7	3	75L
Shrubs				
<i>Acacia falcata</i>	Sickle Wattle	4	2	300mm
<i>Callistemon</i> 'Endeavour'	Bottlebrush	3	3	300mm
<i>Kunzea ambigua</i>	Tick Bush	2.5	2.5	300mm
<i>Pittosporum</i> 'Miss Muffet'	Dwarf Pittosporum	1	1.5	300mm
<i>Viburnum odoratissimum</i>	Sweet Viburnum	5	3.5	300mm
<i>Westringia glabra</i>	Violet Westringia	1	1	300mm
Accent Species				
<i>Phormium tenax</i> 'Evening Glow'	NZ Flax Lily	1.5	2	300mm
<i>Phormium tenax</i> 'Purpurea'	Purple NZ Flax	1.5	1	300mm
Groundcovers and Grasses				
<i>Dianella caerulea</i> 'Breeze'	Blue Flax Lily	0.4	0.4	150mm
<i>Hardenbergia violacea</i>	Happy Wanderer Native Sarsparilla	2.5	2.5	150mm
<i>Hibbertia scandens</i>	Snake Vine	0.2	2	150mm
<i>Lomandra longifolia</i>	Mat Rush	1	0.6	150mm
<i>Lomandra longifolia</i> 'Tanika'	Matt Rush Grass	0.7	0.6	150mm
<i>Myoporum parvifolium</i>	Creeping Boobialla	0.2	1.5	150mm
<i>Pennisetum</i> 'Nafray'	Nafray	0.8	0.5	150mm
<i>Poa labillardieri</i>	Tussock Grass	0.8	0.5	150mm
<i>Themeda australis</i>	Kangaroo Grass	0.8	0.3	150mm



Corymbia maculata



Cupaniopsis anacardioides



Tristaniopsis laurina 'Luscious'



Poa labillardieri



Pyrus calleryana



Pyrus calleryana



Myoporum parvifolium



Callistemon 'Endeavour'



Dianella caerulea 'Breeze'



Phormium tenax 'Purpurea'



Pennisetum 'Nafray'



Westringia fruticosa