

# CADDENS HILL STAGES 5 & 6

Landscape Masterplan Report - REV B

Prepared for  
Legacy Property

Project Reference: 2516076  
January 2017



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South East Asia

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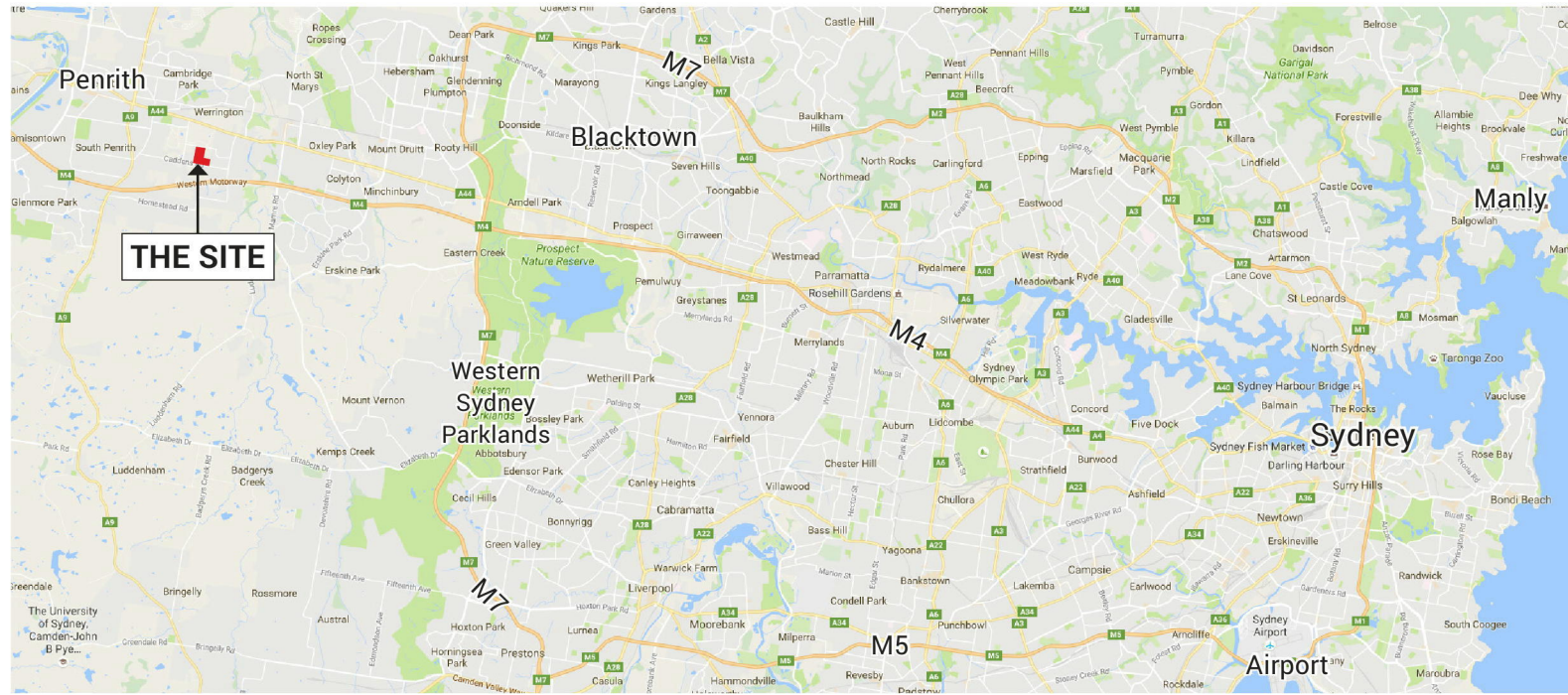
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|---------------------|---|
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| Prepared for        | Legacy Property                             |
| Authors             | Steven Holmes, Lingling Qiu, Jared Phillips |
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| Approved            |   |
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# INTRODUCTION



GoogleMap Location of the Site, NSW

NOT TO SCALE NORTH



PLACE Design Group have been engaged by Legacy Property to provide landscape DA documentation for stages 5 & 6 of the Caddens Hill Development, in Caddens, Penrith, NSW. The scope of this document includes a Basin which will form part of the future sports precinct.

This document is intended to assist in defining the development and landscape character of Caddens Hill and to guide the future development of the site. It is intended that Caddens Hill will provide a quality sustainable development that recognizes and interprets the rural character, landscape features and undulating topography of the site. It will create special places centred on public amenity such as the Hill Top Park with elevated views across the development and district.

The landscape Design as set out in this DA Report is intended to:

- Ensure continuity of design not only from Stage 1,2 ,3 and 4 but also the adjacent UGNSW Caddens site
- Create a strong sense of arrival and identity for the site through the use of linear avenues of trees (*various species*) that characterise the streetscapes.
- Through carefully planted basins, provide habitat for a range of native wildlife and meet sustainability and ecological benchmarks across the site.

- Provide high quality, low maintenance public domain which affords the community with a high level of amenity and creates a strong sense of place for the development.
- Create attractive streetscapes which retain and enhance significant views and vistas, landmark elements and Landscape Features and;

View from O'Connell Street Looking South Towards Stage 5



View from O'Connell Street Looking South West Towards Stage 6

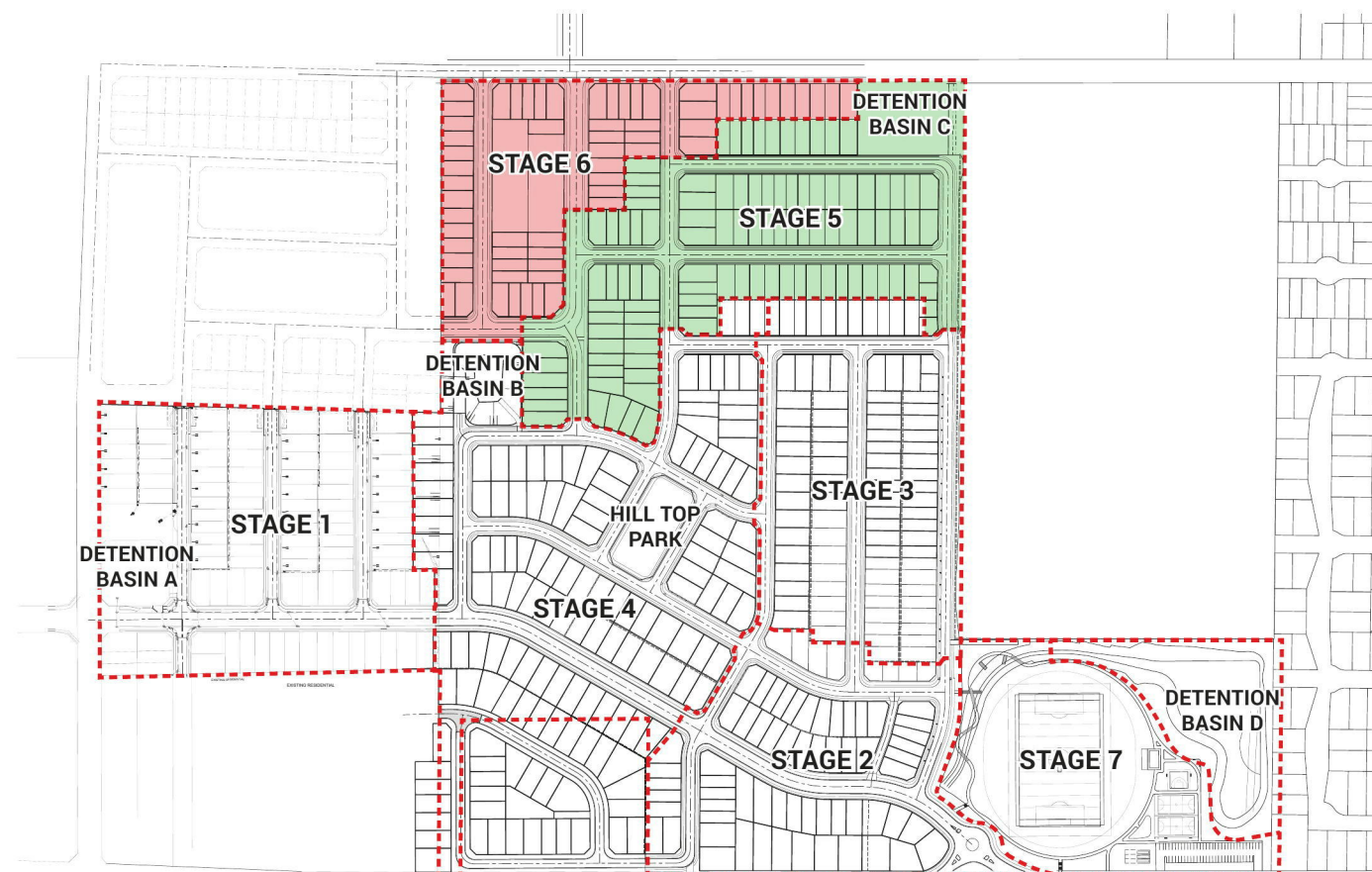


View from O'Connell Street Looking South East Across Stage 6



Images taken from GoogleMaps

# STAGING PLAN & DOCUMENT REFERENCES



STAGING PLAN

SCALE 1:6000@A3

0 60m 300m



## Control Documents:

Background Information

- DCP - Penrith City Council. Items for the site include:

## Penrith DCP 2014 Volume 2 E1 Caddens

### 1.3 The Public Domain

#### 1.3.3 Pedestrian and Cycle Network

Figure E1.6 – Street Hierarchy

Figure E1.7a-j

Figure E1.8 – Pedestrian & Cycle Routes

1) Key pedestrian and cycleway routes are to be provided generally in accordance with Penrith Development Control Plan 2014 E1 Caddens E1 - 25 Figure E1.8.

2) The design of cycleways located within the road reserve is to be in accordance with Figure E1.7.

3) The minimum width of off-street shared cycle and pedestrian pathways is to be 2.5m (as shown in Figure E1.7g).

4) The minimum width of pedestrian footpaths is 1.5m.

5) All pedestrian and cycleway routes and facilities are to be consistent with the Planning Guidelines for Walking and Cycling (DOP & RTA 2004).

## 1.3.5 Open Space, Environmental Conservation and Landscape Network

Figure E1.10 – Open Space and Environmental Conservation Network

Figure E1.11 – Eastern Hilltop Park Concept

Figure E1.14 – Active open space concept

Figure E1.15 – Detention Basins Concept

7) The 0.35 hectare Eastern Hilltop Park located on the ridgeline to the east of the site is to present as natural woodland. It is to incorporate the following elements as illustrated in Figure E1.11:

- heritage interpretation of the ruins of the 19th century farmhouse and re-use of materials where appropriate;
- viewing platforms to other vantage points within Caddens and beyond;
- an informal kick about space on the flatter land;
- accessible paths where possible;
- seating areas and shade structures;
- canopy trees;
- existing trees, Cumberland Plain Woodland species as well as other endemic robust native plant species and where necessary saline-tolerant species; and
- low maintenance and robust finishes.

## Associated Consultant Documents:

Caddens Hill Project Stage 1 to 7 Soil Investigation by SESL (October 2016)

View from O'Connell Street Looking at the Proposed Location for Basin C

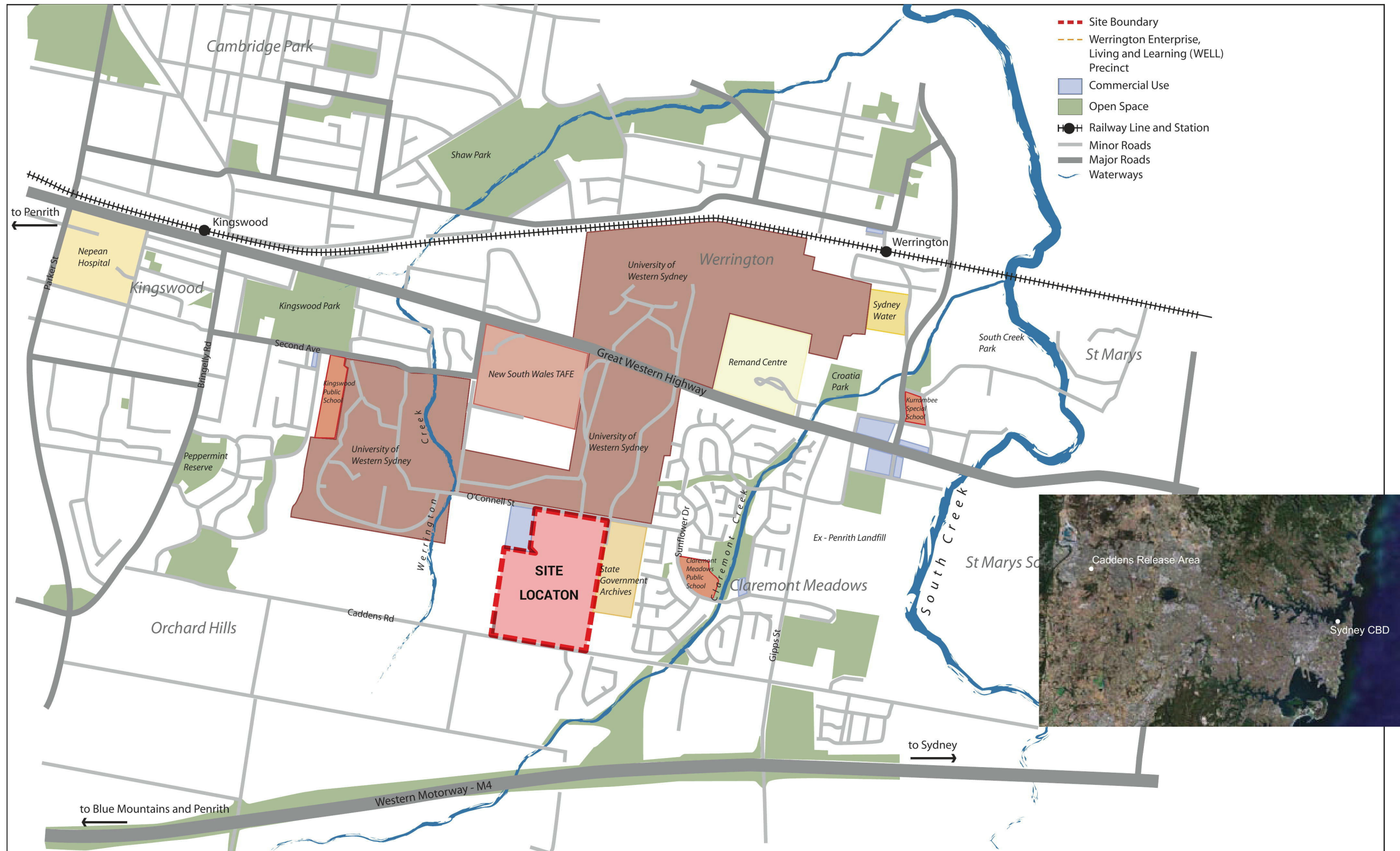


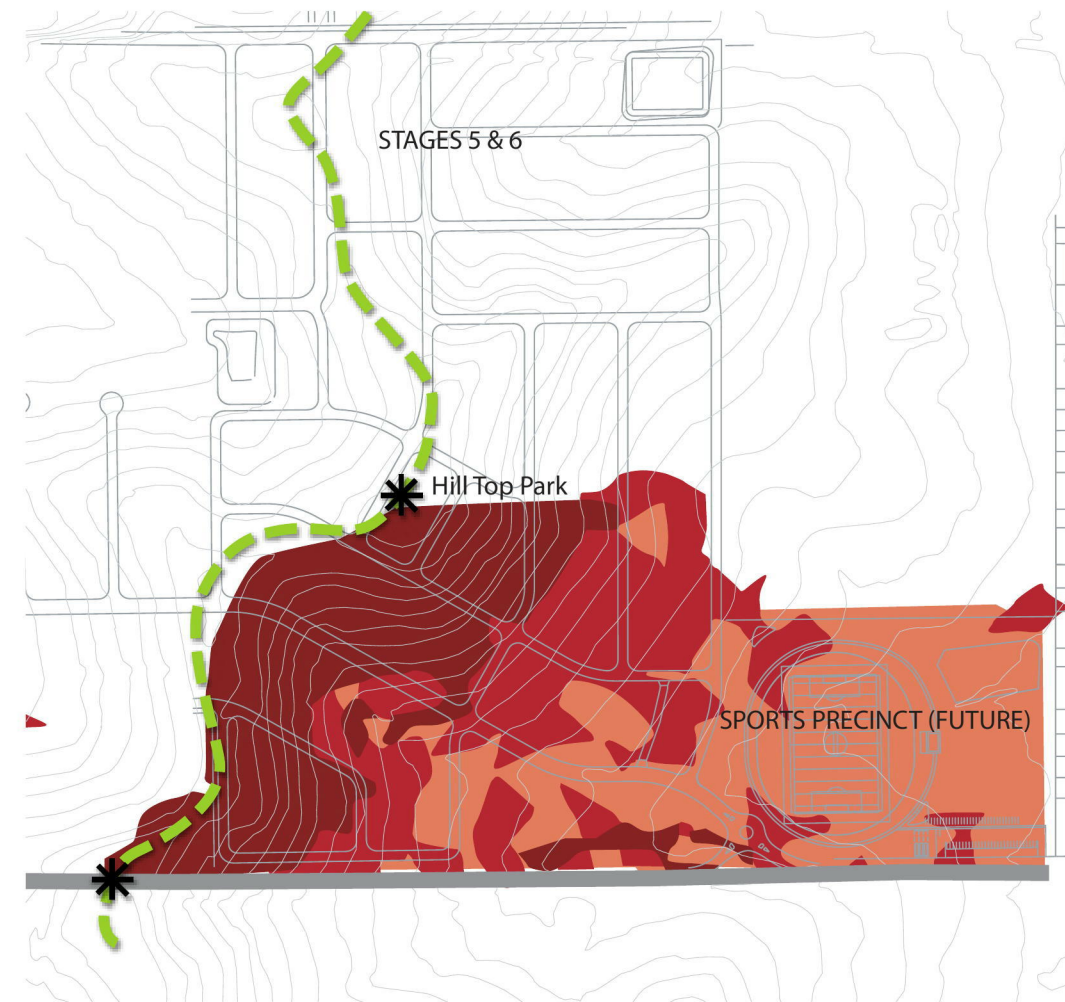
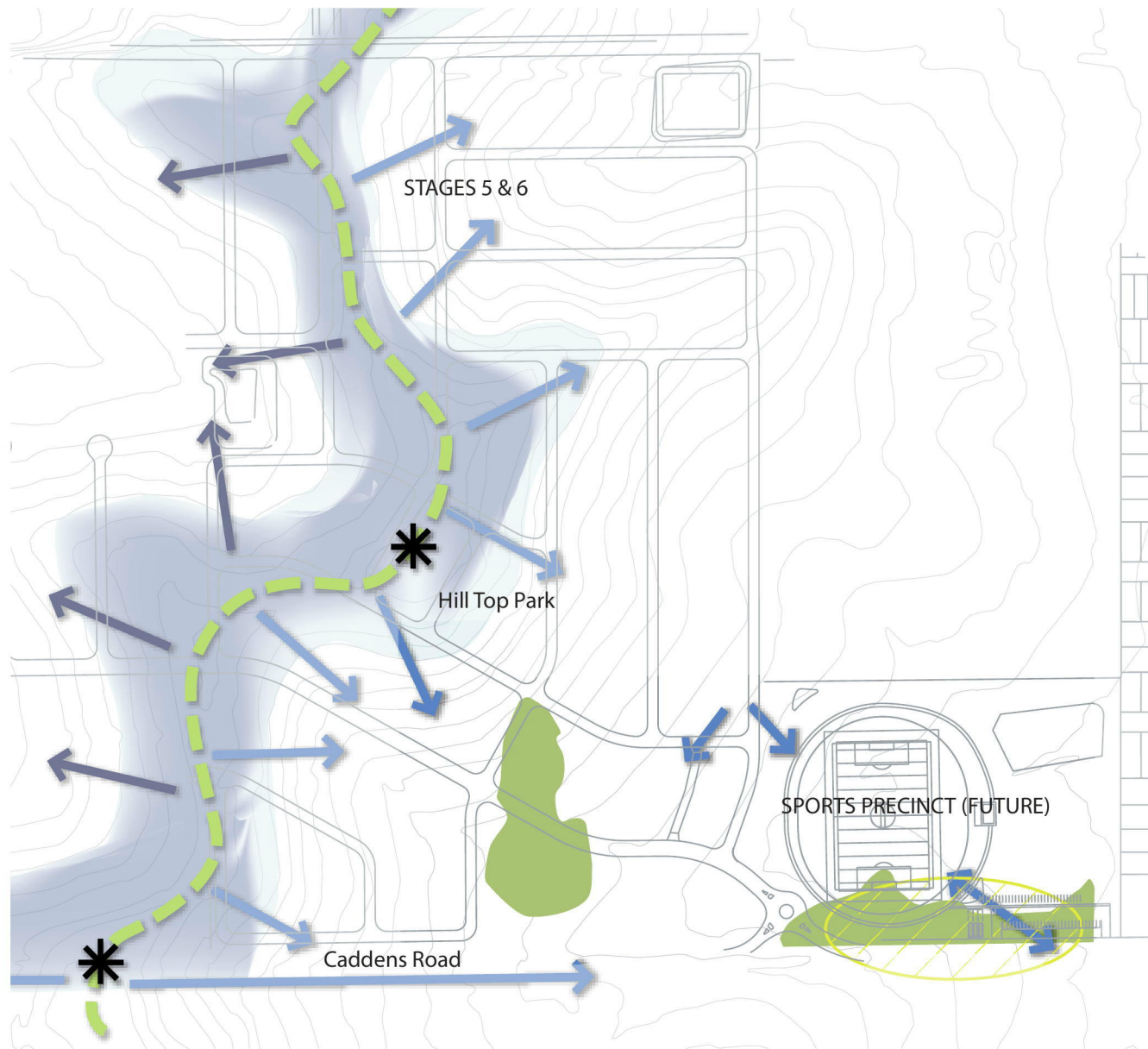
View of O'Connell Street Existing Trees



Images taken from GoogleMaps

# PRECINCT WIDE CONTEXT





## LANDSCAPE ANALYSIS

- High Points
- Primary Views
- Secondary Views
- Ridge line
- Existing Site Attributes
- Areas with Expansive Panoramic Views  
- Optimise the unique existing views, from the local undulating landscape and rural character extending as far as the Blue Mountains.
- Existing Vegetation  
- These ecological communities have minimal intrinsic value.
- Contour Lines at 5m Intervals
- Indicative Development Layout







## LANDFORM ANALYSIS

- Greater than 9% Slope  
(PB 21st April 2006)
- 5 - 9% Slope  
(PB 21st April 2006)
- 0 - 5% Slope  
(PB 21st April 2006)
- High Points
- Main Ridge Lines
- Caddens Road
- Contour Lines at 5m Intervals
- Indicative Development Layout

# STAGES 5 & 6 MASTER PLAN



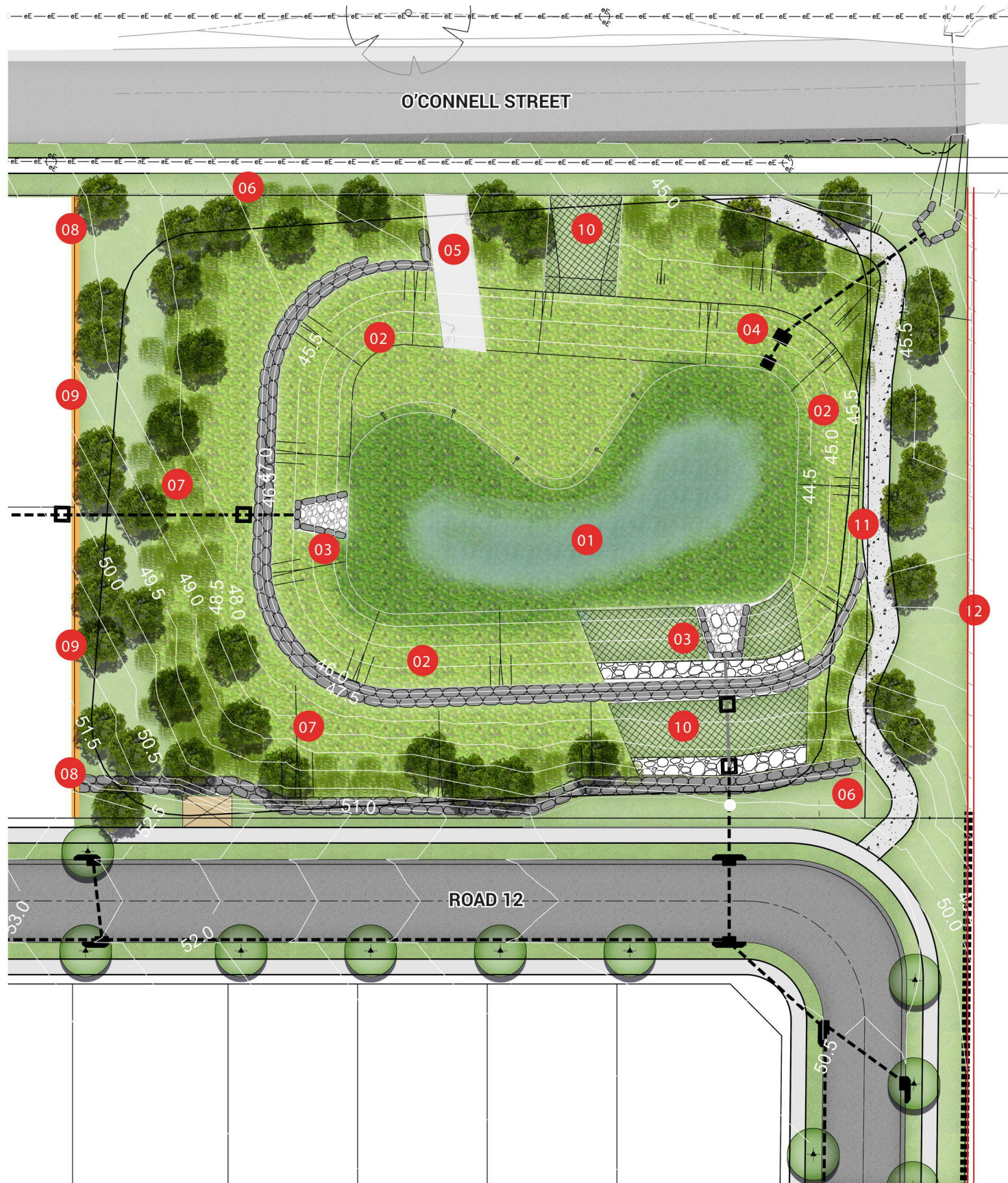
## STREET TREE LEGEND

-  *Cupaniopsis anacardioides*
-  *Waterhousia floribunda* 'Green Avenue'
-  *Lagerstroemia indica* x *L. fauriei* 'Natchez'
-  *Backhousia citriodora*
-  *Pistacia chinensis*
-  *Tristaniopsis laurina* 'Luscious'

SCALE 1:2000@A3  
0 20m 100m

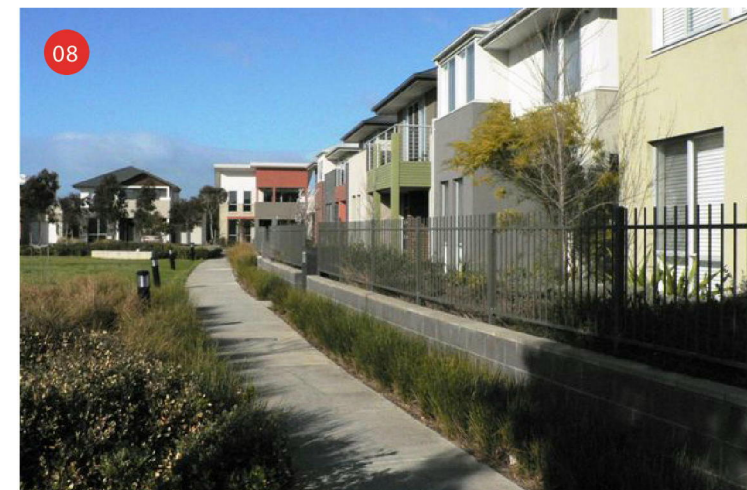


# DETENTION BASIN C



## LEGEND

- 01 Rain Garden Bed
- 02 Basin Planting on Batter
- 03 Proposed Basin Inlets
- 04 Proposed Basin Outlets
- 05 Proposed Concrete Maintenance Access
- 06 Grass Batter
- 07 Shrub Buffer Planting
- 08 Concrete Block Retaining Wall & 1.5m High Open Railing Fence on Top
- 09 2m Timber Boundary fence & Masonry brick Piers
- 10 Reinforced Turf
- 11 Proposed Concrete Shared Path
- 12 Existing Fence to Remain

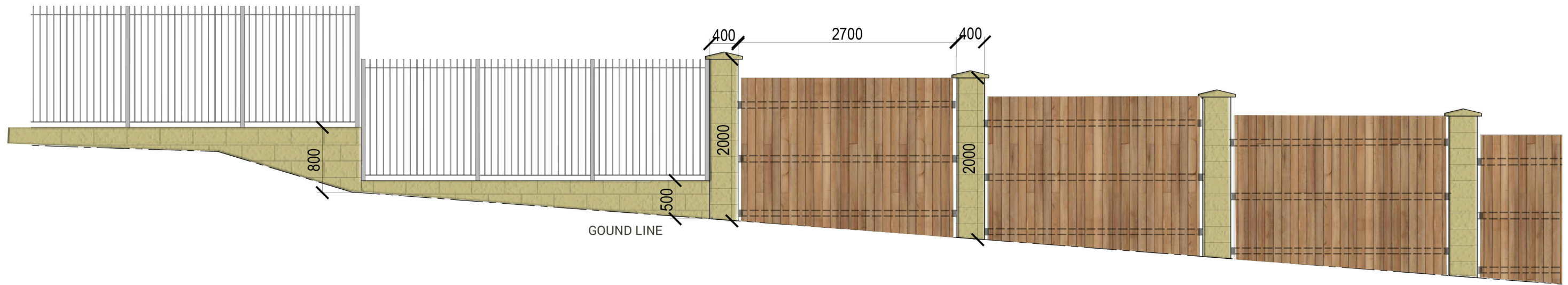


Basin Fence Indicative Details & Image  
 (Charcoal Concrete Block Retaining Wall & 1.5m High Open Railing Fence on Top)

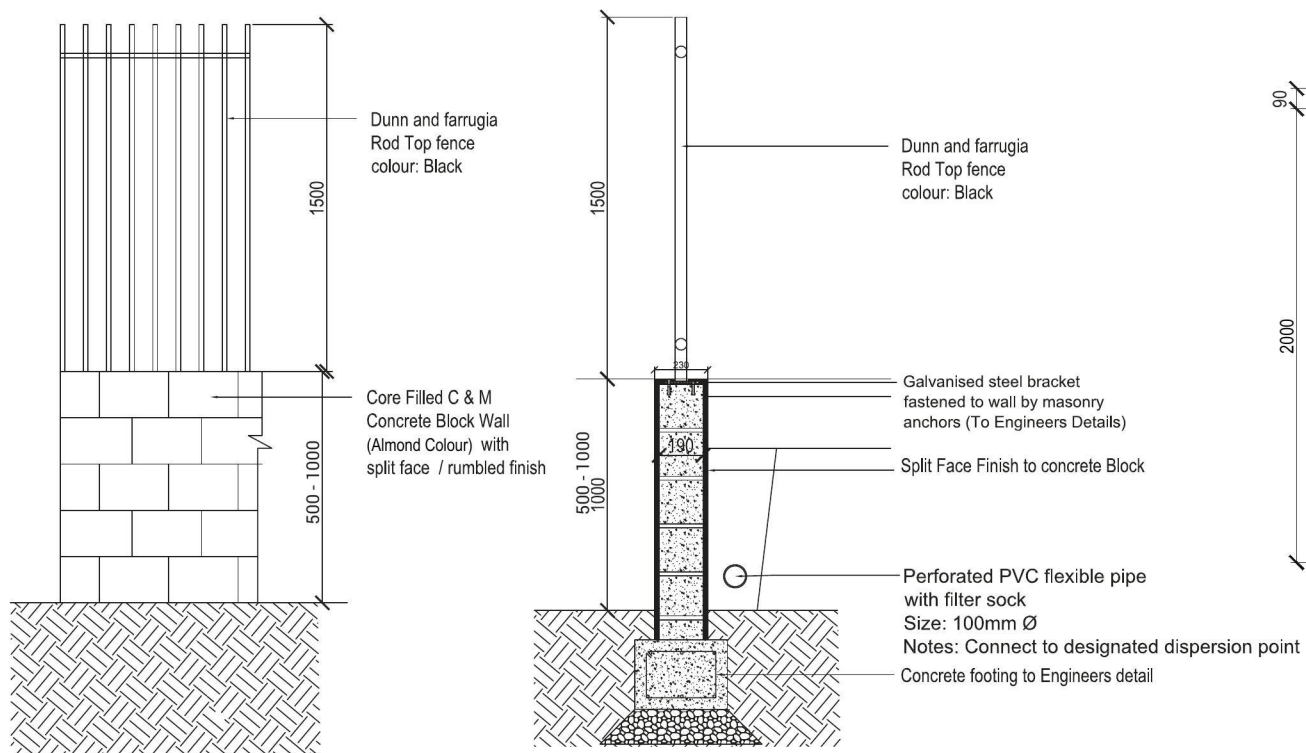




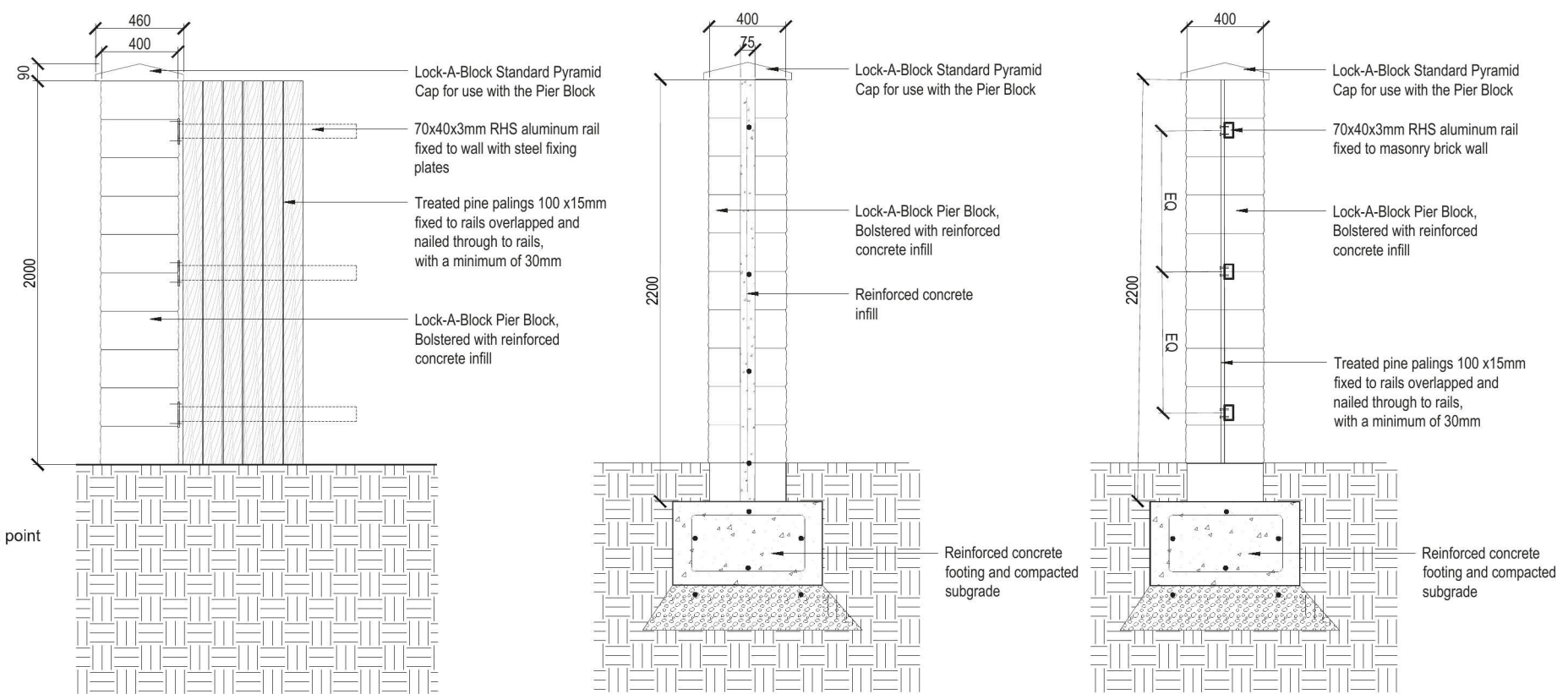
# BOUNDARY FENCE DETAILS



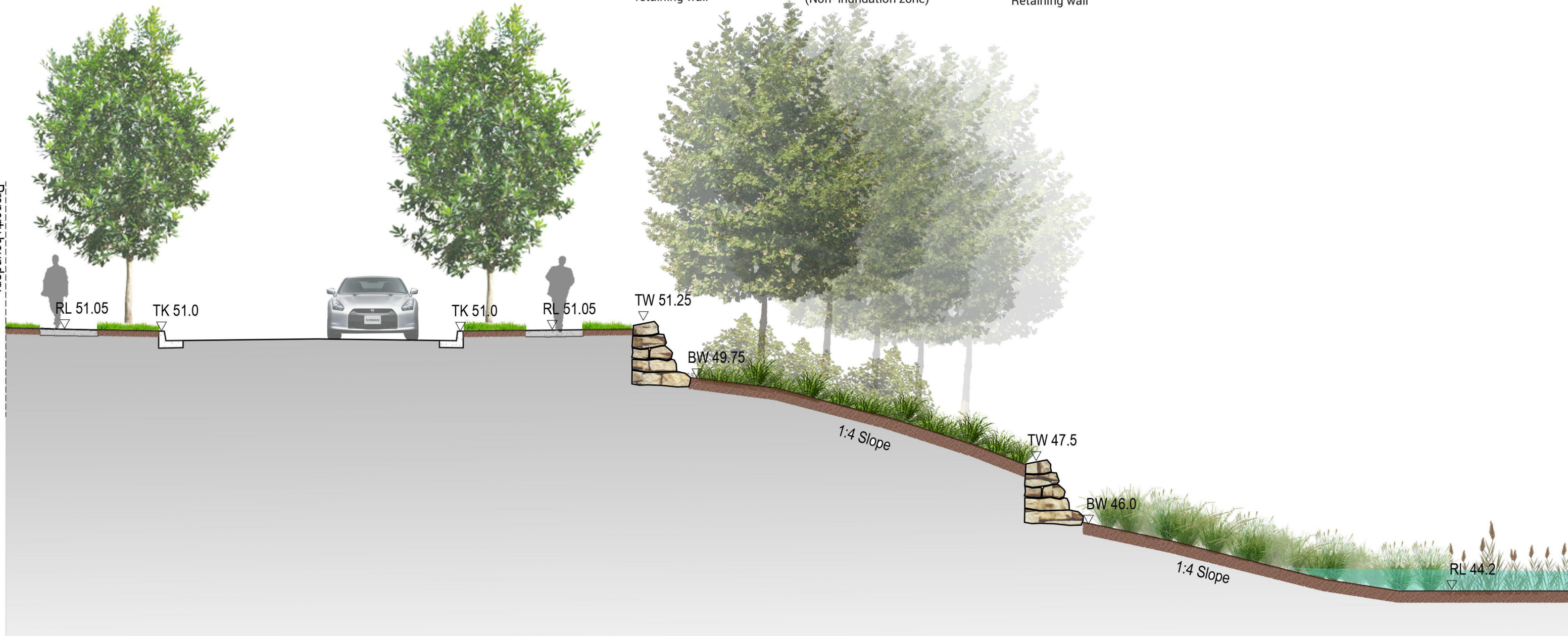
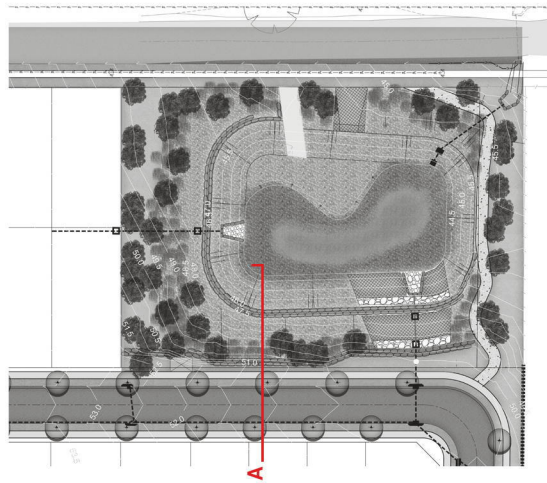
GALV.STEEL FENCE DETAILS (NOT TO SCALE)



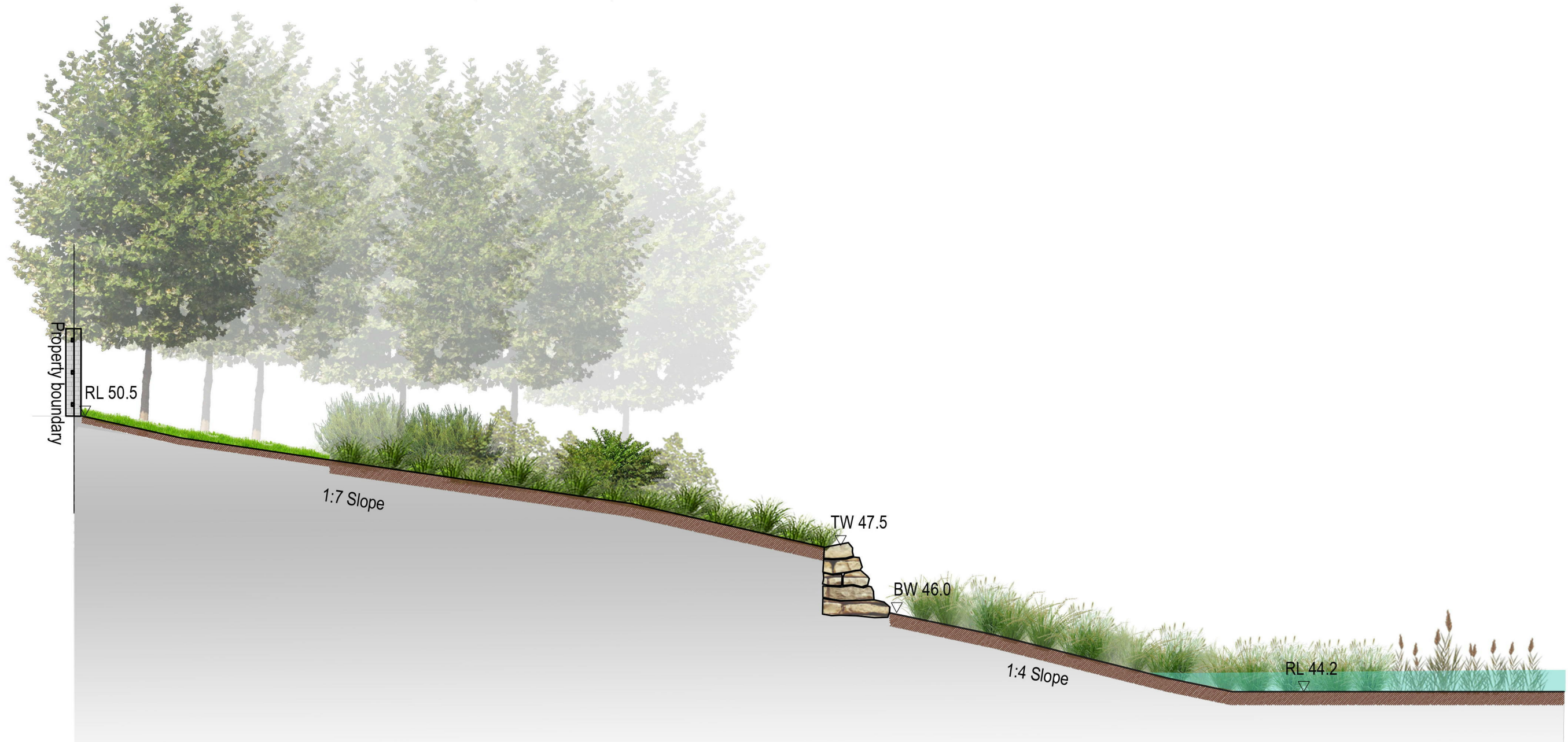
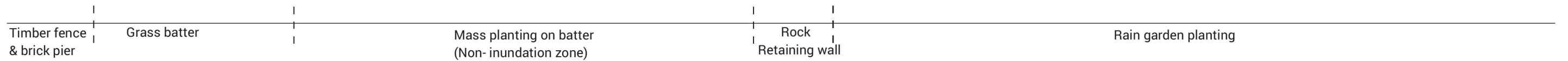
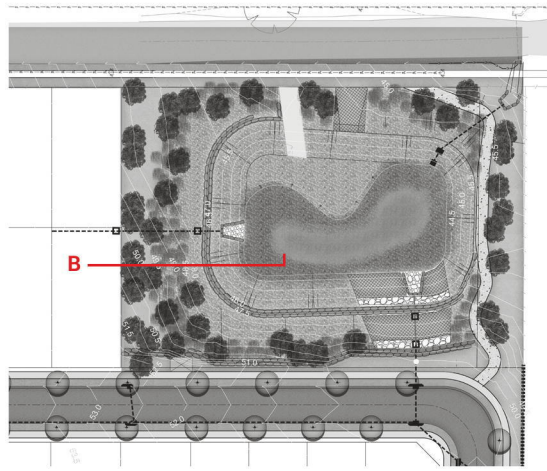
TIMBER FENCE DETAILS (NOT TO SCALE)



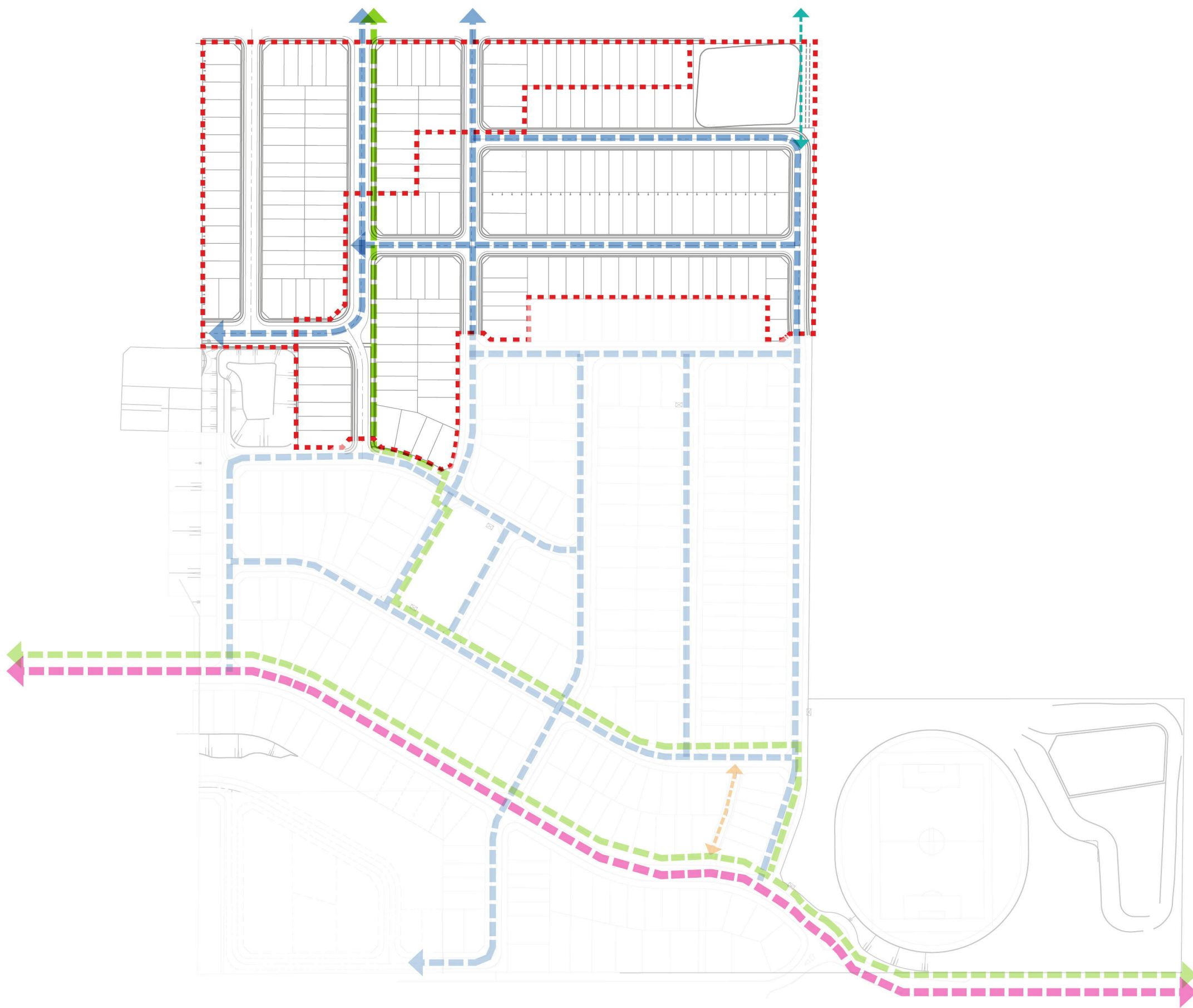
# SECTION A



# SECTION B



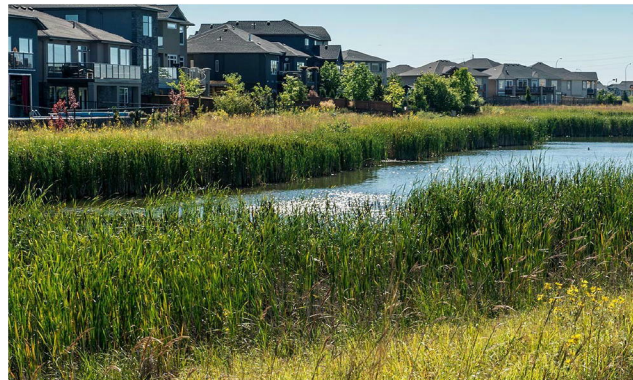
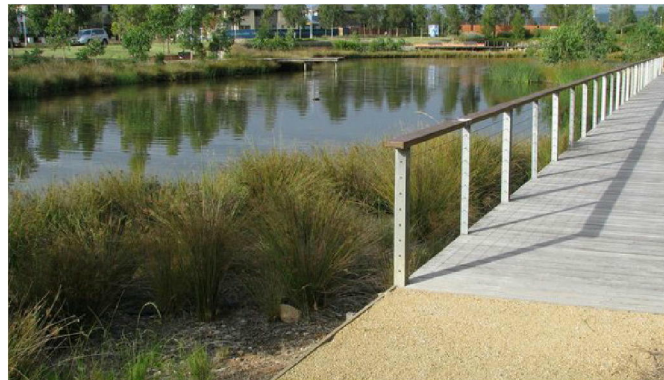
# CIRCULATION DIAGRAM



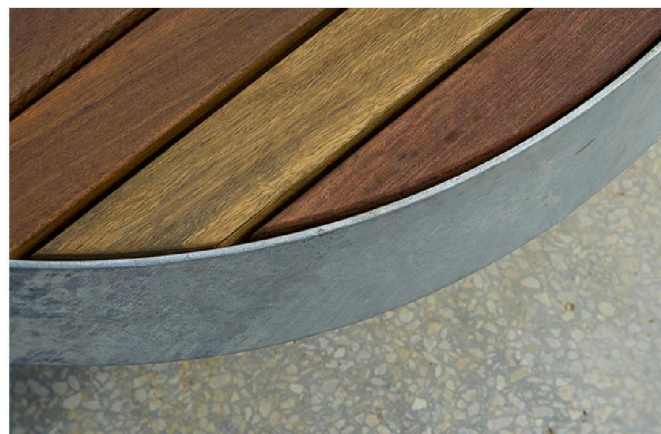
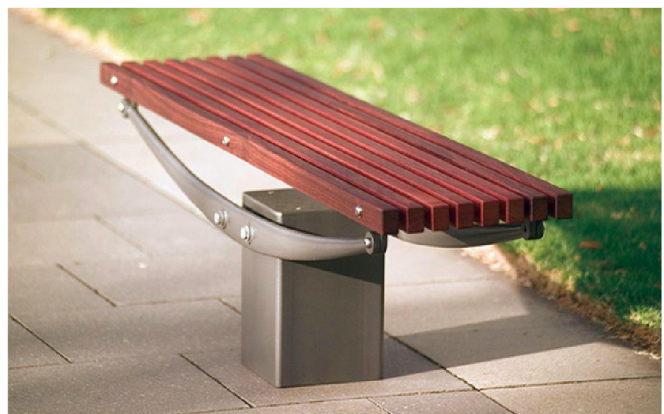
- LEGEND**
- - - - - Scope of Work
  - - - - - 2.5m wide Shared Path (Cycleway / Pedestrian)
  - - - - - Primary Vehicle Circulation
  - - - - - Secondary Vehicle Circulation
  - - - - - Laneway
  - - - - - Pedestrian

SCALE 1:3000@A3  
 0 30m 150m

BASIN PRECINCT



FURNITURE



# TYPICAL PLANT SCHEDULE & INDICATIVE IMAGES

| CADDENS HILL PLANT SCHEDULE                        |                                |               |          |             |
|--|--------------------------------|---------------|----------|-------------|
| STAGES 5 & 6                                       |                                |               |          |             |
| Botanical Name                                     | Common Name                    | Mature Height | Pot Size | Spacing /m2 |
| <b>TREES TO STREETSAPES</b>                        |                                |               |          |             |
| <i>Backhousia citriodora</i>                       | Lemon Myrtle                   | 8m            | 200L     | As Shown    |
| <i>Cupaniopsis anacardioides</i>                   | Tuckeroo                       | 8m            | 200L     | As Shown    |
| <i>Lagerstroemia indica x L. fauriei 'Natchez'</i> | Crepe Mytle                    | 8m            | 100L     | As Shown    |
| <i>Pistacia chinensis</i>                          | Chinese Pistache               | 8m            | 100L     | As Shown    |
| <i>Tristaniopsis laurina 'Luscious'</i>            | Watergum                       | 8m            | 200L     | As Shown    |
| <i>Waterhousia floribunda 'Green Avenue'</i>       | Weeping Lilly Pilly            | 10m           | 200L     | As Shown    |
| <b>TREES TO BASIN AREA</b>                         |                                |               |          |             |
| <i>Acacia decurrens</i>                            | Black Wattle                   | 8m            | 45L      | As Shown    |
| <i>Callistemon 'Kings Park Special'</i>            | Bottlebrush                    | 5m            | 45L      | As Shown    |
| <i>Casuarina glauca</i>                            | Swamp Oak                      | 10m           | 45L      | As Shown    |
| <i>Elaeocarpus grandis</i>                         | Blue Quandong                  | 10m           | 45L      | As Shown    |
| <i>Eucalyptus moluccana</i>                        | Grey Gum                       | 20m           | 45L      | As Shown    |
| <i>Eucalyptus tereticornis</i>                     | Forest Red Gum                 | 20m           | 45L      | As Shown    |
| <i>Eucalyptus sideroxylon 'Rosea'</i>              | Pink Ironbark                  | 20m           | 45L      | As Shown    |
| <i>Ficus hillii</i>                                | Fig                            | 25m           | 100L     | As Shown    |
| <i>Melaleuca styphelioides</i>                     | Prickly Leafed Paperbark       | 8m            | 45L      | As Shown    |
| <i>Tristaniopsis laurina 'Luscious'</i>            | Watergum                       | 8m            | 45L      | As Shown    |
| <i>Syzygium australe</i>                           | Brush Cherry                   | 8m            | 45L      | As Shown    |
| <i>Waterhousia floribunda</i>                      | Weeping Lilly Pilly            | 10m           | 45L      | As Shown    |
| <b>SHRUBS</b>                                      |                                |               |          |             |
| <i>Callistemon 'Captain Cook'</i>                  | Captain Cook Bottlebrush       | 1.5m          | 200mm    | 1           |
| <i>Callistemon 'Slim'</i>                          | Slim Bottlebrush               | 3m            | 200mm    | 1           |
| <i>Grevillea 'Honey Gem'</i>                       | Grevillea Honey Gem            | 5m            | 200mm    | 1           |
| <i>Leptospermum scoparium</i>                      | New Zealand Teatree            | 2m            | 200mm    | 1           |
| <i>Melaleuca 'Claret Tops'</i>                     | Honey Myrtle                   | 1m            | 200mm    | 3           |
| <i>Nandina 'Obsession'</i>                         | Sacred Bamboo                  | 0.6m          | 200mm    | 3           |
| <i>Westringia 'Aussie Box'</i>                     | Coastal Rosemary               | 0.9m          | 200mm    | 3           |
| <i>Westringia 'Mundi'</i>                          | Coastal Rosemary               | 0.5m          | 200mm    | 3           |
| <b>GRASSES TO BASIN / RAIN GARDEN PRECINCT</b>     |                                |               |          |             |
| <b>BANKS</b>                                       |                                |               |          |             |
| <i>Baloskion tetraphyllum 'Feather Top'</i>        | Feather Rush                   | 0.5m          | 75mm     | 4           |
| <i>Lomandra 'Katie Belles'</i>                     | Lomandra Katie Belles          | 1.5m          | 75mm     | 3           |
| <i>Lomandra 'Tropic Belle'</i>                     | Lomandra Tropic Belle          | 0.8m          | 75mm     | 2           |
| <i>Poa eskdale</i>                                 | Poa                            | 0.6m          | 75mm     | 5           |
| <i>Juncus usitatus</i>                             | Common Rush                    | 0.9m          | 75mm     | 5           |
| <i>Pennisetum 'Nafray'</i>                         | Swamp Foxtail Grass            | 0.6m          | 75mm     | 3           |
| <i>Themeda australis</i>                           | Kangaroo Grass                 | 0.5m          | 75mm     | 4           |
| <b>GROWING MEDIUM</b>                              |                                |               |          |             |
| <i>Ficinia nodosa</i>                              | Knobby Club Rush               | 0.8m          | 75mm     | 3           |
| <i>Juncus flavidus</i>                             | Mat Rush                       | 1.0m          | 75mm     | 6           |
| <i>Juncus usitatus</i>                             | Mat Rush                       | 1.0m          | 75mm     | 6           |
| <i>Carex appressa</i>                              | Sedge                          | 1.3m          | 75mm     | 4           |
| <i>Lepironia articulata</i>                        | Grey rush                      | 0.9m          | 75mm     | 5           |
| <i>Lomandra 'Shara'</i>                            | Lomandra Shara                 | 0.5m          | 75mm     | 4           |
| <i>Lomandra 'Katie Belles'</i>                     | Lomandra Katie Belles          | 1.5m          | 75mm     | 3           |
| <b>Turf</b>  |                                |               |          |             |
| Kikuyu Grass                                       | <i>Pennisetum clandestinum</i> |               |          |             |



*Cupaniopsis anacardioides*



*Lagerstroemia 'Natchez'*



*Backhousia citriodora*



*Waterhousia floribunda 'Green Avenue'*



*Pistacia chinensis*



*Tristaniopsis laurina 'Luscious'*



*Eucalyptus tereticornis*



*Melaleuca styphelioides*



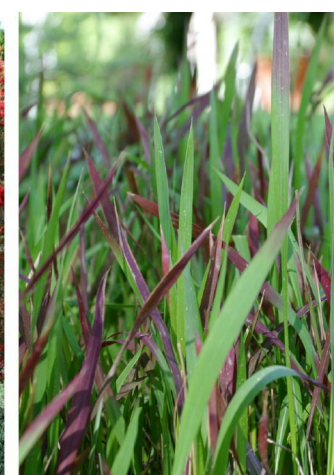
*Grevillea 'Honey Gem'*



*Westringia 'Aussie Box'*



*Callistemon 'Slim'*



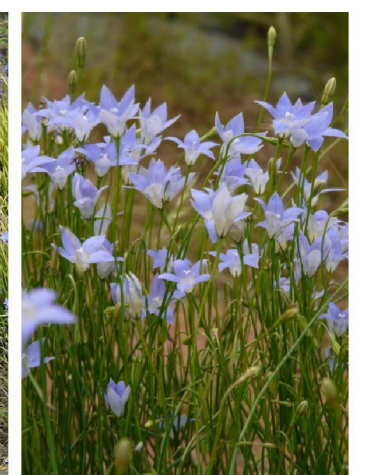
*Imperata cylindrica*



*Poa labillardieri*



*Stypantra glauca*



*Wahlenbergia communis*

# MAINTENANCE PROGRAM

## Caddens Hill DEVELOPER MAINTENANCE PROGRAM - SOFTSCAPE

**Client:** Legacy Property  
**Project Name:** Caddens Hill  
**Precinct Name:** STAGES 5 & 6  
**Works Description:** Maintenance of soft landscape areas  
**Maintenance Period:** 12 months

### SOFTSCAPE AREAS:

| TASK DESCRIPTION:  | 0-9 MONTHS<br>FREQUENCY:                      | 9-12 MONTHS<br>FREQUENCY:                |
|--|---|--|
| <b>Trees to Streetscapes &amp; Basin C</b>                         |   |  |
| Visual inspection of all street, park and basin trees              | Fortnightly in summer/Monthly in Winter       | Monthly in summer/Once in Winter         |
| Manually inspect water levels to trees                             | Fortnightly in summer/Monthly in Winter       | Monthly in summer/Once in Winter         |
| Inspect damage to trees  | Fortnightly in summer/Monthly in Winter       | Monthly in summer/Once in Winter         |
| Replace any taping to trees  | Fortnightly in summer/Monthly in Winter       | Monthly in summer/Once in Winter         |
| Prune dead or damaged branches                                     | Fortnightly in summer/Monthly in Winter       | Monthly in summer/Once in Winter         |
| Check for and report pests & diseases                              | Fortnightly                                   | Monthly                                  |
| Replace failed or damaged trees                                    | Fortnightly/As required                       | Monthly/As required                      |
| Spray in accordance with manufacturers recommendations             | As required                                   | As required                              |
| Adjust &/or replace stakes & ties where necessary                  | As required                                   | As required                              |
| Monitor and apply fertiliser to turf areas                         | 6 month intervals - Autumn/Spring             | Yearly                                   |
| <b>Turf to Verges and Basin C</b>                                  |   |  |
| Mow all turf areas to maintain height between 30-40mm              | Weekly in Summer/Monthly in Winter            | Fortnightly in Summer/2 months in Winter |
| Trim edges of all turf areas                                       | Weekly in Summer/Monthly in Winter            | Fortnightly in Summer/2 months in Winter |
| Remove clippings from site   | Weekly in Summer/Monthly in Winter            | Fortnightly in Summer/2 months in Winter |
| Remove litter & debris from turf areas                             | Weekly in Summer/Monthly in Winter            | Fortnightly in Summer/2 months in Winter |
| Check for and report pests & diseases                              | Fortnightly                                   | Monthly                                  |
| Spray in accordance with manufacturers recommendations             | As required                                   | As required                              |
| Monitor and apply fertiliser to turf areas                         | 6 month intervals - Autumn/Spring             | Yearly                                   |
| <b>Mulch</b>   |   |  |
| Remove litter & debris from mulch                                  | Fortnightly                                   | Monthly                                  |
| Remove weed growth in mulch areas                                  | Fortnightly                                   | Monthly                                  |
| Top up mulch as required   | Annually                                      | Annually                                 |
| <b>Plants to Basin C and Streetscapes</b>                          |   |  |
| Check for and report pests & diseases                              | Fortnightly                                   | Monthly                                  |
| Spray in accordance with manufacturers recommendations             | Fortnightly                                   | Monthly                                  |
| Prune damaged or dead branches                                     | Fortnightly                                   | Monthly                                  |
| Remove weed growth in plant areas                                  | Fortnightly                                   | Monthly                                  |
| Replace failed or damaged plants                                   | Fortnightly/As required                       | Monthly/As required                      |
| Adjust &/or replace stakes & ties where necessary                  | Fortnightly/As required                       | Monthly/As required                      |
| <b>General watering</b>  |   |  |
| Irrigation by hydrant or water cart as required to maintain health | Weekly first 6 months/Fortnightly there after | Monthly                                  |

## Caddens Hill DEVELOPER MAINTENANCE PROGRAM - HARDSCAPE

**Client:** Legacy Property  
**Project Name:** Caddens Hill  
**Precinct Name:** STAGES 5 & 6  
**Works Description:** Maintenance of hard landscape areas  
**Maintenance Period:** 12 months

### HARDSCAPE AREAS:

| TASK DESCRIPTION:  | 0-9 MONTHS<br>FREQUENCY | 9-12 MONTHS<br>FREQUENCY |
|--|-------------------------|--------------------------|
| <b>Concrete pavements to Streetscapes &amp; Basin C</b>                          |                         |                          |
| Visual inspection of all pavements for damage and cracks                         | Fortnightly             | Monthly                  |
| Visual inspection of all pavements for efflorescence (salt deposits)             | Fortnightly             | Monthly                  |
| Visual inspection of all pavements for colour consistency and stains             | Fortnightly             | Monthly                  |
| Clean in accordance with manufacturers recommendations                           | As required             | As required              |
| Leaf and debris clearance with blower  | Monthly                 | 2 Months                 |
| <b>Walls to Hill Basin C</b>   |                         |                          |
| Visual inspection of all gabion and concrete block walls for damage and cracks   | Fortnightly             | Monthly                  |
| Check / Repair all mortar joints as required if failure / damage has occurred    | Fortnightly             | Monthly                  |
| Remove any weed growth in between gabion walls                                   | Fortnightly             | Monthly                  |
| Visual inspection for staining and removal of all stains to concrete block walls | As required             | As required              |
| Visual inspection for graffiti and removal if required                           | As required             | As required              |
| <b>Urgent works</b>  |                         |                          |
| Report any theft damage or vandalism   | Weekly                  | Fortnightly              |

### ADDITIONAL WORKS / COMMENTS:

Site Foreman

place  
design  
group.

Australia  
China  
South East Asia

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