



ARCADIA

**Project Pluto Data Centre**  
132 MCCREDIE RD GUILDFORD WEST  
LANDSCAPE REPORT

Prepared for GOODMAN  
MARCH 2025

**We respectfully acknowledge the Traditional Custodians of the lands where we live and work. We acknowledge their unique ability to care for Country and deep spiritual connection to it. We honour Elders past, present and emerging whose knowledge and wisdom has and will ensure the continuation of cultures and traditional practices.**

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## Executive Summary

This Landscape Report has been prepared by Arcadia Landscape Architecture to accompany a State Significant Development Application (SSDA) for the construction and ongoing operation of a data centre facility at 132 McCredie Road, Guildford West NSW 2161, in the Cumberland Council Local Government Area (LGA). The site is legally described as Lot 1 in DP596315.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the Project Pluto Data Centre (SSD-69223466) dated 4 April 2024

This report concludes that the proposed data centre is suitable and warrants approval subject to the implementation of the following mitigation measures.

- Vegetation canopy coverage
- Deep Soil Percentage
- Total Landscape Area
- Tree Removal Justification

Following the implementation of the above mitigation measures, the remaining impacts are appropriate.

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## Introduction & SEAR

A State Significant Development Application (SSDA) has been prepared in support of a proposed data centre at 132 McCredie Road, Guildford West NSW 2161. The site is zoned E4 General Industrial and has a road frontage to McCredie Road. The developable site area is approximately 71,710 sqm.

The proposed development comprises:

- Site preparation works including bulk excavation and removal of existing hard standing and structures on the site, tree and vegetation clearing, and bulk earthworks;
  
- Construction, fit out and operation of a data centre with an approximate building height of 25.77m and total gross floor area of approximately 29,444 m<sup>2</sup> comprising:
  - At-grade parking for 53 car parking spaces and 2 accessible car parking spaces
  - Two (2) loading dock spaces.
  - Two (2) levels of technical data hall floor space with incorporating a total of nine (9) data halls
  - Ancillary office space
- Provision of required utilities, including:
  - Fuel storage
  - Two (2) Switch-rooms
  - Four (4) industrial water storage tanks
- Vehicle entry and egress driveways located along McCredie Road
- Internal access road
- Associated landscaping and site servicing
- Installation of services and drainage infrastructure.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) and accompanying cover letter issued for the Project Pluto Data Centre (SSD-69223466) dated 4 April 2024

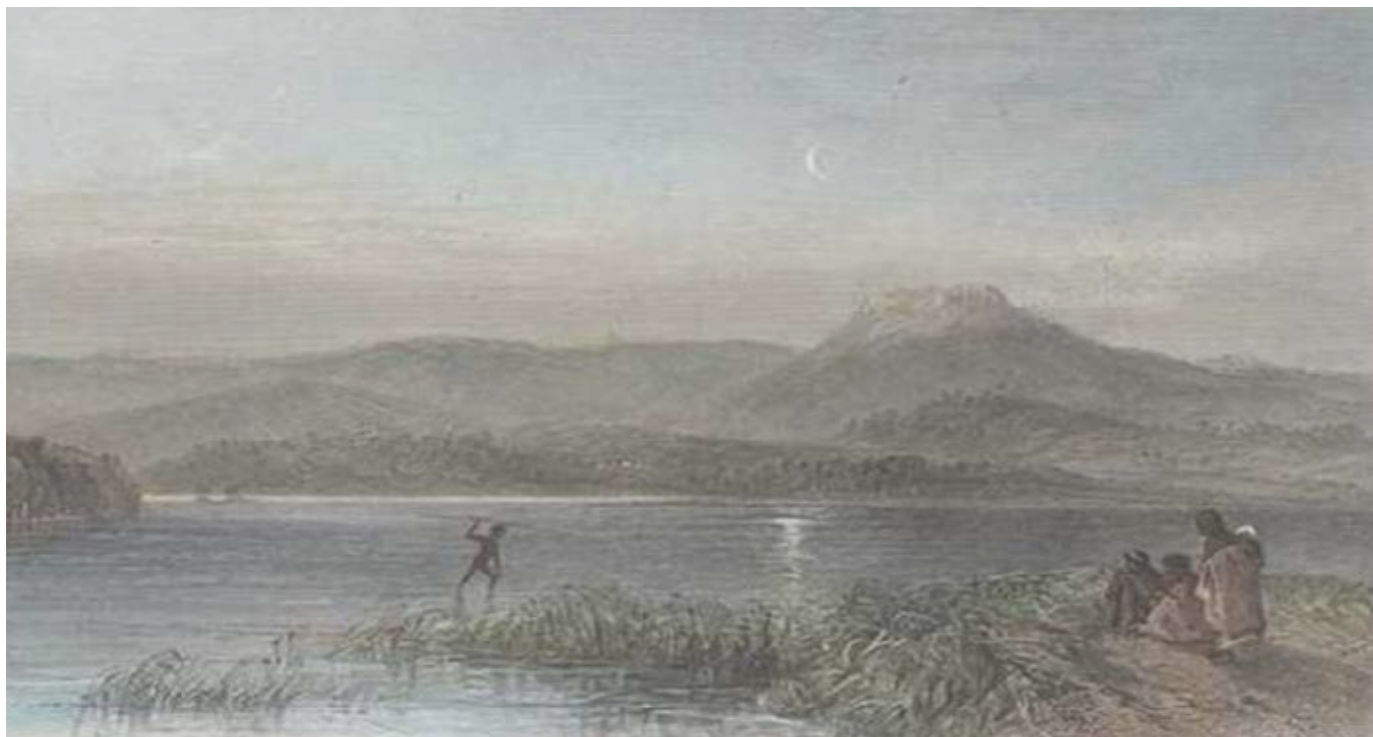
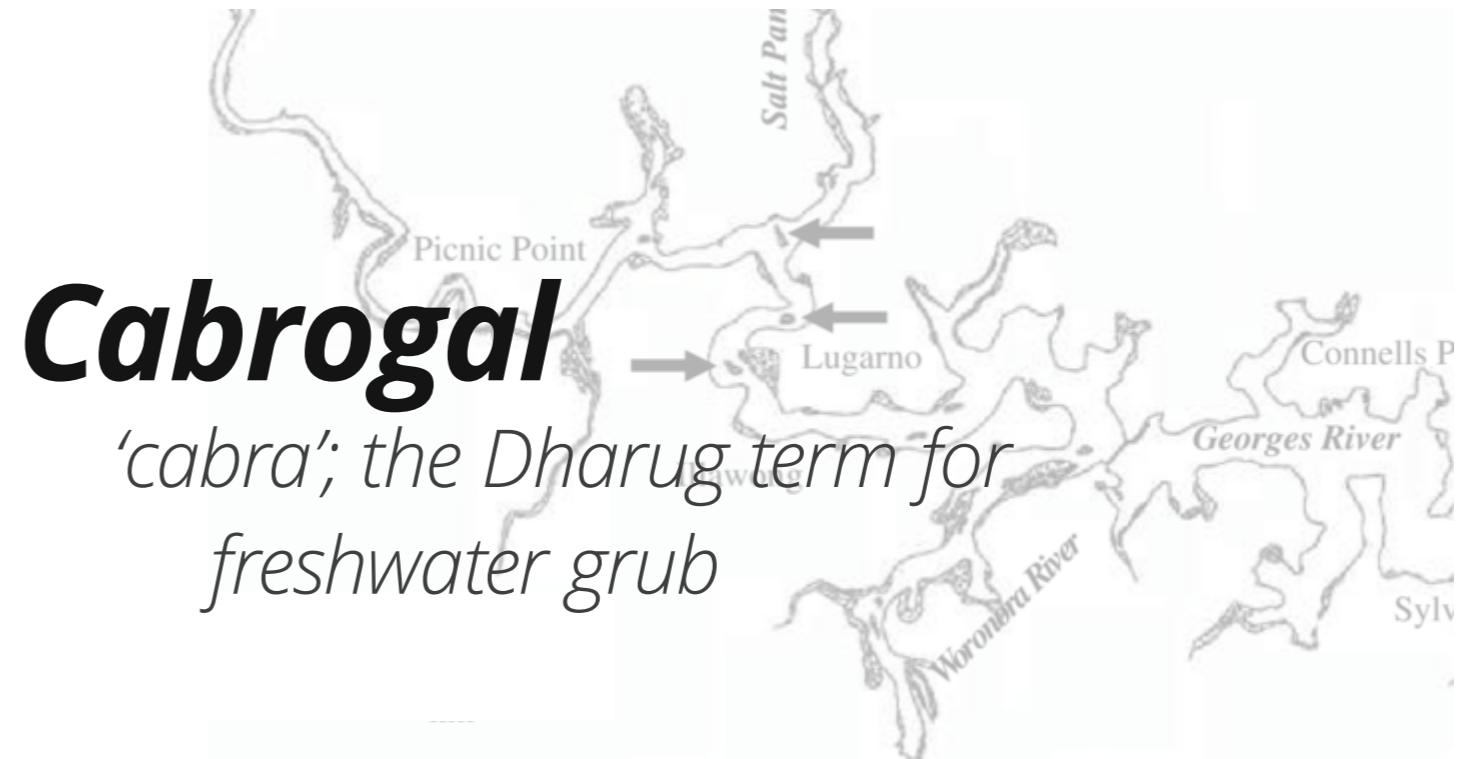
## Site Context

### Indigenous History

Prior to colonial settlement within what is known as present day Guildford West, the expansive landscape of the Fairfield LGA was occupied by the **Cabrogal people of the Dharug language group**.

Occupying the lands for almost thirty thousand years, the Cabrogal people sustained themselves by living off the land. They benefited heavily from their close proximity to the freshwater sources and the subsequently plentiful food sources. It has also been assumed that the Cabrogal people also occupied the land seasonally as other indigenous groups did within the extents of Cabramatta to Liverpool.

This area itself is derived from traditional Dharug naming conventions, as **the name Cabramatta translate to 'freshwater grub place**, with **'cabra'** meaning **'grub'**, and **'matta'** meaning **'place'**. There is also a belief that the name of the Cabrogal people is derived from this same root, as the word **'cabrogal'** can also be translated into **'freshwater grub'** and **'man'**.



The traditional custodians of the lands within Guildford West were first met with the plight of colonisation in 1795 when their camps were discovered by G. Bass and M. Flinders during their exploration of the Georges River. The **Cabrogal people residing within this area had been mostly assimilated by the early 1830s, yet the culture and spirit of the Cabrogal people survived through a notable individual by the name of Lucy Leane**. Lucy Leane, born Lucy Burn, was a traditional Cabrogal woman and farmer who developed good relations with the dignitaries of the settler community, through which she wrote to boards and wrote petitions to argue for reparations.

## Site Context

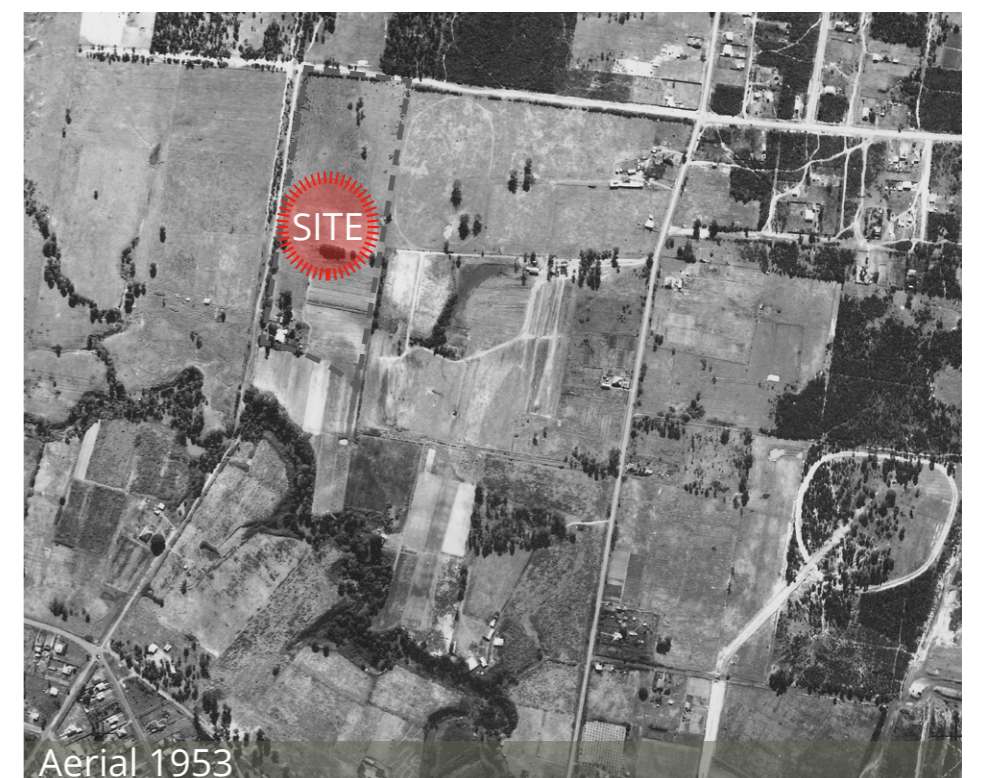
### Historical Research

Located 30km west of present day Sydney CBD, lies the suburb of Guildford West which sits upon the borders of what is known today as the City of Fairfield and Cumberland Council; two separate local Government Areas.

Settlement within Guildford West, or **Chilsholms Bush** as it was known in the early 19th century, began in 1795 alongside the white occupation of the lands surrounding present day Georges River.

By 1867, Guildford West was a **semi-rural settlement populated by gardeners, vine growers, timber cutters, and tanneries**. The near perfect soil conditions and dependable water supply of Guildford West enhanced its colonial appeal substantially, with some of the best farming lands at the time being located within and around Guildford West.

A pivotal figure during this time was J. R. Brenan, who enabled Guildford West to operate as a thriving commercial centre that **remains a significant employment centre in South Western Sydney as part of the modern day Wetherill Park/Yennora industrial block**. Guildford West is now rich in local heritage, with street patterns designed and named by Brenan



# Site Context

The site is located within the Cumberland LGA boarding Fairfield LGA. It's North-West flank of the sits in an industrial complex while it's East-South flank is various public sports grounds and reserves off Prospect Creek.

The ecological corridor that is Prospect creek linking Prospect Reservoir and Georges River is a significant ecotone of the urban sprawl and with the various land reserves and significant vegetation adjacent to the creek it's a great opportunity for the site to connect to a significant ecological system.

The site is located on Gandangara Land and is in the Guildford West Industrial Area within the Cumberland Local Government Area (LGA). It is bounded by McCredie Road to the north.

The front part of the site adjoins the Guildford Transmission Substation, which is located immediately to the east and fronts onto McCredie Road. Other industrial uses are located further east, with residential properties beyond.

The Guildford West Sports Ground, which comprises several playing fields, is located to the south of the Guildford Transmission Substation. The playing fields bound the southern part of the site to the east. The playing fields / public recreation area also about the southern boundary of the site.

Prospect Creek is located to the south of the public recreation area and is zoned C2 Environmental Protection. The area to the south of Prospect Creek is predominately characterised by low density single storey residential housing.

The site is located in the south eastern corner of the Guildford West Industrial Estate and is within close proximity of the Cumberland Highway (A28) and M4 and M7 motorways, which provide access to Sydney CBD, western Sydney and the south. A range of large format industrial uses are located to the west and north west of the site. The Guildford West Industrial Estate extends across the A28 to Gipps Road (approximately 3km west of the site). It forms part of the broader Guildford West Wetherill Park industrial area, which is one of the largest of its kind in the Southern Hemisphere and makes a significant contribution to the New South Wales and Australian economies.

The site has a net developable area of 71,710 sqm and is currently vacant. It previously operated as a Castrol Lubricants facility. However, the majority of the site has now been cleared and subject to category 1 remediation works. A single storey office building is located on the northern portion of the site fronting McCredie Road. The building is vacant.



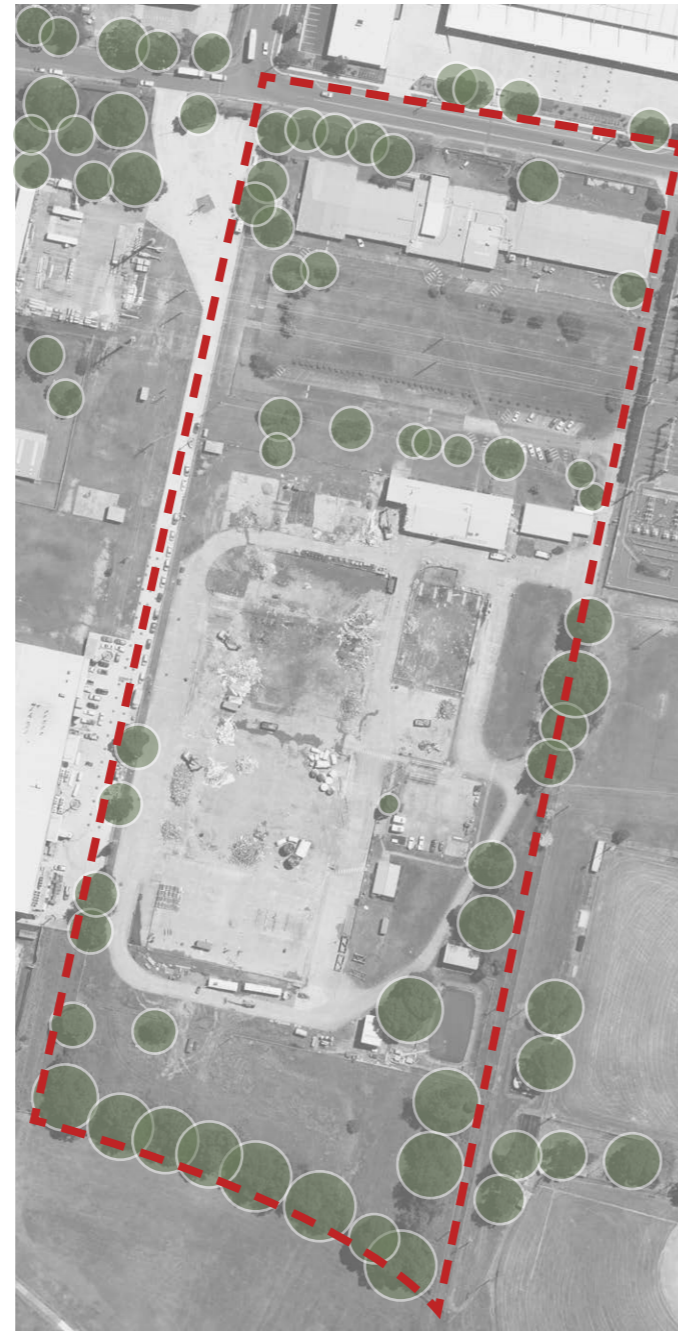
KEY	
	TRAIN-LINE
	ARTERIAL ROAD
	WATERWAYS

# Site Analysis



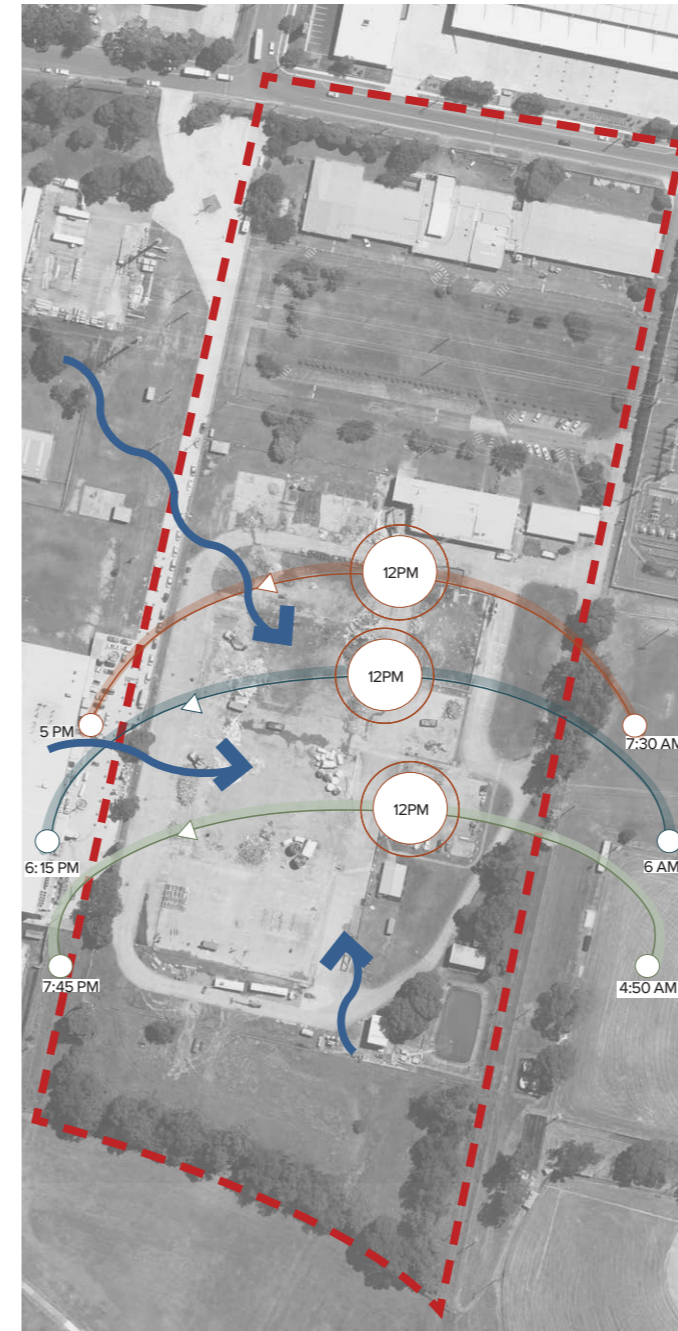
Levels

- KEY
- SITE
  - 0.5M CONTOUR
  - 2M INTERVAL CONTOUR



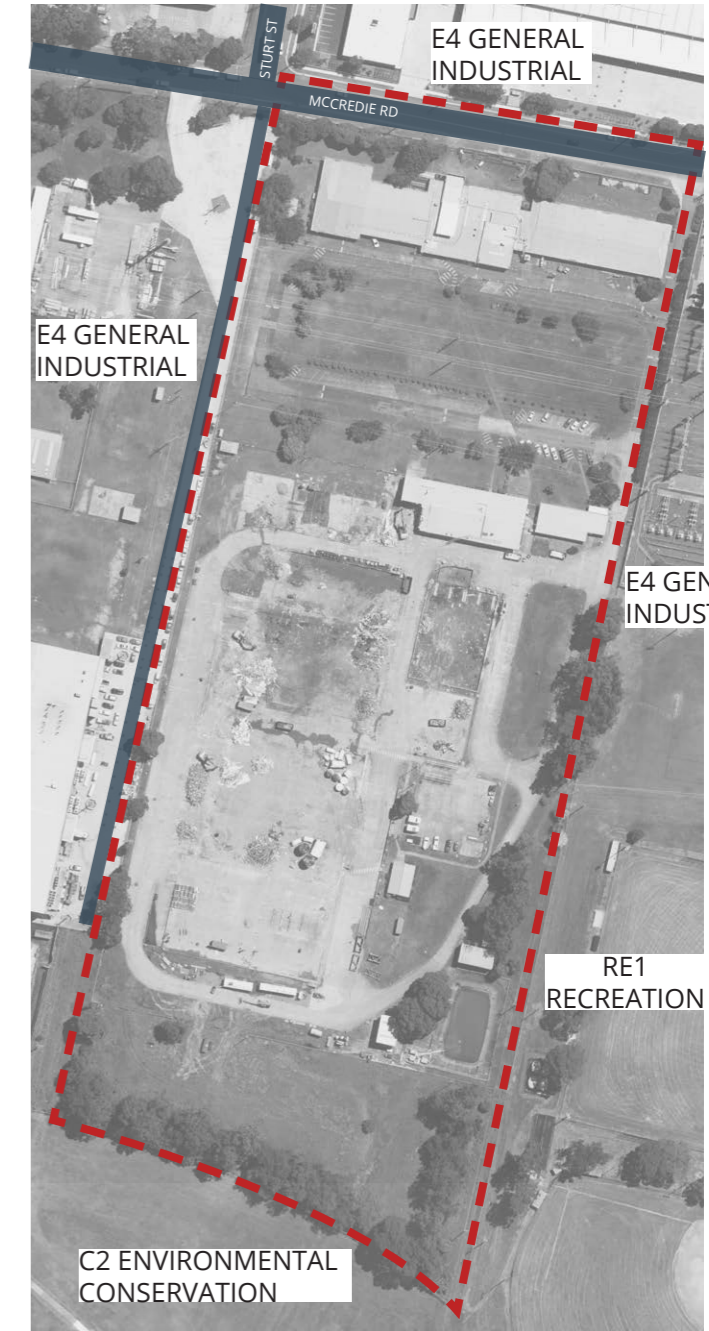
Existing Vegetation

- KEY
- SITE
  - EXISTING TREES



Sun + Wind

- KEY
- SITE
  - ➔ WIND DIRECTION

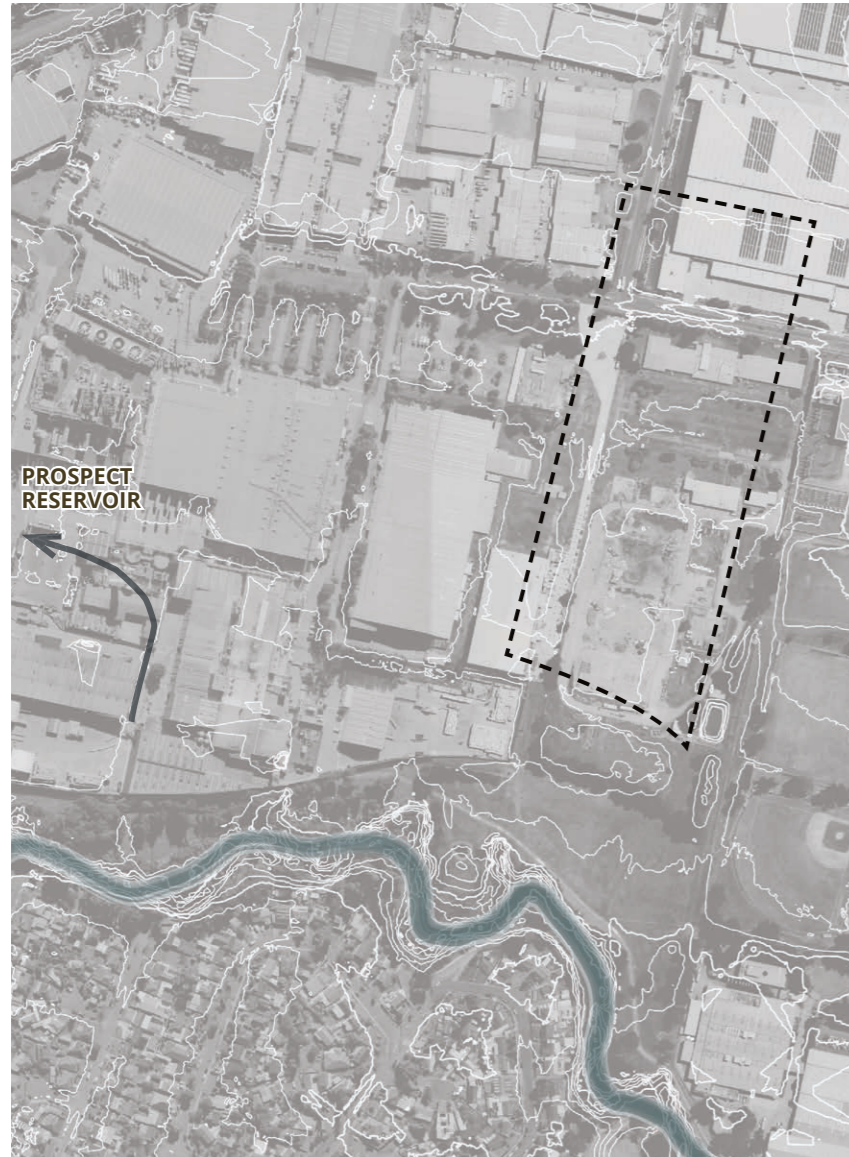


Circulation + Zoning




- KEY
- SITE
  - PRIMARY ROADS
  - SECONDARY ROADS/VEHICULAR ACCESS

# Existing Conditions

## Hydrology



1:8000

-  **SITE EXTENTS**
-  **PRIMARY WATERCOURSES**  
PROSPECT CREEK
-  **PRIMARY WATERBODIES**  
KALUNA RESERVE

## Soil Profiles

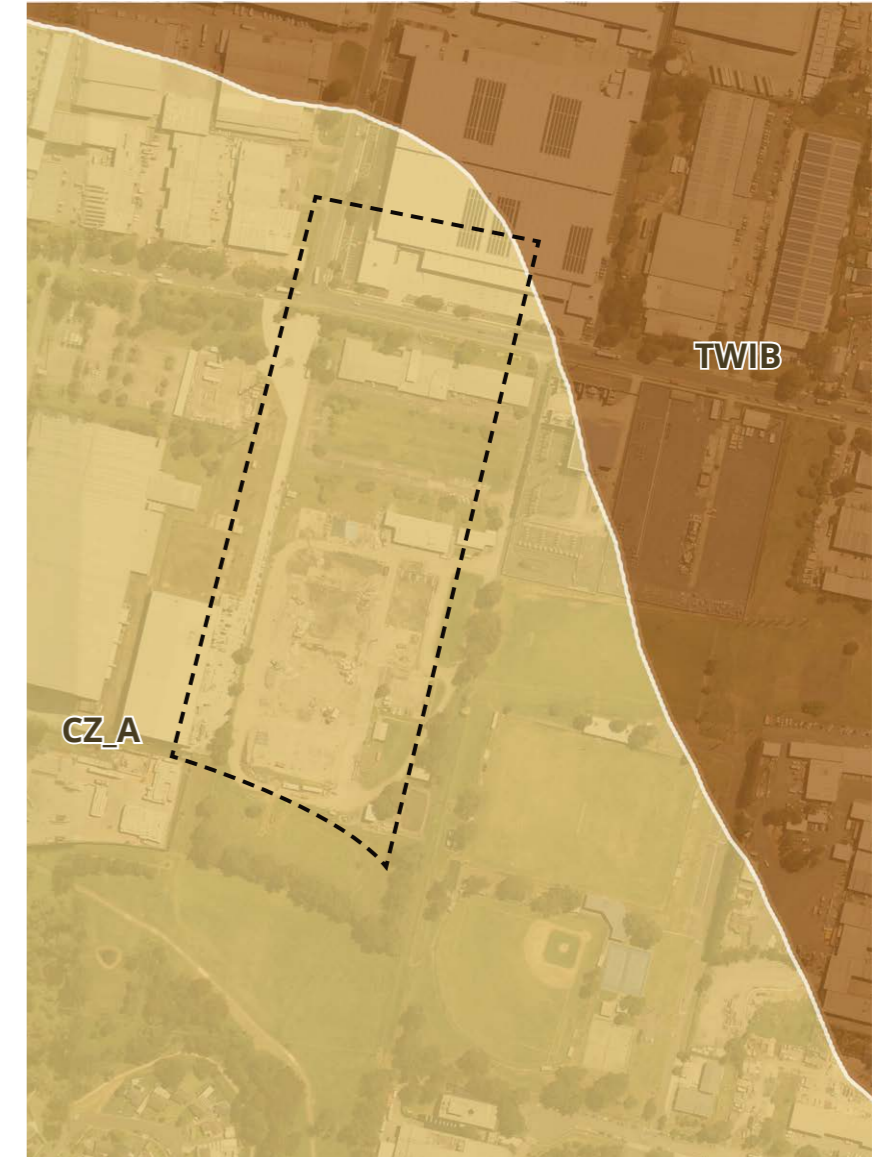


1:5000

### WIANAMATTA SHALE GROUP SOILS



-  **S** **SOLOTHS**  
Acid soils with a strong texture contrast between pale topsoil and clay subsoil with a coarse structure.
-  **YPS** **YELLOW POZOLIC SOILS**
-  **GPS** **GLEYED PODZOLIC SOILS**

## Geology



1:5000

### WIANAMATTA SHALE GROUP GEOLOGY

-  **CZ\_A** **ALLUVIUM**  
Clay, silt, sand, and gravel deposited by systems such as rivers and streams that is geologically young and rarely consolidated into solid rock.
-  **TWIB** **BRINGELLY SHALE**

# Site Analysis

## Ecologies

Australian Passerines are made up of 340 species, typically small birds such as jays, sparrows and crow, that take habitat in protective shrubs such as native blackthorn and prickly grevilleas .

Berkshire Park Soil is distributed across Alluvia plain on Londonderry Tertiary Alluvium in the Cumberland Plain and is primarily made up of alluvium, clay, silt and sand. The Brown and Yellow Sodosols soils support both the Castlereagh Scribbly Gum Woodland and the Castlereagh Swamp Woodland which thrive in waterlogged conditions and close to creek lines.

Passerines



Castlereagh Scribbly Gum Woodland



Castlereagh Swamp Woodland



Eucalyptus sclerophylla



Bursaria spinosa



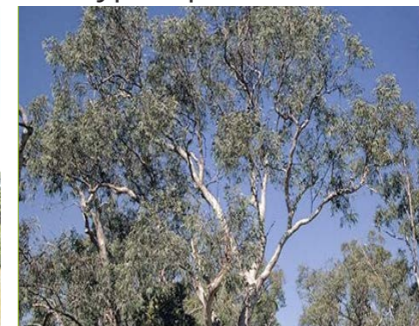
Grevillea juniperina



Melaluca decora



Eucalyptus parramattensis

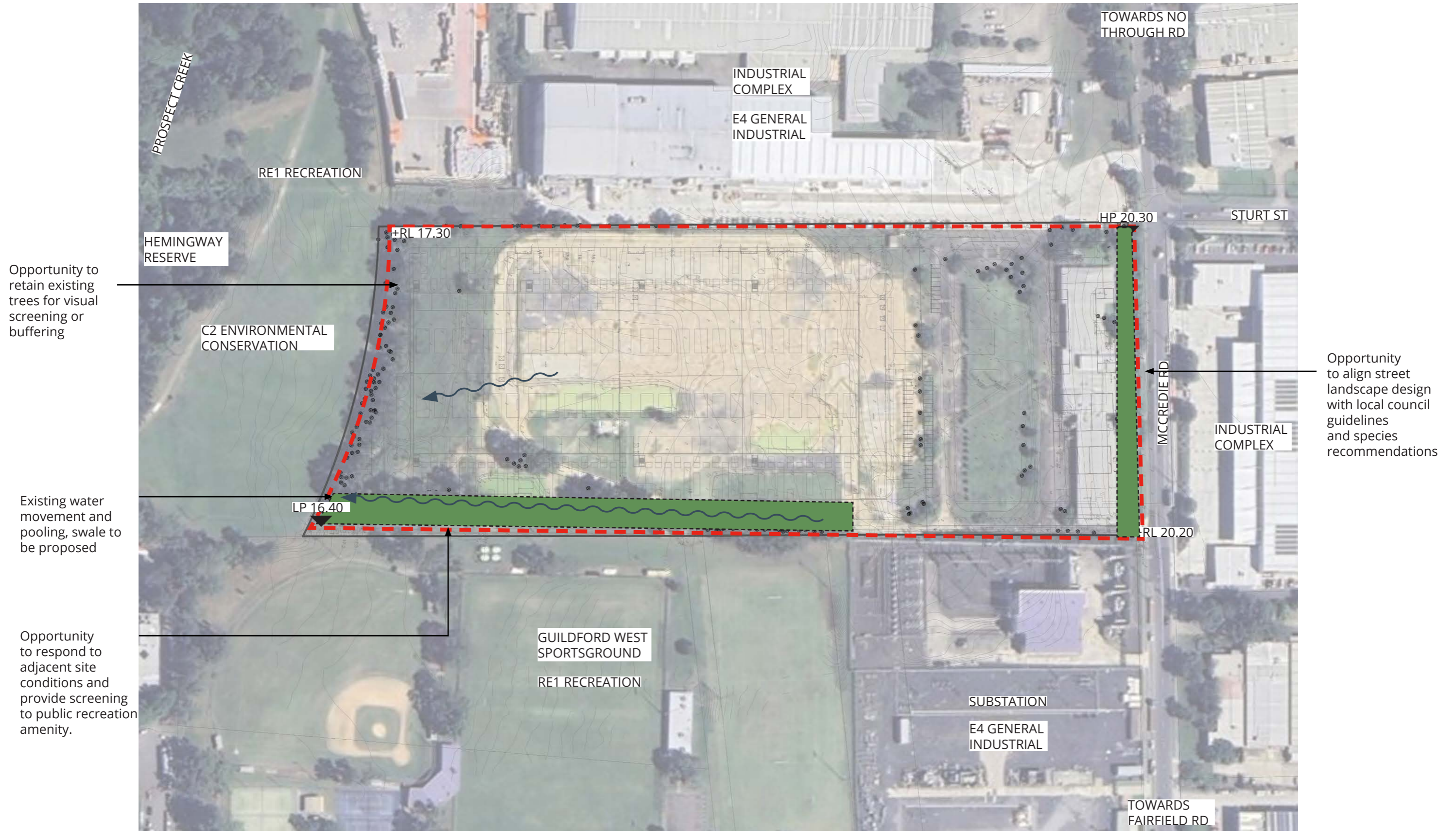


Juncus usitatus



# Site Analysis

## Landscape Opportunities



# Stage 1 plan

## Landscape Extent

Stage 1: Construction of the main data centre building as well as the car park, perimeter access road, site access/exit driveways and landscaping. Stage one will involve the fit-out and operation of five of the 9 proposed data halls at levels 1 and 2 as well as the associated electrical rooms, generators, storage and office rooms.

Stage 2: Completion of the ultimate development scheme involving the extension of the building to the south with an additional four data halls, associated electrical rooms and generators, and associated landscaping and external works. The electrical substations will also be constructed in the north of the site during this phase.

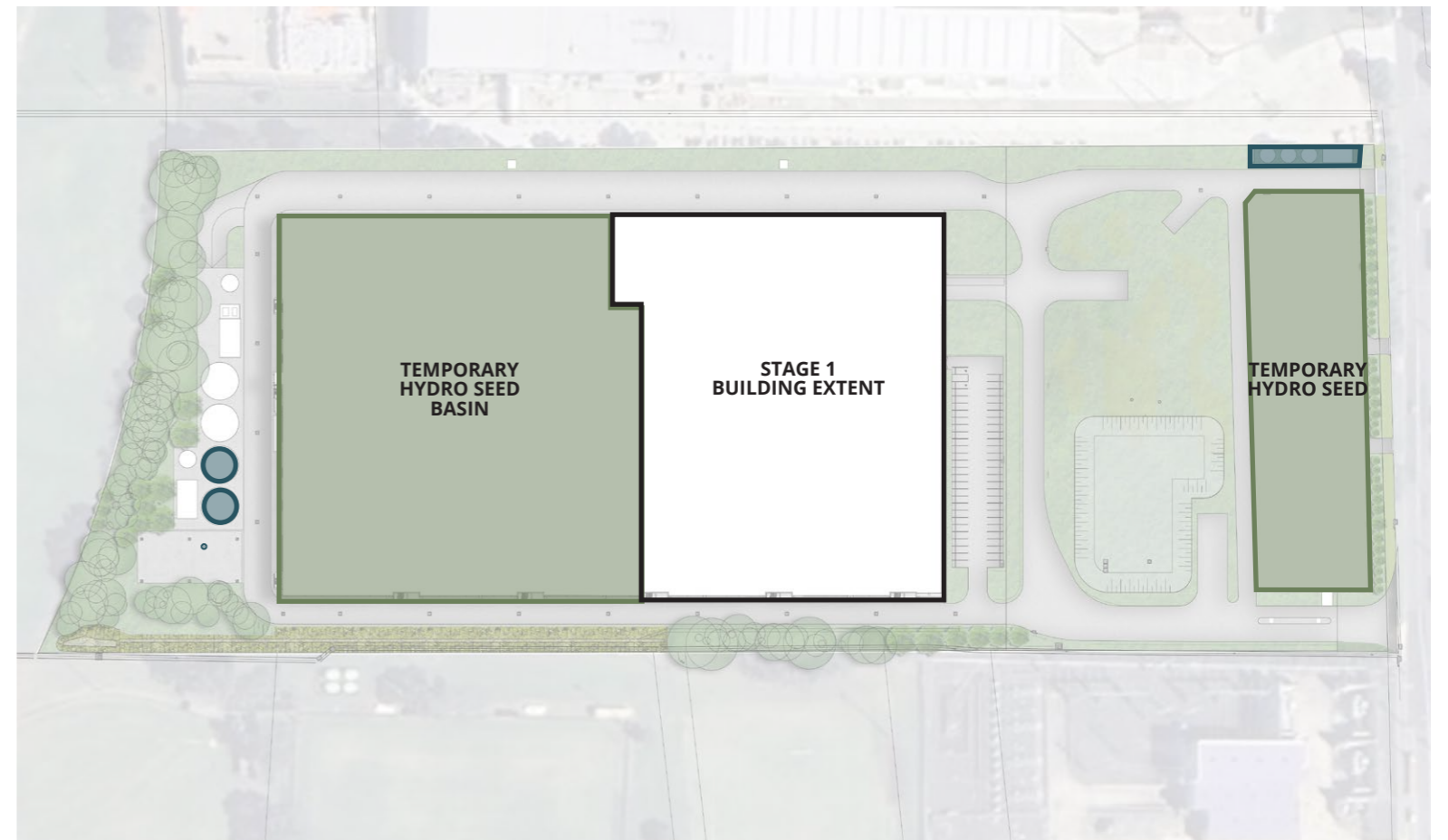
The works are to be completed in four (4) construction stages, as per below:

Stage 1:

- CC1 - Site Preparation works (including but not limited to vegetation removal, earthworks & piling, installation of footings, retaining walls)
- CC2 - Inground services installation, structural works
- CC3 - Façade construction, installation of services, fit out
- CC4 - Landscaping and external works

Stage 2:

- CC1 - Site Preparation works (earthworks & piling, installation of footings)
- CC2 - Inground services installation, structural works
- CC3 - Façade construction, installation of services, fit out
- CC4 - Landscaping and external works

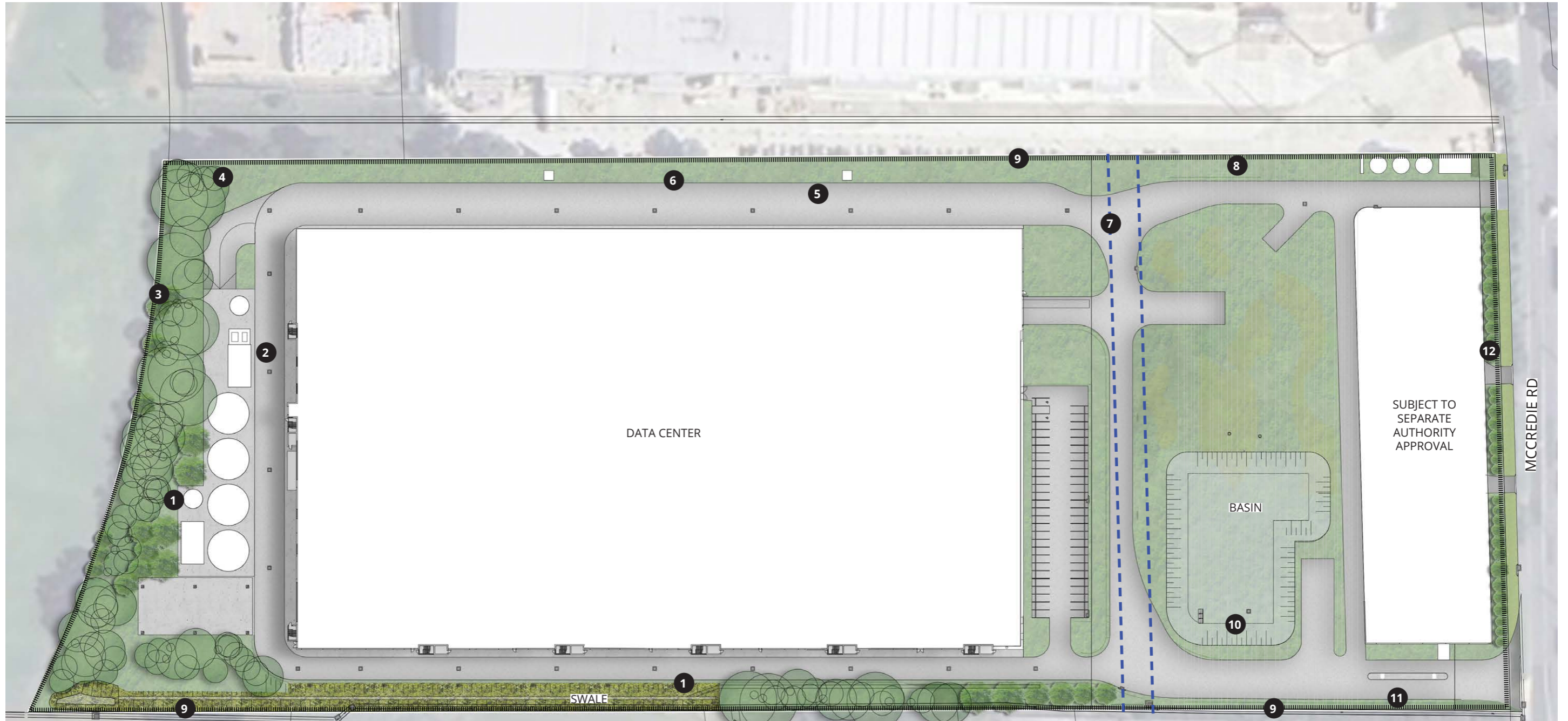


KEY

- PART OF STAGE 2 BUILD
- TEMPORARY HYDRO SEED

# Landscape Concept

## Ground Floor Masterplan

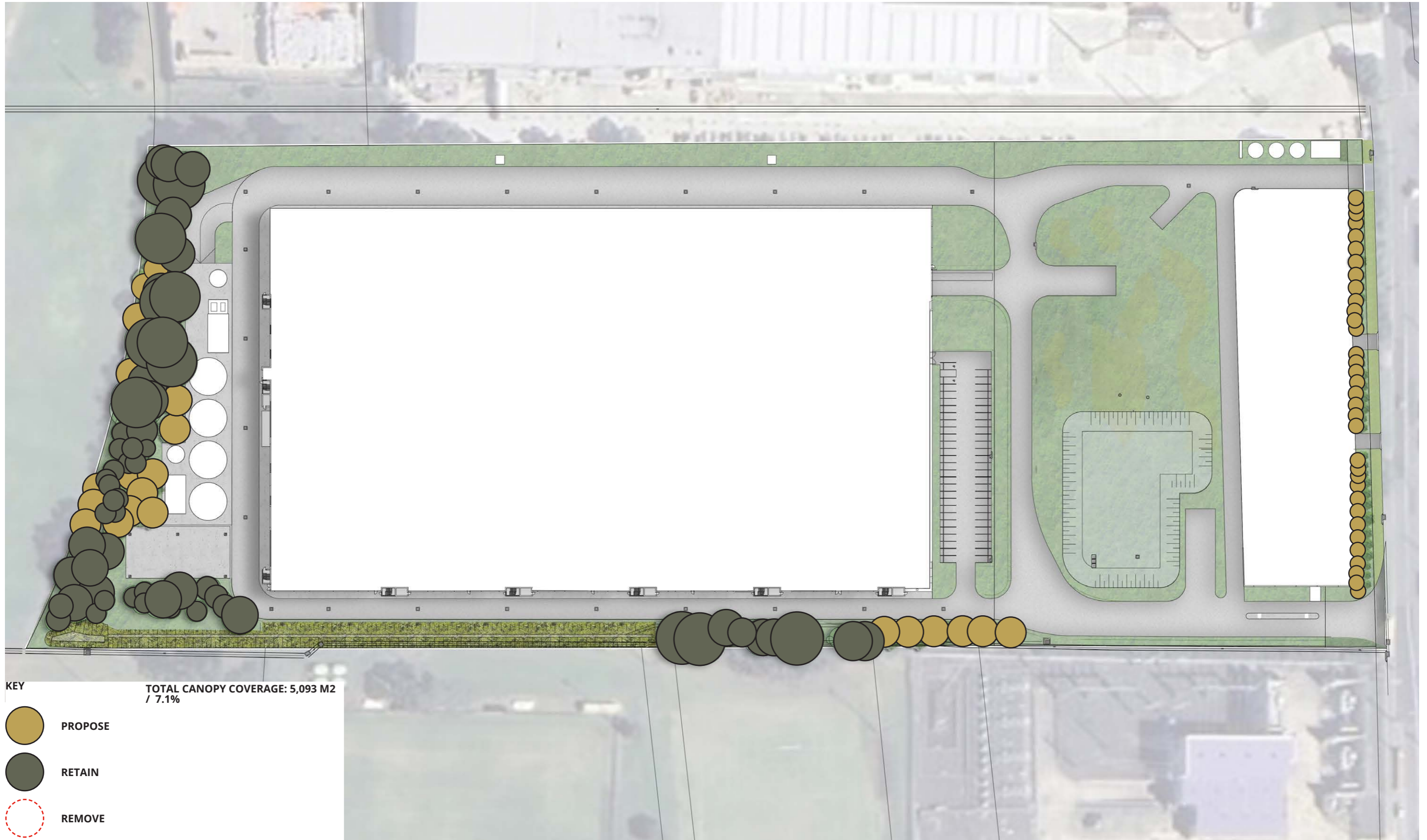


- 1 Retaining wall
- 2 Inground rainwater re-use storage tank
- 3 Ecological pocket responding to prospect creek through planting design
- 4 Retained trees
- 5 Concrete retaining wall
- 6 Low Shrub / Grass planting
- 7 Easement
- 8 Overhead power line restricted planting
- 9 Perimeter palisade fencing
- 10 Mixed material and swathes of planting to form visual interest whilst providing passive habitat
- 11 Retaining buffer planting and further embellishment with low shrub/grass planting
- 12 Dense landscape screening with all tiers of planting



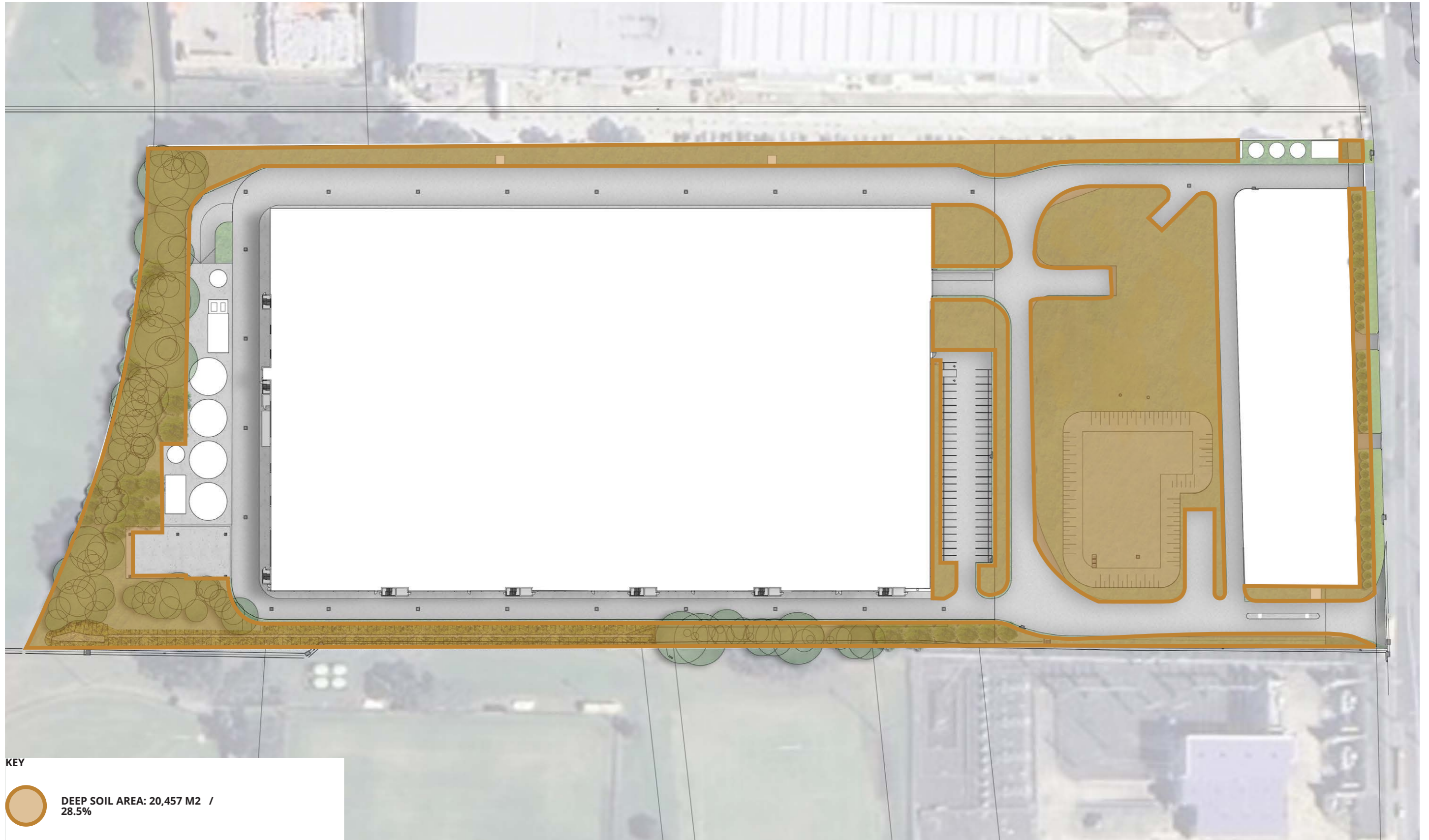
# Landscape Metrics

## Ground Floor - Canopy Coverage



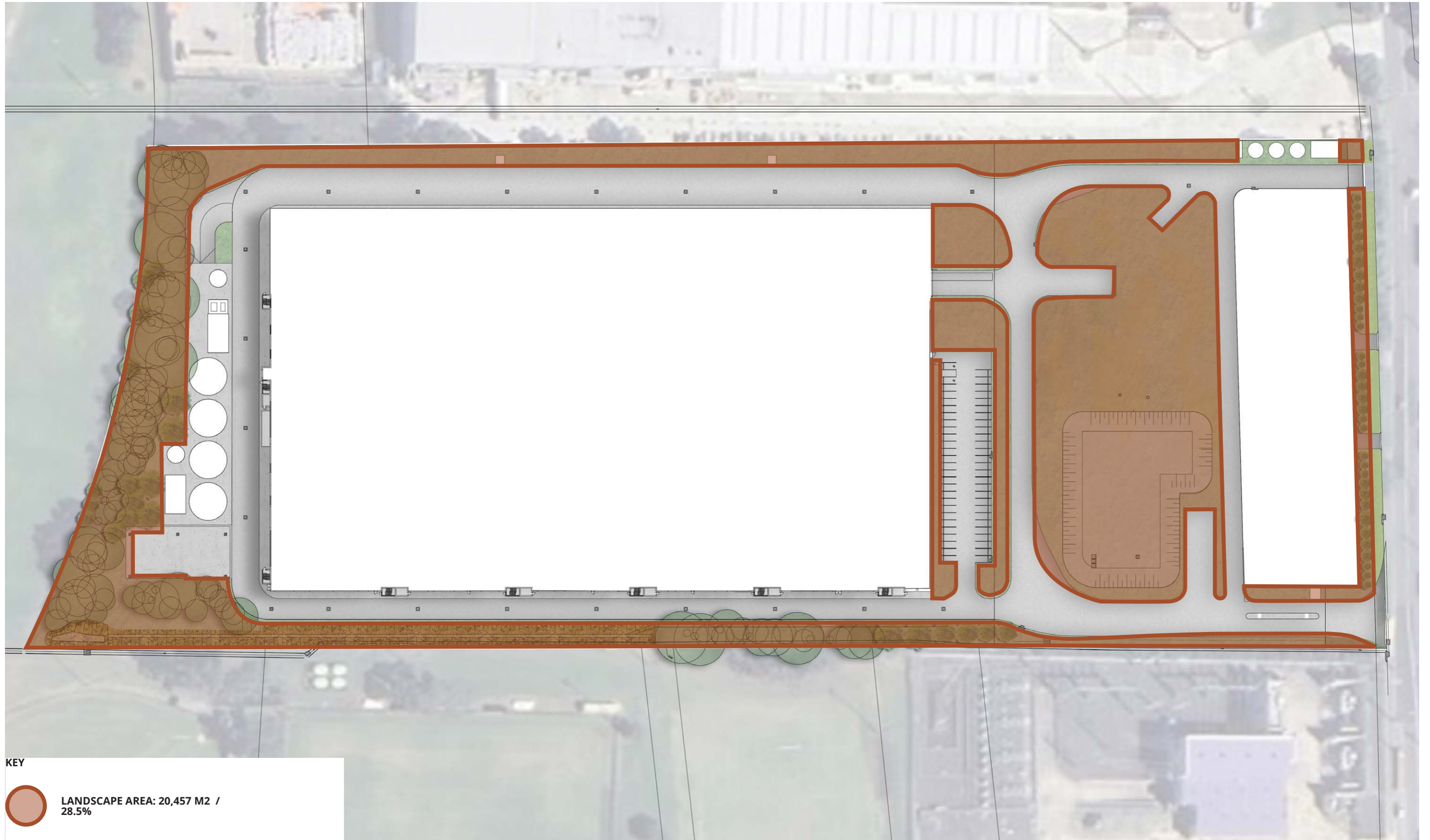
# Landscape Metrics

Ground Floor - Deep soil



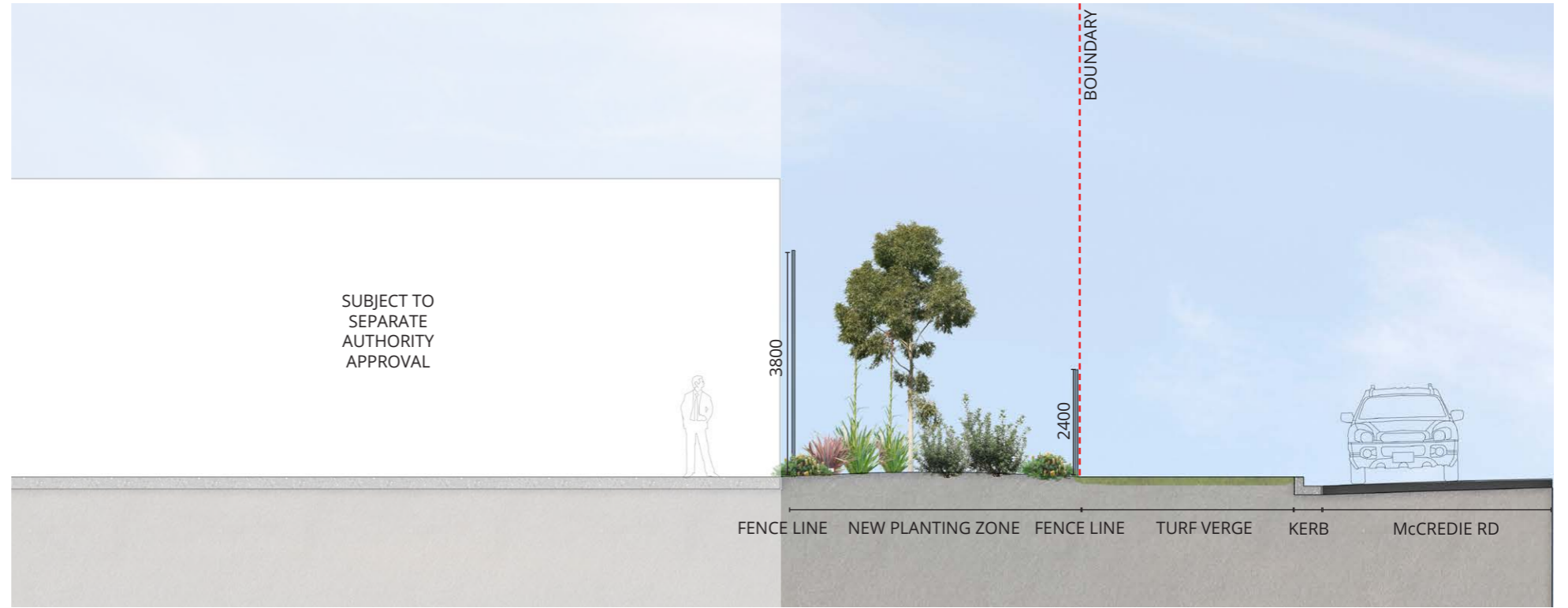
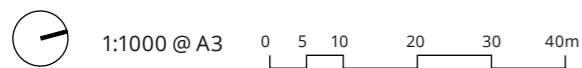
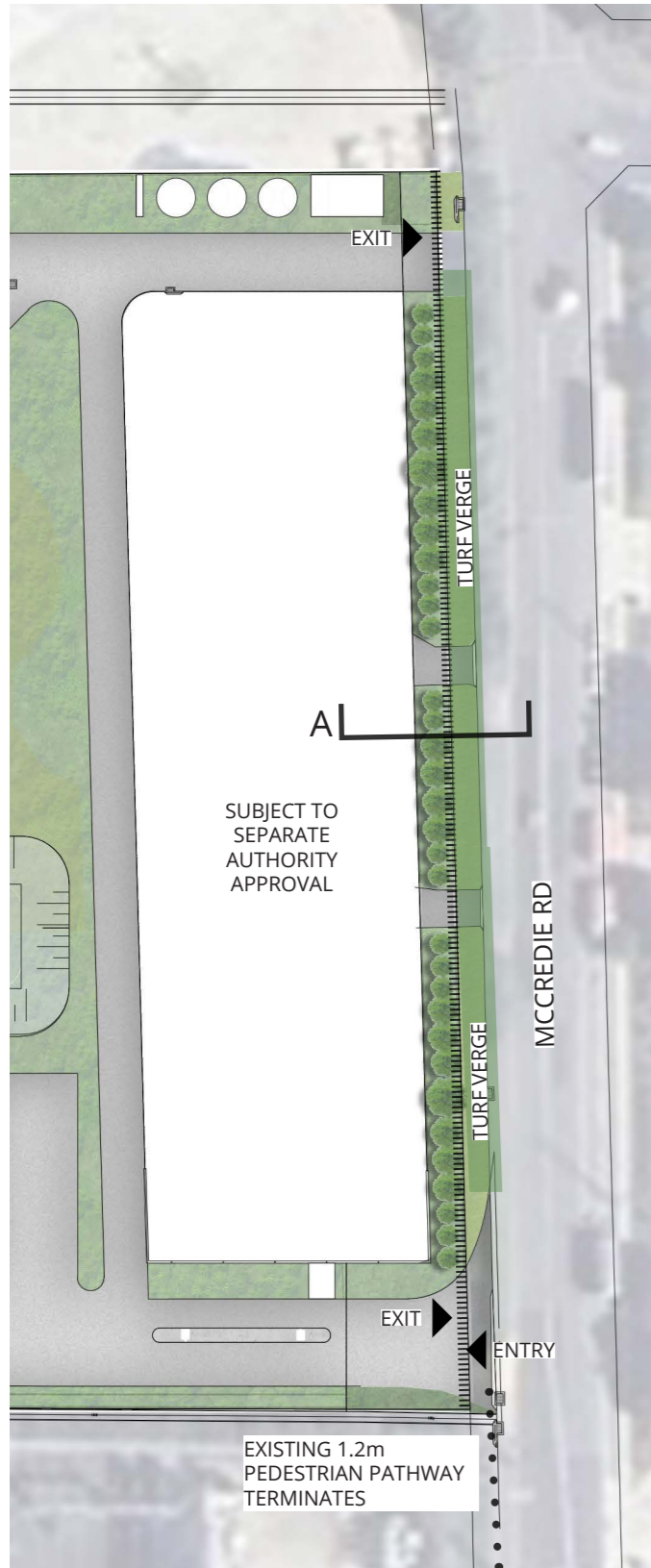
# Landscape Metrics

## Ground Floor - Total Landscape Area

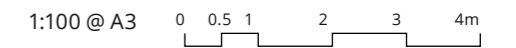


# Landscape Concept

## McCredie Rd



SECTION A\_McCREDIE RD



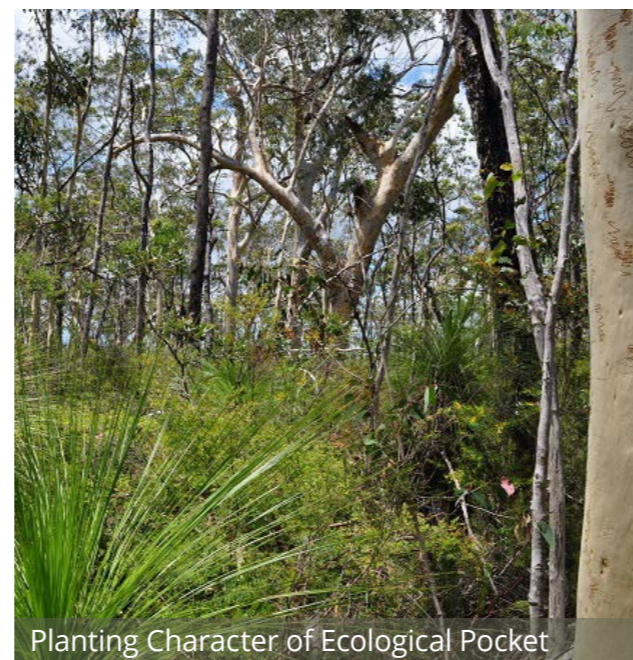
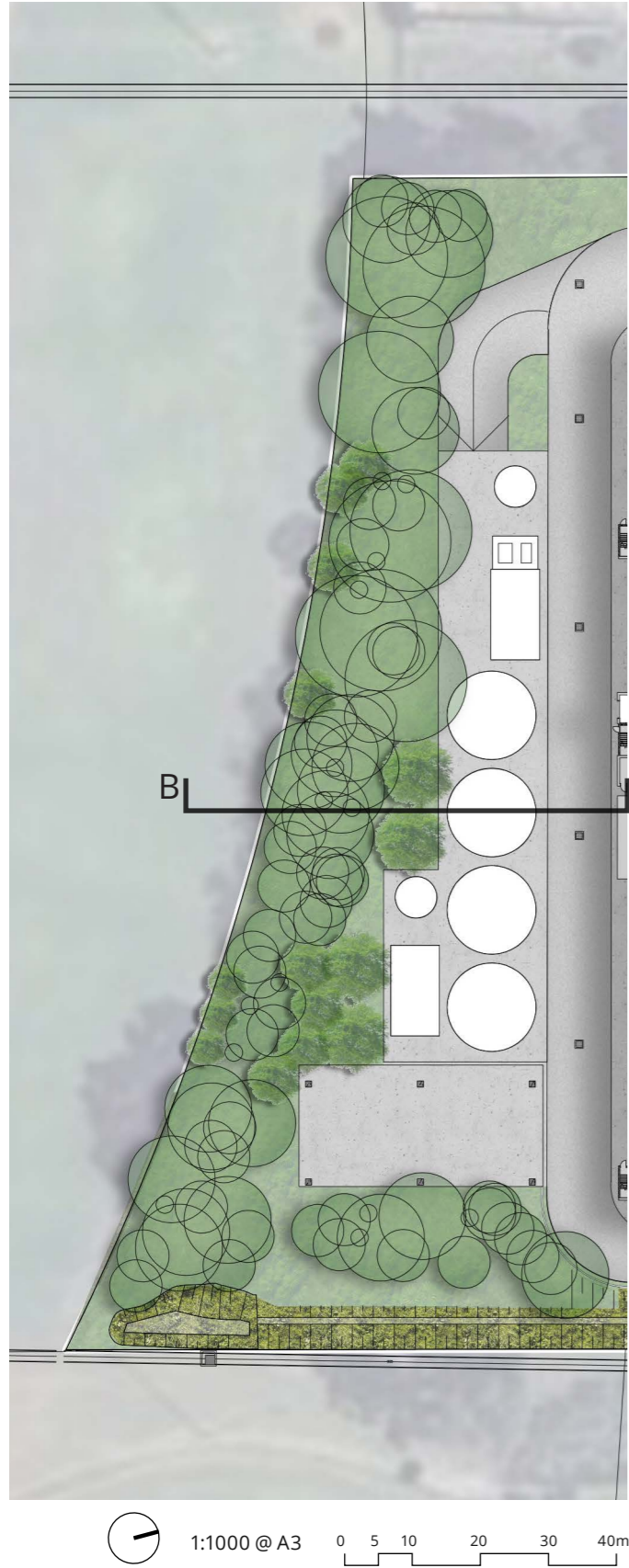
Planting that Peaks Through the Fence



Dense Multi-layered Native Planting

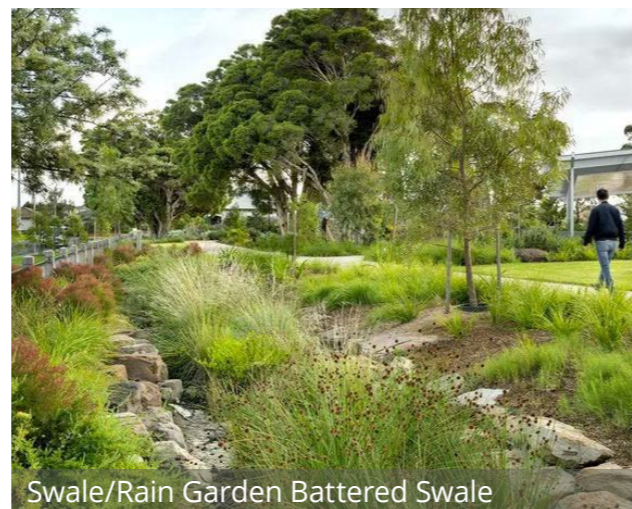
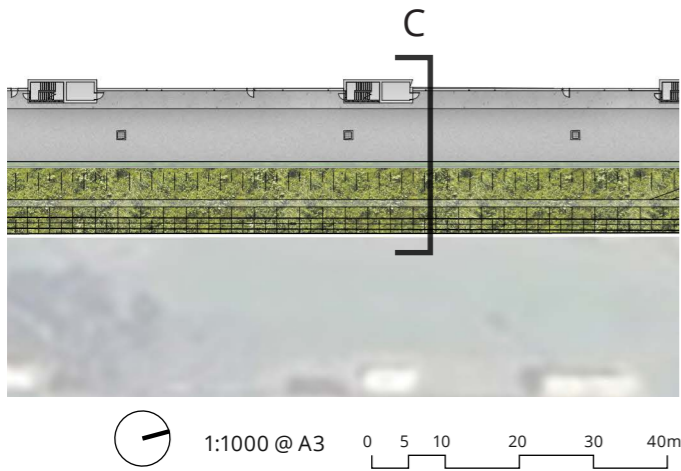
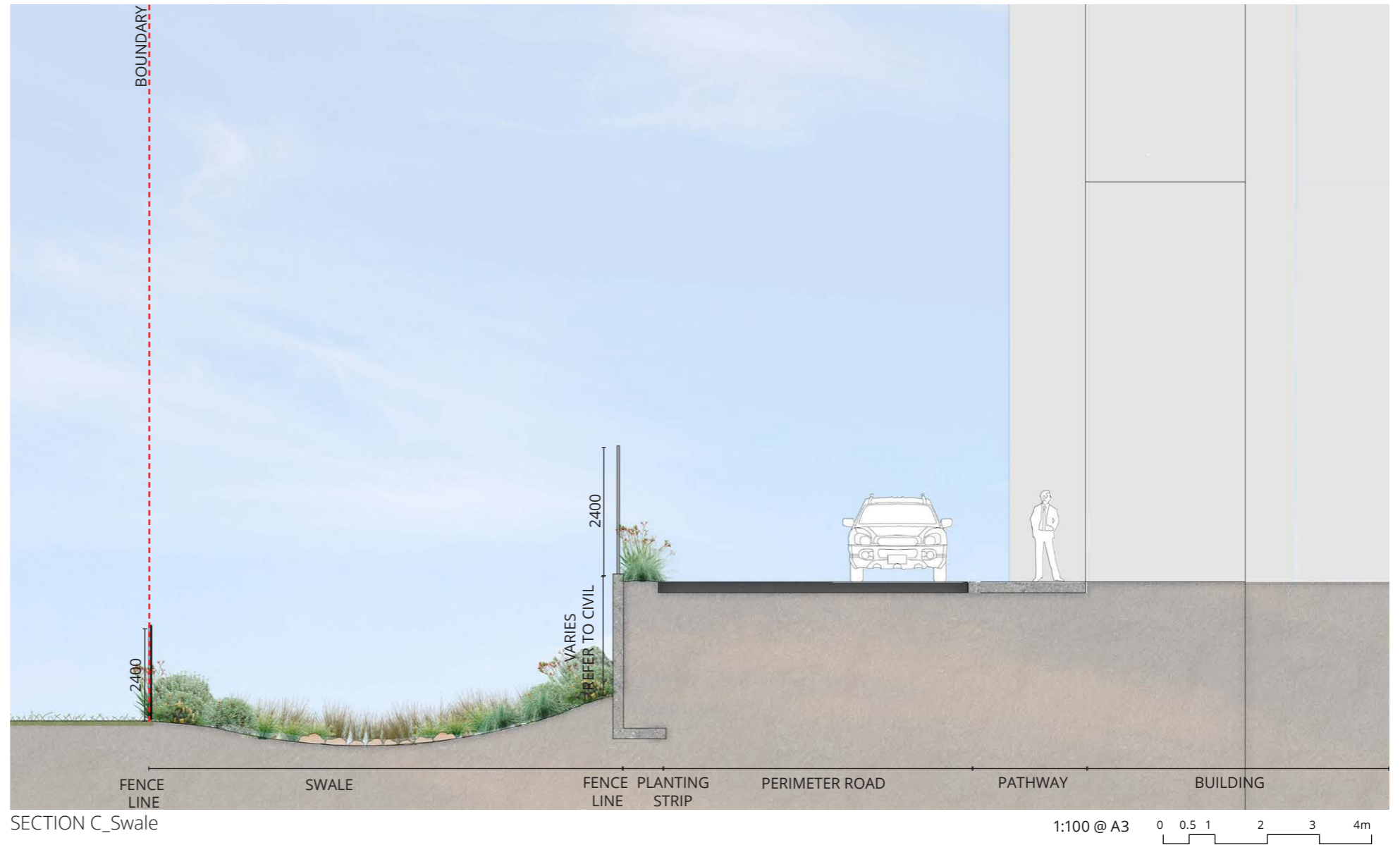
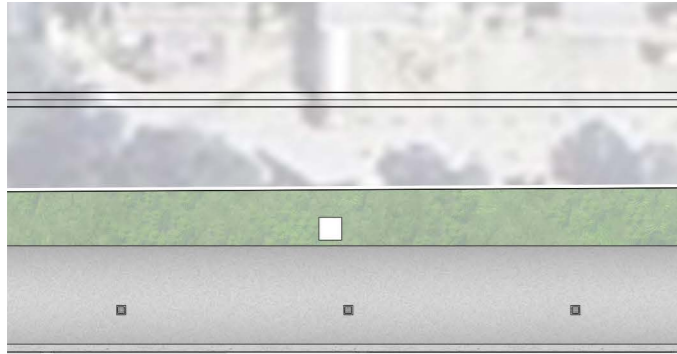
# Landscape Concept

## Prospect Creek



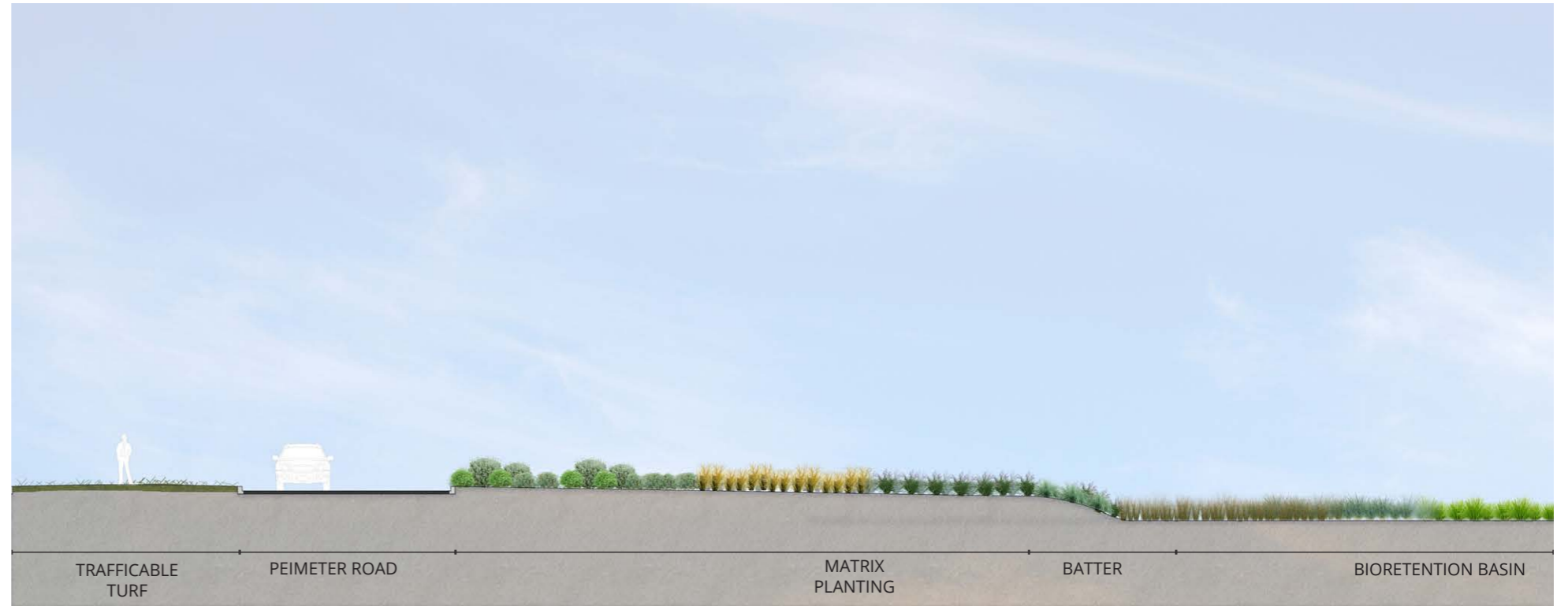
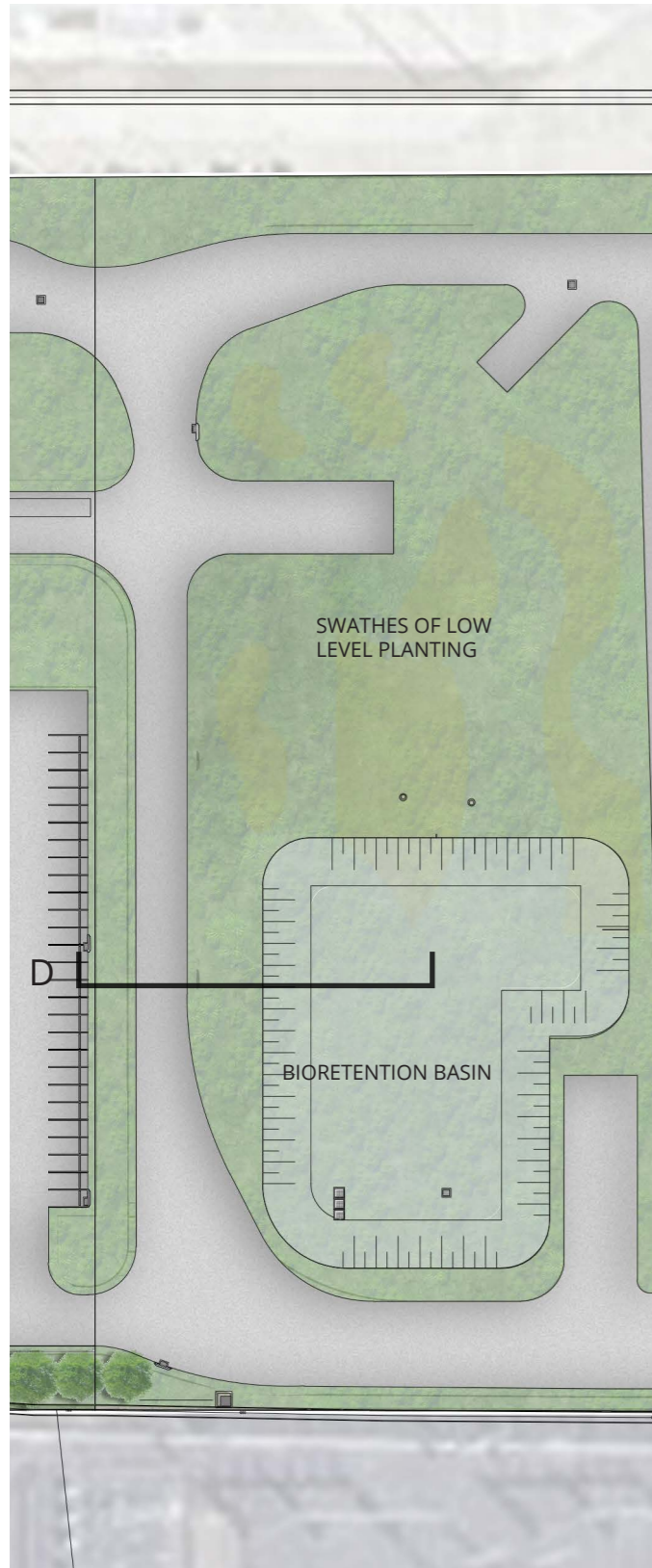
# Landscape Concept

## Swale



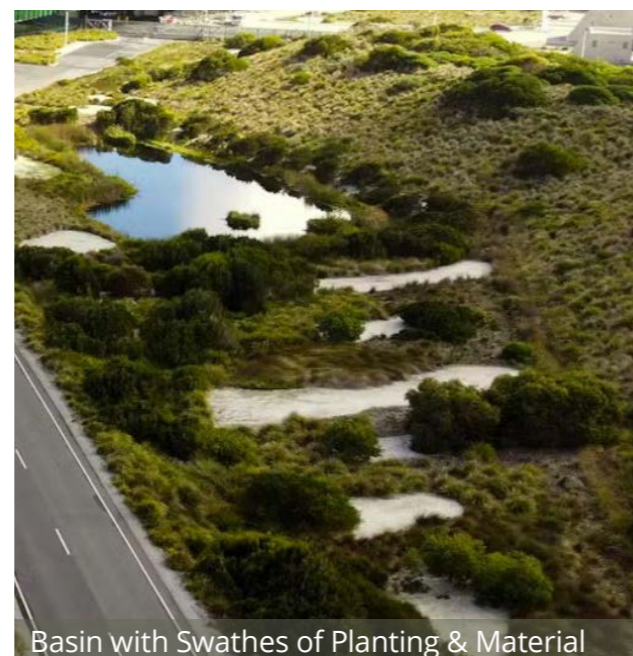
# Landscape Concept

## Basin

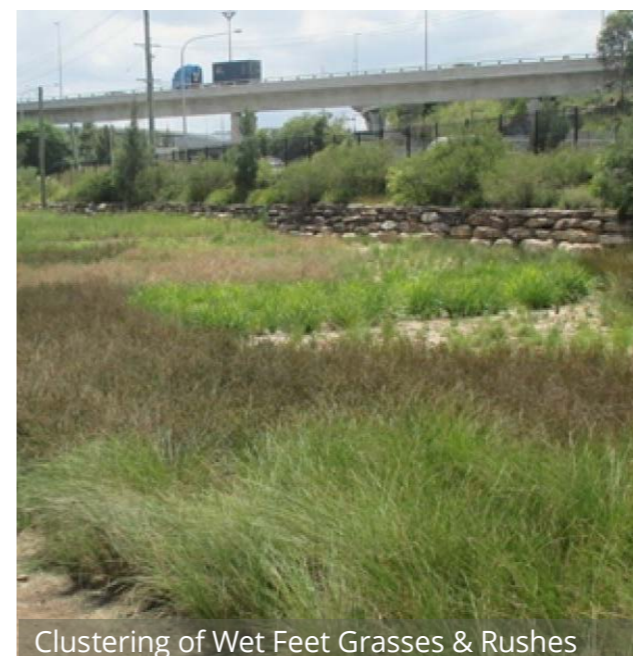


SECTION D\_Basin

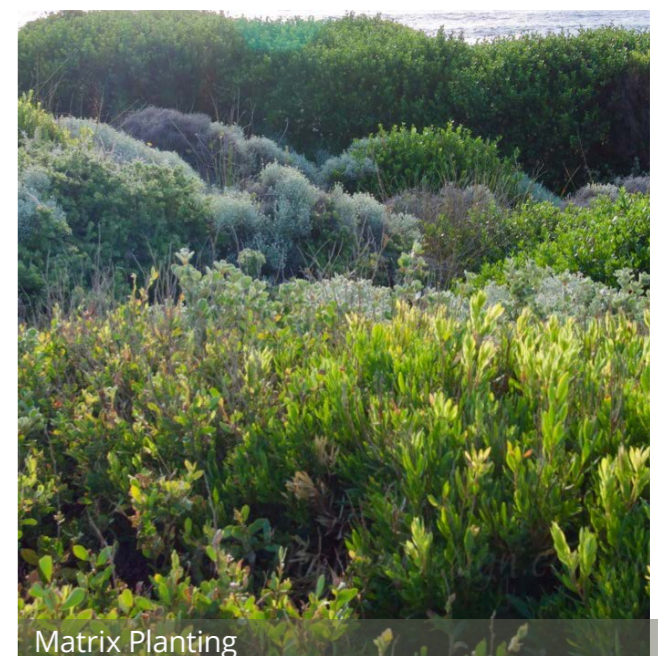
1:200 @ A3 0 1 2 4 6 8m



Basin with Swathes of Planting & Material



Clustering of Wet Feet Grasses & Rushes



Matrix Planting

1:1000 @ A3 0 5 10 20 30 40m

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