

SYDNEY FLIGHT TRAINING CENTRE

28-30 BURROWS ROAD, SYDNEY 2044

LANDSCAPE CONCEPT PLAN

SSDA SUBMISSION

24.10.2022

ISSUE E



Canopy Tree Offset Commitment

When this symbol appears on the drawing, Habit8 with our selected nursery partner will donate 5 x 300mm pot size endemic canopy trees to the local Landcare group in the LGA. This initiative is a joint commitment with landscape architect and client in providing local tree canopy cover to help mitigate the urban heat island effect while increasing local biodiversity values.

DRAWING LIST:

L-01	Coversheet
L-02	Precedent Images
L-03	Landscape Masterplan
L-04	Landscape Planting Strategy
L-05	Deep Soil Diagram
L-06	Landscape Section A-A
L-07	Landscape Section A-A
L-08	North Elevation
L-09	Indicative Plant Schedule
L-10	Typical Specification & Maintenance Notes
L-11	Typical Details

Appendix A: Planting Plan

ARCHITECT:



CLIENT:

LOGOS

LANDSCAPE ARCHITECT:



HABIT8

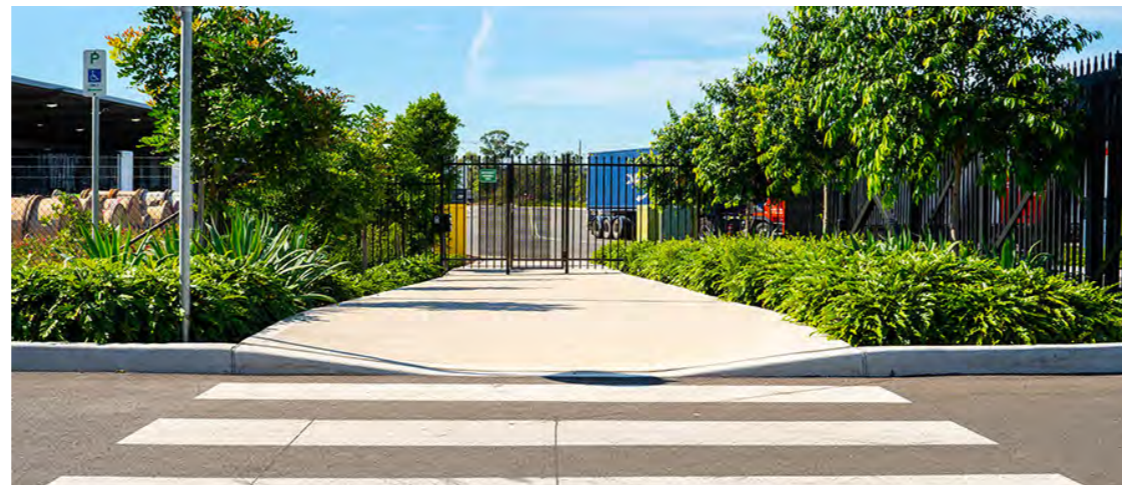
Landscape Architecture & Urbanism

SYDNEY (Gadigal country) BYRON BAY (Bundjalung country)
MELBOURNE (Wurundjeri country) SE QUEENSLAND (Yugambeh country)

www.habit8.com.au

PRECEDENT IMAGES

FRONTAGES AND SETBACK



PARKING AREA



BANDS OF NATIVE GRASS AND GROUNDCOVERS



NATIVE GRASS AND SCATTERED TREES ON EMBANKMENT



LANDSCAPE MASTERPLAN

KEY

- - - - - SITE BOUNDARY
- 2100mm HT PERIMETER FENCE TO ARCHITECT'S DETAILS
- 1800mm HT PALISADE FENCE TO ARCHITECT'S DETAILS
- - - - - GARDEN EDGING
- PROPOSED TREE PLANTING REFER TO PLANT SCHEDULE
- MASS PLANTING BEDS REFER TO PLANT SCHEDULE
- PAVED / TILED SURFACE (BLUESTONE PAVING) BY OTHERS
- BITUMEN SURFACE
- PERMEABLE SURFACE

DESIGN NOTES

1. VEHICLE ENTRY
2. VEHICLE EXIT
3. ACCESSIBLE RAMP
4. FIRE EGRESS
5. PERMEABLE PAVING
6. ELECTRICAL ROOM ACCESS
7. LOGOS SIGNAGE ON BALUSTRADE WALL
8. PUBLIC FRONT ENTRANCE
9. VEHICLE ENTRY DIRECTIONAL SIGNAGE PYLON
10. SUBSTATIONS
11. SPRINKLER TANKS
12. PUMP ROOM
13. DOUBLE SWING GATE ACCESS FOR PARKLAND MAINTENANCE
14. FUTURE COUNCIL RESERVE PARKLAND WITH BANDS OF NATIVE GRASSES & GROUNDCOVERS
15. 3m ZONE FOR FUTURE BIKE PATH AND ASSOCIATED INFRASTRUCTURE
16. NEW STREET TREES (E.G. *Tristaniopsis laurina*)
17. BULKY WASTE STORAGE
18. EXTERIOR EQUIPMENT TRAINING AND STORAGE
19. RAIN WATER TANK



CONTEXT PLAN

TREE CANOPY COVER

TREE NO.	TREE CANOPY	CANOPY AREA (m ²)	TOTAL CANOPY COVER (m ²)
14	3m	7	98
7	5m	20	140
3	6m	30	90
10	8m	50	500
10	10m	78	780

TOTAL SITE AREA: 7965.67m²
 TOTAL NEW TREE NO: 44
 TOTAL TREES TO BE REMOVED (WITHIN SITE BOUNDARY): 6
 TOTAL TREES TO BE REMOVED (OUTSIDE BOUNDARY): 4
 TOTAL SQM CANOPY COVER: 1,608
 TOTAL CANOPY PERCENTAGE: 20%
 DCP REQUIREMENT: 15%
 LANDSCAPE PLANTING AREA: 1473.55m²
 PERMEABLE AREA: 33.26m² / 16.63m² (50%)
 TOTAL PERMEABLE LANDSCAPE AREA: 1490.18m²
 TOTAL LANDSCAPE PERMEABILITY PERCENTAGE: 18.70%



LANDSCAPE PLANTING STRATEGY

KEY

- Parkland Planting
- Entry Landscape Planting
- Setback Planting

NOTE:

REFER TO PLANTING LIST ON DWG L-09 FOR DETAILED SCHEDULES



CONTEXT PLAN



DEEP SOIL DIAGRAM

KEY

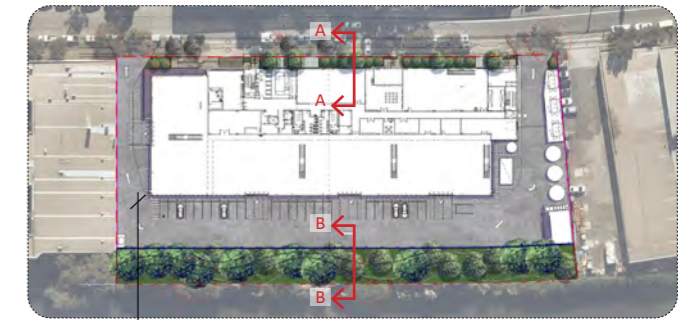
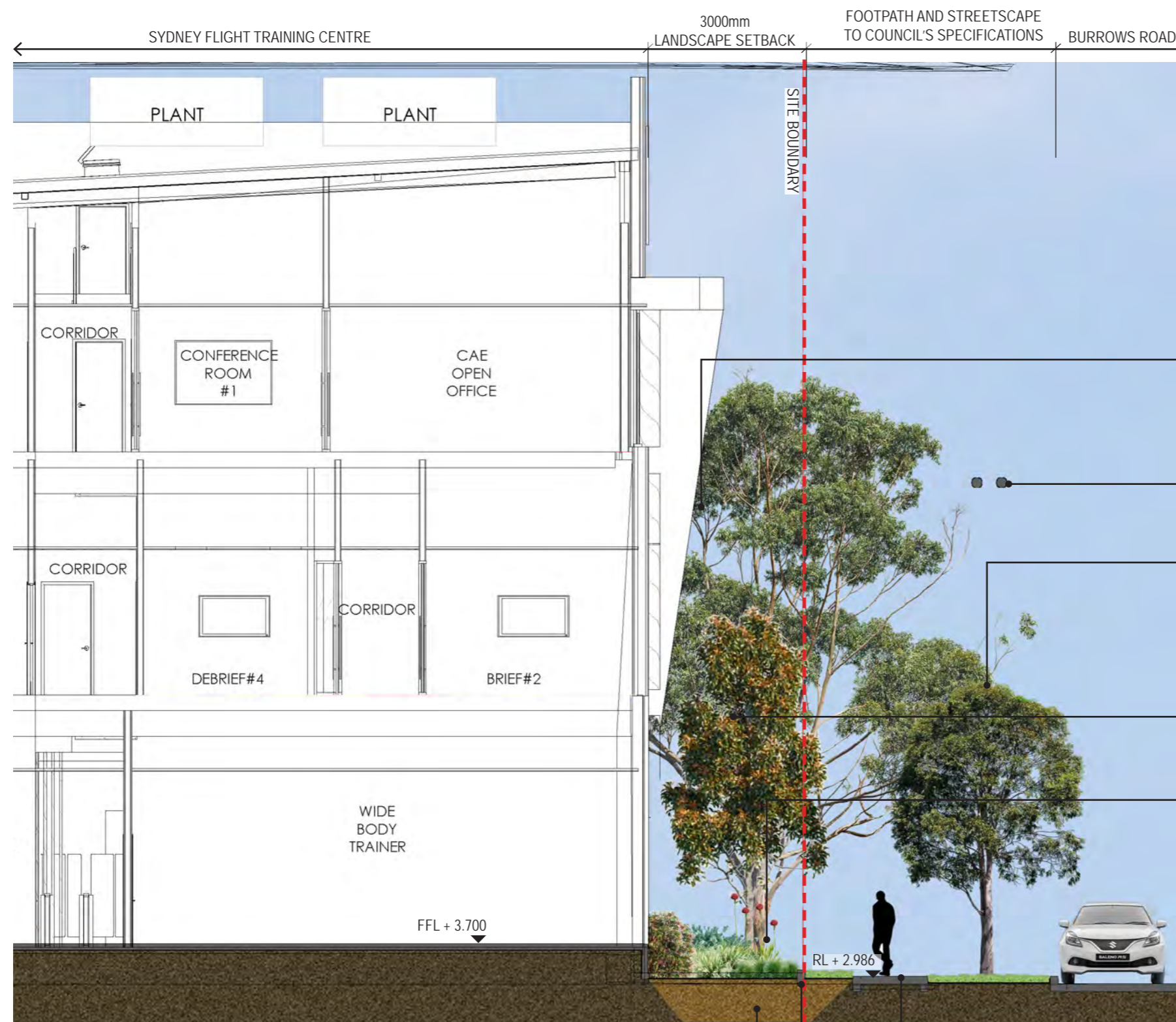
- DEEP SOIL AREA**
1,473.55m²
- DEEP SOIL TREE PIT ZONE**
- PERMEABLE AREA**
33.26m²



CONTEXT PLAN



LANDSCAPE SECTION A-A



KEYPLAN

PROPOSED CANOPY TREES
(APPROX 10M HT+)
REFER TO PLANTING PLANS & SCHEDULE

POWER LINES
(APPROX LOCATION)

RETAIN EXISTING TREES WHERE POSSIBLE
AND ADD MORE TREES IN THE STREET
(E.G *Cupaniopsis anacardioides*) 6M HT MAX

PROPOSED SCREENING TREES
(APPROX 8M HT)
REFER TO PLANTING PLANS & SCHEDULE

GARDEN BED IN DEEP SOIL

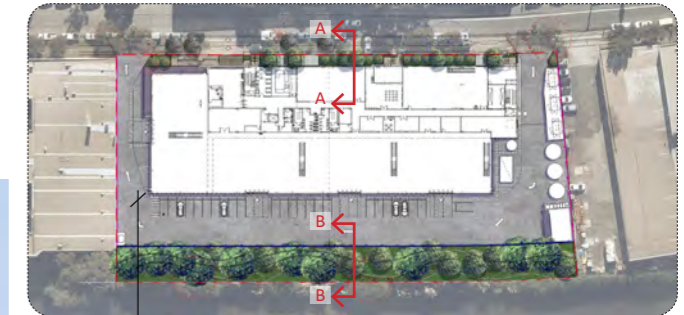
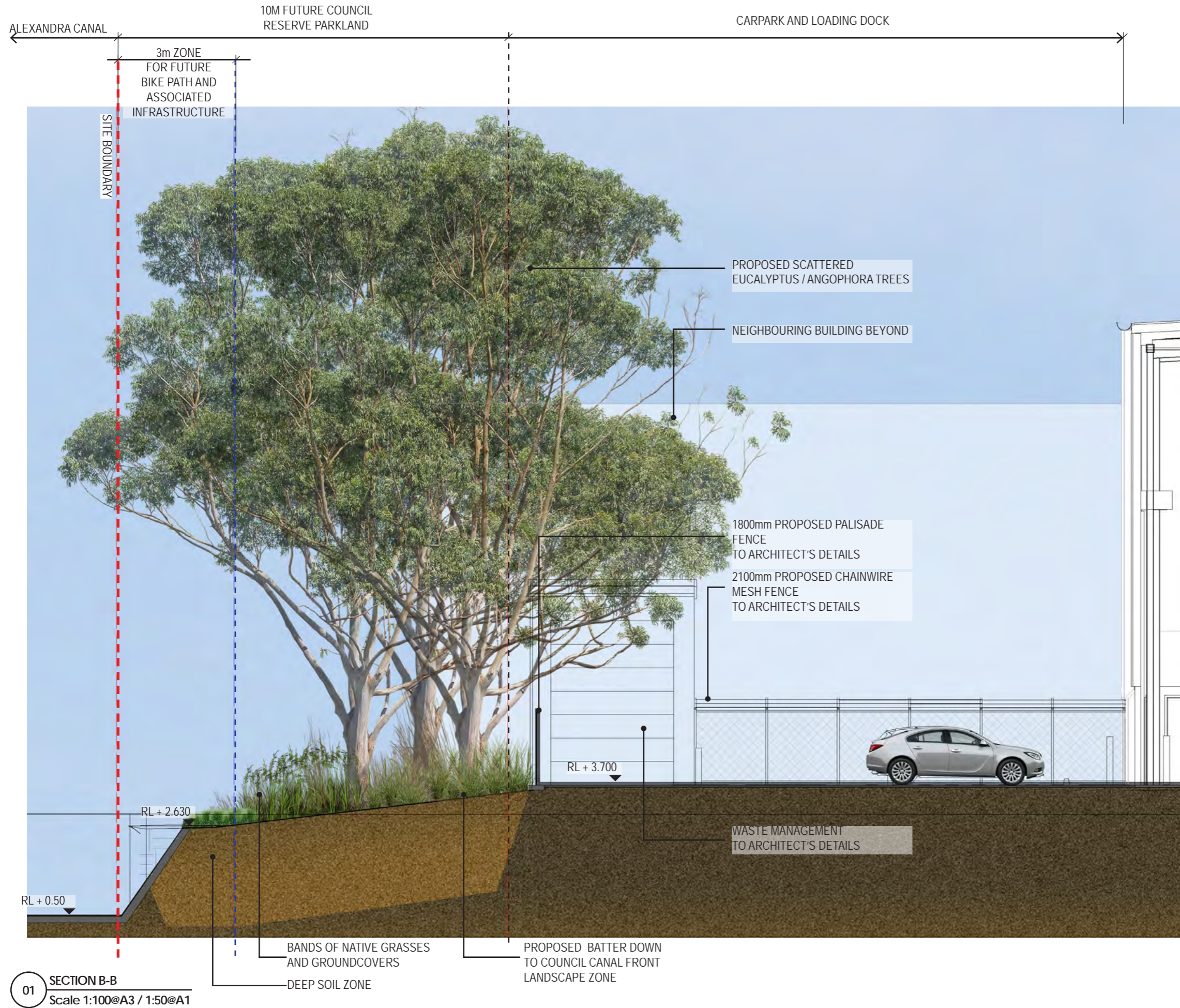
01 SECTION A-A
Scale 1:100@A3 / 1:50@A1

EXISTING FOOTPATH RETAINED

GARDEN EDGING

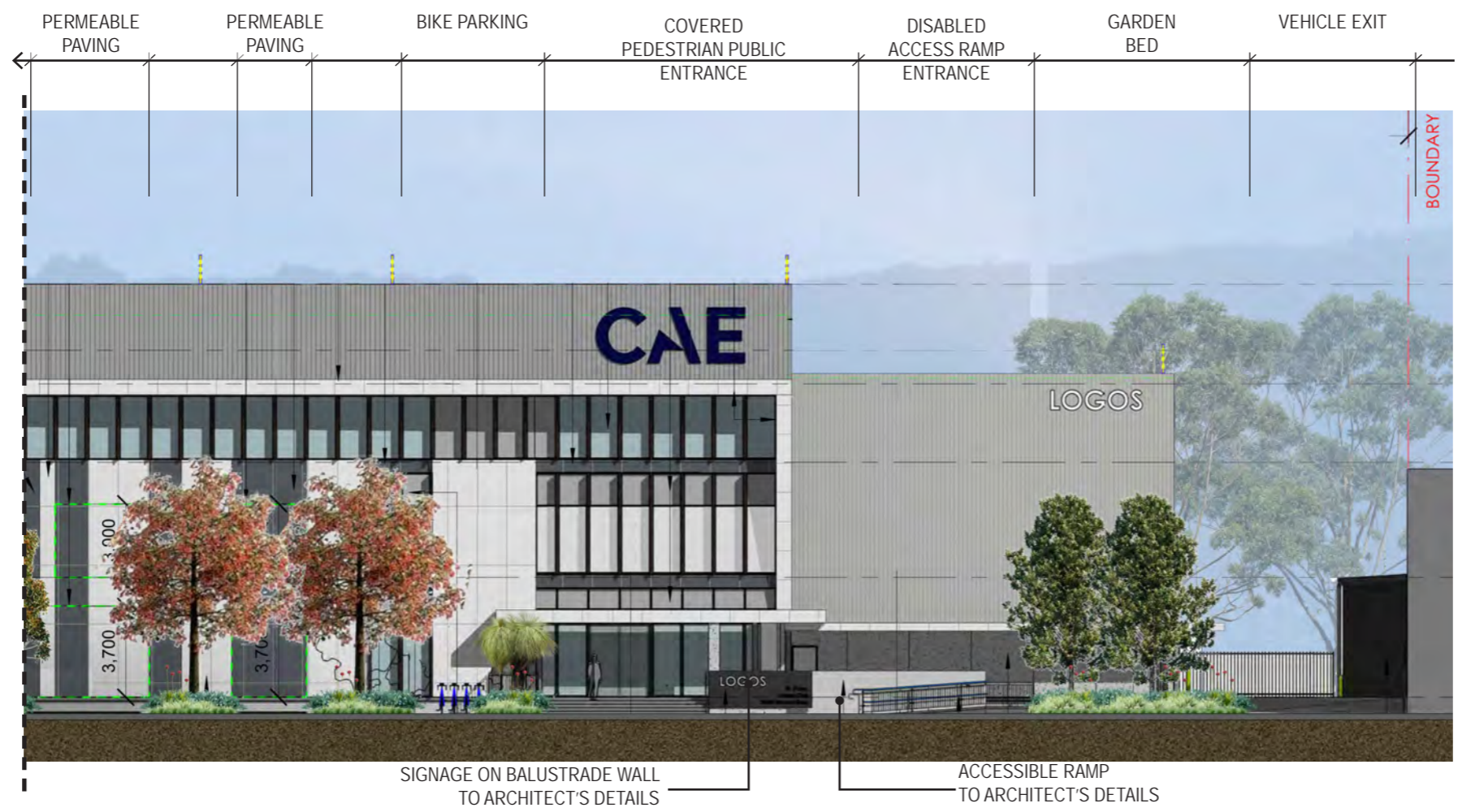
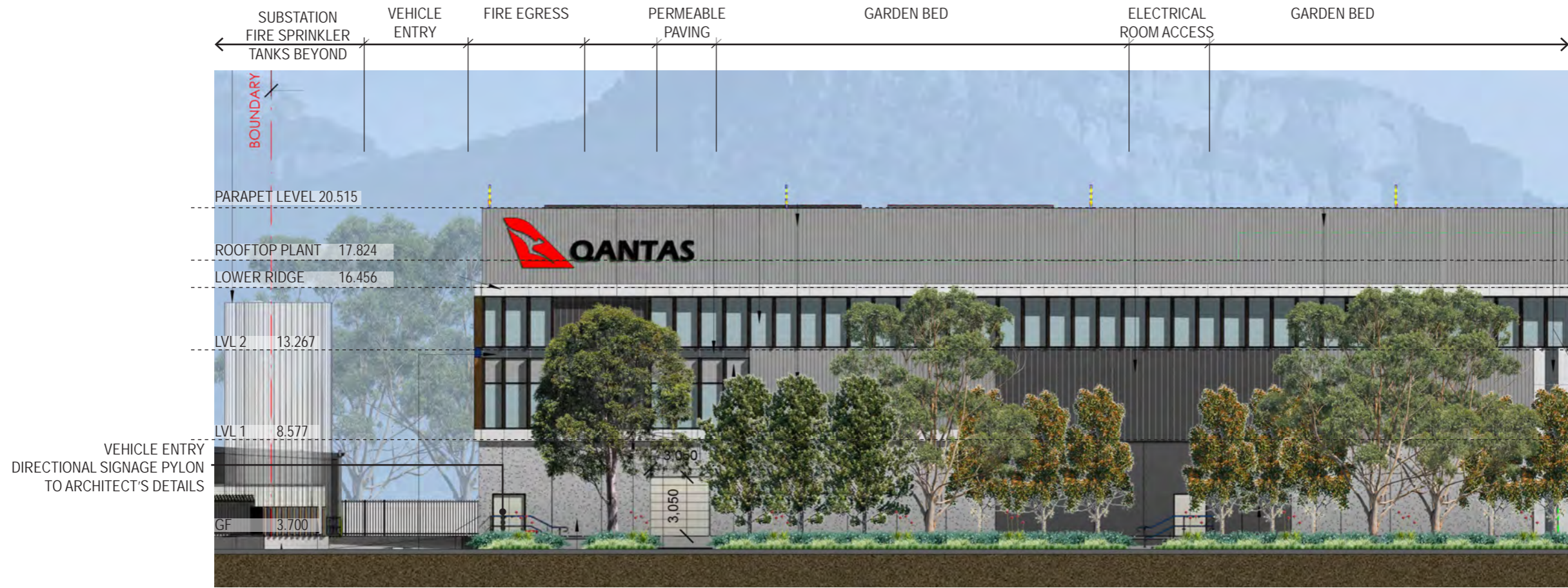
DEEP SOIL ZONE

LANDSCAPE SECTION B-B

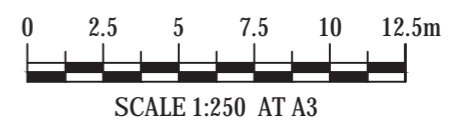


01 SECTION B-B
Scale 1:100@A3 / 1:50@A1

NORTH ELEVATION



PROJECT	DRAWING TITLE	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE	CLIENT
SYDNEY FLIGHT TRAINING CENTRE 28-30 BURROWS ROAD, SYDNEY 2044	NORTH ELEVATION	H8-22034	SSDA SUBMISSION	1:250 @A3	E	24.10.2022	KM/DG	DV	L08	LOGOS



INDICATIVE PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	POT SIZE	DENSITY	QTY
TREES					
AC	<i>Angophora costata</i>	Sydney Red Gum	100L	As Shown	1
EE	<i>Elaeocarpus eumundii</i>	Eumundi quandong	100L	As Shown	7
EH	<i>Eucalyptus haemastoma</i>	Scribbly Gum	100L	As Shown	3
EP	<i>Eucalyptus punctata</i>	Spotted Gum	100L	As Shown	10
ER	<i>Eucalyptus robusta</i>	Swamp Mahogany	100L	As Shown	10
TL	<i>Tristaniopsis laurina</i>	Water Gum	100L	As Shown	4
BI	<i>Banksia integrifolia</i>	Coastal Banksia	100L	As Shown	6
BA	<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	100L	As Shown	2
XAR	<i>Xanthorrhoea arborea</i>	Grass Tree	200L	As Shown	1
SHRUBS					
PMM	<i>Pittosporum tobira</i> 'Miss Muffet'	Miss Muffet	200mm	3/m ²	145
CC	<i>Callistemon citrinus</i>	Crimson Bottlebrush	200mm	2/m ²	15
WFR	<i>Westringia fruticosa</i>	Coastal Rosemary	200mm	2/m ²	31
CR	<i>Correa reflexa</i>	Correa	200mm	2/m ²	256
DEX	<i>Doryanthes excelsa</i>	Gymea Lily	200mm	1/m ²	9
DS	<i>Dillwynia sieberi</i>	Prickly Parrot-pea	200mm	2/m ²	256
VINES					
HV	<i>Hardenbergia violacea</i>	Purple Twining Pea	150mm	4/m ²	512
HS	<i>Hibbertia scandens</i>	Guinea Flower	150mm	4/m ²	512
GROUNDCOVERS + GRASSES					
DR	<i>Dichondra repens</i>	Kidney Weed	150mm	4/m ²	512
IN	<i>Isolepis nodosa</i>	Club-rush	150mm	4/m ²	512
PA	<i>Poa affinis</i>	Tussock Grass	150mm	4/m ²	512
TA	<i>Themeda australis</i>	Kangaroo Grass	150mm	4/m ²	512
LLT	<i>Lomandra longifolia</i> 'Tanika'	Tanika Mat Rush	150mm	4/m ²	195
CGL	<i>Carpobrotus glaucescens</i>	Pigface	150mm	4/m ²	640



TYPICAL SPECIFICATION + MAINTENANCE NOTES

SERVICES

Before landscape work is commenced the Landscape Contractor is to establish the position of all service lines and ensure tree planting is carried out at least 3 metres away from these services. Service lids, vents and hydrants shall be left exposed and not covered by any landscape finishes (turfing, paving, garden beds etc.) Finish adjoining surfaces flush with pit lids.

PLANTING MIXTURE - (300mm DEPTH)

Imported Garden Mix.

Type: Premium

Available: Australian Native Landscapes (ANL)

TURF SOIL MIX (150mm DEPTH)

Type: Turf underlay

Available: Australian Native Landscapes (ANL)

MULCH

APPLICATION: Place mulch to the required depth, (refer to drawings) clear of plant stems, and rake to an even surface finishing 25mm below adjoining levels. Ensure mulch is watered in and tamped down during installation.

MULCH TYPE: (75mm DEPTH)

Type 1 (Base of Trees):

Pine bark: From mature trees, graded in size from 15mm to 30mm, free from wood slivers. Dark brown in colour and texture.

Type 2:

Batters and Edges Re-vegetation Mulch

COMPOST

Shall be “GO Compost” as available from Soilco or approved equal.

PLANT MATERIAL

All plants supplied are to conform with those species listed in the Plant Schedule on the drawings. Generally plants shall be vigorous, well established, hardened off, of good form consistent with species or variety, not soft or forced, free from disease or insect pests with large healthy root systems and no evidence of having been restricted or damaged. Trees shall have a leading shoot. Immediately reject dried out, damaged or unhealthy plant material before planting. All stock is to be container grown for a minimum of six (6) months prior to delivery to site.

FERTILISER

MASS PLANTING AREAS: Fertiliser shall be ‘Nutricote’ or approved equivalent in granule form intended for slow release of plant nutrients over a period of approximately nine months. Thoroughly mix fertiliser with planting mixture at the recommended rate, prior to installing plants.

TURF: Shall be Shirleys No. 17 or approved equal thoroughly mixed into the topsoil prior to placing turf.

TREES IN GRASS AND SUPER ADVANCED TREES: Pellets shall be in the form intended to uniformly release plant food elements for a period of approximately nine months equal to Shirleys Kokei pellets, analysis 6.3:1.8:2.9. Kokei pellets shall be placed at the time of planting to the base of the plant, 50mm minimum from the root ball at a rate of two pellets per 300mm of top growth to a maximum of 8 pellets per tree.

STAKING AND TYING

Stakes shall be straight hardwood, free from knots and twists, pointed at one end and sized according to size of plants to be staked.

a. 100-greater than 200litre 3x(1800x50x50mm)

Ties shall be 50mm wide hessian webbing or approved equivalent nailed or stapled to stake. Drive stakes a minimum one third of their length, avoiding damage to the root system, on the windward side of the plant.

TURF

Obtain turf from a specialist grower of cultivated turf. turf shall be of even thickness, free from weeds and other foreign matter; lay in stretcher pattern with joints staggered and close butted, perpendicular to gradient of FSL. Water immediately after laying.

TURF TYPE: Couch (Confirm with council prior to construction)

LANDSCAPE MAINTENANCE PROGRAM

Maintenance shall mean the care and maintenance of the landscape works by accepted horticultural practice as rectifying any defects that become apparent in the landscape works under normal use. This shall include, but shall not be limited to, watering, mowing, fertilising, re-seeding, returfing, weeding, pest and disease control, staking and tying, replanting, cultivation, pruning, aerating, renovating, top dressing, maintaining the site in a neat and tidy condition as follows:-

GENERAL

The landscape contractor shall maintain the landscape works for the term of the maintenance (or Plant establishment) period to the satisfaction of the council. The landscape contractor shall attend to the site on a weekly basis. Landlord to maintain all landscape areas in perpetuity (life of the development).

WATERING

Grass, trees and garden areas shall be watered regularly so as to ensure continuous healthy growth.

RUBBISH REMOVAL

During the term of the maintenance period the landscape contractor shall remove rubbish that may occur and reoccur throughout the maintenance period. This work shall be carried out regularly so that at weekly intervals the area may be observed in a completely clean and tidy condition.

REPLACEMENTS

The landscape contractor shall replace all plants that are missing, unhealthy or dead at the Landscape Contractor's cost. Replacements shall be of the same size, quality and species as the plant that has failed unless otherwise directed by the Landscape Architect. Replacements shall be made on a continuing basis after the plant has died or is seen to be missing.

STAKES AND TIES

The landscape contractor shall replace or adjust plant stakes, and tree guards as necessary or as directed by the Landscape Architect. Remove stakes and ties at the end of the maintenance period if so directed.

PRUNING

General: Prune to reflect the natural growth flowering and regrowth habit of the individual species.

Shrubs: Prune after flowering - Spring and Summer and on a spot basis as required.

Hedge trimming: Schedule trimming at times which will maintain the character and design of hedges.

Allow up to three times per season.

Tip pruning: To encourage development of new shoots during the active growing season. Do not remove buds before the flowering season in those plants that have terminal flowers.

Radical pruning: To maintain a hedge or formal shape or when a particular problem, growth habit, damage, or disease requires branch removal.

Trees: Prune to eliminate diseased or damaged growth, avoid inter-branch contact and thin out crowns in a natural manner, maintain sight lines to signs and lights, or maintain visibility for personal security. Tree branch removal to AS 4373. Give notice and engage a suitably qualified ‘arborist’.

MULCHED SURFACES

All mulched surfaces shall be maintained in a clean and tidy condition and be reinstated if necessary to ensure that a depth of 75mm is maintained. Ensure mulch is kept clear of plant stems at all times. Remove all mulching materials off lawn or paved areas and maintain a clean and tidy appearance when viewed on a weekly basis.

PEST AND DISEASE CONTROL

The landscape contractor shall spray against insect and fungus infestation with all spraying to be carried out in accordance with the manufacturer's directions. Report all instances of pests and diseases (immediately that they are detected) to the Landscape Architect.

GRASS AND TURF AREAS

The landscape contractor shall maintain all grass and turf areas by watering, weeding, re-seeding, rolling, mowing, trimming or other operations as necessary. Seed and turf species shall be the same as the original specified mixture. Grass and turf areas shall be sprayed with approved selective herbicide against broad leafed weeds as required by the Landscape Architect and in accordance with the manufacturer's directions. Grass and turf areas shall be fertilised once a year in autumn with “Dynamic Lifter” for lawns at a rate of 20kg per 100m². Fertiliser shall be watered in immediately after application. Irregularities in the grass and turf shall be watered in immediately after application. Grass and turf areas shall be kept mown to maintain a healthy and vigorous sward. Mowing height: 30-50mm.

WEED ERADICATION

Eradicate weeds by environmentally acceptable methods using a non-residual glyphosate herbicide (eg. ‘Roundup’) in any of its registered formulae, at the recommended maximum rate. Regularly remove by hand, weed growth that may occur or recur throughout grassed, planted and mulched areas. Remove weed growth from an area 750mm diameter around the base of trees in grassed areas. Continue eradication throughout the course of the works and during the maintenance period.

SOIL SUBSIDENCE

Any soil subsidence or erosion which may occur after the soil filling and preparation operations shall be made good by the landscape contractor at no cost to the client.

MAINTENANCE PERIOD: (52 Weeks) - Confirm with Project Manager

IRRIGATION PERFORMANCE SPECIFICATION NOTES

IRRIGATION OVERVIEW - Confirm with Project Manager at tender stage

EXTENT (All Landscaped Areas)

All mass planting landscape areas and trees are to have full coverage by a fully automatic irrigation system. The design, materials and installation are to be in accordance with Sydney Water Codes and all relevant Australian Standards.

1. An automatic irrigation system is to be installed to all turf and garden bed areas.
2. The irrigation system shall be designed and installed by a licensed contractor to relevant Australian standards and Sydney water guidelines.
3. The irrigation system shall be connected into the rainwater tank system and pump

DRIPLINE

Provide 13mm dripline to all garden bed areas with appropriate 13mm joiners. Dripline to be Toro drip or similar with 400mm centre drippers.

Install line at 500mm spacings with the first line to be 150mm in from edge. Install dripline after planting and prior to mulching to allow for an adequate mulch cover. Anchor at 1.5m maximum intervals with u-shaped stakes. Dripline pattern to suit planting.

CONTROL VALVES

24v solenoid actuated hydraulic valve with flow control. Control valves to be Toro ezflow series solenoids 25mm or approved equal. Provide a gate valve of the same size immediately upstream of each valve.

House both valves in a high impact plastic valve box with a high impact plastic cover at finished ground level. Support the box with bricks on each side. Controller to be Toro greenkeeper or approved equal with a rain switch.

Install a master valve/pressure regulating valve equal to Toro p220 with exreg pressure regulation valve. Filter to be installed equal to Toro y filter 75mm screen filter.

CONTROL WIRES

Connect the control valves and soil moisture sensor to the controller with double insulated underground cables laid alongside piping where possible. Lay intertwined for their full length without joints except at the valves and branches off common wires. Provide waterproof connectors.

Provide a backflow prevention device to Sydney water standards AS 3500.

RELEVANT AUSTRALIAN STANDARDS

Soil: AS4419, AS3743, AS4454.


Mulch: AS4454.

Tree Stock: AS2303.

Pruning: AS4373.

Tree Protection: AS4970.

Contractors to comply with the above Australian Standards.

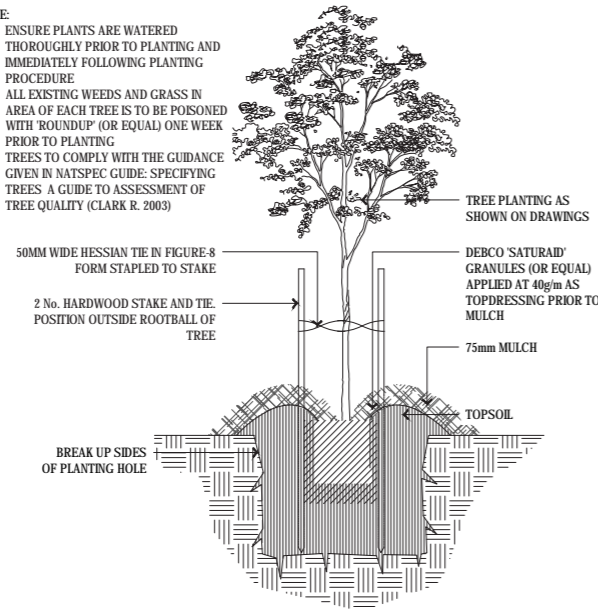
PROJECT	DRAWING TITLE	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE	CLIENT
SYDNEY FLIGHT TRAINING CENTRE 28-30 BURROWS ROAD, SYDNEY, AUSTRALIA	TYPICAL SPECIFICATION + MAINTENANCE NOTES	H8-22034	SSDA SUBMISSION	NTS	E	24.10.2022	KM/DG	DV	L 10	



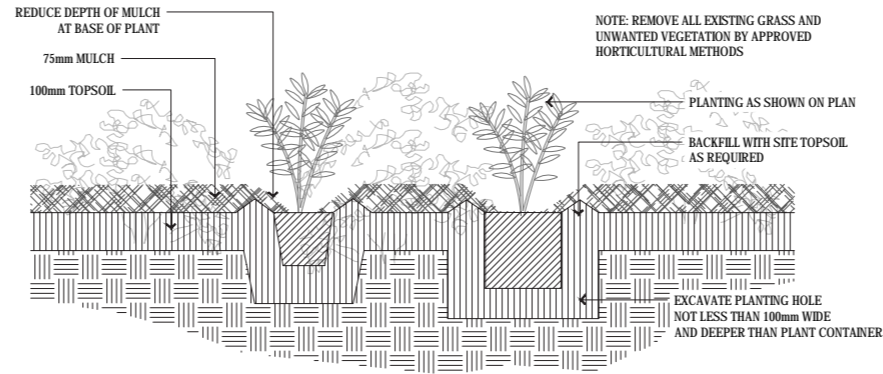
TYPICAL DETAILS

NOTE:

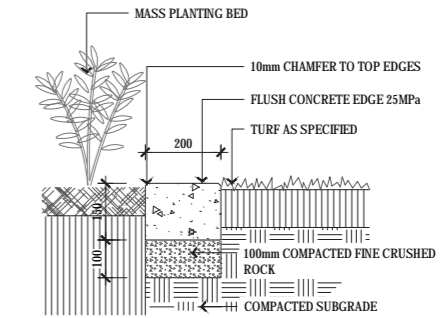
1. ENSURE PLANTS ARE WATERED THOROUGHLY PRIOR TO PLANTING AND IMMEDIATELY FOLLOWING PLANTING PROCEDURE
2. ALL EXISTING WEEDS AND GRASS IN AREA OF EACH TREE IS TO BE POISONED WITH 'ROUNDUP' (OR EQUAL) ONE WEEK PRIOR TO PLANTING
3. TREES TO COMPLY WITH THE GUIDANCE GIVEN IN NATSPEC GUIDE: SPECIFYING TREES A GUIDE TO ASSESSMENT OF TREE QUALITY (CLARK R. 2003)



01 TYPICAL TREE PLANTING DETAIL UNDER 100L
1:20 @ A1 / 1:40 @ A3
(IN GARDEN BED)



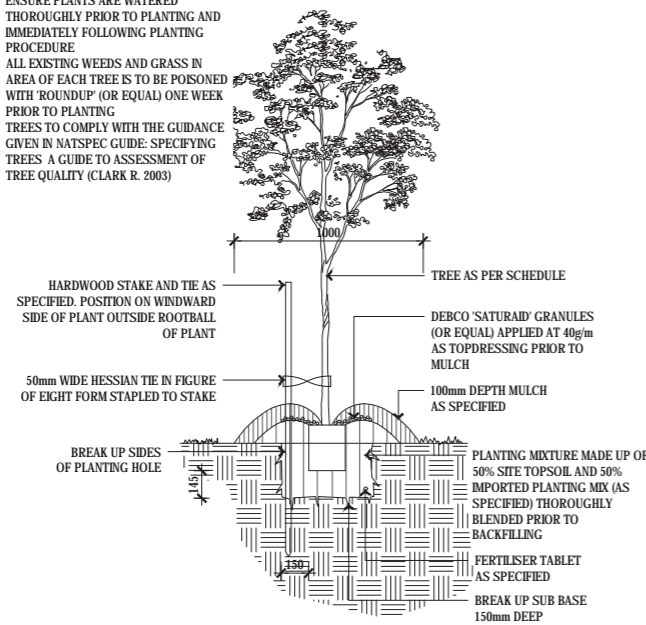
02 MASS PLANTING DETAIL
1:10 @ A1 / 1:20 @ A3



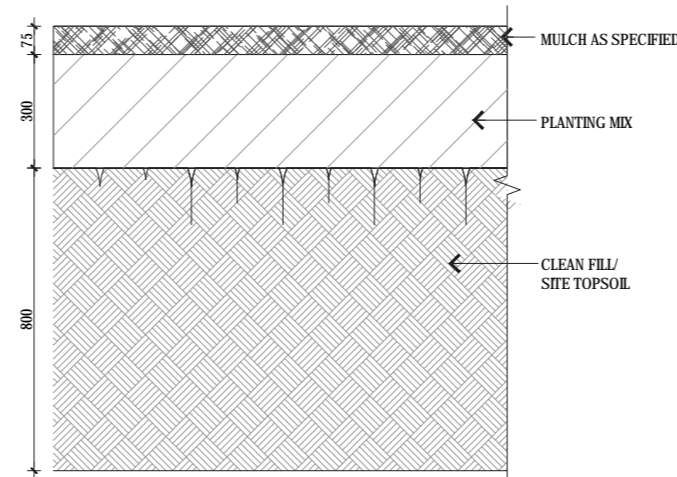
03 CONCRETE EDGE DETAIL
1:10 @ A1 / 1:20 @ A3

NOTE:

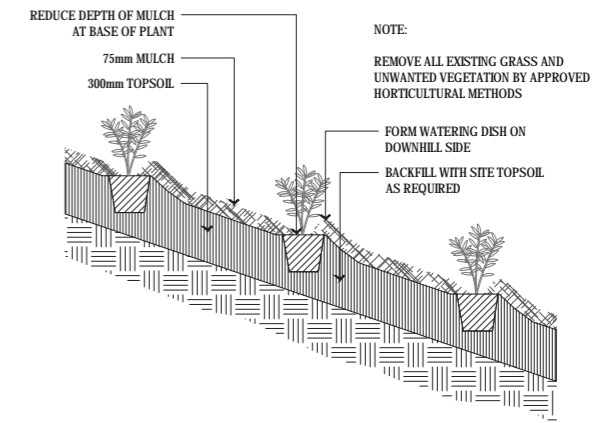
1. ENSURE PLANTS ARE WATERED THOROUGHLY PRIOR TO PLANTING AND IMMEDIATELY FOLLOWING PLANTING PROCEDURE
2. ALL EXISTING WEEDS AND GRASS IN AREA OF EACH TREE IS TO BE POISONED WITH 'ROUNDUP' (OR EQUAL) ONE WEEK PRIOR TO PLANTING
3. TREES TO COMPLY WITH THE GUIDANCE GIVEN IN NATSPEC GUIDE: SPECIFYING TREES A GUIDE TO ASSESSMENT OF TREE QUALITY (CLARK R. 2003)



04 TYPICAL TREE PLANTING DETAIL OVER 100L
1:20 @ A1 / 1:40 @ A3



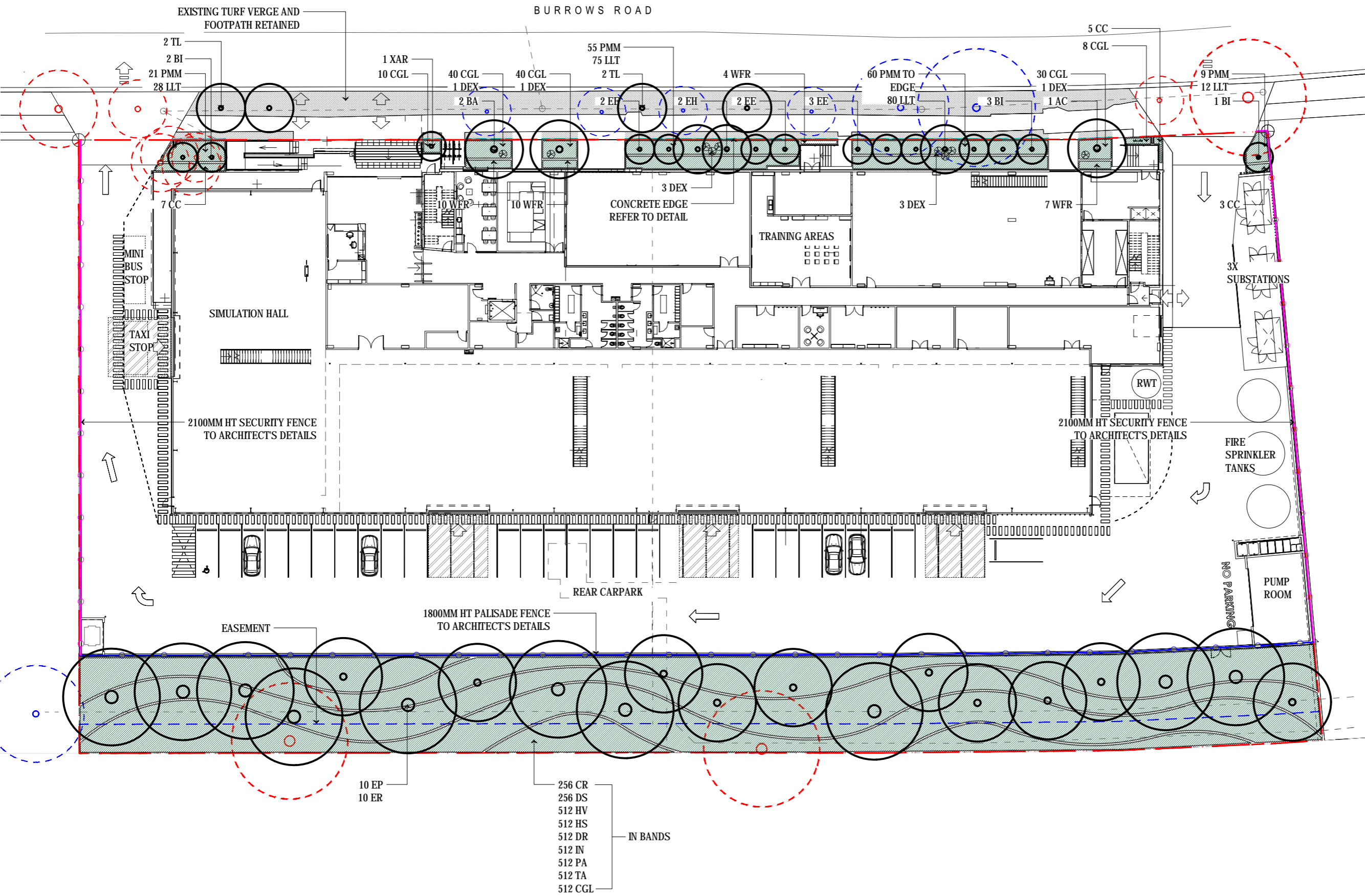
05 TYPICAL SOIL PROFILE
1:10 @ A1 / 1:20 @ A3



06 MASS PLANTING ON EMBANKMENT
1:20 @ A1 / 1:40 @ A3

APPENDIX A: PLANTING PLAN

ISSUE	DATE	PURPOSE
C	29.09.22	SSDA SUBMISSION



- ### LEGEND
- PROPERTY BOUNDARY
 - CONCRETE EDGE
Refer to Details
 - 1800mm HT PALISADE FENCE
To Architect's Details
 - 2100mm HT SECURITY FENCE
To Architect's Details
 - PROPOSED TREE
 - EXISTING TREES TO BE REMOVED
 - EXISTING TREES TO BE RETAINED
 - PLANTING BED
Refer Notes & Details
 - TURF VERGE
To Council's Specifications

Landscape Architect's work is subject to Copyright. Documents should not be used contrary to the purpose of the issue without written permission from Habit8.

NEVER scale off drawings, use figured dimensions only. Drawings indicate scope of works and general setout. These are not shop drawings.

CLIENT

LOGOS

PROJECT
SYDNEY FLIGHT TRAINING CENTRE
 28-30 BURROWS ROAD, SYDNEY 2044

DRAWING TITLE
 LANDSCAPE PLANTING PLAN

SCALE
 1:200 @ A1 / 1:400 @ A3

DRAWN	CHECKED
KM	DV

PROJECT NO.	DRAWING NO.	REVISION
H8-22034	L-2001	C

LANDSCAPE ARCHITECT:

HABIT8

Landscape Architecture & Urbanism

Level 57, MLC Centre 32/24 Scott St.
 19-29 Martin Place Byron Bay, NSW 2481
 Sydney, NSW 2000

www.habit8.com.au
 M: 0425 204 047