

HUNTINGWOOD LOGISTICS ESTATE

AUGUSTA ST, HUNTINGWOOD EAST, NSW

LANDSCAPE CONCEPT PLAN

SSD SUBMISSION

06.09.2023

ISSUE I

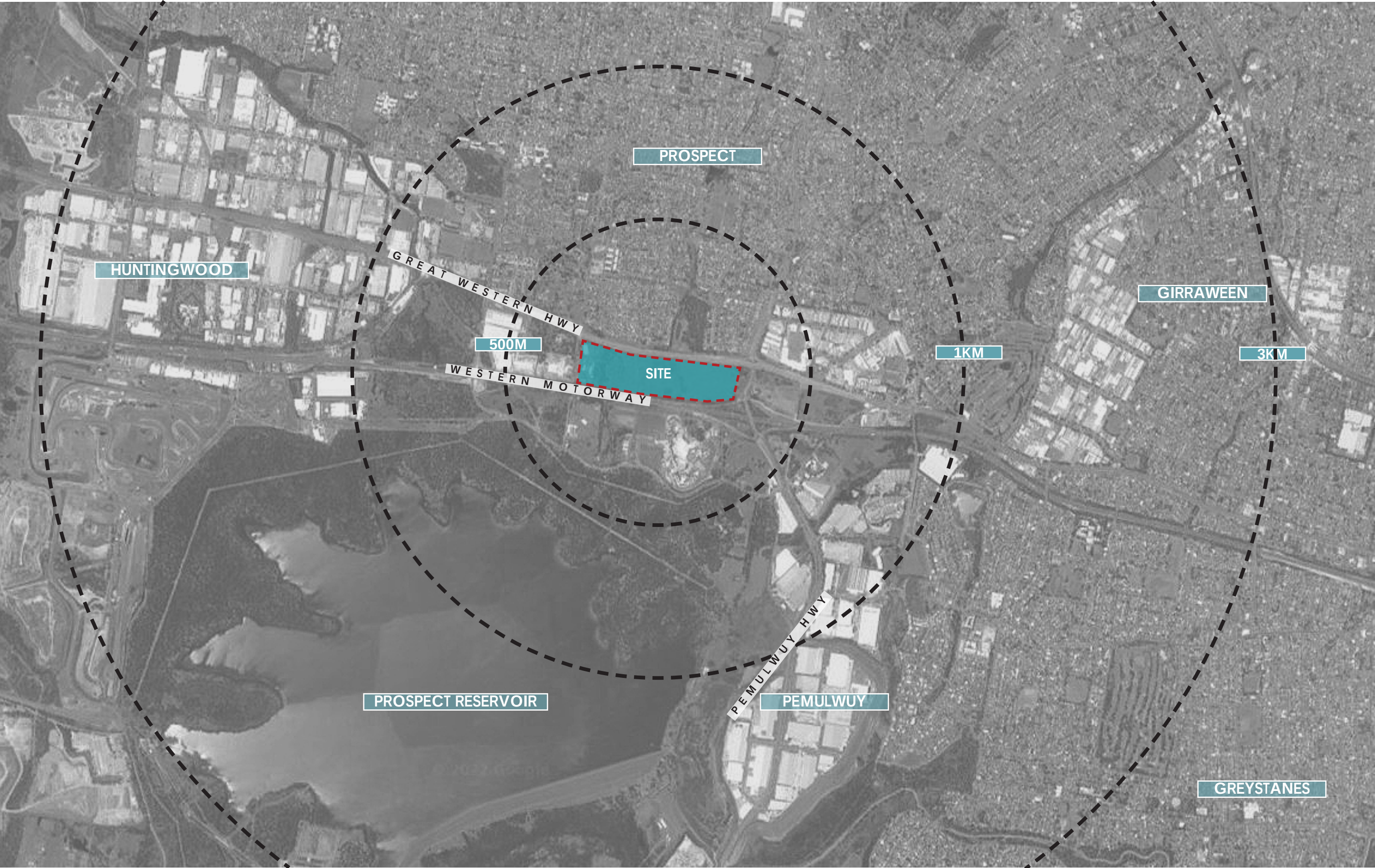
DRAWING LIST:

- L-01 Coversheet
- L-02 Site Context
- L-03 Landscape Design Philosophy
- L-04 Landscape Design Philosophy
- L-05 Landscape Design Strategy
- L-06 Precedent Images
- L-07 Landscape Strategy
- L-08 Pedestrian / Cycleway Movement + Wayfinding Plan
- L-09 Landscape Masterplan
- L-10 Landscape Plan 01
- L-11 Landscape Plan 02
- L-12 Landscape Plan 03
- L-13 Landscape Plan 04
- L-14 Landscape Section A-A
- L-15 Landscape Section B-B
- L-16 Landscape Section C-C
- L-17 Landscape Section D-D
- L-18 Landscape Section E-E
- L-19 Landscape Section F-F
- L-20 Landscape Section G-G
- L-21 Detail Concept Plan 01
- L-22 Detail Concept Plan 02
- L-23 Detail Concept Plan 03
- L-24 Detail Concept Plan 04
- L-25 Plant Schedules 01
- L-26 Plant Schedules 02
- L-27 Typical Specification & Maintenance Notes

CLIENT:
LOGOS



SITE CONTEXT



LANDSCAPE DESIGN PHILOSOPHY

The design philosophy explores the synergetic relationship between PEOPLE and:

- WATER
- LAND

We have incorporated the green-blue city concept to demonstrate the interconnected nature of people with water and vegetation on this site.

1. The Blue Line (the story of water in the landscape)
2. The Green Line (the story of vegetation)

For context, the green-blue city concept is an urban area that is designed to successfully incorporate natural systems that provide the ecological and amenity value associated with urban greening, and also provide stormwater management. Often “green” assets (trees, parks, gardens) and “blue” assets (Water Sensive Urban Design (WSUD), drainage areas and flood storage) are planned separately. However, on this site, the asset can provide multiple services that benefit both “green” and “blue” objectives. By purposely designing for green-blue infrastructure that achieves multiple objectives, this site and its locality can benefit from efficient infrastructure, greater collaboration and heightened benefits.

THE BLUE LINE

The Blue line concept, captures the essence of water and its importance in the landscape everything human and non-human. Water gives and sustains life and flows throughout western Sydney in small and major systems. Water plays a big part in the sustainable management and regeneration of the conservation corridors within the site. The effective design and management of water systems on this site will help with biodiversity and the strengthening of local fauna such as the Golden bell frog. The sites topography and hydrological systems allows water to be managed as part of a whole system that integrates water run off from the landscape and built form.



THE BLUE LINE

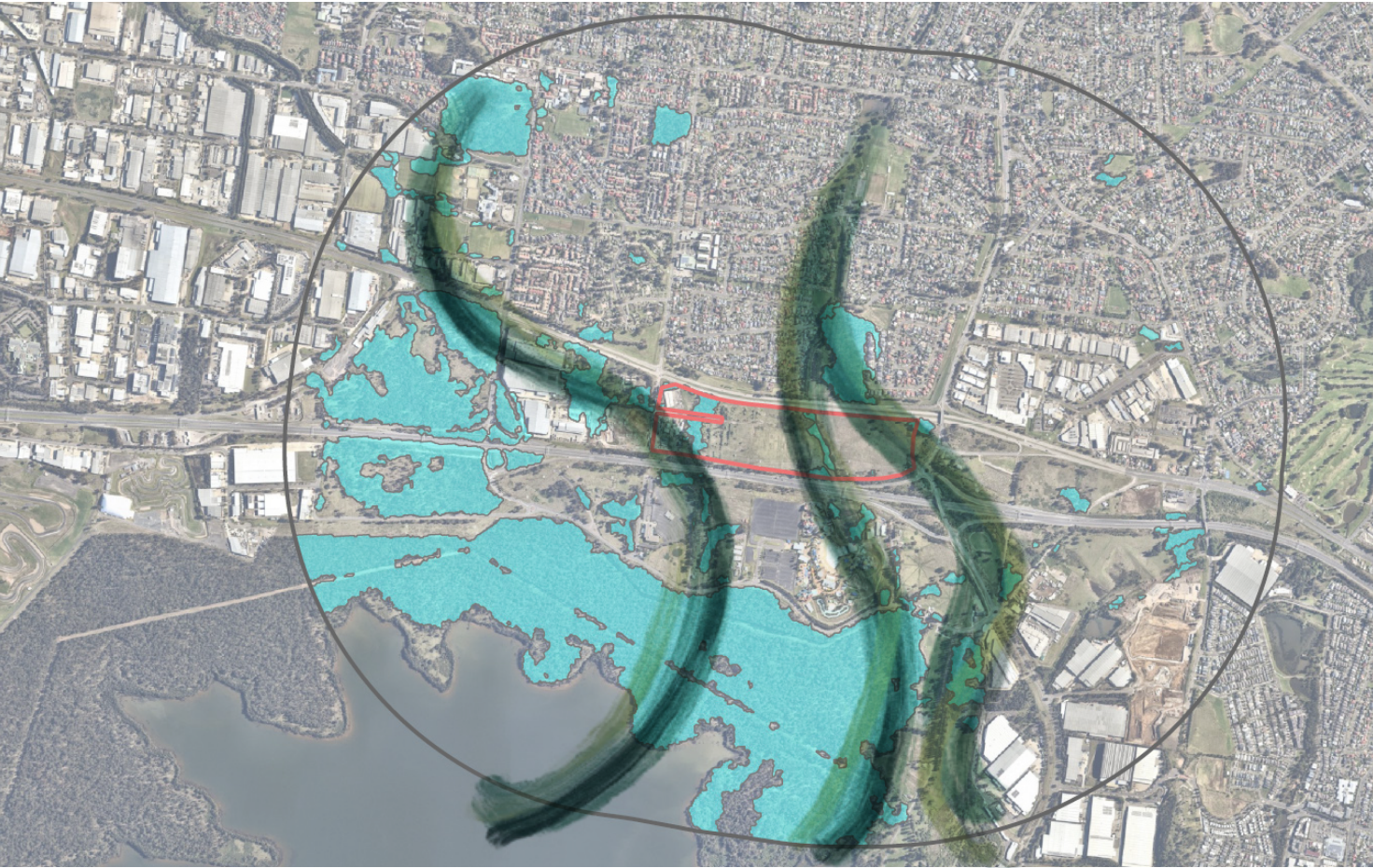
PROJECT	DRAWING TITLE	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE	CLIENT
HUNTINGWOOD LOGISTICS ESTATE AUGUSTA ST, HUNTINGWOOD EAST, NSW	LANDSCAPE DESIGN PHILOSOPHY	H8-22032	CLIENT REVIEW NTS		I	06.09.2023	DG	DV	L03	LOGOS

LANDSCAPE DESIGN PHILOSOPHY

THE GREEN LINE

The “Green line” concept represents the strength of the interconnected vegetation corridors that permeate through the local site context. The two conservation corridors on the site connect to regional vegetation mapping that indicates the proposed regeneration and embellishment of these “green” corridors shall contribute to canopy connectivity, native fauna movements, strengthening of biodiversity and protection of at risk endemic species.

The “green line” also highlights connections to the natural endemic landscape that exists within the locality. Integration of the green line into the site through landscaping design helps to achieve conservation of the existing natural environment through enhancing endemic canopy tree planting while also promoting social, cultural, recreational, and educational opportunities within natural landscapes.



THE GREEN LINE: CONTEXT

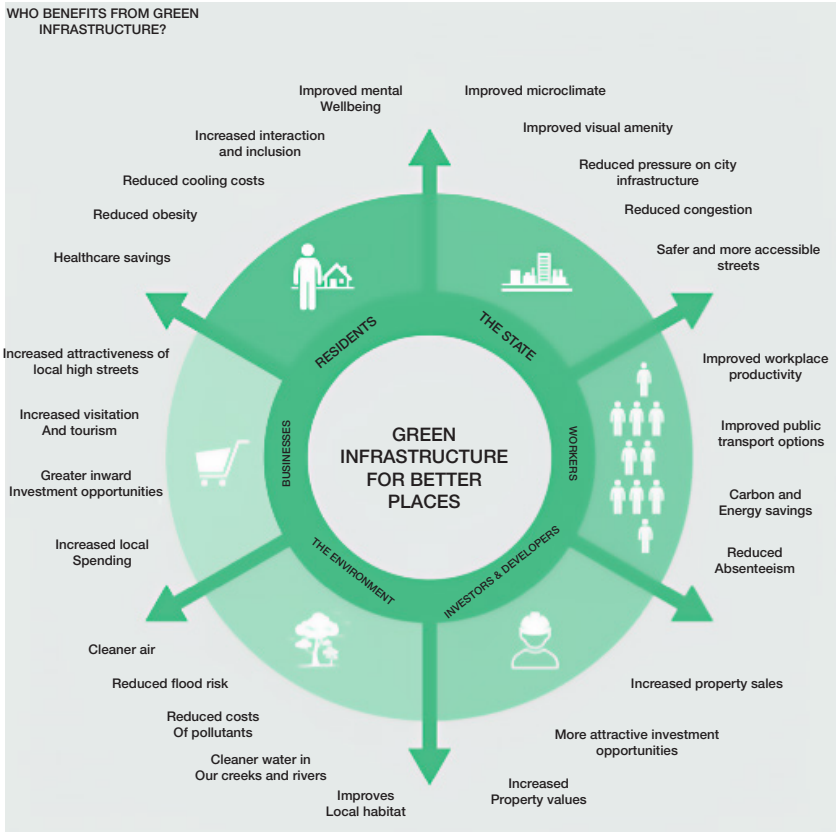


THE GREEN LINE

PROJECT	DRAWING TITLE	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE	CLIENT
HUNTINGWOOD LOGISTICS ESTATE AUGUSTA ST, HUNTINGWOOD EAST, NSW	LANDSCAPE DESIGN PHILOSOPHY	H8-22032	CLIENT REVIEW NTS		I	06.09.2023	DG	DV	L04	LOGOS

Green Infrastructure is the network of green spaces, natural systems and semi-natural systems including parks, rivers, bushland and private gardens that are strategically planned, designed and managed to support a good quality of life in an urban environment.

Green Infrastructure should be envisioned as a three-dimensional envelope that surrounds and connects buildings, streets and utilities. The concept of landscape as Green Infrastructure provides a framework for integrating the work of designers, planners, developers and policy makers, and leveraging this collaboration to achieve larger LGA or state goals.



Green Infrastructure is as crucial to the city as transport, cultural and communications infrastructure. It delivers a range of benefits including:

- *Healthy living*
- *Mitigating flooding*
- *Improving air and water quality*
- *Cooling the urban environment*
- *Encouraging walking and cycling*
- *Enhancing biodiversity and ecological resilience*
- *Absorbing and transforming waste.*

The four main principles associated with the NSW Greener Places Policy prepared by the Government Architect NSW (2017) are:

a) Principle 1: Integration: We propose a multi-purpose infrastructure strategy that mimics nature, provides critical ecosystem services and promotes healthy and active living. We propose to combine green space with industrial urban development and WSUD infrastructure.

b) Principle 2: Connectivity: We aim to create a network of high quality open streetscape and spaces that connect with each warehouse and office, public transport hubs and vegetation corridors. The network includes physical and functional connections that benefit people, wildlife and the logistics nature of the estate.

c) Principle 3: Multifunctionality: Our proposed green space infrastructure is designed to be high quality and high performing, producing ecological, social, environmental and economic benefits. The multifunctionality of our design proposal allows the sites green infrastructure to deliver multiple ecosystem, environmental and other services simultaneously.

d) Principle 4: Participation: We have followed a planning process that has been open to all, transparent and incorporates the knowledge and needs of all interested and diverse parties. The process has involved stakeholders in development, Blacktown City Council and the industrial open market through tenants and the companies they represent. The process has incorporated local and state Green Infrastructure policies and actions.

PROJECT OUTCOMES:

- 1. Conservation of the natural environment.**
This project will lead to the future enhancement of the increasing endemic canopy tree planting promotion of social, cultural, recreational, and educational opportunities within natural landscapes.
- 2. Increased access to open space**
Improved connections to local destinations. The quantity, quality, distribution, and accessibility of Industrial office green spaces enables the delivery of multifunctional spaces that promote healthy work environments.
- 3. Improved connectivity to promote active living**
Improvements to the office communal areas and frontages that promote exercise and alternative modes of transport such as walking and cycling.
- 4. Increase urban greening to ameliorate climate extremes**
We incorporate the design of green cover strategies including street trees, front setback canopy trees, cooler pavement materials and WSUD.
Our landscape scheme provides benefits such as improved amenity, comfort, health, reduced stormwater run-off, improved air and water quality, energy and resource efficiency.

a) THE RE-VEGETATION STRATEGY

The strategy for re-vegetating the site focuses on canopy tree planting to reduce the “urban heat island effect”. We have proposed a mix of local endemic, native and exotic trees to strengthen the urban design principles and to comply with current sustainability guidelines. Street verges, buffer tree planting to boundaries are densely planted with canopy trees ranging from 6m to 15m+ in height and canopy spread. Bush regeneration shall be implemented along major road setbacks for existing vegetation buffers. Car parks hard surfaces are

shaded by tree planting between car parking spaces. Cycleways and path systems are also shaded by canopy tree planting. WSUD principles including soft engineering through bio-swales, detention basins and grey water re-use (co-ordinated with the civil engineer) shall help in maintaining and managing the re-vegetation areas.

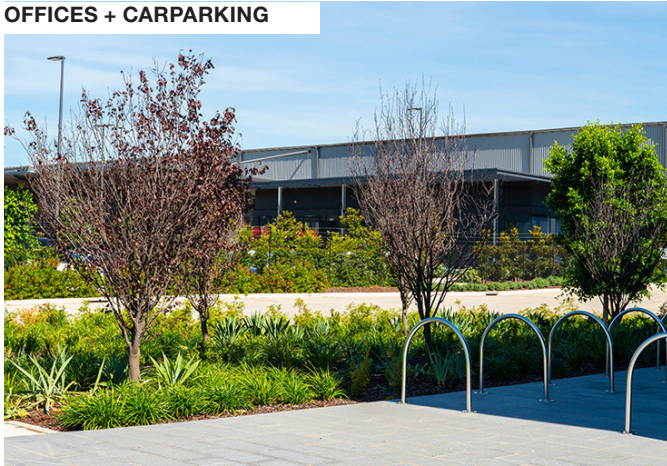
b) STREETSCAPES + PUBLIC DOMAIN

All streetscapes and setbacks have been designed to be multifunctional and provide connectivity throughout the Estate for vehicles, pedestrians and cyclists. The streets and landscaped setbacks form the main “green spines” throughout development. The streetscape has been designed in accordance with Blacktown City Council’s Public Domain policy. The main features of the public domain are:

- 1. Provide tree canopy cover and reduce the “urban heat island effect”;
- 2. Provide safe and comfortable transit for pedestrians and cyclists;
- 3. Strengthen canopy connectivity throughout the Estate;
- 4. Allow multi-functionality through the revisions of various transit lanes such as heavy vehicle, cars, pedestrian footpaths and cycleways;
- 5. Soften and screen the bulk of the warehouses;
- 6. Help create a cooler microclimate around buildings and along pedestrian routes;
- 7. Provide multiple opportunities to create an address for each warehouse project;
- 8. Integrate lighting for safety;
- 9. Allow safe passage for visitors and workers to experience the conservation area corridors interface;
- 10. Strengthen the connection to Fluschcombe road and surrounding areas
- 11. Incorporate WSUD principles into the including water quality bio-swales and vegetated detention basins

DESIGN PRECEDENT IMAGES

OFFICES + CARPARKING



ENTRY FEATURES



PATHWAYS + WAYFINDING



CONSERVATION AREAS



LANDSCAPE STRATEGY

KEY

Entry Feature Planting
1,943.22 sqm

Conservation (Setback)
14,664.62 sqm

Carpark and Office Planting
3,616.13 sqm

Conservation
23,411.38 sqm

Conservation (Under Electrical Easement)
38,810.03 sqm

Conservation Planting (Bioretention Basins)
11,872.90 sqm

- NOTE:
- 1. Refer to Plant Schedules for species lists.
 - 2. All Conservation Areas are subject to VMP.

PROPOSED CONSERVATION OUTCOME ONSITE:

STRATEGY	APPROXIMATE AREA
AREA FOR CONSERVATION	
Conservation setback from roads	1.5 ha
Conservation associated with drainage lines (excl area under Electricity Easement)	2.3 ha
Conservation (under Electricity Easement)	3.5 ha
Conservation Planting (bioretention basins)	1.2 ha
TOTAL	8.6 ha
Area not included in area calculated for conservation (these area provide some potential habitat, especially arboreal and avifauna)	
Entry Feature Planting	0.2 ha
Carpark and Office Planting	0.6 ha
TOTAL	0.8 ha
TOTAL LANDSCAPE AREA	9.4 ha



PEDESTRIAN / CYCLEWAY MOVEMENT + WAYFINDING PLAN

KEY



CYCLEWAY



INTERNAL PATHWAY



KEY WAYFINDING OPPORTUNITY



LANDSCAPE MASTERPLAN

DESIGN NOTES

1. SITE ENTRY FEATURE

- Feature tree (@5m OC) and shrub planting
- Entry feature walls and signage (To future detail)

2. AUGUSTA STREET SETBACK

- Canopy street tree planting (6m ht+) to turf verge
- Large canopy trees in setback
- Footpath & cycleway to DCP requirements

3. CARPARK

- Feature tree planting at carpark entry points
- Canopy trees (6m ht + @10m OC)
- Mix of low groundcover and screening

shrubs at perimeter

- Feature trees around office and carpark entries

4. TRUCK ENTRY/EXIT

4a. TRUCK ENTRY

4b. TRUCK EXIT

5. CAR ENTRY / EXIT AND ENTRY FEATURE

6. SCREEN TREE PLANTING

7. FLUSHCOMBE LANDSCAPE SETBACK

- 2m landscape setback from boundary to fence line
- Canopy street tree planting (6m ht+) to turf verge
- Large canopy trees in setback (10m min ht x 10m dia canopy)

8. GREAT WESTERN HIGHWAY SETBACK

- Large canopy tree planting (15m ht x 10m dia)

- Canopy tree planting (10m ht)

- Screening shrubs (min 3m ht) to acoustic wall

9. REINFORCED TURF FOR VEHICLE ACCESS

10. CONSERVATION AREA

11. HERITAGE SITE

12. BLACKTOWN CREEK RE-ALIGNED CHANNEL AND RIPARIAN ZONE

13. BOARDWALK

14. VIEWING PLATFORM

15. BASIN PLANTING

- Small tree / large shrub planting (less than 4m HT)
- Hydromulch (native grass mix) and tubestock planting

16. EASEMENT PLANTING

- Small tree / large shrub planting (less than 4m HT)
- Hydromulch (native grass mix) and tubestock planting

17. EXISTING ELECTRICAL EASEMENT AREA RETAINED + REGENERATED

18. SETBACK OPEN SPACE

KEY

- ACOUSTIC WALL
- ACOUSTIC MOUND

TREE CANOPY COVER

TREE NO.	TREE CANOPY	CANOPY AREA (m²)	TOTAL CANOPY COVER (m²)
968	3m	7	6,699
198	5m	20	3,900
416	6m	30	11,730
340	8m	50	16,000
78	10m	78	4,914



CONTEXT PLAN



TOTAL SITE AREA 266,400

TOTAL TREE NO. 2000

TOTAL SQM CANOPY COVER 43,243

TOTAL CANOPY PERCENTAGE 16.23%



LANDSCAPE PLAN 01

KEY

SITE BOUNDARY

2400mm HT SECURITY FENCE LOCATION

GARDEN EDGING

RETAINING WALL

ACOUSTIC WALL

PROPOSED TREE PLANTING
REFER TO PLANT SCHEDULE

TURF AREAS

MASS PLANTING BEDS

HARD SURFACE

DECOMPOSED GRANITE PATH

BASIN PLANTING

DESIGN NOTES

1. SITE ENTRY FEATURE
 - Feature tree (@5m OC) and shrub planting
 - Entry feature walls and signage (To future detail)
2. AUGUSTA STREET SETBACK
 - Canopy street tree planting (6m ht+) to turf verge
 - Large canopy trees in setback
 - Footpath & cycleway to DCP requirements
3. CARPARK
 - Feature tree planting at carpark entry points
 - Canopy trees (6m ht + @10m OC)
 - Mix of low groundcover and screening shrubs at perimeter
 - Feature trees around office and carpark entries
4. TRUCK ENTRY/EXIT

4a. TRUCK ENTRY

4b. TRUCK EXIT
5. CAR ENTRY / EXIT
6. FIRE BRIGADE ACCESS
7. FLUSHCOMBE LANDSCAPE SETBACK
 - 2m landscape setback from boundary to fence line
 - Canopy street tree planting (6m ht+) to turf verge
 - Large canopy trees in setback (10m min ht x 10m dia canopy)
8. GREAT WESTERN HIGHWAY SETBACK
 - Large canopy tree planting (15m ht x 10m dia)
 - Canopy tree planting (10m ht)
 - Screening shrubs (min 3m ht) to acoustic wall
9. REINFORCED TURF FOR VEHICLE ACCESS
10. CONSERVATION AREA
11. HERITAGE SITE
12. BLACKTOWN CREEK (RE-ALIGNED CHANNEL + RIPARIAN ZONE)
13. BOARDWALK
14. VIEWING PLATFORM
15. BASIN PLANTING
 - Small tree / large shrub planting (less than 4m HT)
 - Hydromulch (native grass mix) and tubestock planting
16. WESTERN MOTORWAY SETBACK (AUSGRID EASEMENT)
 - Small tree planting (less than 3m HT)
17. EXISTING ELECTRICAL EASEMENT AREA RETAINED + REGENERATED
18. SETBACK OPEN SPACE



JOINS L-07

ISSUE	DATE	PURPOSE
A	12.08.22	CLIENT REVIEW
B	09.06.23	CLIENT REVIEW
C	28.06.23	CLIENT REVIEW
D	07.07.23	CLIENT REVIEW
E	07.07.23	CLIENT REVIEW
F	13.07.23	CLIENT REVIEW
G	04.09.23	CLIENT REVIEW
H	05.09.23	CLIENT REVIEW
I	06.09.23	CLIENT REVIEW



KEYPLAN

CLIENT

LOGOS

PROJECT

HUNTINGWOOD LOGISTICS ESTATE
AUGUSTA ST. HUNTINGWOOD EAST, NSW

DRAWING TITLE

LANDSCAPE PLAN 01



SCALE

1:1000 @ A3

DRAWN CHECKED

DG / KM DV

PROJECT NO. DRAWING NO. REVISION

H8-22032 L010 F

LANDSCAPE ARCHITECT

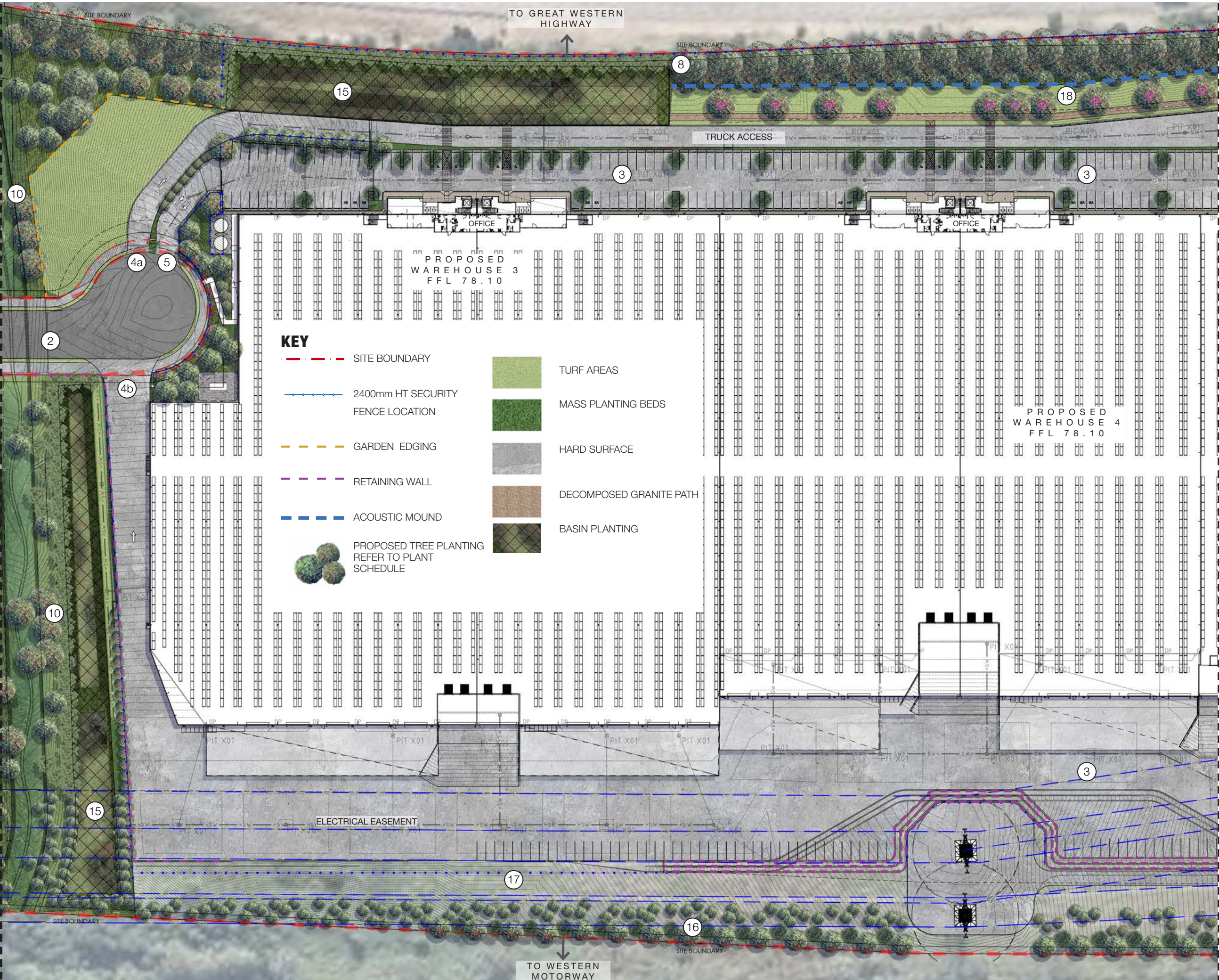


HABIT8
Landscape Architecture & Urbanism
SYDNEY (Gadigal country) BYRON BAY (Bundjalung country)
MELBOURNE (Wurundjeri country) SE QUEENSLAND (Yugambah country)
www.habit8.com.au

LANDSCAPE PLAN 02

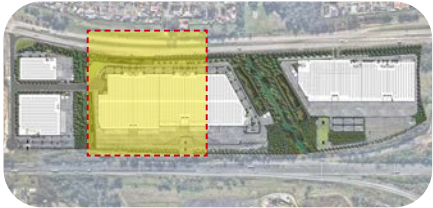
90-7 SNIOJ

ELECTRICAL EASEMENT



80-7 SNIOJ

ISSUE	DATE	PURPOSE
A	12.08.22	CLIENT REVIEW
B	09.06.23	CLIENT REVIEW
C	28.06.23	CLIENT REVIEW
D	07.07.23	CLIENT REVIEW
E	07.07.23	CLIENT REVIEW
F	13.07.23	CLIENT REVIEW
G	04.09.23	CLIENT REVIEW
H	05.09.23	CLIENT REVIEW
I	06.09.23	CLIENT REVIEW



KEYPLAN

CLIENT

LOGOS

PROJECT

HUNTINGWOOD LOGISTICS ESTATE
AUGUSTA ST. HUNTINGWOOD EAST, NSW

DRAWING TITLE

LANDSCAPE PLAN 02



SCALE

1:1000 @ A3

DRAWN

CHECKED

DG / KM

DV

PROJECT NO.

DRAWING NO.

REVISION

H8-22032

L011

F

LANDSCAPE ARCHITECT



LANDSCAPE PLAN 03



ISSUE	DATE	PURPOSE
A	12.08.22	CLIENT REVIEW
B	09.06.23	CLIENT REVIEW
C	28.06.23	CLIENT REVIEW
D	07.07.23	CLIENT REVIEW
E	07.07.23	CLIENT REVIEW
F	13.07.23	CLIENT REVIEW
G	04.09.23	CLIENT REVIEW
I	05.09.23	CLIENT REVIEW
	06.09.23	CLIENT REVIEW



KEYPLAN

LOGOS

CLIENT
HUNTINGWOOD LOGISTICS ESTATE
AUGUSTA ST. HUNTINGWOOD EAST, NSW

DRAWING TITLE
LANDSCAPE PLAN 03

SCALE		
1:1000 @ A3		
DRAWN	CHECKED	
DG / KM	DV	
PROJECT NO.	DRAWING NO.	REVISION
H8-22032	L012	F
LANDSCAPE ARCHITECT		



LANDSCAPE PLAN 04



ISSUE	DATE	PURPOSE
A	12.08.22	CLIENT REVIEW
B	09.06.23	CLIENT REVIEW
C	28.06.23	CLIENT REVIEW
D	07.07.23	CLIENT REVIEW
E	07.07.23	CLIENT REVIEW
F	13.07.23	CLIENT REVIEW
G	04.09.23	CLIENT REVIEW
H	05.09.23	CLIENT REVIEW
I	06.09.23	CLIENT REVIEW



KEYPLAN

CLIENT

LOGOS

PROJECT

HUNTINGWOOD LOGISTICS ESTATE
AUGUSTA ST. HUNTINGWOOD EAST, NSW

DRAWING TITLE

LANDSCAPE PLAN 04



SCALE

1:1000 @ A3

DRAWN

CHECKED

DG / KM

DV

PROJECT NO.

DRAWING NO.

REVISION

H8-22032

L013

F

LANDSCAPE ARCHITECT

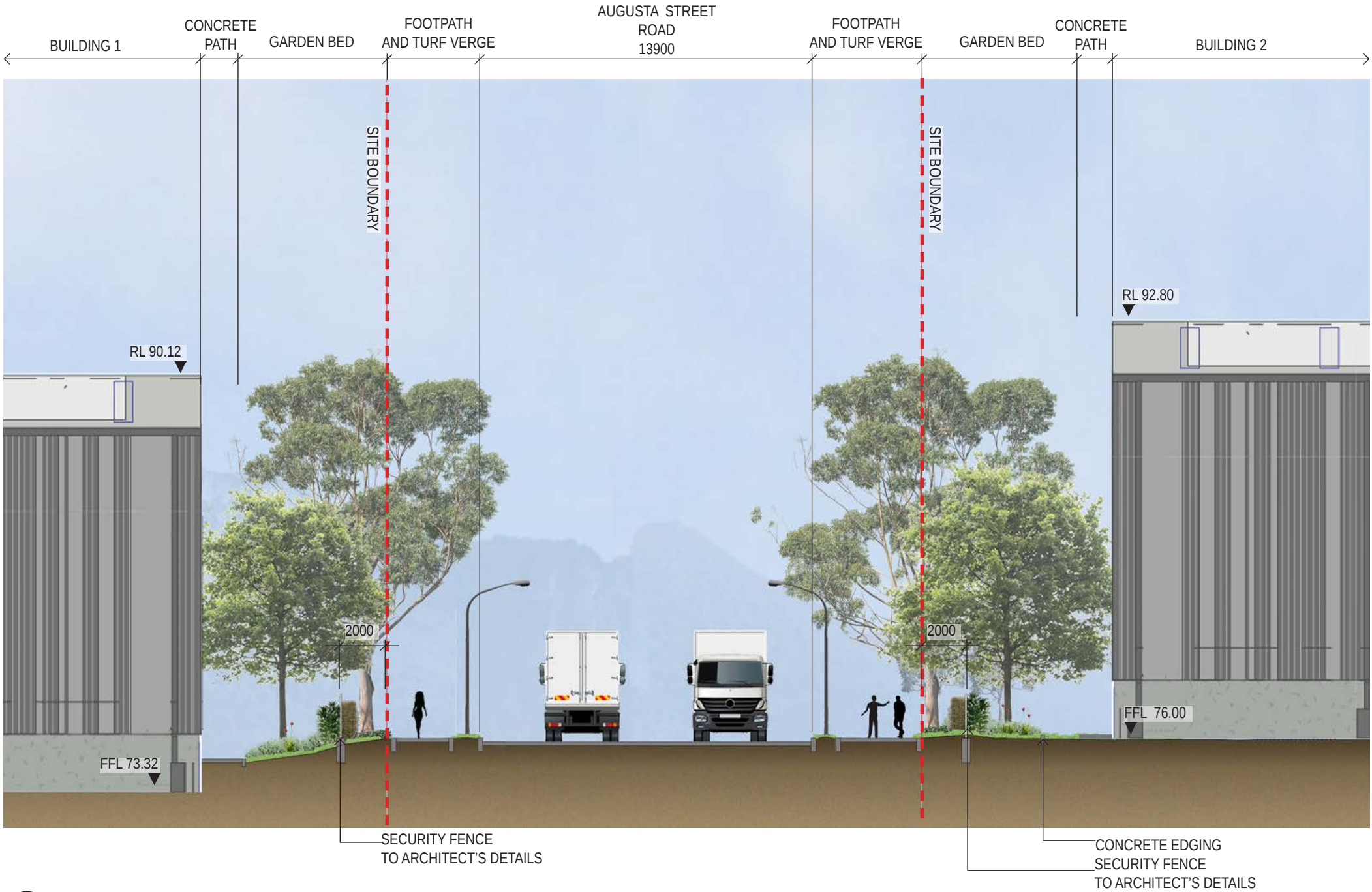


HABIT8
Landscape Architecture & Urbanism
SYDNEY (Gadigal country) BYRON BAY (Bundjalung country)
MELBOURNE (Wurundjeri country) SE QUEENSLAND (Yugambah country)
www.habit8.com.au

LANDSCAPE SECTION A-A



KEYPLAN



01 SECTION A-A
Scale 1:200@A3 / 1:100@A1

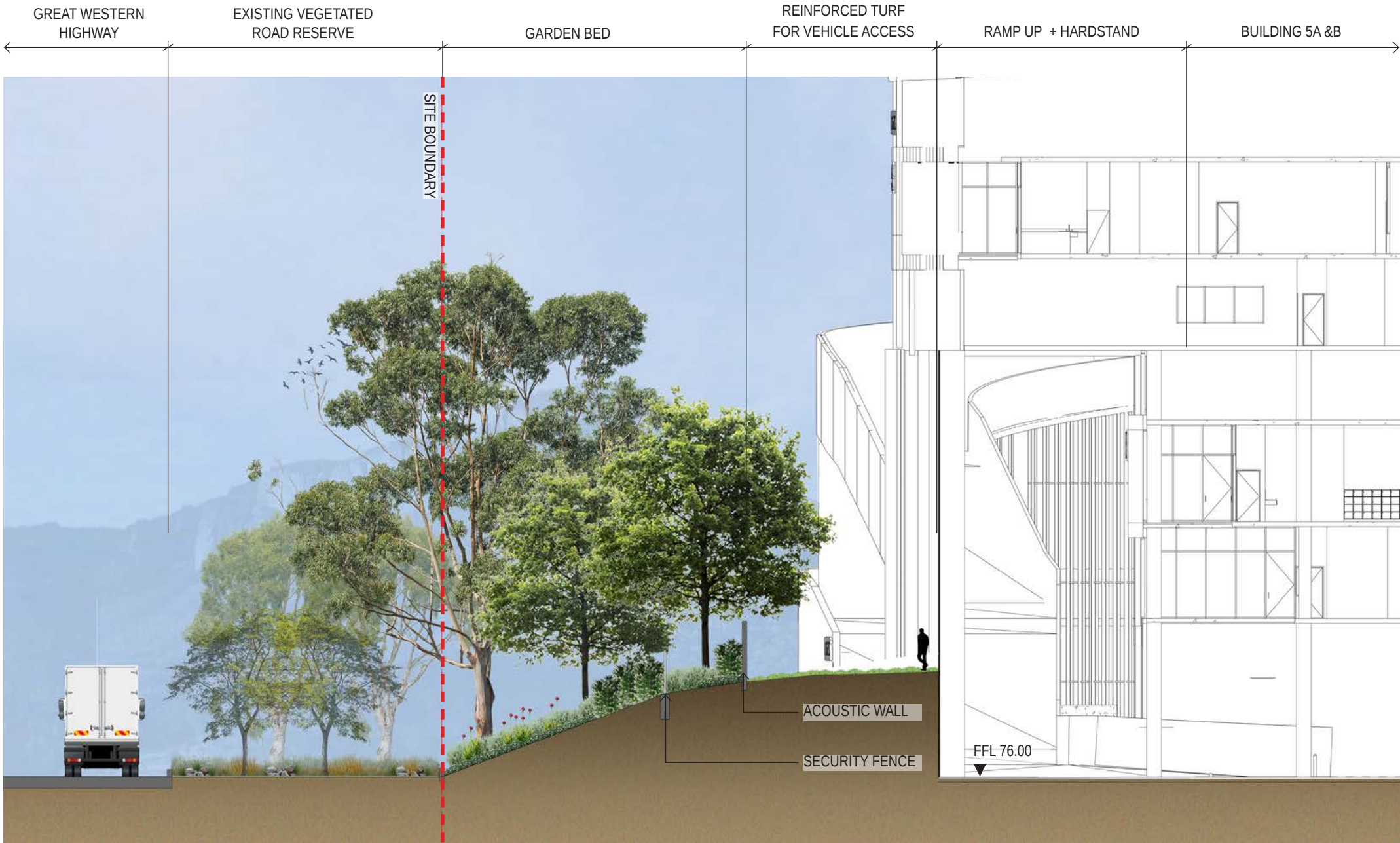
PROJECT	DRAWING TITLE	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE	CLIENT
HUNTINGWOOD LOGISTICS ESTATE AUGUSTA ST, HUNTINGWOOD EAST, NSW	LANDSCAPE SECTION A-A	H8-22032	CLIENT REVIEW	1:200 @A3	I	06.09.2023	DG	DV	L 14	LOGOS



LANDSCAPE SECTION B-B



KEYPLAN



01 SECTION B-B
Scale 1:200@A3 / 1:100@A1

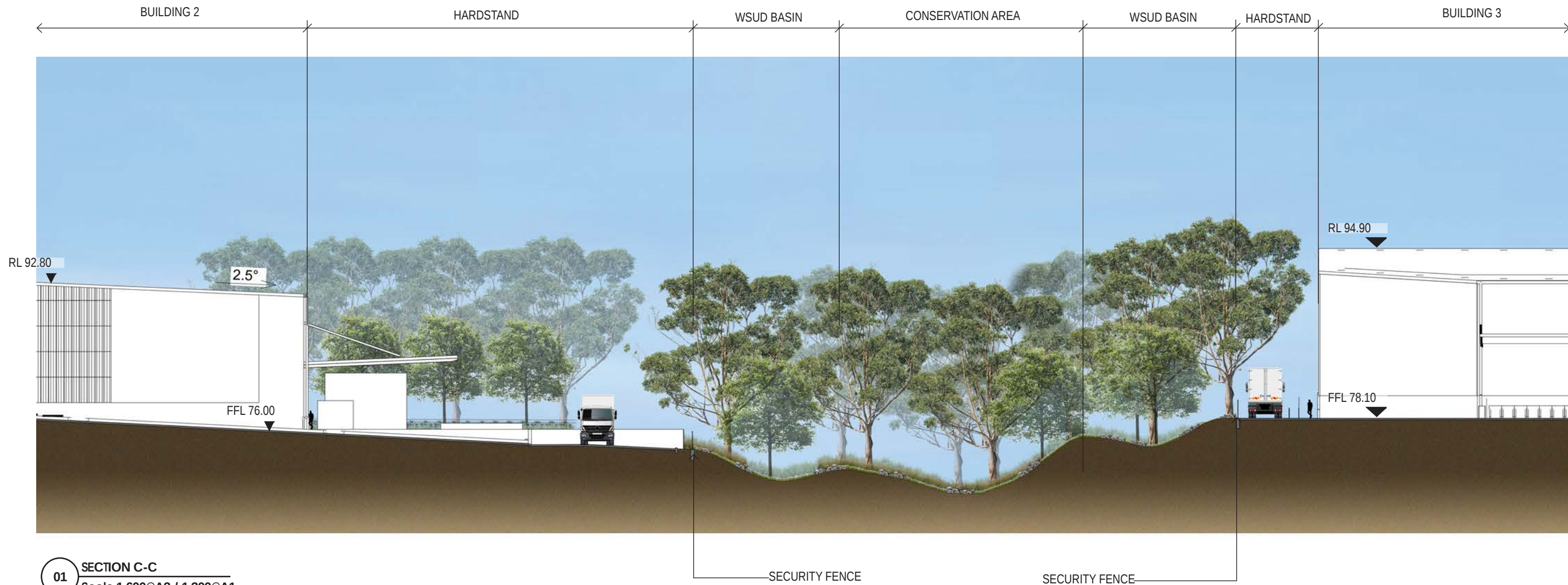
PROJECT	DRAWING TITLE	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE	CLIENT
HUNTINGWOOD LOGISTICS ESTATE AUGUSTA ST, HUNTINGWOOD EAST, NSW	LANDSCAPE SECTION B-B	H8-22032	CLIENT REVIEW	1:200 @A3	I	06.09.2023	DG	DV	L 15	LOGOS



LANDSCAPE SECTION C-C



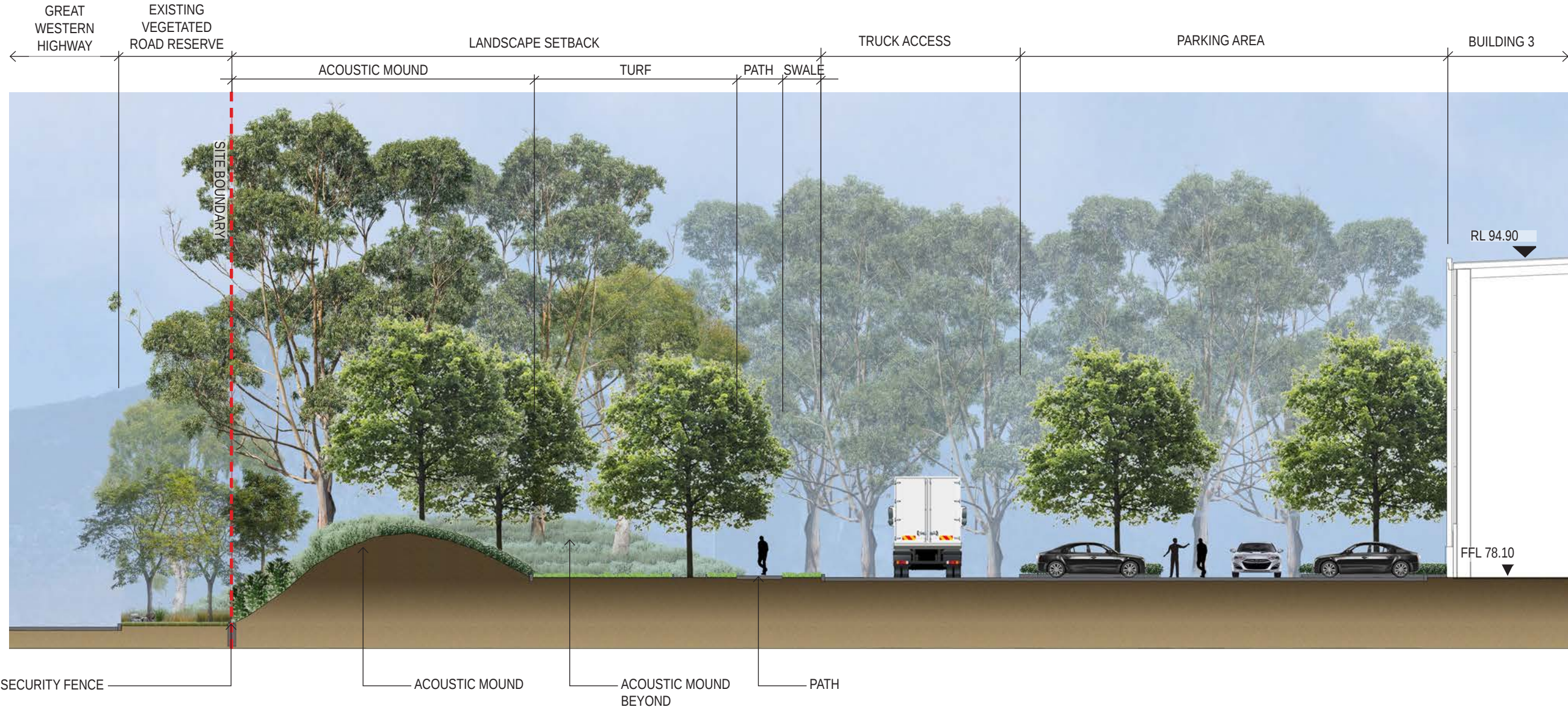
KEYPLAN



LANDSCAPE SECTION D-D



KEYPLAN

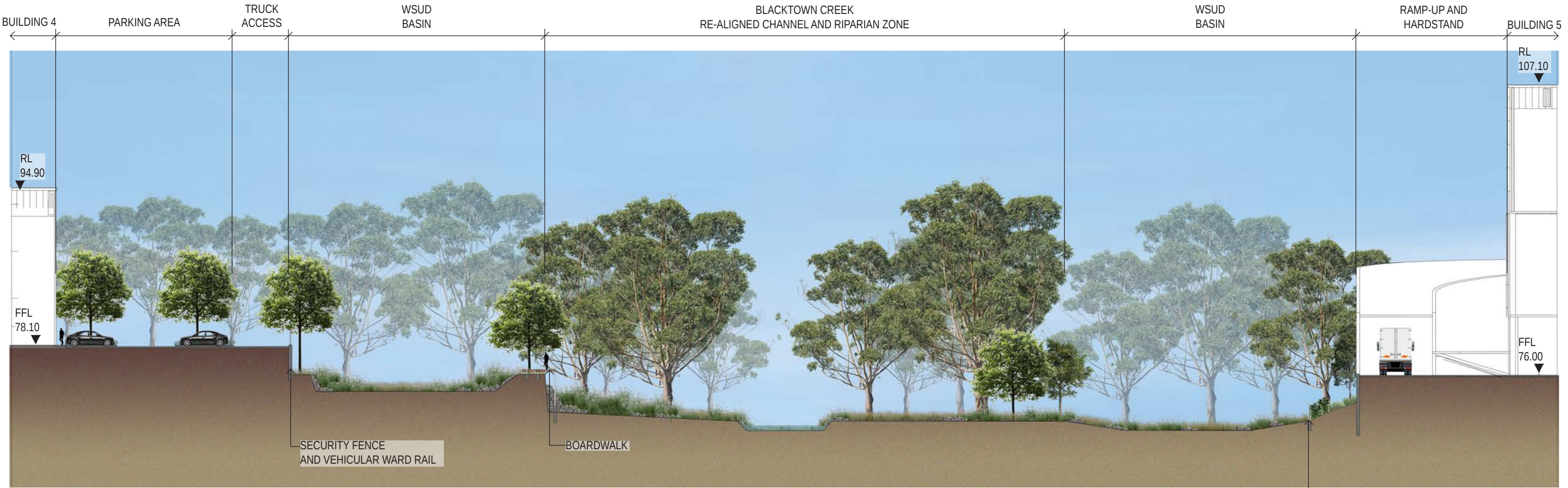


01 SECTION D-D
Scale 1:200@A3 / 1:100@A1

LANDSCAPE SECTION E-E



KEYPLAN



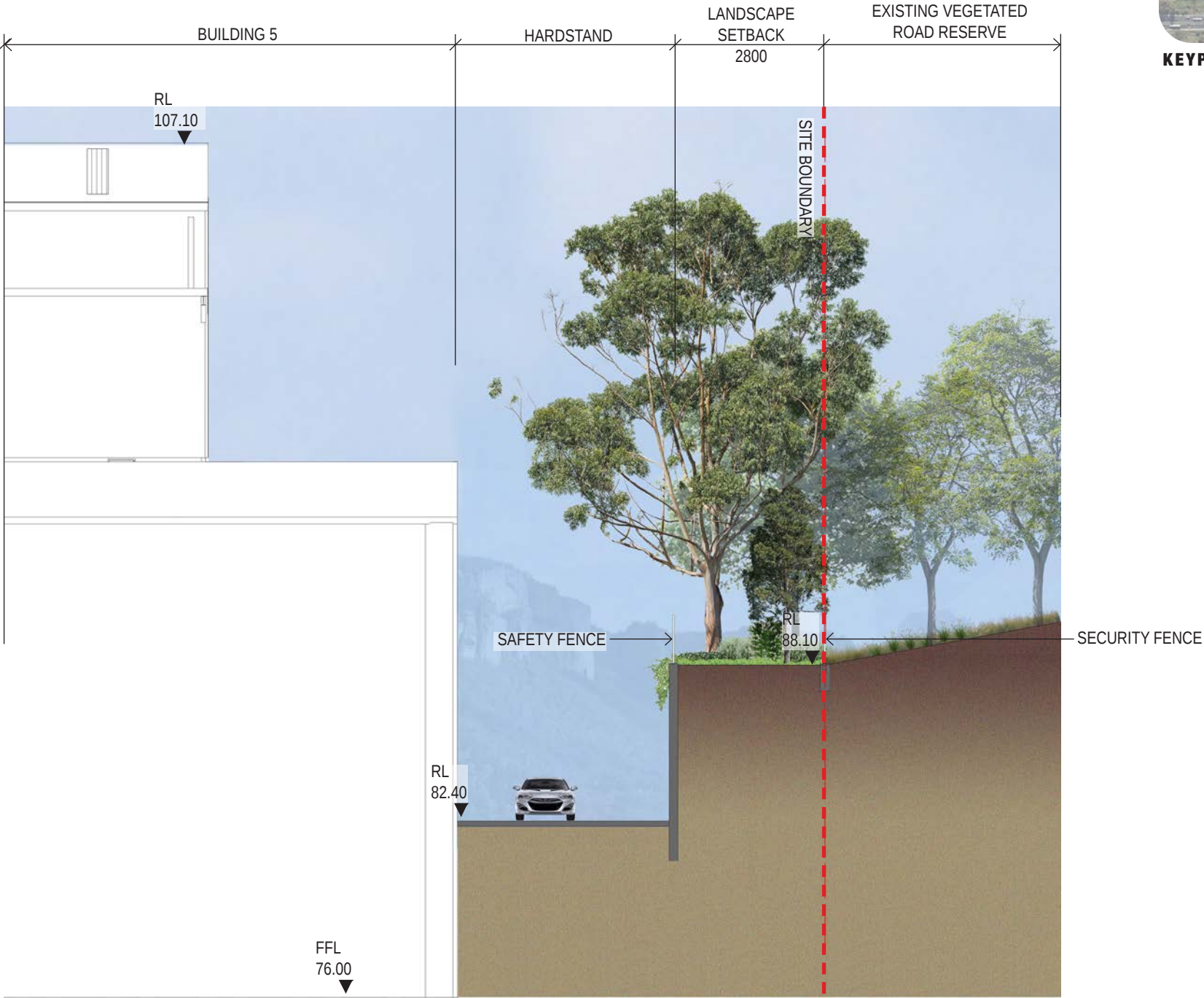
01 SECTION E-E
Scale 1:400@A3 / 1:200@A1

SECURITY FENCE

PROJECT	DRAWING TITLE	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE	CLIENT
HUNTINGWOOD LOGISTICS ESTATE AUGUSTA ST, HUNTINGWOOD EAST, NSW	LANDSCAPE SECTION E-E	H8-22032	CLIENT REVIEW	1:400 @A3	I	06.09.2023	DG	DV	L 18	LOGOS



LANDSCAPE SECTION F-F



KEYPLAN

01 SECTION F-F
Scale 1:200@A3 / 1:100@A1

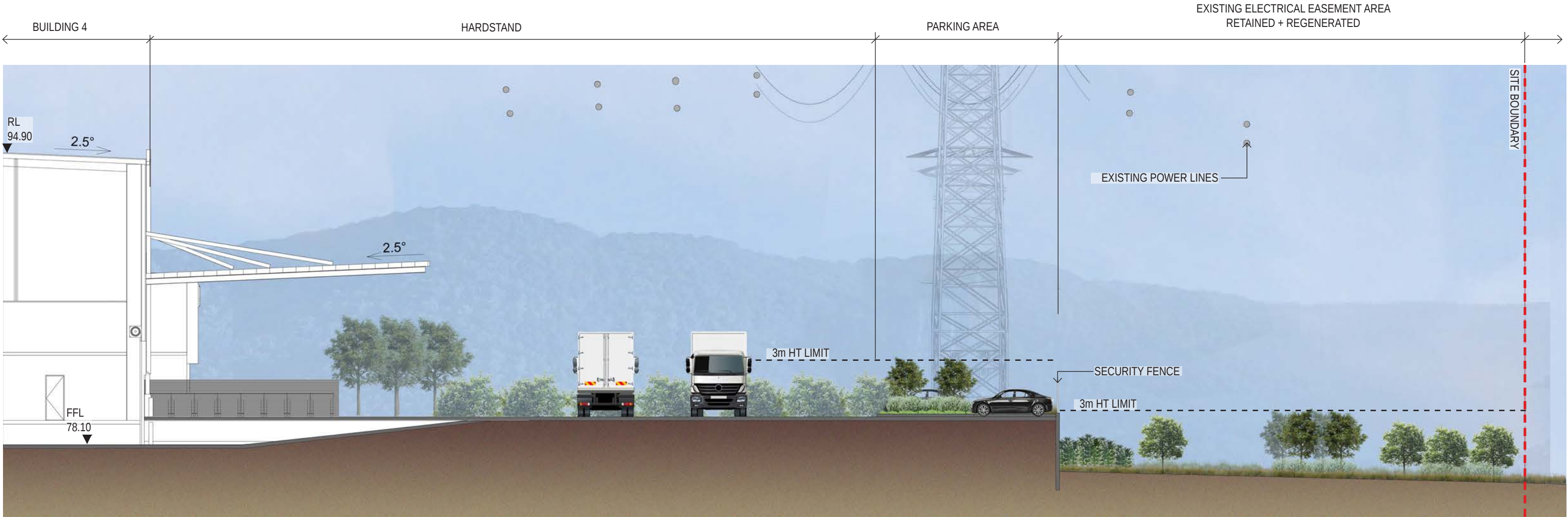
PROJECT	DRAWING TITLE	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE	CLIENT
HUNTINGWOOD LOGISTICS ESTATE AUGUSTA ST, HUNTINGWOOD EAST, NSW	LANDSCAPE SECTION F-F	H8-22032	CLIENT REVIEW	1:200 @A3	I	06.09.2023	DG	DV	L 19	LOGOS



LANDSCAPE SECTION G-G



KEYPLAN

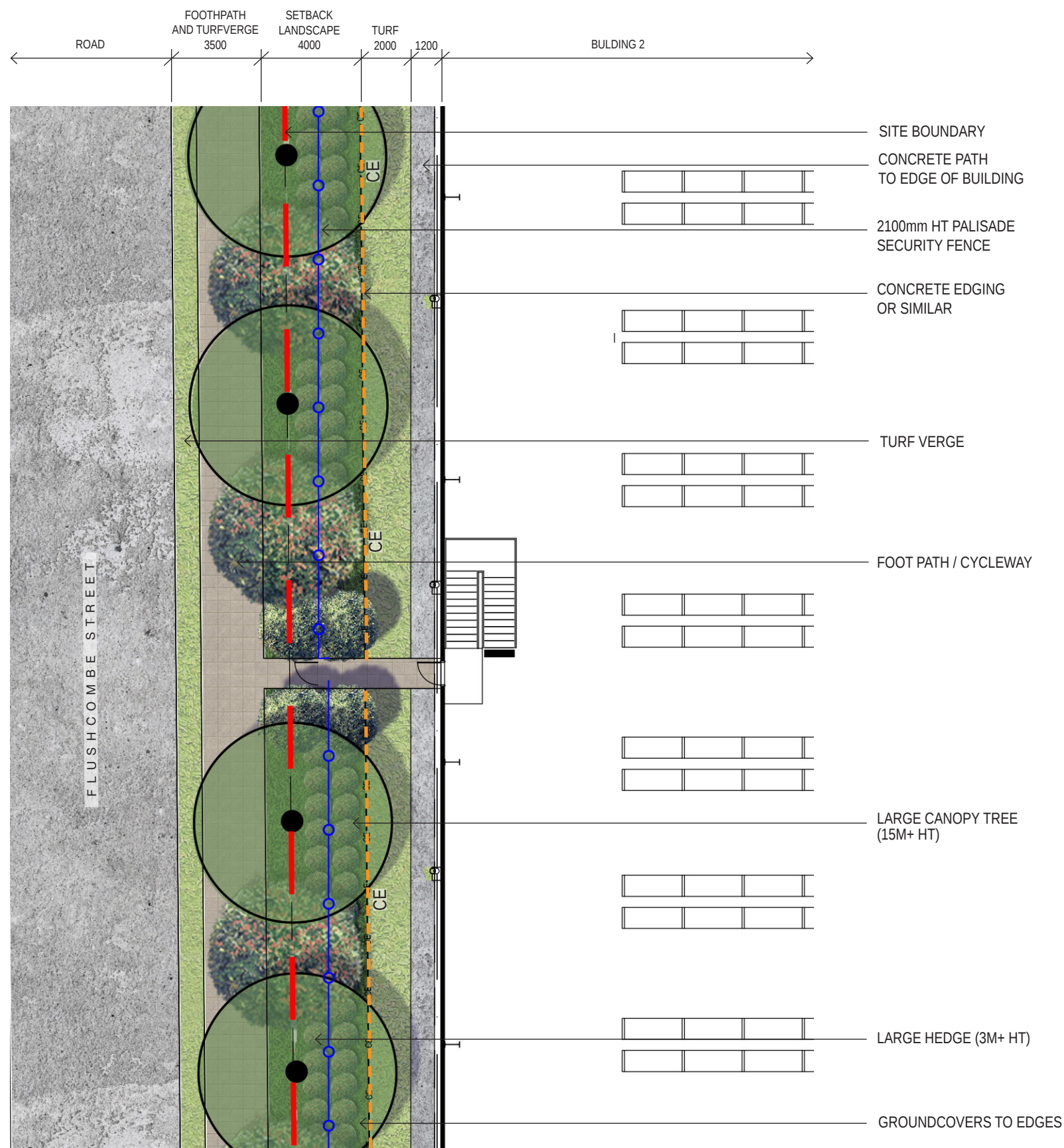


01 SECTION G-G
Scale 1:200@A3 / 1:100@A1

PROJECT	DRAWING TITLE	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE	CLIENT
HUNTINGWOOD LOGISTICS ESTATE AUGUSTA ST, HUNTINGWOOD EAST, NSW	LANDSCAPE SECTION G-G	H8-22032	CLIENT REVIEW	1:200 @A3	I	06.09.2023	DG	DV	L 20	LOGOS



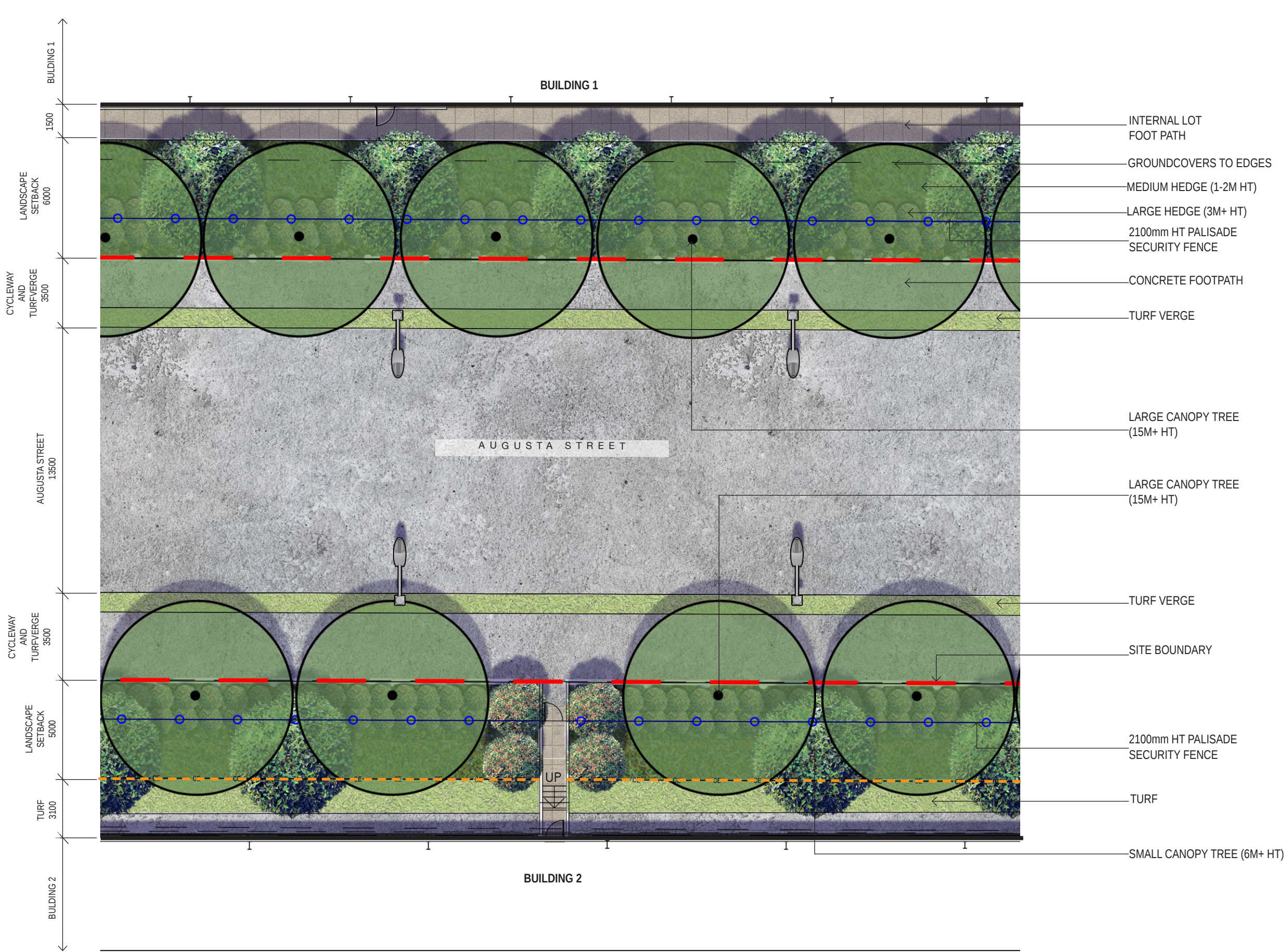
DETAIL CONCEPT PLAN 01



KEYPLAN

01 DETAIL CONCEPT PLAN 01
Scale 1:200@A3 / 1:100@A1

DETAIL CONCEPT PLAN 02



KEYPLAN

01 DETAIL CONCEPT PLAN 02
Scale 1:200@A3 / 1:100@A1



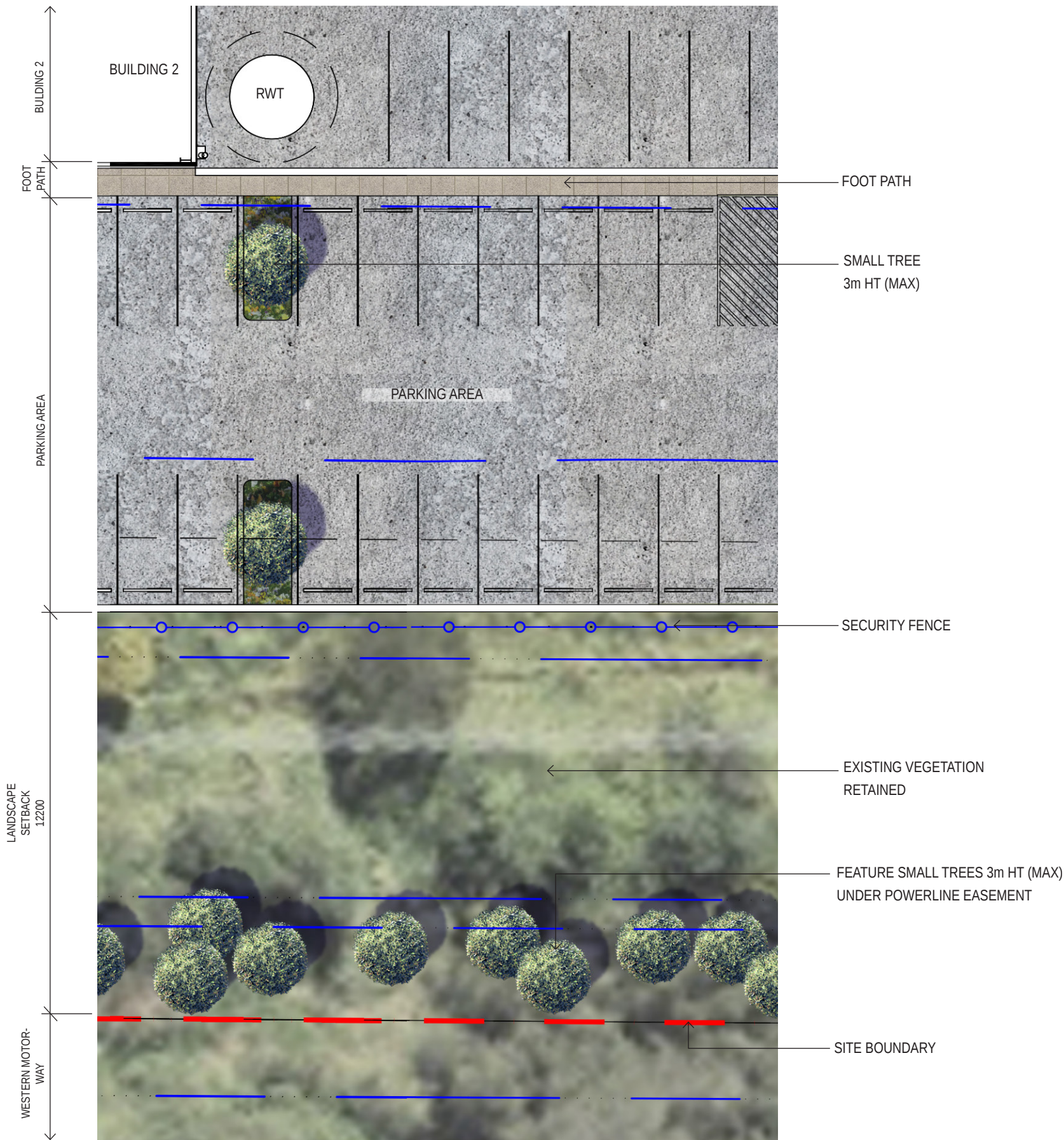
- LARGE HEDGE
(3M+ HT)
- SITE BOUNDARY
- LARGE CANOPY TREE
@10m OC (15M HT)
- MEDIUM HEDGE
(1-2M HT)
- SMALL SHADE TREES
(6M+ HT)
- SCREENING TREES
(5M+ HT)
- CONCRETE EDGING
- GROUNDCOVERS TO EDGE
REFER TO PLANT SCHEDULE
- FEATURE SHADE TREES
(8M+ HT)
- DECOMPOSED GRANITE PATI
- LANDSCAPE SWALE (SEDGES)
- CARPARK SHADE TREES
(4M+ HT)

DETAIL CONCEPT PLAN 03
Scale 1:200@A3 / 1:100@A1

SCALE 1:200 AT A3



DETAIL CONCEPT PLAN 04



KEYPLAN

01 DETAIL CONCEPT PLAN 05
Scale 1:200@A3 / 1:100@A1

PLANT SCHEDULES 01

PLANT SCHEDULE: ENTRY FEATURE PLANTING			
CODE	BOTANICAL NAME	POT SIZE	DENSITY
	TREES		
BUC CEL	<i>Buckinghamia celsissima</i>	100L	As Shown
CUP ANA	<i>Cupaniopsis anacardiodes</i>	100L	As Shown
FLIN AUS	<i>Flindersia australis</i>	100L	As Shown
GLO FER	<i>Glochidion ferdinandi</i>	100L	As Shown
LOP CON	<i>Lophostemon confertus</i>	100L	As Shown
WAT FLO	<i>Waterhousea floribunda</i>	100L	As Shown
BRA ACE	<i>Brachychiton acerifolia</i>	100L	As Shown
BRA POP	<i>Brachychiton populneus</i>	100L	As Shown
FRA GRA	<i>Fraxinus graffithii</i>	100L	As Shown
MAG EXM	<i>Magnolia ‘Exmouth’</i>	100L	As Shown
LAG IND	<i>Lagerstroemia indica ‘Biloxi’</i>	100L	As Shown
PRU CER	<i>Prunus cerasifera ‘Nigra’</i>	100L	As Shown
PYR CAL	<i>Pyrus calleryana ‘Chanticleer’</i>	100L	As Shown
TRI LAU	<i>Tristaniopsis lauria</i>	100L	As Shown
	SHRUBS		
PIT REV	<i>Pittosporum revolutum</i>	200mm	2/m²
ACM SMI	<i>Acmena smithii</i>	200mm	2/m²
BAN SPI	<i>Banksia spinulosa</i>	200mm	2/m²
CAL LIN	<i>Callistemon linearis</i>	200mm	2/m²
CAL SAL	<i>Callistemon salignus</i>	200mm	2/m²
DOD VIS	<i>Dodonaea viscosa</i>	200mm	2/m²
	GROUNDCOVERS		
DIA REV	<i>Dianella revoluta</i>	150mm	4/m²
HAR VIO	<i>Hardenbergia violacea</i>	150mm	4/m²
LOM MUL	<i>Lomandra multiflora</i>	150mm	4/m²
POA LAB	<i>Poa labillardierei</i>	150mm	4/m²
TRA JAS	<i>Trachelospermum jasminoides</i>	150mm	4/m²
MYO PAR	<i>Myoporum parvifolium</i>	150mm	4/m²
CAR GLA	<i>Carpobrotus glaucescens</i>	150mm	4/m²

PLANT SCHEDULE: SET BACK PLANTING			
CODE	BOTANICAL NAME	POT SIZE	DENSITY
	TREES		
ACA PAR	<i>Acacia parramattensis</i>	100L	As Shown
ANG FLO	<i>Angophora floribunda</i>	100L	As Shown
CAS CUN	<i>Casuarina cunninghamiana</i>	100L	As Shown
COR MAC	<i>Corymbia maculata</i>	100L	As Shown
EUC AMP	<i>Eucalyptus amplifolia</i>	100L	As Shown
EUC CRE	<i>Eucalyptus crebra</i>	100L	As Shown
EUC MOL	<i>Eucalyptus moluccana</i>	100L	As Shown
EUC TER	<i>Eucalyptus tereticornis</i>	100L	As Shown
MEL DEC	<i>Melaleuca decora</i>	100L	As Shown
CUP ANA	<i>Cupaniopsis anacardiodes</i>	100L	As Shown
	SHRUBS		
HAK SER	<i>Hakea sericea</i>	200mm	2/m²
HIB HET	<i>Hibiscus heterophyllus</i>	200mm	2/m²
KUN AMB	<i>Kunzea ambigua</i>	200mm	2/m²
PIT REV	<i>Pittosporum revolutum</i>	200mm	2/m²
ACM SMI	<i>Acmena smithii</i>	200mm	2/m²
BAN SPI	<i>Banksia spinulosa</i>	200mm	2/m²
CAL LIN	<i>Callistemon linearis</i>	200mm	2/m²
CAL SAL	<i>Callistemon salignus</i>	200mm	2/m²
DOD VIS	<i>Dodonaea viscosa</i>	200mm	2/m²
DIL SIE	<i>Dillwynia sieberi</i>	200mm	2/m²
	GROUNDCOVERS		
DIA REV	<i>Dianella revoluta</i>	150mm	4/m²
HAR VIO	<i>Hardenbergia violacea</i>	150mm	4/m²
LOM FIL	<i>Lomandra filiformis</i>	150mm	4/m²
LOM LON	<i>Lomandra longifolia</i>	150mm	4/m²
POA LAB	<i>Poa labillardierei</i>	150mm	4/m²
TRA JAS	<i>Trachelospermum jasminoides</i>	150mm	4/m²
MYO PAR	<i>Myoporum parvifolium</i>	150mm	4/m²
CAR GLA	<i>Carpobrotus glaucescens</i>	150mm	4/m²

PLANT SCHEDULE: CARPARK AND OFFICE PLANTING			
CODE	BOTANICAL NAME	POT SIZE	DENSITY
	TREES		
ANG FLO	<i>Angophora floribunda</i>	100L	As Shown
COR MAC	<i>Corymbia maculata</i>	100L	As Shown
MEL DEC	<i>Melaleuca decora</i>	100L	As Shown
CUP ANA	<i>Cupaniopsis anacardiodes</i>	100L	As Shown
WAT FLO	<i>Waterhousea floribunda</i>	100L	As Shown
MAG EXM	<i>Magnolia ‘Exmouth’</i>	100L	As Shown
PYR CAL	<i>Pyrus calleryana ‘Chanticleer’</i>	100L	As Shown
TRI LAU	<i>Tristaniopsis lauria</i>	100L	As Shown
	SHRUBS		
PIT REV	<i>Pittosporum revolutum</i>	200mm	2/m²
ACM SMI	<i>Acmena smithii</i>	200mm	2/m²
BAN SPI	<i>Banksia spinulosa</i>	200mm	2/m²
CAL LIN	<i>Callistemon linearis</i>	200mm	2/m²
CAL SAL	<i>Callistemon salignus</i>	200mm	2/m²
DOD VIS	<i>Dodonaea viscosa</i>	200mm	2/m²
	GROUNDCOVERS		
DIA REV	<i>Dianella revoluta</i>	150mm	4/m²
HAR VIO	<i>Hardenbergia violacea</i>	150mm	4/m²
POA LAB	<i>Poa labillardierei</i>	150mm	4/m²
TRA JAS	<i>Trachelospermum jasminoides</i>	150mm	4/m²
MYO PAR	<i>Myoporum parvifolium</i>	150mm	4/m²
CAR GLA	<i>Carpobrotus glaucescens</i>	150mm	4/m²

NOTE:
Plant list sourced from Blacktown Vegetation Management Plan

PLANT SCHEDULES 02

PLANT SCHEDULE: CONSERVATION AREAS

CODE	BOTANICAL NAME	POT SIZE	DENSITY
	TREES		
ANG FLO	Angophora floribunda	100L	As Shown
CAS GLA	Casuarina glauca	100L	As Shown
EUC AMP	Eucalyptus amplifolia	100L	As Shown
EUC CRE	Eucalyptus crebra	100L	As Shown
EUC MOL	Eucalyptus moluccana	100L	As Shown
EUC TER	Eucalyptus tereticornis	100L	As Shown
ACA BIN	Acacia binervia	100L	As Shown
ACA IMP	Acacia implexa	100L	As Shown
BRA POP	Brachychiton populneum	100L	As Shown
MEL DEC	Melaleuca decora	100L	As Shown
MEL LIN	Melaleuca linariifolia	100L	As Shown
MEL STY	Melaleuca styphelioides	100L	As Shown
	SHRUBS		
ACA FAL	Acacia falcata	200mm	2/m²
BUR SPI	Bursaria spinosa	200mm	2/m²
CAL LIN	Callistemon linearis	200mm	2/m²
DAV ACI	Daviesia acicularis	200mm	2/m²
DAC ULI	Daviesia ulicifolia	200mm	2/m²
DOD VIS	Dodonaea viscosa subsp. cuneata	200mm	2/m²
GRE JUN	Grevillea juniperina subsp. juniperina	200mm	2/m²
HAK SER	Hakea sericea	200mm	2/m²
IND AUS	Indigofera australis	200mm	2/m²
MEL ERU	Melaleuca erubescens	200mm	2/m²
MEL NOD	Melaleuca nodosa	200mm	2/m²
MEL THY	Melaleuca thymifolia	200mm	2/m²
MYO MON	Myoporum montanum	200mm	2/m²
OLE VIS	Olearia viscidula	200mm	2/m²
OZO DIO	Ozothamnus diosmifolius	200mm	2/m²
SAN PLU	Sannantha pluriflora	200mm	2/m²
	CLIMBERS AND SCRAMBLERS		
CLE GLY	Clematis glycinoides	150mm	4/m²
CON ERU	Convolvulus erubescens	150mm	4/m²
HAR VIO	Hardenbergia violacea	150mm	4/m²
PAN PAN	Pandorea pandorana	150mm	4/m²
POL CAL	Polymeria calycina	150mm	4/m²
STE JAP	Stephania japonica	150mm	4/m²
	GROUNDCOVER		
AJU AUS	Ajuga australis	150mm	4/m²
ATR SEM	Atriplex semibaccata	150mm	4/m²

CODE	BOTANICAL NAME	POT SIZE	DENSITY
BRU AUS	Brunoniella australis	150mm	4/m²
CAL CUN	Calotis cuneifolia	150mm	4/m²
CAL LAP	Calotis lappulacea	150mm	4/m²
CHR API	Chrysocephalum apiculatum	150mm	4/m²
DIA LON	Dianella longifolia	150mm	4/m²
DIA REV	Dianella revoluta	150mm	4/m²
DIC REP	Dichondra repens	150mm	4/m²
EIN HAS	Einadia hastata	150mm	4/m²
EIN NUT	Einadia nutans	150mm	4/m²
ERE DEB	Eremophila debilis	150mm	4/m²
GOO HED	Goodenia hederacea	150mm	4/m²
HIB DIF	Hibbertia diffusa	150mm	4/m²
LAM GRA	Laxmannia gracilis	150mm	4/m²
LOM FIL	Lomandra filiformis	150mm	4/m²
LOM LON	Lomandra longifolia	150mm	4/m²
LOM MUL	Lomandra multiflora	150mm	4/m²
MEN SAT	Mentha satureoides	150mm	4/m²
SCA ALB	Scaevola albida	150mm	4/m²
TRI ELA	Tricoryne elatior	150mm	4/m²
VER PLE	Veronica plebeia	150mm	4/m²
VIO HED	Viola hederacea	150mm	4/m²
WAH COM	Wahlenbergia communis	150mm	4/m²
	GRASSES, SEDGES, RUSHES		
AUS RAM	Austrostipa ramosissima	TUBESTOCK	4/m²
CAR APP	Carex appressa – also wetland	TUBESTOCK	4/m²
CHL TRU	Chloris truncata	TUBESTOCK	4/m²
CHL VEN	Chloris ventricosa	TUBESTOCK	4/m²
CYM REF	Cymbopogon refractus	TUBESTOCK	4/m²
ELE ACU	Eleocharis acuta – also wetland	TUBESTOCK	4/m²
JUN USI	Juncus usitatus – also wetland	TUBESTOCK	4/m²
MIC STI	Microlaena stipoides	TUBESTOCK	4/m²
PHR AUS	Phragmites australis – also wetland	TUBESTOCK	4/m²
RYT FUL	Rytidosperma fulvum	TUBESTOCK	4/m²
SCH VAL	Schoenoplectus validus	TUBESTOCK	4/m²
THE TRI	Themeda triandra	TUBESTOCK	4/m²
	WETLAND PLANTS		
ALI PLA	Alisma plantago-aquatica	TUBESTOCK	4/m²
ALT DEN	Alternanthera denticulata	TUBESTOCK	4/m²
LIP EXA	Liparophyllum exaltatum	TUBESTOCK	4/m²
TYP DOM	Typha domingensis	TUBESTOCK	4/m²



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.

MAITENANCE PERIOD: (26 Weeks) - Confirm with Project Manager

IRRIGATION PERFORMANCE SPECIFICATION NOTES
IRRIGATION OVERVIEW - Confirm with Project Manager at tender stage

EXTENT (Setback and Carpark Landscape 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
HUNTINGWOOD LOGISTICS ESTATE AUGUSTA ST, HUNTINGWOOD EAST, NSW	TYPICAL SPECIFICATION + MAINTENANCE NOTES	H8-22032	CLIENT REVIEW	NTS	I	06.09.2023	DG	DV	L 27	

LOGOS

