

<u>ARCADIA</u>

Issue C
Date: September 2020
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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.

DOCUMENT

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Analysis

Local Context Microclimate - Prevailing Wind Microclimate - Sun & Shade Site Considerations Demographics Social & Spatial Experiences

Concept

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Local Context

Hurstville is a suburb south of Sydney, New South Wales, Australia. It is approximately 16 kilometres from the Sydney CBD and is the central business district of the St George area.

The Georges River Council acknowledges that Biddegal/Bidjigal/Bedegal people of the Eora Nation as the original inhabitants and custodians of all land and water in the Georges River region.

The name Hurstville is derived from the English 'hurst', meaning 'a wooded eminence', and 'ville', meaning 'town'.

Site Character

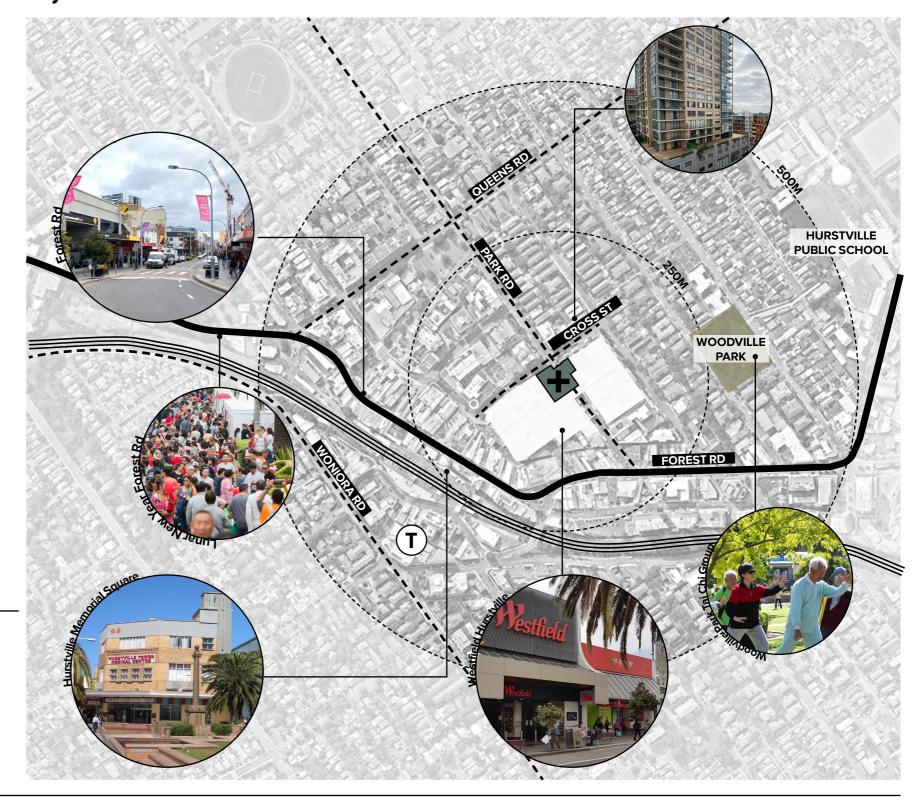
Hurstville is considered to be the commercial hub of the St George Region, influenced significantly by the prevalence of Chinese ancestry on the community.

It is characterised by its multiethnic community and a multitude of commercial buildings and high-rise residential buildings dominating the skyline.

The commercial area is centred on the main street, Forest Road, on the northern side of Hurstville Railway station. Forest Road is the main shopping street which features branches of many retail shops as well as numerous banks and other financial institutions. The commercial developments also extend to surrounding streets concentrated from Queens Road to The Avenue and on the southern side of Hurstville Railway station, around Ormonde Parade.

Forest Road is renowned for its Asian cuisine, and is a major site for the celebration of Lunar New Year.

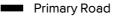
Key Local Sites

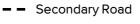


Legend



Project Site







Hurstville train station

Microclimate



Prevailing Wind

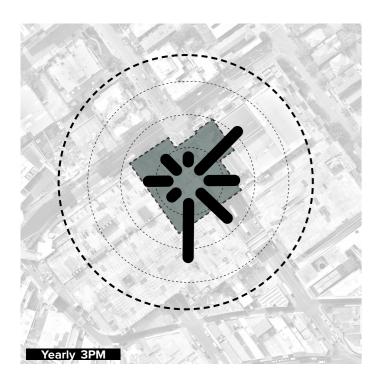
In average November is the windiest month, whilst March is the calmest. The prevailing wind annually is northeasterly. Southerly winds are common from November to the end of February.

Buildings to the north-east as well as south-east protect the new entertainment and leisure precinct from winds especially in the afternoons.

The high-rise at Cross Street overlooking the site may block some of the prevailing winds from the north-west.

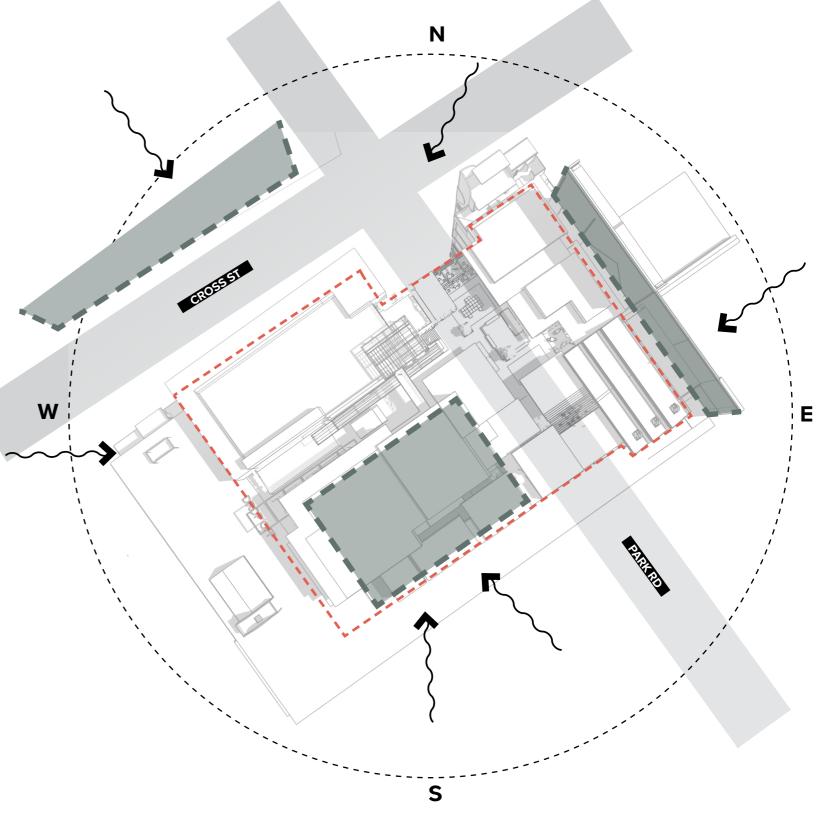
Scope of works

Site Boundary



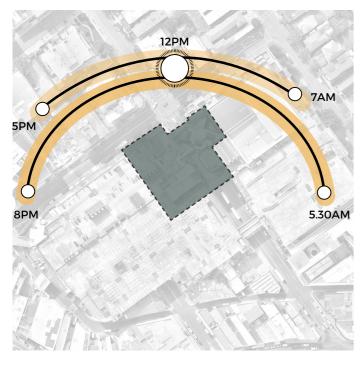
Source of information: www.bom.gov.au





Legend

Microclimate



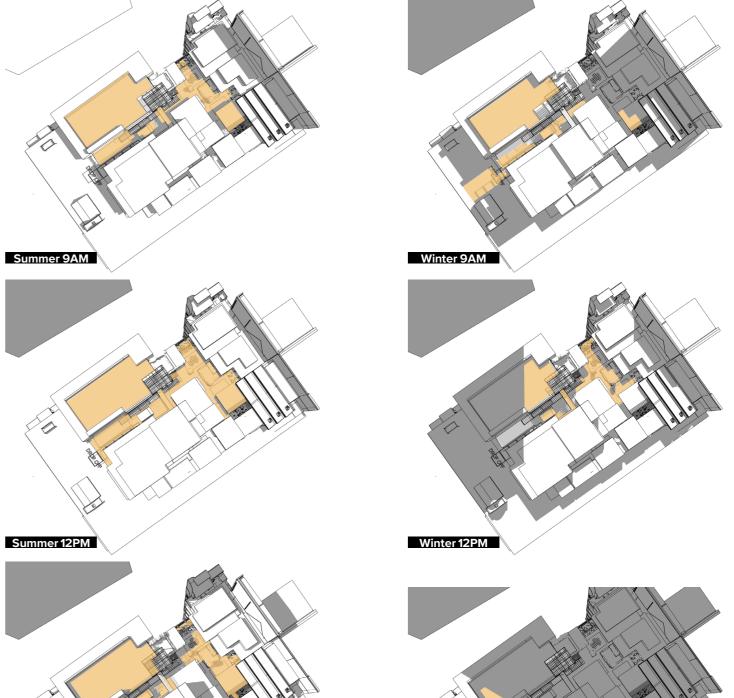
Sun & Shade

The site shows high sun exposure during the summer months throughout the day.

The high-rise at Cross Street overlooking the site may overshadows the new entertainment and leisure precinct especially during the winter months after 12PM.

The most sun exposed part of site throughout the year is the Community Activity Zone as well as the central part of The Courtyard space.

The most shaded parts of site throughout the year will be the Arrival Lane and Laneway which will only recieve partial sun throughout the day.



Legend



Scope of works

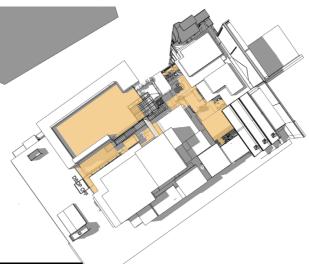


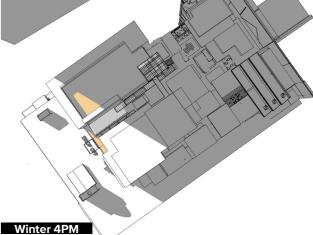
Solar path / Summer



Solar path / Winter

Sun exposed areas





Date

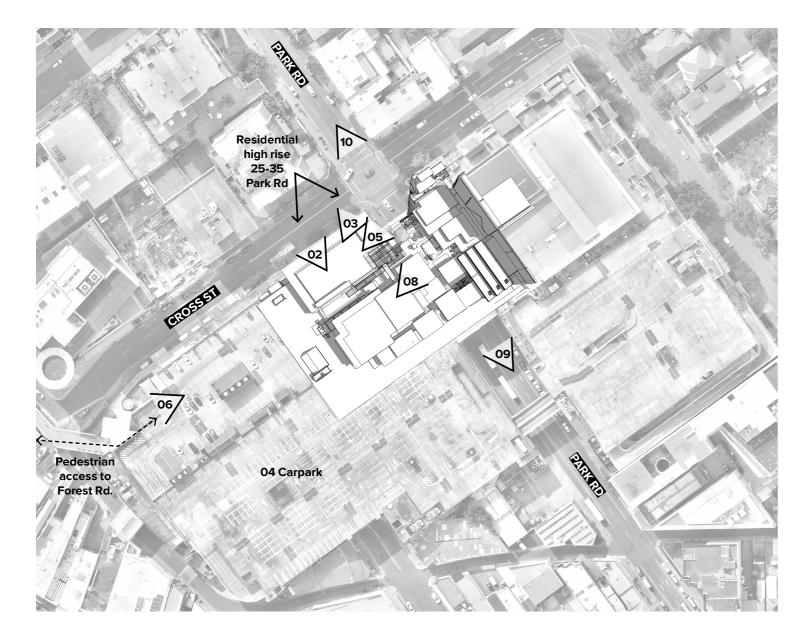
Issue

Site Considerations

Site considerations that require attention include the strong presence of services and ducting infrastructure which offer a challenge in terms of their scale and noise. Adjacent architecture across Crosss Street gain passive views into site, while they are the primary view from the rooftop level.

Screening may be necessary to focus views back into site and not towards this architectural feature. Currently, signage and legibility is minimal and future design interventions would benefit from clear singage.

The best views beyond the site are to the North East, where the CBD can be seen, a focal point that future interventions could focus attention toward.





01 Services/Ducting



02 Adjacent architecture



03 Distant CBD skyline views



04 Carpark



05 Services/Ducting



06 Access and circulation



07 Cross St



08 Existing entry



09 Park Road



10 Park Road



Westfield Hurstville ELP

Development Application

MORKIN PROGRA

ANALYSIS

Demographics

Population: 213,504

Age: 24% 25-39 yrs (51,240)
Households 27% Families with kids

Birthplace 31% Born in Asia

(compared to 19% in Sydney)



38



POPULATION **213,504**

HOUSEHOLD

27% FAMILIES

WITH KIDS UNDER 15

MEDIAN AGE

38

SYDNEY AVERAGE: 37

BIRTHPLACE

31% BORN IN ASIA

SYDNEY AVERAGE: 19%

DATA PROVIDED BY SCENTRE GROUP - FEB 2019

Creating Social & Spatial Experiences

Off The Street

Provide an oasis from the bustle of Hurstville's busy commercial streets to offer a unique set of entertainment and leisure options

People Space

create a place that priorities human interaction, safety and enjoyment to provide for Hurstville's diverse community

Safety

ensure that safety is observed throughout the site, including refuge from the elements and parent/child friendly areas

Discovery

of space that change throughout the day and seasonally to offer an exciting program that meets the needs of the community

Enclosure

Enclosure is important in creating a sense of character and perceived safety within space

Stylish

Create a place that reflects the urban grain of Hurstville and current design sensibilities in material and form

Experiential

Stimulate the senses through form, texture, sound and smell to create exciting spaces that people want to return to

Conscious & Non-Conscious Processing

"Our minds and bodies constantly, and at many levels engage in active and interactive, conscious and nonconscious processing of our internal and external environments."

Welcome to Your World: How the Built Environment Shapes Our Lives, by Sarah Williams Goldhagen

"Our responses to surfaces, consequently, are more likely to powerfully contribute to our holistic experience of place than our responses to forms."

Frank Lloyd Wright & Louis I. Kahn's Nature
Published on Mar 7, 2018
Understanding Nature through Architecture

"The experience of space is not a privilege of the gifted few, but a biological function."

László Moholy-Nagy













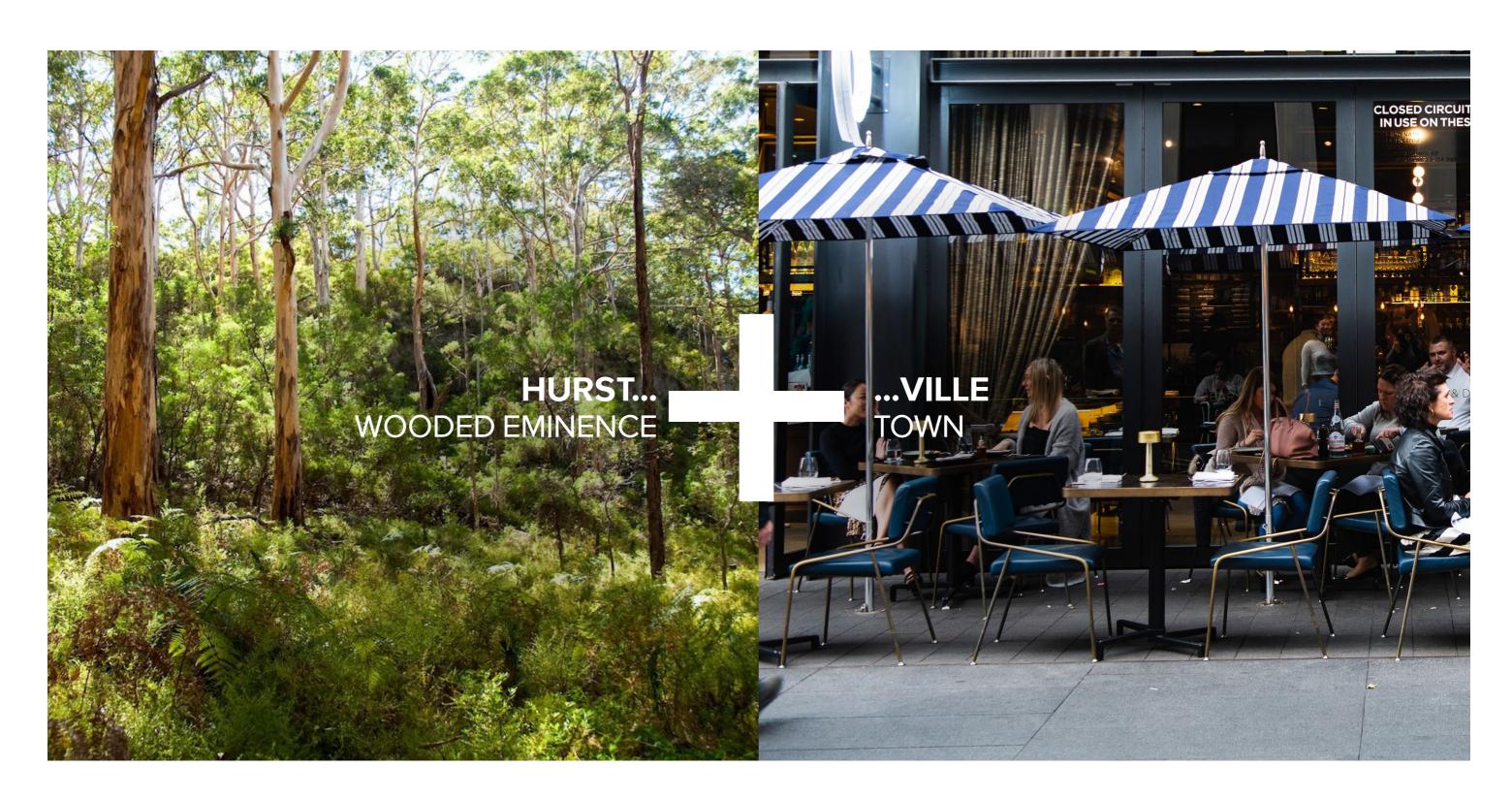






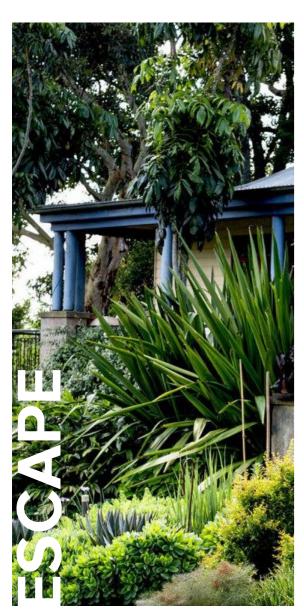


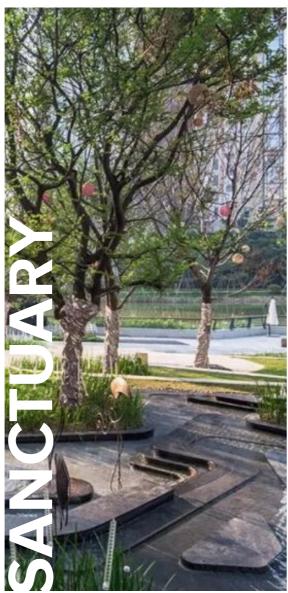
Vision



Westfield Hurstville ELP Development Application

Guiding Principles









To create an escape from the bustle of Hurstville's commercial centre, offering visitors a sanctuary that reflects a calm sophistication in its materiality and overall structure.

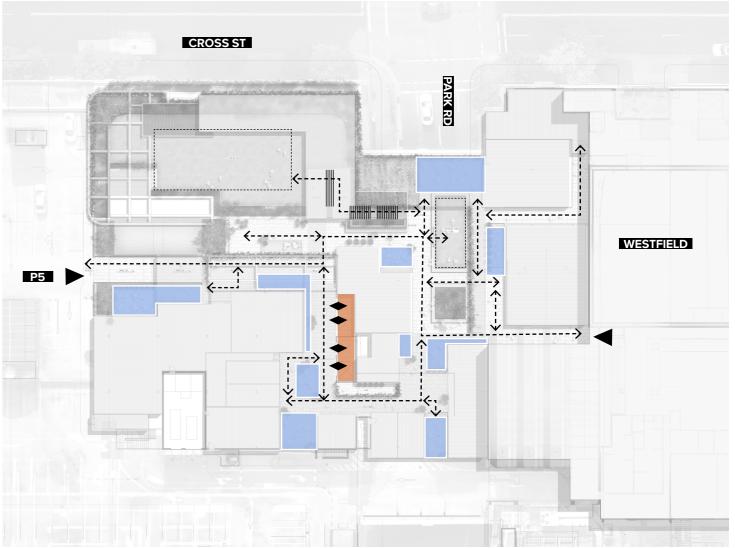


Design Considerations

Built Form

CROSS ST PARK RD WESTFIELD P5

Accessibility



Legend



Undercover/Roof over

Open air space

Legend













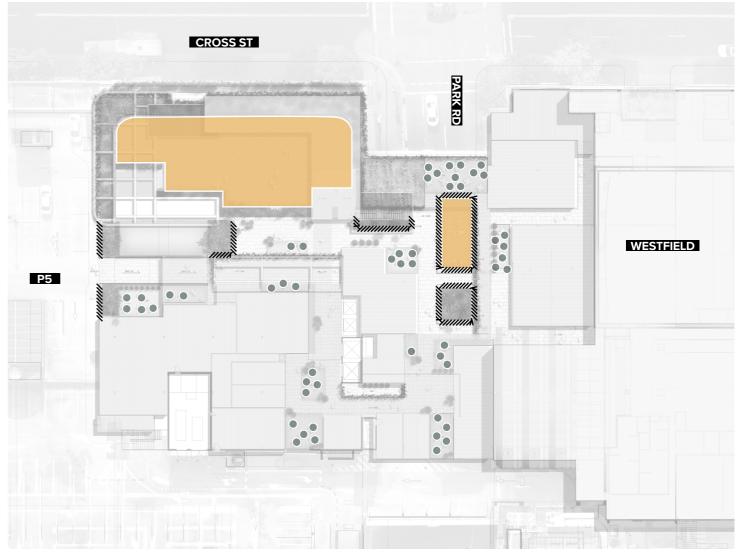
Stair Access

Design Considerations

Screening & Weather Protection



Fixtures & Furniture



Legend

Weather Protection - Rain & Sun

Views (external/internal)

Legend

Integrated Seating Edges



Flexible Furniture/ LSA areas



Open Programmable Area

Design Considerations

Vegetation Strategy



Soil Depth Zones



Legend

IIIIIIII Green Edges

Green Roofs/ Hanging Gardens

Integrated Planters Flexible Pot Planting

Astroturf

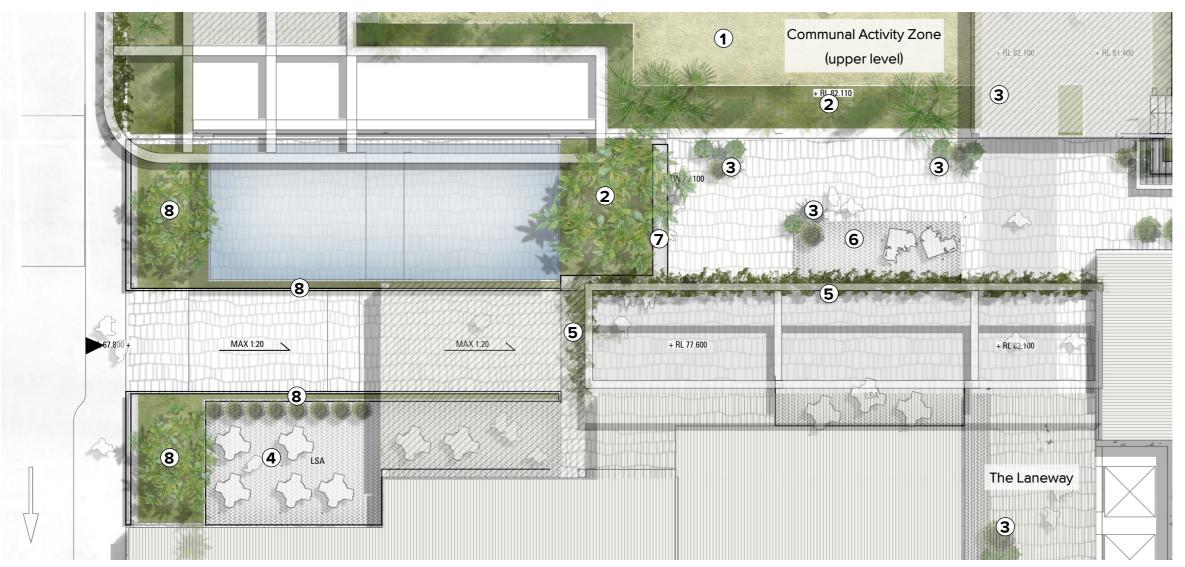
Legend

1.0m Depth (mounded)

0.4 - 0.6m Depth

140mm- 200mm Depth

O1 The Arrival





The Entry Corrdior is an critical first impression of the site from the carpark. It is important that this space performs on a number of levels including its ability to:

- Clearly guide people into the site
- Capture the essence of the landscape design intent
- Work around the existing Skylight

Features of this area included an Alfresco Dining area, Acent Threshold Planting and overhead integrated planting structures









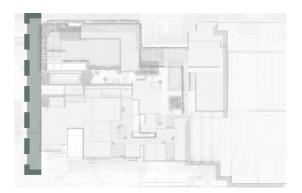
Legend

- (1) Open Astroturf Area
- **2** Lush Accent Planting
- (3) Freestanding Pots & Planters
- (4) Alfresco Dining Area
- **5** Overhead Integrated Planting Frame
- (6) Pop Up Stall Site
- **7** Concrete/Brick Seating Element
- **8** Entry Threshold Accent Planting

O1 The Arrival

Legend

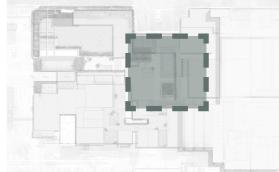
- 1 Entry Threshold Accent Planting
- 2 Alfresco Dining Area
- 3 Contemporary Native Australian Planting Buffer to upper level
- 4 Carpark Accent Planting
- **5** Feature Tree
- 6 Entrance to ELP from Parking Deck P5





O2 CONCEPT The Courtyard





The Central Open Space area is the symbolic heart of the site, it is a highly social space, designed to promote gathering and family friendly enjoyment. It is important that this space performs on a number of levels including its ability

- Offer a variety of flexible social settings
- Capture the essence of the landscape design intent
- Offer an aesthetically pleasing variety of textural and visual details

Features of this area included seating elements with raised planted beds, a large astroturfed area suitable for families to play and supervise on as well as a Planted Staircase.

Legend

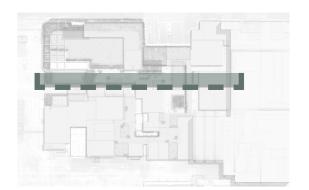
- 1 Open Astroturf Area
- **2** Lush Accent Planting
- **3** Freestanding Pots & Planters
- (4) Raised Astroturf Platform
- **5** Concrete/Brick Seating Edge with integrated lighting
- **6** Cascading Overhead Planting
- **7** Green Wall Tensile Cable Planting
- **8** Feature Tree/ Palm

Client

O2 CONCEPT The Courtyard

Legend

- 1 Contemporary Native Buffer Planting
- 2 Lush Accent Planting
- **3** Feature Tree
- Raised Planter with Seating Edge and feature tree/ palm planting
- **5** Green Roof with Cascading Edges
- 6 Sky Light
- **7** Cascading Overhead Planting
- (8) Green Wall Tensile Cable Planting











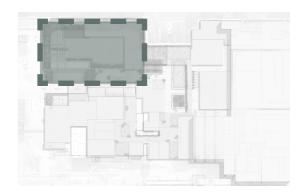






03 Communal Activity Zone





The Community Green is intended to be the most multi-functional space on site. It will have the ability to host a variety of seasonal programs including:

- Sports & Fitness events
- Music/Dramatic performances
- Markets
- Outdoor Cinema
- Informal Games

This programming is supported by an appropriately sized storage facility, overhead shade structure and an attractive feature tree planting.

Legend

- (1) Open Astroturf Area
- (2) Lush Accent Planting
- (3) Services
- 4 Accent Screen Planting
- (5) Entry Facing Cascading Edge
- **6** Storage Site
- (7) Cascading Overhead Planting
- **8** Feature Tree
- **9** Overhead Structure











O3 Communal Activity Zone

FLEXIBLE/ SEASONAL ACTIVATION









































Client

Architect

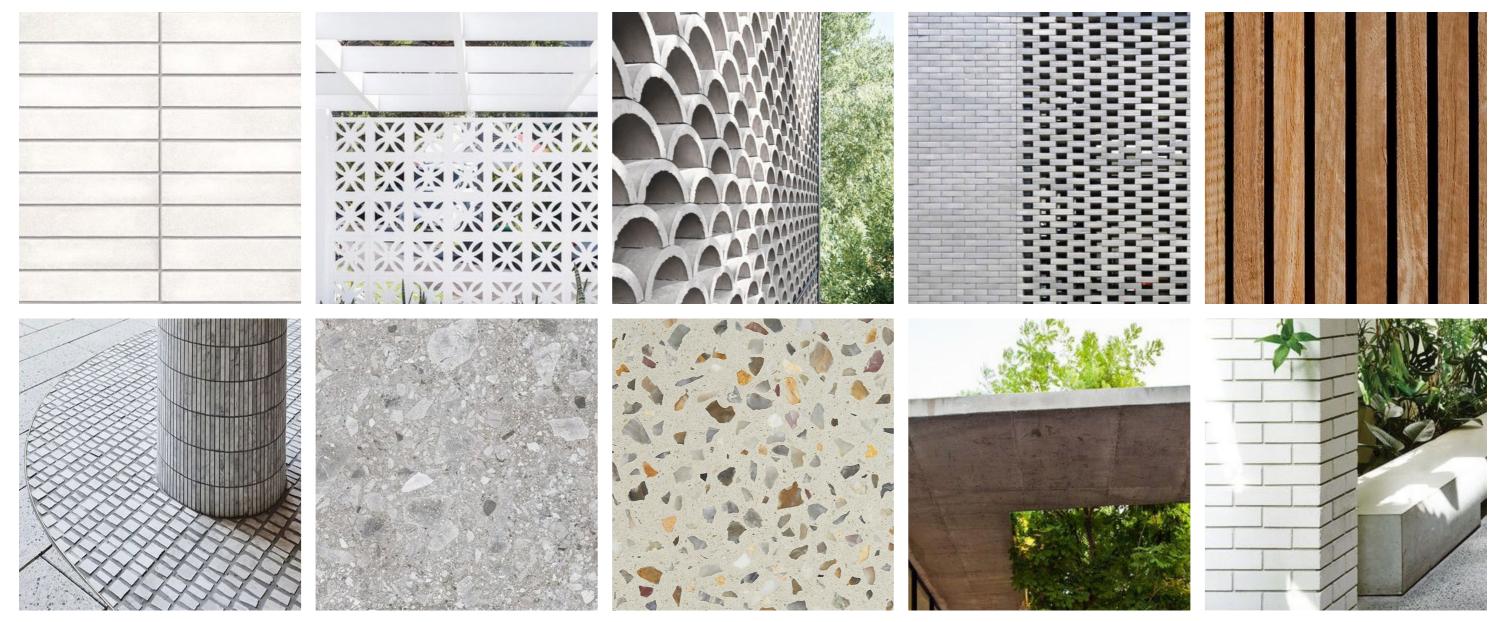




Pop Up Stalls-Flowers/Baked Goods/ Gifts

Materials Palette

GENERAL CHARACTER



Planting Strategy

GENERAL CHARACTER



Pots & Planter

- Flexible
- Opportunity to integrate textures and colours into the overall design
- Soften built edges
- Create rooms spatial seperation
- Easy to maintain
- Easy to replace plants if needed
- Soften edges and corners
- Create focal points



Green Roofs and Edges

- Soften built edges
- Increase urban biodiversity
- Enhance livability for surrounding residents
- Cool ambient roof temperatures
- Aethetically pleasing from street level
- Create a visual and aural break from the street below
- Directs views from within and into the site



Hanging Green

- Soften edges
- Cool ambient roof temperatures
- Screens sun where needed
- Create focal points
- Create rooms spatial seperation
- Create an emmersive experience
- Vertical green allows you to incorporate large amounts of plants without sacrificing floorspace



Green Walls

- Creates focal points
- Creates backdrop
- · Provides screening
- Positive effects on the microclimate
- Sustainable eye-catcher
- Vertical green allows you to incorporate large amounts of plants without sacrificing
- Highly visible throughout the whole space
- Improves air quality (more humidity, less harmful substances)
- Plants decrease stress & improve productivity

BIOPHILIA

Biophilia is humanity's intuitive and deeply ingrained attraction to nature. It actually means 'love for other life forms'.

- reduced stress levels
- enhanced cognitive function and creativity
- a deeper sense of happiness and wellbeing an ability to heal faster.

AIR PURIFICATION

- plant leaves and root micro-organisms can remove toxins from modern building air
- extra oxygen released from plants helps keep people awake and alert

THERMAL BENEFITS

- Hard inert surfaces become far hotter with increasing exposure.
- reducing thermal energy flowing
 through building walls to inner surfaces
- decreasing cooling load demands placed on air-conditioning systems
- increasing energy savings

ACOUSTIC

- more comfortable sound levels
- increase wall sound absorption coefficiency
- enhance speech privacy
- improve ambient noise levels of office environments

Planting Strategy

THE ARRIVAL & THE COURTYARD - CHARACTER

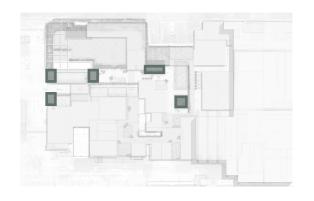








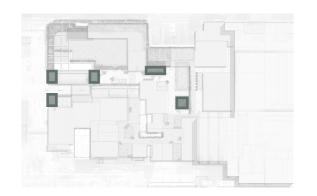




The Arrival Lane through to The Courtyard reflects a palette highly structured and curated, with an emphasis on form and texture to act as visually stimulating main entries to site.

Planting through this zone will be low maintenance species that are shade tolerant and durable.

Planting Strategy



Mature Size

Name

THE ARRIVAL & THE COURTYARD - SPECIES





























Planting Strategy

GREEN EDGES & ROOFS - CHARACTER













The Edge planting is critical as it softens built edges and significantly adds to the character of site.

Species will be naturally prostrate or cascading in nature to spill and create a pouring effect.

Planting Strategy

GREEN EDGES & ROOFS - SPECIES















Name	Mature Size
Casuarina 'Cousin It'	0.3 h x Spreading
Rhipsalis 'Mistletoe'	0.2 h x Spreading
Dichondar 'Silver Falls'	0.2 h x Spreading
Curio rowleyanus 'String-of-Pearls'	0.1 h x Spreading
Carpobrotus glaucescens	0.2 h x Spreading
Phormium tenax 'Purple Haze'	1.0 h × 0.5 w

Planting Strategy

THE COMMUNITY ACTIVITY ZONE - CHARACTER

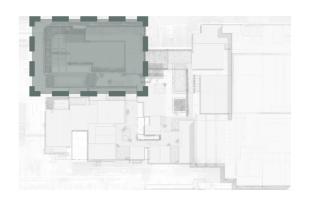












The Community Activity Zone reflects a Contemporary Australian native palette, designed to celebrate the bush landscape.

Planting through this zone will be low maintenance species that are able to withstand high exposure to wind and sunlight.

Planting Strategy

THE COMMUNITY ACTIVITY ZONE - SPECIES















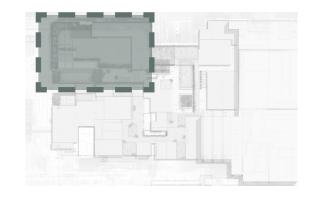












Name	Mature Size
Pandanus tectorius	3.0 h x 20 w
Hardenbergia violacea	0.5 h x 0.5 w
Lomandra 'Tanika'	0.5 h x1.0 h
Melaleuca lin. 'Claret Tops'	0.3 h x Spreading
Banksia spinulosa	1.2h x1.0w
Adenanthos sericeus	0.8 h x 1.0 w
Raphiolepsis indica	0.5 h x 0.5 w
Scenecio mandraliscae	0.3 h x Spreading
Pennisetum 'Nafray'	0.5 h x 0.5 w
Anigozanthos 'Yellow Gem'	0.5 h x 0.5 w
Westringia fruticosa	0.8 h x 1.0 w
Melaleuca viminalis	0.8 h x 0.8 w
'Little John'	

Planting Strategy

THE LANEWAY - CHARACTER

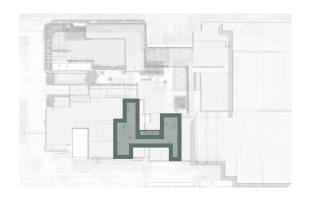












The Laneway reflects a palette that is Oriental in nature with broad, lush leaved species that thrive well in the shaded conditions of this area.

Species will be distributed into pots in away that best compliments their colour, form and texture.

Planting Strategy

THE LANEWAY - SPECIES















Sanseveria zeylanica





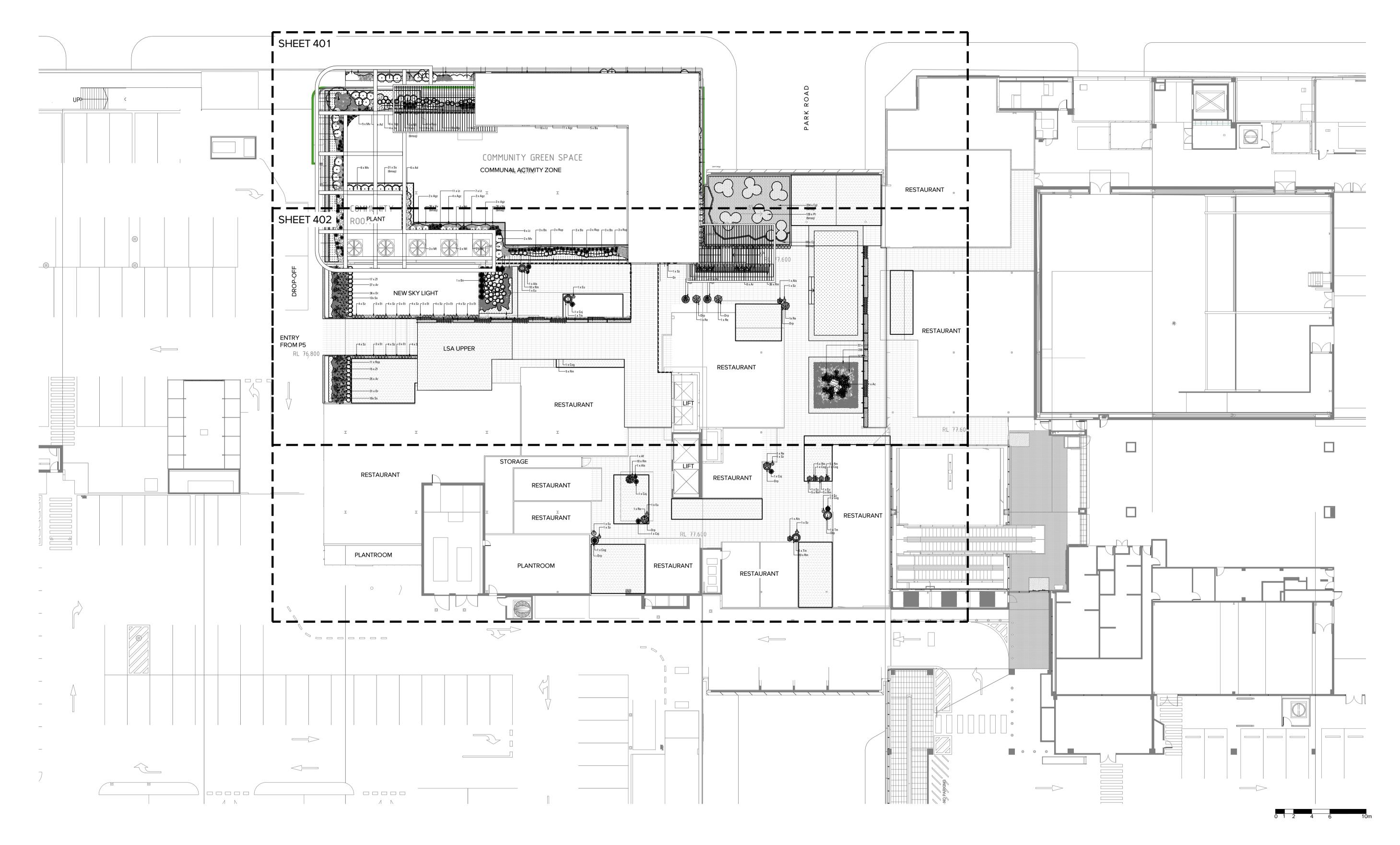




Name	Mature Size
Rhapis excelsa	1.8h x 2h
Euphorbia 'Firesticks'	0.8h x 0.5 w
Rhipsalis 'Mistletoe'	0.2 h x Spreading
Crassula ovata 'Gollum'	0.3 h x Spreading
Crassula ovata 'Jade'	0.5 h x 0.5 w
Dichondra repens	0.2 h x Spreading
Sanseveria zeylanica	1.2 h x 0.5 w
Alpinia formosana	1.0 h x 1.0 w
Algaonema Silver Queen	0.5 h x 0.5 w
Thysanolaena maxima	20 h x 1.0 w
'Tiger Grass'	

ARCADIA

CROSS STREET









PREPARED BY Arcadia Landscape Architecture CLIENT Scentre Group **ARCHITECT**

DATE 02.09.2020 SCALE 1:200 @ A1 ISSUE C

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Plant Schedule 400

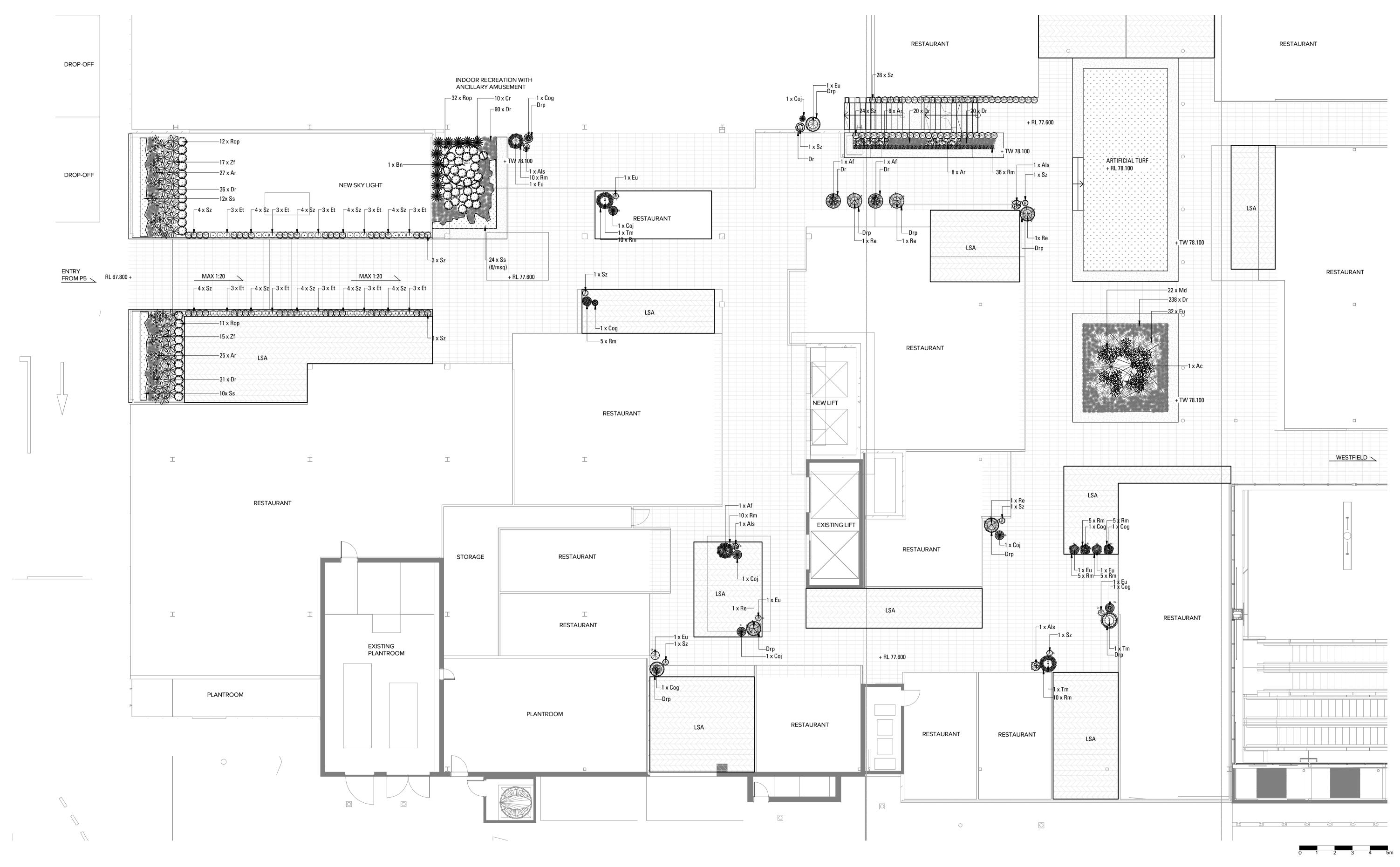
84 VV	ESTFIELD HURSTVILLE PLAI	VI SCHEDULE			
CODE	BOTANIC NAME	COMMON NAME	MATURE SIZE	PROPOSED POT SIZE	QUANTI
			(h x w) (m)		
	TREES & PALMS				
Ac	Archontophoenix cunninghamiana	Bangalow Palm	5.0 h x 2.0 w	Minimum 6m Trunk	1
Bn	Bismarckia nobilis	Bismarckia Palm	4.0 h x 2.5 w	Minimum 1.5m Trunk	1
Pt	Pandanus tectorius	Screw Pine	3.0 h x 20 w	800 L	1
	SHRUBS & ACCENTS				
Ad	Adenanthos sericeus	Woolly Bush	0.8 h x 1.0 w	300 mm	31
Ar	Agave 'Reginae'	Queen Victoria Agave	0.3 h x 0.3 w	300 mm	68
Als	Algaonema Silver Queen	Silver Queen	0.5 h x 0.5 w	300 mm	4
Af	Alpinia formosana	Pinstripe Ginger	1.0 h x 1.0 w	300 mm	3
Bs	Banksia spinulosa	Hairpin Banksia	1.2 h x 1.0 w	100 L	31
Cog	Crassula ovata 'Gollum'	Gollum Jade	0.3 h x Spreading	200 mm	5
Cj	Crassula ovata 'Jade'	Lucky Plant	0.5 h x 0.5 w	300 mm	4
Cr	Cycas revoluta	Sago Plam	1.5 h x 1.0 w	400 mm	10
Eu	Euphorbia 'Firesticks'	Firesticks	0.3 h x 0.9 w	300 mm	94
Et	Euphorbia trigona	African Milk Tree	0.8 h x 0.5 h	300 mm	30
Mv	Melaleuca viminalis 'Little John'	Dwarf Bottlebrush	0.8 h x 0.8 w	300 mm	57
MI	Melaleuca linarifolia	Claret Tops	0.3 h x Spreading	300 mm	31
Md	Monstera deliciosa	Swiss Cheese	2.0 h x 2.0 w	300 mm	22
Rop	Raphiolepsis indica 'Oriental Pearl'	Indian Hawthorn	2.0 h x 1.0 w	300 mm	104
Re	Rhapis excelsa	Broadleaf Lady Palm	2.0 h x 1.0 w	45 L	5
Wf	Westringia fruticosa	Coastal Rosemary	0.8 h x 1.0 w	300 mm	129
Zf	Zamia furfurace a	Cardboard Palm	1.0 h x 1.0 w	300 mm	33
	GRASSES & RUSHES				
Agz	Anigozanthos 'Yellow Gem'	Kangaroo Paw	0.5 h x 0.5 w	300 mm	100
Dr	Dianella 'Little Rev'	Little Rev	0.3 h x 0.3 w	200 mm	435
Lt	Lomandra 'Tanika'	Mat Rush	0.5 h x 1.0 h	200 mm	208
PaN	Pennisetum 'Nafray'	Chinese Pennisetum	0.5 h x 0.5 w	300 mm	110
Pt	Phormium tenax 'Purple Haze'	Purple Haze	1.0 h x 0.5 w	300 mm	126
Sz	Sanseveria zeylanica	Bowstring Hemp	1.2 h x 0.5 w	300 mm	104
Tm	Thysanolaena maxima	Tiger Grass	20 h x 1.0 w	200 mm	3
<u>.c. 55.5</u>	GROUNDCOVERS & CLIMBERS				
Cg	Casuarina glauca	Cousin It	0.3 h x Spreading	300 mm	120
Cgl	Carpobrotus glaucescens	Pig Face	0.2 h x Spreading	200 mm	341
Cr	Curio rowleyanus	String- of- Pearls	0.1 h x Spreading	300 mm	66
Drp	Dichondra repens	Kidney Weed	0.2 h x Spreading	200 mm	30
Dsf	Dichondra 'Silver Falls'	Silver Falls	0.2 h x Spreading	200 mm	70
Hv	Hardenbergia violacea	False Sarsparilla	0.5 h x 0.5 w	200 mm	126
Rm	Rhipsalis 'Mistletoe'	Mistletoe Cactus	0.2 h x Spreading	300 mm	246
Ss	Scenecio mandraliscae	Blue Chalk Sticks	0.3 h x Spreading	300 mm	272



WESTFIELD HURTSVILLE ELP
DEVELOPMENT APPLICATION

PREPARED BY Arcadia Landscape Architecture
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ARCHITECT

DATE 02.09.2020 SCALE ISSUE C Softworks Plan P5





WESTFIELD HURTSVILLE ELP
DEVELOPMENT APPLICATION

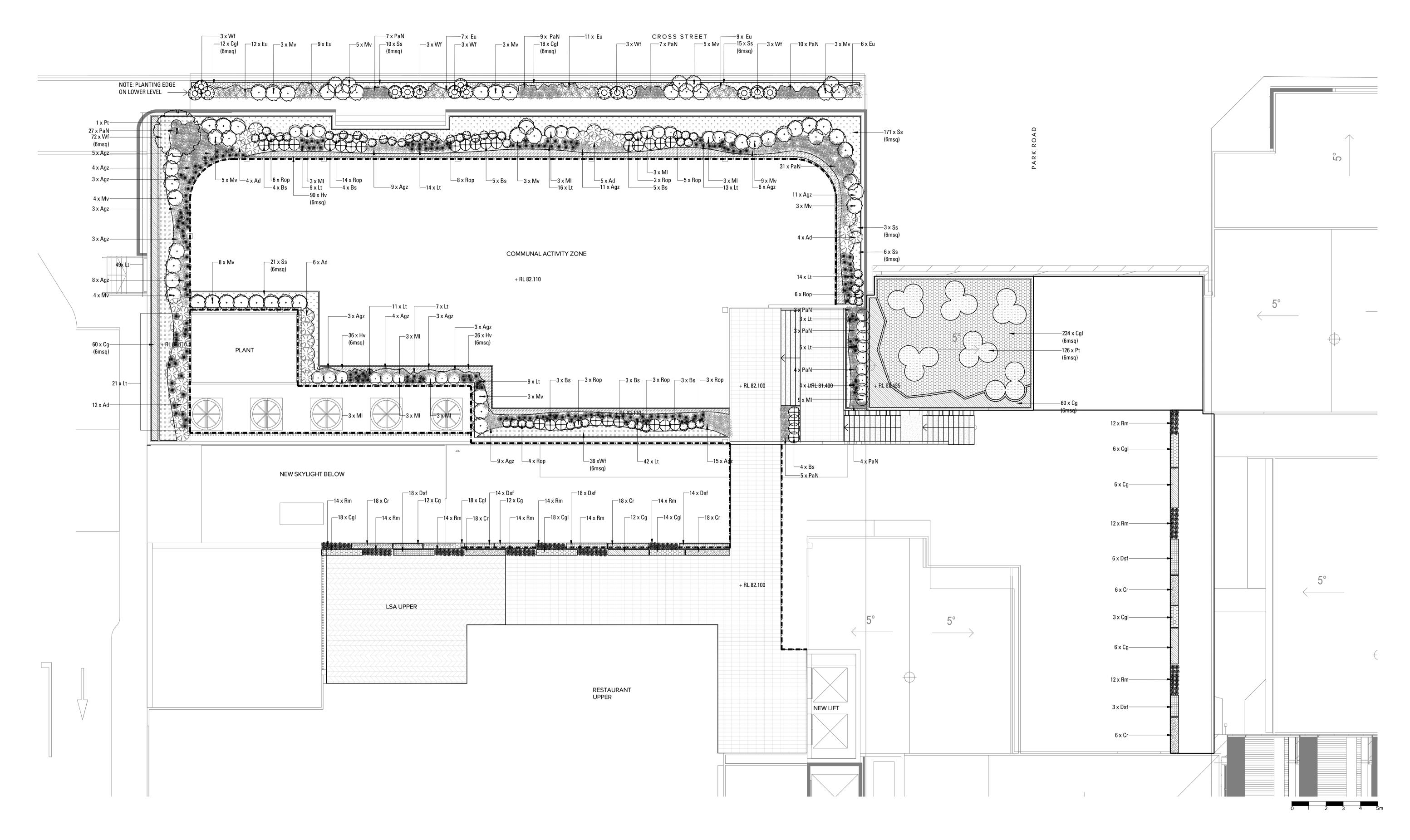


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hitecture DATE 02.09.2020 SCALE 1:100@A1 ISSUE C

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Softworks Plan P6





WESTFIELD HURTSVILLE ELP
DEVELOPMENT APPLICATION

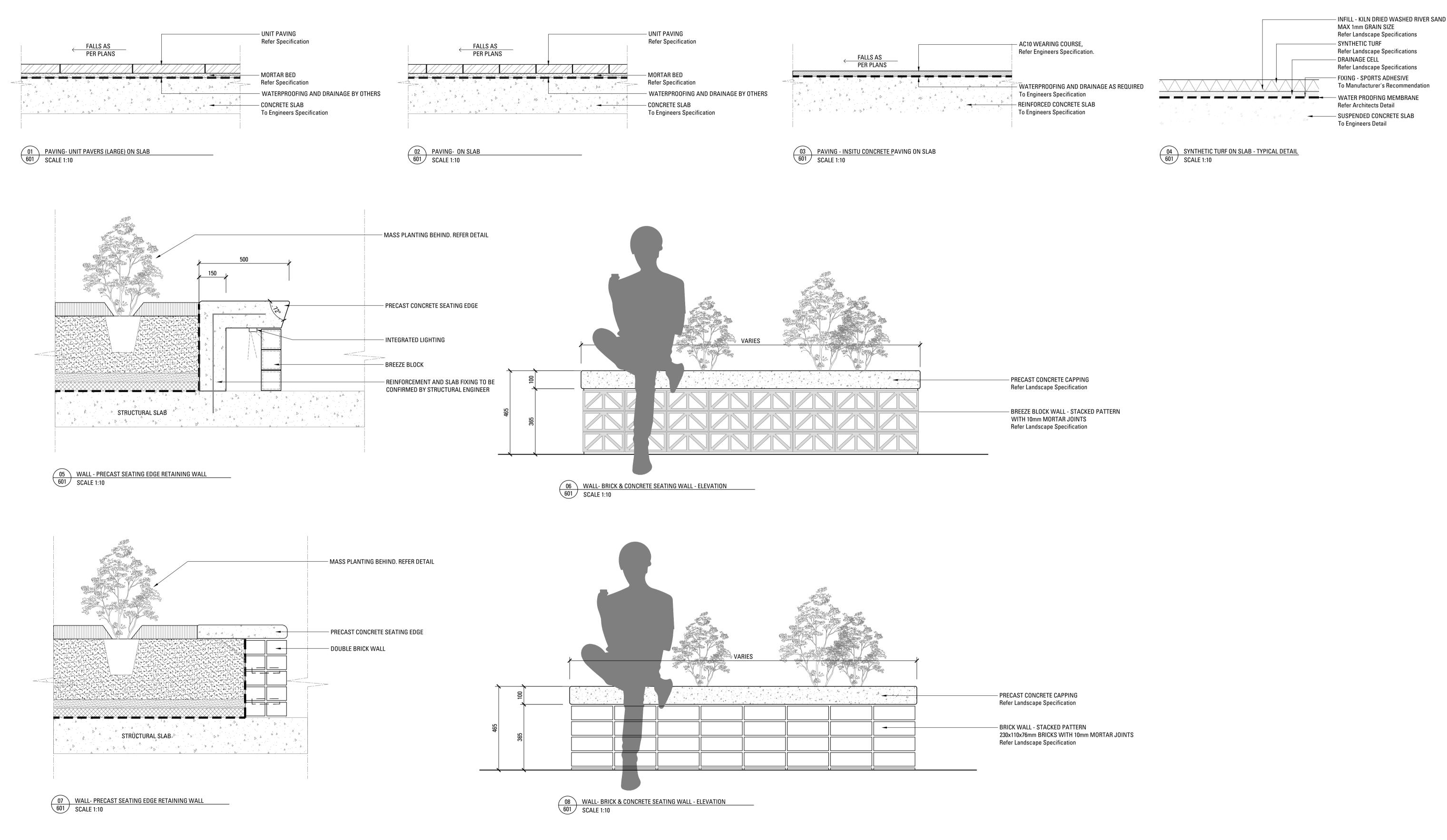


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Typical Details 60⁴



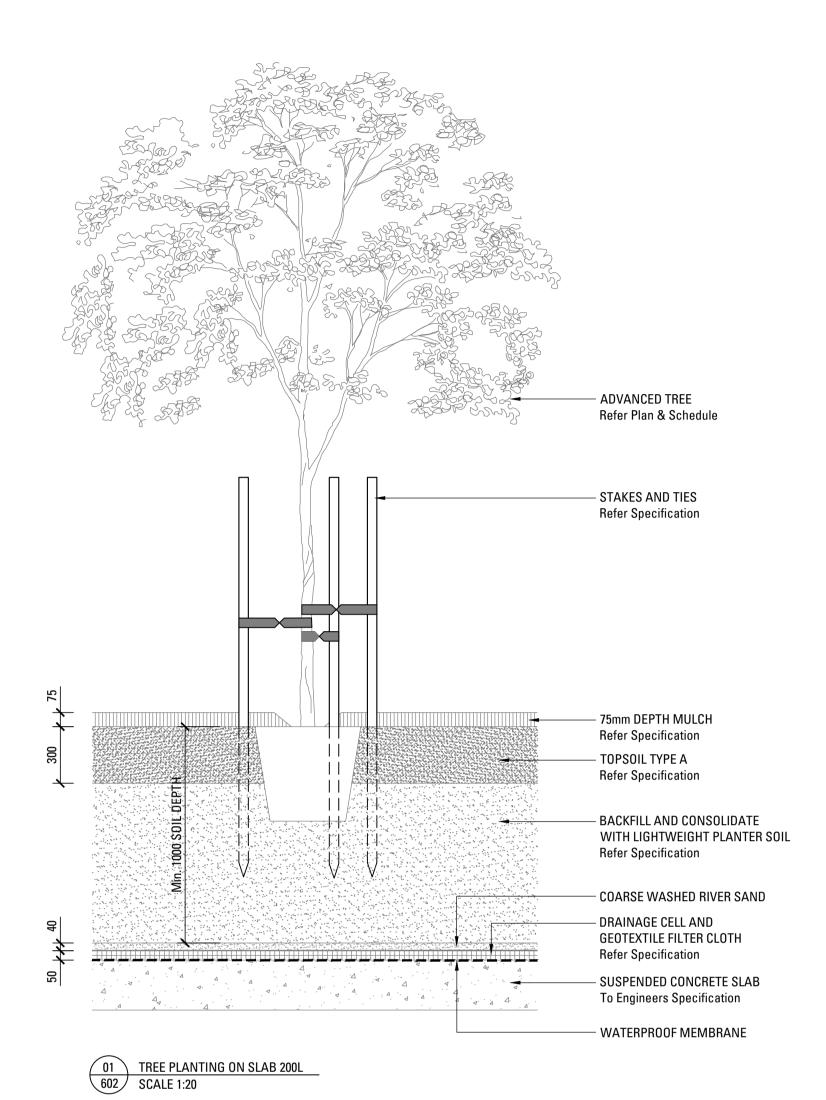
ARCADIA

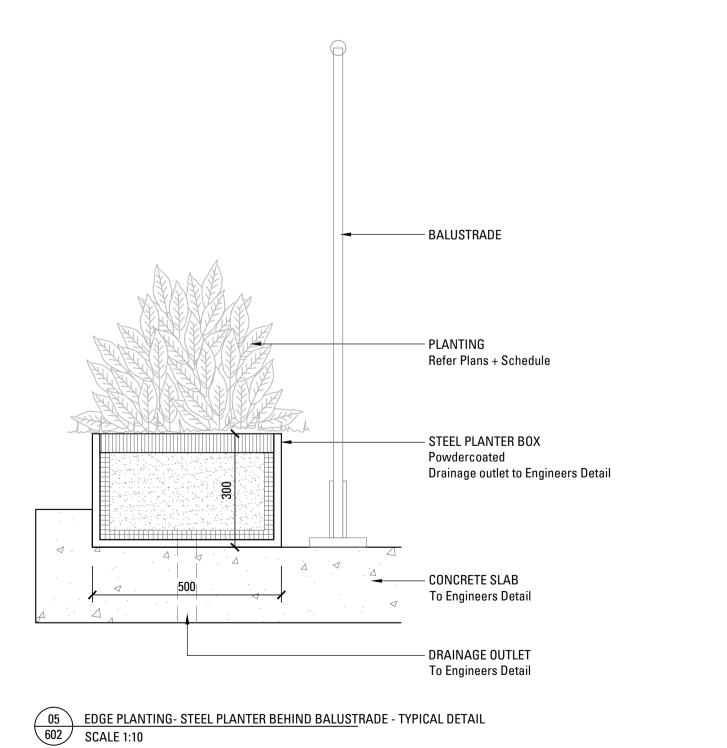
WESTFIELD HURTSVILLE ELP
DEVELOPMENT APPLICATION

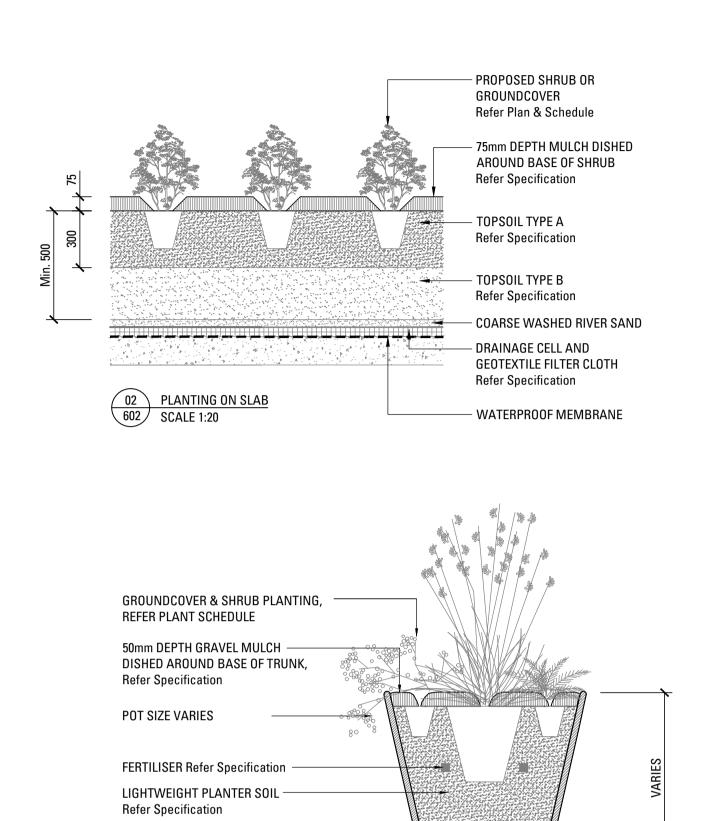
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VARIES



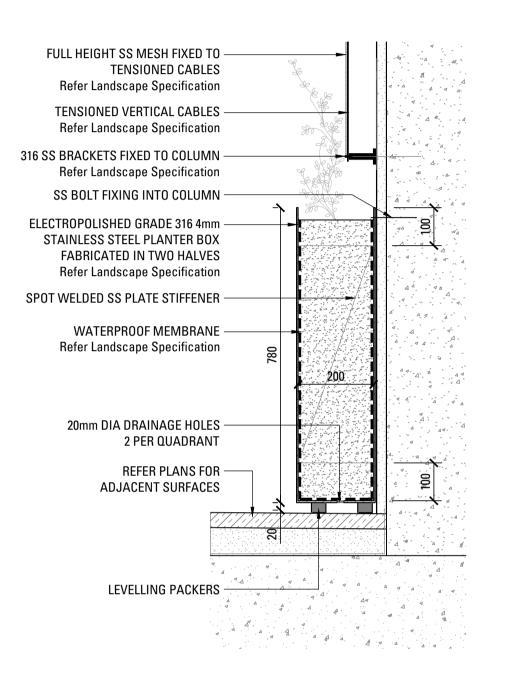


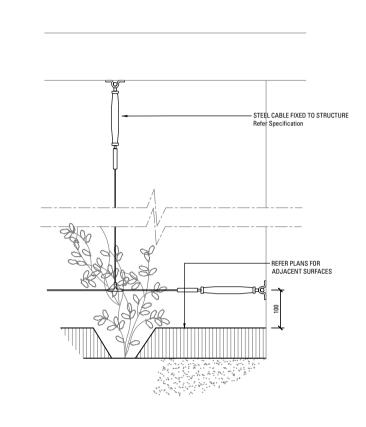


FILTER FABRIC—

50mm DEPTH PEA GRAVEL -

03 SHRUBS AND GROUNDCOVERS IN ROUND PLANTER









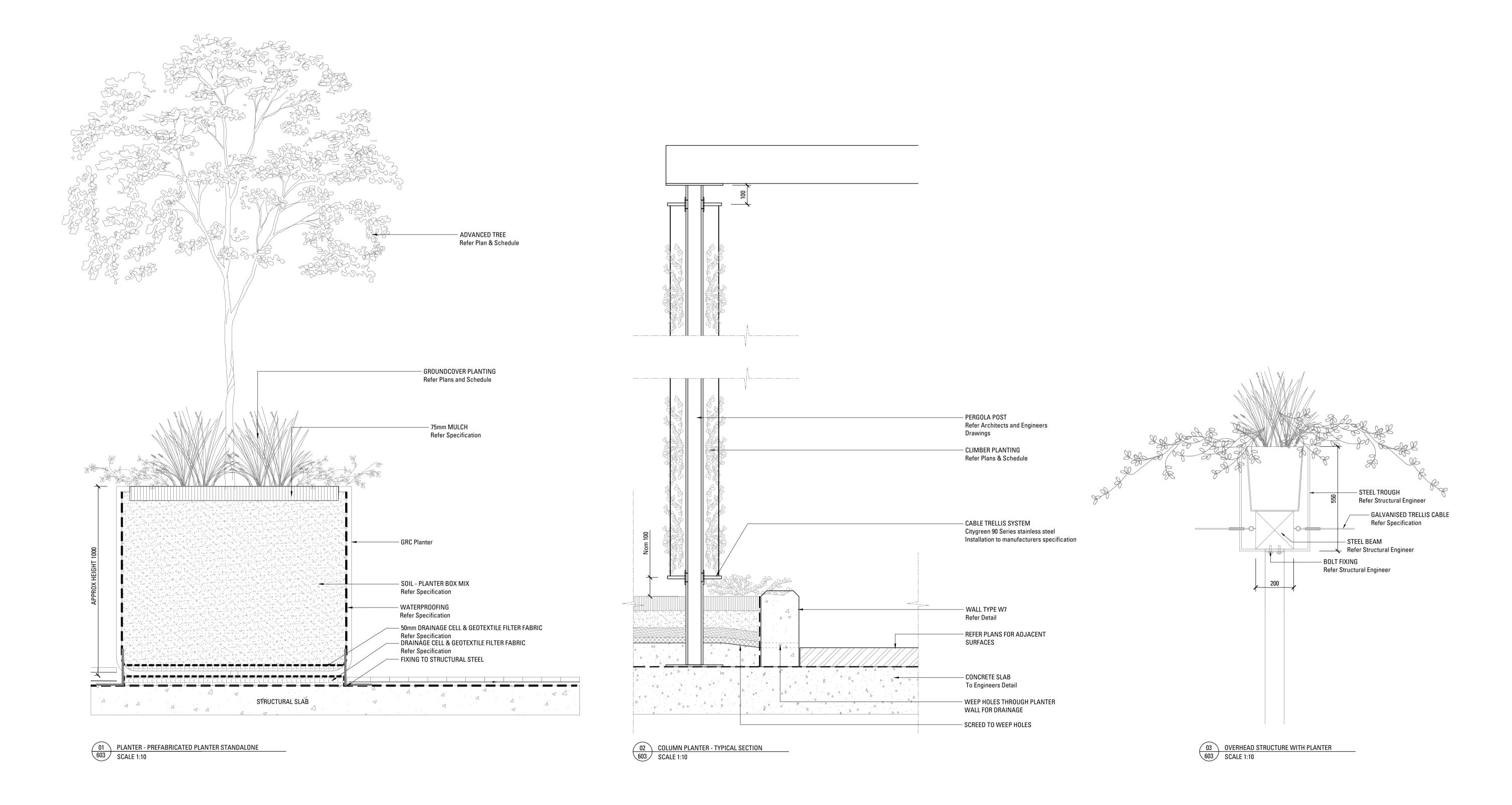
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Typical Details 603





WESTFIELD HURTSVILLE ELP
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DATE 02.09.2020 SCALE as shown @ A1 ISSUE C **Specification**

LANDSCAPE SPECIFICATION NOTES

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.

ABORIST MANAGEMENT OF TREE PROTECTION

A QUALIFIED AND APPROVED ABORIST IS TO BE CONTRACTED TO UNDERTAKE OR MANAGE THE INSTALLATION OF PROTECTIVE FENCING, AND TO UNDERTAKE SUCH MEASURES AS HE DEEMS APPROPRIATE TO PRESERVE THE SUBJECT TREES TO BE RETAINED. THE ARBORIST IS TO BE RETAINED FOR THE ENTIRE CONTRACT PERIOD TO UNDERTAKE ONGOING MANAGEMENT AND REVIEW OF THE TREES.

DRAINAGE CELL AND FILTER FABRIC

FOR ON-SLAB AREAS INSTALL AN APPROVED 'DRAINAGE CELL' PRODUCT TO COMPREHENSIVELY COVER THE BOTTOM OF ALL PLANTERS. OVER DRAINAGE CELL TO ON-SLAB AREAS, A POLYFELT GEOTEXTILE LINING (AS SUPPLIED BY 'POLYFELT TS' OR APPROVED EQUIVALENT) IS TO BE INSTALLED TO COVER THE BOTTOM OF ALL PLANTERS, TURNED UP 300MM AND TAPED TO THE PLANTER SIDES TO ENSURE SOIL MIX DOES NOT ESCAPE INTO DRAINAGE OUTLETS/HOLES. INSTALL MIN. 50MM COARSE RIVER SAND OVER ALL GEOTEXTILE LINING PRIOR TO INSTALLATION OF SOIL MIX.

PLANTING MIXTURE

SHALL BE HOMOGENOUS BLEND OF SOIL AND ADDITIVES IN THE FOLLOWING PROPORTIONS:

EXISTING SITE SOIL IF SUITABLE OR **IMPORTED TOPSOIL 50%**

COMPOST 30% **D/W SAND 20%**

SOIL TESTING OF EXISTING SITE SOIL IS TO BE UNDERTAKEN TO ASSESS SUITABILITY OF USE AS PLANTING TOPSOIL AND COMPLIANCE WITH AUSTRALIAN STANDARDS.

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

PINE BARK: FROM MATURE TREES, GRADED IN SIZE FROM 15MM TO 30MM, FREE FROM WOOD SLIVERS. DARK BROWN IN COLOUR AND TEXTURE.

SHALL BE WELL ROTTED VEGETATIVE MATERIAL OR ANIMAL MANURE, OR OTHER APPROVED MATERIAL, FREE FROM HARMFUL CHEMICALS, GRASS AND WEED GROWTH AND WITH NEUTRAL PH. PROVIDE A CERTIFICATE OF PROOF OF PH UPON REQUEST.

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.

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. 5-15 LITRE SIZE PLANT 1X(1200X25X25MM)

B. 35-75 LITRE SIZE PLANT 2X(1500X38X38MM)

C. 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.

IRRIGATION SYSTEM

SUPPLY AN AUTOMATIC WATERING SYSTEM USING 'TORO IRRIGATION SYSTEM' OR SIMILAR APPROVED, WITH MICRO-JET SPRINKLER HEADS AND LOW DENSITY, RUBBER MODIFIED POLYPROPYLENE RETICULATION, TO INCLUDE FILTERS, BENDS JUNCTIONS, ENDS AND OTHER ANCILLARY EQUIPMENT. THE LANDSCAPER SHALL NOMINATE HIS SOURCE OF SUPPLY FOR THE WATERING SYSTEM AND OBTAIN APPROVAL FROM THE SUPERINTENDENT BEFORE PLACING ORDERS FOR EQUIPMENT OR SUPPLY.

A SCHEMATIC PLAN OF THE PROPOSED IRRIGATION SYSTEM IS TO BE PREPARED BY THE CONTRACTOR, SHOWING SOLENOIDS, PIPE DIAMETERS, AND ALL NOZZLE AND TRICKLE ATTACHMENT TYPES (INCLUDING SPRAY/HEAD ANGLE), FOR REVIEW BY THE SUPERINTENDENT PRIOR TO INSTALLATION

THE CONTRACTOR IS TO LIASE WITH THE HYDRAULIC ENGINEER AND COUNCIL AS NECESSARY, TO ENSURE THE THE IRRIGATION SYSTEM CONFORMS WITH ALL THE COUNCIL AND WATER BOARD CODES AND REQUIREMENTS.

PROVIDE AN AUTOMATIC CONTROLLER THAT PROVIDES FOR TWO WEEK SCHEDULING AND HOURLY MULTI-CYCLE OPERATION. THE CONTROLLER SHALL MANUAL OVERRIDE. PROGRAMMING SHALL BE UNDERTAKEN BY THE CONTRACTOR WHO SHALL ADVISE ON THE OPERATION OF THE SYSTEM.

PROVISION OF SECURE HOUSING FOR THE AUTOMATIC IRRIGATION CONTROLLER TO BE LOCATED IN ASSOCIATION WITH THE LANDSCAPE CONTRACTOR AND LOCATION CONFIRMED BY THE SUPERINTENDENT. WIRING TO CONNECT REMOTE SOLENOID LOCATIONS IS TO BE PROVIDED. THE CONTROLLER SHALL BE LOCATED IN A DRY PLACE, PROTECTED FROM THE WEATHER, AND ALL CABLE CONNECTIONS SHALL BE MADE WITH WATERPROOF CONNECTORS.

WATER SUPPLY POINTS TO BE SUPPLIED BY BUILDER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE AND GUARANTEE SATISFACTORY OPERATION OF THE IRRIGATION

AFTER THE SYSTEM HAS BEEN INSTALLED TO THE SATISFACTION OF THE SUPERINTENDENT, THE INSTALLATION SHALL BE TESTED UNDER KNOWN WORKING CONDITIONS. ACCEPTANCE OF THE INSTALLED PLANT AND EQUIPMENT SHALL BE SUBJECT TO THESE BEING SATISFACTORY.

TREATED PINE TIMBER EDGING

TIMBER EDGE: 100 X 25MM CCA TREATED RADIATA PINE TIMBER STAKES: 50 X 50 X 500MM CCA TREATED RADIATA PINE-SHARPENED AT ONE END. INSTALL IN LOCATIONS SHOWN ON THE DRAWINGS FLUSH TO FINISHED SURFACE LEVELS.

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, RESEEDING, 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:-

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. THE MAINTENANCE PERIOD SHALL COMMENCE AT PRACTICAL COMPLETION AND CONTINUE FOR A PERIOD OF TWENTY SIX (26) WEEKS.

GRASS, TREES AND GARDEN AREAS SHALL BE WATERED REGULARLY SO AS TO ENSURE CONTINUOUS HEALTHY GROWTH.

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.

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 NOT EXCEEDING TWO (2) WEEKS AFTER THE PLANT HAS DIED OR IS SEEN TO BE MISSING.

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.

TREES AND SHRUBS SHALL BE PRUNED AS DIRECTED BY THE LANDSCAPE ARCHITECT. PRUNING WILL BE DIRECTED AT THE MAINTENANCE OF THE DENSE FOLIAGE OR MISCELLANEOUS PRUNING AND BENEFICIAL TO THE CONDITION OF THE PLANTS. ANY DAMAGED GROWTH SHALL BE PRUNED. ALL PRUNED MATERIAL SHALL BE REMOVED FROM THE SITE.

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.

PEST AND DISEASED 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.

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.



WESTFIELD HURTSVILLE ELP DEVELOPMENT APPLICATION

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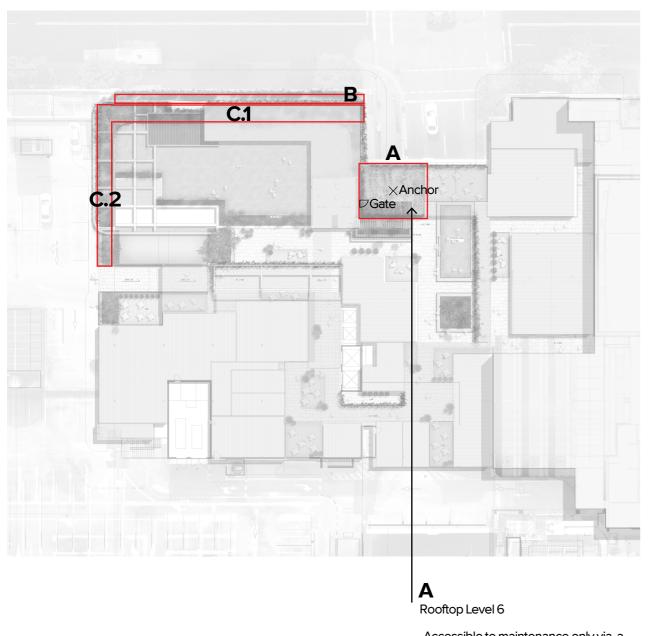
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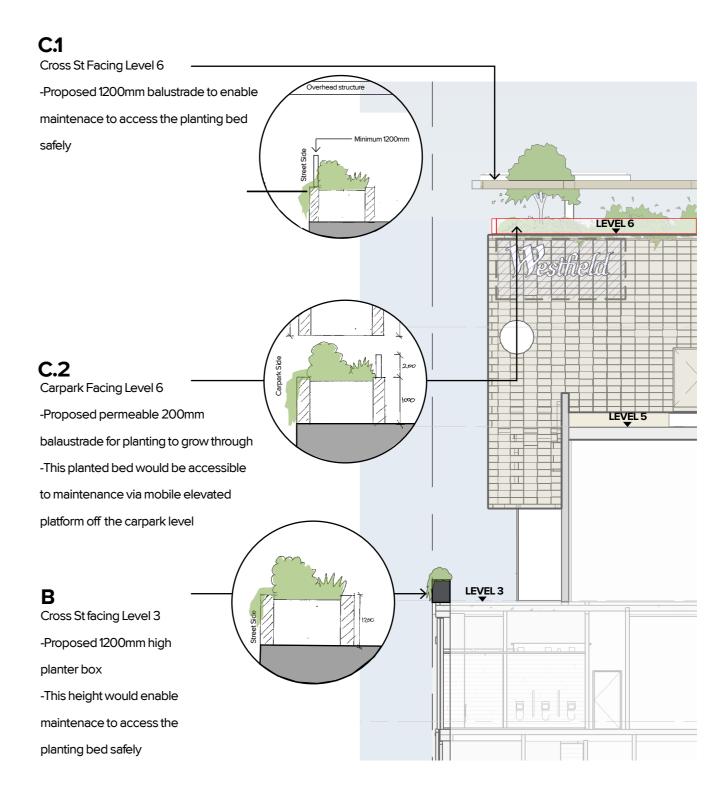
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PLANTING

Maintenace Strategy



- -Accessible to maintenance only via a proposed gate (as indicated)
- -Proposed 1200mm Fencing (Non climbable)
- -Proposed anchor point for maintenance to secure themselves to safely to maintan proposed planting



Westfield Hurstville ELP
Development Application