



311 South Street, Marsden Park

Landscape State Significant Development Application

April 2022



SITE IMAGE
Landscape Architects



Landscape / Design Philosophy

Designing to the *Greener Places* and *Better Places* Design Framework for Green Infrastructure:

Following the ethos of the '*Greener Places*' design framework, this project focuses on providing canopy coverage and vegetated setbacks along both South Street and Collector Road Street as well as 3 large communal areas for the use of office workers and site visitors.

The entry to the corner of South Street and Collector Road is highlighted by formal low planting and a row of feature trees which allow visual access into the site. The entirety of the South Street frontage will host a row of upright deciduous trees with low groundcover planting beneath. Behind the fence along both street frontages the canopy is made up of tree species from the Cumberland Plain Woodland (CPW) Vegetation Community. The understory planting to these areas is also comprised of CPW species to help increase the sites biodiversity and reestablish the threatened community (found locally in remnant bushland areas of Blacktown) and soften the built form.

Tree canopy coverage across the site shall be increased extensively mainly through the use of native species introduced to these setbacks. The lack of existing canopy coverage on the site means that there will be no need to remove any pre-existing tree species, allowing the project to focus more on the integration of native vegetative species that are endemic to the Cumberland Plain Woodland ecology.

Incorporating the *Greener Places* and *Better Places* principles through the landscape design philosophy:

1. Integration & Better for community

Combine green infrastructure with urban development and grey infrastructure

This principle seeks to transition away from single purpose grey infrastructure and promote the benefits of diversifying the use of developments through integration of green infrastructure. Throughout Marsden Park there is a multitude of large industrial lots dominated by considerable areas of asphalt and concrete. Despite this, the relatively low density of the suburb provides great opportunity for green setbacks and tree lined streets along arterial roads and residential streets. The lack of pre-existing vegetation on site means that the development doesn't come at the cost of the removal of any significant species, allowing the planting to help counteract the industrial processes involved in the construction of the grey infrastructure.

2. Connectivity

Create an interconnected network of open space

Connection and enhancing community amenity is one of the most critical principles within the framework. This development pursues connectivity through the following:

- Increased street tree planting which in turn provides increased canopy coverage
- Enhanced network of green streets in Marsden Park
- Minimise fragmentation of core bushland through the use of Cumberland Plain Woodland Planting along setbacks

3. Multifunctionality & Better Fit

Good design in the built environment is informed by and derived from its location, context and social setting.

The project's proximity to remnant Cumberland Plain Woodland ecologies found in nature reserves such as the Windsor Downs Nature Reserve, the Castlereagh Nature Reserve, and the Wianamatta Regional Park provides a great opportunity to create a link to the sites contextual values and ecological character. The location highlights the importance of threading Cumberland Plain Woodland species into the new development where possible. As indicated in the *Better Places* objectives, new developments

contribute to a locality's context and character and create a dialogue with established places such as the aforementioned reserves.

Multifunctionality as a principle, also places emphasis on diversity of ecosystems, bioretention etc. These systems work cohesively together to create a landscape which respects and responds to the remnant ecology of the region, whilst also providing the on-site planting with ways to treat and protect itself alongside the existing ecology, through areas of bioretention and more.

The key benefits of adopting the *Greener Places* and *Better Places* framework as a basis for this design include:

- Increased attractiveness of local high streets
- Greater inward investment opportunities
- Cleaner air
- Reduced flood risk
- Improved microclimate
- Improved visual amenity
- Improved local habitat
- Cleaner water in our creeks and rivers

Landscape / Masterplan Key Areas



Key Areas

- 1** *South Street Frontage and Setback*

The South Street setback planting focuses on breaking up the building elevation from the street through the use of large and medium sized canopy trees and an understory planting mix composed of predominantly Cumberland Plain Woodland species.
- 2** *South Street/Collector Road Entry & Communal Area 1*

This entry point at the corner of Collector Road and South Street is the most visually prominent corner of the site, and is therefore highlighted as such. The area includes feature entry planting, pedestrianised paving, softening of built form and an attractive communal open space providing outdoor amenity for office workers and people using the warehouse. The acoustic wall along part of the northern facade will also be green as part of the landscape strategy.
- 3** *Collector Road Communal Area 2*

This communal area provides a landscaped buffer between the building alongside additional pedestrian access and paved seating areas complimented by areas of open turf and large canopy trees.
- 4** *Collector Road Communal Area 3*

Similar to communal area 2, this space provides a lunch area/ large breakout space in a park like setting. the communal open spaces are located in sunny open areas and in addition to providing outdoor amenity they assist in softening the warehouse 2 facade form Collector Road.
- 5** *Carpark Planting*

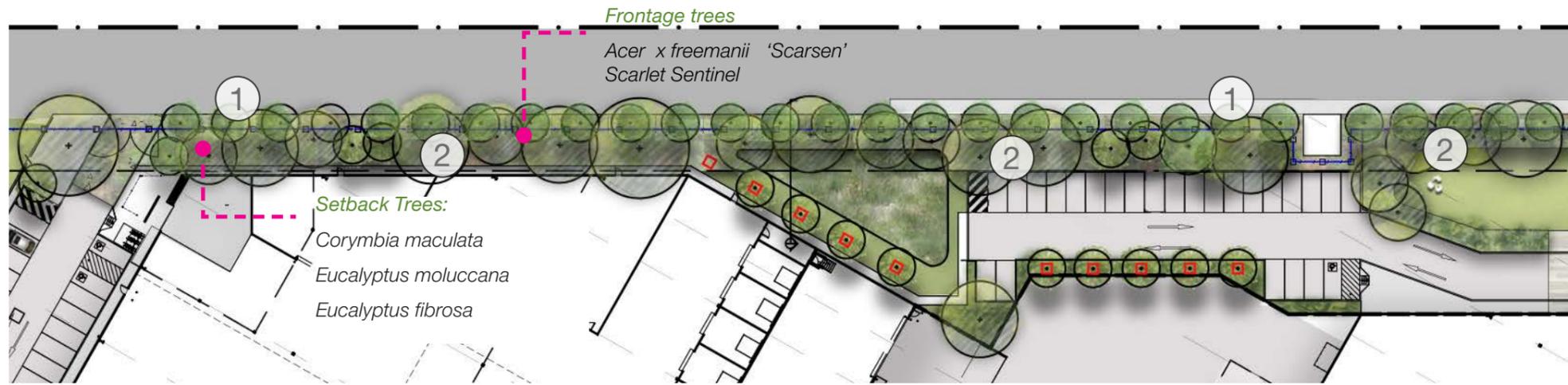
The car park areas will host tree planting where possible to help reduce the heat island effect across the site.
- 6** *Bioretention Planting*

The mix of native grasses and sedges will be planted in allocated bioretention basins to assist the filtration of on-site storm water runoff.

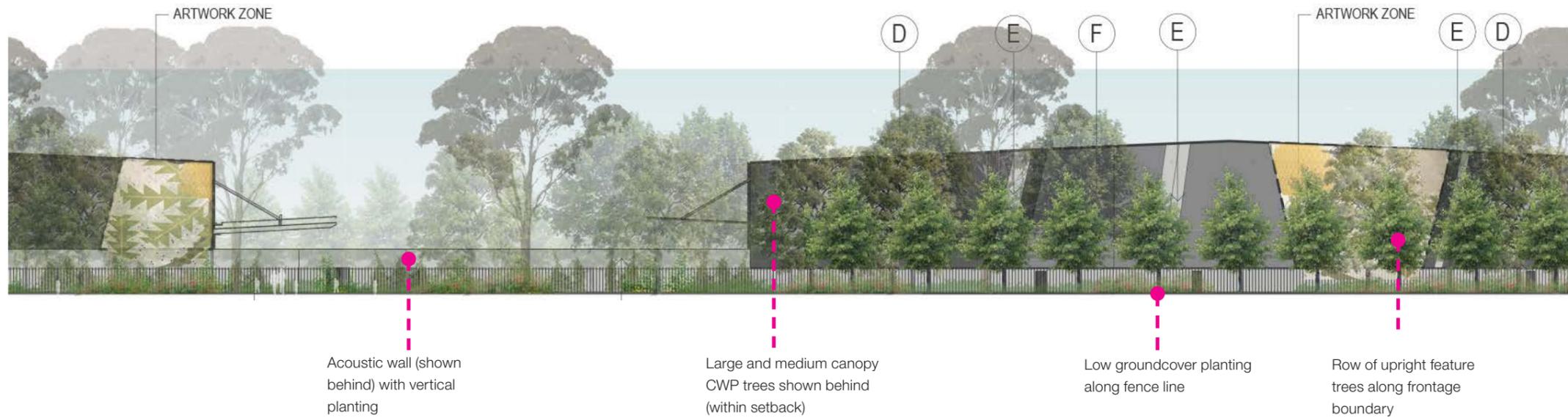
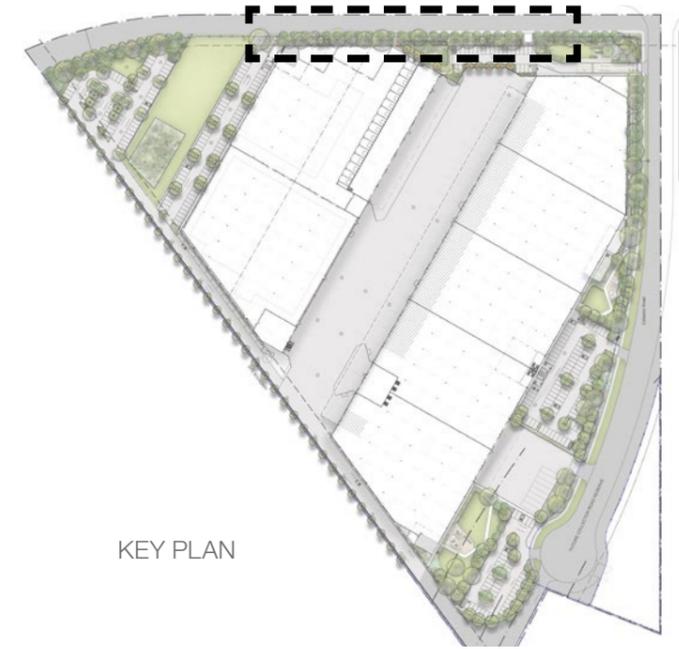
SCALE 1:1000



Landscape / South Street Frontage and Setback



SCALE 1:500



South Street/Collector Road Entry & Communal Area

The South Street setback planting focuses on breaking up the building elevation from the street through the use of large and medium sized canopy trees and an understory planting. In front of the fence line along the street is a structured line of trees evenly spaced with groundcover planting underneath. Behind the fence line within the setback, informal mass planting of Cumberland Plain Woodland Species will occur to help increase the sites biodiversity and re-establish the threatened community as well as soften the built form.



Upright formal planting in front of fence line



Cumberland Plain Woodland species to setback

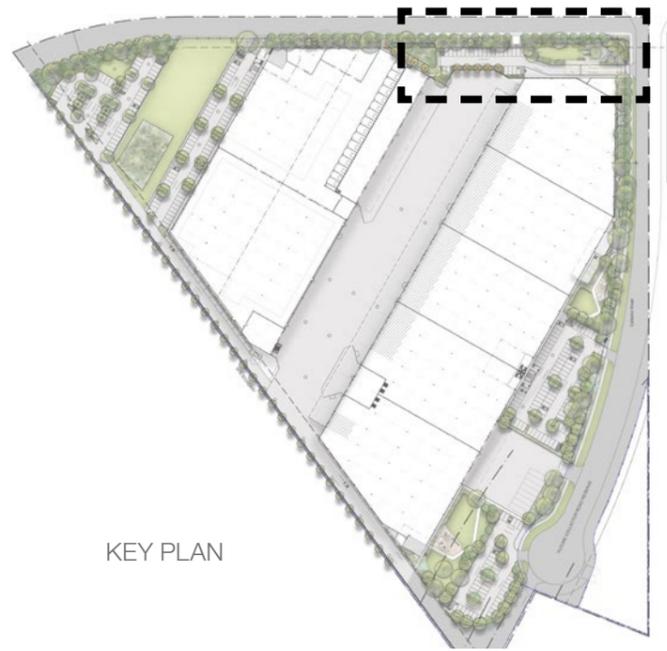


Vertical planting to acoustic wall

Landscape /
South Street / Collector Road Entry Communal Area 1



SCALE 1:400



South Street/Collector Road Entry & Communal Area

This entry point at the corner of Collector Road and South Street is the most visually prominent corner of the site, and is therefore highlighted as such. The area includes feature entry planting, pedestrianised paving, softening of built form and an attractive communal open space providing outdoor amenity for office workers and people using the warehouse. The acoustic wall along part of the northern facade will also be softened through the use of native climbers fixed to the wall and upright deciduous trees planted in front.

NOTE: Furniture layout to communal area is indicative and subject to be finalised during design development



Sculptural entry feature



Feature entry trees



Pedestrianised paving across driveway



Seating area



Passive lawn area

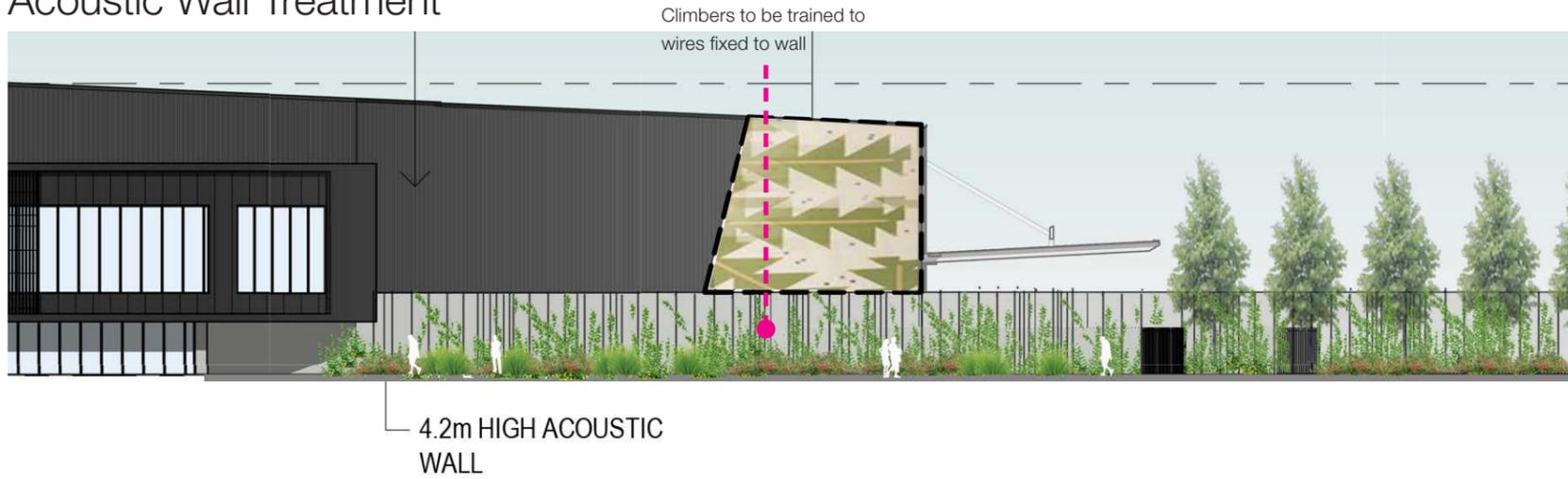


Vertical greenery to acoustic wall

Refer to next page for further detail



Landscape / Acoustic Wall Treatment



Acoustic Wall

The 4.2m High acoustic walls located along the northern and eastern facade will be screened with vertical climbers and shrubbery to the base (where possible).

Climbing plants (*Hibbertia scandens* & *Pandorea pandorana*) are to be trained to wires fixed to the acoustic wall. The trellis spacing/ intervals will change along the wall to create variation in screening. Both species selected as climbing plants are native and will adapt well to the site conditions.



Vertical greenery to acoustic wall



Rope/ wire system fixed to wall



Hibbertia scandens



Pandorea pandorana

Landscape /
Collector Road - Communal Area 2



SCALE 1:400



Footpath



Planting



Park benches with green outlook



Planting to frame turf



Tree planting to lawn



Paved area with seating



KEY PLAN

Collector Road Communal Area 2

This communal area provides a landscaped buffer between the building alongside additional pedestrian access and paved seating areas complimented by areas of open turf and large canopy trees. The setback along Collector Rd is planted with Cumberland Plain Woodland Species and provides a pedestrian link to the northern part of the site.

NOTE: Furniture layout to communal area is indicative and subject to be finalised during design development



Landscape /
Collector Road - Communal Area 3



SCALE 1:400



Footpath



Open lawn area for flexible use



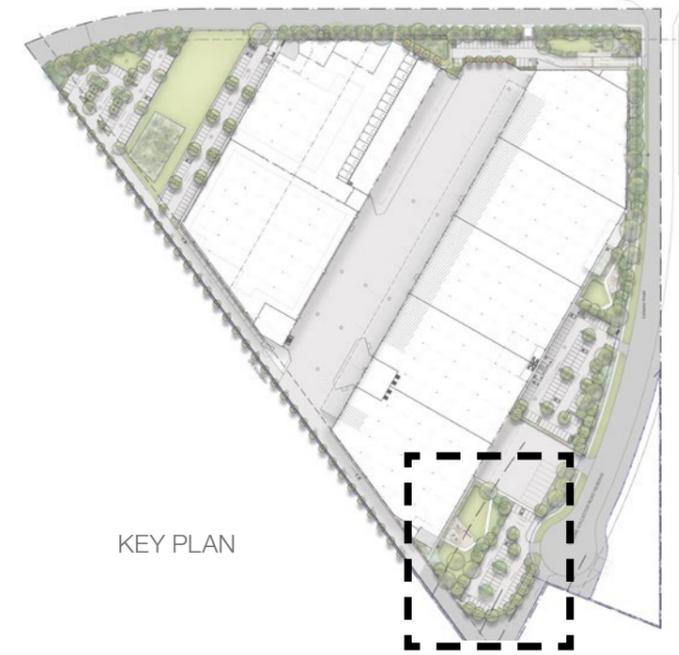
Covered seating area



Increased canopy to carpark



Tree planting to lawn



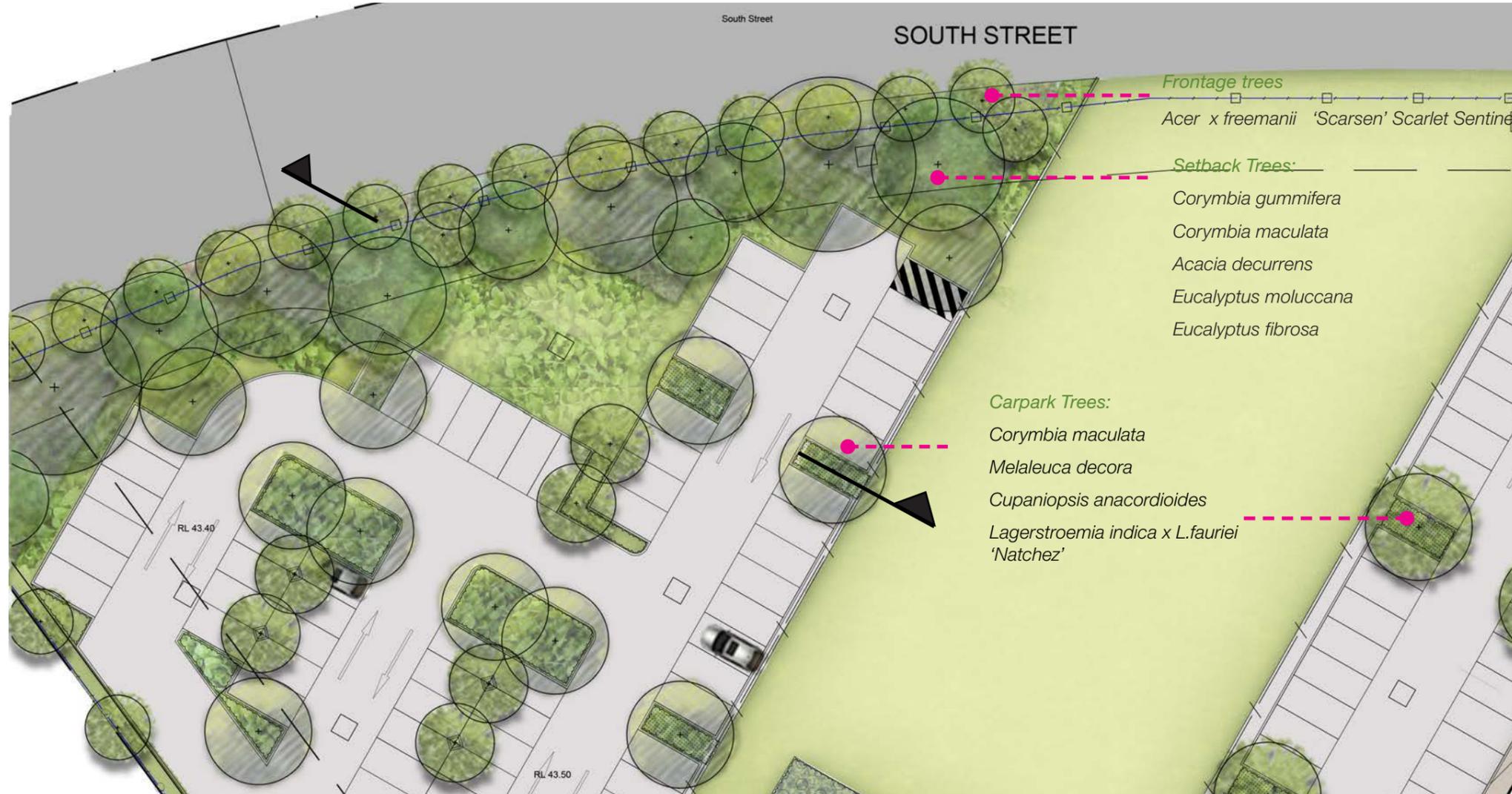
KEY PLAN

Collector Road Communal Area 3

Similar to communal area 2, this space provides a lunch area/ large breakout space in a park like setting. The communal open spaces are located in sunny open areas and in addition to providing outdoor amenity they assist in softening the warehouse 2 facade form Collector Road.

NOTE: Furniture layout to communal area is indicative and subject to be finalised during design development

Landscape /
South Western Carpark Planting



SCALE 1:400



KEY PLAN

Setback Planting & Carpark Planting

The planting strategy along South Street continues along the entirety of the street. Along the fence line along is a structured line of trees evenly spaced with groundcover planting underneath. Behind the fence line within the setback, informal mass planting of Cumberland Plain Woodland Species will occur. Within the carpark a more low maintenance palette for understory plants is propose. The trees to the carpak will be a large and medium species which provide increased canopy cover and reduce the heat island effect.



Native Shrubs



Large Canopy Trees



Planting to carpark islands



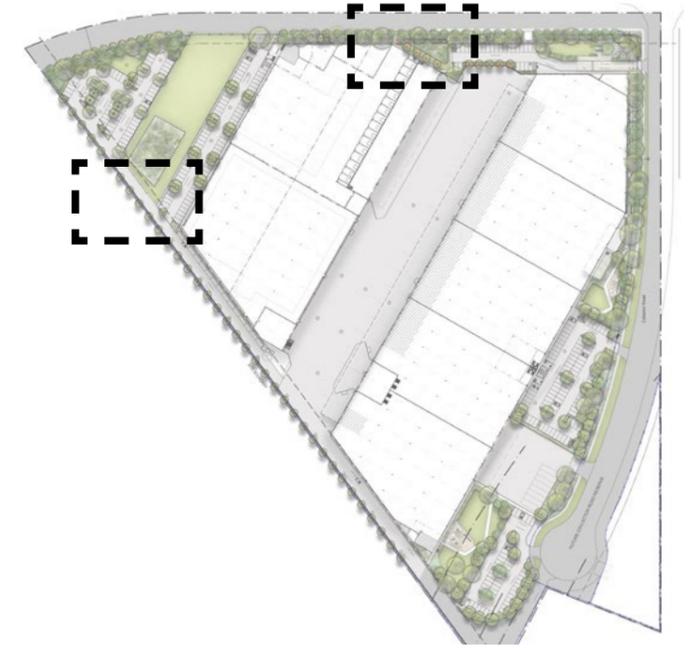
Medium sized trees



Landscape /
Bioretention



SCALE 1:300



KEY PLAN

Bioretention Planting

These planted areas are an essential part of the bioretention system as it removes pollutants and maintains the hydraulic conductivity of the filter media. Plants have been selected with reference to the Blacktown City Council WSUD standard drawings and specification as well as the civil drawings. The mixture of native grasses, shrubs, and sedges have been strategically placed in allocated basins to maximise the effect the planting will have in filtering on-site storm water runoff.



Native Shrubs



Sedges



Bioretention



Native Grasses

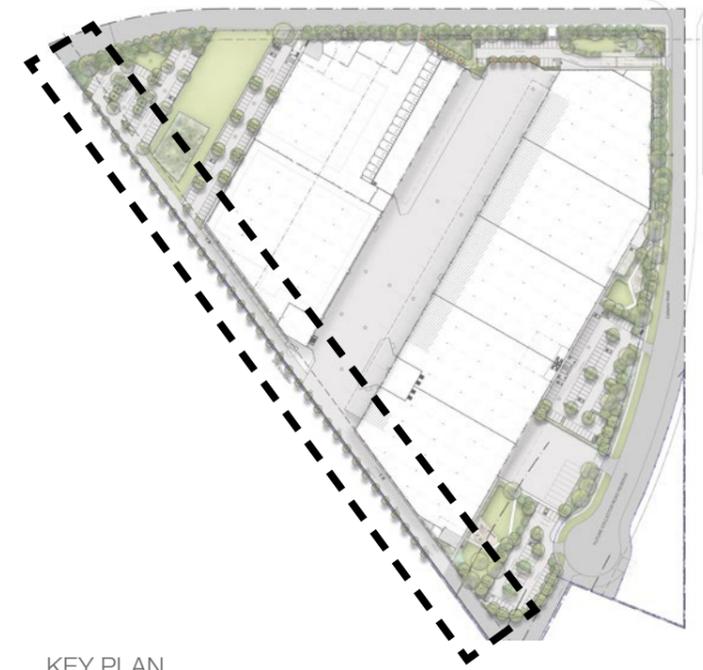


Landscape / Planting within Asset Protection Zone

- Tree canopy cover should be **less than 15%** at maturity;
- Trees at maturity should not touch or overhang the building;
- Lower limbs should be removed up to a height of **2m above the ground**;
- Tree canopies should be separated by **2 to 5m**; and
- Preference should be given to retaining smooth barked and evergreen trees.
- Large discontinuities or gaps in the vegetation should be provided to slow down or break the progress of fire towards buildings;
- Shrubs should not be located under trees;
- Shrubs should form **less than 10%** ground cover; and
- Clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.
- Grass should be kept mown to a height of **less than 100mm**; and
- Leaves and other debris should be removed



SCALE 1:2000



KEY PLAN

Planting Within APZ

Due to the constraints of planting within the APZ no trees are proposed up against the building. To mitigate the separate issue of screening the south west boundary from the neighboring property, Ornamental pears have been proposed to soften the visual impact of the wall/ boundary. Due to their fastigiate form, these trees will not have interconnecting canopies and do not encroach the 15% canopy cover within the APZ. where trees are located in the carpark (still part of the APZ, there will be no shrubs planted beneath the canopies.



Pyrus calleryana 'Capital'



Landscape / Northern Elevation (From South Street)

10-15 Year growth



SCALE 1:500

WAREHOUSE 2



KEY PLAN



SCALE 1:500

WAREHOUSE 1

5 Year growth



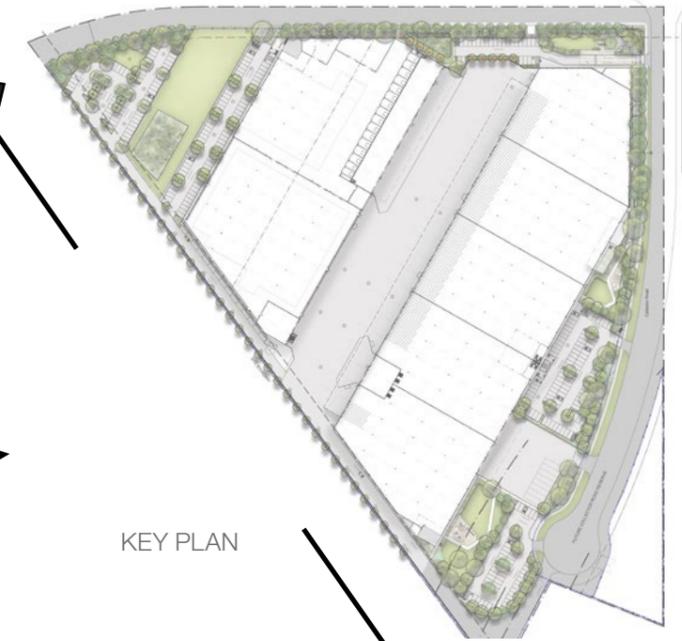
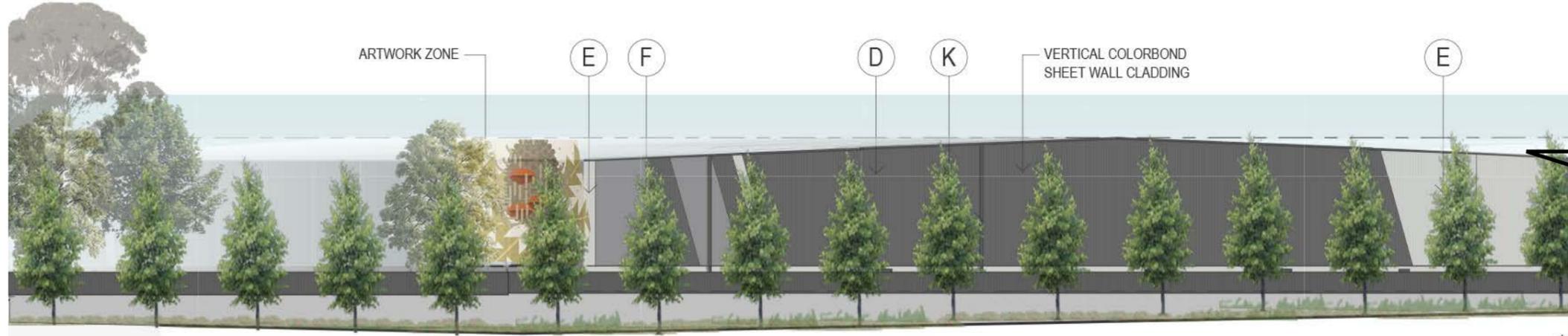
SCALE 1:500

WAREHOUSE 2



Landscape /
South West Elevation

10-15 Year growth



SCALE 1:500

WAREHOUSE 1

1.
FE
SC
BC

10-15 Year growth



SCALE 1:500

WAREHOUSE 2

Landscape / Tree Planting Strategy

South Street Frontage



Acer x freemanii 'Scarsen' Scarlet Sentinel™

South West Boundary Trees



Pyrus calleryana 'Capital'

Cumberland Plain Woodland Trees



Corymbia maculata



Eucalyptus moluccana



Eucalyptus fibrosa



Acacia decurrens



Melaleuca decora

Carpark Tree Planting



Corymbia maculata



Melaleuca decora



Tristaniopsis laurina



Cupaniopsis anacardioides



Lagerstroemia indica x L.fauriei 'Natchez'

Communal Area Trees



Eucalyptus moluccana



Melaleuca decora



Tristaniopsis laurina



Cupaniopsis anacardioides



Lagerstroemia indica x L.fauriei 'Natchez'



Magnolia grandiflora Little Gem

Plant Schedule

Symbol	Botanic Name	Common Name	Mature Size	Pot size	Density	Qty
Trees						
Cg	<i>Corymbia gummifera</i>	Red bloodwood	10 x 20	100L	As Shown	12
Md	<i>Melaleuca decora</i>	White Feather Honey myrtle	7 X 7	100L	As Shown	16
Ad	<i>Acacia decurrens</i>	Black Wattle	10 x 6	100L	As Shown	18
Ca	<i>Cupaniopsis anacardioides</i>	Tuckeroo	8 x 5	100L	As Shown	18
Cm	<i>Corymbia maculata</i>	Spotted Gum	30 x 8	100L	As Shown	18
Em	<i>Eucalyptus moluccana</i>	Grey Box	8 x 20	100L	As Shown	15
Ef	<i>Eucalyptus fibrosa</i>	Red Ironbark	30 x 10	100L	As Shown	12
ASS	<i>Acer x freemanii 'Scarsen' Scarlet Sentinel™</i>	Maple	12 x 7	100L	As Shown	47
PCC	<i>Pyrus calleryana 'Capital'</i>	Capital Pear	10 x 3	100L	As Shown	41
Li	<i>Lagerstroemia indica x L.fauriei 'Natchez'</i>	Crepe Myrtle (White)	8 x 6	100L	As Shown	3
MLG	<i>Magnolia grandiflora Little Gem</i>	Little Gem Magnolia	5 x 3	100L	As Shown	5
TL	<i>Tristaniopsis laurina</i>	Water Gum	8 x 5	100L	As Shown	5

Total number of new trees: 210

Landscape / Shrubs and Understory Planting Strategy



Formal Planting along South Street

Low Groundcovers and shrubs in an organised arrangement in front of fence line. Upright medium sized tree planting evenly spaced along entire South street frontage.

Cumberland Plain Woodland Mix

A mix of medium shrubs, grasses and groundcovers selected from the Cumberland plain woodland species list. This is an endangered vegetation community that has been found within the Blacktown local government area and fragmentation is the biggest threat.

Carpark Planting

Low maintenance & low water use attractive planting to carpark Garden beds.

Biobasin Planting

Low grasses and sedges selected with reference to the Blacktown City Council WSUD.

Acoustic Wall Planting

Native climbers to be planted and trained to acoustic wall to help soften the visual impact of the wall.

Communal Open Space Planting

Structured planting with a mix of hedges, shrubs, accents and groundcovers comprised of mainly native low water use species.

Symbol	Botanic Name	Common Name	Mature Size	Pot size	Density
Shrubs and Accents					
CLJ	<i>Callistemon viminalis</i> Little John	Little John Bottlebrush	0.8 x 0.8	300mm	As Shown
CRS	<i>Cordyline 'Red Sensation'</i>	Red Cordyline	1.5 x 1.0	300mm	As Shown
Dg	<i>Dietes grandiflora</i>	Fortnight lily	1.2 x 1.2	300mm	As Shown
Mp	<i>Murraya paniculata</i>	Mock Orange	3.0 x 2.0	300mm	As Shown
PgR	<i>Photinia glabra 'Rubens'</i>	Dwarf Photinia	3.0 x 2.0	300mm	As Shown
PBB	<i>Phormium 'Bronze Baby'</i>	Bronze new Zealand Flax	0.7 x 0.8	300mm	As Shown
PX	<i>Philodendron 'Xanadu'</i>	Dwarf Philodendron	1.0 x 1.0	300mm	As Shown
RI	<i>Raphiolepis indica</i>	Indian Hawthorn	1.5 x 1.5	300mm	As Shown
Sc	<i>Syzygium cascade</i>	Pink Flowering Lily Pilly	2.5 x 2.0	300mm	As Shown
WVG	<i>Westringia 'Wynabbie Gem'</i>	Zanzibar Gem	1.5 x 1.5	300mm	As Shown
WF	<i>Westringia fruticosa</i>	Coastal Rosemary	1.5 x 1	200mm	As Shown
GRG	<i>Grevillea 'Robyn Gordon'</i>	Grevillea 'Robyn Gordon'	1.5 x 1.5	200mm	As Shown
As	<i>Acmena smithii</i>	Lilly Pilly	2 x 1	200mm	As Shown
Groundcovers and Grasses					
Dc	<i>Dianella caerulea</i>	Blue flax lily	0.8 x 0.7	150mm	As Shown
Ju	<i>Juncus usitatus</i>	Common Rush	1 x 0.5	150mm	As Shown
LI	<i>Lomandra longifolia</i>	Mat Rush	1 x 0.6	150mm	As Shown
Lm	<i>Liriope muscari 'Evergreen Giant'</i>	Giant Liriope	0.5 x 0.5	150mm	As Shown
LV	<i>Lomandra 'Verday'</i>	Mat Rush	0.5 x 0.5	150mm	As Shown
MCT	<i>Melaleuca linearifolia 'Claret Tops'</i>	Honey Myrtle	1.2 X 1	150mm	As Shown
Mpa	<i>Myoporum parvifolium</i>	Creeping Boobialla	0.2 x 0.8	150mm	As Shown
PE	<i>Poa labillardieri 'Eskdale'</i>	Poa	0.6 x 0.5	150mm	As Shown
Ta	<i>Themeda australis</i>	Kangaroo Grass	0.5 x 0.5	150mm	As Shown
Hs	<i>Hibbertia scandens</i>	Guinea Flower climber	climber	150mm	As Shown
Vh	<i>Viola hederacea</i>	Native Violet	2 x 1	150mm	5/m2
Ga	<i>Gazania tomentosa</i>	Silver leaf Gazania	0.15 x 1	150mm	5/m2
Hv	<i>Hardenbergia violacea</i>	False Sardaparilla	0.5 x 1	150mm	5/m2
Lf	<i>Lomandra filiformis</i>	Wattle Mat Rush	0.5 x 0.75	150mm	5/m2
Bioretention Basin					
As	<i>Austrostipa stipoides</i>	Prickly Spear Grass	1 x 1	150mm	5/m2
Ca	<i>Carex appressa</i>	Tall Sedge	1 x 1	150mm	5/m2
Dr	<i>Dianella revoluta</i>	Spreading Fax Lily	1 x 2	150mm	5/m2
LI	<i>Lomandra longifolia</i>	Mat Rush	1 x 0.6	150mm	5/m2
Ju	<i>Juncus usitatus</i>	Common Rush	1 x 0.5	150mm	5/m2
Me	<i>Melaleuca erubescens</i>	Pink honey myrtle shrub	1.8 x 3.0	150mm	5/m2
CPW Planting Matrix					
Dm	<i>Dichelachne micrantha</i>	Plume grass	1.2 x 0.5	150mm	5/m2
Dr	<i>Dianella revoluta</i>	Blue Flax Lily	0.7 x 0.4	150mm	5/m2
Ia	<i>Indigofera australis</i>	Australian indigo	1 x 1.2	200mm	5/m2
Hv	<i>Hardenbergia violacea</i>	False Sardaparilla	0.5 x 1	150mm	5/m2
Ds	<i>Dillwynia sieberi</i>	Prickly Parrot pea	1.5 x 1	200mm	5/m2
Lm	<i>Lomandra multiflora</i>	Mat rush	0.7 x 1	150mm	5/m2
Bs	<i>Bursaria spinosa</i>	Sweet bursaria	2 x 2	200mm	5/m2
Ta	<i>Themeda australis</i>	Kangaroo Grass	0.6 x 0.5	150mm	5/m2

Landscape / Shrubs and Understory Planting Strategy

Formal Planting along South Street



Gazania tomentosa



Dietes grandiflora



Westringia fruticosa



Callistemon 'Little John'



Lomandra longifolia



Melaleuca linariifolia 'Claret Tops'

Acoustic Wall Planting



Hibbertia scandens



Communal Open Space Planting



Melaleuca linariifolia 'Claret Tops'



Westringia fruticosa

Cumberland Plain Woodland Mix



Hardenbergia violacea



Dianella revoluta



Dillwynia sieberi



Bursaria spinosa



Dichelachne micrantha



Indigofera australis

Carpark Planting



Dietes grandiflora



Dianella revoluta



Viola hederacea



Lomandra longifolia



Phormium 'Bronze Baby'



Cordyline 'Red Sensation'



Syzygium cascade

Biobasin Planting



Juncus usitatus



Dianella revoluta



Carex appressa



Lomandra longifolia



Dietes grandiflora



Dianella revoluta