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EXECUTIVE SUMMARY

iScape Landscape Architecture have been engaged to prepare the landscape design response of the proposed Kellyville Park PNRL Eels – Centre of Excellence and Community Facilities at Memorial Avenue, Kellyville NSW.

This report responds to the requirements of the State Significant Development Application and the Secretary's Environmental Assessment Requirements for the detailed design and construction of the new Centre of Excellence & Community Facilities.

This report addresses the following matters:

- Proposed landscaping and planting
- Protecting and increasing urban tree canopy
- Tree and vegetation removal
- Green infrastructure opportunities







INTRODUCTION

This report supports a State Significant Development Application (SSDA) for the proposed Kellyville Park PNRL Eels – Centre of Excellence and Community Facilities at Lot 60 DP10702 & Lot 1 DP167535 No. 8 Memorial Avenue, Kellyville NSW.

This report is to be submitted to the Minister for Planning pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

Refer to reports prepared by others (Architectural etc) for project parameters and project background information.

SEARS

6. Landscaping and trees Details the proposed landscaping and planting, including proposals for native vegetation communities and plant species	Overall concept plan - Page 12 Detail plans - Pages 13-14 Planting palettes - Pages 17-18 Planting plans - Pages 19-20
Demonstrates how the development proposes to protect and increase the urban tree canopy	Overall concept plan - Page 12 Urban tree canopy - Page 16
Includes justification for any tree and vegetation removal	Urban tree canopy - Page 16 Arborist report
Demonstrates how the proposed development maximises opportunities for green infrastructure, consistent with Greener Places	Green infrastructure - Page 11 Overall concept plan - Page 12 Urban tree canopy - Page 16 Heat island mitigation - Page 21 Architectural report



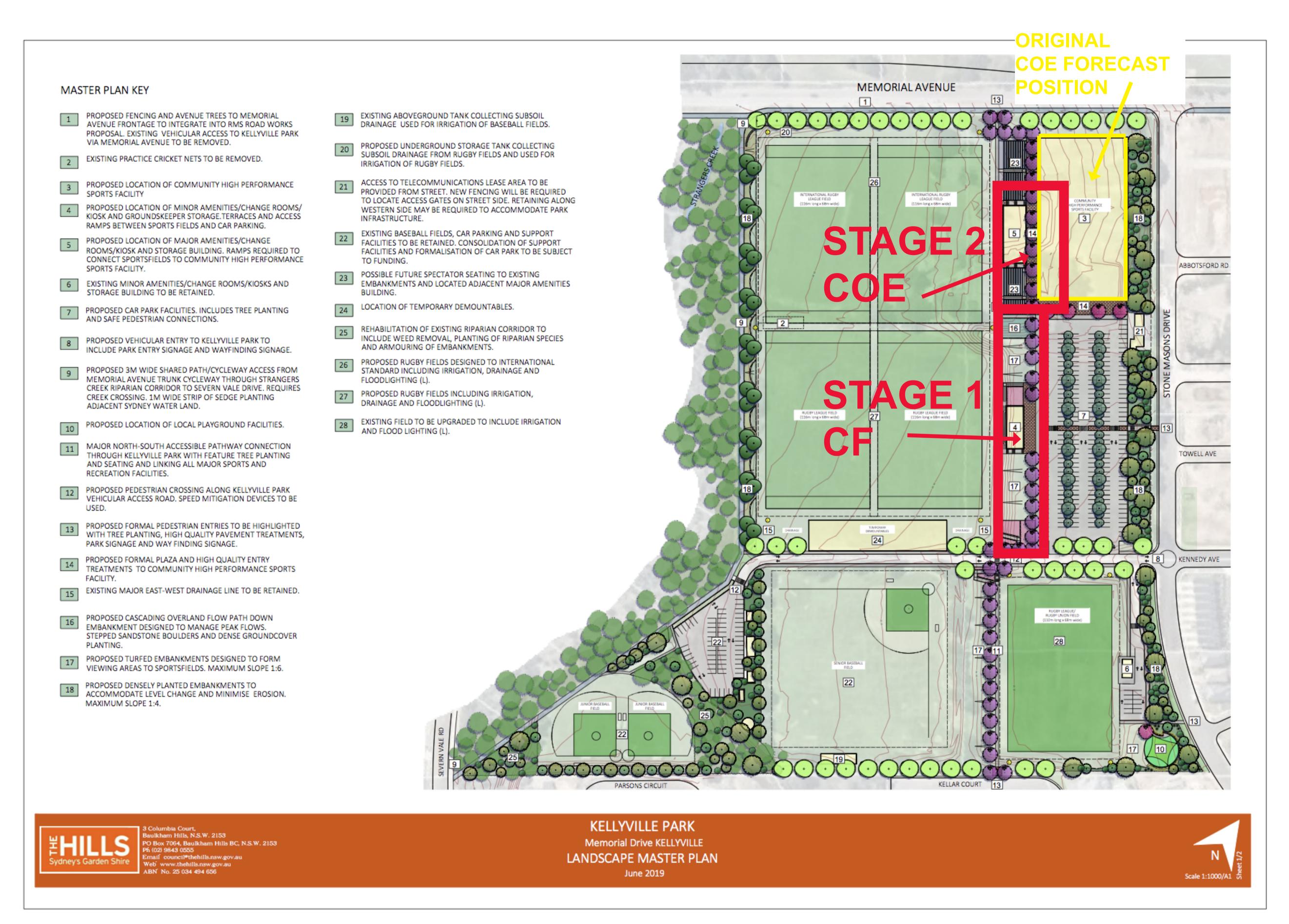
PROJECT DESCRIPTION

The proposed development will provide state of the art facilities which enable physical recreation opportunities in conjunction with improved facilities for staff, players and existing users of the site. The proposed development will be integrated with the existing recreational landscape of the site and complement the upgrades to the existing playing fields being undertaken by Council. The proposed development is defined as a Recreation facility (major), and includes the following components:

- Construction of high-performance Centre of Excellence in the north east of the site adjacent to Training Field 2:
 - Elite level gymnasium.
 - Medical and rehabilitation facilities.
 - Aquatic recovery and rehabilitation pools.
 - Lecture theatre and meeting rooms.
 - Player education and study areas.
 - Administration offices for the Parramatta Eels.
 - New female facilities including a dedicated female change room, cubicle toilets and showers.
 - Balcony and terrace area.
 - End of Trip Facilities and bicycle parking.
 - Refuse Area.
- Construction of a Community Facility, including a grandstand with approximately 1,500 seats in the centre of the site adjacent to the Main Playing Field 3:
 - Unisex changerooms and amenities.
 - Referee changeroom and amenities.
 - First Aid/Medical room.
 - Community gymnasium.
 - Café/kiosk.
 - Concourse terrace.
 - Multipurpose community function room with kitchen and amenities.
 - Refuse Area.
 - Bicycle parking.
- Solar arrays will be included on the roof of both the Centre of Excellence and Community Facility.
- Additional 40 car parking spaces for the proposed facility to operate in conjunction with existing at grade car
 parking already constructed by Council.
- Additional landscaping throughout the development footprint.
- Removal of a small number of trees internal to the site, however noting perimeter trees will be retained where not affected by the proposed building footprints.
- Hours of operation for the Centre of Excellence and Community Facility are 5:00am to 12:00am, however the following key times are likely:
 - Centre of Excellence: 7.00am 7.00pm
 - Community Facility: 7.00am 10.00pm



THE HILLS SHIRE COUNCIL MASTERPLAN FOR KELLYVILLE PARK





THE HILLS SHIRE COUNCIL MASTERPLAN FOR KELLYVILLE PARK

KELLYVILLE PARK - STATEMENT OF INTENT

PREAMBLE

The Hills Shire Council wants to actively provide top-level sporting facilities for each major sporting code within the Shire. These facilities provide health and wellbeing benefits for our community as well as pathways for local residents to access elite sport.

A premier sports facility for each mainstream (major) sporting code is designed to enable The Hills Local Government Area to have representation at regional or state level sporting competitions, and for residents to partake in their chosen sport at a higher level within the Shire. Additionally, a premier sports facility provides a venue for sporting codes and other user groups to undertake events such as regional and school competitions, gala events, seminars, conferences and training aimed at a wider catchment level.

A premier sports facility does not necessarily imply that a whole site needs to be developed at an elite or sub-regional level but instead an element or component of the site. It predominantly requires the provision of a facility catering for the higher tier i.e. a field/s with associated amenities, building/s, spectator seating, floodlighting etc.

COMMUNITY ACCESS AND PLAN OF MANAGEMENT

It is intended that the site continue to be managed in keeping with the terms of the Plan of Management and that the majority of the site remain available to the general public for community use. The current tenants, Kellyville Bushrangers will continue occupying Kellyville Park as their home venue. Other existing users of Kellyville Park including the Polecats Rugby League, Renegades Rugby Union, Kellyville Kolts Baseball and local cricket will also remain at Kellyville Park, though some may be temporarily relocated during construction. Football and AFL will move to new facilities at Arnold Avenue and Balmoral Road Sports Complex.



RUGBY LEAGUE

Council has identified Kellyville Park as the premier sports facility in the Shire for rugby league. Kellyville Park offers opportunities for multiple full size playing fields, as well as accommodating other required infrastructure such as upgraded amenities, increased floodlighting levels and an opportunity for a Centre of Excellence. Kellyville Park is also the preferred premier rugby league venue in the Shire for a National Rugby League presence, providing pathways and access to elite level competition and facilities for our community.

Multi-use changerooms (female inclusive), under-cover spectator seating, high level floodlighting to main field (300 plus lux), work stations, gymnasium, and meeting rooms are proposed to be contained within the Centre of Excellence space, initially temporary and subsequently permanent, proposed as part of the Kellyville Park upgrade with an elite level partner who has the capacity and capability from an organisational, governance and financial perspective to help Council deliver this outcome for the Community.

The Centre of Excellence is required to support the proper functioning of the site and it is anticipated that it will occupy the southern end of the four field set up for up to five years, until such time as a permanent facility is constructed in the north-east corner of Kellyville Park. The availability of the north-east corner is subject to the temporary compulsorily acquired lease of that area by the RMS for the Memorial Avenue road widening project.









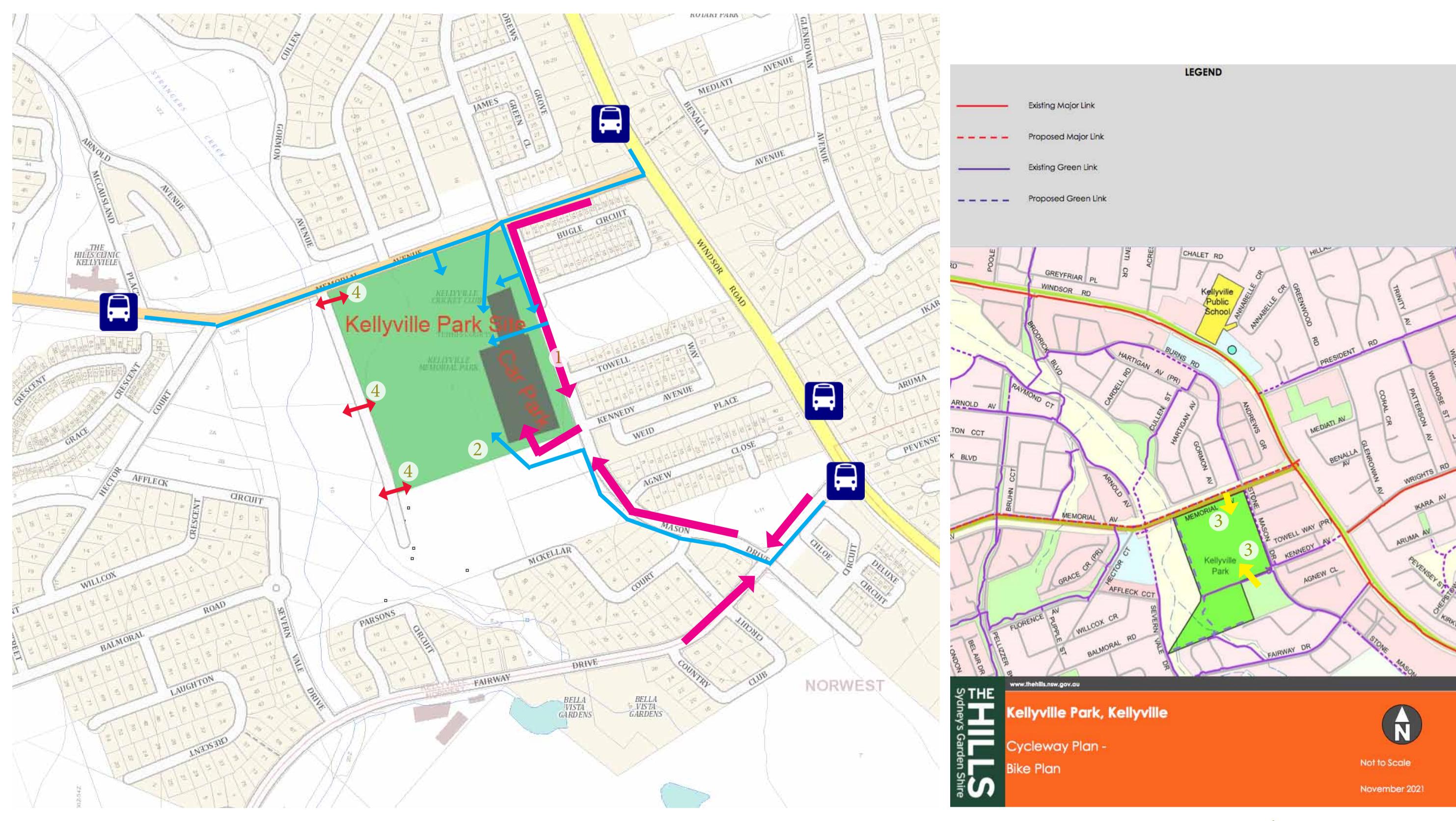




KELLYVILLE PARK Memorial Drive KELLYVILLE LANDSCAPE MASTER PLAN - STATEMENT OF INTENT June 2019

SITE CONNECTIONS

- 1. Vehicle access routes (pink arrows)
- 2. Pedestrian access routes including from local bus stops (blue arrows)
- 3. Cycle access points into the site from existing (and future) local cycleways (yellow arrows)
- 4. Possible future links with future pathways/cycleways along Strangers Creek (red arrows)



THE SITE

- 1. Existing recently completed carpark by Hills Shire Council
- 2. Existing Parramatta Eels temporary facility
- 3. Existing upgraded Rugby League Fields by Hills Shire Council 4. Proposed new building locations
- 5. Stone Mason Drive
- 6. Memorial Avenue
- 7. Proposed car park extension location







DESIGN PRINCIPLES & VISION

The three main design principles informing the landscape response to the site are:

- 1. Increased canopy coverage
- 2. Connectivity through landscaping
- 3. Active community spaces

Increased canopy coverage

The site is proposed to support a new large area of local indigenous 'Cumberland Plain Woodland' ecological community plant species. This connects the site to it's past and also improves the urban tree canopy coverage of the local area.

It also acts as an education area to the local community of the local indigenous plant species.

Connectivity through landscaping

The new facilities are accessed through two main ways:

- 1. Pedestrians entering the facilities from the car parking areas. The car park is accessed from Stone Mason Drive, the main access to Stone Mason Drive is from Memorial Avenue and Fairway Drive.
- 2. Pedestrians entering off the footpaths from the access road, Stone Mason Drive or Memorial Avenue.

It is proposed to reinforce and strengthen the identity of these entries through landscaping, by creating strong avenue planting to draw pedestrians to the new facilities and facilitate intuitive way finding.

Active community space

Adjacent to the proposed cafe is proposed a new community space. A deck is proposed overlooking lush landscaped areas. An area for stalls/marquees to be set up is also proposed.

By providing an attractive gathering space it is envisaged this will become a meeting point for the local community even outside of sporting events and will provide a year round active space for the local community.







GREEN INFRASTRUCTURE

The major components that make up the green infrastructure network fall into three categories:

- 1. Open space for recreation: green infrastructure for people
- 2. Urban tree canopy: green infrastructure for climate adaptation and resilience
- 3. Bushland and waterways: green infrastructure for habitat and ecological health.

Open space for recreation

The Kellyville Park Masterplan by Hills Shire Council proposes 4 playing fields for active recreation. These are set into a landscape setting with trees and remnant vegetation. These fields improve the quality of open space and provide upgraded facilities for the amenity of local and district residents.

The playing fields have been provided by Hills Shire Council and are outside the scope of this project.

Urban tree canopy

The main strategies for improving urban tree canopy are:

- 1. Protect, maintain, and enhance the existing urban tree canopy
- 2. Create an interconnected urban tree canopy
- 3. Build knowledge and awareness of urban tree canopy across State and local government, and the community

In response to these points:

- 1. Refer to the Landscape plans, Urban tree canopy section and Bushland and waterways section in this report to see how additional tree canopy has been added to the site.
- 2. Refer to Bushland and waterways section explaining increased connection of tree canopy
- 3. The revegetation area has two functions, firstly it acts as an education area for the local indigenous 'Cumberland Plain Woodland' and secondly increases the urban tree canopy coverage of the site.

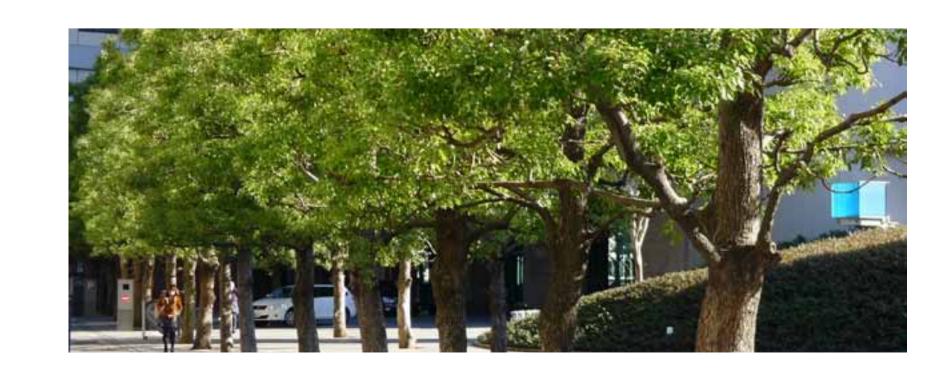
Bushland and waterways

The site contains a number of existing trees including remnant species from the local 'Cumberland Plain Woodland' ecological community. A small number of trees are proposed for removal to accommodate the proposed development. A total of 88 new trees are proposed to be planted, mostly local indigenous species to enhance and supplement the existing trees and bushland. 13 trees are proposed for removal to accommodate the proposed works.

The proposed replacement planting area proposes a revegetation area of 1850m² (125m x 14m approx.) of Cumberland Plain Woodland, this is of a size and volume that can be sustainable long term.

This large revegetation area also connects people with the indigenous bushland that would have once stood on the land now occupied by the sporting facilities and local residential developments.

The vegetation will provide new habitat for local fauna; enhancing the existing vegetation on the site by providing a larger bushland area allows a greater species diversity, improving the genetic health of the urban habitat. The larger vegetation area as proposed also improves the proximity of habitats in the local areas, and the capacity of species to move between habitats.



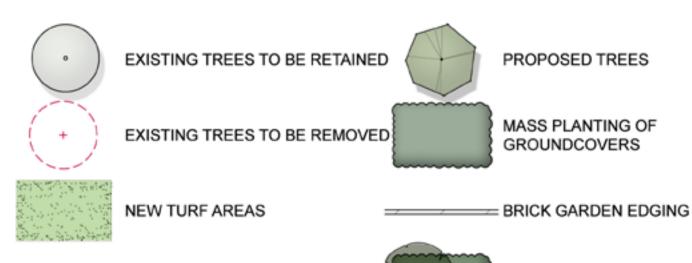




OVERALL CONCEPT PLAN

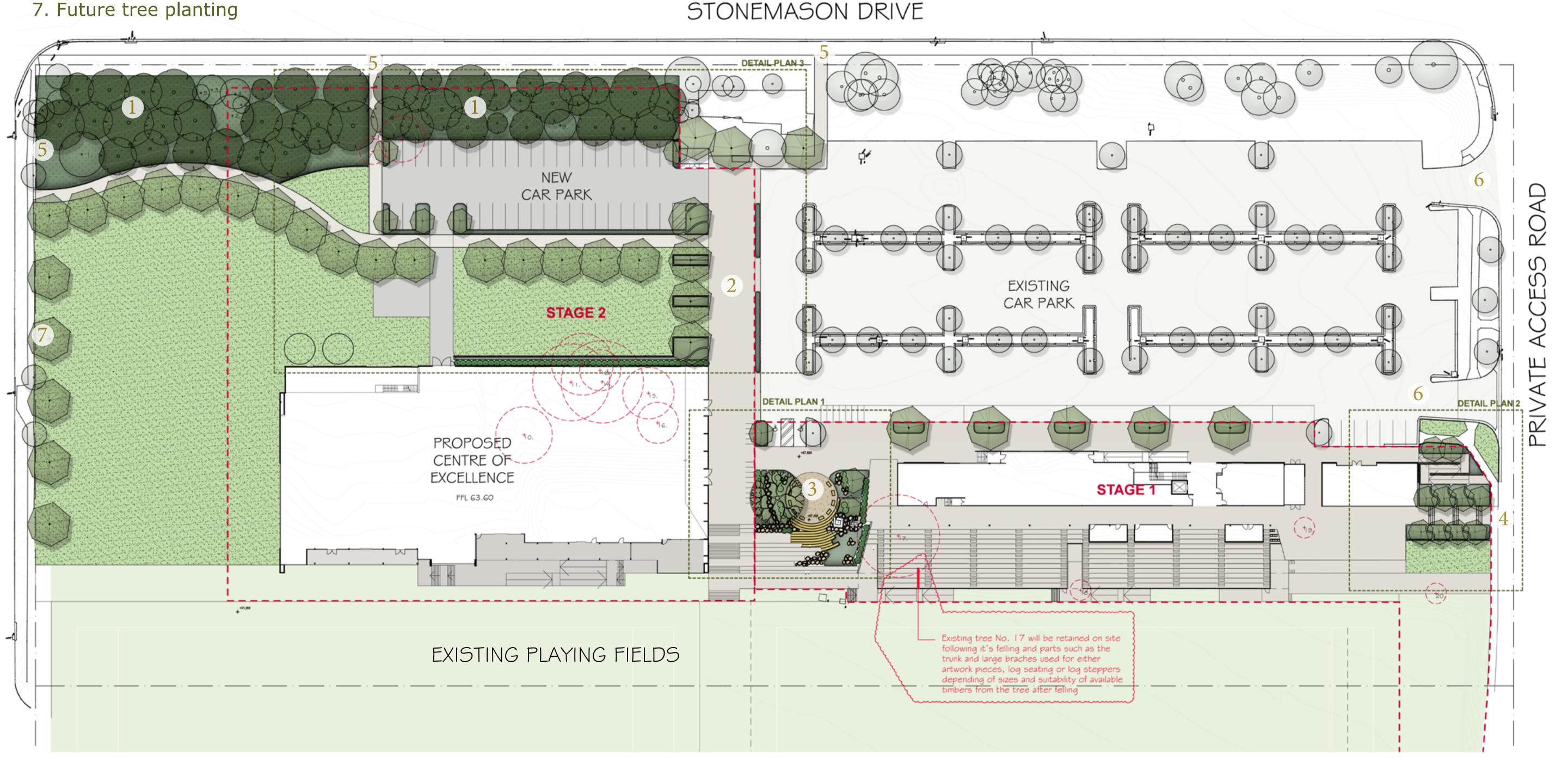
- 1. Replacement tree planting area
- 2. Main concourse entry from car park
- 3. Meeting place between the buildings
- 4. Pedestrian concourse entry from street
- 5. Pedestrian access paths from street footpaths
- 6. Vehicle access points
- 7. Future tree planting

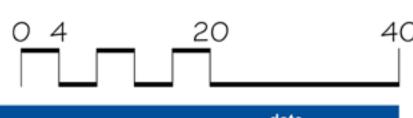
AVENUE



LEGEND

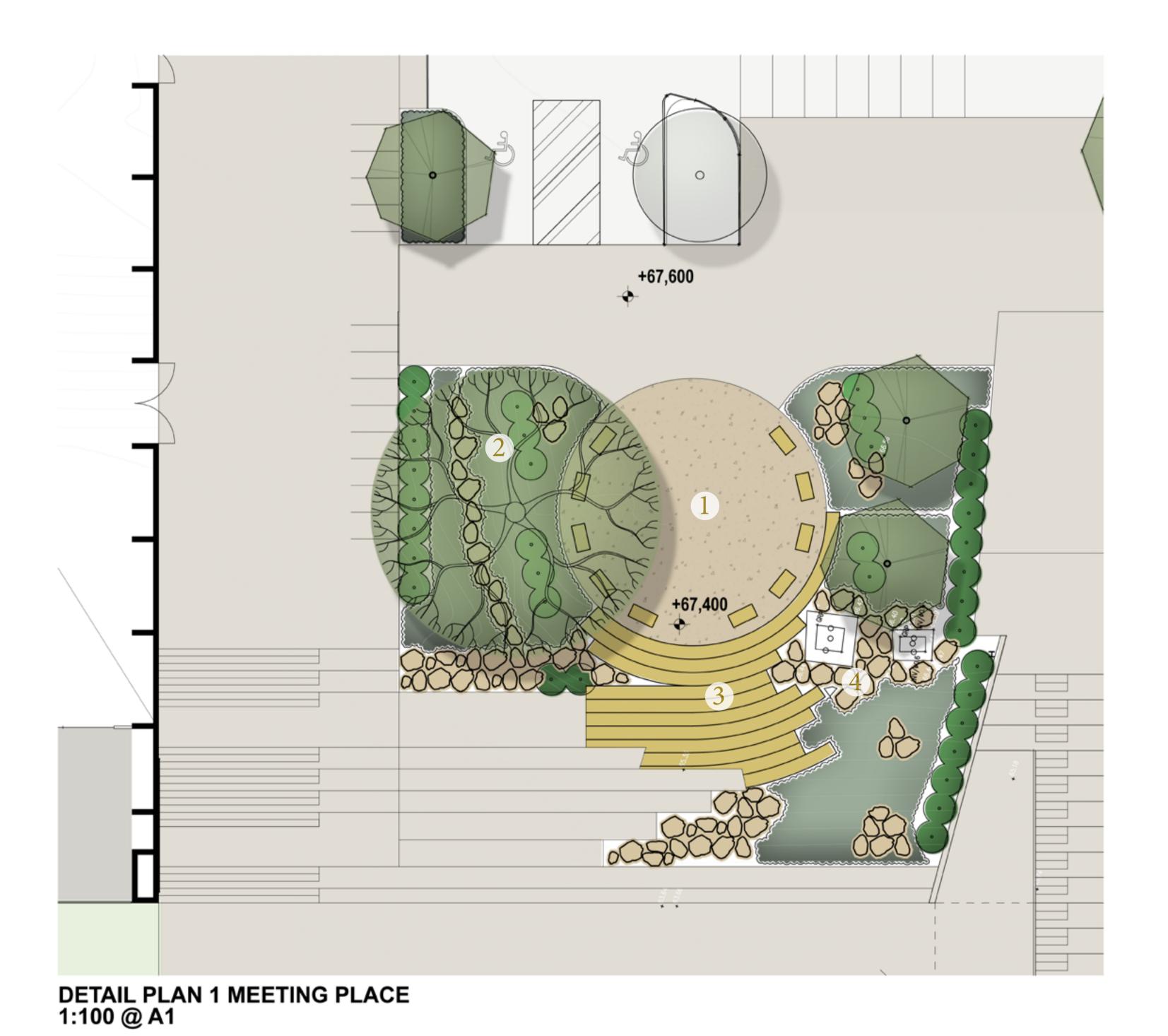




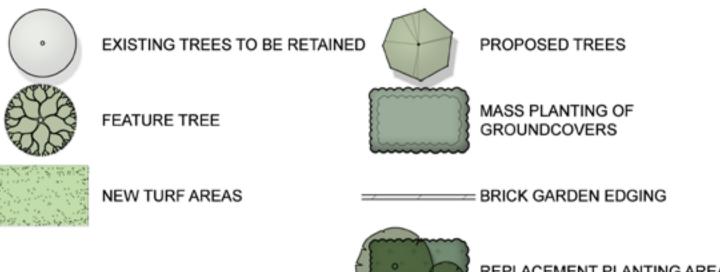


DETAIL PLANS

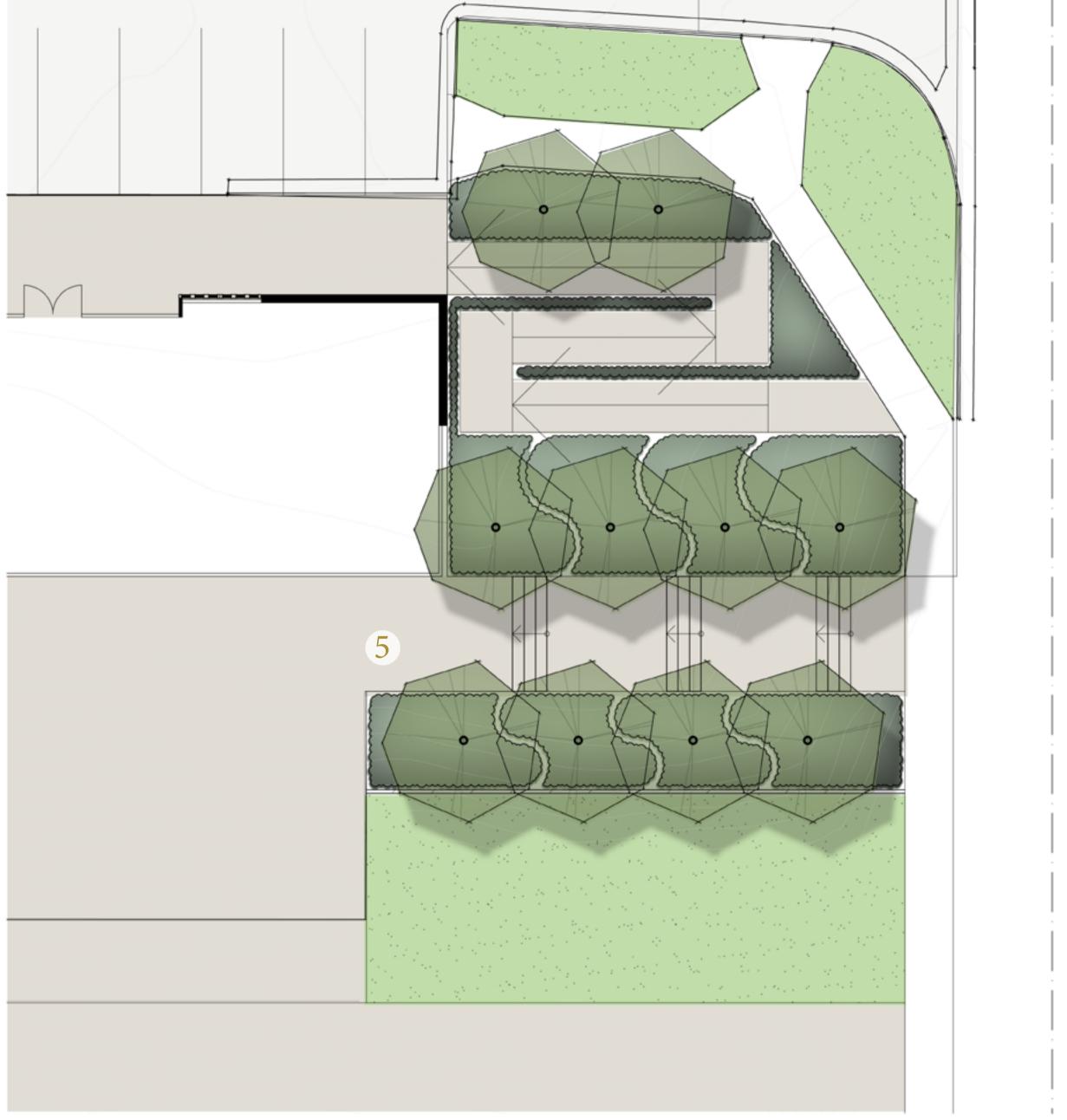
- 1. Circular meeting place with informal sandstone block seats
- 2. Focal feature tree and surrounding planting
- 3. Informal sandstone log steps to link to seating area
- 4. Sandstone boulders to retain embankment and informal play
- 5. Entry avenue planting with understory native grasses



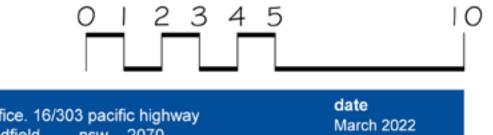
LEGEND







DETAIL PLAN 2 CONCOURSE ENTRY 1:100 @ A1







DETAIL PLANS

- 1. Replacement tree planting area also provides screening of development from neighbouring residents
- 2. Main concourse entry from car park with avenue tree planting





Kellyville Park Centre of Excellence & Sports Hub





LEGEND

EXISTING TREES TO BE RETAINED

FEATURE TREE

PROPOSED TREES

MASS PLANTING OF GROUNDCOVERS

office, 16/303 pacific highway lindfield nsw 2070

ph 9416 4290 A.C.N 097 328 580 email ijla@netspace.net.au

date March 2022 job.dwg no. 140.22(21)/352 scale 1:150 @ A1 1:300 @ A3

CONNECTING WITH COUNTRY

AVENUE

1. Opportunity for interpretive signage with information on the local indigenous 'Cumberland Plain Woodland' plant community and it's relationship with the local Aboriginal people.

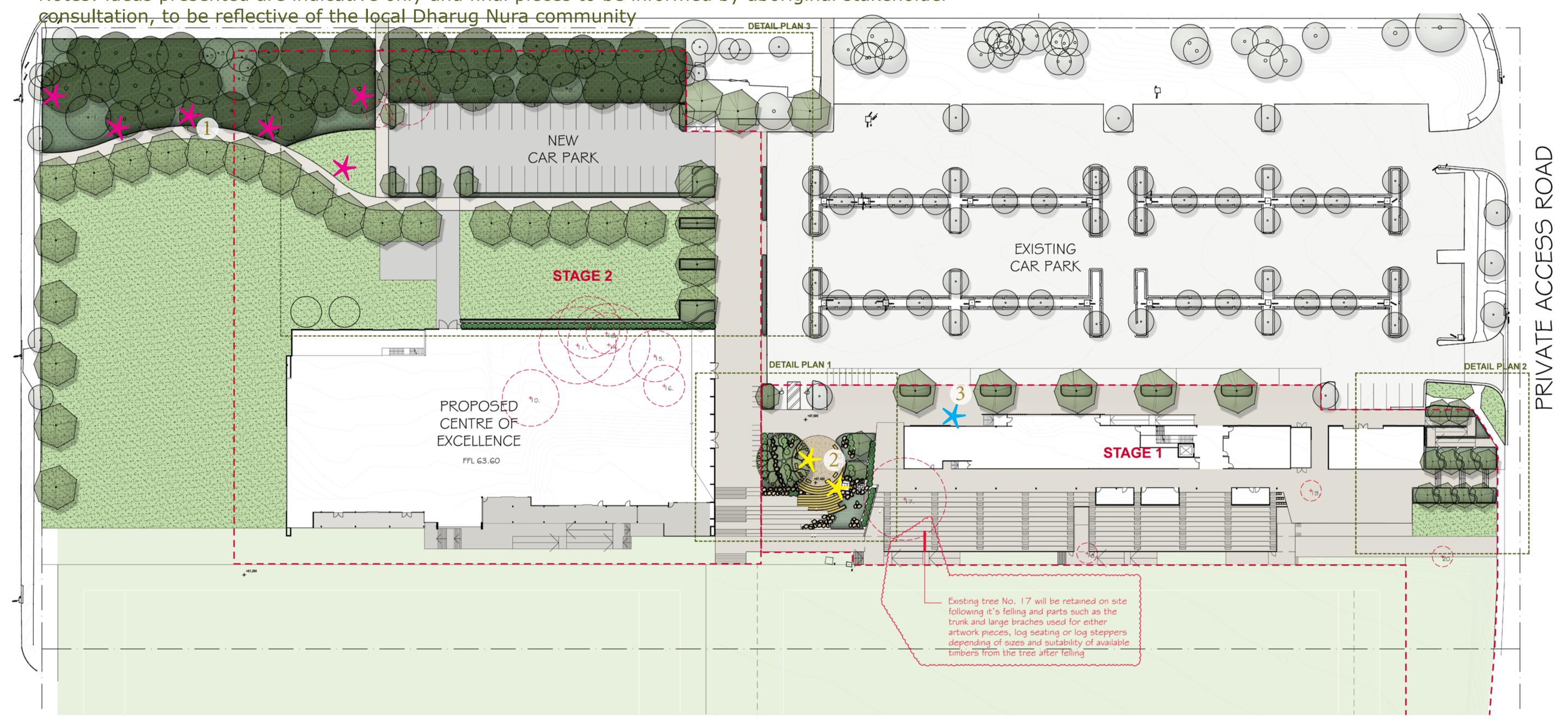
2. Opportunity for interpretive art in the meeting space reflective of the local Aboriginal people and local history. Possible words/patterns in the paving and art/sculpture to be creating from the existing tree to be removed.

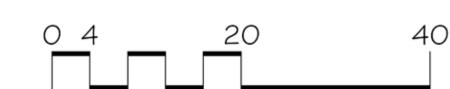
3. Opportunity for welcome to country text on building wall viewable on approach to buildings and the meeting space.

Notes: ideas presented are indicative only and final pieces to be informed by aboriginal stakeholder







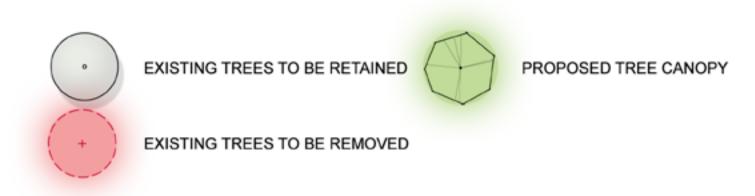




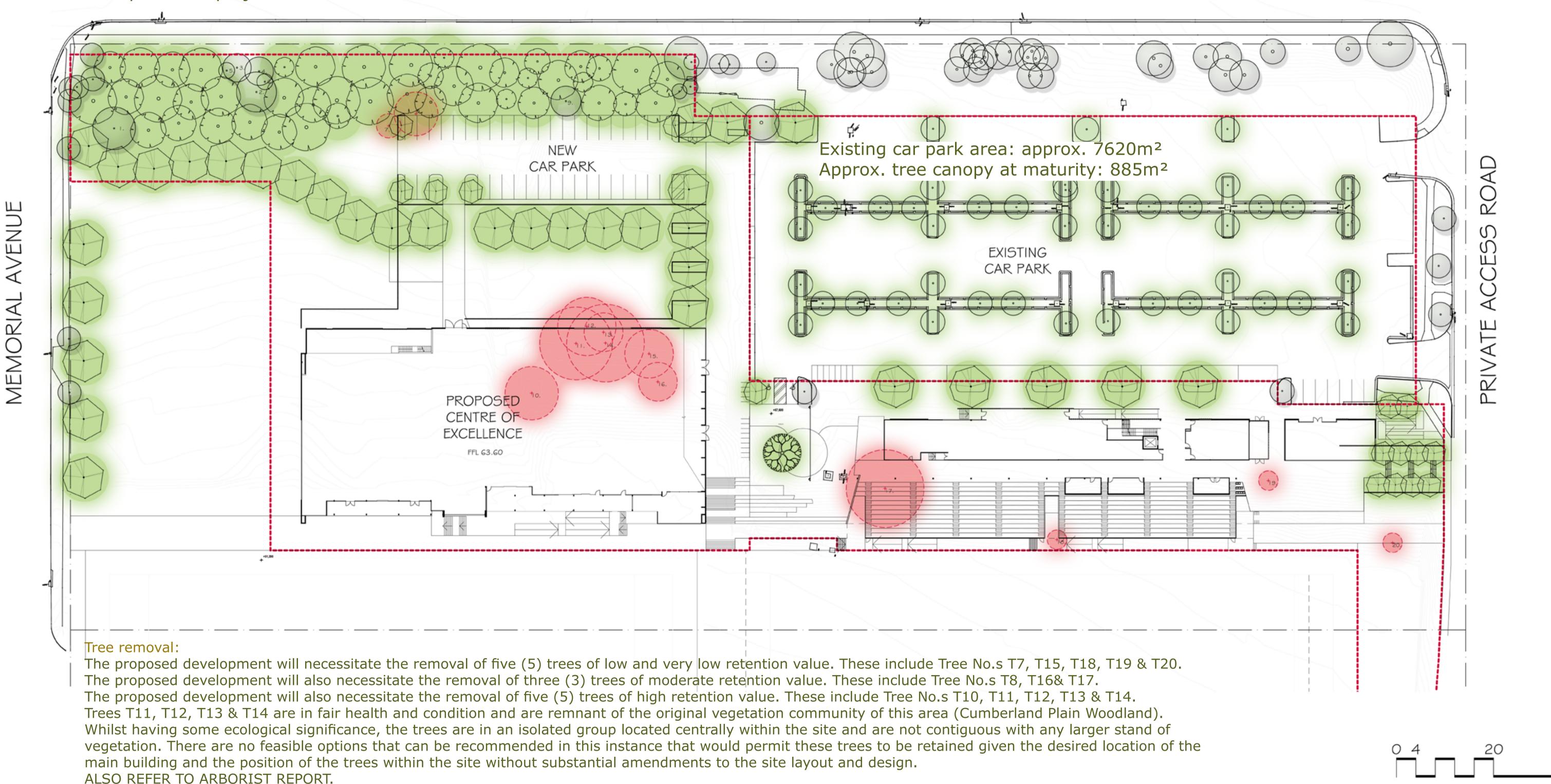
LEGEND

URBAN TREE CANOPY

Site area: approx. 17,000m² Existing canopy cover: approx. 1,450m² (8.5% site are)
Proposed canopy cover: approx. 4,935m² (29% site area)



Hills Council have noted tree coverage across Kellyville Park is quite limited due to the large areas set aside for organised sport in accordance with Council's Recreation Strategy. It is intended that as part of the Kellyville Park Landscape Master Plan, concentrations of dense native plantings be undertaken primarily along the site's eastern boundary and southern boundary. These dense native plantings along the eastern boundary have been provided as part of this proposal as this area falls within the scope of this project.



PLANTING PALETTE

The planting palette for the replacement planting area is to be comprised of plant species from the locally indigenous 'Cumberland Plain Woodland' plant community.

SCHEDULE OF PLANT MATERIAL - REPLACEMENT PLANTING

CODE	BOTANICAL NAME	COMMON NAME	QUANTITY	MATURE HEIGHT	CONTAINER SIZE	STAKES	
AF	Acacia falcata	Sickle Wattle	65	4m	200mm	-	
BS	Bursaria spinosa	Sweet Bursaria	65	3m	200mm	-	
CM	Corymbia maculata#	Spotted Gum	4	20m	45 litre	2	
DL	Dianella longifolia	Flax Lily	505	0.4m	tubestock	-	
DR	Dianella revoluta	Flax Lily	505	0.4m	tubestock	-	
DRe	Dichondra repens	Kidney Weed	505	0.4m	tubestock	-	
DV	Dodonaea viscosa subsp. cuneata	Hop Bush	65	3m	{ 200mm }	-	
EA	Eucalyptus amplifolia	Cabbage Gum	4	20m	45 litre	2	
EC	Eucalyptus crebra#	Narrow-leaved Ironbarl	< 4	20m	45 litre	2	
EE	Eucalyptus eugenioides#	Thin leaf Stringybark	4	20m	45 litre	2	
EF	Eucalyptus fibrosa ssp. fibrosa#	Broad-leaved Red Ironba	rk 4	20m	45 litre	2 2 2 2 2 2 2 2	
EG	Eucalyptus globoidea#	White Stringybark	4	20m	45 litre	2	
EL	Eucalyptus longifolia#	Woollybutt	4	20m	45 litre	2	
EM	Eucalyptus moluccana#	Grey Box	4	20m	45 litre	2	
ET	Eucalyptus tereticornis	Forest Red Gum	4	20m	45 litre	2	
GH	Goodenia hederacea	Forest Goodenia	505	prostrate	tubestock	-	
HV	Hardenbergia violacea	Native Sarsaparilla	505	prostrate	tubestock	-	
IA	Indigofera australis	Native Indigo	65	2m	200mm	-	
LF	Lomandra filiformis	Wattle Mat Rush	505	0.4m	tubestock	-	
MD	Melaleuca decora#	White Feather Honeymyrtle	4	6m	45 litre	2	
MSt	Microlaena stipoides	Meadow Grass	505	0.4m	tubestock	-	
MS	Melaleuca stypheloides#	Paperbark	4	10m	45 litre }	2 2	
SG	Syncarpia glomulifera#	Turpentine	4	15m	} 45 litre	2	
TA	Themeda australis	Kangaroo Grass	505	0.4m	tubestock	-	
# 48 x trees from the local indigenous 'Cumberland Plain Woodland' ecological community.							



Sickle Wattle



Sweet Bursaria



Spotted Gum



Dianella longifolia Flax Lily



Dianella revoluta Flax Lily



Dichondra repens Kidney Weed



Dodonaea viscosa subsp. cuneata **Hop Bush**



Eucalyptus amplifolia Cabbage Gum



Eucalyptus crebra Narrow-leaved Ironbark



Eucalyptus eugenioides
Thin leaf Stringybark



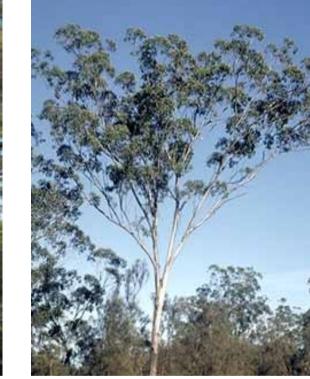
Eucalyptus fibrosa ssp. fibrosa Broad-leaved Red Ironbark



Eucalyptus globoidea
White Stringybark



Eucalyptus longifolia Woollybutt



Eucalyptus moluccana **Grey Box**



Eucalyptus tereticornis
Forest Red Gum



Goodenia hederacea
Forest Goodenia



Hardenbergia violacea
Native Sarsparilla



Indigofera australis
Native Indigo



Lomandra filiformis Wattle Mat Rush



Melaleuca decora **Paperbark**



Microlaena stipoides **Meadow Grass**



Melaleuca styphelioides
Prickly Paperbark



Syncarpia glomulifera **Turpentine**



Themeda australis **Kangaroo Grass**



PLANTING PALETTE

The planting palette for the general landscape areas around the buildings and car park is to be comprised of a mix of plant species from the locally indigenous 'Cumberland Plain Woodland' plant community, other native species used throughout the existing car park, and other suitable native species.

SCHEDULE OF PLANT MATERIAL - GENERAL AREAS

CODE	BOTANICAL NAME	COMMON NAME	QUANTITY	MATURE HEIGHT	CONTAINER SIZE	STAKES
CAp	Carex appressa	Sedge	130	0.8m	200mm	_
CBj	Callistemon 'Better John'	Bottlebrush	45	1m	200mm	_
CM	Corymbia maculata#	Spotted Gum	15	25m	100 litre	2
CP	Crinum pedunculatum	Swamp Lily	5	0.75m	200mm	_
DCI	Dianella caerulea 'Lucia'	Lucia Dianella	416	0.4m	140mm	-
DE	Doryanthes excelsa	Gymea Lily	8	1.5m	200mm	-
DRIr	Dianella revoluta 'Little Rev'	Little Rev Dianella	484	0.3m	140mm	-
DV	Dodonaea viscosa subsp. cuneata	a Hop Bush	15	3m	200mm	_
EM	Eucalyptus moluccana#	Grey Box	4	15m	100 litre	2
FN	Ficinia nodosa	Nobby Clubrush	140	1m	200mm	_
HV	Hardenbergia violacea	Native Sarsparilla	432	prostrate	140mm	_
IA	Indigofera australis	Native Indigo	8	2m	200mm	_
LC	Lophostemon confertus*	Brush Box	5	15m	200 litre	2
LF	Lomandra fluviatilis	Fine Leaf Lomandra	404	0.4m	140mm	_
LLn	Lomandra longifolia 'Nyalla'	Nyalla Lomandra	134	0.4m	140mm	_
LLt	Lomandra longifolia 'Tanika'	Tanika Lomandra	328	0.4m	140mm	_
TL	Tristaniopsis laurina 'Luscious'*	Water Gum	10	5m	100 litre	2
MS	Melaleuca stypheloides#	Paperbark	7	10m	100 litre	2
WF	Waterhousea floribunda*	Weeping Lillypilly	6	15m	100 litre	2

26 x trees from the local indigenous 'Cumberland Plain Woodland' ecological community (in addition to those in the offset planting area).



Callistemon 'Better John' **Bottlebrush**





Spotted Gum



Swamp Lilly



Lucia Dianella



Dianella revoluta 'Little Rev' **Little Rev Dianella**



Gymea Lilly



Dodonaea viscosa subsp. cuneata **Hop Bush**



Eucalyptus moluccana **Grey Box**



Ficinia nodosa **Knobby Club Rush**



Hardenbergia violacea
Native Sarsparilla



Indigofera australis Native Indigo



Lomandra fluviatilis Fine Leaf Lomandra



Lomandra longifolia `Nyalla' **Nyalla Mat Rush**



Lomandra longifolia 'Tanika' **Tanika Mat Rush**



Lophostemon confertus **Brush Box**



Tristaniopsis laurina 'Luscious' **Water Gum**



Melaleuca styphelioides **Prickly Paperbark**

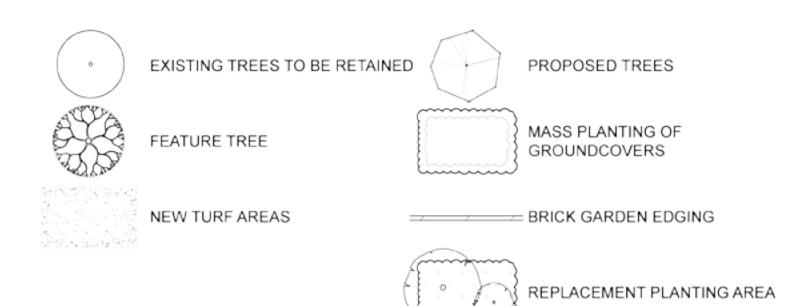


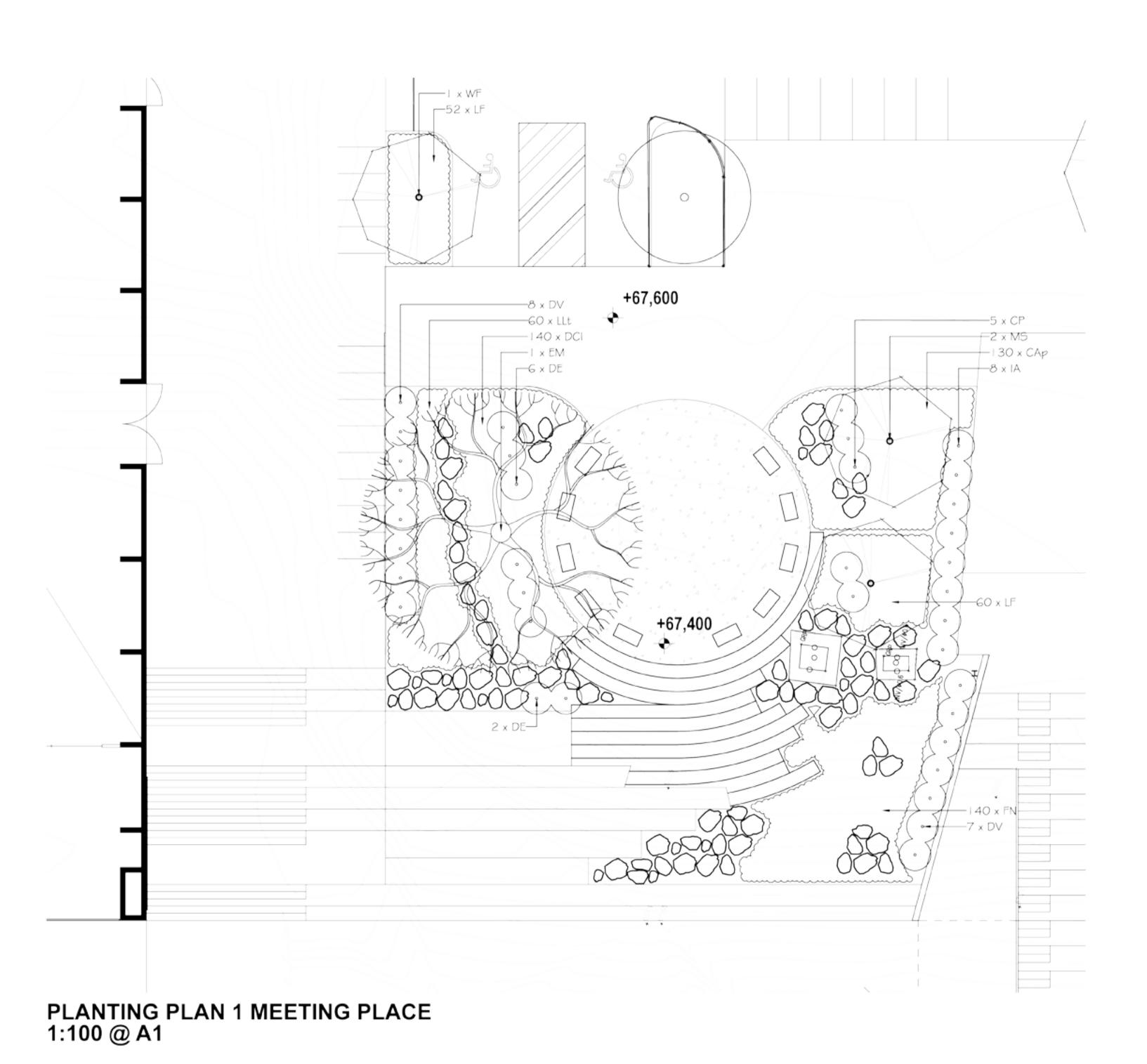
Waterhousea floribunda **Weeping Lilly Pilly**

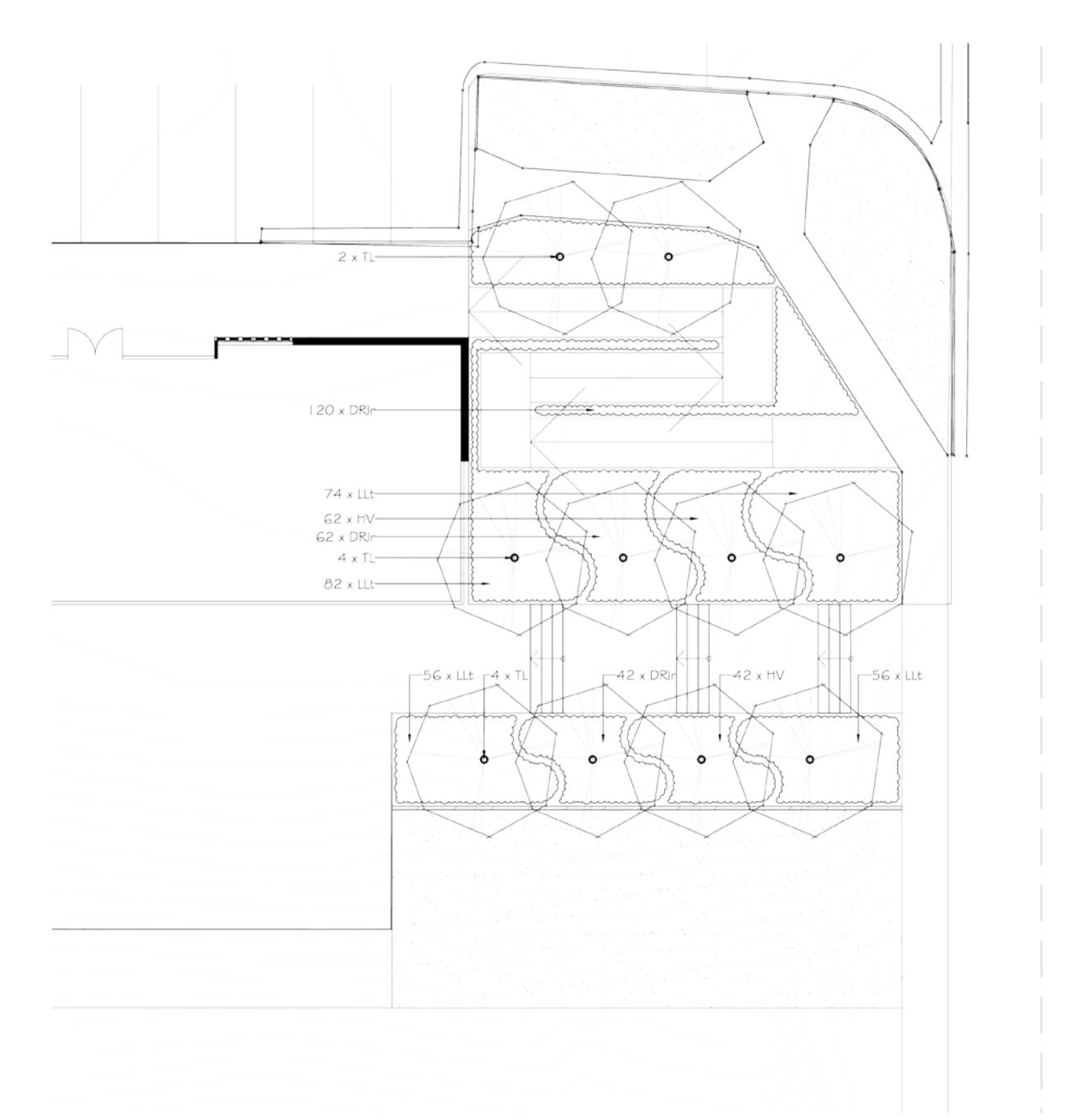


^{* 21} x additional non-indegenous trees.

PLANTING PLANS

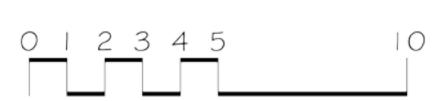




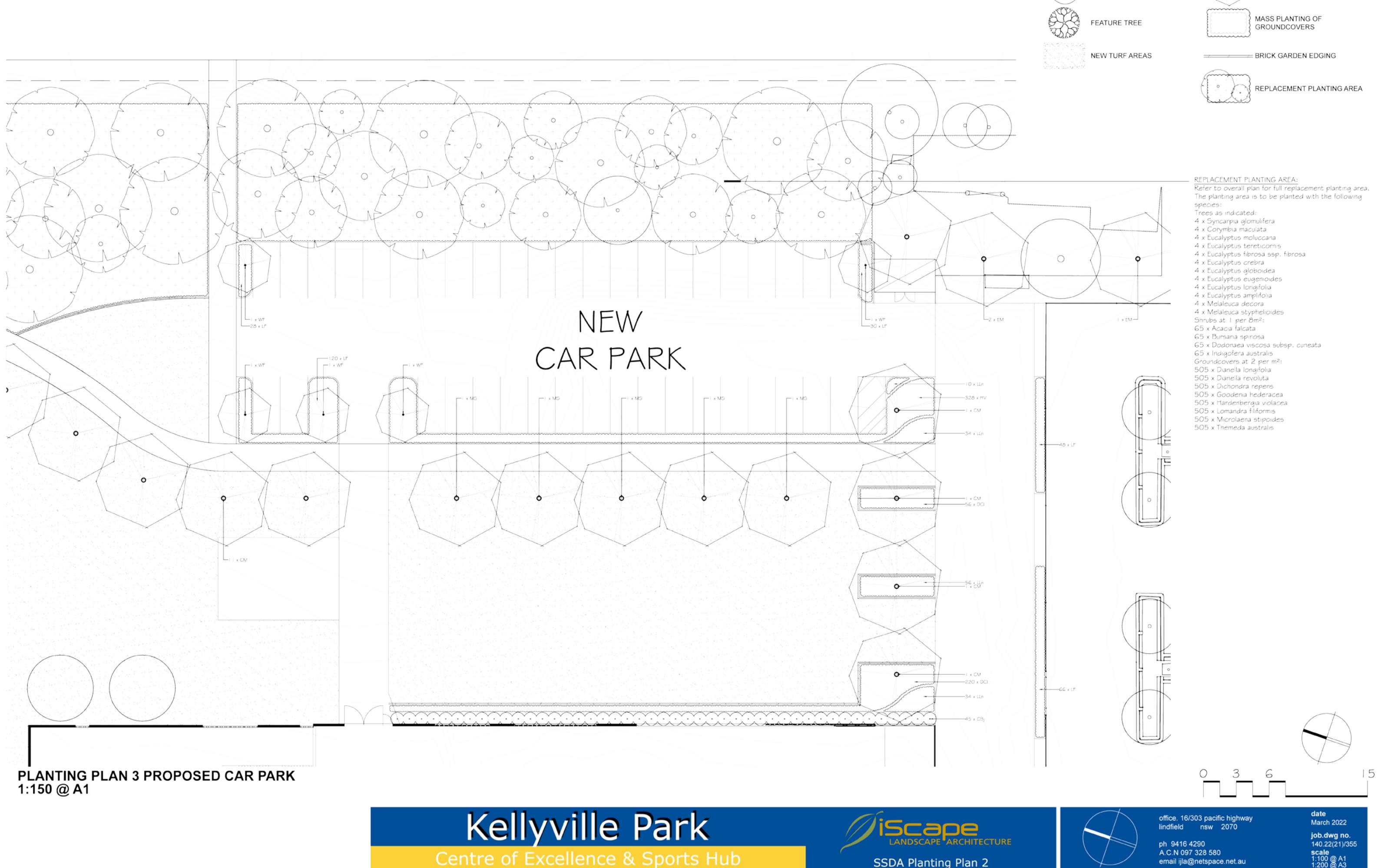


LEGEND

PLANTING PLAN 2 CONCOURSE ENTRY 1:100 @ A1



PLANTING PLANS



Centre of Excellence & Sports Hub

LEGEND

SSDA Planting Plan 2

EXISTING TREES TO BE RETAINED

PROPOSED TREES

scale 1:100 @ A1 1:200 @ A3

HEAT ISLAND MITIGATION

Proposed trees have been strategically placed to maximise shade coverage of hard surface areas in the mid afternoon when the sun is at is hottest. This reduces the amount of heat absorbed and retained by the hard surfaces, helping to reduce the heat island effect.

As shown diagrammatically below a large area of the proposed car will be shaded in the mid

As shown diagrammatically below a large area of the proposed car will be shaded in the mid afternoon as well as shading of the main concourse pathway from the car park areas.

LEGEND

