90-120 REGENT STREET REDFERN

LANDSCAPE DA REPORT

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ISSUE B



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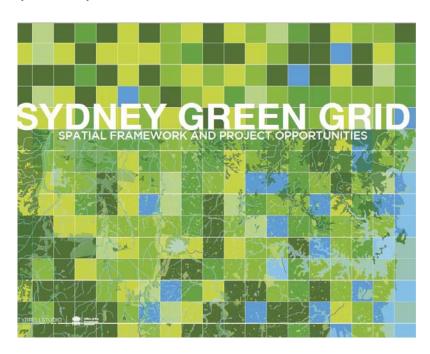
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90 - 120 REGENT STREET I REDFERN I LANDSCAPE DA REPORT

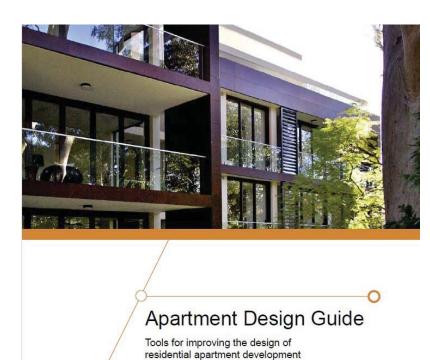
STRATEGIC PLANNING FRAMEWORK | STATE GOVERNMENT (PUBLIC DOMAIN & LANDSCAPE)

INTRODUCTION SYDNEY GREEN GRID 2017 (GANSW)



- The site on Regent St is located within a key urban renewal corridor of Sydney. - P115
- "With significant transformations underway [in the Redfern-Waterloo area] opportunity to provide additional high quality open space as well as a connected network to support future growth" - P116.
- A series of key strategic opportunities have been identified and include: "Continue lane-way revitalisation within the CBD... to activate under-utilised public spaces." – P121

APARTMENT DESIGN GUIDE 2015 (DPE NSW)



- Principle 5 Good landscape design enhances the development's environmental performance by... solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management. – P13
- Minimum soil volume standards are outlined in the document for Planting on Structures. – P116

GREENER PLACES (GANSW)



- Integration: Greener Places considers Green Infrastructure as being integrated with other urban infrastructure such as built form, transport infrastructure and water management systems to create high quality urban environments. – P32
- Connectivity: Greener Places promotes the creation of a network of high quality open spaces that connect with town centres, public transport hubs, rivers, creek and employment and residential areas - creating a network of open space. The network includes physical and functional connections that benefit people and wildlife. - P34
- Multi-functionality: Multifunctional green spaces should be high quality and high performing, producing ecological, social, environmental and economic benefits. Multifunctionality represents the ability of Green Infrastructure to deliver multiple ecosystem, environmental and other services simultaneously. -P36

PREPARED BY TURF DESIGN STUDIO

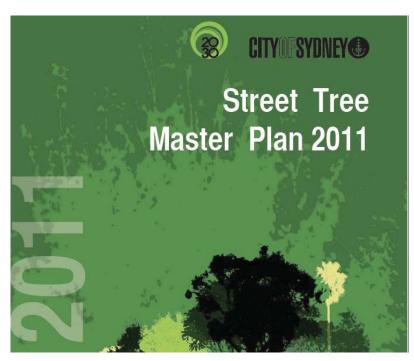
STRATEGIC PLANNING FRAMEWORK | LOCAL GOVERNMENT (PUBLIC DOMAIN & LANDSCAPE)

THE FINE GRAIN - REVITALISING SYDNEY'S **LANES 2008 (COS)**



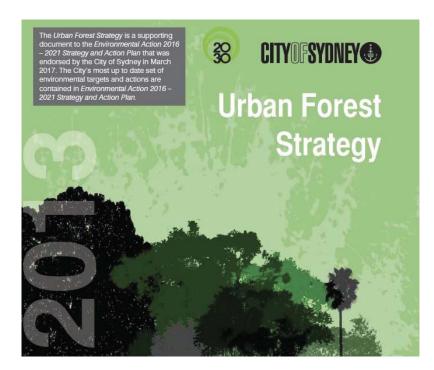
- "The majority of Sydney's lanes continue to effectively perform the role they were built for. That is, the delivery of goods and the removal of refuse. These uses however do not create vibrancy and interest that the City of Sydney is seeking. Active and interesting lanes require other uses to locate there, such as small shops, bars, cafés and art galleries. These uses generally locate in city lanes for the simple reason that these spaces off major thoroughfares is inexpensive. Over time many of the small retail spaces in lanes in Sydney have been removed as blocks have been consolidated to build large office buildings. This report suggests ways to re-establish the supply of small retail spaces, particularly at street level." – P3
- Objective 2: Increase the supply of small scale spaces on streets and lanes. - P4

STREET TREE MASTERPLAN 2011 (COS)



Street Trees to the Regent St frontage are nominated as Platanus acerifolia (London Plane) and street trees to the Marian St frontage are nominated as Pistacia chinensis in the Street Tree masterplan (existing street trees are in accordance with this)

URBAN FOREST STRATEGY 2013 (COS)



- To protect and maintain any existing urban forest The City will prioritise the maintenance and protection of existing trees in order to maximise the benefits already received from this asset. (P 2-1)
- Increase Canopy cover The City will increase the canopy cover from 15.5% to 23.25% by 2030, and then to 27.13% by 2050, through targeted programs for trees located in streets, parks and private property. (P 2-1)
- Improve urban forest diversity The City will improve the age spread of our street and park trees. We will also increase species diversity, while ensuring the population does not comprise of more than 40% for any one family, 30% for any one genus and 10% for any particular species.

SITE ANALYSIS | LANDSCAPE CONTEXT



Contextual Aerial Image - Not to scale

INTRODUCTION

This report supports a State Significant Development Application (SSDA - 10382) submitted to the Minister of Planning and Public Spaces. This SSDA seeks consent for the design, construction and operation of the student housing development at 90-120 Regent St, Redfern.

This report demonstrates the landscape design intent for the public domain and private communal open spaces within the development. Refer to the design statement on page 9 for a detailed explanation on design intent and guidance.

SITE LOCATION

The site is located on Regent Street, one of Redfern's prominent commercial strips and only a few minutes walk southeast from the station. The district is undergoing mass redevelopment, with the major upgrade of the Redfern station as a catalyst. The area has a present mix of medium and high density residential and commercial buildings, with retail along the streets, creating a highly urban setting. The proposed scheme, tying into the Marian Street pedestrian link from the station, will support the upgraded Precinct, offering greater access to open space and paths, with pedestrian and community needs at the forefront of the design thinking.

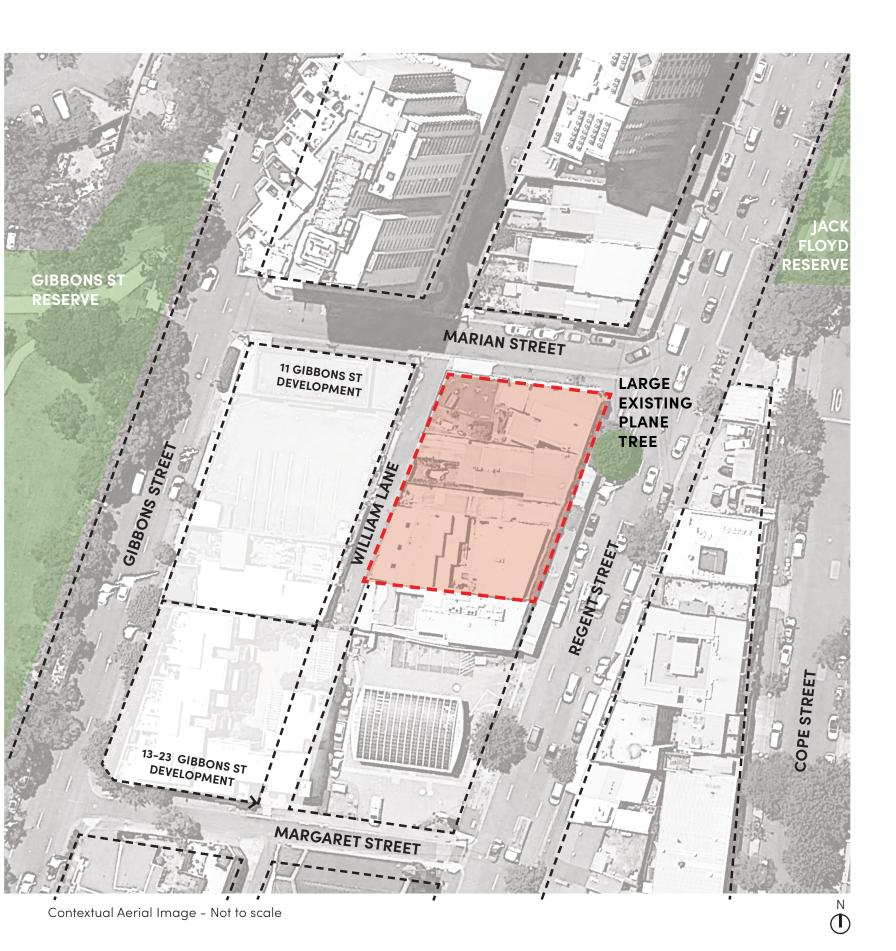
THE LOCAL ENVIRONMENT

A number of green spaces mark the district surrounding the site. Gibbons Street Reserve between the site and Redfern Station provides a pleasant green buffer to the busy Gibbons St roadway.

Jack Floyd Reserve across Regent St provides a small local park with an open lawn and benches under a scattering of indigenous trees, and the 4.8 hectare Redfern Park is a short 10min walk to the east. To the west, development of Australian Technology Park has seen the creation of a number of quality new open spaces in close proximity to the site, including 'Innovation Plaza' and 'Vice Chancellor's Oval'.



SITE ANALYSIS | LANDSCAPE CONTEXT



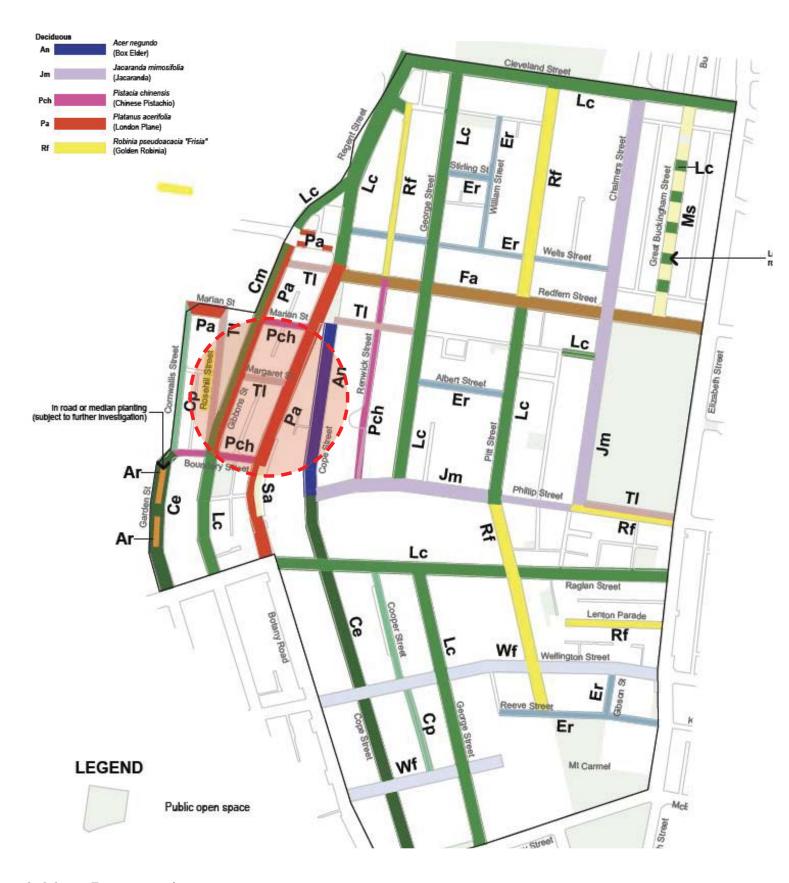






Important aspects of the local environment

SITE ANALYSIS | STREET TREES

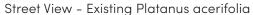


TREE RETENTION

The design intent is to retain and protect the existing mature Platanus acerifolia (London Plane) planted along the Regent St frontage. There is also opportunity to create a more continuous street tree canopy along Regent St by planting additional Platanus trees along the footpath edge at 9 metre intervals in accordance with CoS street tree masterplan.

The two small Pistacia chinensis along Marian St are also earmarked for retention with the possibility to add an additional tree of the same species along the street edge.



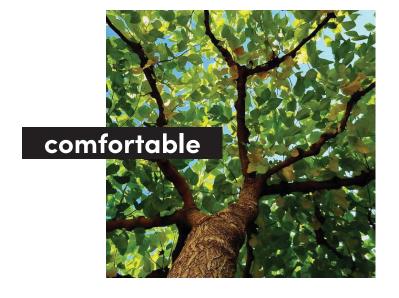




Street View - Existing Pistacia chinensis

CoS Street Tree masterplan 2014

PLACE PRINCIPLES | LANDSCAPE











YEAR-ROUND ENVIRONMENTAL COMFORT

The Sydney climate offers warm summer nights and cool winter evenings. Ensuring the outdoor terraces will be comfortable year-round will foster a more social and connected community.

GENUINE, SOCIAL PLACES FOR ALL

Delivering flexible spaces for the entire student community offering a diverse array of amenity.

CONTRIBUTE STREETSCAPE AMENITY

Ensuring the public open space provides a variety of slow spaces for people to congregate and inhabit.

CONNECTED WITH LOCAL CHARACTER

Drawing on the character and ecological value of neighbouring open spaces, notably Gibbons Street Reserve & Redfern Park.

INSIDE / OUTSIDE CONNECTIONS

Maxising the connectivity between apartments and social spaces while providing for passive surveillance and improved views out of private rooms and terraces.

DESIGN STATEMENT | LANDSCAPE



PUBLIC DOMAIN

The objective of this project is to create a vibrant street destination, complemented by residential apartments above that enjoy a strong connection with nature by way of large balcony planters and rooftop terraces. Highly articulated façades deliver a dynamic visual outcome, whilst providing the setting for a diverse range of microlandscapes for communal use.

Along Regent St the aim is to continue the cloak of existing London Plane trees along the facade of the proposed building, providing shade in summer and a green outlook for residents in surrounding blocks. William Lane and Marian St are more intimate streetscapes, catering for unique urban breakout spaces and further street greening. William late with its newly proposed connection to Margaret St aims to be a new urban destination with the building's carved out entrance at its northern edge.

LANDSCAPE & COMMUNAL OPEN SPACE

Extensive landscaping to terraces and rooftops of the development will also contribute to the urban tree canopy, providing positive outcomes for micro-climate, biodiversity, and habitat, whilst optimising opportunities for social interaction between residents. The landscape will be designed with the end-user in mind, ensuring a balance of planting and open views, practical establishment and long term management strategies.

LEVEL 2

Level 2 provides residents with three rooftop terraces each with their own unique character and uses. The Western Terrace, overlooking William Ln, with its raised timber deck, BBQ facilities, flexible lawn and outdoor cinema provides a social gathering space catering for many different groups. Because of its location adjacent to internal bedrooms a planting buffer along its inner edge is proposed to provide visual privacy. The Eastern Terrace overlooking Regent St, provides recessed seating nooks separated by low planters allowing climbers to grow up the inner face of the facade. A raised planted edge provides visual privacy between private rooms and the communal terrace. The Northern Terrace, with ample seating and outdoor studying opportunities makes use of views over Marian St.

LEVEL 3

Level 3 rooftop planting consists of hardy native grasses, cascading ground-covers and screening shrubs which provide a buffer from services and a green outlook from surrounding streets and apartment views.

URBAN ELEMENTS

Elements such as paving, furniture, fencing and lighting will be developed further during detailed design. Refer page 23 for proposed materials & finishes.

90 - 120 REGENT STREET | REDFERN | LANDSCAPE DA REPORT | L-DA-9

DESIGN STATEMENT | LANDSCAPE

PROTECTION FROM THE ELEMENTS

Access to sun, shade, shelter and natural ventilation have been maximised by selecting a variety of tree species to suit varying requirements throughout the site and the use of awning structures on podium and rooftops. Where trees have been used a mixture of tropical, light-canopied and heavy shade trees have been chosen to create a diversity of spaces that ensure comfortable levels of protection in a range of conditions.

VIEWS/PRIVACY

The design acknowledges the opportunity to provide landscaping that is both visually appealing from rooms and that encourages inhabitation of communal open space. In doing so, visual privacy needs have been addressed through tree and plant selection. The desire for an outlook to public areas is balanced with the need for privacy internally and externally, during day and night.

AMENITY

The design incorporates a variety of amenity such as community BBQ facilities, an outdoor cinema, a variety of seating offerings, bike storage etc.. This is in line with providing a rich collection of spaces and activities for the young generations occupying the building. Many of these spaces are sheltered by either planting or awnings that will provide summer shade and protect people from the elements.

ACCESSIBILITY

All residents of the new development can access and enjoy the communal areas. Universal access to AS1428 has been incorporated into communal spaces, connecting walkways and building entries without compromising design quality.

Gently graded pathways will provide accessibility for all age groups and degrees of mobility; ensuring that residents can access site amenities comfortably. Paths are rationally laid out into a clear and identifiable pathway network assisting orientation for visitors, and access to and from building entries and service areas.

LIGHTING

Lighting of external spaces will be provided to ensure access points are well lit, improving visibility and the sense of safety. Lighting of the communal open spaces will ensure safe levels of illumination for movement, whilst considering the impact on private residences. Unobtrusive lighting will be incorporated where appropriate to enable night time recreational use.

DRAINAGE & IRRIGATION

The detailed design will specify drainage cell to all soft landscape zones on structure.

Consideration has been given to the incorporation of low water demand and low maintenance plant species in all areas to reduce mains consumption and fertilizer contamination of drainage water.

Irrigation will be provided to all soft landscape areas on structure.

LANDSCAPE AREAS

Total site area: 1287m²

Level ground - paving area: 161m² Level 2 - softscape area: 46m² Level 2 - paving area: 345m² Level 3 - softscape area: 77m²

Total softscape area: 123m², 9.5% of total site area. Total external paving area: 506m², 39% of total site area.

SOIL

The planting will comprise a complementary mix of indigenous and exotic species. Soil requirements will therefore differ according to varying soil chemistries enjoyed by individual species. For indigenous vegetation, soil profiles will be provided which have modest nutrient levels, particularly phosphorus. Suggested material would equal Australian Native Landscapes 'Low P' mixture. In areas where exotic species are to be planted an industry standard organic soil mixture will be provided. Consideration will be given to the planting arrangement to ensure that species that are sensitive to nutrient will be grouped together.

PLANT ESTABLISHMENT & MAINTENANCE

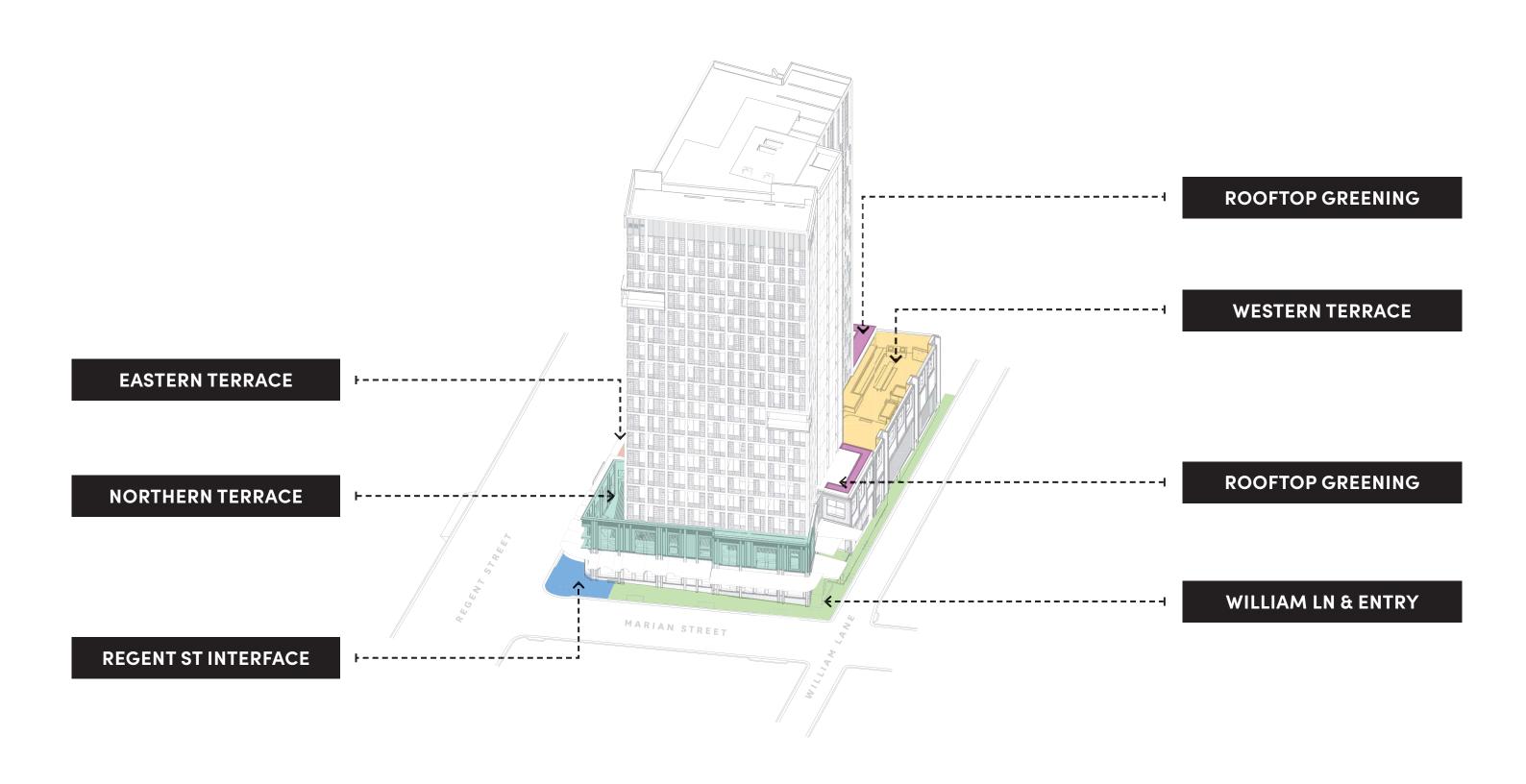
A landscape maintenance contractor will be engaged to keep all plant material in a state of health and vigour after practical completion. The appointed contractor must provide the Superintendent with a proposed maintenance works program for approval. The landscape contractor must keep a logbook of all maintenance works undertaken and include 'works to date' information with all progress payment invoices. Works will include, but not be limited to:

- · Monitoring the irrigation system on a weekly basis to ensure plants are not under or over irrigated,
- · Replacing dead plant material to achieve a complete cover of planting without obvious gaps in planting at final completion,
- · Replenishment of mulch as required to provide cover to the soil surface minimizing weed encroachment,
- · Suppression of weed growth,
- Low phosphorus nutrient will be provided to indigenous plant groupings, and a broad spectrum fertiliser applied to exotic plant groupings to satisfy differing chemical requirements,
- Selective pruning / crown lifting / canopy shaping of trees to remove potential future structural defects, establish branching above head height, etc.

A diverse mix of drought tolerant species will ensure long-term resilience, minimise ongoing energy inputs for maintenance, and have positive outcomes for biodiversity.

90 - 120 REGENT STREET | REDEFRN | | ANDSCAPE DA REPORT

KEY SPACES | LANDSCAPE



90 - 120 REGENT STREET I REDFERN I LANDSCAPE DA REPORT

GROUND LEVEL | PUBLIC DOMAIN LANDSCAPE PLAN

KEY

- William Lane entry and breakout space. Sandstone seating blocks under new trees & edge seating betside staircase.
- 2. Regent St entry. Gently sloped walkway between street footpath and entry.
- 3. Bench seating along Marian St against external facade to activate street edge.
- 4. William Lane to connect to Margaret St through 13–23 Gibbonst St's through site-link.

Tree Strategy





Paving Strategy

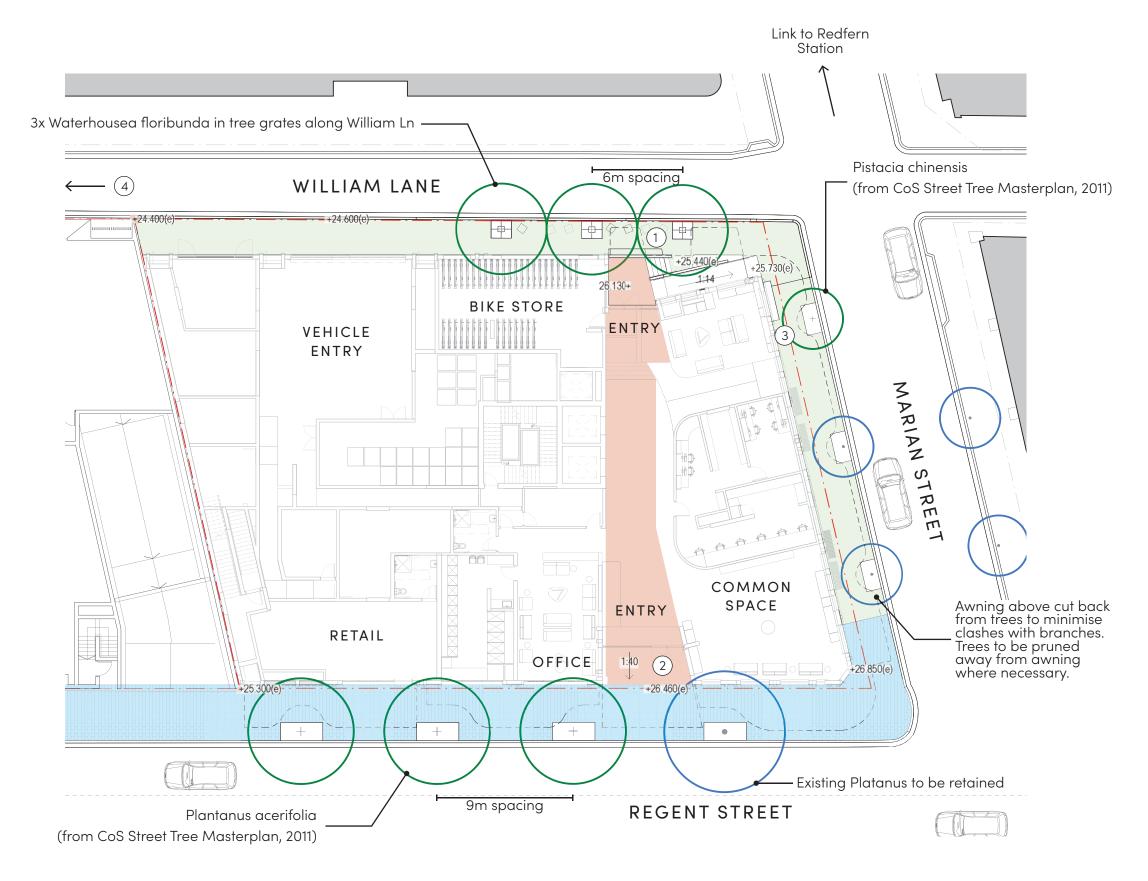
Concrete unit paving (Council's Street Design Code)

In-situ concrete paving (Council's Street Design Code)

Internal Street connection (refer arch drawings)

NOTE

All tree grates in accord with CoS standards (William Lane).
All building entrances to meet existing street levels.



1:250@A3 N

GROUND LEVEL | VIEWS



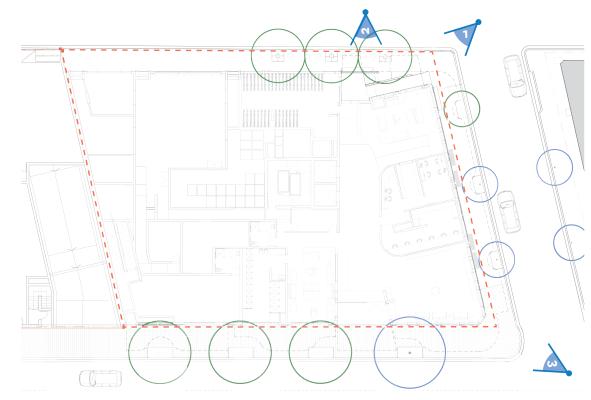
View 1: William Lane & Marian St Entry



View 3: Corner of Regent & Marian St



View 2: Street Corner Breakout Space - William Lane

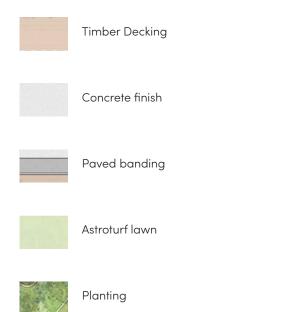


LOCATION PLAN

LEVEL 2 | LANDSCAPE PLAN

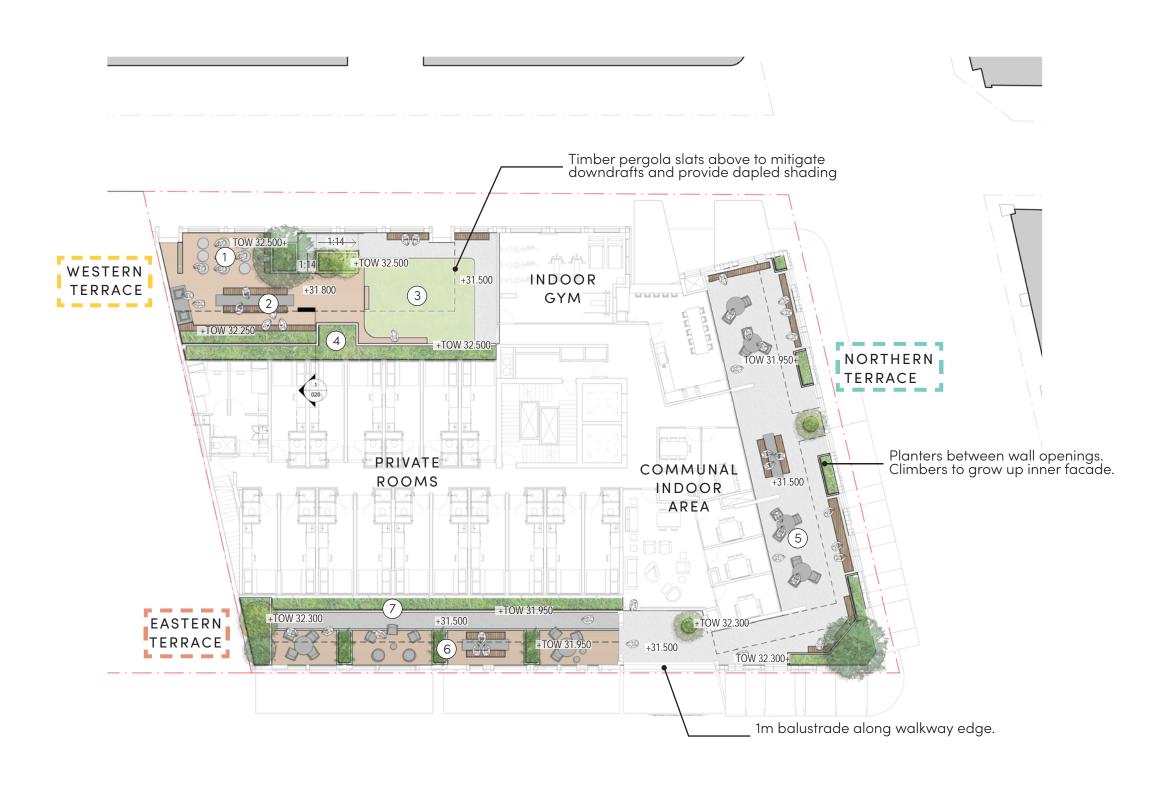
KEY

- 1. Outdoor Cinema with informal beanbag seating.
- 2. Alfresco amenity including BBQ, long communal table, variety of seating opportunities on a raised timber deck.
- 3. Adaptable open space, astro-turf & concrete perimeter paving.
- 4. Raised planter with climbing wires as barrier providing visual privacy between private rooms and communal terrace. See section on pg..11 for details.
- 5. Seating and outdoor studying opportunities with views over Marian St.
- 6. Eastern Terrace, with recessed seating offerings and low free standing planter boxes.
- 7. Raised planted edge providing visual privacy between private rooms and communal terrace.



NOTE

Refer page 21 for detailed planting plan.

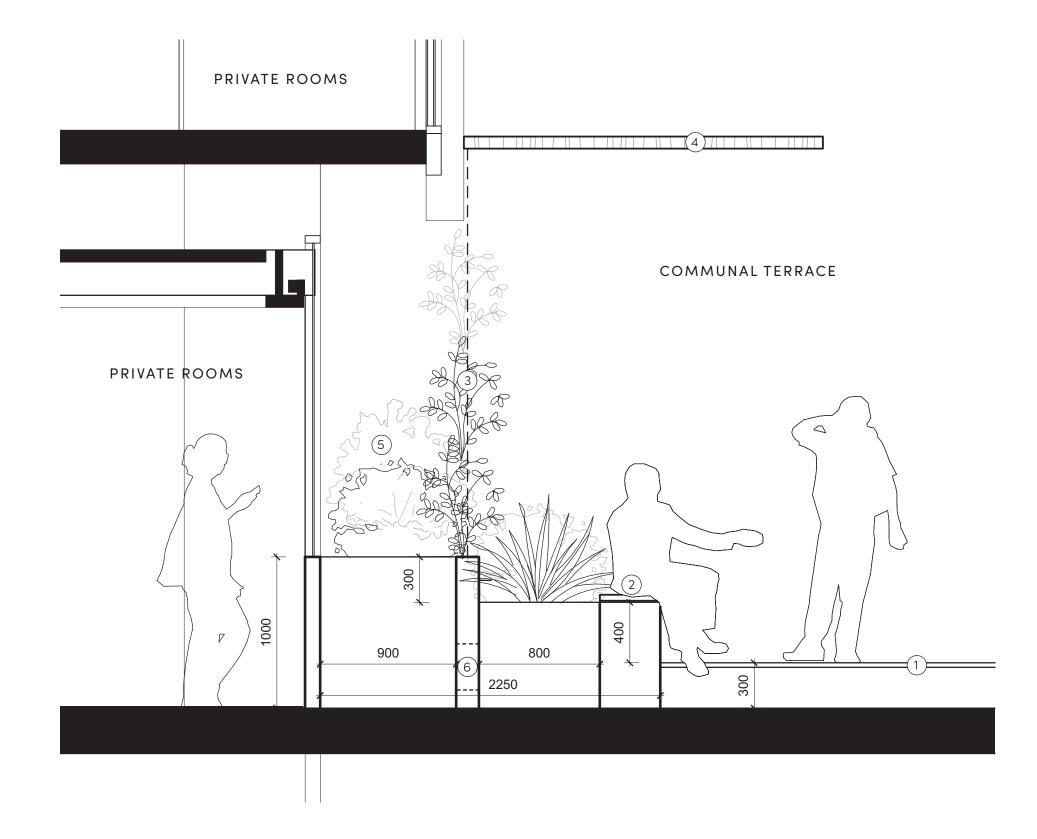


1:250@A3 N

LEVEL 2 | PLANTING BUFFER SECTION

KEY

- 1. Raised timber deck.
- 2. Seating edge to lower planter
- 3. Climbers to grow up wires to increase visual privacy for internal rooms.
- 4. Awning protecting outdoor spaces from downdraft winds.
- 5. Plants give green outlook from internal rooms & act as visual barrier.
- 6. Cut-outs through retaining wall for shared root volume between planters.



NOTE

Refer page 14 for location of section cut.

1:250@A3

LEVEL 2 | VIEWS - WESTERN TERRACE

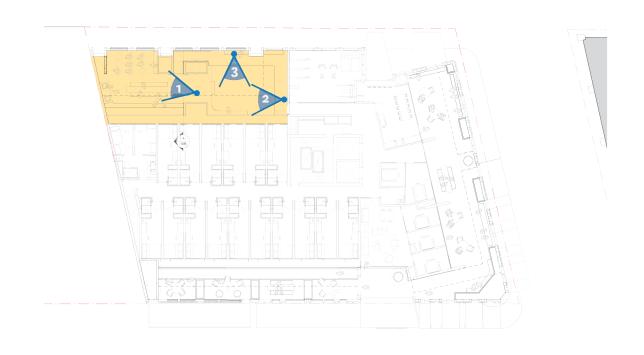




View 1:







LOCATION PLAN

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LEVEL 2 | VIEWS - EASTERN & NORTHERN TERRACES



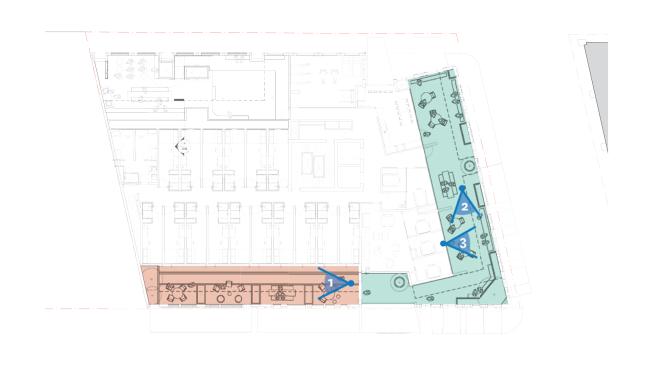
View 1:



View 3:



View 2:



LOCATION PLAN

ИО

LEVEL 3 | LANDSCAPE PLAN

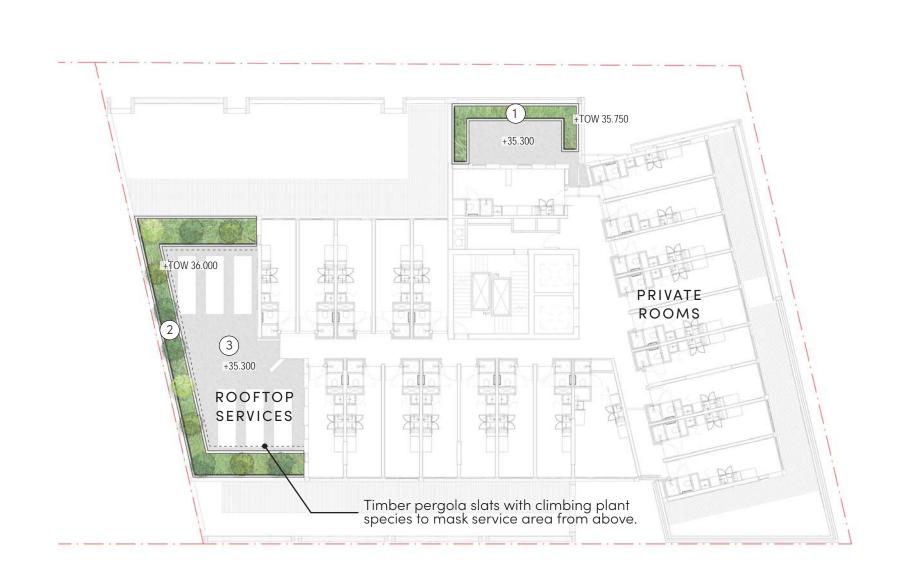
KEY

- 1. Inaccessible roof garden displaying a mix of indigenous grasses and groundcovers cascading over edge. Visible from William lane entry.
- 2. Dense planting strip as buffer to rooftop services from Regent St.
- 3. Stone pebble finish to rooftops.





Planting



NOTE

Refer page 21 for detailed planting plan.

1:250@A3 N

LEVEL 2 | VIEWS - ROOFTOP PLANTING







View 3:



View 2:



LOCATION PLAN

CHARACTER | LANDSCAPE









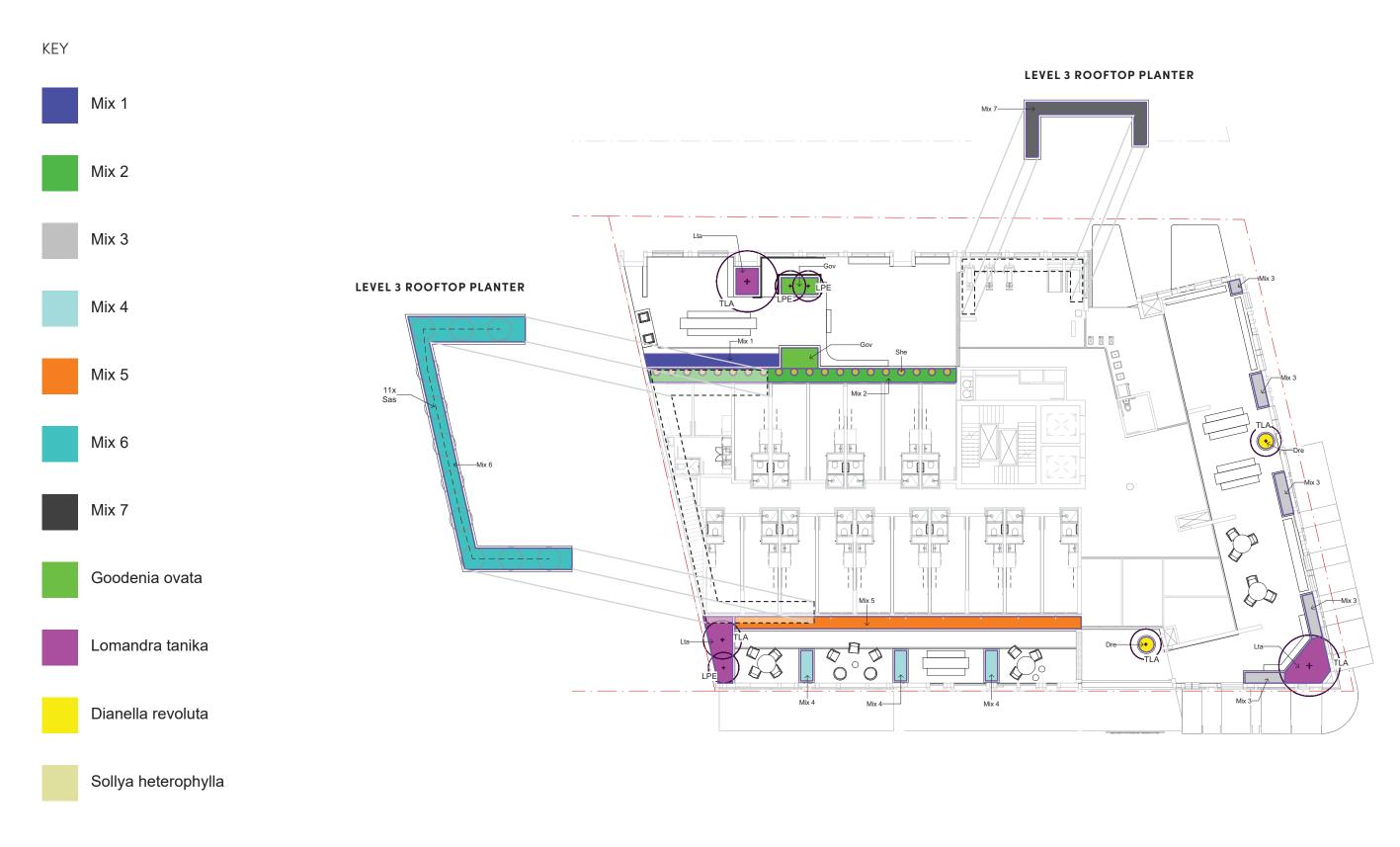








LEVEL 2 & 3PLANTING PLANS | UNDERSTOREY & TREES



NOTE

Refer page 22 for detailed planting palette.

PLANTING PALETTE | LANDSCAPE

TREE & SHRUI	B SPECIES				
CODE	BOTANICAL NAME	COMMON NAME	SIZE AT INSTALL	SPACING	QUANTITY
CPI	Pistacia chinensis	Chinese pistache	200L	As Shown	5
LPE	Leptospermum petersonii	Lemon-scented Teetree	75L	As Shown	3
PXA	Platanus × acerifolia	London Plane	400L	As Shown	4
Sas	Syzygium 'aussie southern'	Lilly Pilly	40L	As Shown	11
TLA	Tristaniopsis laurina	Water Gum	75/400L	As Shown	5
WFL	Waterhousea floribunda	Weeping Lilli Pilli	200L	As Shown	3

Grand total: 31

GROUNDC	GROUNDCOVERS AND CLIMBERS							
CODE	BOTANICAL NAME	COMMON NAME	CENTRES(mm)	POT SIZE	QUANTIT Y	TOTAL AREA		
Dre	Dianella revoluta	Blueberry Lily	,		0	2 m²		
Gov	Goodenia Ovata	Hop goodenia	300	200mm	65	6 m²		
Lta	Lomandra Tanika	Mat Rush	300	200mm	164	15 m²		
Mix 1	Even Mix of: Cordyline stricta Crinum pedunculatum Goodenia ovata Blechnum cartilagineum Pellaea falcata	Slender Palm Lily Swamp Lily Hop goodenia Gristle Fern sickle fern	300	200mm	78	7 m²		
Mix 2	Even Mix of: Lomandra hystrix Dietes robinsoniana Ficinia nodosa	 Green mat-rush Lord howe wedding lily Knotted club-rush	300	200mm	166	15 m²		
Mix 3	Mix of: Goodenia Ovata Pandorea jasminoides	 Hop goodenia Bower plant	300	200mm	88	8 m²		
Mix 4	Even Mix of: Ficinia nodosa Viola hederacea Hymenosporum flavum 'gold nugget' Goodenia ovata 'Edna Walling Coverup' Acmena smithii 'Allyn Magic' Pandorea jasminoides	Knotted club-rush Native Voila Native Frangipani Goodenia Tenacity Lilly Pilly Bower plant	300	200mm	53	5 m ²		
Mix 5	Even Mix of: Cordyline stricta Goodenia ovata Blechnum 'silver lady' Centella asiatica dichondra 'silver falls'	Slender Palm Lily Hop goodenia Minature tree fern Indian pennywort Silver dichondra	300	200mm	200	18 m²		
Mix 6	Even mix of: Carissa macrocarpa Dichondra 'silver falls' Cissus antarctica	natal Plum Silver dichondra kangaroo vine	500	200mm	145	36 m²		
Mix 7	Even mix of: Leptospermum petersonii Lomandra tanika carpobrotus glaucescens 'yellow'	Lemon scented tree tree Mat Rush Hottentot fig	400	200mm	63	10 m²		
She	Sollya heterophylla	Bluebell creeper.	400	200mm	20	3 m²		

INDICATIVE PLANTING PALETTE







Leptospermum petersonii



Cordyline stricta

















Ficinia nodosa





Viola hederacea



Hymenosporum flavum 'gold nugget'



Acmena smithii 'Allyn Magic'



Dichondra 'silver falls'



carpobrotus glaucescens 'yellow'

NOTE

Refer to page 21 for detailed planting plan.

MATERIALS PALETTE | LANDSCAPE

STRATEGY

The material palette for landscape components will echo the architectural character of the development. The hardscape elements will portray urban tones and textures, while relating to nature simultaneously. The aim is to soften the ground plane and compliment the lush planting that guides pedestrian movement through and into the site.

All furniture and fixtures for the site will:

- Be durable, functional and low maintenance
- Improve ease of access
- Invite use by inhabitance
- Reflective of a contemporary design character
- Adaptable to the needs of the community.

LANDSCAPE ELEMENTS



VARIETY OF LOOSE FURNITURE



COMMUNAL OUTDOOR TABLE



TIMBER SEATING BENCH



STAINLESS STEEL GROWER CABLES



BBQ FACILITIES



TIMBER SLATS PERGOLA STRUCTURE



RAISED CONCRETE PLANTER



Soc concrete unit paving



HONED CONCRETE



TREE GRATE TO CoS STANDARDS

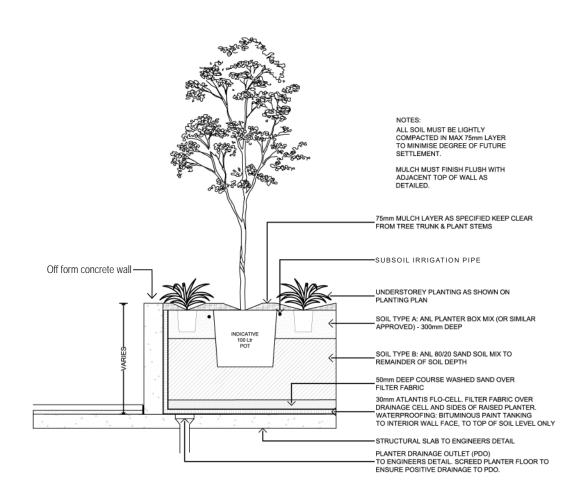


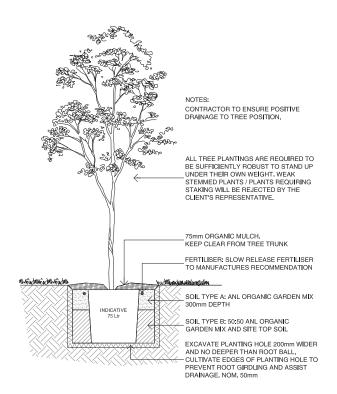
TIMBER DECKING



ARTIFICIAL TURF

TYPICAL DETAILS | LANDSCAPE





1. TYPICAL DETAIL - PLANTING ON STRUCTURE 1:40 @A3

2. TYPICAL DETAIL - TREE PLANTING IN SOIL 1:40 @A3



SYDNEY

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