

SITE 9 , SYDNEY OLYMPIC PARK

LANDSCAPE DA REPORT

APRIL 2016

Prepared for: Ecove
By: Turf Design Studio



CONTENTS

INTRODUCTION	3
DESIGN	4
TREE MANAGEMENT PLAN	5
LANDSCAPE PLAN	6
SECTIONS	9
VIEWS	12
PLANTING	14
MATERIALS & LANDSCAPE ELEMENTS	17
TYPICAL DETAILS	18

Client



Consultants

ARCHITECTURE

BATESSMART™

PUBLIC DOMAIN / LANDSCAPE





SITE CONTEXT

Site 9 is located on a prominent corner of Sydney Olympic Park (SOP) - cnr Sarah Durack Ave & Olympic Blvd, and opposite the Sports Centre.

Olympic Boulevard, the site's primary frontage, will see significant development in the coming years, with the aspiration for a highly activated public domain.

Achieving this activation must also ensure due consideration is given to maintaining the broader masterplan legacy, and existing functionality during major events (i.e. the existing 7m wide pedestrian concourse).

An existing parking station east of the site is highly utilised by visitors to the various sporting facilities on Olympic Boulevard. This project provides an opportunity to create a direct through-site link.

SOPA POLICIES

The public domain / landscape design has been developed in accordance with the following SOPA policies:

- Sydney Olympic Park Access Guidelines 2015;
- Sydney Olympic Park Urban Elements Design Manual;
- Sydney Olympic Park Environmental Guidelines;
- Sydney Olympic Park Stormwater and Water Sensitive Urban Design Policy.



DESIGN STATEMENT

PUBLIC DOMAIN

This proposal creates a public domain that is equally functional and comfortable both for the everyday user and during major events. Fluid and legible connections are established through the site, and the landscape character contributes to the greater SOP aesthetic.

PODIUM LANDSCAPES

Level 7 - a diverse mix of particularly hardy and low maintenance species provides residents with an attractive overlook from their apartments above.

Level 9 - a place people can inhabit regardless of the weather with the inclusion of 2 garden pavilions. A series of spaces, from a generous open lawn to small seating nooks creates a landscape that can be enjoyed simultaneously by many user groups. Social interaction and private contemplation are equally catered for.

STRUCTURES & URBAN ELEMENTS

Elements such as rooftop garden pavilions, paving, furniture, screening and lighting will be developed further during detailed design. All public domain elements will be designed/detailed in accordance with SOPA requirements. The proposed public domain paving (Trihex) is in accordance with SOP UEDM, and will extend under the colonnade to meet the building line. Refer pages L-DA-17 & 18 for proposed materials & finishes.

PLANTING DESIGN

A range of species including local native and exotic will be used to promote biodiversity and robustness within the planting scheme. Low-growing plant species will be located where appropriate to ensure clear views and site lines.

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

Refer pages L-DA-14, 15 & 16 for detailed description of proposed planting.

SAFETY & PRIVACY

The public domain design ensures open views are retained to maximise passive surveillance. In the planting design, low-growing grasses are proposed and all trees will be underpruned to maintain a crown height above 2m.

Visual privacy needs have been addressed in the landscape and planting design. The desire for an outlook to public areas is balanced with the need for privacy internally and externally, during day and night. Elements such as the garden pavilions have been designed to provide a sense of visual privacy from overlooking apartments.

WIND CONSIDERATIONS

Effective mitigation of wind is key to achieving amenity for the users of level 9 podium. Several techniques have been used, including:

- planting of densely foliage trees to the southern and western edges (source of prevailing winds);
- using the central rooflight structure (in combination with planting) as a windbreak
- creating garden pavilions with impermeable walls to the prevailing wind edges

ACCESSIBILITY

Universal access to AS1428 has been achieved for all external 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 workers and patrons can access site amenities comfortably.

DRAINAGE

All paving will grade away from building entries at a minimum 1:100 fall. Detailed design will specify drainage cell to all soft landscape zones on structure.

IRRIGATION

Irrigation will be included as a design & construction item within the tender package. Irrigation will be provided to all soft landscape areas.

SOIL

The planting will comprise a complementary mix of indigenous and exotic species. Soil requirements will therefore vary 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 equal to 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 species sensitive to nutrient will be grouped together.

LIGHTING

Lighting of external spaces will be provided to ensure access points are well lit, improving visibility and the sense of safety. Importantly, the through-site link will be well-lit to provide safe passage through and around the site at all hours. Public domain light fittings to be confirmed with SOPA to ensure consistency with current precinct-wide preferences.

PLANT ESTABLISHMENT & MAINTENANCE

A landscape maintenance contractor will be engaged to maintain all plant material in a state of health and vigour after practical completion. 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 establish a complete cover of planting without obvious voids at final completion.
- replenishment of mulch as required to provide cover to the soil surface minimising weed encroachment.
- suppression of weed growth.
- selective pruning / crown lifting / canopy shaping of trees to remove potential future structural defects, establish branching above head height, etc.

TREE MANAGEMENT PLAN

The Site 9 Site Development Guidelines require that all new public domain works must allow for pedestrian linkages within the site and at interfaces with adjoining sites, including the through site link to the parking station P3.

The proposed building footprint necessitates the removal of the existing trees within the site boundary. In addition two Araucaria trees (2&7) located immediately outside the site are proposed to be removed so as to improve site connectivity in keeping with the SOPA masterplan guidelines.



LEGEND

- # Trees to be removed*
- # Trees to be retained - *Araucaria cunninghamii* (Hoop pine) Avenue

* Refer Arborist Report by Stuart Pittendrigh, February 2016, for further information on proposed removal of trees 2 & 7.



LANDSCAPE PLAN PUBLIC DOMAIN

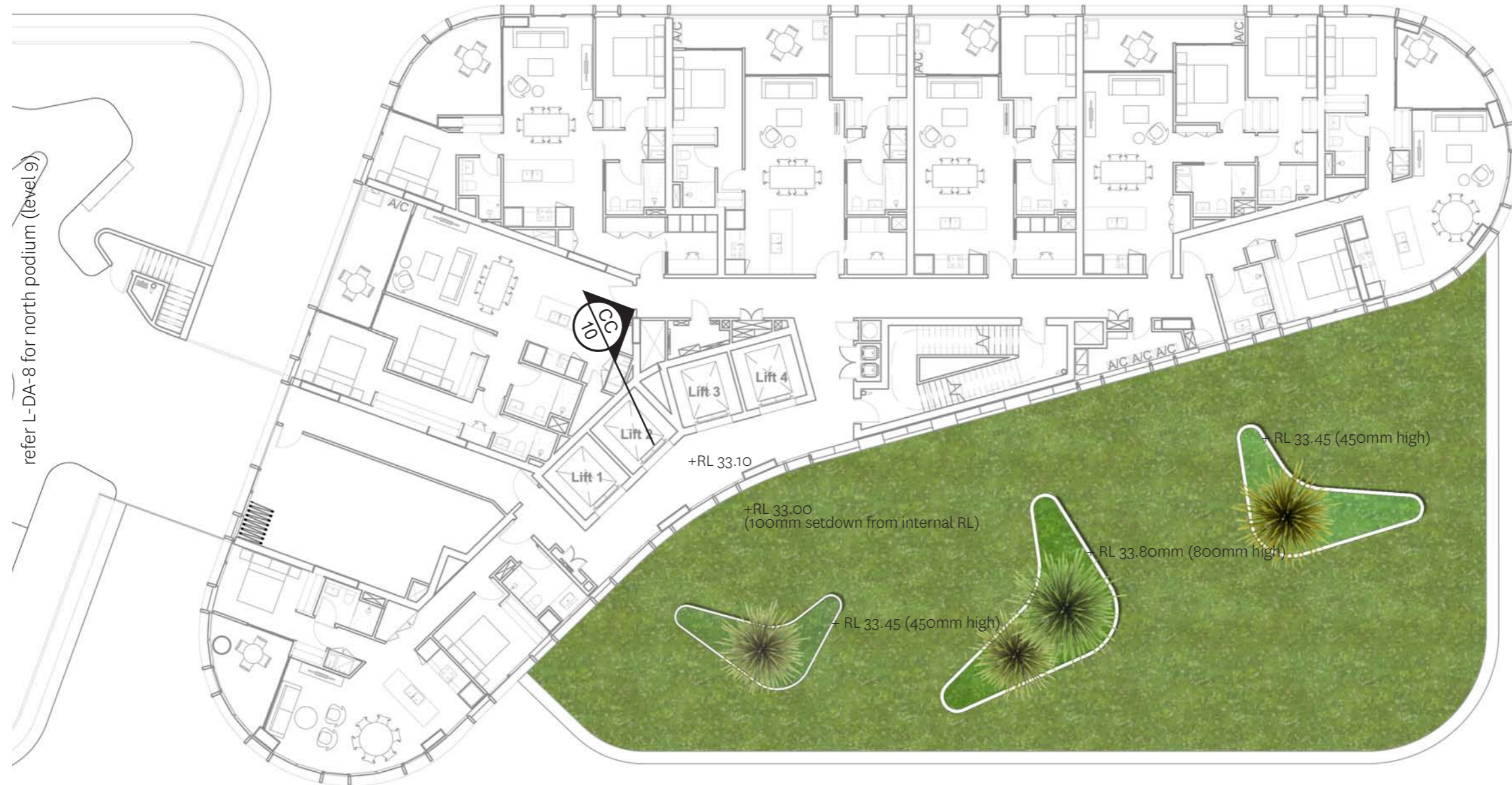


LEGEND

- Site boundary
- Existing trees to be retained.
- Existing trees to be removed.
- Existing lawn/garden beds
- Trihex paving to match existing
- Existing footpath retained
- Insitu concrete seat wall
- Bike rails
- Existing street lights
- Architectural internal levels
- Proposed levels
- Existing levels



LANDSCAPE PLAN
LEVEL 7 - SOUTH PODIUM



LEGEND



Accent planting in raised planters.



Diverse mix of succulents and hardy species - refer L-DA-15.

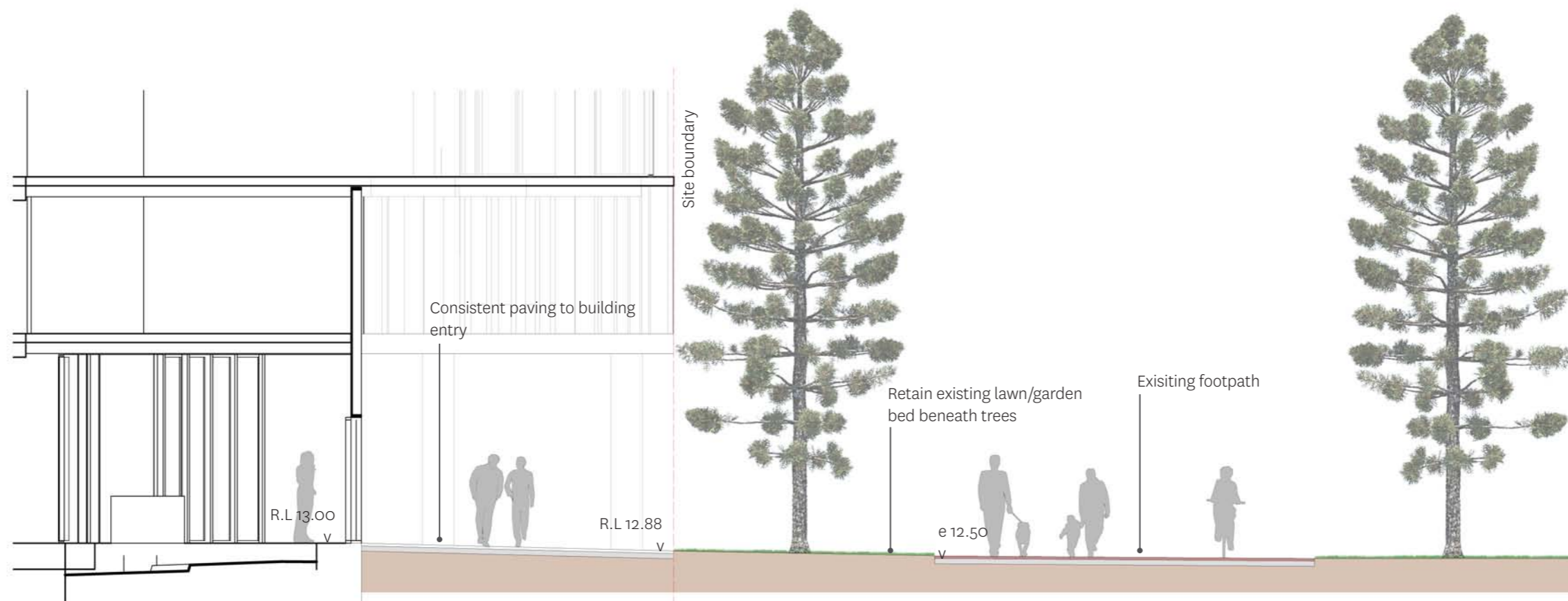


0 2 4 6 8 10
SCALE - 1:200 @ A3

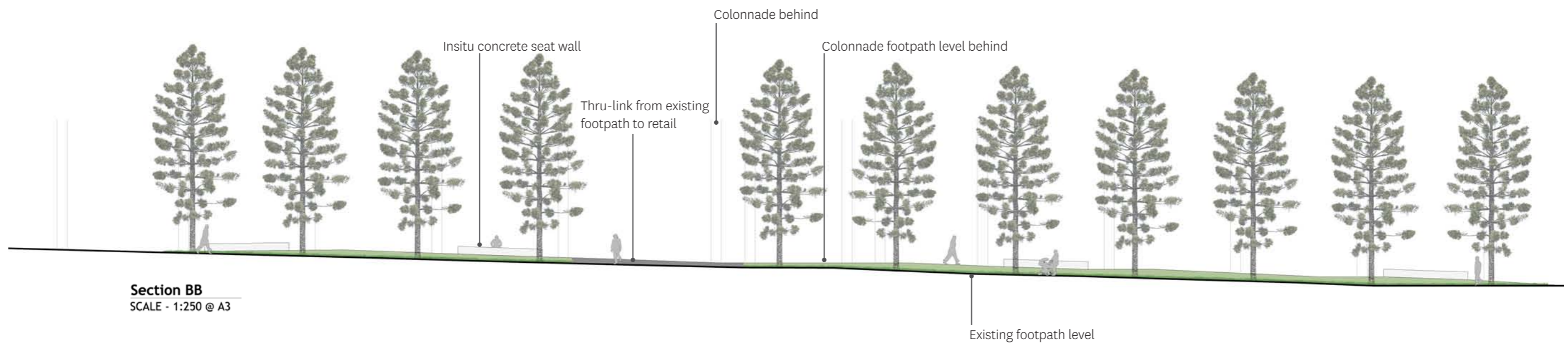
LANDSCAPE PLAN

LEVEL 9 - NORTH PODIUM





Section AA
SCALE - 1:100 @ A3



Section BB
SCALE - 1:250 @ A3



Section CC
SCALE - 1:100 @ A3

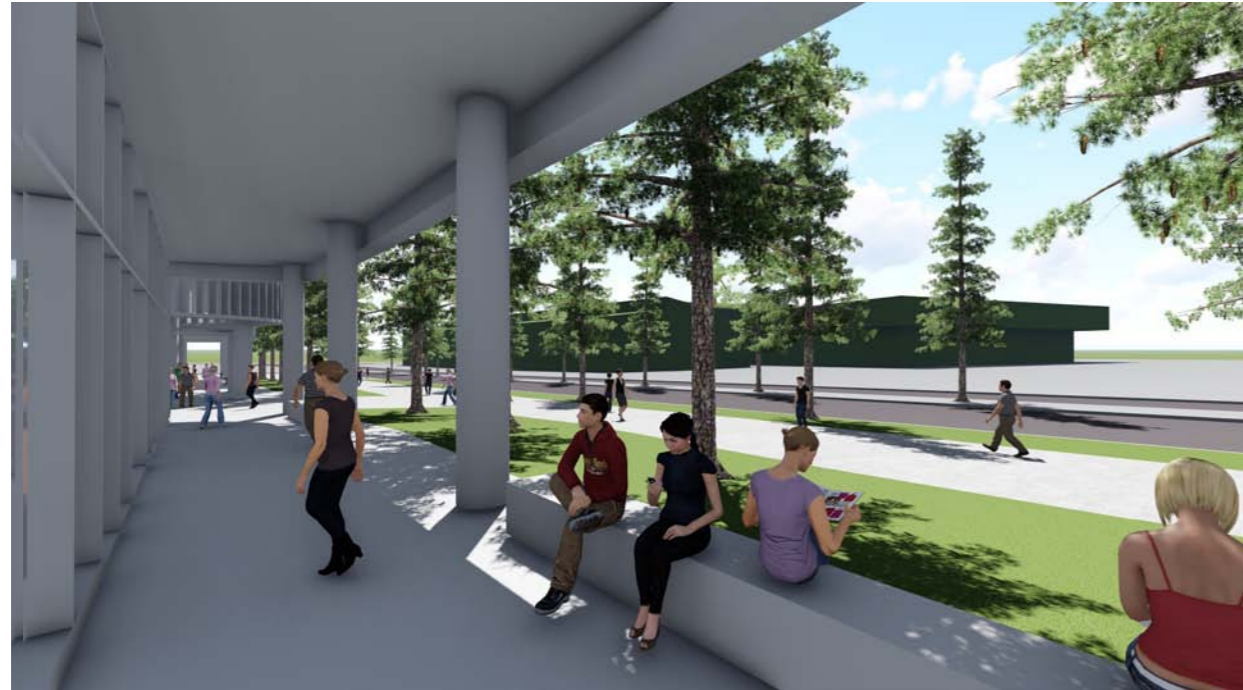
SECTIONS
LEVEL 9 - NORTH PODIUM



Section DD
SCALE - 1:100 @ A3



Section EE
SCALE - 1:100 @ A3



Looking south along the colonnade



View from the main boulevard walk



Through-site link



Aerial view of landscape concept



Open lawn with wind buffer to southern edge



Approach to garden pavilions



Garden pavilion 1 - internal planter



Garden pavilion 2 - perimeter planting and viewing terrace



SUCCULENT SKY GARDEN

A robust, diverse mix of species will provide residents with an attractive living landscape overlook from their apartments.

The diversity of colours and tones creates a unique garden landscape within the site. Adoption of green, yellow, red, orange, and bronzed foliage and flowers provides a wealth of visual interest throughout the year. Appropriate maintenance path access will be provided through the pebble mulch.

The key considerations of the planting concept include:

- Robustness to exposed, often windy conditions;
- Shade tolerance;
- Suitability to shallow soil profiles;
- Low maintenance.

This has led to a selection of hardy shrubs and succulent plant varieties.

Total of 2,100 plants, at an average spacing of 500 centres.

Ratio of 20:30:50 for pot size - 300mm:200mm:140mm

Planting plants will be finalised at Tender/CC stage.

Botanical Name	Common Name	Pot Size / Installation size
Aeonium 'Zwartkop'	Aeonium Black Rose	140mm
Aloe 'Eager Beaver'	Eager Beaver	300mm
Aspidistra elatior	Cast Iron Plant	140mm
Clivia miniata	Clivia	140mm
Crassula ovata	Jade Plant	140mm
Dracaena marginata 'Tricolor'	Madagascar Dragon Plant	300mm
Echeveria 'Black Prince'	Black Prince Echeveria	140mm
Echeveria elegans	Mexican Gem	140mm
Kalanchoe fedtschenkoi	Kalanchoe	140mm
Kalanchoe 'Flapjacks'	Flapjacks	200mm
Ophiopogon japonicus 'Dwarf'	Dwarf Mondo Grass	140mm
Sansaviera trifasciata	Mother-In-Law-Tongue	200mm
Sedum 'Gold Mound'	Gold Mound Sedum	140mm
Senecio mandraliscae	Blue Chalksticks	140mm
Yucca 'Bright Edge'	Bright Edge Yucca	300mm



Aeonium 'Zwartkop'



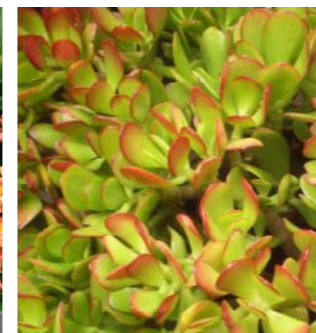
Aloe 'Eager Beaver'



Aspidistra elatior



Clivia miniata



Crassula ovata



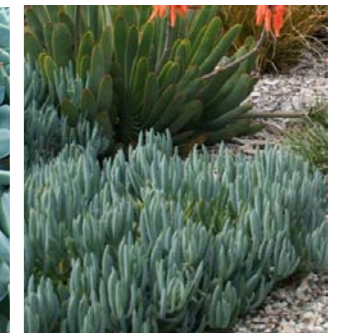
Dracaena marginata 'Tricolor'



Echeveria 'Black Prince'



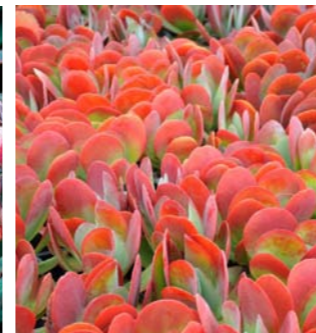
Echeveria elegans



Senecio mandraliscae



Kalanchoe fedtschenkoi



Kalanchoe 'Flapjacks'



Ophiopogon japonicus 'Dwarf'



Sansaviera trifasciata



Sedum 'Gold Mound'



Yucca 'Bright Edge'



Koelreuteria paniculata



Elaeocarpus reticulatus



Elaeocarpus eumundii



Tristaniopsis laurina



Jacaranda mimosifolia

LUSH GREEN 'SECRET' GARDEN

A private rooftop garden for the residents. A base of lush green understorey planting accentuated with flower and foliage colour. Native species will dominate the palette, with some complementary exotics added.

The gardens finish flush with the adjacent paving, giving a sense of deep soil. The landscape carries through into the garden pavilions, blurring the perception of what is inside and what is out.

For the 600mm wide planting zone outside the balustrade, the building edge will be defined by a single low maintenance species.

Total of 2,600 Shrubs / Groundcovers, at an average spacing of 500 centres.

Ratio of 20:30:50 for pot size - 300mm:200mm:140mm.

Planting plants will be finalised at Tender/CC stage.

Botanical Name	Common Name	Pot Size / Installation size	Quantity
TREES / LARGE SHRUBS			
Elaeocarpus eumundii	Eumundi Quandong	20olt	8
Elaeocarpus reticulatus	Blueberry Ash	20olt	3
Jacaranda mimosifolia	Jacaranda	40olt	1
Koelreuteria paniculata	Golden Rain Tree	40olt	3
Syzygium australe 'Aussie Southern'	Lilly Pilly	10olt	14
Tristaniopsis laurina	Water Gum	20olt	2
SHRUBS / GROUNDCOVERS			
Acmena smithii 'Red Tip'	Lilly Pilly	200mm	
Alcantarea imperialis 'Rubra'	Imperial Bromeliad	300mm	
Anigozanthus 'Red Velvet'	Red Kangaroo Paw	300mm	
Cordyline glauca	Green Ti Plant	300mm	
Cordyline 'Red Fountain'	Red Fountain	300mm	
Justicia brandegeana	Shrimp Plant	200mm	
Liriope gigantea 'Evergreen Giant'	Giant Liriope	200mm	
Lomandra 'Tanika'	Matt Rush	150mm	
Metrosideros 'Fiji Fire'	Fiji Fire	200mm	
Philodendron 'Xanadu'	Xanadu	200mm	
Schefflera aboricola	Dwarf Umbrella Plant	200mm	
Syzygium australe 'Aussie Southern'	Lilly Pilly	10olt	
Trachelospermum jasminoides	Star Jasmine	140mm	
Trachelospermum tricolour	Tricolor Jasmine	140mm	
Tradescantia pallida 'Purpurea'	Purple Heart	200mm	



Alcantarea imperialis 'Rubra'



Schefflera aboricola 'Variegata'



Anigozanthus 'Red Velvet'



Cordyline glauca



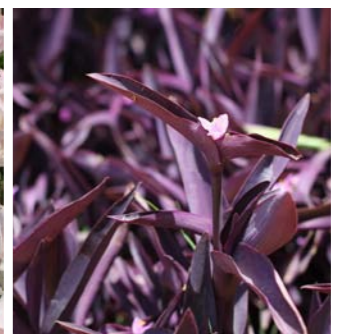
Cordyline 'Red Fountain'



Cordyline terminalis



Trachelospermum tricolour



Tradescantia pallida 'Purpurea'



Justicia brandegeana



Liriope gigantea 'Evergreen Giant'



Lomandra 'Tanika'



Metrosideros 'Fiji Fire'



Philodendron 'Xanadu'



Trihex interlocking unit paving to match existing. Installed in accordance with SOP UEDM Section 3.1 Pavements.



Insitu Free Standing Concrete Seat Wall - in accordance with UEDM Section 3.1 Pavements and Level Changes.



Bike Rails - in accordance with UEDM Section 3.2 Street Furniture.



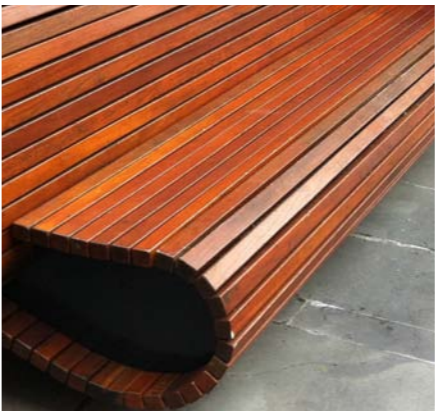
Tree Surround - 2.1m x 2.1m (Tree 1 only) Resin Bonded Porous Paving. Colour to match adjacent trihex paving. Required to retain tree and ensure clear movement around commercial lobby.



Timber Cladding to Garden Pavilions



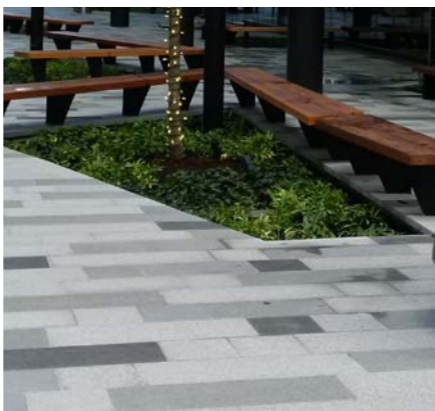
Operable Glazing to Garden pavilions



Timber Seating



Moveable Furniture



Flush planting and unit paving on structure

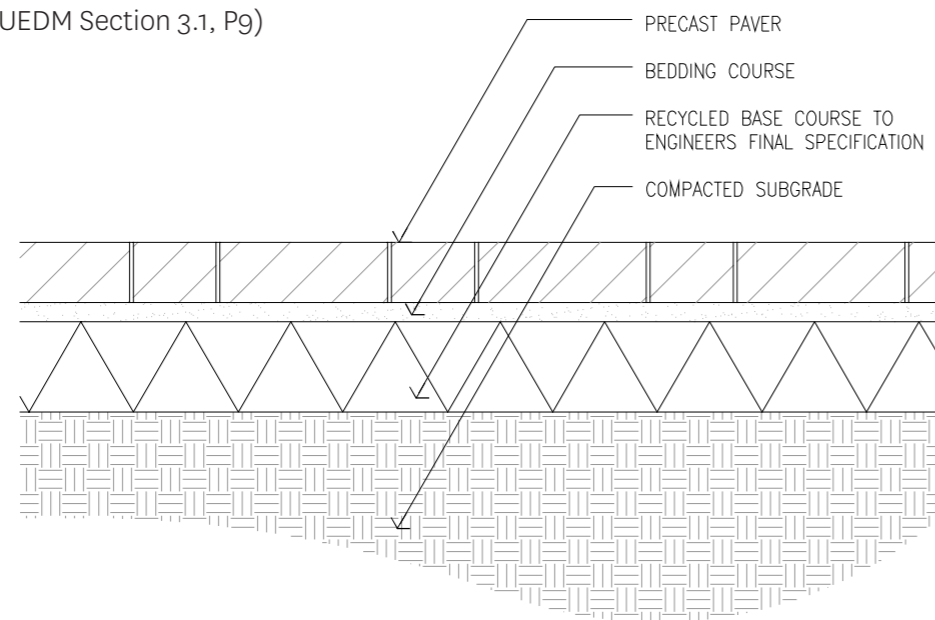


Timber Decking

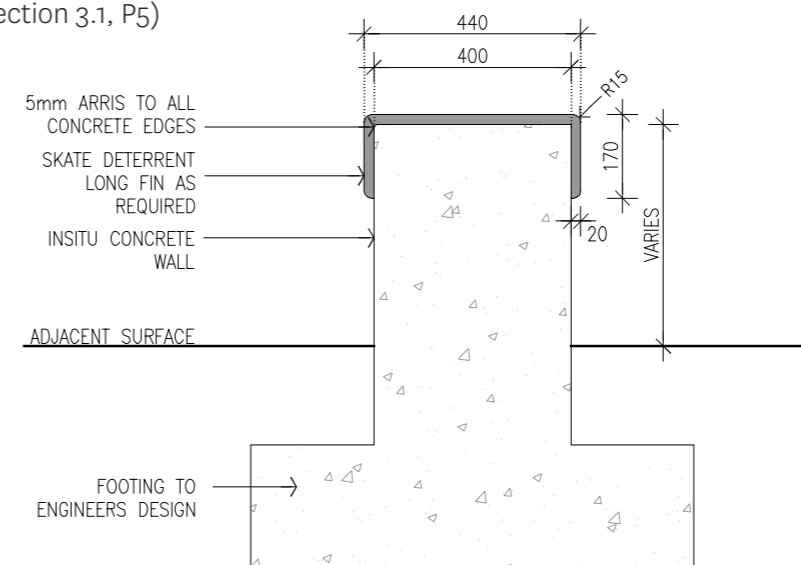


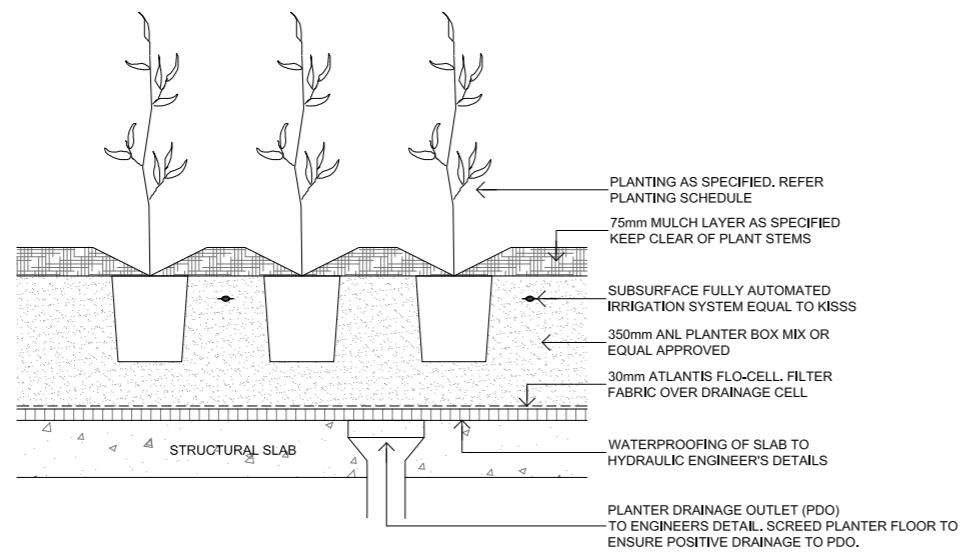
Stepping Stones in lawn

Typical Precast Pavers Interlocking
(UEDM Section 3.1, P9)

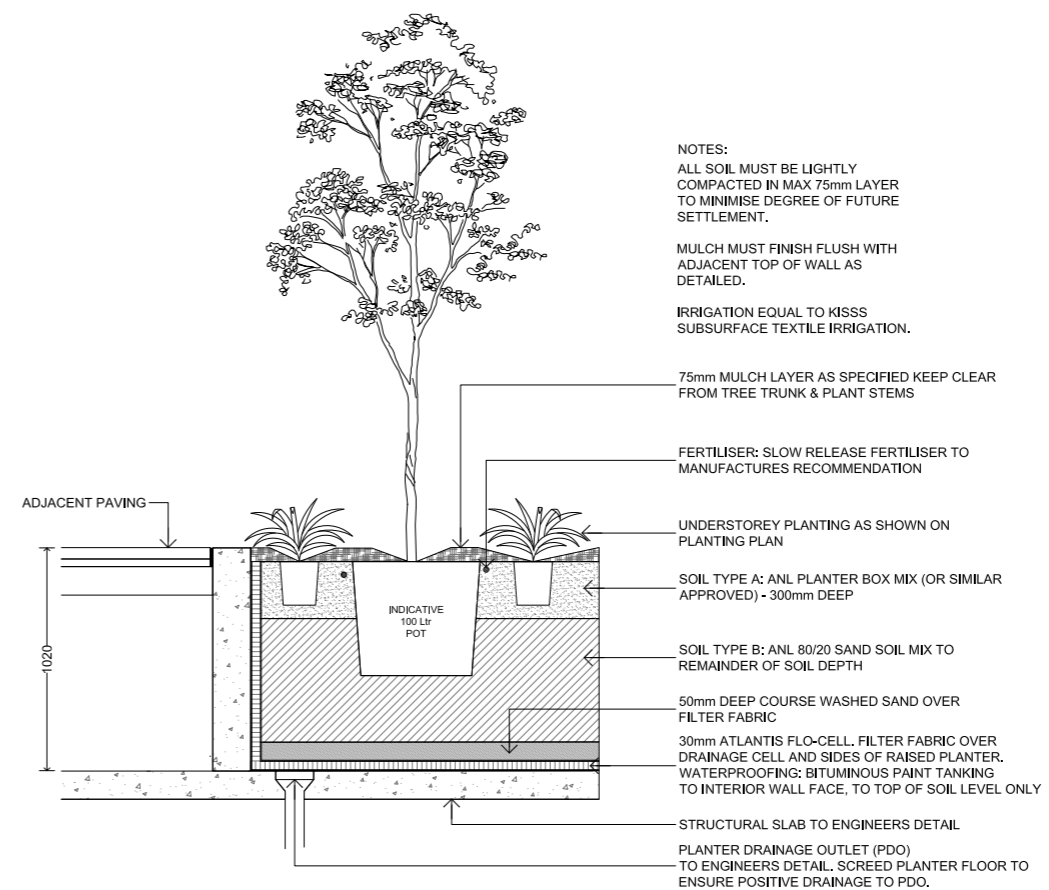


Insitu Free Standing Concrete
Seat Wall.
(UEDM Section 3.1, P5)





1 TYPICAL MASS PLANTING ON STRUCTURE
1:20 @ A3



NOTES:
ALL SOIL MUST BE LIGHTLY COMPACTED IN MAX 75mm LAYER TO MINIMISE DEGREE OF FUTURE SETTLEMENT.
MULCH MUST FINISH FLUSH WITH ADJACENT TOP OF WALL AS DETAILED.
IRRIGATION EQUAL TO KISSS SUBSURFACE TEXTILE IRRIGATION.

2 PLANTER ON STRUCTURE WITH STRATACELL
1:40 @ A3