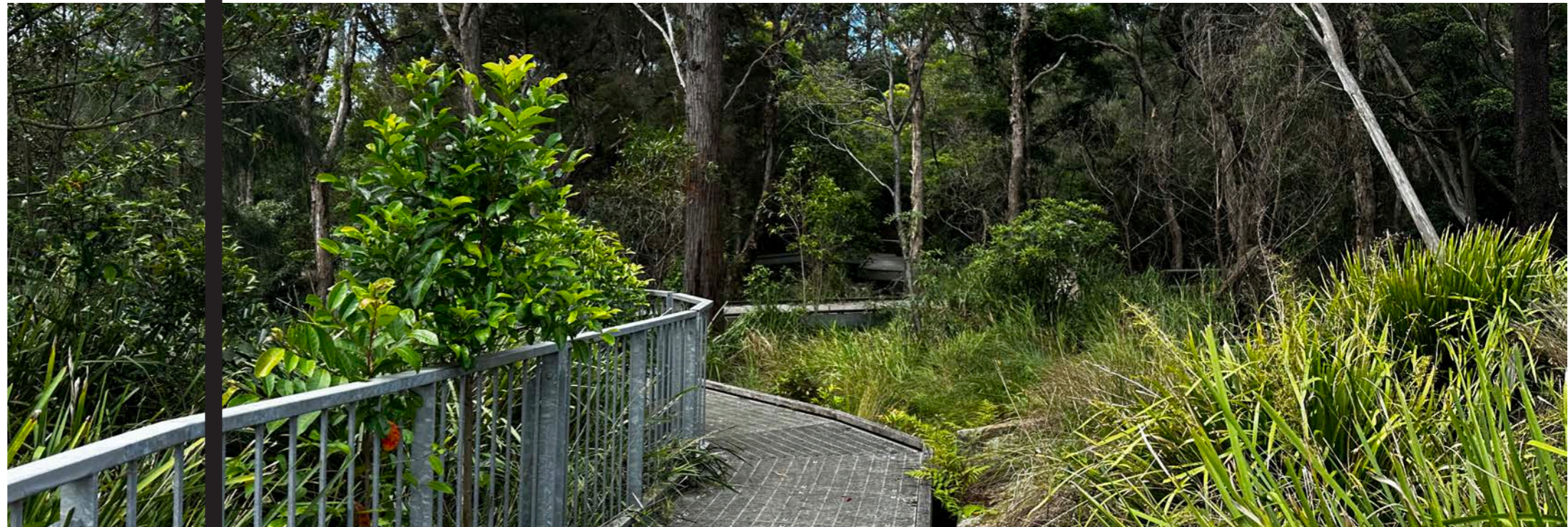


# **GROUND iNK**

LANDSCAPE ARCHITECTS



## **LANDSCAPE DA DOCUMENTATION**

### **BUILDING A, LOT 102**

**HALIFAX STREET - LACHLAN'S LINE**  
MACQUARIE PARK, NSW 2113  
REVISION B - 08.10.2024

### KEY PRINCIPLES

- PROVIDE A CONNECTION TO THE LANDSCAPE THAT BUILDS UPON SURROUNDING ECOSYSTEMS
- CREATE ROBUST AND SUSTAINABLE DESIGN OUTCOMES FOR FUTURE GENERATIONS
- PROVIDE A VARIETY OF LANDSCAPE TREATMENTS TO ENSURE MORE ROBUST ENVIRONMENTAL SYSTEMS
- UTILISE PLANTING AND GREENERY IN WAYS THAT CREATE AN EMERSIVE OUTDOOR SPACE
- FOSTER COMMUNITY GATHERING AND SOCIALIZATION WITH OUTDOOR SPACES
- DESIGN THAT RECOGNISES THE LOCAL INDIGENOUS CULTURE AND THE IMPORTANCE OF CONNECTING WITH COUNTRY



INCREASE CANOPY AND BIODIVERSITY



ENGAGE WITH THE SURROUNDING LOCAL CHARACTER



CREATE A SENSE OF SITE IDENTITY AND WAYFINDING



INTEGRATE THE LOCAL ECOLOGY INTO THE DESIGN



PROVIDE AREAS OF PASSIVE RESPITE AND GATHERING



CREATE A LANDSCAPE THAT HAS A TANGIBLE CONNECTION TO COUNTRY

## LANE COVE NATIONAL PARK AND URBAN POCKETS

THE MOST SIGNIFICANT ECOLOGICAL CORRIDOR IN PROXIMITY OF THE SITE IS THE LANE COVE NATIONAL PARK ALONG THE LANE COVE RIVER CORRIDOR. THE RIVER IS A FRESHWATER TRIBUTARY ON A BOUNDARY OF HAWKESBURY SANDSTONE AND WIANAMATTA SHALE. THIS PROVIDES THE DESIRED CONDITIONS FOR A NUMBER OF ROBUST ECOLOGICAL COMMUNITIES THAN CAN BE DRAWN UPON WITHIN THE SUBJECT SITE. THE CLOSEST PATCH TO THE SITE IS TIRRAWAN RESERVE WHICH IS A REMEDIATED CREEK CATCHMENT WITH NATIVE VEGETATION. THE DESIGN INTENT IS TO DRAW THE STRONGEST ECOLOGICAL CONNECTIONS TO THESE COMMUNITIES.

THE COMMUNITIES WITHIN THE LOCAL RESERVE AREAS CONSIST OF:

- SYDNEY COASTAL SHALE-SANDSTONE FOREST
- NORTHERN SYDNEY SCRIBBLY GUM WOODLAND
- SYDNEY COASTAL SANDSTONE GULLY FOREST
- BLUE GUM HIGH FOREST
- SYDNEY TURPENTINE IRONBARK FOREST
- SYDNEY ENRICHED SANDSTONE MOIST FOREST
- NORTHERN SYDNEY HEATH-MALLEE



## WALK ON COUNTRY

WE ACKNOWLEDGE THE WALLAMATTAGAL PEOPLE OF THE DHARUG NATION AS THE TRADITIONAL CUSTODIANS OF THE LAND AND THAT SOVEREIGNTY HAS NOT BEEN CEDED.

A WALK ON COUNTRY WAS UNDERTAKEN FOR THE SITE ON 25.01.24 WITH TRADITIONAL ELDERS REPRESENTED BY AUNTIE THEL AND UNCLE PAUL, WHO IDENTIFIED A FEW KEY AREAS OF IMPORTANCE WHICH SHOULD BE REFLECTED IN THE DESIGN OF THE FUTURE DEVELOPMENT:

- THE EXPOSED SANDSTONE OUTCROPPINGS
- HABITAT FOR LOCAL WILDLIFE SUCH AS POSSUMS, OWLS, AND SNAKES
- SEASONALITY IN THE PLANTING SCHEME
- CELEBRATING THE ADJACENT ECOLOGICAL RESERVE AND CREEKLINE
- FORMS OF EDUCATION THAT ARE TANGIBLE IN THE LANDSCAPE
- OPPORTUNITY FOR BUSHTUCKER SPECIES AND COMMUNITY LEARNING



OPPORTUNITIES FOR INTERPRETIVE SIGNAGE ELEMENTS



HIGHLIGHT MATERIALITY OF EXISTING EXPOSED BEDROCK



SEASONALLY RESPONSIVE PLANTING SCHEME



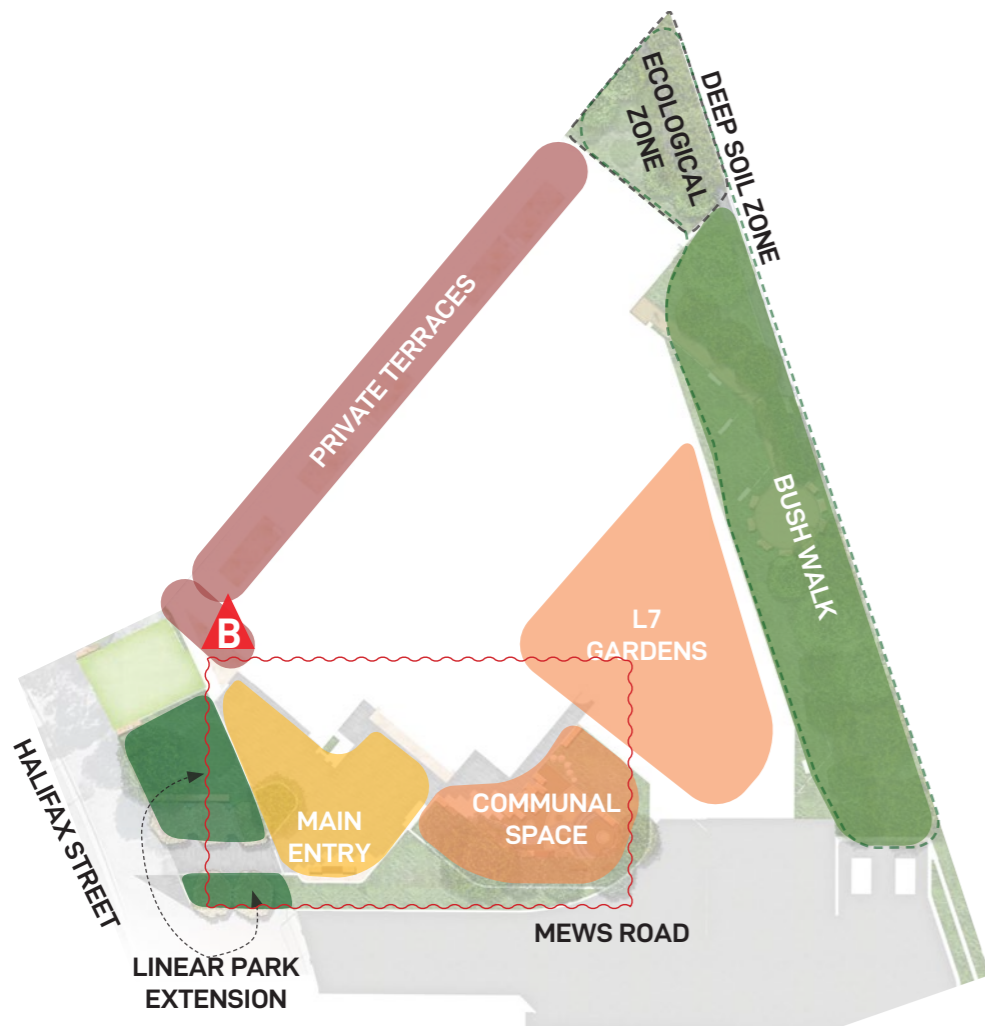
DRAW UPON EXISTING SITE CHARACTER AND ECOLOGY



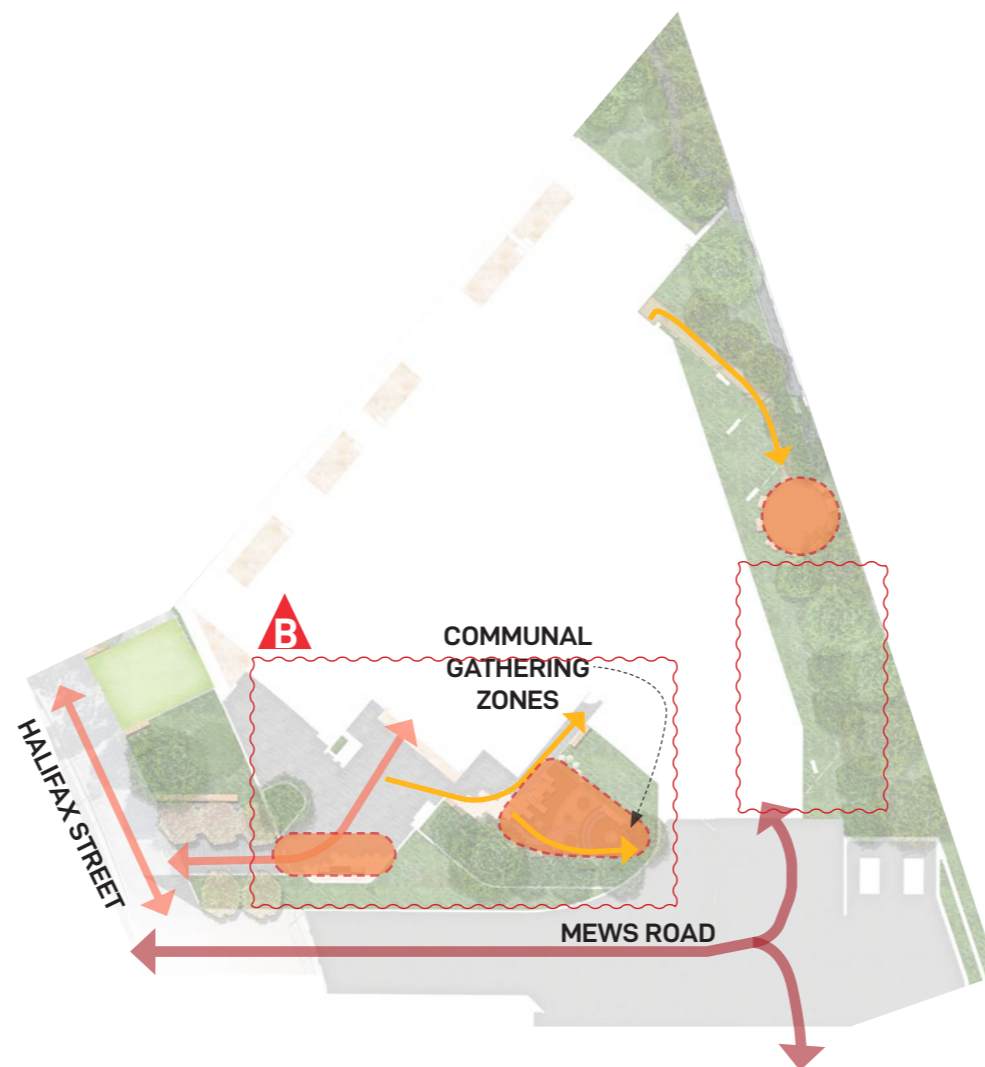
BUSHTUCKER AND LEARNING EXPERIENCES



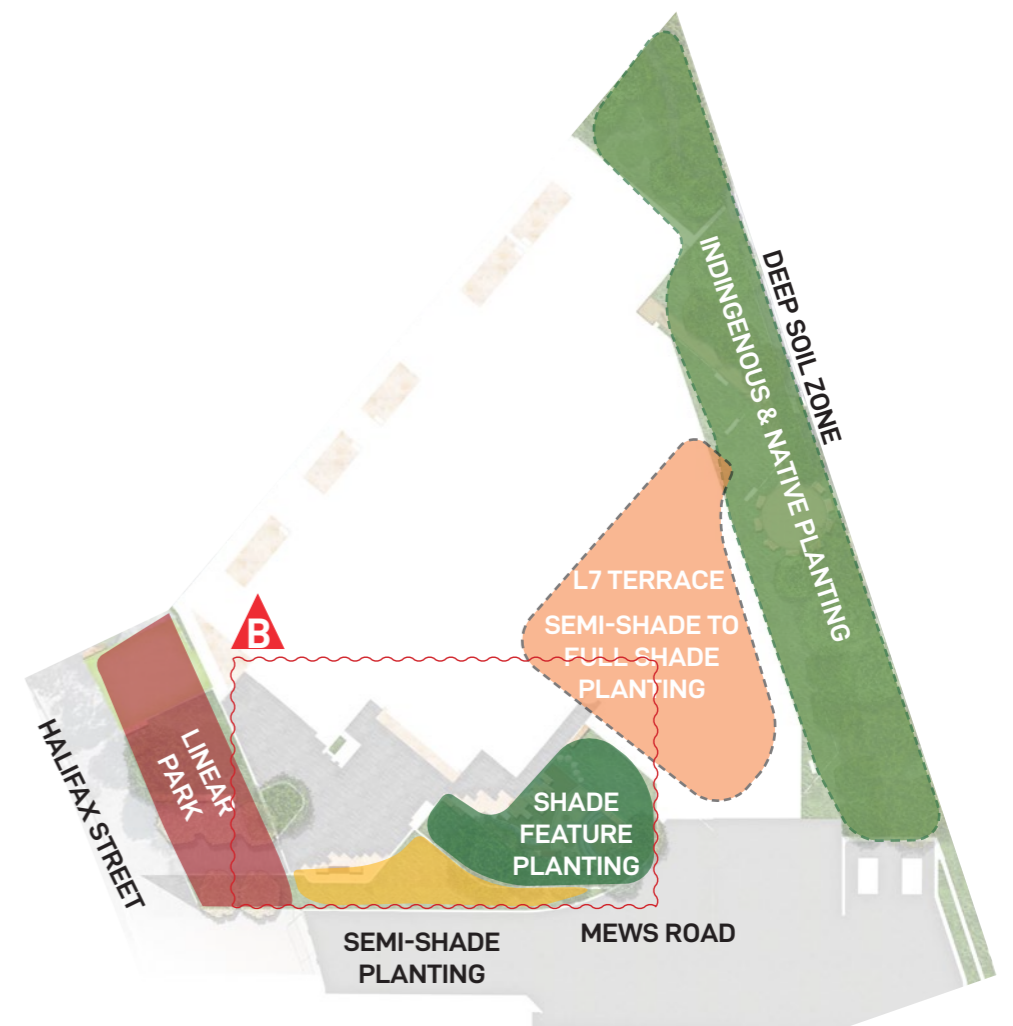
GATHERING AND COMMUNITY SPACES



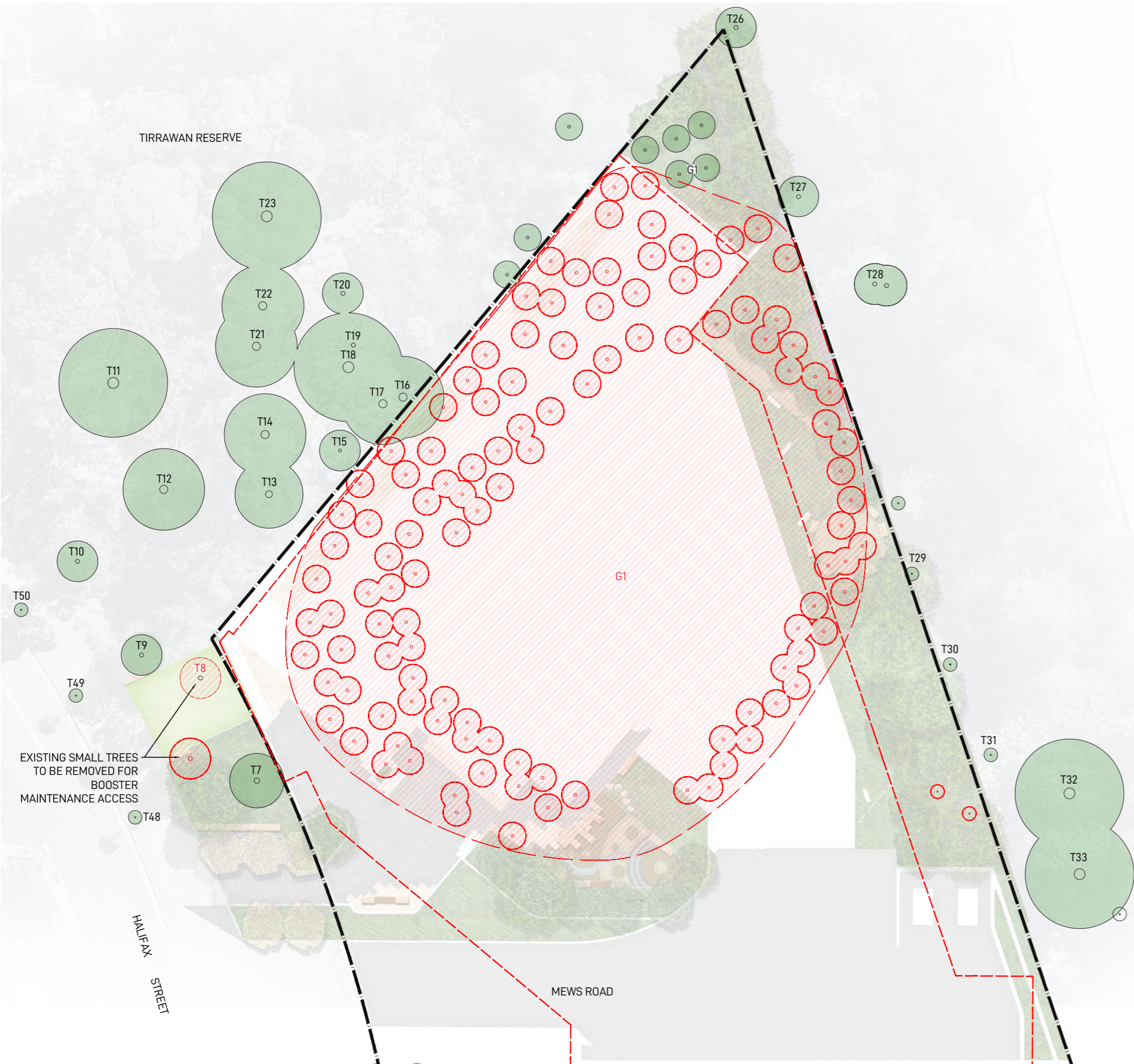
LANDSCAPE ZONES



CIRCULATION



PLANTING TYPOLOGIES



LEGEND

- SITE BOUNDARY
- LINE OF BASEMENT BELOW
- EXISTING TREES TO BE RETAINED. REFER TO ARBORICULTURAL IMPACT ASSESSMENT REPORT PREPARED BY URBAN ARBOR DATED 8 MARCH 2024
- EXISTING TREES TO BE REMOVED. REFER TO ARBORICULTURAL IMPACT ASSESSMENT REPORT PREPARED BY URBAN ARBOR DATED 8 MARCH 2024

EXISTING TREE SCHEDULE

ID	BOTANIC NAME	HEIGHT	CANOPY SPREAD (RADIUS)	TPZ	ACTION
1	PYRUS CALLERYANA	4M	2M	2.0M	RETAIN
2	PYRUS CALLERYANA	5M	2.5M	2.4M	RETAIN
3	PYRUS CALLERYANA	5M	2.5M	2.3M	RETAIN
4	PYRUS CALLERYANA	5M	2.5M	2.4M	RETAIN
5	PYRUS CALLERYANA	5M	2.5M	2.0M	RETAIN
6	PYRUS CALLERYANA	5M	2.5M	2.3M	RETAIN
7	EUCALYPTUS MICROCORYS	7M	2.0M	2.5M	RETAIN
8	EUCALYPTUS MICROCORYS	8M	2.5M	2.8M	REMOVE
9	GLOCHIDION FERDINANDI	4M	2M	2.2M	RETAIN
10	EUCALYPTUS MICROCORYS	7M	2M	2.6M	RETAIN
11	EUCALYPTUS RESINIFERA	14M	5M	6.0M	RETAIN
12	ALLOCASUARINA LITTORALIS	9M	3M	4.0M	RETAIN
13	EUCALYPTUS RESINIFERA	14M	4M	4.4M	RETAIN
14	MELALEUCA LINARIFOLIA	10M	3M	3.6M	RETAIN
15	MELALEUCA LINARIFOLIA	7M	1.5M	2.5M	RETAIN
16	MELALEUCA LINARIFOLIA	7M	1.5M	2.4M	RETAIN
17	MELALEUCA LINARIFOLIA	7M	1M	2.0M	RETAIN
18	MELALEUCA LINARIFOLIA	10M	4M	6.9M	RETAIN
19	MELALEUCA LINARIFOLIA	7M	2M	2.3M	RETAIN
20	MELALEUCA LINARIFOLIA	6M	1M	2.0M	RETAIN
21	MELALEUCA LINARIFOLIA	9M	2.5M	2.8M	RETAIN
22	MELALEUCA LINARIFOLIA	10M	3M	3.5M	RETAIN
23	MELALEUCA LINARIFOLIA	10M	3.5M	5.8M	RETAIN
24	EUCALYPTUS RESINIFERA	18M	5M	6.4M	RETAIN
25	ACACIA SPP	6M	2M	2.0M	RETAIN
26	DEAD TREE	5M	2M	2.0M	RETAIN
27	DEAD TREE	5M	2M	2.0M	RETAIN
28	ALLOCASUARINA LITTORALIS	6M	2M	2.0M	RETAIN
29	ACACIA SPP	5M	1.5M	2.0M	RETAIN
30	CASUARINA GLAUCA	6M	1M	2.0M	RETAIN
31	CASUARINA GLAUCA	7M	1M	2.0M	RETAIN
32	EUCALYPTUS RESINIFERA	16M	5M	5.0M	RETAIN
33	EUCALYPTUS RESINIFERA	16M	5M	4.6M	RETAIN
34	EUCALYPTUS SPP	10M	3M	3.4M	RETAIN
35	EUCALYPTUS RESINIFERA	9M	3M	4.0M	RETAIN
36	EUCALYPTUS SALIGNA	9M	2.5M	2.8M	RETAIN
37	GREVILLEA ROBUSTA	10M	2.5M	3.1M	RETAIN
38	SYNCARPIA GLOMULIFERA	8M	2M	3.5M	RETAIN
39	SYNCARPIA GLOMULIFERA	9M	3M	4.9M	RETAIN
40	NYSSA SYLVATICA	4M	1.5M	2.0M	RETAIN
41	UNKNOWN SPECIES	4M	1.5M	2.0M	RETAIN
42	CASUARINA GLAUCA	7M	2.5M	2.2M	RETAIN
43	ANGOPHORA COSTATA	3M	1M	2.0M	RETAIN
44	TRISTANIOPSIS LAURINA	2M	1M	2.0M	RETAIN
45	ANGOPHORA COSTATA	3M	1M	2.0M	RETAIN
46	ANGOPHORA COSTATA	4M	1.5M	2.0M	RETAIN
47	TRISTANIOPSIS LAURINA	3.5M	1.5M	2.0M	RETAIN
48	ANGOPHORA COSTATA	2.5M	0.5M	2.0M	RETAIN
49	ANGOPHORA COSTATA	2.5M	0.5M	2.0M	RETAIN
50	ANGOPHORA COSTATA	1M	0.5M	2.0M	RETAIN
G1	GROUP OF CASUARINA GLAUCA	5-8M	0.5-1M	2.0M	REMOVE
G2	GROUP OF CASUARINA GLAUCA	5-8M	0.5-1M	2.0M	REMOVE

NOTE: REFER TO ARBORICULTURAL IMPACT ASSESSMENT REPORT PREPARED BY URBAN ARBOR DATED 8 MARCH 2024 FOR FURTHER DETAILS



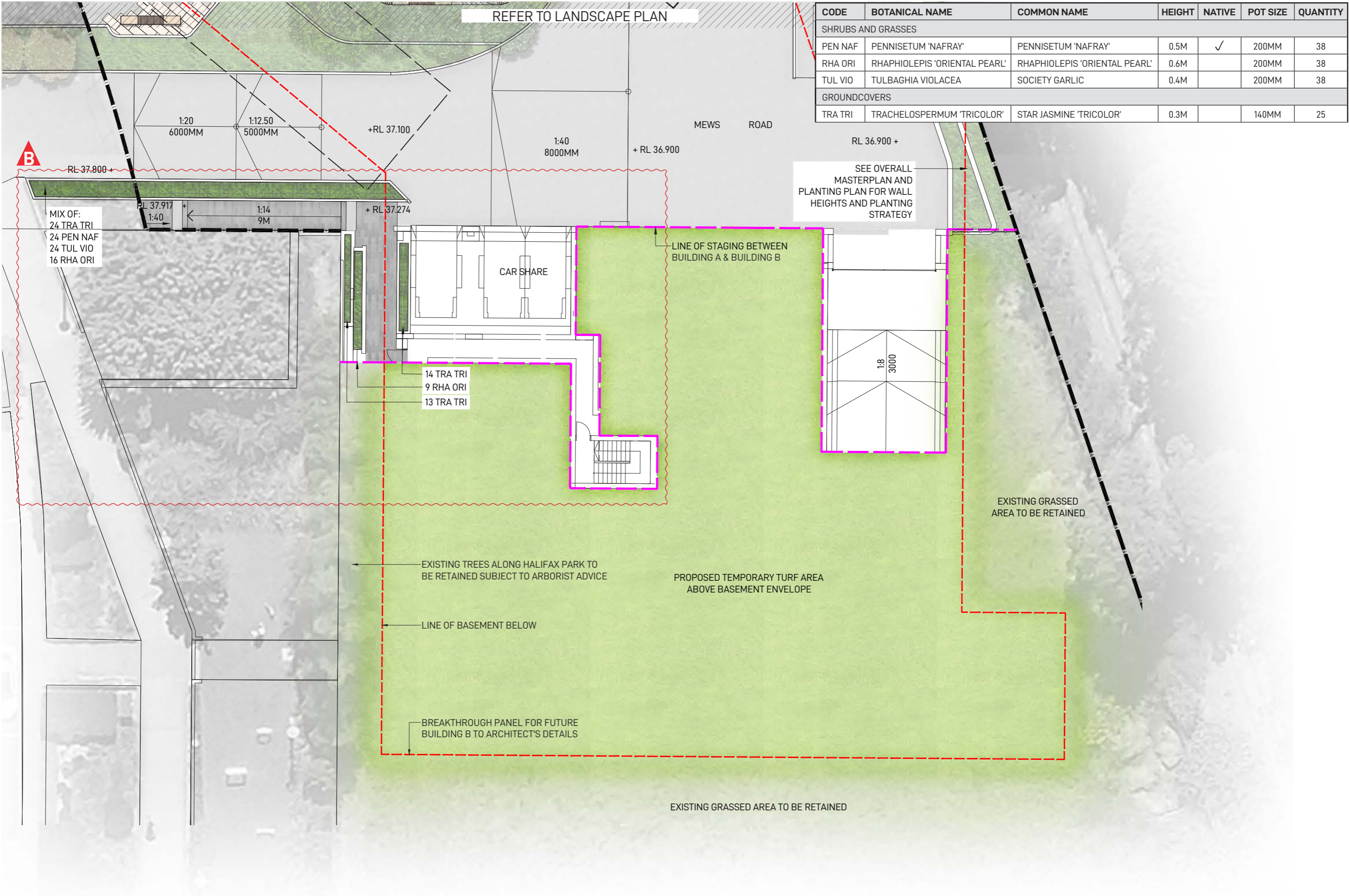
LEGEND

- FFL 45.00 FINISHED FLOOR LEVEL
- + EX 45.00 EXISTING SPOT LEVEL
- + RL 45.00 PROPOSED SPOT LEVEL
- + TOW 45.00 PROPOSED TOP OF WALL LEVEL
- SITE BOUNDARY
- - - LINE OF BASEMENT BELOW
- EX ISTING TREES TO BE RETAINED  
REFER TO PRELIMINARY ARBORICULTURAL REPORT PREPARED BY URBAN ARBOR DATED MARCH 2024
- PROPOSED TREES  
REFER TO PROPOSED PLANTING PLAN FOR SPECIES

- 1 TURF TO REPLACE EXISTING GARDEN TO FACILITATE BOOSTER ACCESS
- 2 SANDSTONE SEATING LOGS TO BORDER REMEDIATED PUBLIC DOMAIN GARDEN
- 3 FLOWERING TREES TO PUBLIC DOMAIN ENTRY TO MATCH ADJACENT CHARACTER AND FRAME ENTRY TO DEVELOPMENT
- 4 BIKE RACK BAY WITH FEATURE PAVING
- 5 FEATURE PAVING TO DESIGNATE SECONDARY ACCESS AND ENTRY TO COMMUNAL GARDEN WITH RAISED SANDSTONE SEATING LOGS
- 6 SMALL NATIVE PLAZA WITH GROUND PATTERNING AND NATURALISTIC SEATING AREAS
- 7 DECOMPOSED GRANITE ACCESS PATH
- 8 GATHERING CIRCLE WITH SANDSTONE LOGS
- 9 FEATURE WAYFINDING PAVING INLAY TO MAIN ENTRY
- 10 DRAINAGE SWALE
- 11 SEATING BAY TO ENTRY

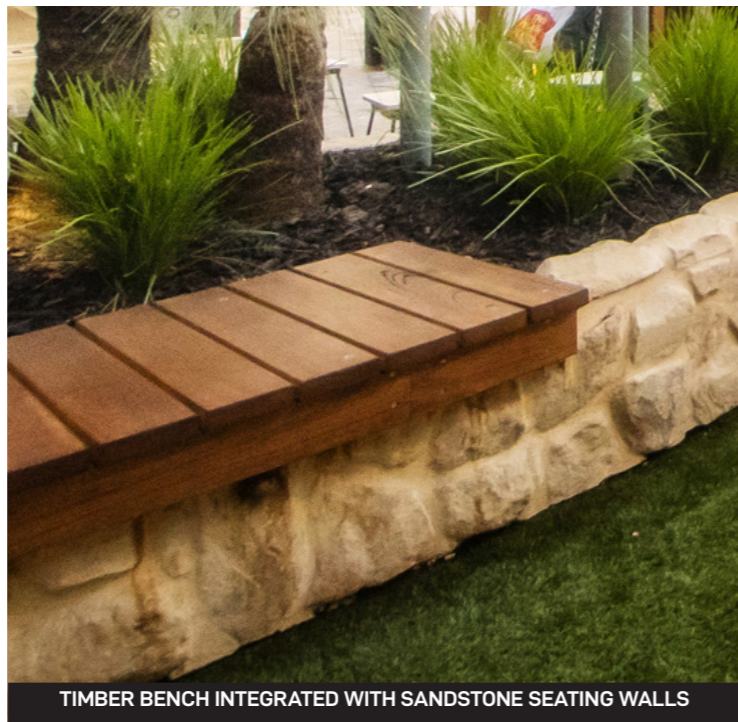
LANDSCAPE MASTERPLAN: GROUND FLOOR

REFER TO MEWS ROAD PLAN

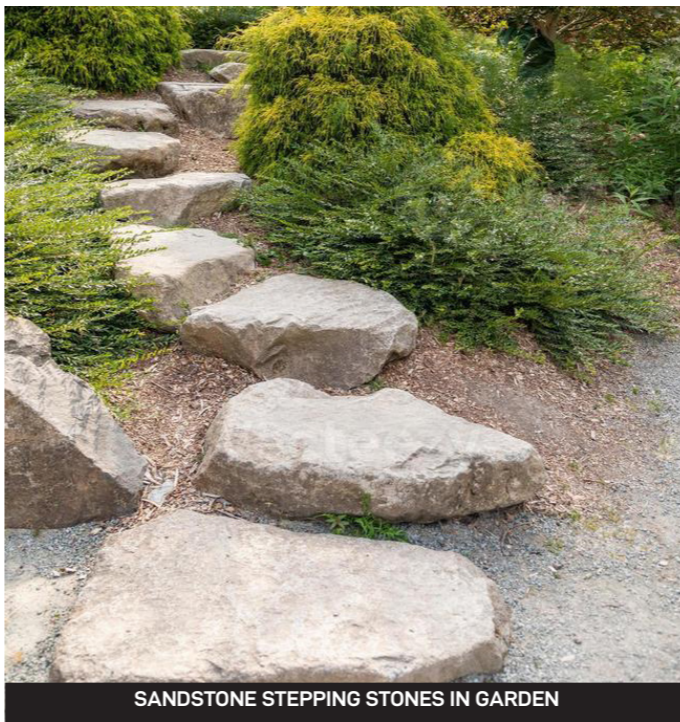




PATTERNED RESIN BOUND GRAVEL



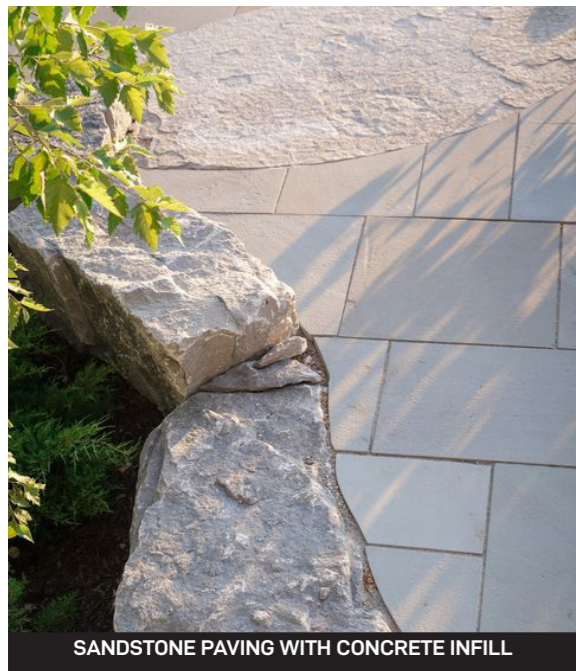
TIMBER BENCH INTEGRATED WITH SANDSTONE SEATING WALLS



SANDSTONE STEPPING STONES IN GARDEN



SANDSTONE LOG SEATING



SANDSTONE PAVING WITH CONCRETE INFILL



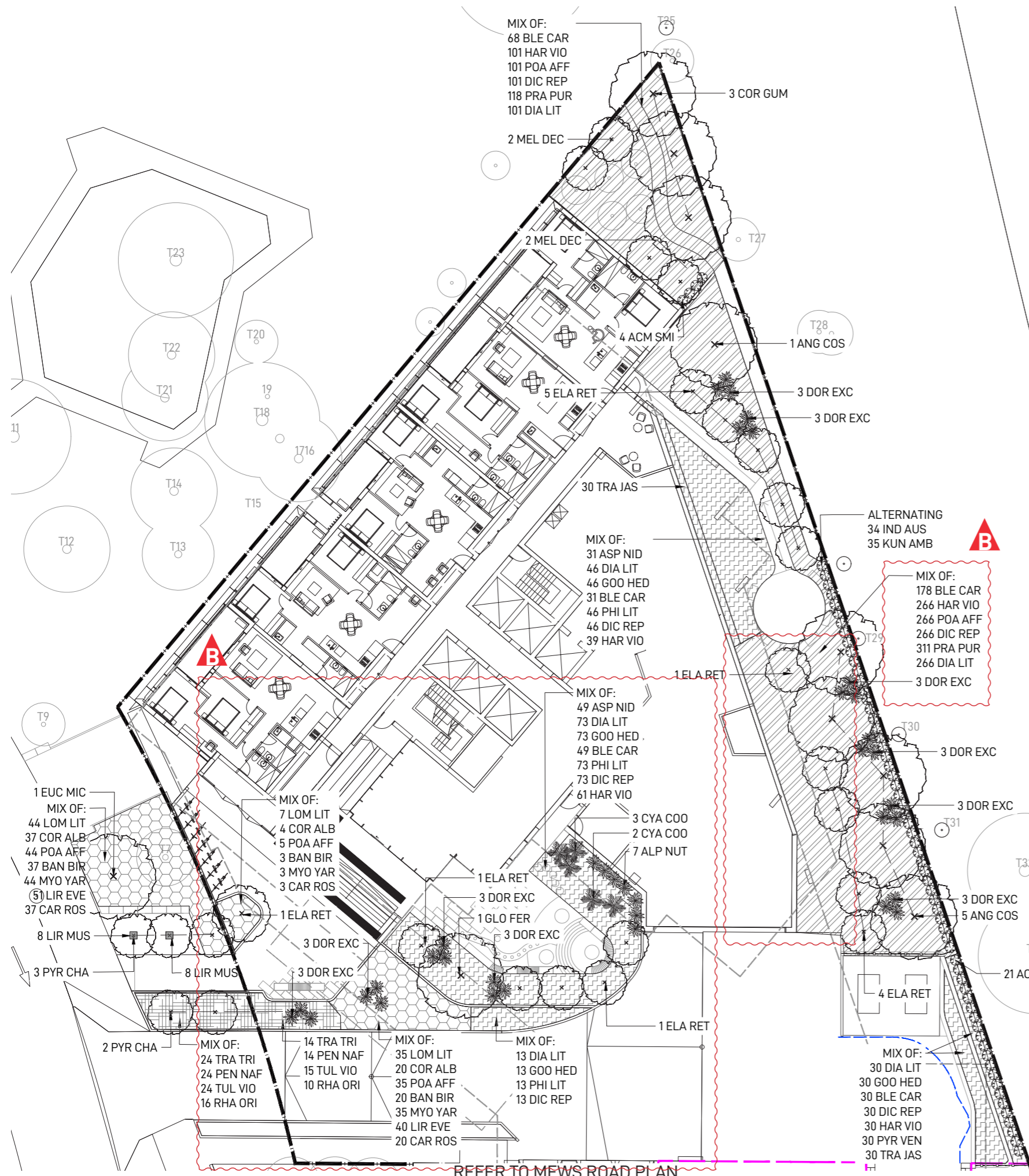
UNCOMPRESSED DECO GRANITE IN GOLD



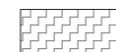
RECLAIMED SITE BOULDERS IN GARDEN BED




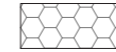
INDICATIVE BRASS TEXT INLAY IN PAVING




CODE	BOTANICAL NAME	COMMON NAME	HEIGHT	NATIVE	POT SIZE	QUANTITY
TREES						
ANG COS	ANGOPHORA COSTATA	SMOOTH BARK APPLE GUM	15M	✓	200L	6
COR GUM	CORYMBIA GUMMIFERA	RED BLOODWOOD	10-15M	✓	200L	3
ELA RET	ELAEOCARPUS RETICULATUS	BLUEBERRY ASH	6-8M	✓	200L	16
EUC MIC	EUCALYPTUS MICROCORYS	TALLOWOOD	10-15M	✓	200L	1
GLO FER	GLOCHIDION FERFINANDI	CHEESE TREE	10M	✓	200L	1
MEL DEC	MELALEUCA DECORA	WHITE FEATHER HONEYMYRTLE	8M	✓	200L	4
PYR CHA	PYRUS 'CHANTICLEER'	CALLERY PEAR	4M		200L	6
SHRUBS						
ACM SMI	ACMENA SMITHII	LILLI PILLI	2-3M	✓	300MM	25
ALP NUT	ALPINIA NUTANS	DWARF CARDAMOM	2M		300MM	7
CYA COO	CYATHEA COOPERI	TREE FERN	3-5M	✓	45L	5
DOR EXC	DORYANTHES EXCELSA	GYMEA LILY	1M	✓	45L	33
IND AUS	INDIGOFEA AUSTRALIS	NATIVE INDIGO	1.5M	✓	300MM	20
KUN AMB	KUNZEA AMBIGUA	WHITE KUNZEA	1.5M	✓	300MM	21
SHRUBS AND GRASSES						
ASP NID	ASPLENIUM NIDUS	BIRDS NEST FERN	0.5M	✓	300MM	80
BAN BIR	BANKSIA 'BIRTHDAY CANDLES'	DWARF BANKSIA	0.4M	✓	200MM	27
BLE CAR	BLECHNUM CARTILAGINEUM	GRISTLE FERN	0.4M	✓	300MM	237
COR ALB	CORREA ALBA	WHITE CORREA	0.4M	✓	200MM	69
DIA LIT	DIANELLA 'LITTLE JESS'	NATIVE FLAX	0.4M	✓	200MM	354
GOO HED	GOODENIA HEDERACEA	IVY GOODENIA	0.3M	✓	200MM	149
LIR EVE	LIRIOPE 'AMETHYST'	BLUE LILY TURF	0.6M		200MM	102
LOM LIT	LOMANDRA 'LITTLE CON'	MATT RUSH	0.3M	✓	200MM	96
PHI LIT	PHILODENDRON 'LITTLE PHIL'	PHILODENDRON 'LITTLE PHIL'	0.4M		300MM	119
PEN NAF	PENNISETUM 'NAFRAY'	PENNISETUM 'NAFRAY'	0.5M	✓	200MM	48
POA AFF	POA AFFINIS	TUSSOCK GRASS	0.5M	✓	200MM	339
RHA ORI	RHAPHIOLEPIS 'ORIENTAL PEARL'	RHAPHIOLEPIS 'ORIENTAL PEARL'	0.6M		200MM	33
TUL VIO	TULBAGHIA VIOLACEA	SOCIETY GARLIC	0.4M		200MM	48
GROUNDCOVERS						
CAR ROS	CARPOBROTUS ROSSI	COASTAL PIGFACE	0.3M	✓	140MM	68
DIC REP	DICHONDRA REPENS	KIDNEY WEED	0.2M	✓	140MM	344
MYO YAR	MYOPORUM 'YAREENA'	CREEPING BOOBIALLA	0.3M	✓	140MM	92
PRA PUR	PRATIA PURPURASCENS	BLUE STAR CREEPER	0.2M	✓	140MM	429
TRA TRI	TRACHELOSPERMUM 'TRICOLOR'	STAR JASMINE 'TRICOLOR'	0.3M		140MM	48
TRA JAS	TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	0.3M		140MM	60
CLIMBERS						
HAR VIO	HARDENBERGIA VIOLACEA	FALSE SARSAPARILLA	-	✓	200MM	356
PYR VEN	PYROSTEGIA VENUSTA	ORANGE TRUMPET VINE	-		140MM	30

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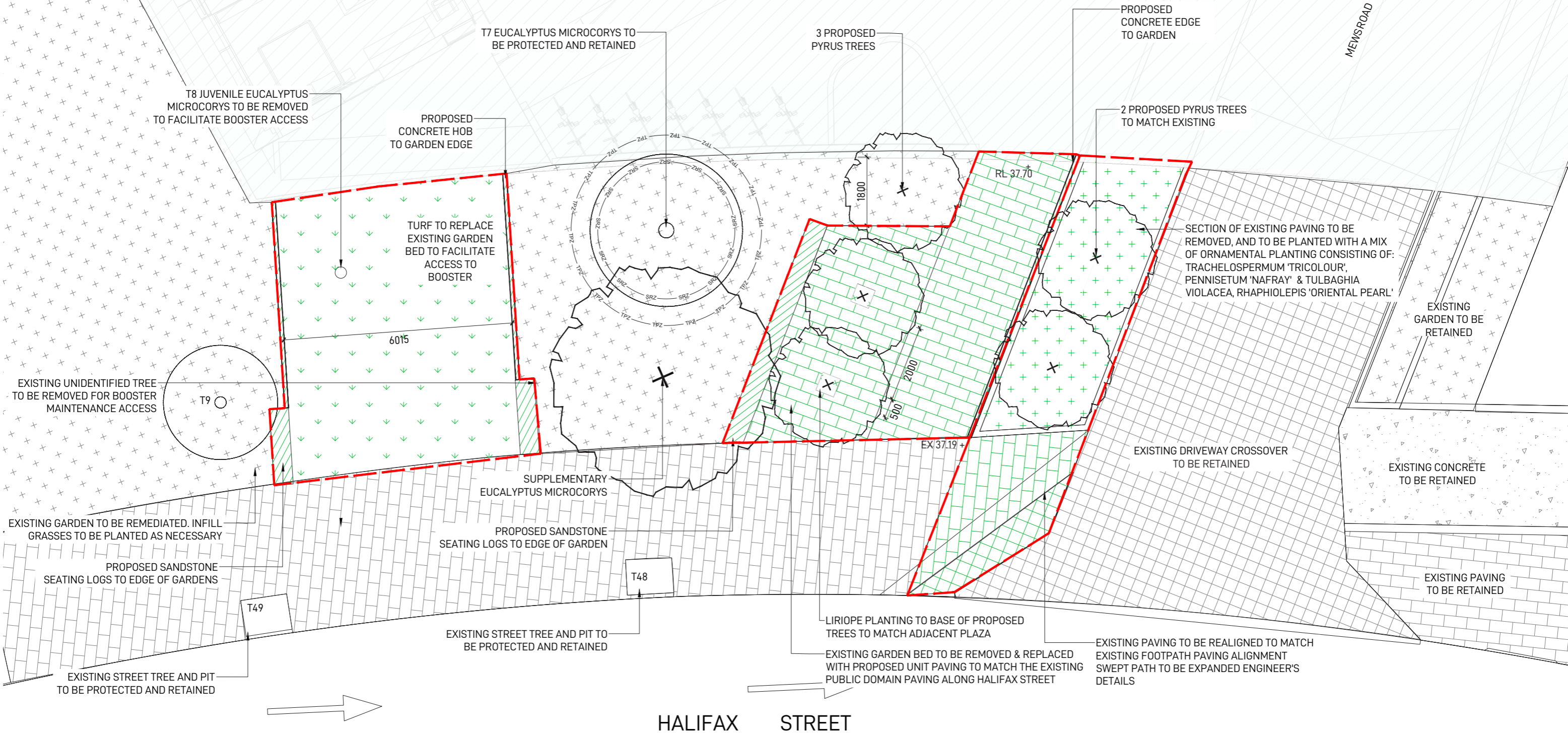
FEATURE SHADE PLANTING MIX
- 

STREETSCAPE PLANTING MIX
- 

FULL SUN PLANTING MIX
- 

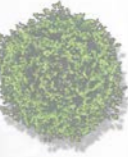
BIODIVERSITY CORRIDOR PLANTING MIX

REFER TO LANDSCAPE MASTERPLAN FOR PROPOSED LANDSCAPING WORKS WITHIN SITE BOUNDARY



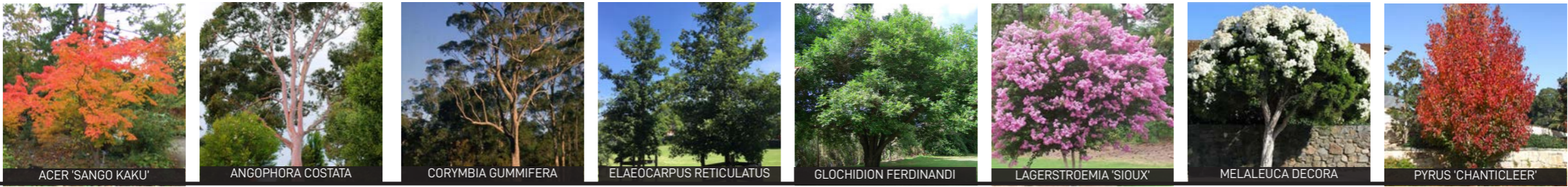


## LEGEND

- + RL 45.00 PROPOSED SPOT LEVEL
- SITE BOUNDARY
- + TOW 45.00 PROPOSED TOP OF WALL LEVEL
-  PROPOSED TREES REFER TO PROPOSED PLANTING PLAN FOR SPECIES
- ① CAFE SEATING
- ② PLANTER BENCH SEATING
- ③ OUTDOOR STUDY DESK PODS

CODE	BOTANICAL NAME	COMMON NAME	HEIGHT	NATIVE	POT SIZE	QTY
TREES						
LAG SIO	LAGERSTROEMIA 'SIOUX'	INDIAN SUMMER CREPE MYRTLE	3-4M		100L	3
SHRUBS AND GRASSES						
BAN BIR	BANKSIA 'BIRTHDAY CANDLES'	BIRTHDAY CANDLES	0.4M	✓	200MM	29
CRA MAX	CRASSULA 'MAX COOK'	MAX COOK CRASSULA	0.6M		300MM	26
DIA LIT	DIANELLA 'LITTLE JESS'	NATIVE FLAX	0.4M	✓	200MM	32
LOM LIT	LOMANDRA 'LITTLE CON'	LITTLE CON LOMANDRA	0.3M	✓	200MM	40
PHO SWE	PHORMIUM 'SWEET MIST'	SWEET MIST PHORMIUM	0.45M		300MM	6
RHA EXC	RHAPIS EXCELSA	RHAPIS PALM	1.8M		45L	3
GROUNDCOVERS						
DIC REP	DICHONDRA REPENS	KIDNEY WEED	0.1M	✓	140MM	43
DIC SIL	DICHONDRA 'SILVER FALLS'	SILVER FALLS	0.2M		140MM	72
GOO HED	GOODENIA HEDERACEA	FOREST GOODENIA	0.8M	✓	140MM	6
MYO YAR	MYOPORUM 'YAREENA'	MYOPORUM	0.3M	✓	140MM	40
SHADE TOLERANT PLANTING						
ALC IMP	ALCANTAREA IMPERIALIS	BROMELIAD	0.4M		140MM	6
ASP NID	ASPLENIUM NIDUS	BIRDS-NEST FERN	0.5-1M	✓	140MM	6
CIS ANT	CISSUS ANTARCTICA	KANGAROO VINE	CLIMBER	✓	200MM	8
CLI MIN	CLIVIA MINIATA	CLIVIA	0.5M		140MM	29
LIR AME	LIRIOPE 'AMETHYST'	LILYTURF	0.6M		140MM	29
PHI XAN	PHILODENDRON 'XANADU'	XANADU	0.9M		300MM	21
PYR VEN	PYROSTEGIA VENUSTA	ORANGE TRUMPET VINE	3-4M		140MM	62
TRA JAS	TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	CLIMBER		200MM	8
BUSHTUCKER PLANTING						
CYM AMB	CYMBOPOGON AMBIGUUS	NATIVE LEMONGRASS	0.5M	✓	140MM	43
MEN AUS	MENTHA AUSTRALIS	NATIVE RIVER MINT	0.3M	✓	140MM	43
TET TET	TETRAGONIA TETRAGONIOIDES	WARRIGAL GREENS	0.2M	✓	140MM	43

TREES



LARGE SHRUBS  
AND SCREENING



SHADE PLANTING



FULL SUN



GROUNDCOVERS

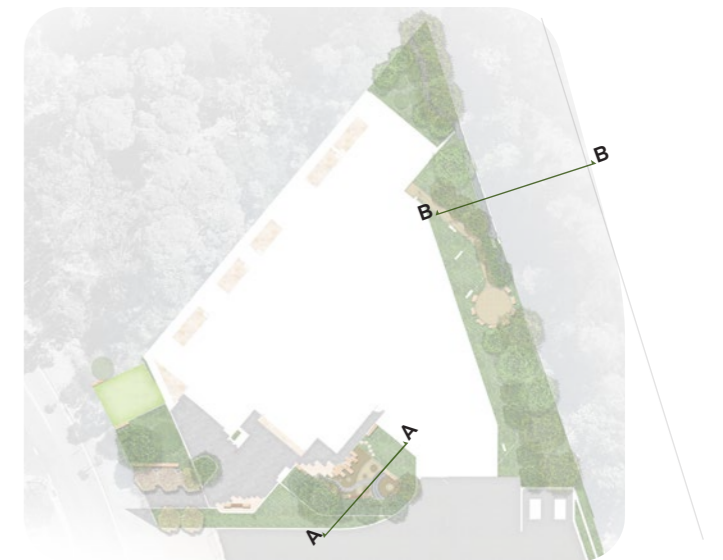


CLIMBERS

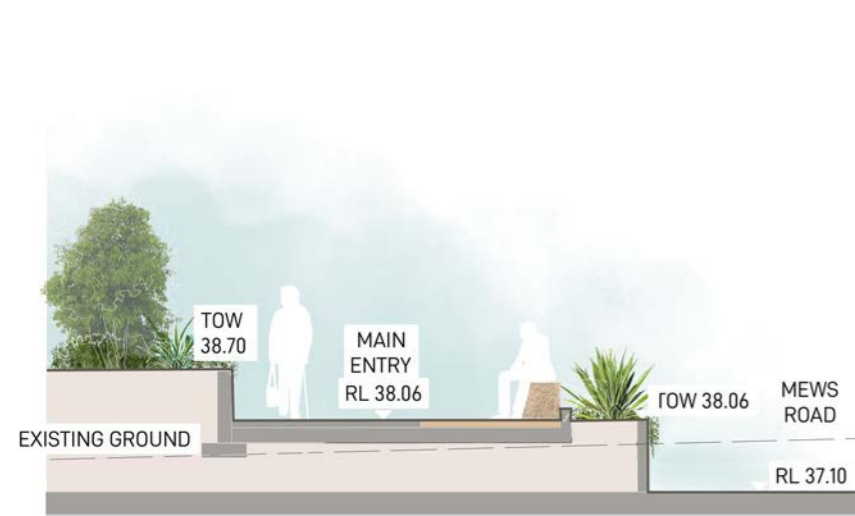




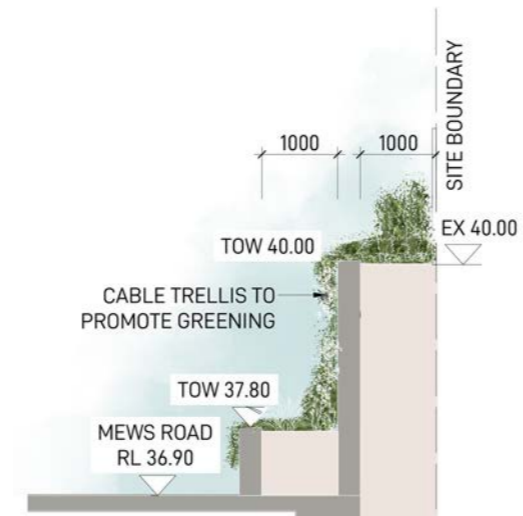
SECTION AA: ENTRANCE COURTYARD



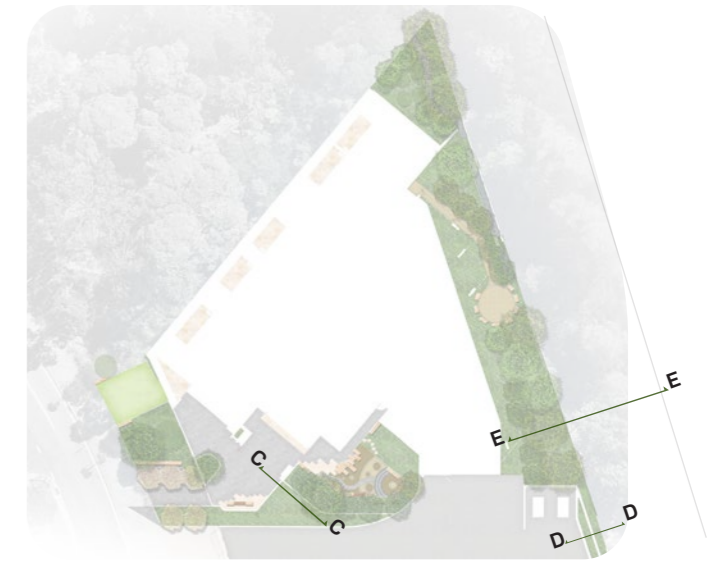
SECTION BB: EASTERN SETBACK INTERFACE



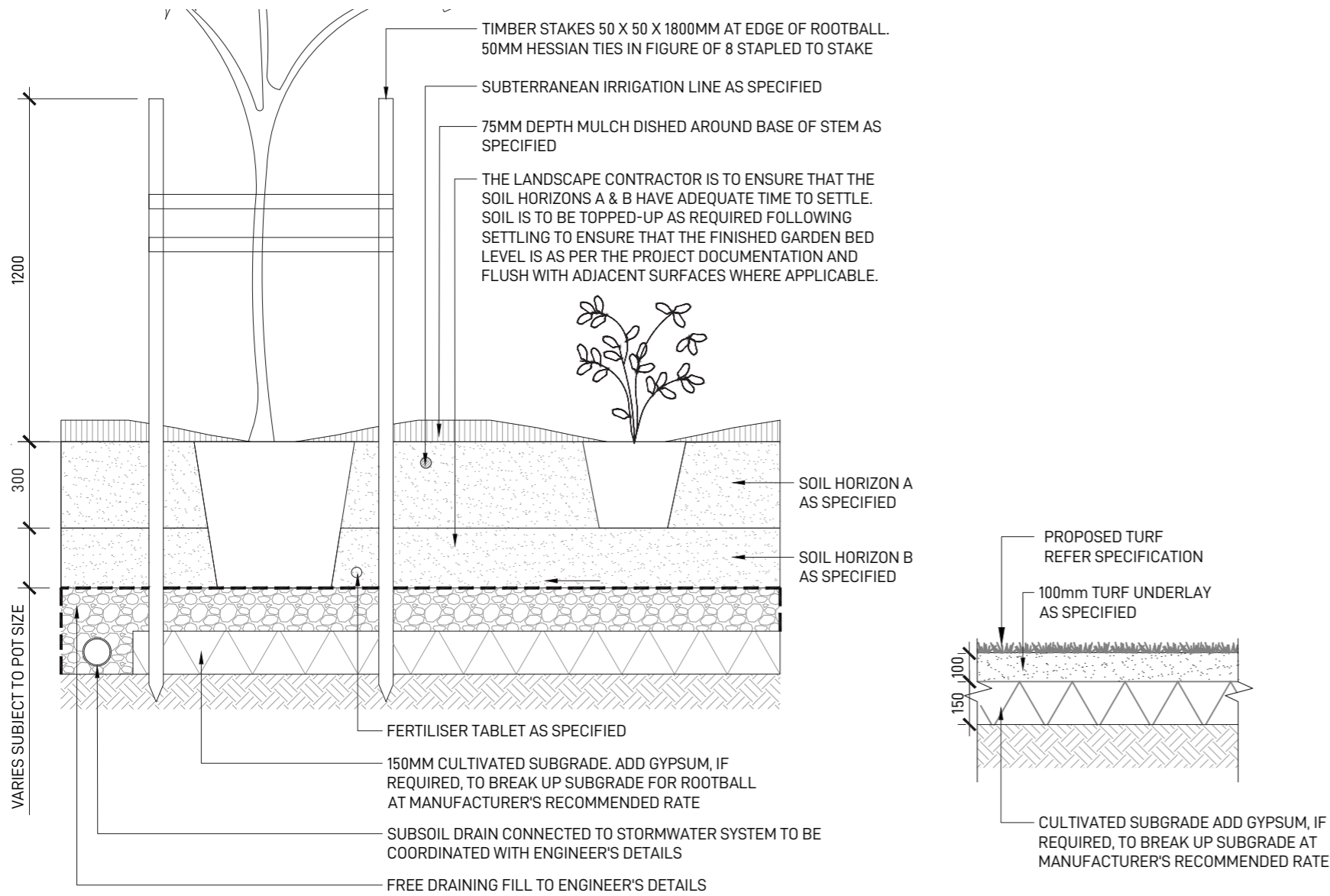
SECTION CC: WESTERN TERRACE AND ARRIVAL



SECTION DD: MEWS ROAD WALL



SECTION EE: EASTERN MAINTENANCE PATH INTERFACE



**MASS PLANTING**  
TYPICAL SECTION  
1:20 @ A3

**TURF ON NATURAL GROUND**  
TYPICAL SECTION  
1:20 @ A3

## MAINTENANCE SCHEDULE

MAINTENANCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
INSPECTIONS	2M		2M		2M		2M		2M		2M	
WATERING	W	W	W	W	W	W	W	W	W	W	W	W
WEED AND PEST MANAGEMENT	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
LITTER REMOVAL	2M		2M		2M		2M		2M		2M	
REMOVAL OF DEAD/DYING TREE LIMBS	2M		2M		2M		2M		2M		2M	
PLANT REPLACEMENT IF REQUIRED	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
MULCHING	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
TREE STAKE ADJUSTMENTS	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
FERTILISING	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR
PLANTING ESTABLISHMENT PERIOD - 12 MONTHS LANDSCAPE MATERIAL ESTABLISHMENT - 12 MONTHS KEY = <b>W</b> -WEEKLY, <b>2M</b> - EVERY TWO MONTHS, <b>AR</b> - AS REQUIRED												
THE CONTRACTOR IS TO ALLOW 52 WEEKS PLANTING ESTABLISHMENT PERIOD FROM THE DATE OF PRACTICAL COMPLETION. CONTRACTOR TO MAINTAIN A LOG BOOK TO KEEP A RECORD OF MAINTENANCE EVERY MONTH. REPLACEMENTS OF FAILED, DAMAGED OR STOLEN PLANTS TO BE CARRIED OUT DURING THE MAINTENANCE PERIOD. IRRIGATION SYSTEMS TO BE INSTALLED AND MAINTAINED DURING THE MAINTENANCE PERIOD. LANDSCAPE MAINTENANCE REPORT SHALL BE SUBMITTED TO THE PRINCIPLE CERTIFYING AUTHORITY BY THE CONTRACTOR.												

## OUTLINE LANDSCAPE SPECIFICATION

**GENERAL**  
MAINTENANCE SHALL MEAN THE CARE AND MAINTENANCE OF THE LANDSCAPE WORKS BY ACCEPTED HORTICULTURAL PRACTICE AS RECTIFYING ANY DEFECTS THAT BECOME APPARENT IN THE LANDSCAPE WORKS UNDER NORMAL USE. THE LANDSCAPE CONTRACTOR SHALL ATTEND THE SITE ON A WEEKLY BASIS TO MAINTAIN THE LANDSCAPE WORKS FOR THE FULL TERM APPROVED AT CC STAGE OF THE MAINTENANCE PERIOD (COMMENCING FROM PRACTICAL COMPLETION).

**RUBBISH REMOVAL**  
DURING THE TERM OF THE MAINTENANCE PERIOD THE LANDSCAPE CONTRACTOR SHALL UNDERTAKE RUBBISH REMOVAL FROM THE SITE ON A WEEKLY BASIS TO ENSURE THE SITE REMAINS IN TIDY CONDITION.

**WEED ERADICATION**  
WEED GROWTH THAT MAY OCCUR IN, PLANTED OR MULCHED AREAS IS TO BE REMOVED USING ENVIRONMENTALLY ACCEPTABLE METHODS I.E. NON-RESIDUAL GLYPHOSATE HERBICIDE, (E.G. 'ROUNDUP', APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS) OR HAND WEEDING.

**TREE REPLACEMENT**  
TREES SHALL SHOW SIGNS OF HEALTHY VIGOROUS GROWTH AND BE FREE FROM DISEASE AND NOT EXHIBIT SIGNS OF STRESS PRIOR TO HANDOVER TO THE CLIENT. ANY TREES OR PLANT THAT DIE OR FAIL TO THRIVE, OR ARE DAMAGED OR STOLEN WILL BE REPLACED. REPLACEMENT MATERIAL SHALL HAVE THE MAINTENANCE PERIOD EXTENDED IN ACCORDANCE WITH THE LANDSCAPE CONTRACT CONDITIONS. TREES AND PLANT MATERIALS SHALL BE EQUAL TO THE MINIMUM REQUIREMENTS OF SPECIES SPECIFIED AND APPROVED MATERIAL DELIVERED TO SITE. SHOULD THE CONDITION DECLINE FROM THE APPROVED SAMPLE THE SUPERINTENDENT RESERVES THE RIGHT TO REJECT THE TREE / PLANTS. FREQUENCY: AS REQUIRED.

**PRUNING**  
SELECTIVE PRUNING MAY BE REQUIRED DURING THE ESTABLISHMENT PERIOD TO PROMOTE A BALANCED CANOPY STRUCTURE. THESE ACTIVITIES SHALL BE CARRIED OUT TO THE BEST HORTICULTURAL AND INDUSTRY PRACTICE. ALL PRUNED MATERIAL IS TO BE REMOVED FROM SITE.

**IRRIGATION**  
A LOW VOLUME DRIP IRRIGATION SYSTEM MAY BE INSTALLED AT THE DISCRETION OF THE DEVELOPER. POSITION OF CONTROL BOX, SOLENOIDS AND IRRIGATION CONDUITS TO BE DESIGNED BY QUALIFIED IRRIGATION ENGINEER AT CC STAGE. CONTROLLERS SHALL BE MOUNTED ON A STABLE WALL, POWER RACK, OR FORMED AND CONSTRUCTED CONCRETE BASED PEDESTAL MOUNT. PERFORMANCE SPECIFICATION TO BE PROVIDED BY LANDSCAPE ARCHITECT, NOMINALLY 25MM DELIVERED TO PLANT AREAS EACH WEEK DURING ESTABLISHMENT (DEPENDING ON WEATHER CONDITIONS). AFTER ESTABLISHMENT, IRRIGATION RATES CAN BE DECREASED IN CERTAIN AREAS OF THE LANDSCAPE DEPENDING ON THE SPECIES.

**WATERING**  
IMPLEMENT AN APPROPRIATE HAND WATERING REGIME IN AREAS NOT IRRIGATED IN ASSOCIATION WITH CURRENT WATERING PROGRAMME TO MAINTAIN PLANT HEALTH AND VIGOUR. THE PROGRAM SHALL REFLECT SEASONAL CONDITIONS AND PLANT SPECIES. FREQUENCY: WEEKLY OR AS REQUIRED.

**DRAINAGE**  
ALL LANDSCAPE AREAS ARE TO HAVE POSITIVE DRAINAGE TO SW SYSTEMS. IF AREAS OF POOR DRAINAGE ARE IDENTIFIED ON SITE THEN THIS SHOULD BE BROUGHT TO THE SITE SUPERINTENDENTS ATTENTION. INSTALL AGG LINES IF REQUIRED.

**SOILS**  
HORIZON A - GARDEN BEDS ON NATURAL GROUND  
A SANDY LOAM TO CLAY LOAM TOPSOIL MIX DESIGNED FOR GENERAL PURPOSE, ON-GRADE LANDSCAPE GARDEN BED PLANTING OF GRASSES, WOODY AND HERBACEOUS ANNUALS AND PERENNIALS THAT HAVE HIGH NUTRIENT REQUIREMENT FOR SUSTAINED OPTIMUM GROWTH, AND ARE NOT SUBJECT TO COMPACTION BY PEDESTRIAN AND OTHER FOOT TRAFFIC. HEAVIER TEXTURED SOILS IN THIS SPECIFICATION MAY REQUIRE ENGINEERED SOLUTIONS WHERE EXCESSIVE WETNESS IS ANTICIPATED. NOTE THAT ORGANIC SOIL VARIANT SHOULD NOT BE CHOSEN FOR LOW PLANTINGS AND SHOULD NOT BE USED BELOW 300MM. PLANTING METHODS INCLUDE DIRECT SEEDING, TUBE AND POTTED SPECIMENS UP TO 45L

HORIZON B - LARGER POTTED PLANTING BELOW 300MM  
A SANDY, WELL DRAINED MEDIUM WITH LOW ORGANIC MATTER FOR BACKFILLING BELOW 300MM FROM THE SURFACE IN LARGER POTTED SPECIMENS OVER 45L OR 400MM DEPTH OF ROOT BALL, SEMI-ADVANCED, ADVANCED AND SUPER ADVANCED TREE PLANTING. THE SPECIFICATION MAY USE A SMALL PROPORTION OF SITE WON TOPSOIL OR SUBSOIL, PROVIDED THE ORGANIC MATTER UPPER LIMIT IS NOT EXCEEDED.

**CULTIVATION**  
ALL GARDEN BEDS TO BE CULTIVATED TO A MIN DEPTH OF 150MM AND TREE PITS TO THE DEPTH OF THE ROOT BALL ONLY. IF ADDITIVES SUCH AS GYPSUM ARE REQUIRED CONDUCT THIS AFTER CULTIVATION INTO THE TOP 100MM OF SOIL.

**PLANTING**  
ALL PLANTING TO BE GROWN TO NATSPEC SPECIFICATIONS. CONTRACTOR TO PREPARE SITE FOR PLANTING INCLUDING WATERING, HANDLING, SETTING OUT AND EXCAVATION. EXCAVATE A HOLE FOR EACH PLANT LARGE ENOUGH TO PROVIDE NOT LESS THAN 100MM ALL AROUND THE ROOT SYSTEM OF THE PLANT. FOR TREE PLANTING EACH HOLE SHALL BE DUG WITH A SHOVEL, BACKHOE OR SIMILAR TOOL. INDIVIDUAL HOLES SHALL BE EXCAVATED TO ALLOW ROOT SYSTEM TO SIT FLAT ON THE EXCAVATED HOLE AND 400MM TO EACH SIDE OF THE ROOT SYSTEM. BACKFILL PLANTING HOLES WITH EXISTING SITE SOIL AND TOPSOIL AS DESCRIBED IN SECTION 'SOIL'. PLANT / TREE SHALL BE SET PLUMB, WITH THE ROOT BALL SET SLIGHTLY BELOW THE FINAL SOIL LEVEL.

**MULCHING**  
THE LANDSCAPE CONTRACTOR SHALL SUPPLY AND INSTALL 10MM PINE BARK MULCH TO ALL GARDEN BEDS SHOWN ON THE LANDSCAPE PLANS, TO A MINIMUM DEPTH OF 75MM. ALL MULCH IS TO BE FREE OF DELETERIOUS MATTER SUCH AS SOIL, WEEDS AND STICKS. MULCHED SURFACES ARE TO BE KEPT CLEAN AND TIDY AND FREE OF ANY DELETERIOUS MATERIAL AND FOREIGN MATTER. REINSTATE DEPTHS TO A UNIFORM LEVEL OF 75MM WITH MULCH AS SPECIFIED, MULCH TO BE FREE OF ANY WOOD MATERIAL IMPREGNATED WITH CCA OR SIMILAR TOXIC TREATMENT. MAINTAIN WATERING RINGS AROUND TREES. TOP UP MULCH LEVELS PRIOR TO HANDOVER TO CLIENT.

**TURFING**  
THE LANDSCAPE CONTRACTOR SHALL SUPPLY AND INSTALL SAPPHIRE BUFFALO TURF IN STRETCHER PATTERN TO ALL TURF AREAS SHOWN ON THE LANDSCAPE PLANS AND IS TO FINISH FLUSH WITH ADJACENT SURFACES. TURF TO BE A MIN THICKNESS OF 50MM WITH A 40MM MOWING HEIGHT. CONTRACTOR TO ALLOW FOR FERTILISING, LAYING, TAMPING, WATERING, TOP DRESSING, MAINTENANCE AND MOWING. THE LANDSCAPE CONTRACTOR SHALL SUPPLY AND INSTALL TURF UNDERLAY UNDER ALL TURF AREAS, CONSISTING OF 100MM THICK LAYER OF SCREENED TOP SOIL.

**PEST AND DISEASE CONTROL**  
THE LANDSCAPE CONTRACTOR SHALL SPRAY FOR PESTS AND DISEASE INFESTATIONS WHEN THE PEST AND FUNGAL ATTACK HAS BEEN POSITIVELY IDENTIFIED AND WHEN THEIR POPULATIONS HAVE INCREASED TO A POINT THAT WILL BECOME DETRIMENTAL TO PLANT GROWTH. APPLY ALL PESTICIDES TO MANUFACTURER'S DIRECTIONS. FREQUENCY: WEEKLY INSPECTION

**FERTILISING**  
PELLETS SHALL BE IN THE FORM INTENDED TO UNIFORMLY RELEASE PLANT FOOD ELEMENTS FOR A PERIOD OF APPROXIMATELY NINE MONTHS EQUAL TO SHIRLEYS KOKEI PELLETS, ANALYSIS 6.3:1.8:2.9 OR SIMILAR APPROVED. KOKEI PELLETS SHALL BE PLACED AT THE TIME OF PLANTING TO THE BASE OF THE PLANT, 50MM MINIMUM FROM THE ROOT BALL AT A RATE OF TWO PELLETS PER 300MM OF TOP GROWTH TO A MAXIMUM OF 8 PELLETS PER TREE. GENERALLY CHECK FOR SIGNS OF NUTRIENT DEFICIENCIES (YELLOWING OF LEAVES, FAILURE TO THRIVE), AND ADAPT FERTILISER REGIME TO SUIT. FERTILISER SHOULD BE APPLIED AT THE BEGINNING AND THE END OF THE (SUMMER) GROWING SEASON.