

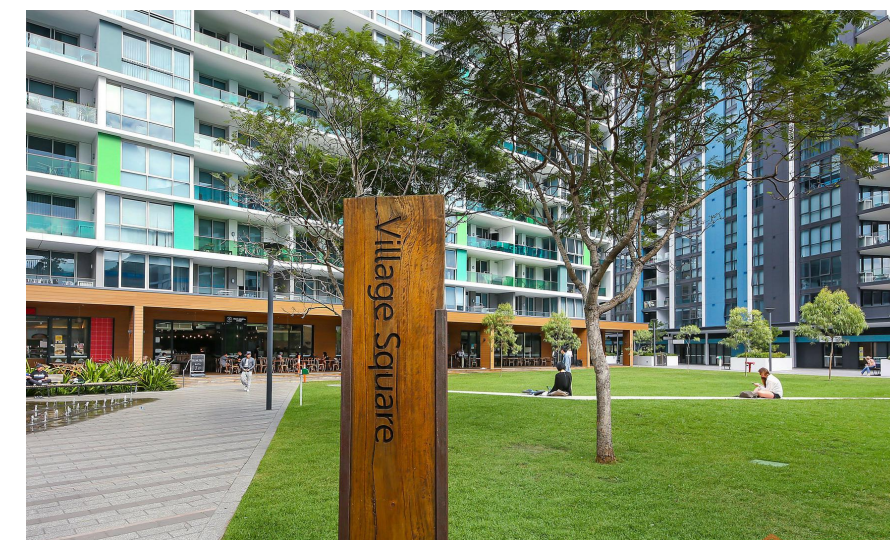
GRANGE AVENUE

HARSCAPE PLAN
1:200

PROPOSED APARTMENT DEVELOPMENT

LOT 8 230 GRANGE ROAD, MARSDEN PARK

DWG No.: LPS34 21 - 20 / 1



BLOQX™ 2- KOPMAN Item no. BLX410202-3717

LOCATION PLAN

Scale: NTS



STREET TREES


- CA**
Botanical Name: *Cupaniopsis anacardioides*
Common Name: Tuckeroo (Native)
Pot size: 75Lt
Mature H x S: 8-10m x 3-5m
Qty Required: tbc
- TLL**
Botanical Name: *Tristanopsis laurina 'Luscious'*
Common Name: Watergum (Native)
Pot size: 75Lt
Mature H x S: 5-8m x 3-5m
Qty Required: tbc

OTHER LANDSCAPE ITEMS

- 2.4m high acoustic barriers - refer acoustic report & architectural plan
- 1.8m high acoustic fence with canopy - refer acoustic report & architectural plan
- 1.8m high acoustic fence - refer acoustic report & architectural plan
- Steel garden edging - refer detail
- 1.2m High Childproof fence - to be nom. by clients
- Nature turf area - refer detail
- Deco surface finishes - refer detail
- Softfall mulch - refer detail
- Rubberised soft fall - refer detail
- Artificial turf area - refer detail
- Permeable paving - refer detail
- Timber decking - refer detail
- Sandpit - refer detail
- Sandpit sandstone retaining wall - refer detail
- Shade sail - refer manufacturer's detail & Spec.
- Cubby house - refer manufacturer's detail & Spec.
- Landscape area - refer landscape plan
- Retaining / raised planter wall - refer detail
- Picnic table - refer detail
- Timber chair - refer detail
- Pergola - refer detail
- BBQ - refer manufacturer's detail

REV	DATE	NOTATION/AMENDMENT
A	04.08.20	Preliminary 3/4 prepared for review
B	09.09.20	Coordinate with architectural updates
C	20.05.21	Coordinate with architectural updates

SHEET #	DRAWING TITLE	REV.
/1	HARSCAPE PLAN	C
/2	DEEP SOIL PLAN	C
/3	LANDSCAPE MASTER PLAN	C
/4	LANDSCAPE PLAN 01	C
/5	LANDSCAPE PLAN 02	C
/6	SECTIONS	C
/7	DETAILS + SPECIFICATION	C
/8	DETAILS	C
/9	DETAILS	C



Concept
Landscape Architects

Suite 101, 506 Miller St
CAMMERAY NSW 2062

Phone: 9922 5312
Fax: 8209 4982
Mob: 0413 861 351

www.conzept.net.au
enquiries@conzept.net.au

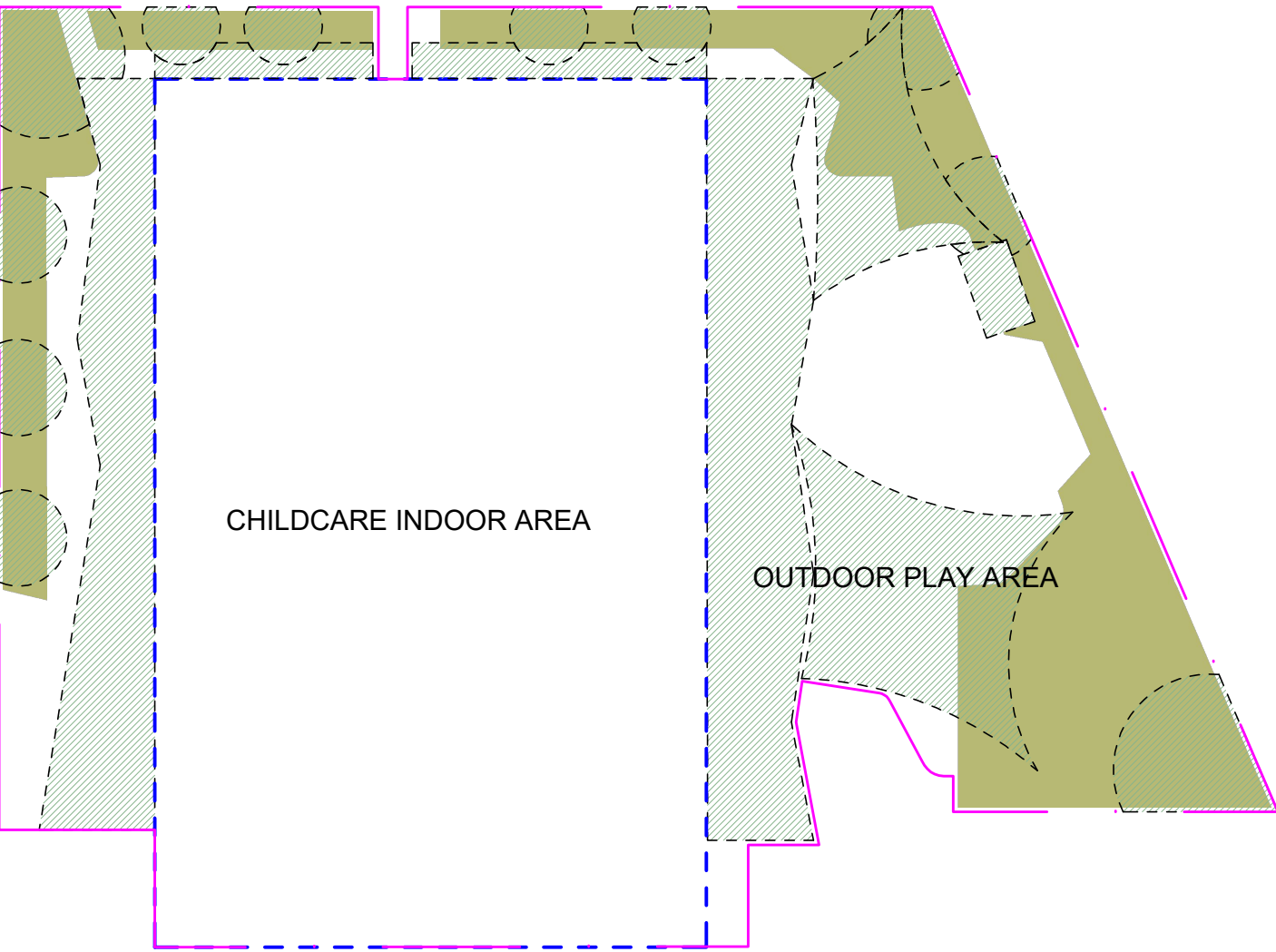
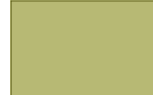
CHILD CARE CENTRE SHADE AREA CALCULATIONS

OUTDOOR PLAY AREA: 849.54m²
REQUIRED SHADE AREA: 424.77m² (50%)
PROPOSED SHADE AREA: 497.53m² (58.56%)
PROPOSED NATURAL PLAY AREA: 290.97m² (34.25%)

SHADE AREA INCLUDE IN CALCULATION:



NATURAL PLAY AREA INCLUDE IN CALCULATION:



KEY

NATURAL DEEP SOIL:

- NATURAL DEEP SOIL ZONE (WITH MINIMUM DIMENSION OF 6m)
- GENERAL DEEP SOIL ZONE (WITH DIMENSION LESS THAN 6m)

ON-SLAB PLANTING:

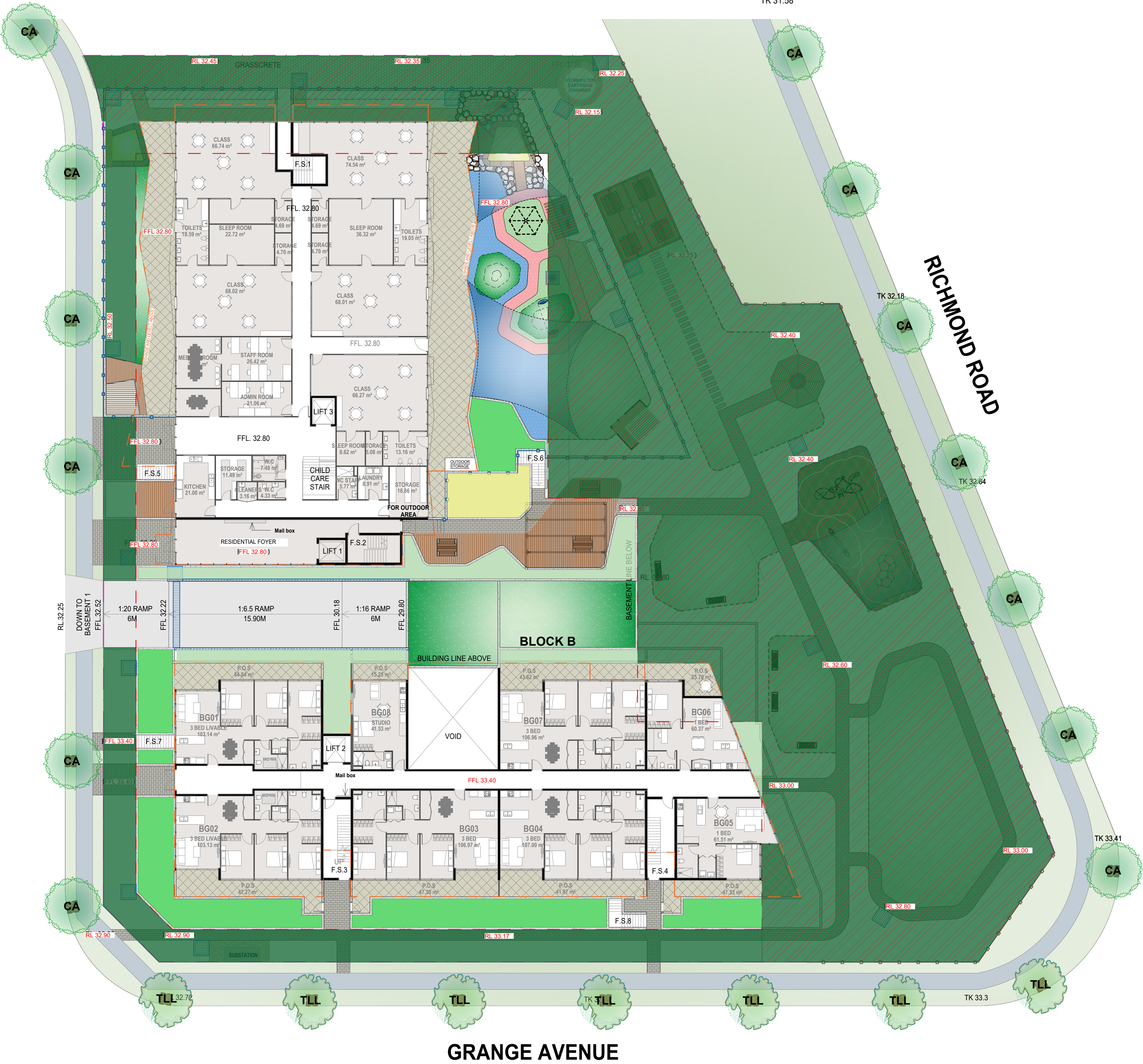
- PLANTER OVER SLAB (MINIMUM OF 950mm* SOIL DEPTH FOR SHRUBS , MOUND SOIL TO 1m FOR TREE WHERE IS REQUIRED)
- PLANTER OVER SLAB (MINIMUM OF 650mm* SOIL DEPTH FOR GROUNDCOVERS, MOUND SOIL TO 950mm FOR SMALL TREES WHERE IS REQUIRED)
- PLANTER OVER SLAB (MINIMUM OF 450mm* SOIL DEPTH FOR GROUNDCOVERS, MOUND SOIL TO 750mm FOR SHRUBS WHERE IS REQUIRED)

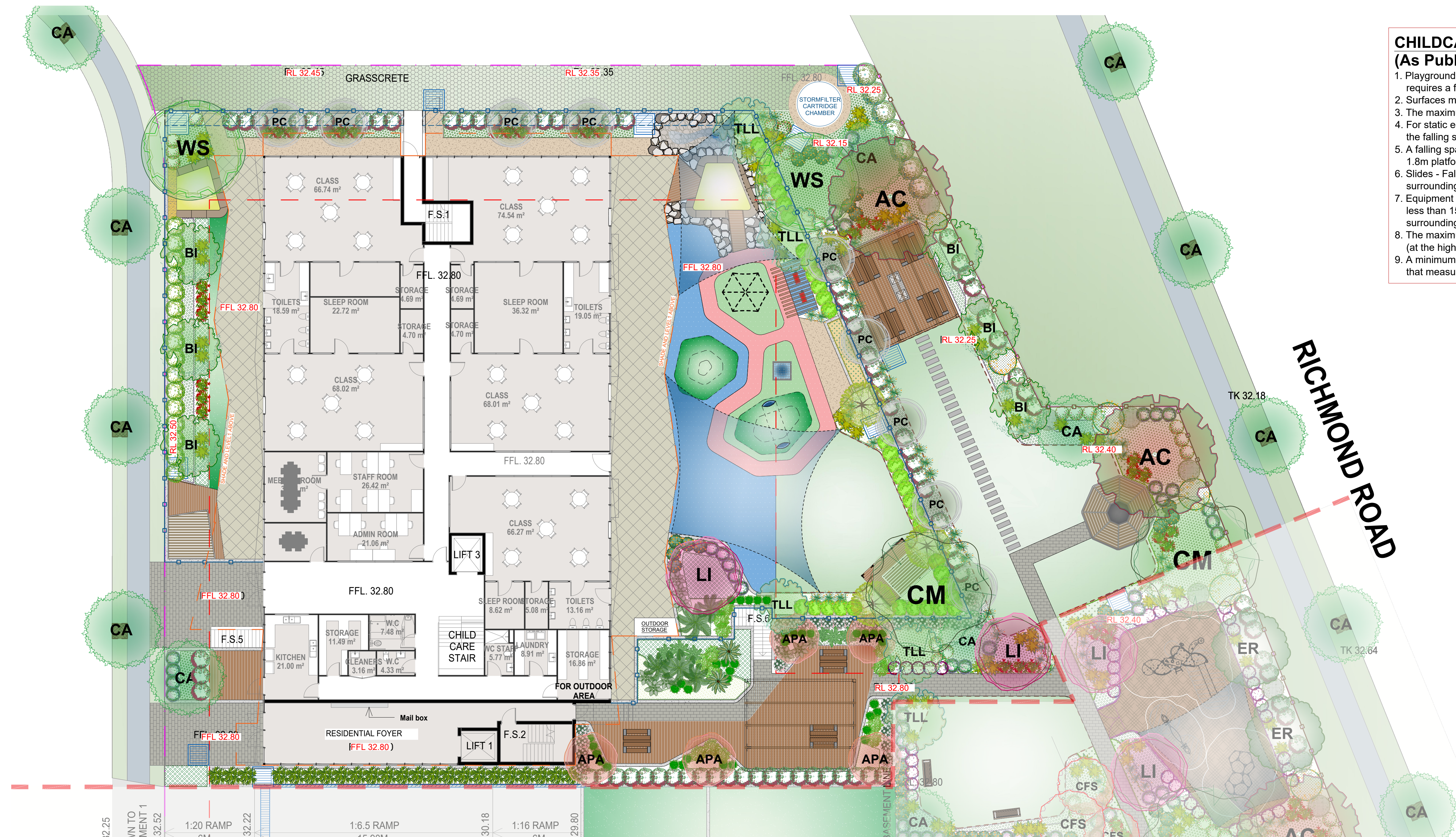
DEEP SOIL CALCULATIONS

SITE AREA: 5929.5m²
REQUIRED NATURAL DEEP SOIL (ADG): 416.1m² (7%)
PROPOSED NATURAL DEEP SOIL AREA (ADG): 2168.93m² (36.57%) (MINIMUM DIMENSION OF 6m AS PER ADG OBJECTIVE 3E-1)
TOTAL DEEPSOIL AREA: 2527.7m² (42.63%) (NATURAL DEEP SOIL AREA NOT ACHIEVING MINIMUM DIMENSION OF 6m)
NATURAL DEEPSOIL AREA INCLUDED IN CALCULATION:



*SOIL DEPTH FOR PLANTING PURPOSE ONLY.
ALLOW FOR ADDITIONAL DEPTH FOR WATERPROOFING, DRAINAGE LAYER,etc IN PLANTER TO ENGINEER'S DETAILS





- ### CHILDCARE / PLAYGROUND SAFETYFALL ZONES (As Published by KIDS SAFE NSW)
1. Playground equipment that measures 600mm or more above ground level requires a falling space and impact area.
 2. Surfaces must have proof of testing in accordance with AS/NZS 4422
 3. The maximum height of platforms in Education and Care Services is 1800mm
 4. For static equipment items with platforms 600-1500mm above the ground, the falling space and impact area is 1500mm
 5. A falling space/impact area of 1.7m is required for the maximum 1.8m platform height in SECS
 6. Slides - Falling space and impact areas are required to be provided surrounding slides elevated more than 600mm above the playing surface
 7. Equipment less than 600mm above ground level must be provided with an impact area of less than 1500mm. Kidsafe NSW recommends a circulation zone of 1000mm is provided surrounding low equipment items that are designed for climbing, rocking or jumping.
 8. The maximum fall height for moveable equipment is 1.5m (at the highest foot support and/or platform)
 9. A minimum falling space and impact area of 1.5m is required for equipment items that measure 600mm or more above the ground.



CUBBYHOUSE



MOUND & TUNNEL



PIT STOP



VEGETABLE GARDEN



CHILDPLOY ROPE TOWER



SANDPIT



DRYCREEK BED



WATER PUMP



SANDSTONE RETAINING



TRAMPOLINES



RUBBER SOFTFALL



SHADE CLOTH

LEGEND & SCHEDULE

- NOTES:
1. ALL FINAL PLANT QUANTITIES INDICATED ON PLANS SHALL BE CHECKED AND VERIFIED BY SUCCESSFUL LANDSCAPE CONTRACTOR.
 2. ANY PLANT SUBSTITUTES REQUIRED DUE TO UNAVAILABILITY SHALL BE RECOMMENDED BY THE LANDSCAPE CONTRACTOR TO BEST MATCH SUBSTITUTED PLANTS AND APPROVED PRIOR TO PURCHASING BY THE LANDSCAPE ARCHITECT.
 3. WORKS CERTIFIED FOR FINAL OCCUPANCY CERTIFICATE ARE TO MATCH APPROVED LANDSCAPE PLANS.
 4. LANDSCAPE CONTRACTOR SHALL LOCATE AND AVOID SITE STORM WATER & DRAINAGE SERVICES. LOCATE TREES A MINIMUM 1.25M FROM PITTS
 5. ALL PLANTING AROUND EXISTING TREES SHALL BE ADJUSTED TO AVOID DAMAGE AND CLASHING WITH SURFACE ROOTS
 6. THE NATURE STRIP (STREET FRONTAGE) FOR THE SITE IS PUBLIC LAND, AND ONLY AUTHORIZED WORKS MAY OCCUR HERE. EXISTING CONDITIONS SUCH AS STREET TREES, COUNCIL PLANTING ETC SHALL BE RETAINED AND PROTECTED DURING CONSTRUCTION, UNLESS SPECIFIC APPROVAL HAS BEEN GRANTED FOR NEW WORK IN THIS AREA.

TREES

Trees refer to Master landscape plan

SHRUBS AND HEDGES

- Botanical Name:** *Backhousia myrtifolia*
Common Name: Grey Myrtle (Native)
Pot size: 200mm
Mature H x S: 4-6m x 2-4m
Qty Required: tbc
- Botanical Name:** *Grevillea 'Honey Gem'*
Common Name: Honey Gem Grevillea (Native)
Pot size: 200mm
Mature H x S: 3-5m x 2-3m
Qty Required: tbc
- Botanical Name:** *Grevillea 'Moonlight'*
Common Name: Moonlight Grevillea (Native)
Pot size: 300mm
Mature H x S: 3-6m x 2-4m
Qty Required: tbc
- Botanical Name:** *Syzygium 'Cascade'*
Common Name: Cascade Lilly Pilly (Native)
Pot size: 200mm
Mature H x S: 2.5m x 1.8m
Qty Required: tbc
- Botanical Name:** *Callistemon 'Great Balls of Fire'*
Common Name: GBOF Bottlebrush (Native)
Pot size: 200mm
Mature H x S: 1.8m x 1.5m
Qty Required: tbc

SHRUBS AND HEDGES

- Botanical Name:** *Acmena smithii 'Minor'*
Common Name: Minor Lilly Pilly (Native)
Pot size: 200mm
Mature H x S: 2-3m x 2m
Qty Required: tbc
- Botanical Name:** *Gardenia augusta 'True love'*
Common Name: Gardenia (Exotic)
Pot size: 300mm
Mature H x S: 1m x 1m
Qty Required: tbc
- Botanical Name:** *Westringia 'Aussie Box'*
Common Name: Westringia Aussie Box (Native)
Pot size: 200mm
Mature H x S: 0.9m x 0.9m
Qty Required: tbc
- Botanical Name:** *Banksia 'Birthday Candles'*
Common Name: Banksia Birthday Candles (Native)
Pot size: 200mm
Mature H x S: 0.6m x 0.9m
Qty Required: tbc
- Botanical Name:** *Callistemon 'Better John'*
Common Name: Better John Bottlebrush (Native)
Pot size: 200mm
Mature H x S: 1m x 0.9m
Qty Required: tbc
- Botanical Name:** *Loropetalum chinense 'Purple Pixie'*
Common Name: Purple Pixie (Exotic)
Pot size: 200mm
Mature H x S: 0.5m x 1.5m
Qty Required: tbc

ACCENT PLANTS

- Botanical Name:** *Doryanthes excelsa*
Common Name: Gynea Lily (Native)
Pot size: 200mm
Mature H x S: 1.1m x 1m
Qty Required: tbc
- Botanical Name:** *Russelia equisetiformis*
Common Name: Firecracker (Exotic)
Pot size: 200mm
Mature H x S: 1m x 1.2m
Qty Required: tbc
- Botanical Name:** *Strelitzia juncea*
Common Name: Rush-leaved Strelitzia (Exotic)
Pot size: 200mm
Mature H x S: 1.5m x 1m
Qty Required: tbc
- Botanical Name:** *Rhaphis excelsa*
Common Name: Rhaphis Palm (Exotic)
Pot size: 200mm
Mature H x S: 3m x 1.5m
Qty Required: tbc
- Botanical Name:** *Strelitzia nicotai*
Common Name: Giant Bird of Paradise (Exotic)
Pot size: 200mm
Mature H x S: 6m x 3m
Qty Required: tbc

SHADE

- Botanical Name:** *Cyathea australis*
Common Name: Cyathea Tree Fern (Native)
Pot size: 45L (Min 1m trunk)
Mature H x S: 2.5-5m x 3m
Qty Required: tbc

SHADE

- Botanical Name:** *Calathea zebrina*
Common Name: Zebra plant (Exotic)
Pot size: 300mm
Mature H x S: 1m x 0.6m
Qty Required: tbc
- Botanical Name:** *Asplenium australasicum*
Common Name: Birds Nest Fern (Native)
Pot size: 200mm
Mature H x S: 1m x 1.4m
Qty Required: tbc
- Botanical Name:** *Philodendron 'Xanadu'*
Common Name: Xanadu Plant (Exotic)
Pot size: 200mm
Mature H x S: 0.7m x 0.7m
Qty Required: tbc
- Botanical Name:** *Zamia furfuracea*
Common Name: Cardboard Palm (Exotic)
Pot size: 200mm
Mature H x S: 1m x 1.25m
Qty Required: tbc

GROUNDCOVER

- Botanical Name:** *Liriope muscari 'Just Right'*
Common Name: Liriope Just Right (Exotic)
Pot size: 140mm
Mature H x S: 0.5m x 0.5m
Qty Required: 7/m2 (##m2 total)
- Botanical Name:** *Ophiopogon japonicus*
Common Name: Mondo grass (Exotic)
Pot size: 140mm
Mature H x S: 0.2m x 0.2m
Qty Required: 9/m2 (##m2 total)

GROUNDCOVER

- Botanical Name:** *Trachelospermum Jasminoides*
Common Name: Star Jasmine (Exotic)
Pot size: 140mm
Mature H x S: 0.3m x 0.6m
Qty Required: 5/m2 (##m2 total)
- Botanical Name:** *Myoporum parvifolium 'Yareena'*
Common Name: Creeping Boobialla (Native)
Pot size: 140mm
Mature H x S: 0.15m x spreading
Qty Required: 7/m2 (##m2 total)
- Native Grass Groundcover Mix:**
Lomandra longifolia 'Tanika'
Themeda triandra
Dianella revoluta 'Revelation'
Poa labillardieri
Pot size: 140mm
Mature H x S: < .8m
Qty Required: 4/m2 (##m2 total)
- Groundcover Mix A:**
Dianella caerulea 'Little jess'
Trachelospermum jasminoides
Myoporum parvifolium 'Yareena'
Pot size: 140mm
Mature H x S: < .5m
Qty Required: 5/m2 (##m2 total)

OTHER LANDSCAPE ITEMS

- Vegetable garden patch
- species to be nom. by clients



Angophora costata



Corymbia maculata



Waterhousea floribunda



Cupaniopsis anacardioides



Tristaniopsis laurina 'Luscious'



Banksia integrifolia



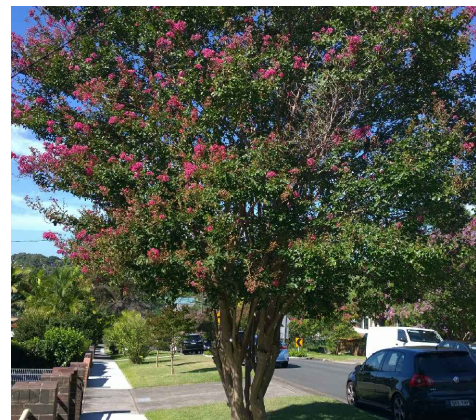
Elaeocarpus reticulatus



Rhipis excelsa



Corymbia ficifolia 'Summer Red'



Lagerstroemia indica



Pyrus calleryana 'Capital'



Acer palmatum 'Ariadne'

LEGEND & SCHEDULE

- NOTES:
1. ALL FINAL PLANT QUANTITIES INDICATED ON PLANS SHALL BE CHECKED AND VERIFIED BY SUCCESSFUL LANDSCAPE CONTRACTOR.
 2. ANY PLANT SUBSTITUTES REQUIRED DUE TO UNAVAILABILITY SHALL BE RECOMMENDED BY THE LANDSCAPE CONTRACTOR TO BEST MATCH SUBSTITUTED PLANTS AND APPROVED PRIOR TO PURCHASING BY THE LANDSCAPE ARCHITECT.
 3. WORKS CERTIFIED FOR FINAL OCCUPANCY CERTIFICATE ARE TO MATCH APPROVED LANDSCAPE PLANS.
 4. LANDSCAPE CONTRACTOR SHALL LOCATE AND AVOID SITE STORM WATER & DRAINAGE SERVICES. LOCATE TREES A MINIMUM 1.25M FROM PITS
 5. ALL PLANTING AROUND EXISTING TREES SHALL BE ADJUSTED TO AVOID DAMAGE AND CLASHING WITH SURFACE ROOTS
 6. THE NATURE STRIP (STREET FRONTAGE) FOR THE SITE IS PUBLIC LAND, AND ONLY AUTHORIZED WORKS MAY OCCUR HERE. EXISTING CONDITIONS SUCH AS STREET TREES, COUNCIL PLANTING ETC SHALL BE RETAINED AND PROTECTED DURING CONSTRUCTION, UNLESS SPECIFIC APPROVAL HAS BEEN GRANTED FOR NEW WORK IN THIS AREA.

TREES

Trees refer to Master landscape plan

SHRUBS AND HEDGES

- Botanical Name:** Grevillea 'Honey Gem'
Common Name: Honey Gem Grevillea (Native)
Pot size: 200mm
Mature H x S: 3-5m x 2-3m
Qty Required: tbc
- Botanical Name:** Grevillea 'Moonlight'
Common Name: Moonlight Grevillea (Native)
Pot size: 300mm
Mature H x S: 3-6m x 2-4m
Qty Required: tbc
- Botanical Name:** Syzygium 'Cascade'
Common Name: Cascade Lilly Pilly (Native)
Pot size: 200mm
Mature H x S: 2.5m x 1.8m
Qty Required: tbc
- Botanical Name:** Acmena smithii 'Minor'
Common Name: Minor Lilly Pilly (Native)
Pot size: 200mm
Mature H x S: 2-3m x 2m
Qty Required: tbc

SHRUBS AND HEDGES

- Botanical Name:** Callistemon 'Great Balls of Fire'
Common Name: GBOF Bottlebrush (Native)
Pot size: 200mm
Mature H x S: 1.8m x 1.5m
Qty Required: tbc
- Botanical Name:** Gardenia augusta 'True love'
Common Name: Gardenia (Exotic)
Pot size: 300mm
Mature H x S: 1m x 1m
Qty Required: tbc
- Botanical Name:** Westringia 'Aussie Box'
Common Name: Westringia Aussie Box (Native)
Pot size: 200mm
Mature H x S: 0.9m x 0.9m
Qty Required: tbc
- Botanical Name:** Banksia 'Birthday Candles'
Common Name: Banksia Birthday Candles (Native)
Pot size: 200mm
Mature H x S: 0.6m x 0.9m
Qty Required: tbc
- Botanical Name:** Callistemon 'Better John'
Common Name: Better John Bottlebrush (Native)
Pot size: 200mm
Mature H x S: 1m x 0.9m
Qty Required: tbc

SHRUBS AND HEDGES

- Botanical Name:** Syzygium 'Tiny Trev'
Common Name: Dwarf Lilly Pilly (Native)
Pot size: 200mm
Mature H x S: 1m x 1m
Qty Required: tbc
- Botanical Name:** Loropetalum chinense 'Purple Pixie'
Common Name: Purple Pixie (Exotic)
Pot size: 200mm
Mature H x S: 0.5m x 1.5m
Qty Required: tbc
- Botanical Name:** Doryanthes excelsa
Common Name: Gynea Lily (Native)
Pot size: 300mm
Mature H x S: 1.1m x 1m
Qty Required: tbc
- Botanical Name:** Russelia equisetiformis
Common Name: Firecracker (Exotic)
Pot size: 200mm
Mature H x S: 1m x 1.2m
Qty Required: tbc
- Botanical Name:** Strelitzia juncea
Common Name: Rush-leaved Strelitzia (Exotic)
Pot size: 200mm
Mature H x S: 1.5m x 1m
Qty Required: tbc

ACCENT PLANTS

- Botanical Name:** Calathea zebrina
Common Name: Zebra plant (Exotic)
Pot size: 300mm
Mature H x S: 1m x 0.6m
Qty Required: tbc
- Botanical Name:** Asplenium australasicum
Common Name: Birds Nest Fern (Native)
Pot size: 200mm
Mature H x S: 1m x 1.4m
Qty Required: tbc
- Botanical Name:** Philodendron 'Xanadu'
Common Name: Xanadu Plant (Exotic)
Pot size: 200mm
Mature H x S: 0.7m x 0.7m
Qty Required: tbc

ACCENT PLANTS

- Botanical Name:** Rhipis excelsa
Common Name: Rhipis Palm (Exotic)
Pot size: 200mm
Mature H x S: 3m x 1.5m
Qty Required: tbc
- Botanical Name:** Cyathea australis
Common Name: Rough Tree Fern (Native)
Pot size: 45L (Min 1m trunk)
Mature H x S: 2.5-5m x 3m
Qty Required: tbc
- Botanical Name:** Calathea zebrina
Common Name: Zebra plant (Exotic)
Pot size: 300mm
Mature H x S: 1m x 0.6m
Qty Required: tbc
- Botanical Name:** Asplenium australasicum
Common Name: Birds Nest Fern (Native)
Pot size: 200mm
Mature H x S: 1m x 1.4m
Qty Required: tbc
- Botanical Name:** Philodendron 'Xanadu'
Common Name: Xanadu Plant (Exotic)
Pot size: 200mm
Mature H x S: 0.7m x 0.7m
Qty Required: tbc

SHADE

- Botanical Name:** Zamia furfuracea
Common Name: Cardboard Palm (Exotic)
Pot size: 200mm
Mature H x S: 1m x 1.25m
Qty Required: tbc

SHADE

- Botanical Name:** Liriope muscari 'Just Right'
Common Name: Liriope Just Right (Exotic)
Pot size: 140mm
Mature H x S: 0.5m x 0.5m
Qty Required: 7/m2 (##m2 total)
- Botanical Name:** Ophiopogon japonicus
Common Name: Mondo grass (Exotic)
Pot size: 140mm
Mature H x S: 0.2m x 0.2m
Qty Required: 9/m2 (##m2 total)
- Botanical Name:** Trachelospermum Jasminoides
Common Name: Star Jasmine (Exotic)
Pot size: 140mm
Mature H x S: 0.3m x 0.6m
Qty Required: 5/m2 (##m2 total)
- Botanical Name:** Dichondra argentea 'Silver Falls'
Common Name: Silver Falls Dichondra (Exotic)
Pot size: 140mm
Mature H x S: 0.15m x spreading
Qty Required: 9/m2 (##m2 total)

GROUNDCOVER

- Botanical Name:** Myoporum parvifolium 'Yareena'
Common Name: Creeping Boobialla (Native)
Pot size: 140mm
Mature H x S: 0.15m x spreading
Qty Required: 7/m2 (##m2 total)
- Shade Groundcover Mix:**
Botanical Name: Ophiopogon japonicus 'Nana'
Common Name: Viola hederacea
Pot size: 140mm
Mature H x S: 0.25m x 0.75m
Qty Required: 9/m2 (##m2 total)
- Native Grass Groundcover Mix:**
Botanical Name: Lomandra longifolia 'Tanika'
Common Name: Themeda triandra
Pot size: 140mm
Mature H x S: 0.2m x 0.2m
Qty Required: 140mm
Pot size: 140mm
Mature H x S: 0.2m x 0.2m
Qty Required: 140mm
- Groundcover Mix A:**
Botanical Name: Dianella caerulea 'Little jess'
Common Name: Trachelospermum jasminoides
Pot size: 140mm
Mature H x S: 0.15m x spreading
Qty Required: 5/m2 (##m2 total)

GROUNDCOVER

- Botanical Name:** Myoporum parvifolium 'Yareena'
Common Name: Creeping Boobialla (Native)
Pot size: 140mm
Mature H x S: 0.15m x spreading
Qty Required: 7/m2 (##m2 total)
- Shade Groundcover Mix:**
Botanical Name: Ophiopogon japonicus 'Nana'
Common Name: Viola hederacea
Pot size: 140mm
Mature H x S: 0.25m x 0.75m
Qty Required: 9/m2 (##m2 total)
- Native Grass Groundcover Mix:**
Botanical Name: Lomandra longifolia 'Tanika'
Common Name: Themeda triandra
Pot size: 140mm
Mature H x S: 0.2m x 0.2m
Qty Required: 140mm
Pot size: 140mm
Mature H x S: 0.2m x 0.2m
Qty Required: 140mm
- Groundcover Mix A:**
Botanical Name: Dianella caerulea 'Little jess'
Common Name: Trachelospermum jasminoides
Pot size: 140mm
Mature H x S: 0.15m x spreading
Qty Required: 5/m2 (##m2 total)

GENERAL NOTE:

Figured dimensions take preference to scale readings. Verify all dimensions on site. If a plant is not suitable for any reason, damage, harm or injury to the site, the client shall be responsible for the cost of replacement. The client shall be responsible for the cost of replacement. The client shall be responsible for the cost of replacement.

www.dialbeforeyoudig.com.au

ALIA Associate

Bar Scale

0 3 6 9 12 15m

ARCHITECT:

The Bathla Group

LANDSCAPE ARCHITECT:

Conzept Landscape Architects

Suit 101, 506 Miller Street, CAMMERAY NSW 2062

Phone: 9622 5312

Fax: 9209 4962

Mobile: 0413 861 351

www.conzept.net.au

enquiries@conzept.net.au

COUNCIL:

BLACKTOWN

CLIENT:

The Bathla Group

REV DATE NOTATION/AMENDMENT

A	30.07.20	Preliminary s34 prepared for review
B	09.09.20	Coordinate with architectural updates
C	20.05.21	Coordinate with architectural updates

PROJECT:

PROPOSED RESIDENTIAL DEVELOPMENT

LOT 8, 230 GRANGE ROAD

MARSDEN PARK

TITLE:

LANDSCAPE PLAN01

DWG No: LPS34 21 - 20

PAGE NUMBER: 5

STATUS:

SECTION 34

SCALE: 1:150 @ A1

DATE: MAY 2021

DRAWN: R.H

CHECKED: R.F

LANDSCAPE WORK SPECIFICATION

PRELIMINARIES

1.01 GENERAL

- The following general conditions should be considered prior to the commencement of landscape works:
- The landscape plans should be read in conjunction with the architectural plans, project arborist's assessment, hydraulic plans, service plans and survey prepared for the proposed development.
 - All services including existing drainage should be accurately located prior to the commencement of landscape installation. Any proposed tree planting which falls close to services will be relocated on site under the instruction of the landscape architect.
 - Installation of conduit for required irrigation, electrical and other services shall be completed prior to the commencement of landscape works and hardstand pours.
 - All outdoor lighting specified by architect or client to be installed by qualified electrician.
 - Anomalies that occur in these plans should be brought to our immediate attention.
 - Where an Australian Standard applies for any landscape material testing or installation technique, that standard shall be followed.

1.02 PROTECTION OF ADJACENT FINISHES

The Contractor shall take all precautions to prevent damage to all or any adjacent finishes by providing adequate protection to these areas / surfaces prior to the commencement of the Works

1.03 PROTECTION OF EXISTING TREES

Existing trees identified to be retained shall be done in accordance with (AS14870-Protection of trees on development sites as well as in accordance with the tree protection measures prepared by project arborist.

Where general works are occurring around such trees, or pruning is required, a qualified Arborist shall be engaged to oversee such works and manage tree health. Existing trees designated on the drawing for retention shall be protected at all times during the construction period. Any soil within the drip-line of existing trees shall be excavated and removed by hand only. No stockpiling shall occur within the root zone of existing trees to be retained.

Any roots larger in diameter than 50mm shall only be severed under instruction by a qualified arborist. Roots smaller than 50mm diameter shall be cut cleanly with a saw.

Temporary fencing shall be installed around the base of all trees to be retained prior to the commencement of landscape works. Where possible this fencing will be located around the drip line of these trees, or a minimum of 3m from the trunk. The fencing shall be maintained for the full construction period.

1.04 EROSION & POLLUTION CONTROL

The Contractor shall take all proper precautions to prevent the erosion of soil from the subject site. The contractor shall install erosion & sediment control barriers and as required by council, and maintain these barriers throughout the construction period. Note that the sediment control measures adopted should reflect the soil type and erosion characteristics of the site.

Erosion & pollution control measures shall incorporate the following:

- Construction of a sediment trap at the vehicle access point to the subject site.
- Sediment fencing using a geotextile fabric liner in the location indicated on the erosion control plan or as instructed on site by the landscape architect.
- Earth banks to prevent scour of stockpiles
- Sandbag Verb sediment traps
- Straw bales & geotextile sediment filter.
- Exposed banks shall be pegged with an approved Jute matting in preparation for mass planting

Refer to "Sitewise Reference Kit" as prepared by DLWC & WSROC (1997) for construction techniques

SOIL WORKS

2.01 MATERIALS

Specified Soil Conditioner (Generally to improve site soil)

The specified soil conditioner for site top-soil improvement shall be an organic mix, equal to "Botany Humus", as supplied by ANL. Note that for sites where soil testing indicates toxins or extremes in pH, or soils that are extremely poor, allow to excavate and supply 300mm of imported soil mix.

New gardens & proposed Planting

New garden and planting areas shall consist of a 50/50 mix of clean site soil (refer d) below) and imported "Organic Garden Mix" as supplied by ANL or approved equal. All mixes are to comply with AS 4419 Soils for landscaping & garden use, & AS 4544 Composts. Soil conditioners & mulches.

Specified Soil Mix - Turf

The specified soil mix for all turf areas shall be a min 75mm layer of imported soil mix consisting of 80% washed river sand (reasonably coarse), and 20% composted organic matter equivalent to mushroom compost or soil conditioner, or other approved lawn top dress.

Site Topsoil

Site topsoil is to be clean and free of unwanted matter such as gravel, clay lumps, grass, weeds, tree roots, sticks, rubbish and plastics, and any deleterious materials and materials toxic to plants. The topsoil must have a pH of between 5.5 and 7. Use 100% imported soil mix when site soil runs out.

2.02 INSTALLATION (TO GARDEN OUTSIDE OF TREE PROTECTION ZONES OF TREES RECOMMENDED TO BE RETAINED)

Note: No level changes (Cut or Fill), soil ripping within the Tree Protection Zones of trees to be retained

a) Testing

All testing is to be conducted in accordance with AS 1289 Methods for testing soils for engineering purposes. Site soil shall be given a pH test prior to modifying to ensure conditions are appropriate for planting as stated above. Tests shall be taken in several areas where planting is proposed, and the pH shall be adjusted accordingly with sulphur or lime to suit.

Note that a soil test conducted by the "Sydney Soil Lab" or approved equal shall be prepared for all commercial, industrial and multi-unit residential sites. The successful landscape contractor shall implement the recommendations of this test.

b) Set Out of Individual Trees & Mass Planting Areas

All individual tree planting positions and areas designated for mass planting shall be set out with stakes or another form of marking, ready for inspection and approval. Locate all services.

c) Establishing Subgrade Levels outside of tree protection zones of trees to be retained

Subgrade levels are defined as the finished base levels prior to the placement of the specified material (i.e. soil conditioner). The following subgrade levels shall apply:

- Mass Planting Beds - 300mm below existing levels with specified imported soil mix.
- Turf areas - 100mm below finished surface level.

Note that all subgrades shall consist of a relatively free draining natural material, consisting of site topsoil placed previously by the Civil Contractor. No builders waste material shall be acceptable.

d) Subgrade Cultivation

Cultivate all subgrade to a minimum depth of 100mm in all planting beds and all turf areas, ensuring a thorough breakup of the subgrade into a reasonably coarse tilth. Grade subgrades to provide falls to surface and subsurface drains, prior to the placement of the final specified soil mix.

e) Drainage Works

Install surface and subsurface drainage where required and as detailed on the drawing. Drain subsurface drains to outlets provided, with a minimum fall of 1:100 to outlets and / or service pits.

f) Placement and Preparation of Specified Soil Conditioner & Mixes.

- Trees in turf & beds - Holes shall be twice as wide as root ball and minimum 100mm deeper - backfill hole with 50/50 mix of clean site soil and imported "Organic Garden Mix" as supplied by ANL or approved equal.

- Mass Planting Beds - Install specified soil conditioner to a compacted depth of 100mm

Place the specified soil conditioner to the required compacted depth and use a rotary hoe to thoroughly mix the conditioner into the top 300mm of garden bed soil. Ensure thorough mixing and the preparation of a reasonably fine tilth and good growing medium in preparation for planting.

- Turf Areas - Install specified soil mix to a minimum compacted depth of 75mm.

Place the specified soil mix to the required compacted depth and grade to required finished soil levels, in preparation for planting and turfing.

PLANTING

3.01 MATERIALS

a) Quality and Size of Plant Material

All trees supplied above a 25L container size must be grown and planted in accordance with AS 2303:2018 'TREE STOCK FOR LANDSCAPE USE'. Contractor shall ensure that trees have been grown to AS 2303:2018 is to be provided upon request of Council's Tree Management Officer.

Above - Ground Assessment

The following plant quality assessment criteria should be followed:

Plant true to type, Good vigour and health, free from pest & disease, free from injury, self-supporting, good stem taper, has been pruned correctly, is apically dominant, has even crown symmetry, free from included bark & stem junctions, even trunk position in pot, good stem structure

Below - Ground Assessment

Good root division & direction, rootball occupancy, rootball depth, height of crown, non-suckering For further explanation and description of these assessment criteria, refer to Ross Clark's book.

All Plant material shall be to the type and size specified. No substitutions of plant material shall be permitted without written prior approval by the Landscape Architect. No plant shall be accepted which does not conform to the standards listed above.

b) Stakes and Ties

Provide min. 3 No. Stakes and ties to all plants identified as trees in the plant schedule. Stakes shall be sound, unpainted, straight hardwood, free of knots and pointed at end. They shall be 1800mm x 50mm x 50mm Hardwood timber, or as per council specification where is available. Ties shall be 50mm wide hessian webbing material.

c) Fertilisers

Fertilisers shall be approved slow release fertilisers suitable for the proposed planting types. Note that for native plants, specifically Proteaceae family plants including Grevillea species, low phosphorus fertilizers shall be used.

d) Mulch

Mulch for general planter bed shall be an approved equal to "Forest Blend" as supplied by ANL. Mulch shall be completely free from any soil, weeds, rubbish or other debris. Mulch for bio-retention/rain garden area where is required shall be non-floatable materials that could include crushed rock, gravel, coarse river sand, scoria or river pebbles. 4-7mm screenings or similar.

e) Turf

Turf for project site shall be soft leaf Buffalo or Zoysia macrantha 'Nana' or equivalent unless stated otherwise), free from any weeds and other grasses, and be in a healthy growing condition. Re-turfing to nature strip where is required shall use species that match existing on street.

3.02 INSTALLATION

a) Setting Out

All planting set out shall be in strict accordance with the drawings, or as directed. Note that proposed tree planting located near services should be adjusted at this stage. Notify Landscape Architect for inspection for approval prior to planting.

b) Planting

All plant material shall be planted as soon after delivery as possible. Planting holes for trees shall be excavated as detailed and specified. Plant containers shall be removed and discarded, and the outer roots gently teased from the soil mass. Immediately set plant in hole and backfill with specified soil mix, incorporating the approved quantity of fertiliser for each plant type. Ensure that plants are set plumb vertically and root balls set to the consolidated finished grades detailed on the drawings. Compact the backfilled soil and saturate by hand watering to expel any remaining air pockets immediately after planting.

c) Staking and Tying

Staking and tying shall be in strict accordance with the drawings and shall occur immediately following plant placement and soil backfilling. All plants identified as "Trees" on the planting schedule shall be staked with a min. 3 stakes.

d) Mulching

Mulch for general planter bed shall be an approved equal to "Forest Blend" as supplied by ANL. Mulch shall be completely free from any soil, weeds, rubbish or other debris. Mulch for bio-retention/rain garden area where is required shall be non-floatable materials that could include crushed rock, gravel, scoria or river pebbles. 4-7mm screenings or similar.

e) Turfing

Moisten soil prior to the turf being laid. Turf shall be neatly butt jointed and true to grade to finish flush with adjacent surfaces. Incorporate a lawn fertilizer and thoroughly water in. Keep turf moist until roots have taken and sodalifts cannot be lifted. Keep all traffic off turf until this has occurred. Allow for top dressing of all turf areas. All turf shall be rolled immediately following installation.

f) XXXXXXX

Where is required, the Contractor shall install xxxxxxx as detailed on the drawings, to all mass planting beds adjoining turf or gravel mulched areas, and where required. The resultant edge shall be true to line and flush with adjacent surfaces. However, no edging shall be used within the Structural Root Zone (SRZ) of trees to be retained.

g) Earth retaining structure

All walls which form part of drainage works must be built as detailed by the hydraulic engineer. All walls exceeding 800mm shall be of egg timber construction materials, construction details to be provided by a qualified engineer. Install wall to suit site levels and to manufacturer's specification.

HARDSCAPE WORKS

4.01 GENERAL

The Contractor shall undertake the installation of all hardscape works as detailed on the drawing, or where not detailed, by manufacturers specification.

- Paving - refer to typical details provided, and applicable Australian Standards. Permeable paving may be used as a suitable means of satisfying Council permeable surface requirements, while providing a useable, hardwearing, practical surface. In most instances, the client shall nominate the appropriate paving material to be used.

Australian Standards shall be adhered to in relation to all concrete, masonry & metal work. Some details are typical and may vary on site. All hardscape works shall be setout as per the drawings, and inspected and approved by the Landscape Architect prior to installation. All workmanship shall be of the highest standard. Any queries or problems that arise from hardcape variations should be brought to the attention of the Landscape Architect.

Your attention is directed to any obligations or responsibilities under the Dividing Fences Act, 1991 in respect of adjoining property owners which may arise from this application. Any enquiries in this regard may be made to the Crown Lands Division on (02) 8836 5332.

IRRIGATION WORKS

5.01 GENERAL (PERFORMANCE SPECIFICATION)

New irrigation systems to planting areas shall be a Commercial Grade Irrigation System conforming to all relevant Australian standards, including AS 3500 & the Electrical Safety Act 2002, Workplace Health & Safety Act 1995, & the latest Sydney Water Code

An automated drip-irrigation system is to be installed to all gardens, planters and lawn areas in accordance with the approved Irrigation Design. This system shall be designed and installed by a qualified and licensed irrigation specialist, to the highest industry standards and to maximise the efficient usage of water.

The installer is required to obtain all approvals necessary for the completion of works in accordance with the Laws of Australia, Laws of the State of NSW, Blacktown Council By-Laws and Ordinances.

Drawings:

- The Landscape Contractor nominated Licensed Irrigation Specialist shall provide irrigation drawings for approval upon engagement.

Design Requirements:

- The irrigation system shall be installed prior to all planting works. It shall incorporate a commercially available irrigation system, with sub-surface dripper lines to irrigate all gardens, planters and lawn areas.
- It shall incorporate a suitable back flow prevention device for the scale of works, an in-line filter, check valves, and suitable high and low density poly hose fittings and PVC piping to achieve flow rates suitable for specified planting.
- The irrigation application rate shall not exceed the infiltration rate of the soil or creates run-off.
- The landscape contractor shall check the existing pressure available from the ring mains and size irrigation piping to suit. Supply shall be from local hose cock where available.
- All piping and fittings shall be buried 50mm below the finished soil levels in garden and lawn areas, and secured in position at 500mm centres with galv wire pins.
- Size of pipes shall be selected to ensure the working pressure at the end of the line does not decrease by more than 5%.

Services Co-ordination:

- Co-ordination required by Landscape Contractor or Project Manager to provide required conduit, pipe work and penetration through slabs and planter walls for water and power provisions.
- The Landscape Contractor shall be engaged with the Irrigation Specialist to co-ordinate with the Project Manager to identify the preferred service and conduit locations.
- Project Manager and Landscape Contractor to establish area suitable for irrigation control system with required area, power provision and water supply

Testing & Defects:

- Upon completion of installation, the system shall be tested, including:
 - Main Line Pressure Test: The main line is pressurised to test for leaks. All valves are shut and the pressure is taken over a determined length of time.
 - Dripper Pressure Test: Measurement at flushing valves are taken and the pressure gauged to make sure it conforms to the manufacturer's recommendations. The inlet pressure is then tested under the same conditions to check it does not exceed 300kPa.
- All components are to be satisfactorily functional and operational prior to approval. Should any defect develop, or the capacity or efficiency of the system decline during the agreed maintenance system, then these faults shall be immediately rectified.

Warranty:

- A full 12 month warranty shall be included to cover labour and all parts.

Further Documentation:

- On request, a detailed irrigation performance specification report can be issued.

CONSOLIDATION AND MAINTENANCE

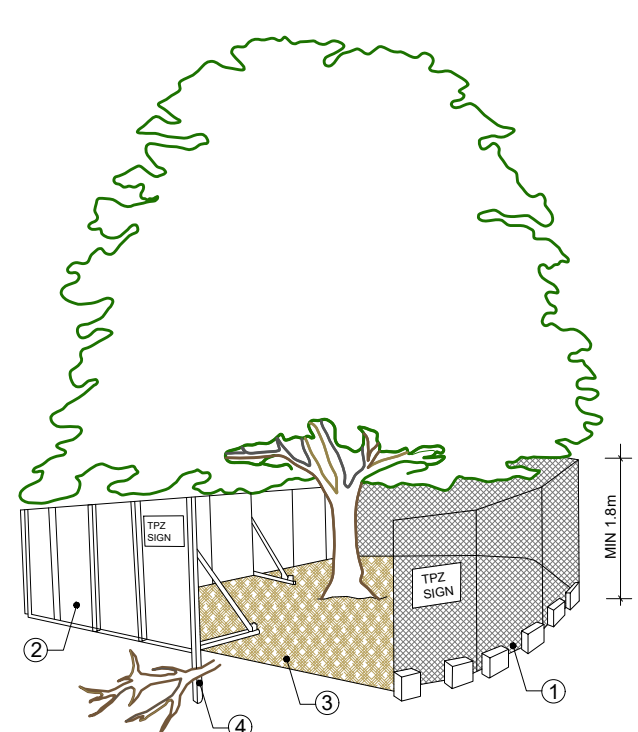
6.01 GENERAL

The consolidation and maintenance period shall be 12 months beginning from the approved completion of the specified construction work (Practical Completion). A qualified landscape maintenance contractor shall undertake the required landscape maintenance works. Consolidation and maintenance shall mean the care and maintenance of Constructed works by accepted landscaping or horticultural practices, ensuring that all plants are in optimum growing conditions and appearance at all times, as well as rectifying any defects that become apparent in the contracted works.

This shall include, but not be limited to, the following items where and as required:

- Watering all planting and lawn areas / irrigation maintenance.
- Clearing litter and other debris from landscaped areas.
- Removing weeds, pruning and general plant maintenance.
- Replacement of damaged, stolen or unhealthy plants.
- Make good areas of soil subsidence or erosion.
- Topping up of mulched areas.
- Spray / treatment for insect and disease control.
- Fertilizing with approved fertilizers at correct rates.
- Mowing lawns & trimming edges each 14 days in summer or 18 days in winter
- Adjusting ties to Stakes
- Maintenance of all paving, retaining and hardcape elements.

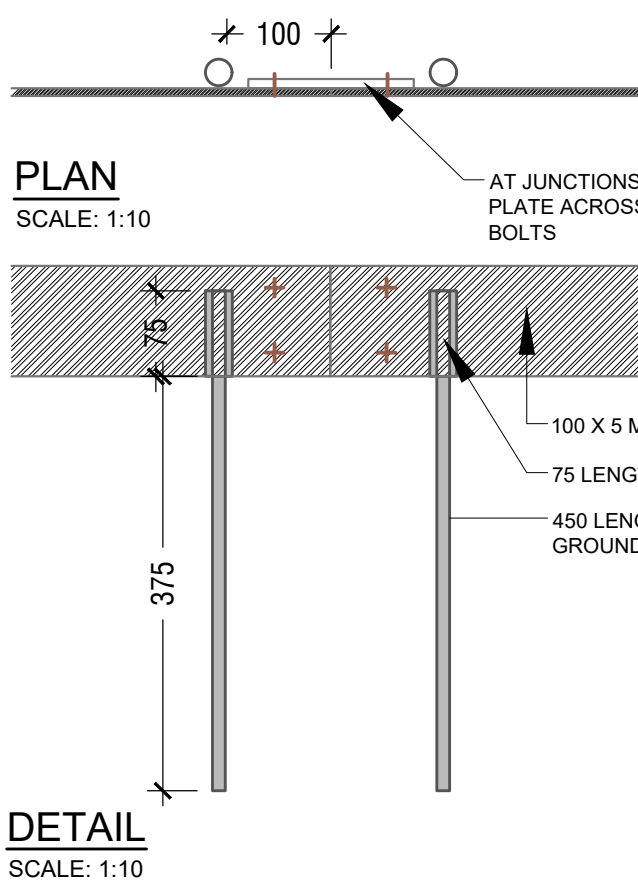
On the completion of the maintenance period, the landscape works shall be inspected and at the satisfaction of the superintendent or landscape architect, the responsibility will be signed over to the client.



PROVIDE FENCING AS DETAILED TO ALL TREES PROPOSED TO BE RETAINED ON THE SUBJECT SITE. FENCING TO BE LOCATED TO THE DRIP LINE OF TREES OR AS INDICATED ON PLANS OR DIRECTED ON-SITE BY ARBORIST. NO STOCKPILING WITHIN FENCE PERIMETERS.

TREE PROTECTION ZONE

N.T.S



STEEL EDGE DETAIL

SCALE: 1:10

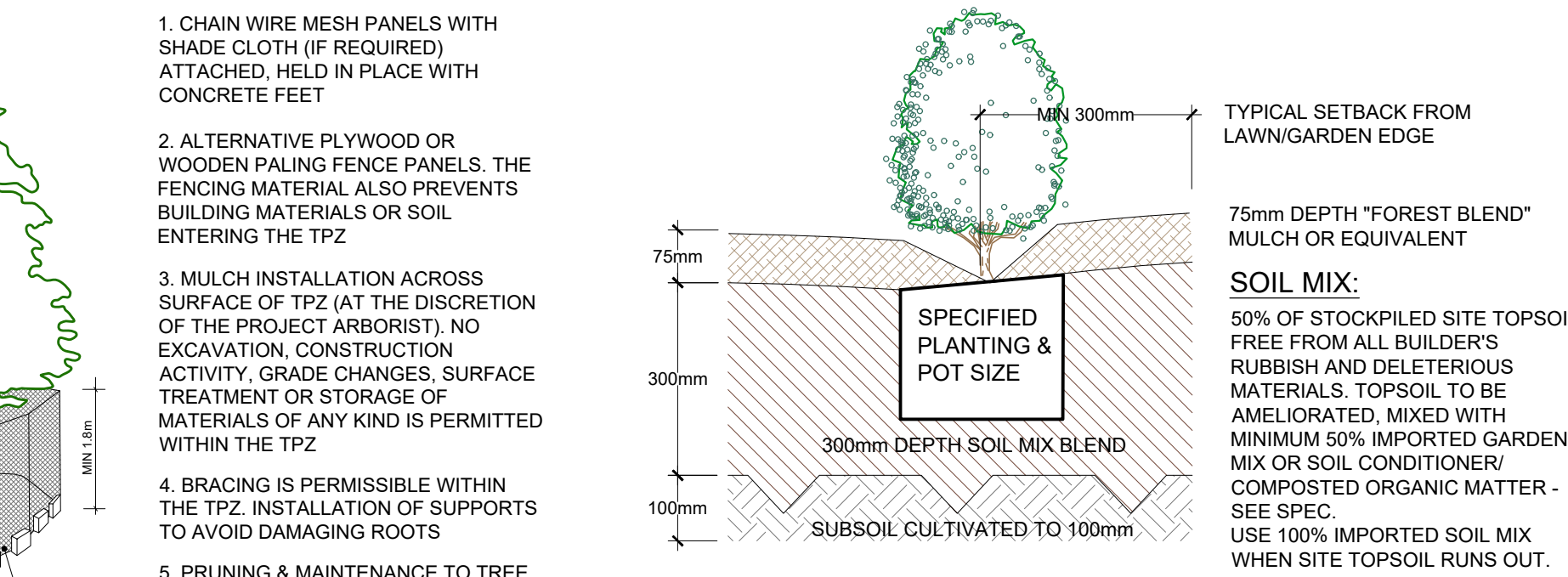


NOTE (BCA COMPLIANCE). WHERE NO EXTERNAL BALUSTRADE IS PROPOSED, THE INTERNAL PLANTER WALL FACE MUST BE NON-CLIMBABLE TO A HEIGHT TO MEET AS & BCA COMPLIANCE.

NOTE (DRAINAGE & WATER PROOFING). DRAINAGE PITS AND LAYOUT TO BE NOMINATED BY HYDRAULIC ENGINEER TO WORK WITH STRUCTURAL DESIGN AND LANDSCAPE.

THE WATERPROOFING, APPROVED DRAINAGE CELL AND SPECIFIED GEOFABRIC LAYER IN THIS DETAIL ARE INDICATIVE ONLY AND SHOULD BE DETAILED BY THE RELEVANT PROFESSIONAL ENGINEER 'FOR CONSTRUCTION'.

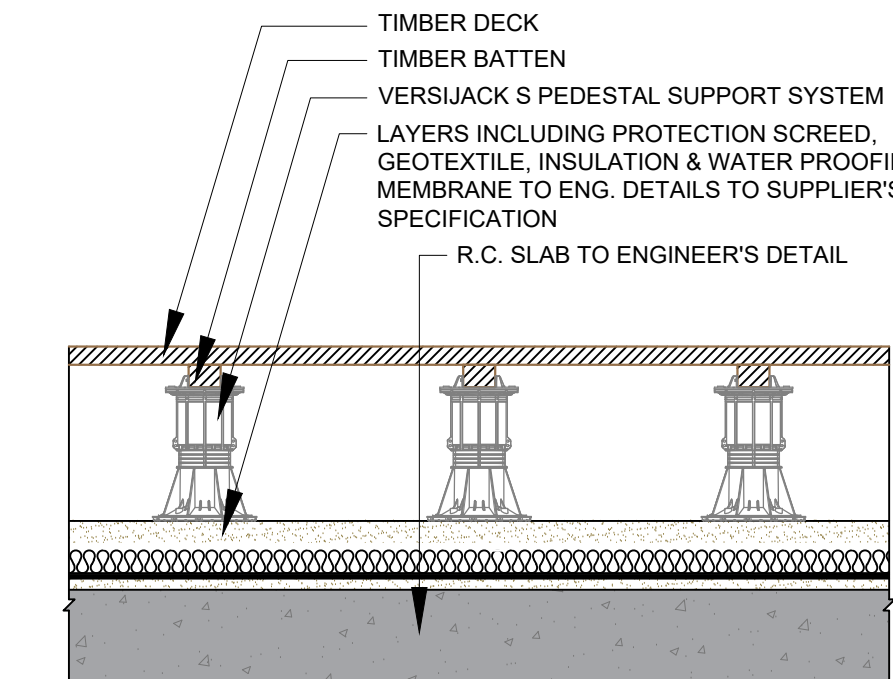
UNDER THE CONSTRUCTION PRACTITIONER BILL, STRUCTURAL WATER-PROOFING SHALL BE DOCUMENTED BY A HYDRAULIC ENGINEER



TYPICAL GARDEN PREPARATION DETAIL

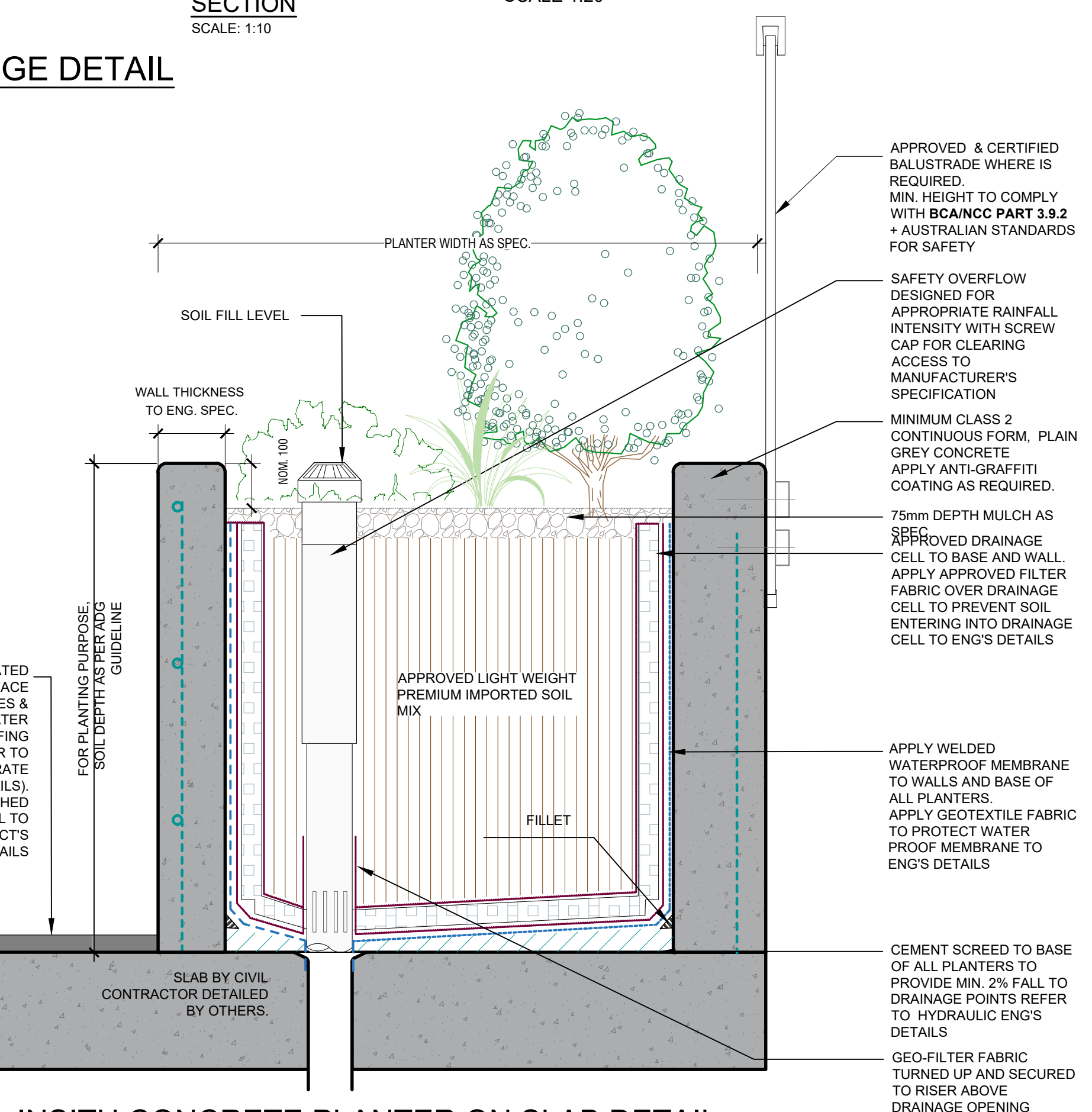
SCALE 1:10

(ONLY APPLICABLE FOR PLANTING AREA OUTSIDE TREE PROTECTION ZONE OF TREES TO BE RETAINED. NO CHANGES ARE TO OCCUR TO EXISTING LEVELS, INCLUDING RIPPING/CULTIVATING OF THE SOIL WITHIN THE TPZ OF TREES TO BE RETAINED ON SITE)



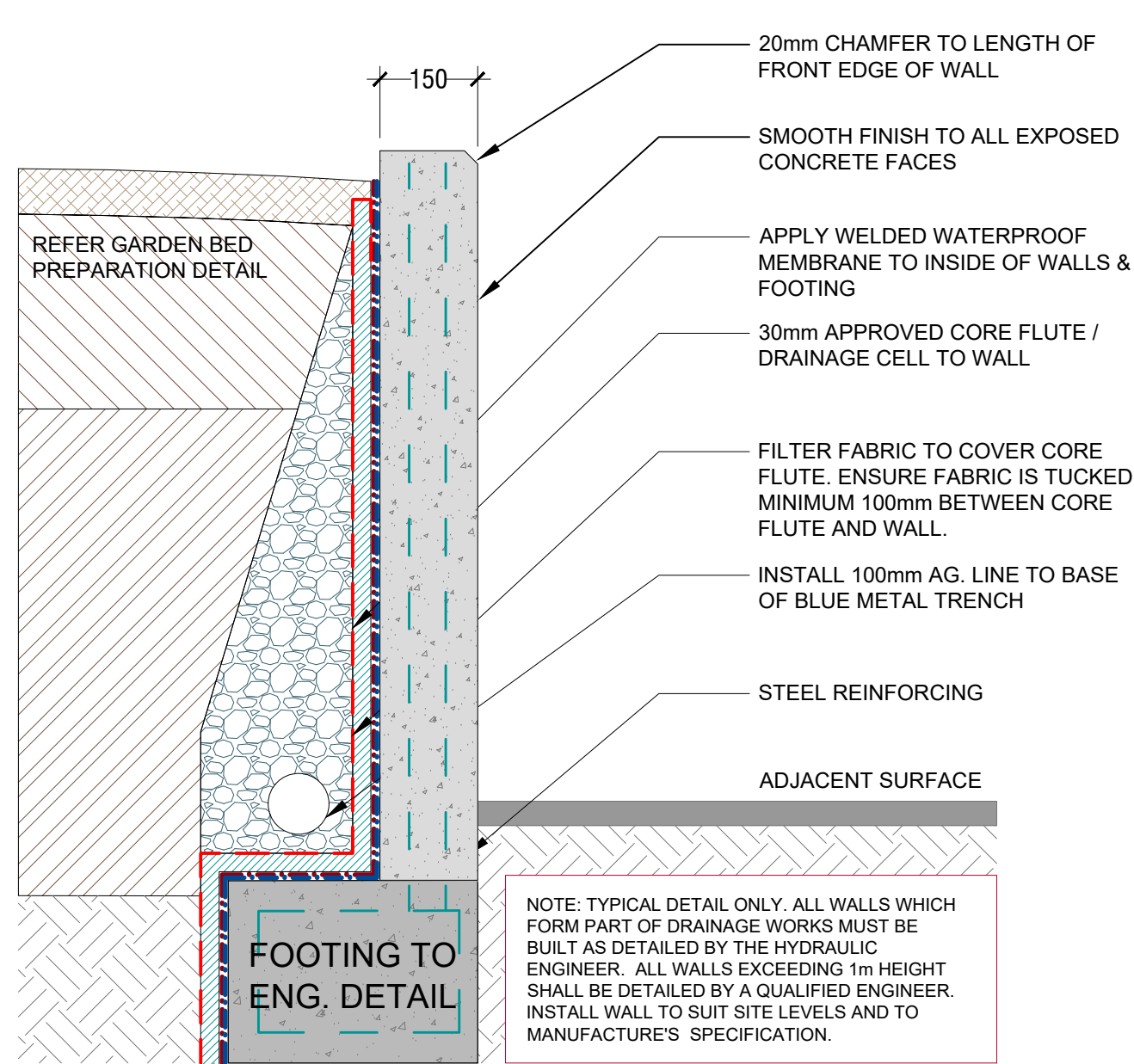
TIMBER DECKING DETAIL

SCALE 1:20



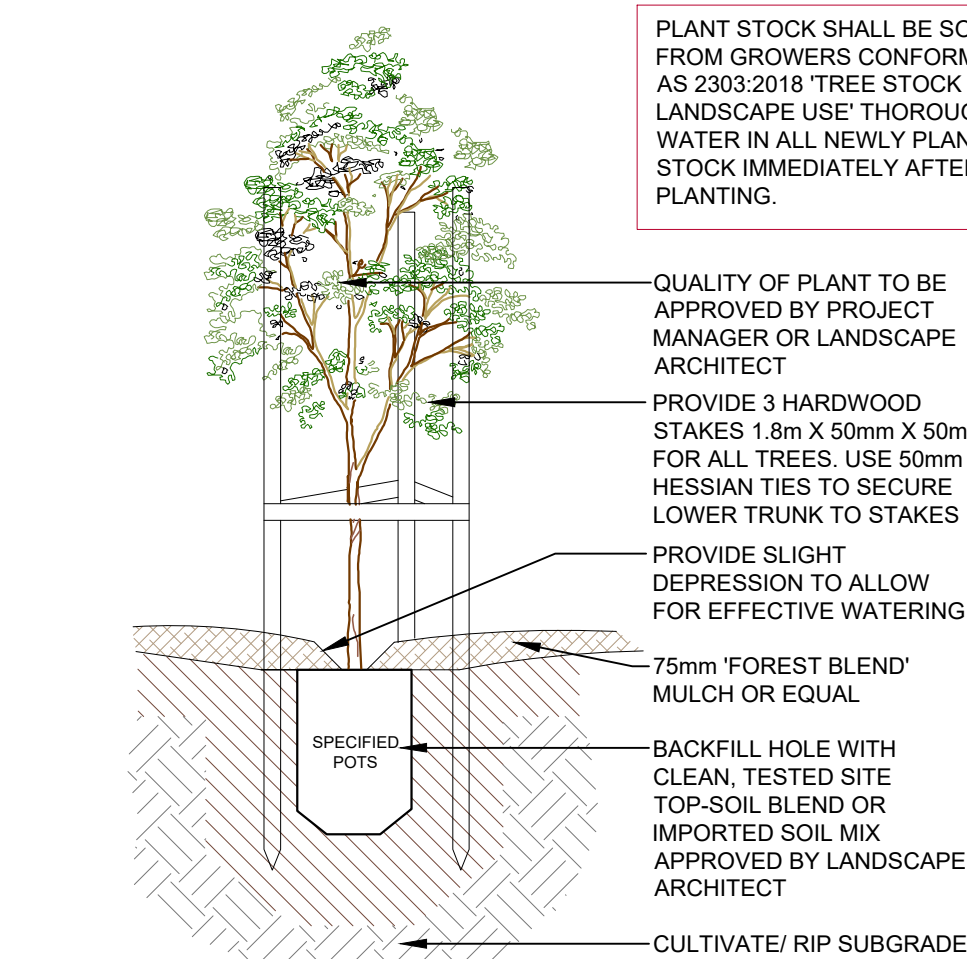
INSITU CONCRETE PLANTER ON SLAB DETAIL

SCALE: 1:10



TYPICAL IN SITU RETAINING WALL DETAIL

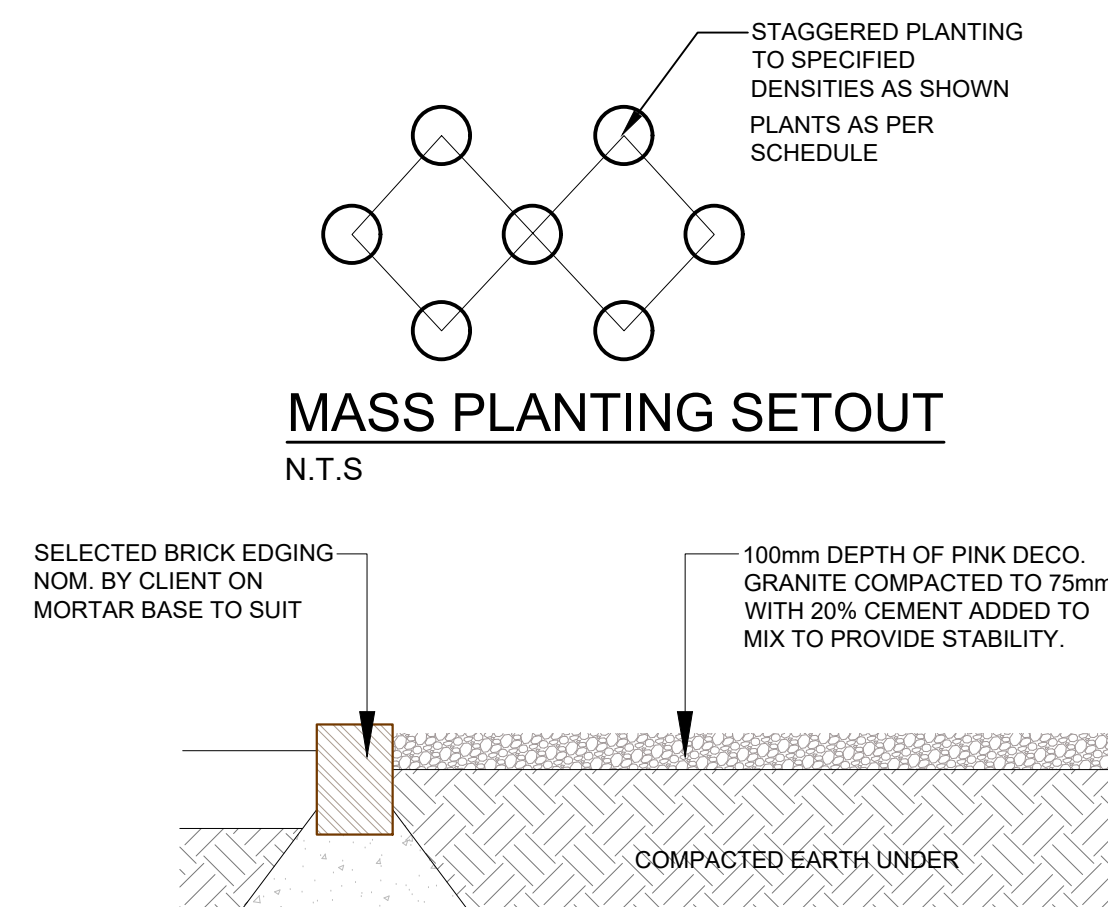
SCALE 1:10



TREE PLANTING DETAIL

SCALE: 1:10

(ONLY APPLICABLE FOR PLANTING AREA OUTSIDE TREE PROTECTION ZONE OF TREES TO BE RETAINED. NO CHANGES ARE TO OCCUR TO EXISTING LEVELS, INCLUDING RIPPING/CULTIVATING OF THE SOIL WITHIN THE TPZ OF TREES TO BE RETAINED ON SITE)



TYPICAL COMPACTED DECO GRANITE DETAIL

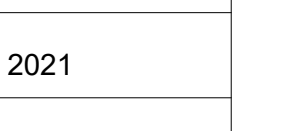
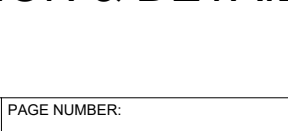
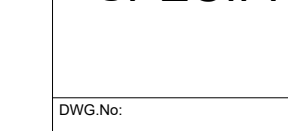
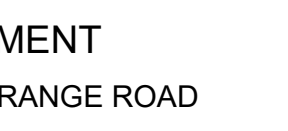
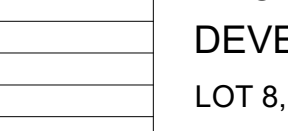
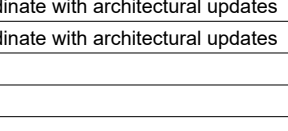
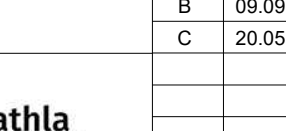
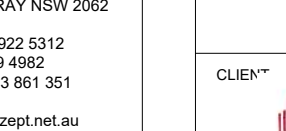
SCALE 1:10

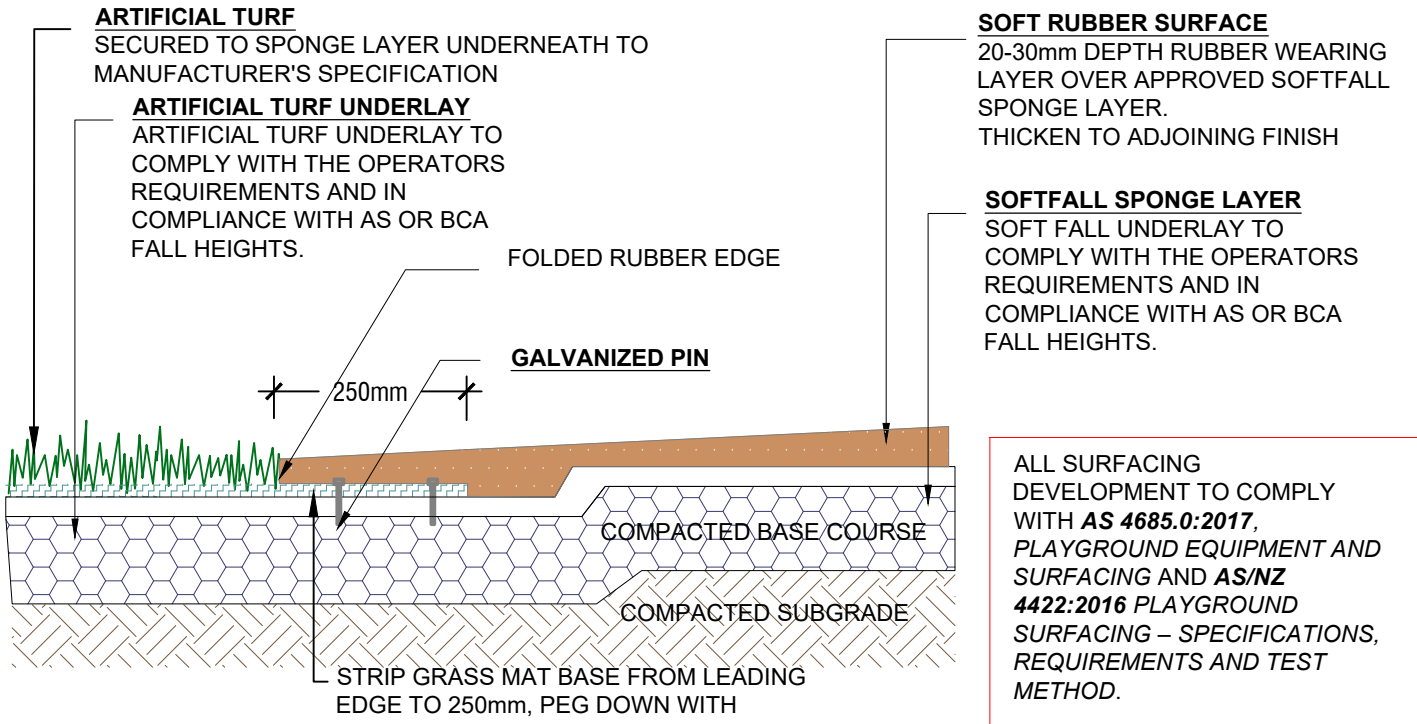
GENERAL NOTE:

Figured dimensions take preference to scale readings. Verify all dimensions on site. If any dimension is found to be incorrect, the client shall be notified immediately.

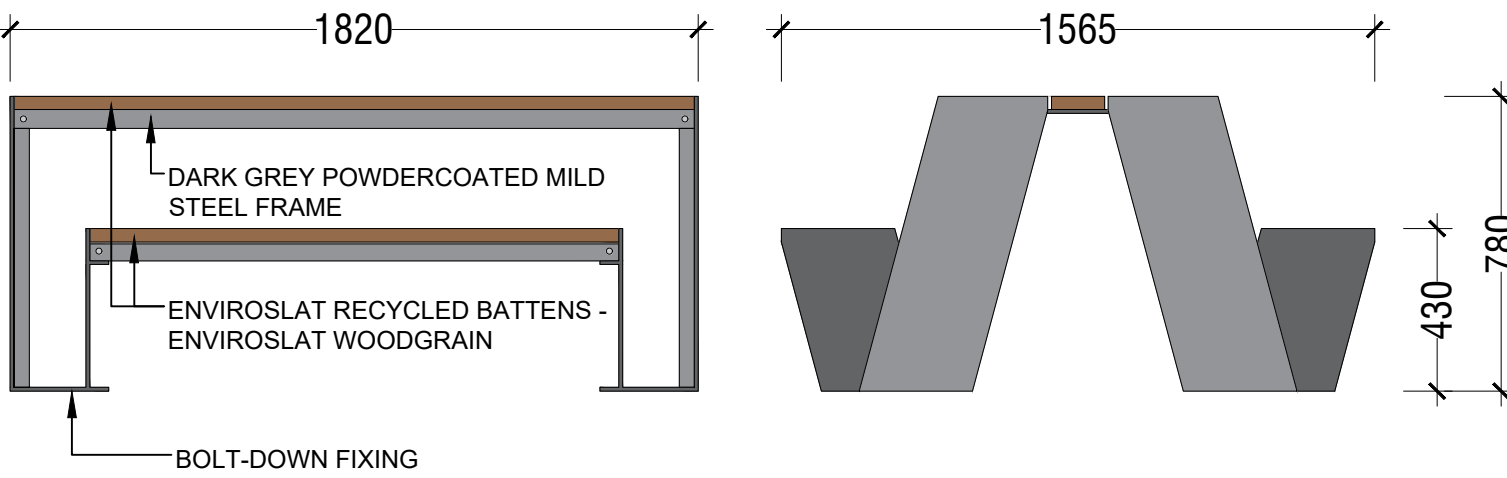
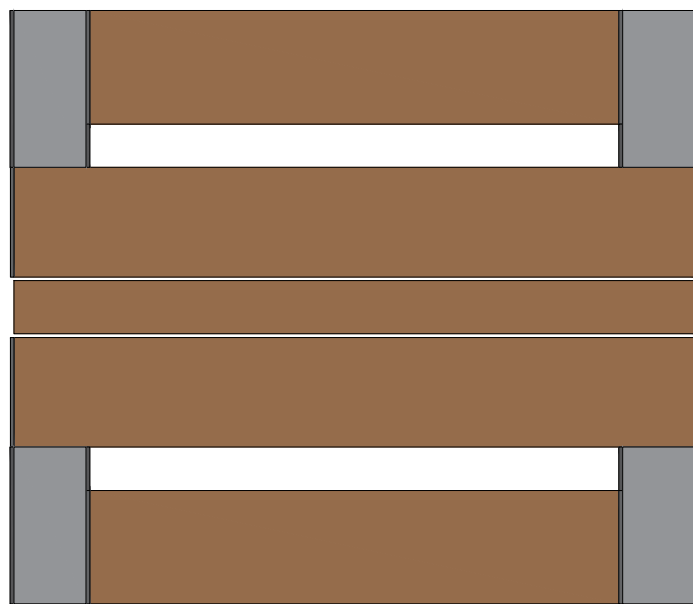
Copyright Statement: Copyright © 2021 by Concept. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the copyright owner.

If the State of this drawing is not signed by the Contractor it may be subject to change, deletion or amendment at the discretion of the client.



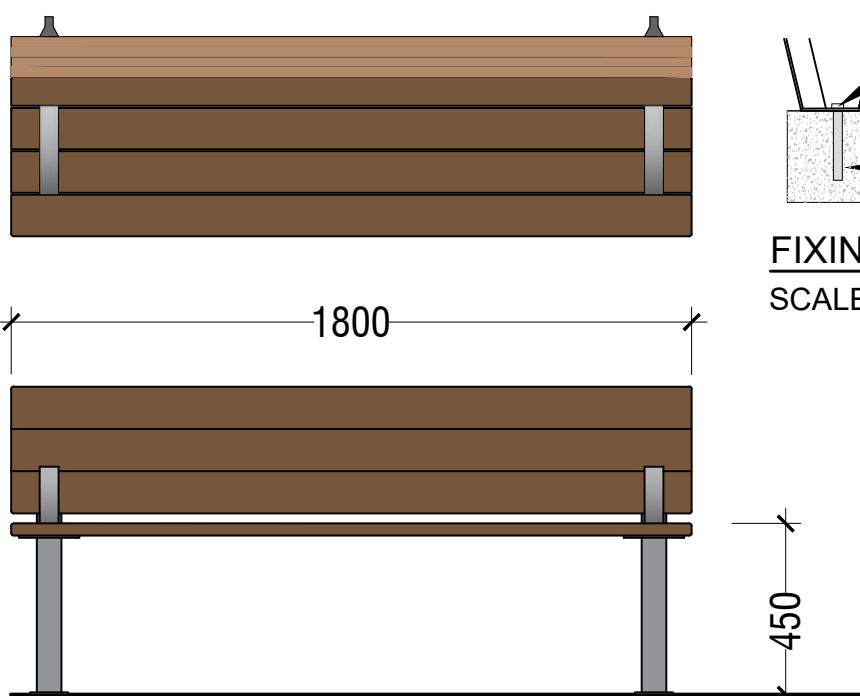


TYPICAL RUBBERISED SOFTFALL AND SYNTHETIC TURF IN NATURAL SOIL
SCALE: NTS

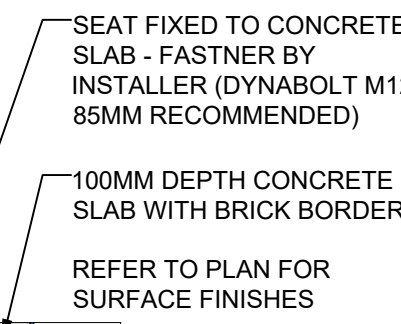


NOTE: DRAWING IS INDICATIVE ONLY. PRODUCT BY COMMERCIAL SYSTEMS AUSTRALIA. REFER MANUFACTURER'S SPECIFICATIONS & INSTRUCTIONS FOR INSTALLATION

ODYSSEY PICNIC SETTING BY CSA - PRODUCT CODE: TM4170
SCALE 1:20



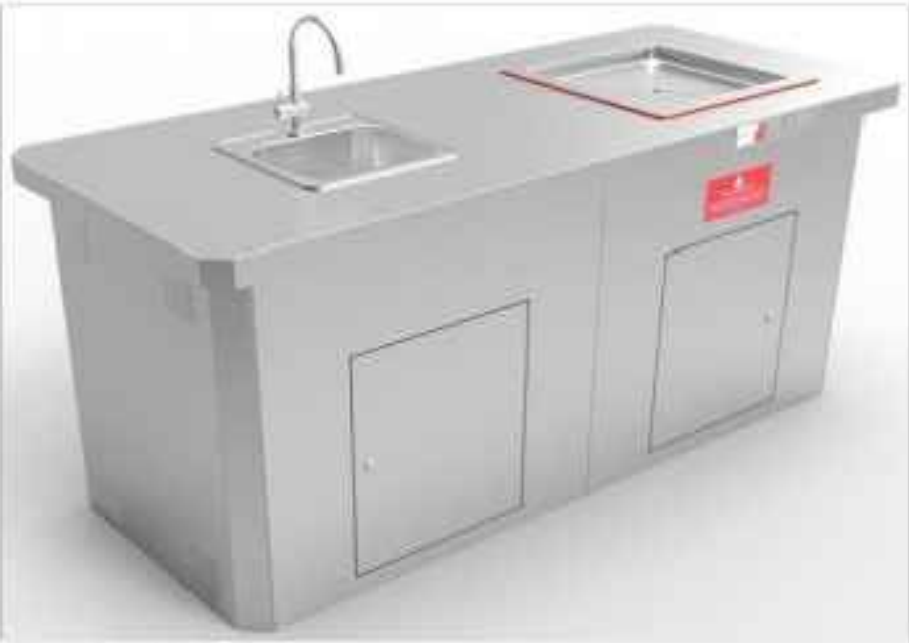
FIXING DETAIL
SCALE 1:10



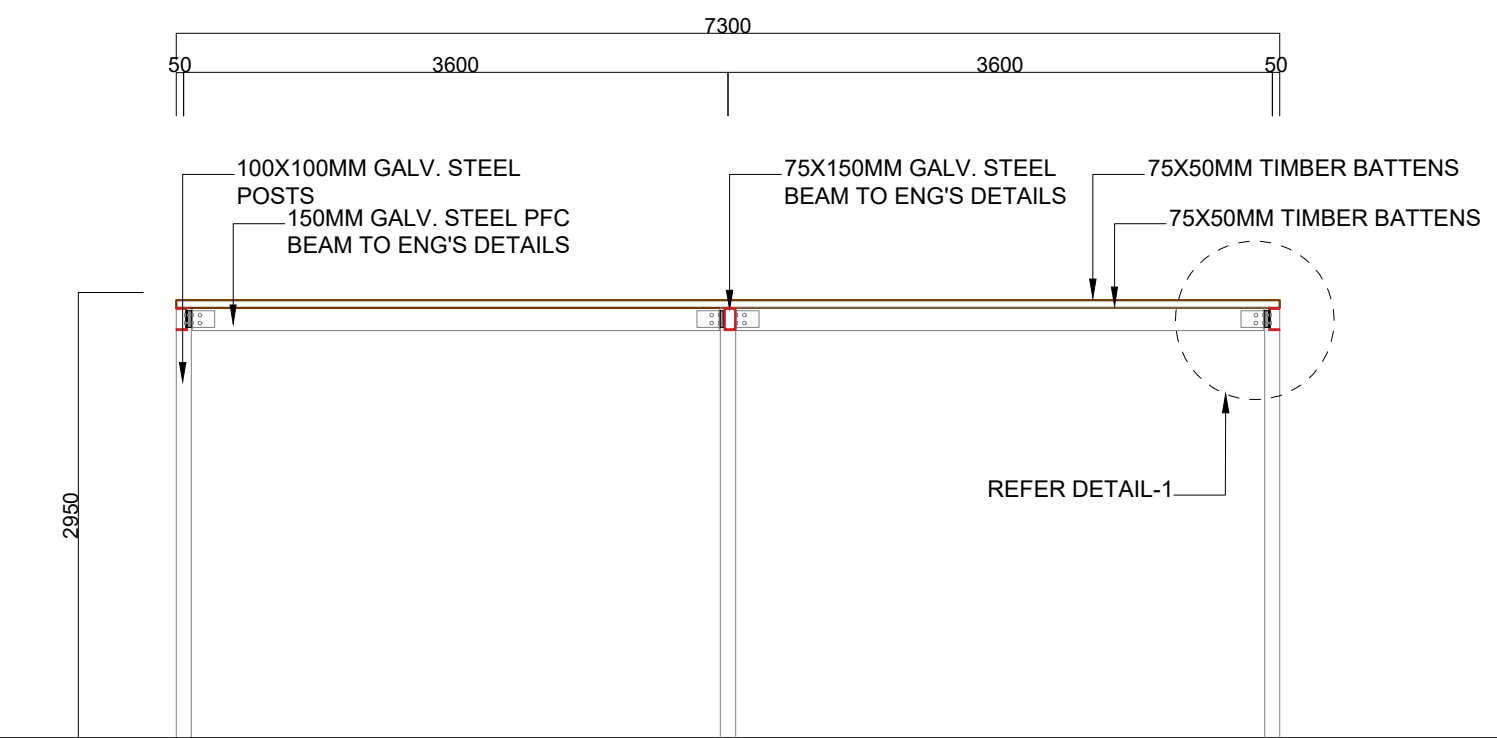
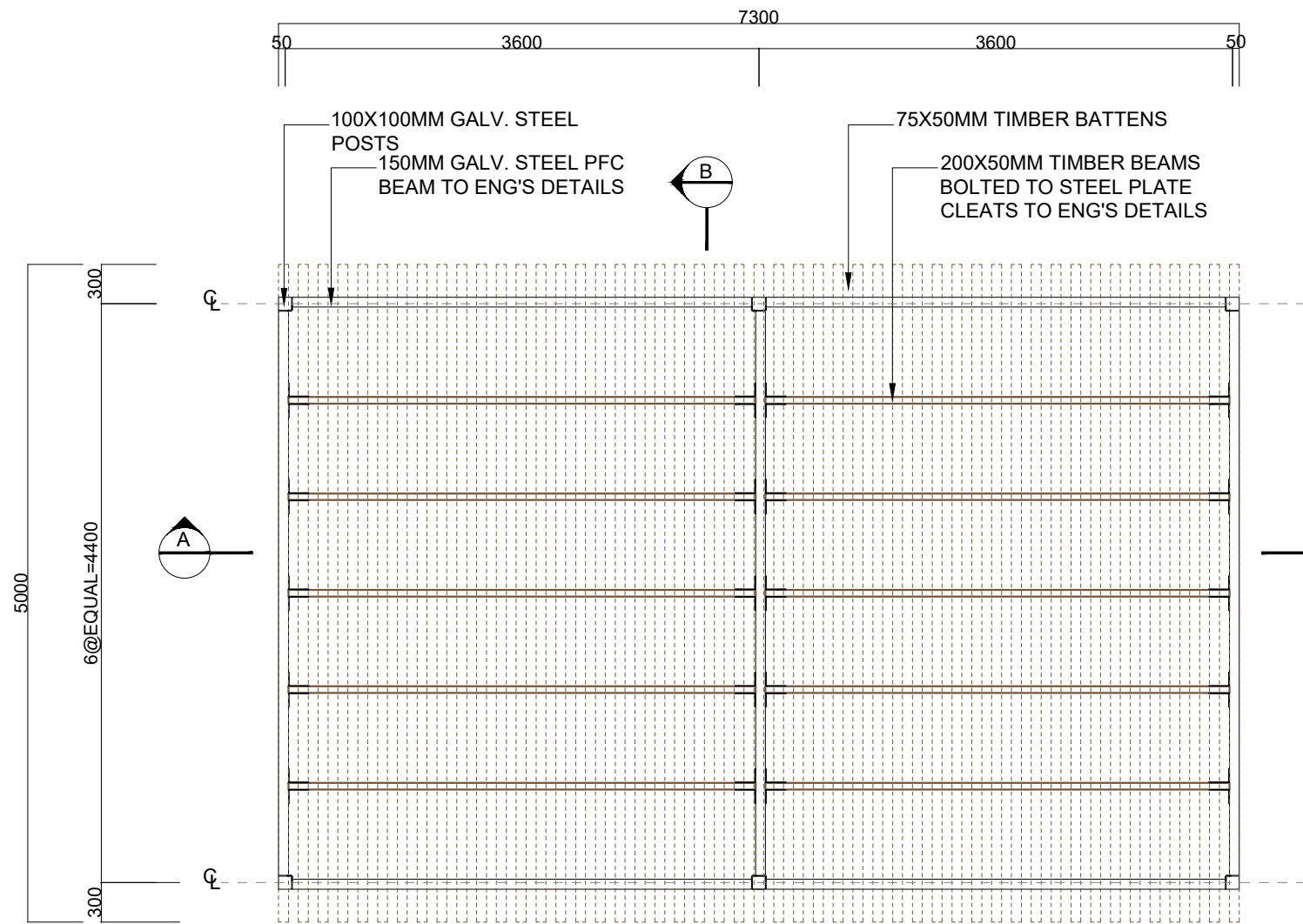
NOTE: DRAWING IS INDICATIVE ONLY. PRODUCT BY COMMERCIAL SYSTEMS AUSTRALIA. REFER MANUFACTURER'S SPECIFICATIONS & INSTRUCTIONS FOR INSTALLATION

MONACO BENCH SEAT BY GOSSI
APPROX 1:20

Barbeco Grillex® Double BBQ Unit with 1 x Hotplate and Sink - Stainless Steel Finish

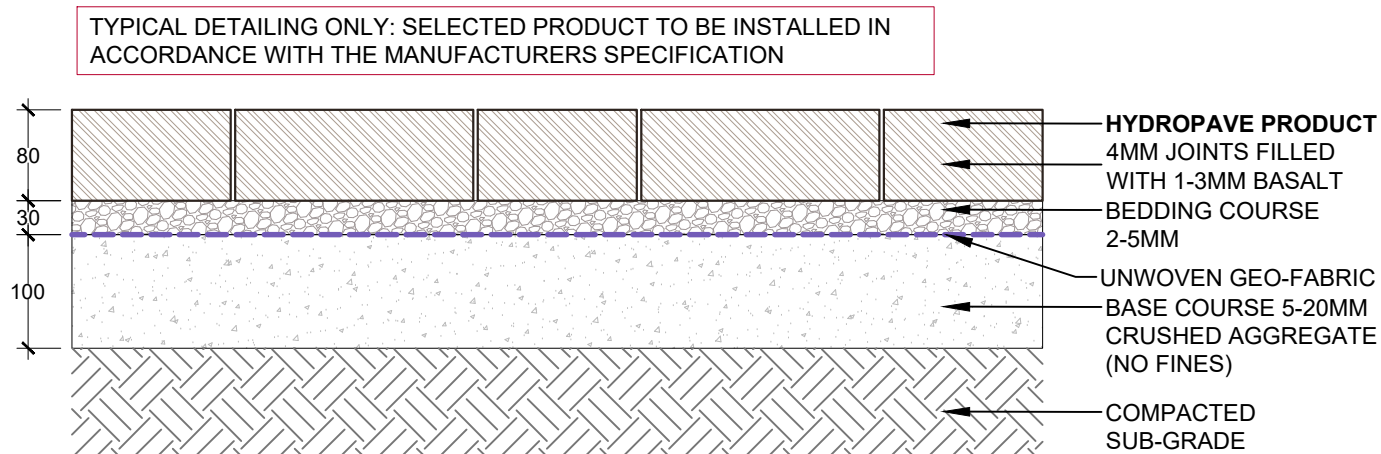


- * Cabinet Dimension: 1900 x 800mm
- * Cabinet manufactured from 304 grade Stainless Steel
- * Grillex® Inbench Barbeque Unit is available in a 10 amp (GXA-10) or 15amp (GXA-15) option
- * 20 amp RCD is recommended for maximum safety (refer to manual for technical information)
- * Under and over voltage protection with automatic self-resetting by pressing the push button switch
- * Removable Inbench Unit for fire or flood prone areas
- * Adjustable cooking temperature (175 - 275 degrees C)
- * Adjustable cooking time (10 - 40min)
- * 5 second delay child lock feature (can be turned off and on easily)
- * Audible buzzer to alert when Barbeque is turning on and off
- * Very easy and safe to clean
- * Cooking hot plate made from 316 stainless steel
- * Heavy duty vandal resistant lock
- * Supplied fully assembled reducing installation costs
- * Fully tested and certified to Australian standards
- * The Barbeque Plates are covered by their own **exclusive two year warranty**
- * **Lifetime Structural Warranty (*Conditions apply)** for repair or replacement covering structural failures caused by corrosion, deterioration and faulty workmanship on the cabinet

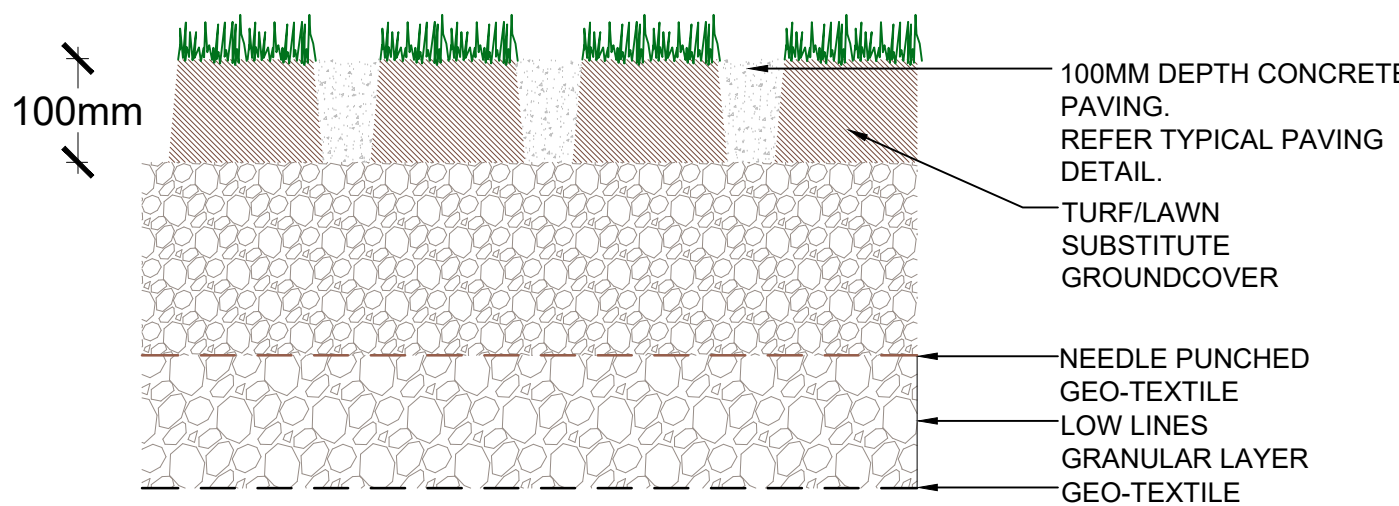


SECTION A-A

TYPICAL PERGOLA DETAIL
SCALE 1:20



TYPICAL PERMEABLE PAVING DETAIL
SCALE 1:15

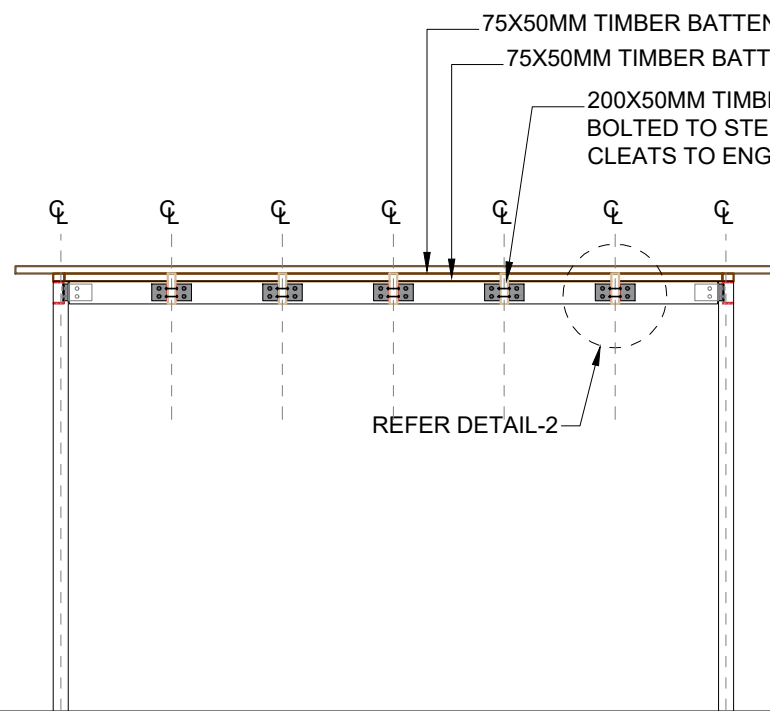
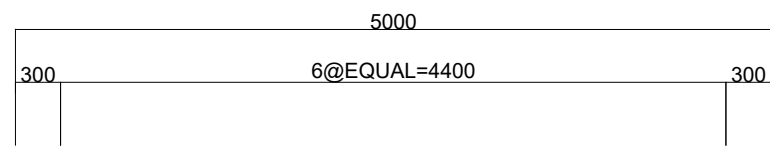


TYPICAL PERMEABLE PAVING & GRASS DETAIL
SCALE 1:20

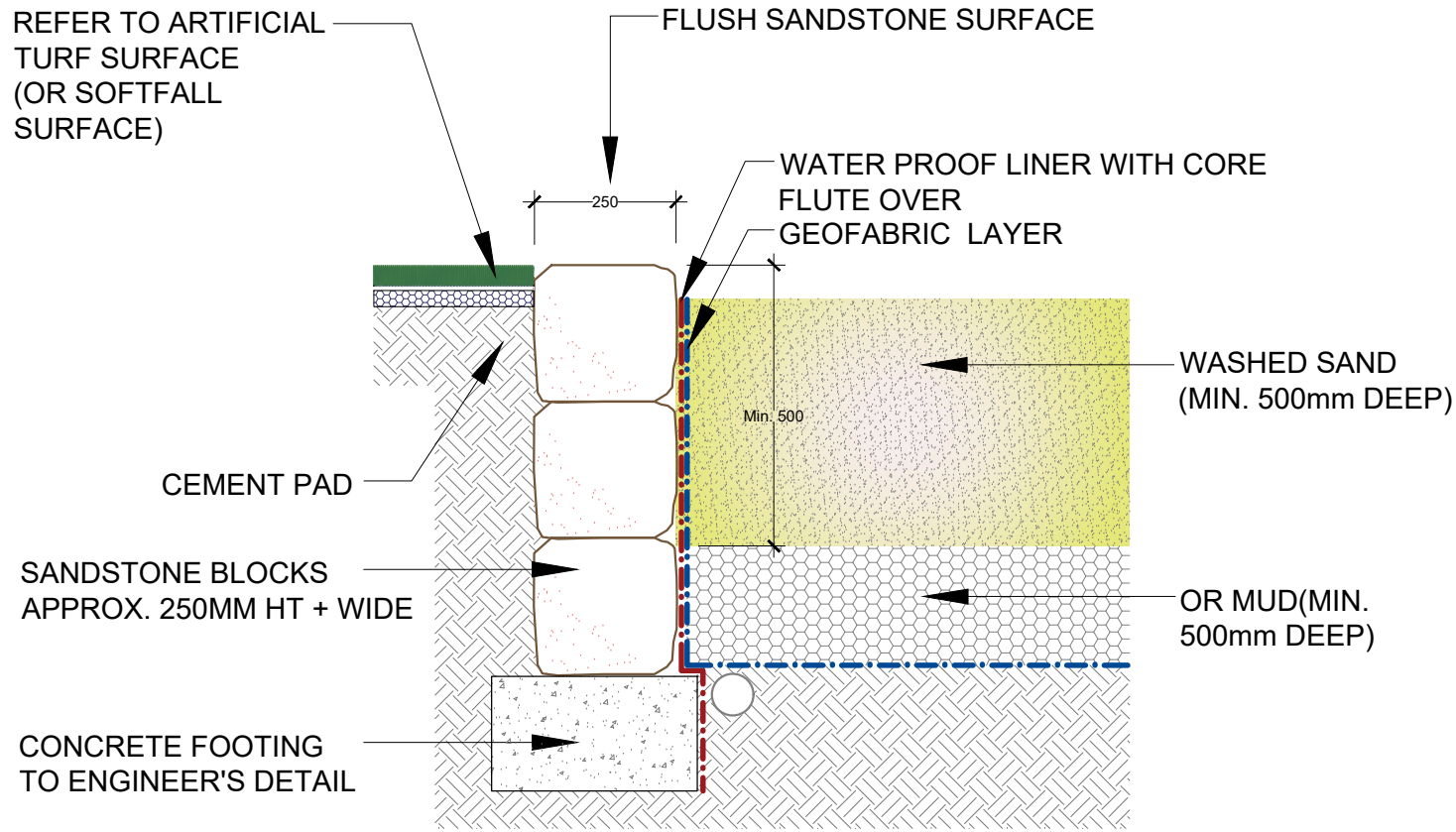


SAMPLE IMAGE

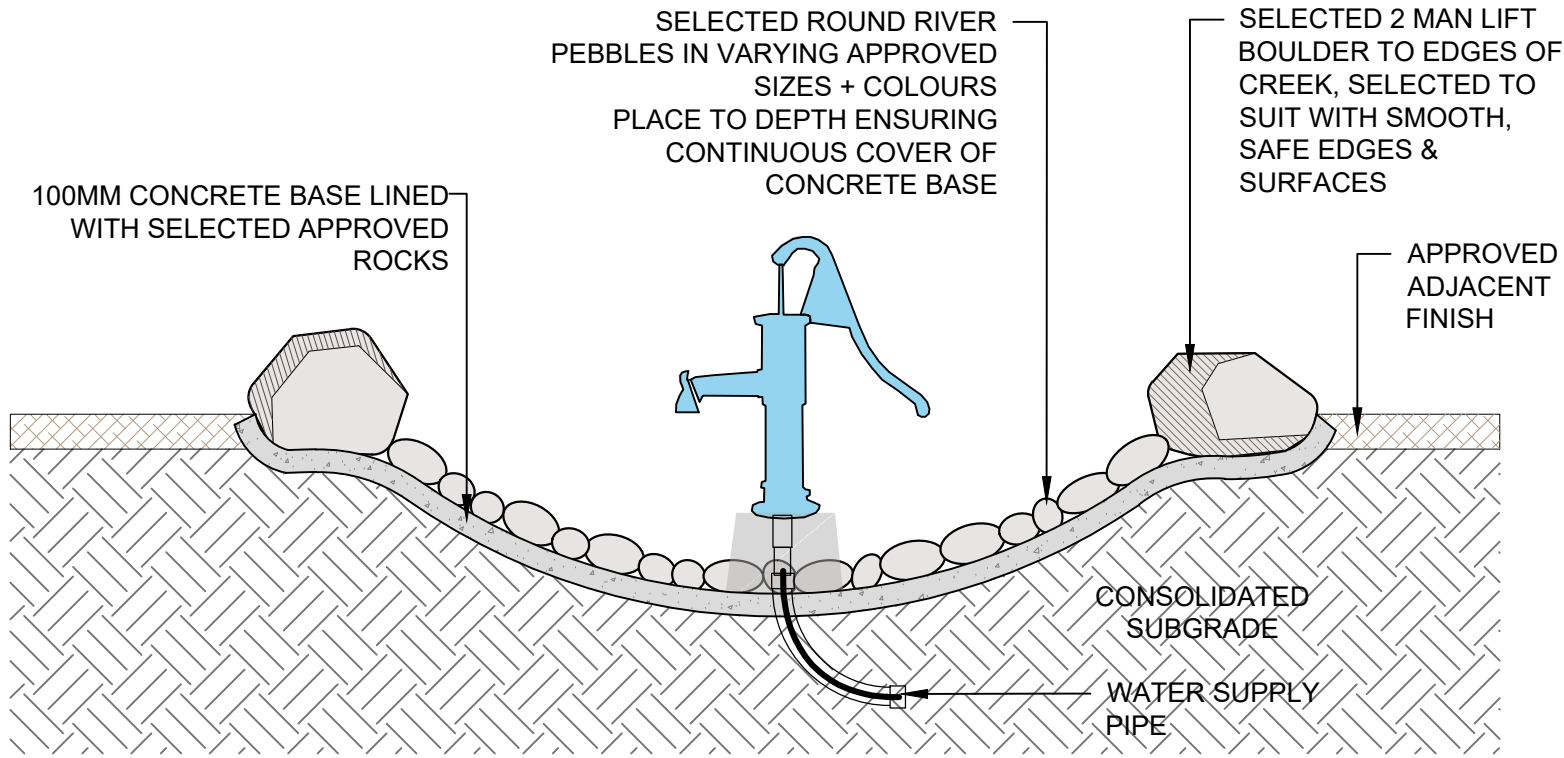
NOTE:
DETAIL PROVIDED FOR DESIGN INTENT ONLY,
TO BE REVIEWED AND VERIFIED WITH
FURTHER DETAILING PROVIDED AS
REQUIRED FOR CONSTRUCTION BY
ARCHITECT/ STRUCTURAL ENGINEER



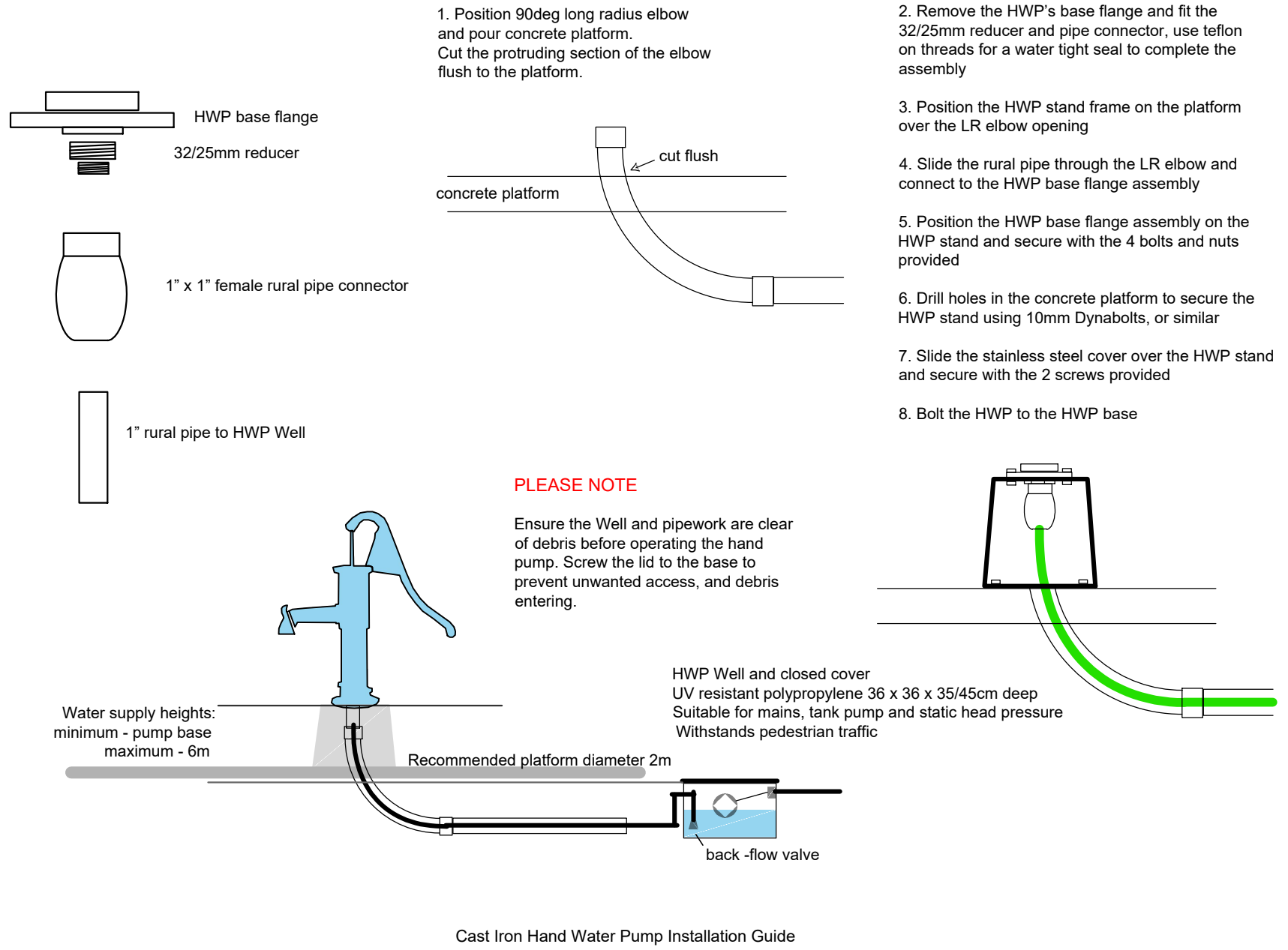
SECTION B-B



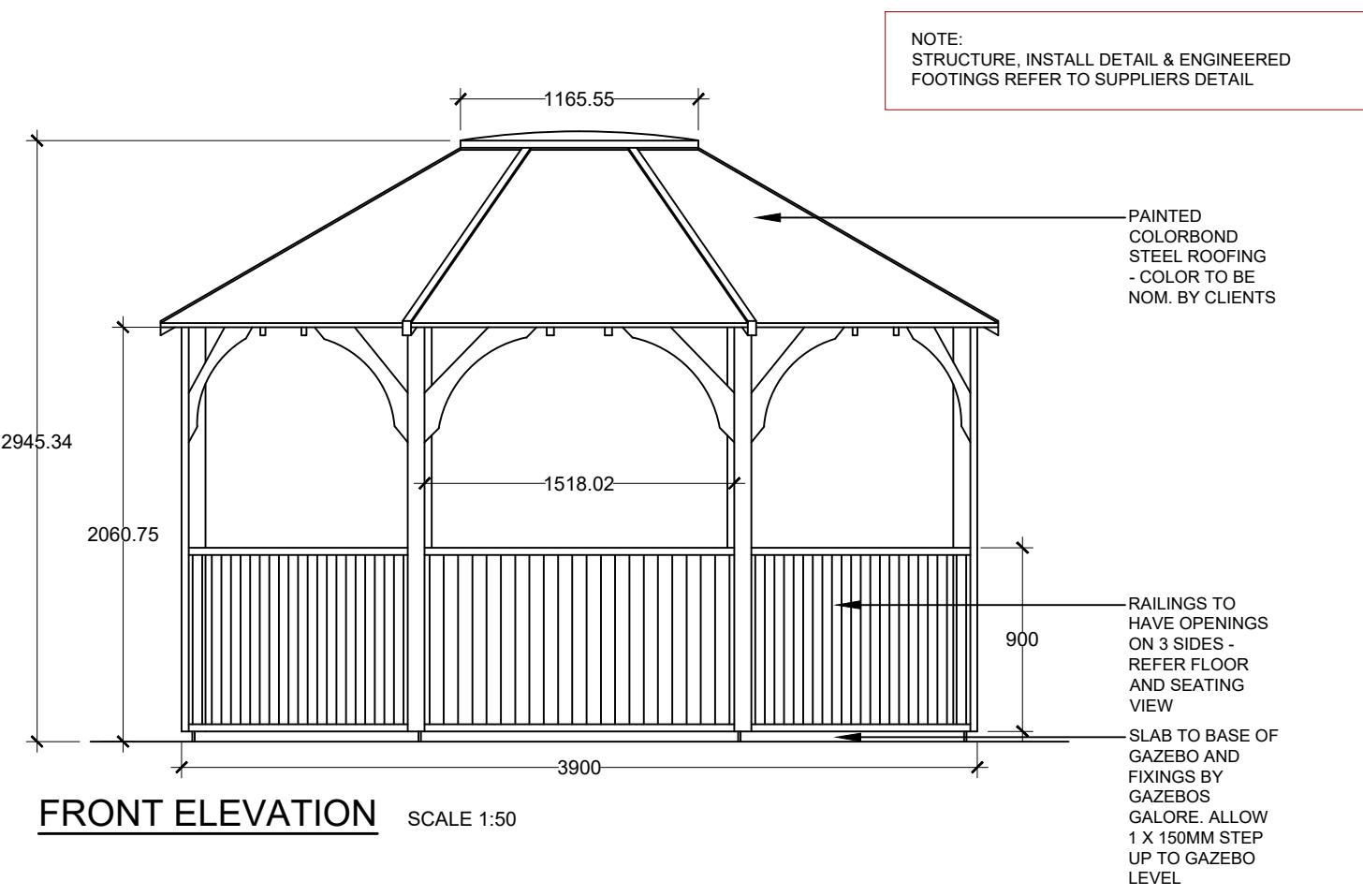
TYPICAL SANDPIT & SANDSTONE EDGING DETAIL
SCALE 1:20



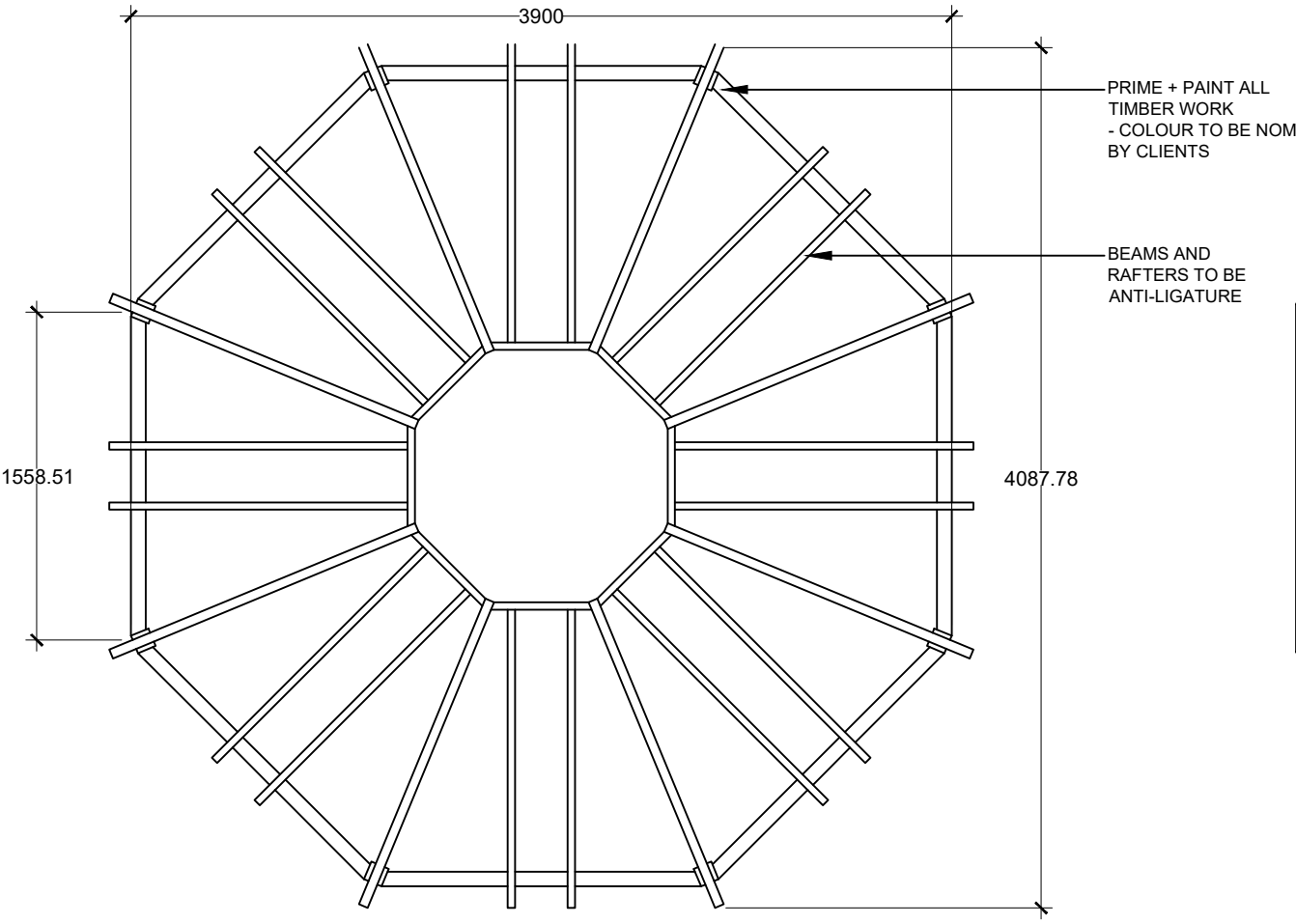
TYPICAL DRY RIVER BED WITH WATER PUMP TREATMENT
SCALE: N.T.S



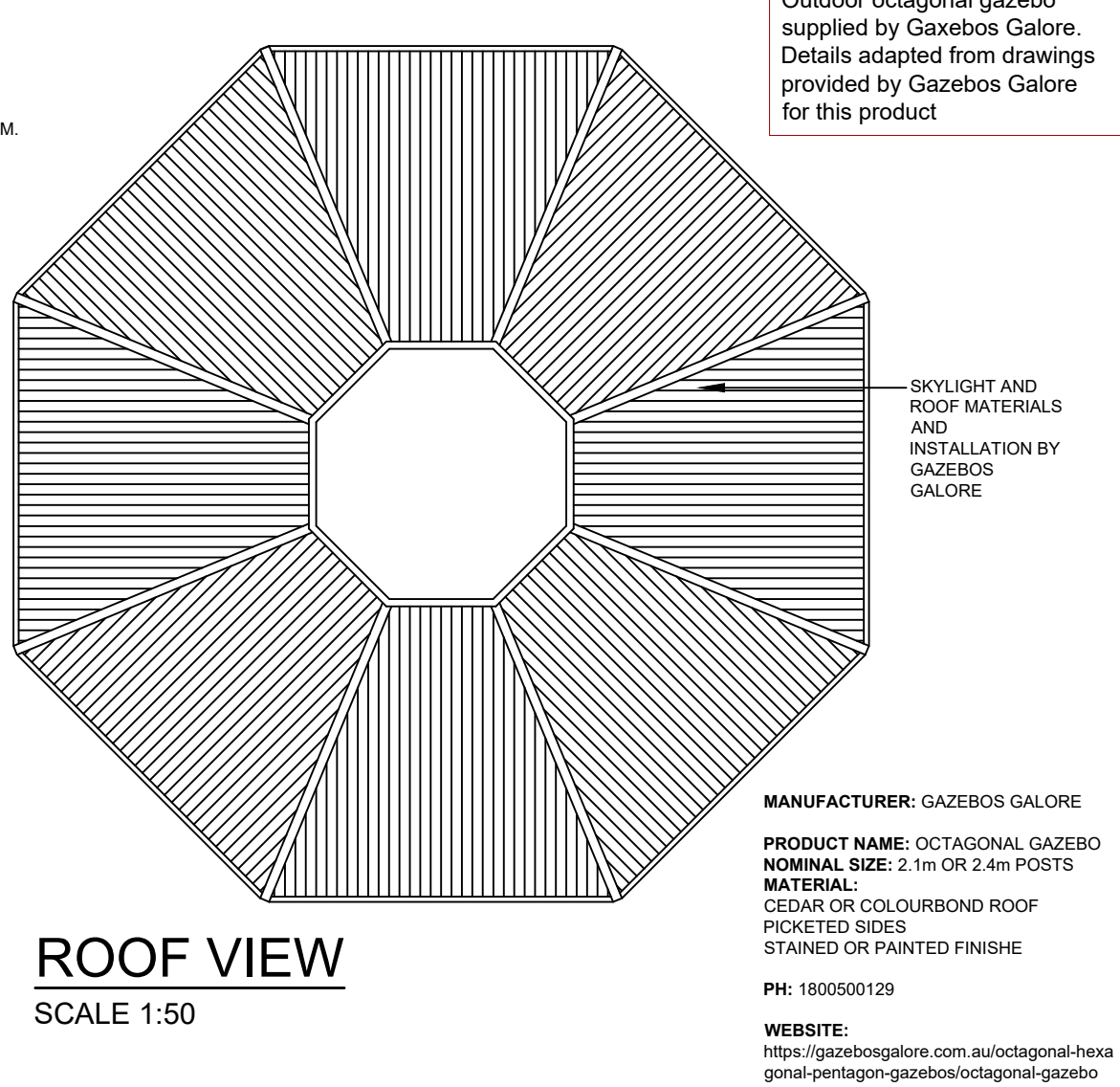
CAST IRON HAND WATER PUMP
N.T.S



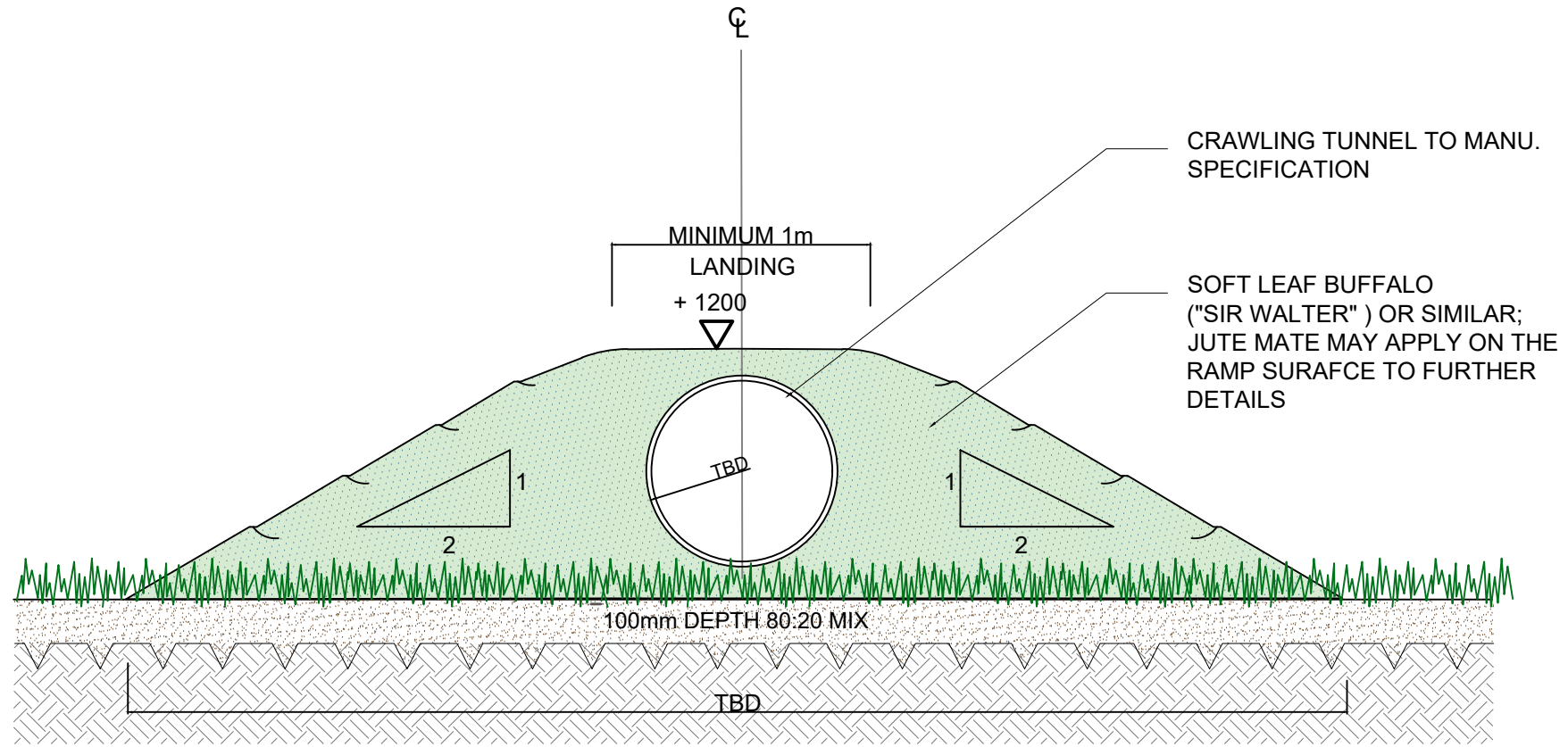
OCTAGONAL GAZEBO TYPICAL DETAIL
scale as shown



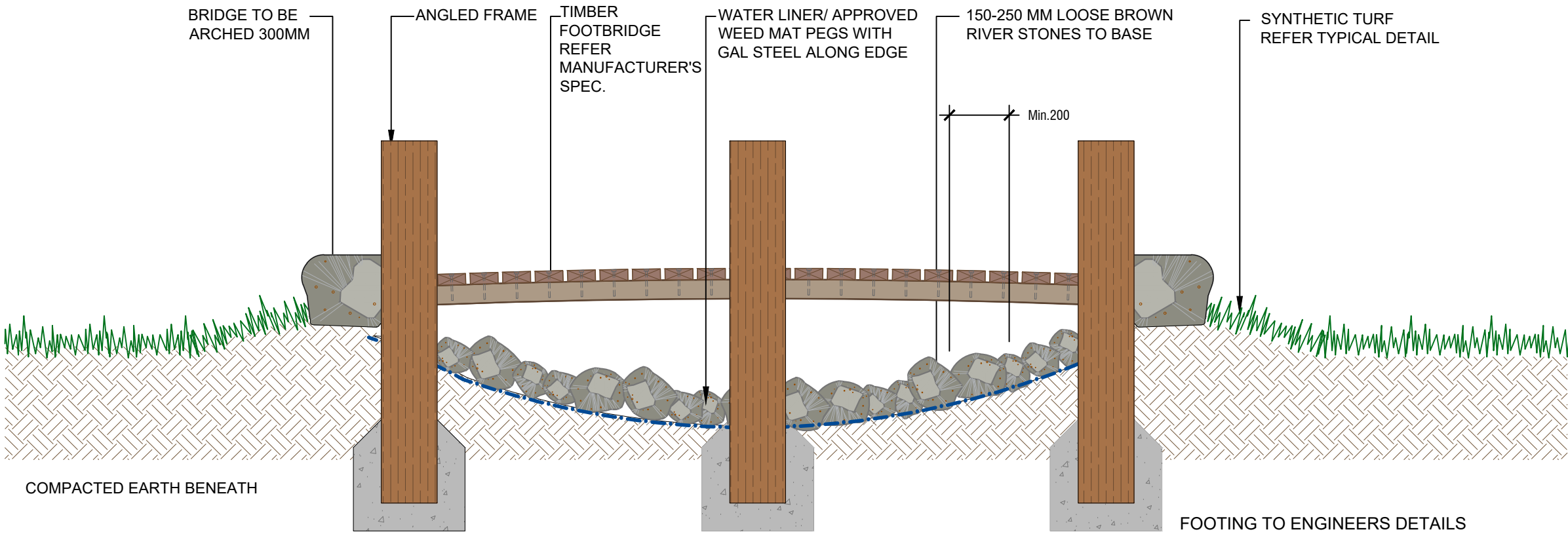
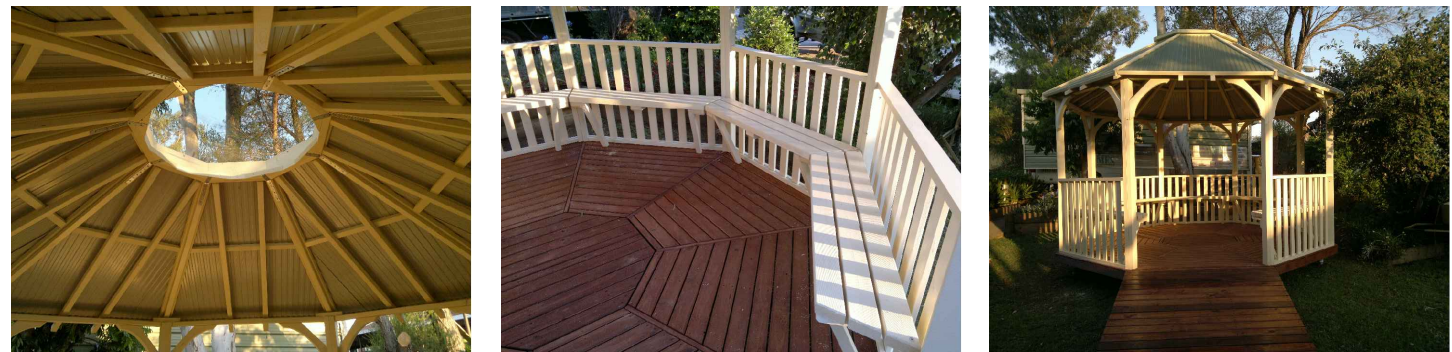
BEAM & RAFTERS VIEW
SCALE 1:50



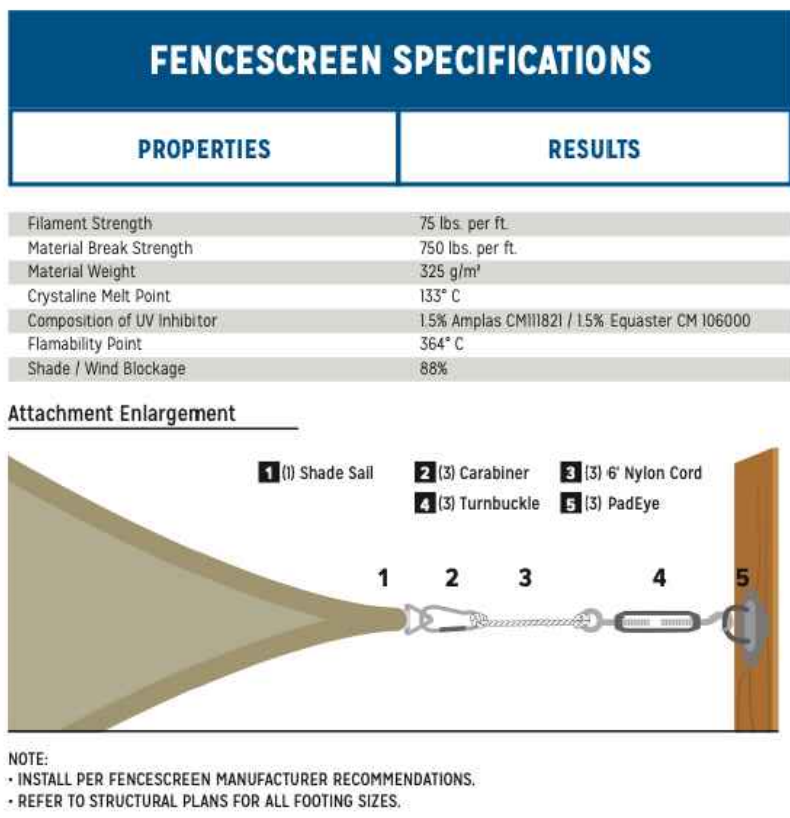
ROOF VIEW
SCALE 1:50



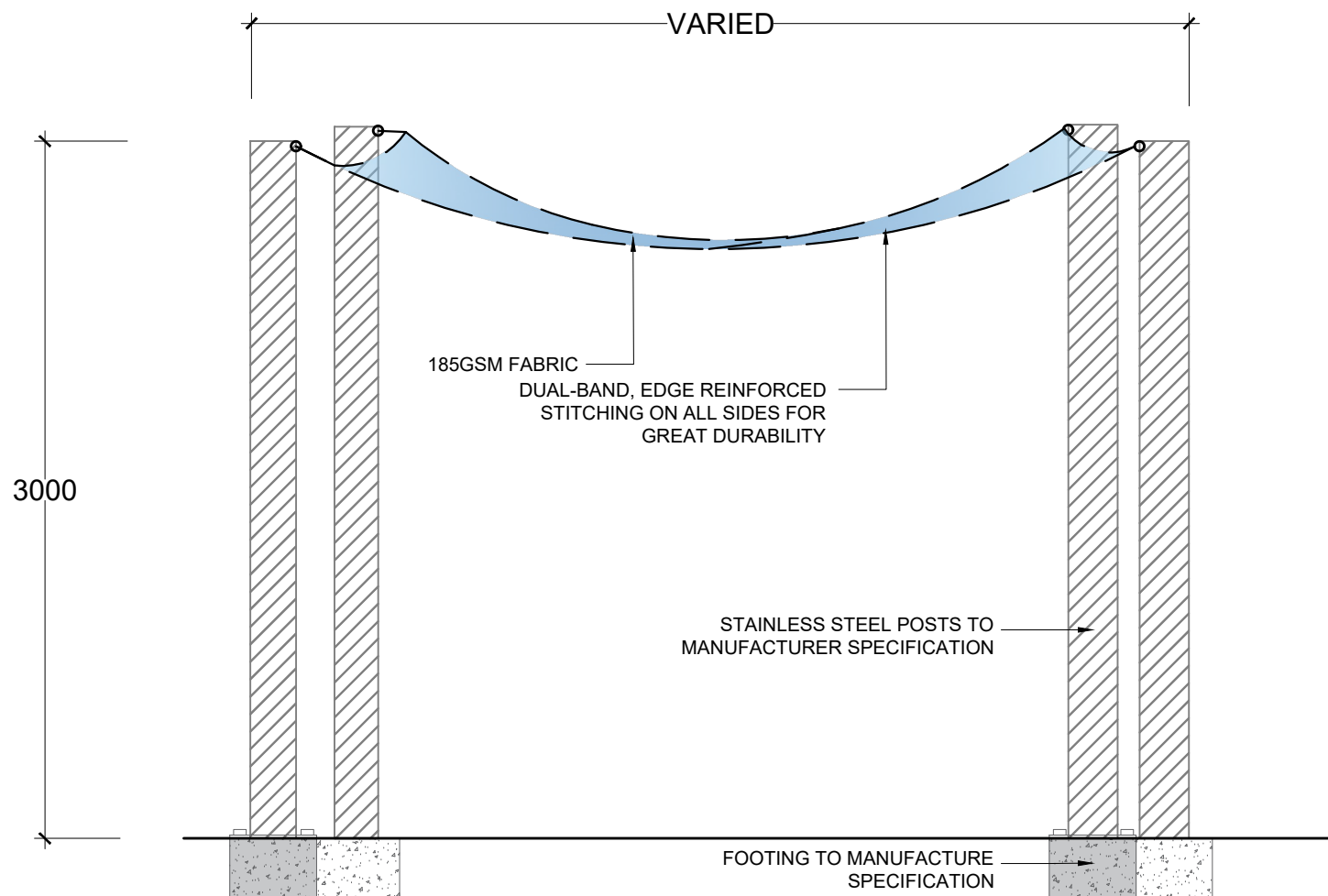
TYPICAL DETAIL: CRAWLING TUNNEL - FRONT ELEVATION
SCALE: 1:20



TYPICAL FOOT BRIDGE DETAILS
SCALE 1:20



TRELLIS FIXED ON TIMBER FENCE
SCALE: 1:20



CUBBY HOUSE
SCALE N.T.S

MANUFACTURER: AARONS OUTDOOR LIVING
PRODUCT NAME: TAJ MAHAL CUBBY HOUSE
3.3M(W) X 3.3M(L) X 2.1M(H)

MATERIAL: TREATED PINE(ARSENIC FREE) - INSIDE AND OUT

COLOURBOND ROOF - CHOICE OF COLOURS

PH: 1300 227 667

WEBSITE: <http://www.aaronsoutdoor.com.au/>