

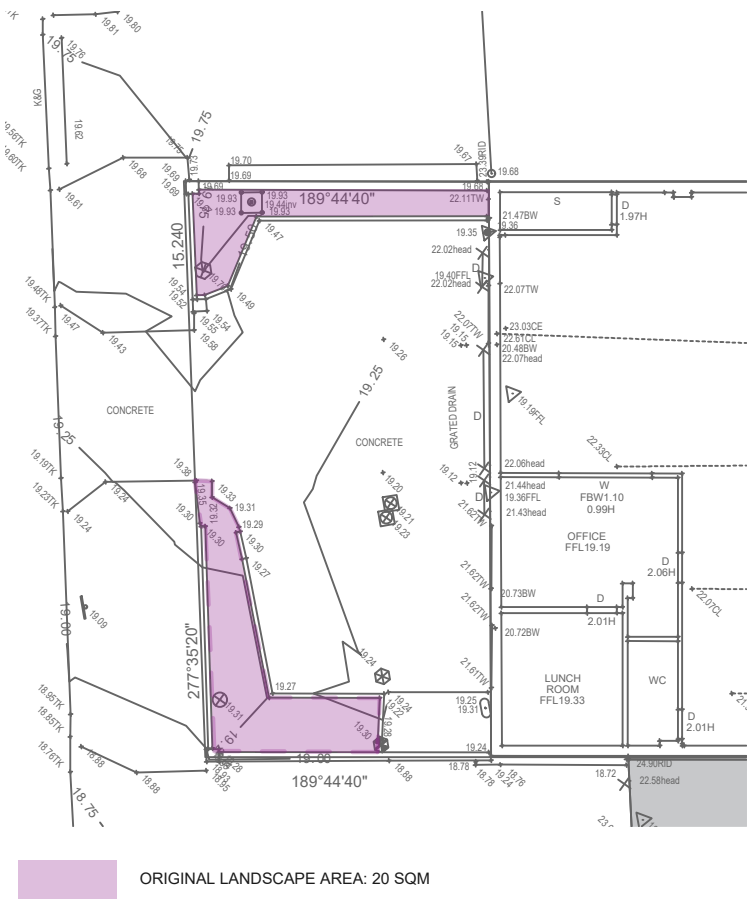
DRAWING LIST

NO.	DRAWING NAME	SCALE
LA-101	COVER SHEET	1:200 @ A3
LA-201	GENERAL ARRANGEMENT PLAN	1:100 @ A3
LA-301	LANDSCAPE DETAILS	AS SHOWN
LA-401	SPECIFICATION	N/A

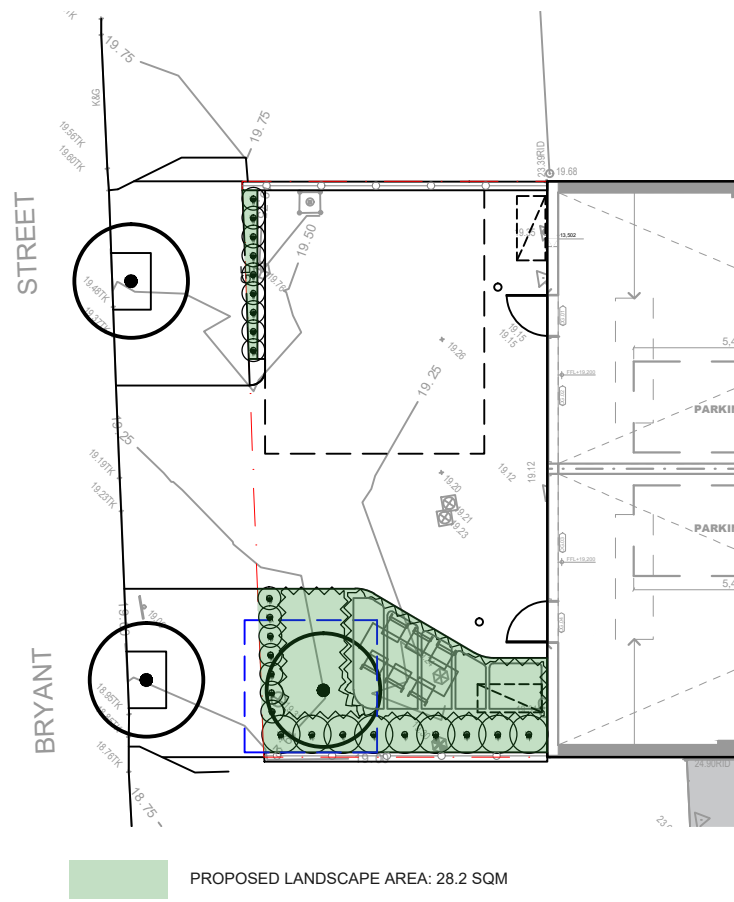
GENERAL NOTES

- REFER TO ARCHITECT'S DRAWINGS FOR ALL INTERNAL BUILDING LAYOUT AND PROPOSED BUILDING LEVELS.
- ALL DRAINAGE AND STRUCTURAL DETAILS AS PER ENGINEER'S DRAWINGS.
- THIS DOCUMENTATION SET SHALL BE READ IN CONJUNCTION WITH ARCHITECT'S, CIVIL, STORMWATER, AND STRUCTURAL ENGINEER'S DRAWINGS.
- LOCATE AND PROTECT ALL UNDERGROUND SERVICES PRIOR TO ANY EXCAVATION. PROPOSED TREES TO BE LOCATED MINIMUM 6M FROM ANY EXISTING SEWER LINES, ALL UNDERGROUND SERVICES TO BE LOCATED AND PROTECTED PRIOR TO ANY EXCAVATION AND INSTALLATION OF TREES.
- ANY DISCREPANCIES MUST BE REPORTED IMMEDIATELY TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCEMENT OF WORKS.
- DO NOT SCALE DRAWINGS, FIGURED DIMENSIONS HAVE PREFERENCE OVER SCALED DIMENSIONS.
- CONTRACTOR TO CHECK EXISTING LEVELS ALONG SITE BOUNDARY TO CONFIRM EXTENT AND HEIGHT OF PROPOSED RETAINING WALLS. OBTAIN APPROVAL FROM SUPERINTENDENT AND PROJECT LANDSCAPE ARCHITECT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- THIS LANDSCAPE DOCUMENTATION SET IS PRODUCED FOR DA PURPOSE ONLY. IT SHALL NOT BE USED SOLELY AS FOR TENDER OR FOR CONSTRUCTION DRAWINGS.

EXISTING LANDSCAPE AREA - 1:200@A3



PROPOSED LANDSCAPE AREA - 1:200@A3



LEGEND

	SITE BOUNDARY
	EXISTING CONTOUR REFER TO SURVEY
	PROPOSED CONTOUR
	EXISTING SPOT LEVEL
	PROPOSED LEVEL GENERAL
	PROPOSED TOP OF RETAINING WALL LEVEL
	PROPOSED BOTTOM OF RETAINING WALL LEVEL

HARDWORKS

	PROPOSED GARDEN EDGING REFER TO SPECIFICATION
	PROPOSED RETAINING WALL
	EXISTING RETAINING WALL; RETAIN AND MAKE GOOD
	PROPOSED FENCE TYPE 1 METAL FENCE
	PROPOSED STEPPING STONE
	PROPOSED CONCRETE SURFACE

SOFTWORKS

	PROPOSED SHRUB; DETAILS REFER TO PLANTING SCHEDULE
	TU; PROPOSED TURF; REFER TO SPECIFICATION AND LANDSCAPE DETAIL

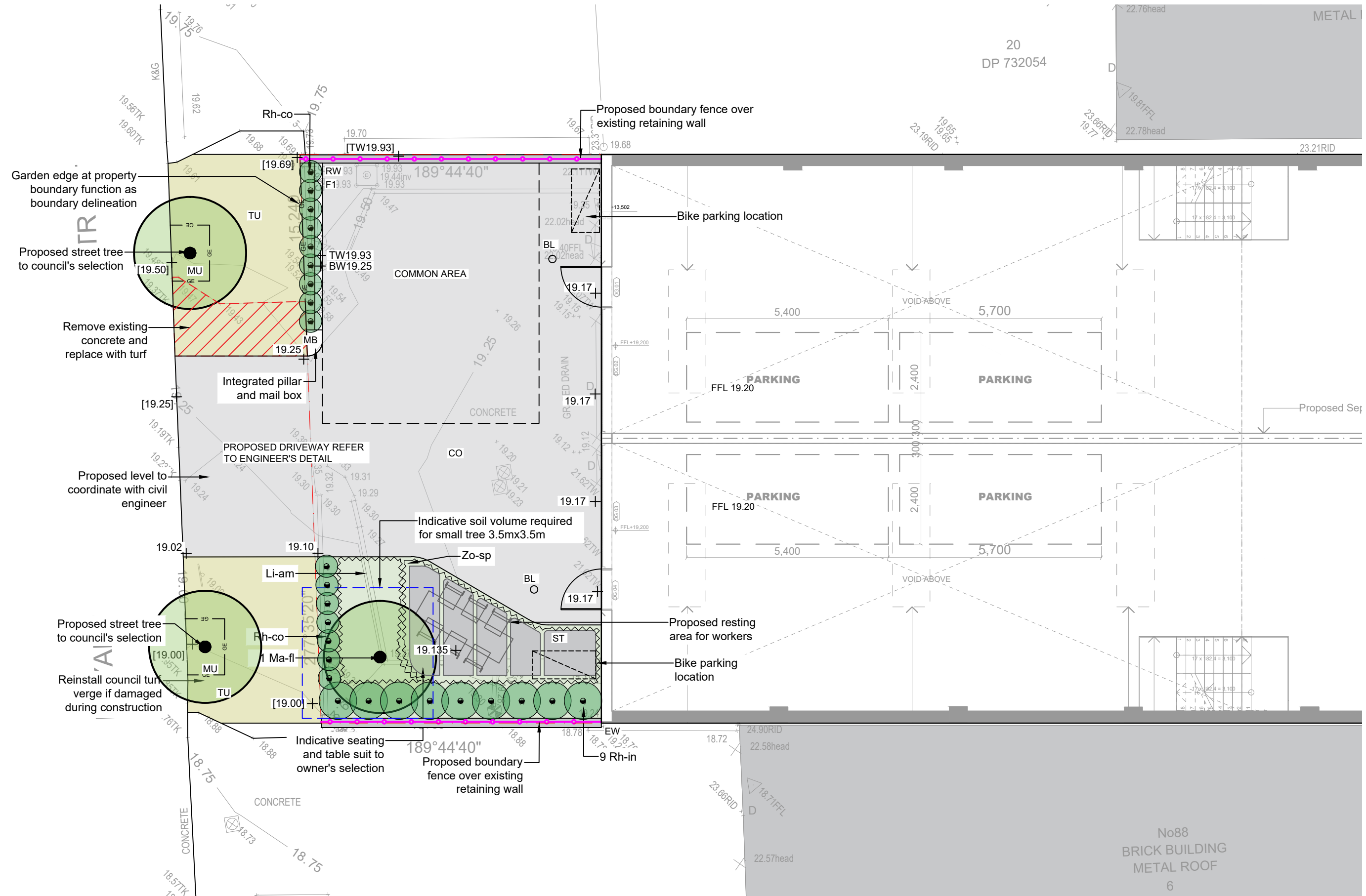
PLANTING SCHEDULE

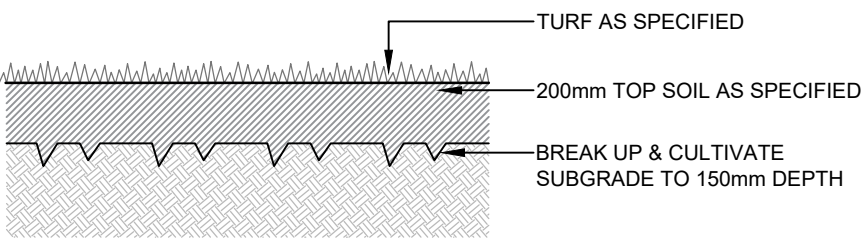
ID	BOTANICAL NAME	COMMON NAME	POT SIZE	MATURE HEIGHT	SPREAD	SPACING	NATIVE	QTY
TREES								
Ma-fl	<i>Malus floribunda</i>	Crab apple	45lt	5m	5m	As Shown	N	1
SHRUBS								
Rh-co	<i>Cosmic Pink™Raphiolepis indica 'RAPH02' PBR</i>	Indian Hawthorn Cosmic Pink	200mm	0.4-0.8m	0.4-0.8m	As Shown	Y	/
Rh-in	<i>Raphiolepis indica 'Oriental Pearl'</i>	Indian Hawthorn Oriental Pearl	200mm	1m	1m	As Shown	Y	/
GROUNDCOVER & GRASS								
Li-am	<i>Amethyst™ Liriope muscari</i>	Amethyst™ Liriope	75mm	0.4m	0.4m	6/sqm	Y	/
Zo-sp	<i>Zoysia spp. 'ZOY01'</i>	Lilly Pilly	tube	0.1-0.2m	1m	6/sqm	Y	/

DESIGN INTENT

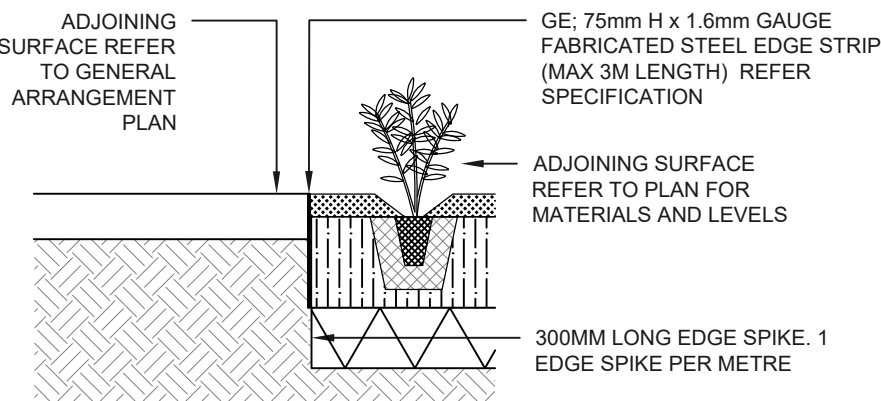
Boundary Fence - 1.2m tall



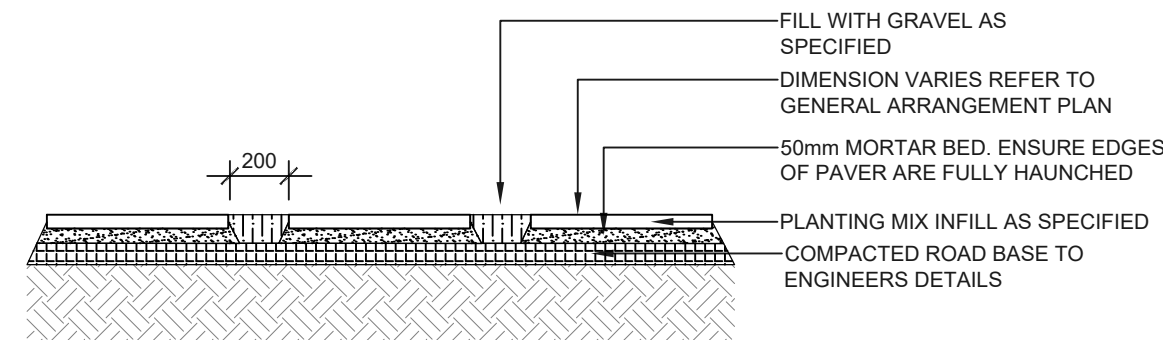




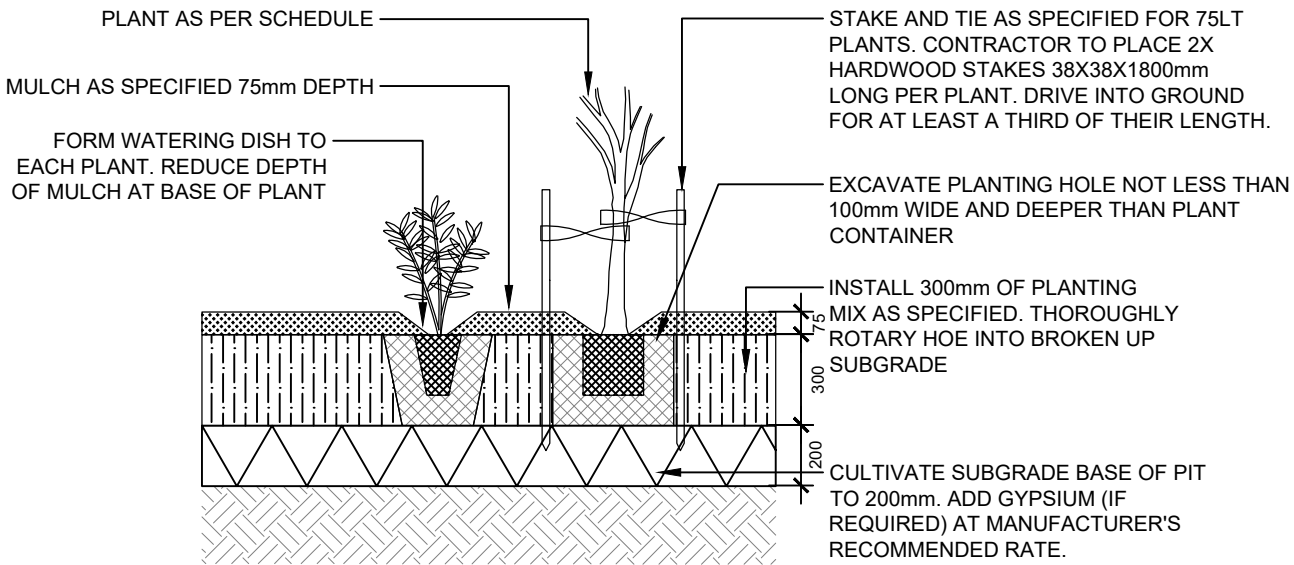
01 TURF
TYPICAL DETAIL 1:25



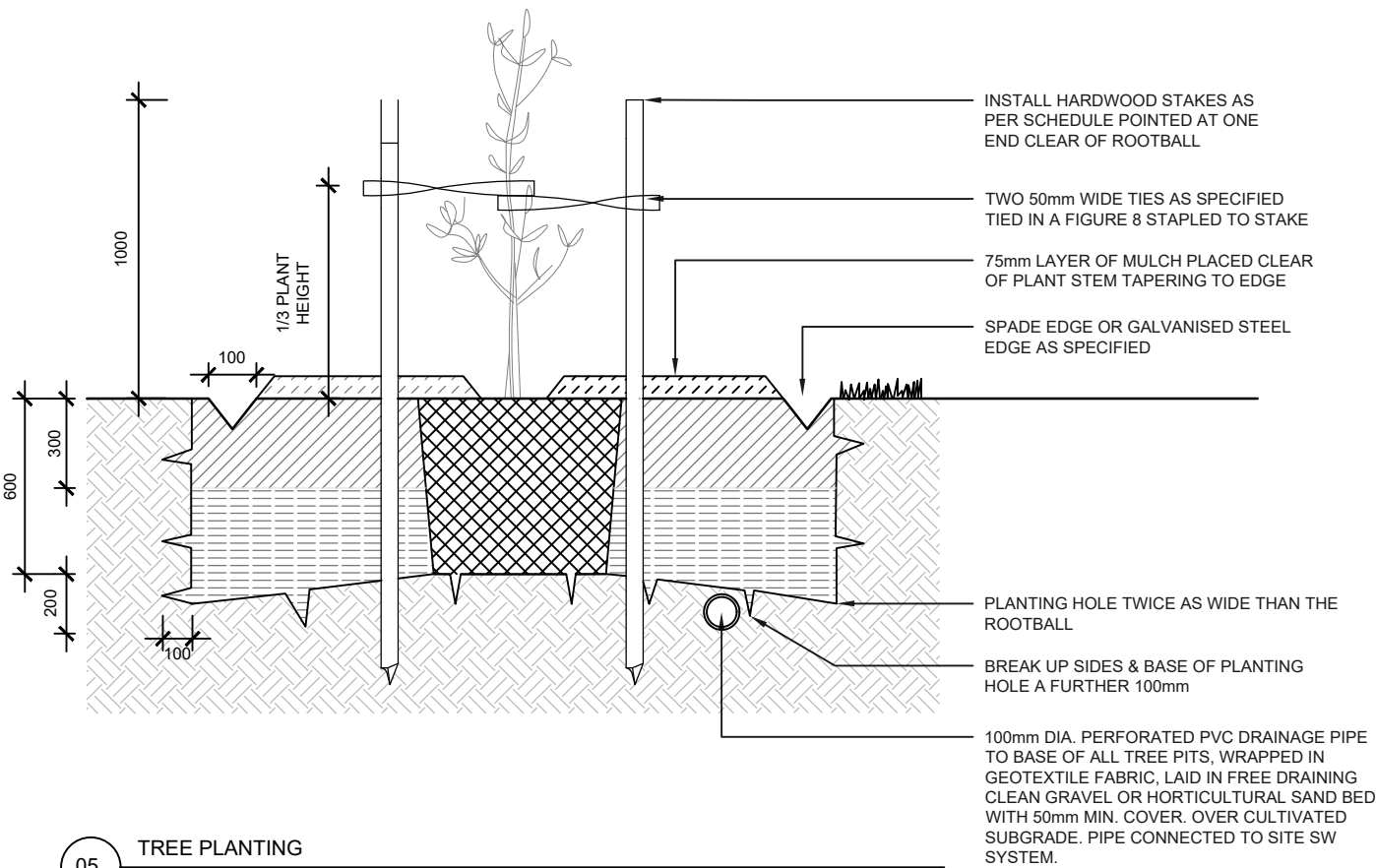
02 STEEL GARDEN EDGE
TYPICAL DETAIL 1:25



03 STEPPING STONE IN MULCH
TYPICAL DETAIL 1:25



04 MASS PLANTING
TYPICAL DETAIL 1:25



05 TREE PLANTING
TYPICAL DETAIL 1:25

SPECIFICATION NOTES

GENERAL NOTES

References

All plans and details included in the project documents shall be read in conjunction with this specification. All structural and civil works components of the landscape design shall be referenced to engineers' details and specifications. Read this specification in conjunction with the plant and materials schedules on the drawings. If in doubt about any detail or if conflicts are found in the documents, seek advice.

Workmanship and Materials

The whole of the landscape works shall be carried out by a competent, trained and qualified landscape contractor who is experienced in horticultural practices, landscape construction and planting techniques. The landscape contractor shall hold a current Building Contractors License and/or be a financial member of LNA Landscape Association NSW & ACT or equivalent organisations in other states.

HARDWORKS

Furniture, Handrails, Balustrades

Supply and install the scheduled items in accordance with the manufacturer's recommendations, as detailed and in the locations shown on Provide all footings and fixings required for the items to be stable and in accordance with applicable codes, BCA, and Australian standards.

Garden walls, fences, steps, and Edging

Construct garden walls, fences, steps, and edging as shown on plan, as detailed and of the material scheduled. Provide footings, step nosings, to comply with BCA, Australian Standards and applicable legislation. Refer to engineer's details for structural retaining walls, heavy duty slabs, concrete stairs, concrete strength, reinforcing and joint placement.

Continuous, Unit and Loose Pavement

Install the scheduled material pavement to the locations shown on plan. Ensure that all sub-grade / subsurface works are complete prior to commencing paving. Confer with the engineer to ensure the structural integrity of the sub-grade. Ensure that the base course under paved surfaces is a continuous plane offering a constant depth of bedding material not exceeding 50mm.

Samples

Samples to be provided for each type of landscape material for client's approval prior to ordering and installation. Confirm with superintendent for quantity of samples to be provided.

SOFTWARES

Soil Testing

Where site soil is to be retrieved from and stored for reuse on site, undertake at least two (2) soil tests, in locations as advised by the Project Manager. Provide results and recommendations regarding soil additives for the benefit of healthy plant growth and to adjust the soil components to achieve an appropriate planting medium for successful plant development.

Subsoil

Excavate and/or fill all garden beds to bring the top of subsoil to at least 300mm below finished design soil levels. Excavate all turf areas to bring the subsoil to at least 100mm below finished design levels. In all areas shape the subsoil to fall to subsoil drains where applicable. Do not excavate within the drip line of trees and shrubs to be retained. Cultivate or rip the subsoil to a further depth of 100mm before placing top soil. Remove stones of size exceeding 25mm, clods of earth exceeding 50mm, and weeds, rubbish or other deleterious material brought to the surface during cultivation. Do not disturb services or existing tree roots. If necessary cultivate these areas by During cultivation, thoroughly mix in materials required to be incorporated into the subsoil, as recommended in the soil testing results and to manufacturer's recommendations. Trim the surface to design levels again after cultivation.

Topsoil

Import topsoil for the garden and turf areas, unless the topsoil can be provided from material recovered from the site, as recommended in the soil testing results. Spread the topsoil on the prepared subsoil and grade evenly, compact lightly and uniformly in 150mm layers. Avoid differential subsidence and excess compaction and produce a finished topsoil surface which has the following characteristics:

- Finished to design levels, allowing for mulch or turf, which is to finish flush with adjoining hard surfaces such as paths and edges
- Smooth and free from inorganic matter, stones or clods of soil
- Graded to drain freely, without ponding, to catchment and/or sub-soil drains
- Graded evenly to adjoining surfaces
- Ready for planting

Non-Australian native garden beds to have soil installed consisting of 50% existing site topsoil and 50% new topsoil equal or equivalent to 'Organic Garden Mix' as supplied by Australian Native Landscapes. Australian native garden beds to have soil installed consisting of 50% existing site topsoil and 50% new topsoil equal or equivalent to 'Native Low 'P' Mix' as supplied by Australian Native Landscapes. Topsoil to be installed to depth of 300mm for tree and mass planting garden beds, 100mm of turf underlay should be used under turf areas.

Compost

Provide, in accordance with AS 4454, well rotted vegetative material or animal manure, free from harmful chemicals, inorganic matter, grass, weeds and the reproductive parts of unwanted plants.

Fertiliser

Provide proprietary fertilisers, delivered to the site in sealed containers marked to show manufacturer or vendor, weight, fertiliser type, N:P:K ratio, recommended uses, application rates and safety procedures. Apply appropriate fertiliser suited to the provenance of plants (indigenous or exotic) included in the design.

Plants

- Supply plants in accordance with the landscape design drawings and schedules, which have the following characteristics:
- Large healthy root systems, with no evidence of root curl, restriction or damage;
 - Vigorous, well established, free from disease and pests, of good form consistent with the species/variety;
 - Hardened off, not soft or forced, and suitable for planting in the natural climatic conditions prevailing at the site in full sun, partial shade or full shade conditions;
 - Grown in final containers for not less than twelve weeks;
 - Trees, unless required to be multi-stemmed, shall have a single leading shoot; and
 - Containers shall be free from weeds and of appropriate size in relation to the specified plant size.

Plant Installation

Following excavation of the planting hole, place and spread 15gms of wetting agent pre-mixed with one (1) litre of water. Place the plant correctly orientated to north or for best presentation. Backfill the planting holes with specified topsoil mixture. Lightly tamp and water to eliminate air pockets. Ensure that the backfill soil is not placed over the top of the root ball and that the root ball is not higher than the soil in which it is planted. Apply fertiliser, as specified around the plants in the soil at the time of planting.

Embankment Stabilisation

Where necessary and shown on the drawings prevent soil erosion or soil movement by stabilising embankments as follows. As a minimum this should be on slopes steeper than or equal to 1:3 gradient. Stabilise embankments using biodegradable fibre reinforced heavy weight jute fabric. Lay fabric from top to bottom of slope. Install in accordance with manufacturer's specification, including 300 x 300mm anchor trench at top and bottom of slope, backfilled with soil over the fabric and compacted into the trenches. Using U-shaped galvanised steel pegs at 1000 mm centres generally and 250mm centres at edge overlaps, secure the fabric to the prepared soil surface. Plant through the fabric after it is installed.

Root Barrier

Supply and install root control barriers to all new tree plantings adjacent to walls, paths, kerbs and all service trenches, where their proximity poses a threat to the stability of the built infrastructure. Install in accordance with manufacturer's recommendations.

Mulch

Unless noted otherwise, mulch shall be approved proprietary recycled wood fibre or pine bark material. Place mulch in all garden beds to a depth of 75mm after all specified plants are installed. Keep mulch clear of all plant stems and rake to an even plane, flush with the surrounding surfaces evenly graded between design surface levels. Over fill to allow mulch to settle to the specified depth. Mulching to be:

Pine Bark Mini Nuggets by ANL (or approved equivalent)
https://anlscape.com.au/Products/garden-mulch/pine-bark-mini-nuggets

Stakes and ties
Stakes shall be durable hardwood, straight, free of knots and twists, pointed at one end, in the following quantities and sizes for each of the various plant pot sizes:

- Plants (>25 lt): 1 off 38 x 38 x 1200mm;
- Semi-advanced plants (>75 lt): 2 off 50x50x 1800mm;
- Advanced (>100 lt): 3 off 50 x 50 x 2400mm.

Turfing

Turf shall be delivered to site as 25mm minimum thick cut rolls. Obtain turf from a specialist grower of cultivated turf. Turf shall have an even thickness, free from weeds and other foreign matter. Deliver turf to the site within 24 hours of being cut and lay it within 24 hours of delivery. Prevent it from drying out between cutting and laying. Lay the turf in the following manner:

- In stretcher pattern, joints staggered and close butted;
- Parallel long sides of level areas, with contours on slopes; and
- To finish flush, after lightly tamping, with adjacent finished surfaces and design levels.

Turf to be:
'Sapphire' Soft Leaf Buffalo - by All About Turf (or approved similar)
https://allaboutturf.com.au/turf-variety/sapphire-buffalo-turf/

IRRIGATION

All proposed landscape areas shall be irrigated.

The irrigation system shall be an automatic permanent system, with an irrigation controller self operated via a soil moisture sensor. The system shall be calibrated to deliver the optimum rate and volume of water appropriate to the type of plants in the design. The system shall be adjustable and fully serviceable. The layout of the entire irrigation system shall focus on delivering the required amount of water to maintain healthy and vigorous growth. The irrigation system shall be such that, component theft, vandalism, over-spray and wetting of paths shall be reduced to a minimum or completely eliminated by the use of drip, pop-up sprinklers and judiciously placed fixed spray emitters. Generally do not use fine mist emitters that provide a drifting mist that may wet paths and the buildings unless specifically required by the design.

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.

TREE PROTECTION NOTES

- The tree protection zone (TPZ) is a radial distance measured from the centre of the trunk of the tree and calculated in accordance with AS 4970-2009 (Protection of Trees on Development Sites)
- The Structural Root Zone (SRZ) provides the bulk of mechanical support and anchorage for a tree. This is also a radial distance measured from the centre of the trunk and calculated in accordance with AS 4970-2009 (Protection of trees on development sites).
- Incursions within the SRZ are not recommended as they are likely to result in the severance of woody roots which may compromise the stability of the tree or lead to its decline and demise.
- Tree protection shall be in accordance with AS 4970-2009 (Protection of trees on development sites.)
- Tree Protection Fence - All trees within the site to be retained shall be protected prior to and during construction from all activities that may result in detrimental impact by erecting a suitable protective fence beneath the canopy to the full extent of the tree protection zone.
- As a minimum, the fence should consist of temporary chain wire panels of 1.8m in height, supported by steel stakes as required and fastened together and supported to prevent sideways movement using corner braces where required. The fence shall be erected prior to the commencement of any work on-site and shall be maintained in good condition for the duration of construction. Where tree protection zones merge together a single fence encompassing the area is deemed to be adequate. Existing site boundary fences may form part of the enclosure.
- Tree Protection Signs - Signs shall be installed on the tree protection fence to prevent unauthorised movement of plant and equipment or entry to the tree protection zone. The signs shall be securely attached to the fence using cable ties or equivalent. Signs shall be placed at minimum 10 metre intervals. The wording and layout of the sign shall comply with AS 4970-2009
- Trunk Protection - Where provision of tree protection fencing is in impractical due to its proximity to the proposed building footprint, trunk protection shall be erected around nominated trees to avoid accidental damage. The trunk protection shall consist of a layer of carpet underfelt (or similar) wrapped around the trunk, followed by 1.8m lengths of softwood timbers (90x45mm in section) aligned vertically with 2mm galvanised wire or galvanised hoop strap. Recycled timber (such as demolition waste) may be suitable for this purpose, subject to the approval of the project arborist. The timber shall be wrapped around the trunk (over the carpet underfelt), but not fixed to the tree to avoid mechanical injury or damage to the trunk. Trunk protection should be installed prior to any site works and maintained in good condition for the duration of the construction period. Carpet underfelt (alone) is sufficient for trees with a trunk diameter of less than 200mm.
- Demolition and excavation within the tree protection zones of trees to be retained shall be undertaken under the supervision of the site arborist.
- Tree Damage - Care shall be taken when operating cranes, drilling rigs and similar equipment near trees to avoid damage to tree canopies (foliage and branches). Under no circumstances shall branches be torn-off by construction equipment. Where there is potential conflict between tree canopy and construction activities, the advice of the site arborist must be sought.
- In the event of any tree becoming damaged for any reason during the construction period, a consulting arborist (Australian Qualification Framework Level 5) shall be engaged to inspect and provide advice on any remedial action to minimise any adverse impact. Such remedial action shall be implemented as soon as practicable and certified by the arborist.

LANDSCAPE MAINTENANCE

The Landscape Contractor shall rectify defects during installation and that become apparent in the works under normal use for the duration of the contract Defects Liability Period. Unless contracted otherwise, the Landscape Contractor shall maintain the contract areas by the implementation of industry accepted horticultural practices for 52 weeks from Practical Completion of the works. The landscape maintenance works shall include, but not be limited to:

- Replacing failed plants
- Pruning
- Insect and pest control
- Fertilising
- Maintaining and removing stakes and ties
- Maintaining mulch
- Mowing and top dressing
- Irrigation and watering
- Erosion control
- Weed and rubbish removal

Maintenance Log Book

Implement and keep a maintenance log book recording when and what maintenance work has been undertaken and what materials, actions and decisions have been used, implemented and concluded to keep the landscape always looking its best. Enter data daily and review information every 2 weeks. Observe trends and develop a maintenance regime around seasonal and observed event occurrences.

Maintenance Activities

During the defects maintenance period schedule the following activities to occur on a timely basis.

- Plant replacement** - Replace plants that have failed to mature, die or are damaged. Replacement plants shall be in a similar size and quality and identical species or variety to the plant that has failed. Replacement of plants shall be at the cost of the landscape contractor unless advised otherwise. If the cause of the failure is due to a controllable situation then correct the situation prior to replacing plants. Observe and replace failed plants within 2 weeks of observation.
- Pruning** - Prune dead wood, broken limbs, dead or infected foliage and as needed to develop strong, healthy plants to achieve the shape and form expected of the plant type. Observe daily and prune plants on a needs basis.
- Insect, disease and pest control** - Avoid spraying:
 - if ever possible
 - in wet weather or if wet weather is imminent
 - if target plants are still wet after rain
 - in windy weather
 - if non-target species are too close

Immediately report to the Project Manager any evidence of intensive weed infestation, insect attack or disease amongst plant material. Submit all proposals to apply chemicals and obtain approval before starting this work. When approved, spray with herbicide, insecticide, fungicide as appropriate in accordance with the manufacturers' recommendations. Observe daily and act as necessary to control any infestation or disease. Record in the logbook all relevant details of spraying activities including:

- Product brand / manufacturer's name
 - chemical / product name
 - chemical contents
 - application quantity and rate
 - date of application and location
 - results of application, and
 - use approval authority
- Fertilising** - Fertilise gardens with a proprietary slow release fertiliser applied in accordance with the manufacturer's directions and recommendations. Apply 6-12 monthly. Record in the logbook all relevant details of fertilising including:
 - Product brand / manufacturer's name
 - Fertiliser / product name
 - Application quantity and rate, and
 - Date of application and location

- Stakes and ties** - Adjust and replace as required to ensure plants remain correctly staked. Remove those not required at the end of the planting establishment period (Defects Liability Period). Inspect and act at least every 2 weeks.

- Maintaining mulch** - Maintain the surface in a clean, tidy and weed free condition and reinstate the mulch as necessary to ensure correct depth as specified. Observe weekly and replenish mulch as required.

- Mowing and top dressing** - Mow the turf to maintain a grass height of between 30-50mm. Do not remove more than one third of the grass height at any one time. Remove grass clippings from the site after each Top dress to a maximum of 10mm to fill depressions and hollows in the surface. Mow weekly/fortnightly in warmer months. Mow monthly or as required in cooler months. Top dress at approximately 6 monthly intervals.

- Irrigation and watering** - Maintain the irrigation system to sure that each individual plant receives the required amount of water to maintain healthy and vigorous growth. Adjust and calibrate as required. Provide additional watering, if necessary but inspect irrigation weekly and make repairs as necessary.

- Erosion control** - Where necessary, maintain the erosion control fabric in a tidy and weed free condition and reinstate as necessary to ensure control measures are effective where deemed necessary. Inspect every 2 weeks and act to repair any damage as soon as possible.

- Weeding and rubbish removal** - During the plant establishment period remove by hand, rubbish and weed growth that may occur or re-occur throughout all planted, mulched and paved areas. The contractor shall target weeds that are capable of producing a major infestation of unwanted plants by seed distribution. Whenever possible, time weed removal to precede flowering and seed set. Constant observation and removal of weeds is essential.

YUE RAO LANDSCAPE ARCHITECT

Registration number: 14978

FOR DEVELOPMENT APPLICATION ONLY

t: +61 451613982 e: raoyue@outlook.com

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Figured dimensions shall be taken in preference to scaling.

The contractor shall check all dimensions on site before commencing work.

ISSUE	COMMENTS	DATE
D1	DRAFT FOR REVIEW	14.08.2024
A	FOR DEVELOPMENT APPLICATION	06.09.2024

N/A

A3

N

86 Bryant Street, Padstow, NSW

CLIENT: Xiang Lin He ARCHITECT: BJ ARCHITECTS

DRAWN: YR CHECKED: YR DATE CREATED: 08. 2024

SPECIFICATION

LA-401

ISSUE
A