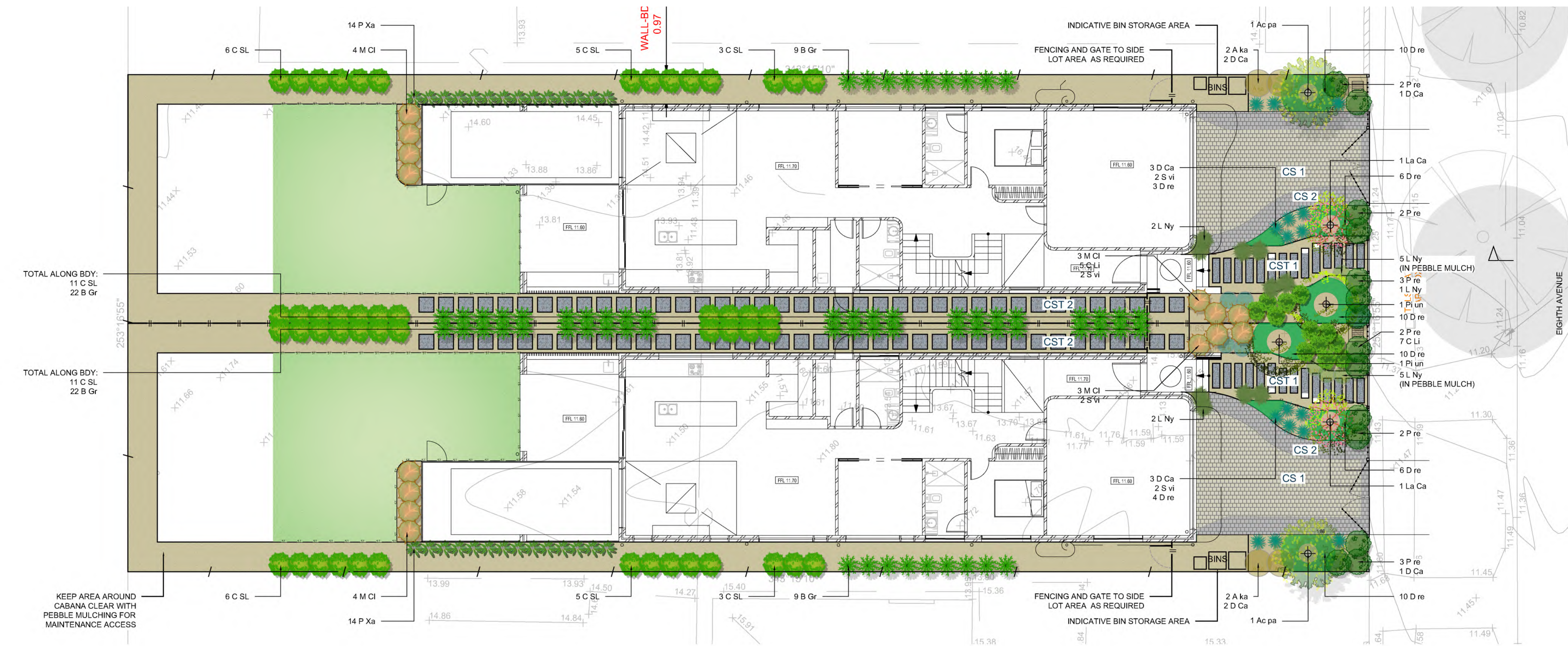


85 Eighth Avenue Campsie, NSW

Landscape Plan for Development Application



Landscape Plan



- NOTES
- DRAWINGS MUST BE READ IN CONJUNCTION WITH SURVEY, ARCHITECT'S DRAWINGS, STRUCTURAL ENGINEER'S DRAWINGS, STORMWATER ENGINEER'S DRAWINGS, ARBORIST'S REPORT, AND CLIENT'S SWIMMING POOL COMPLIANCE REPORT.
 - ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH SPECIFICATION AND TO THE SATISFACTION OF WANG'S LANDSCAPE REPRESENTATIVE.
 - CONTRACTOR TO OBTAIN UNDERGROUND SERVICES INFORMATION AND SATISFY THEMSELVES OF THE LOCATION OF ALL SERVICES PRIOR TO ANY EXCAVATION.
 - PROTECT EXISTING/ADJACENT ITEMS AT ALL TIMES. WHERE DAMAGE OCCURS, REPAIR / REPLACEMENT MUST BE DONE AT CONTRACTOR'S OWN EXPENSE.
 - DO NOT SCALE FROM DRAWINGS. DETAIL DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.
 - SEDIMENTATION AND EROSION CONTROL DEVICES SHALL BE IMPLEMENTED PRIOR TO OR IN CONJUNCTION WITH THE FIRST PHASE OF EARTHWORKS AND SHALL BE REMOVED ONLY WHEN THE AREAS ABOVE IT HAVE BEEN STABILISED. EACH SEDIMENTATION AND EROSION CONTROL DEVICE SHALL BE INSPECTED PERIODICALLY & AFTER EACH STORM FOR STRUCTURAL DAMAGE OR CLOGGING BY SILT AND OTHER DEBRIS AND PROMPTLY DE-SILTED, REPAIRED OR REPLACED IF REQUIRED.
 - SOIL EROSION CONTROL MEASURE SHALL BE MAINTAINED IN ACCORDANCE WITH THE GUIDELINES OF THE NSW DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT AND NSW EPA AS NECESSARY TO PREVENT SEDIMENT RUN OFF FROM THE SITE RESULTING FROM WORKS.
 - ALL AREAS NOT SUBJECT TO CONSTRUCTION WORKS SHALL BE RETAINED FREE FROM DISTURBANCE OR DAMAGE FOR THE DURATION OF WORKS. TOPSOIL STOCKPILES SHALL BE LOCATED OUTSIDE HAZARD/PROTECTION AREAS SUCH AS DRAINAGE DEPRESSIONS OR TREE PROTECTION ZONES.
 - COMPRESSIVE STRENGTH OF ALL CONCRETE SHALL BE 25MPa AT 28 DAYS UNLESS NOTED OTHERWISE

LEGEND

GENERAL

PROPERTY BOUNDARY

ARCHITECTURAL

INDICATIVE EXTENT OF OVERHANG

FENCING & BALUSTRADE

EXISTING SIDELOT FENCING TO BE RETAINED AND ENHANCED AS REQUIRED

PROPOSED FRONT FENCING AND GATES FOR FOOT TRAFFIC AND VEHICLE ACCESS

PRIVACY FENCING IN BETWEEN THE TWO FACING LOTS

PRIVACY FENCING AND GATE BETWEEN RESIDENCE FRONTAGE AND SIDE BOUDARY

EDGING

GALVANISED STEEL GARDEN EDGE

SURFACE FINISHES

CS 1 COBBLESTONE PAVING TO DRIVEWAY LIGHTER & WARMER COLOUR

CS 2 COBBLESTONE PAVING TO DRIVEWAY DARKER COLOUR

CST 1 PRECAST CONCRETE STEPPING STONES (VARIES IN TWO SIZES) IN GRAVEL / PEBBLE MULCH

CST 2 CONCRETE SQUARE STEPPING STONES IN GRAVEL / PEBBLE MULCH

FINE GRAVEL / PEBBLE MULCH FOR ACCESS AND PLANTING

DECKING AND TILING TO ALFRESCO, POOL AREA AND AND COURTYARD (BY OTHERS)

SOFTSCAPE

TURF

ORGANIC MULCHED GARDEN BED - PROPOSED NEW & INFILL PLANTING

PROPOSED TREE LOCATIONS

*EXISTING TREE (RETAIN)

NOTE:
*REFER TO ARBORIST FOR DETAIL TREE SPEC
PLANTING OF Bambusa SPECIES MUST BE ENCLOSED BY ROOT BARRIER

PLANT SCHEDULE

	CODE	BOTANICAL NAME	COMMON NAME	H (m)	W (m)	SPACING	POT SIZE	QTY	
TREES									
	Ac pa(r)	Acacia parramatensis	Sydney Green Wattle	Up to 15	5	As shown	45L	2	Native
	La Ca	Lagerstroemia indica fauriei 'Sioux'	Hot Pink Crepe Myrtle	4	2-4	As shown	45L	2	Exotic
	Pi un	Pittosporum undulatum	Sweet Pittosporum	Up to 13	4	As shown	45L	2	Native
SHRUBS									
	A ka	Abelia x grandiflora kaleidoscope	Glossy Abelia	0.7	1	As shown	200mm	4	Exotic
	B Gr	Bambusa textilis 'Gracilis'	Slender Weaver Bamboo	4-6	2	As shown	200mm	62	Exotic
	C Li	Callistemon 'Little John'	Bottlebrush	0.7	0.7	As shown	200mm	12	Native
	C SL	Callistemon viminalis 'CV01' PBR SLIM™	Slim Callistemon	3	1-1.5	As shown	200mm	50	Native
	M Ci	Melaleuca 'Claret Tops'	Honey Myrtle	1.2	1.2	As shown	200mm	14	Native
	P Xa	Philodendron 'Xanadu'	Xanadu	0.6	0.6	As shown	200mm	28	Exotic
	P re	Pittosporum revolutum	Rough-fruited Pittosporum	2-4	1-3	As shown	200mm	14	Native
TOS SOCKS, GROUND COVERS AND CLIMBERS									
	D Ca	Dianella caerulea 'Cassa Blue'	Blue Flax Lily	0.3-0.6	0.6	As shown	150mm	12	Native
	D re	Dichondra repens	Kidney Weed	0.1	Prostrate	4/m²	150mm	60	Native
	L Ny	Lomandra longifolia 'Nyalla'	Nyalla Mat Rush	0.6-1	0.6-1	As shown	150mm	14	Native
	S vi	Senecio vitalis	Narrow-leaf Chalksticks	0.6	1	As shown	200mm	8	Exotic

WARNING:

EXISTING SERVICES HAVE BEEN PLOTTED FROM RECORDS SUPPLIED BY CLIENT. LOCATIONS FROM THESE RECORDS ARE ACCURATE TO WITHIN THE STATED TOLERANCE. A SERVICE CHECK CONDUCTED BY THE CONTRACTOR IS RECOMMENDED BEFORE ANY CONSTRUCTION WORKS COMMENCE ON-SITE. EXTREME CAUTION SHOULD BE TAKEN WHEN EXCAVATING.

Material Palette

Surface Materials



Cobblestone driveway (warmer tone)



Cobblestone driveway (darker tone)



Concrete stepping stones (varies in sizes) in gravel / pebble mulch



Concrete stepping stones in gravel / pebble mulch to side lot area



Steel edging

Front Fencing



Blade fencing and gate

Planting Palette

TREES



Acacia parramattensis
Sydney Green Wattle



Lagerstroemia indica fauriei 'Sioux'
Hot Pink Crepe Myrtle



Pittosporum undulatum
Sweet Pittosporum

SHRUBS



Abelia x grandiflora kaleidoscope
Glossy Abelia



Bambusa textilis 'Gracilis'
Slender Weaver Bamboo



Callistemon 'Little John'
Bottlebrush



Callistemon 'CV01' PBR SLIM™
Slim Callistemon



Melaleuca 'Claret Tops'
Honey Myrtle



Philodendron 'Xanadu'
Xanadu



Pittosporum revolutum
Rough-fruited Pittosporum

TUSSOCKS, GROUNDCOVERS AND CLIMBERS



Dianella caerulea 'Cassa Blue'
Blue Flax Lily



Dichondra repens
Kidney Weed



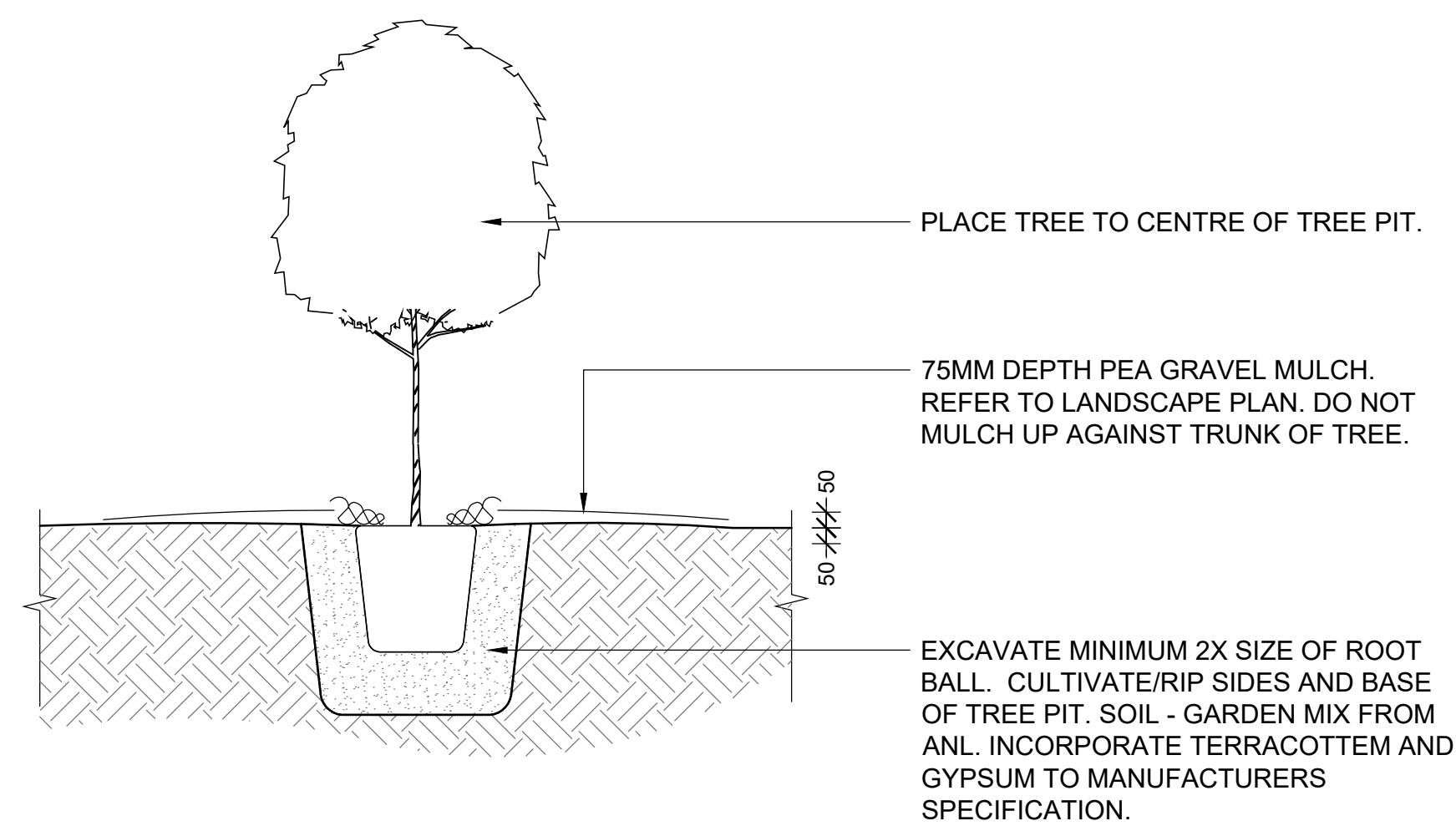
Lomandra longifolia 'Nyalla'
Nyalla Mat Rush



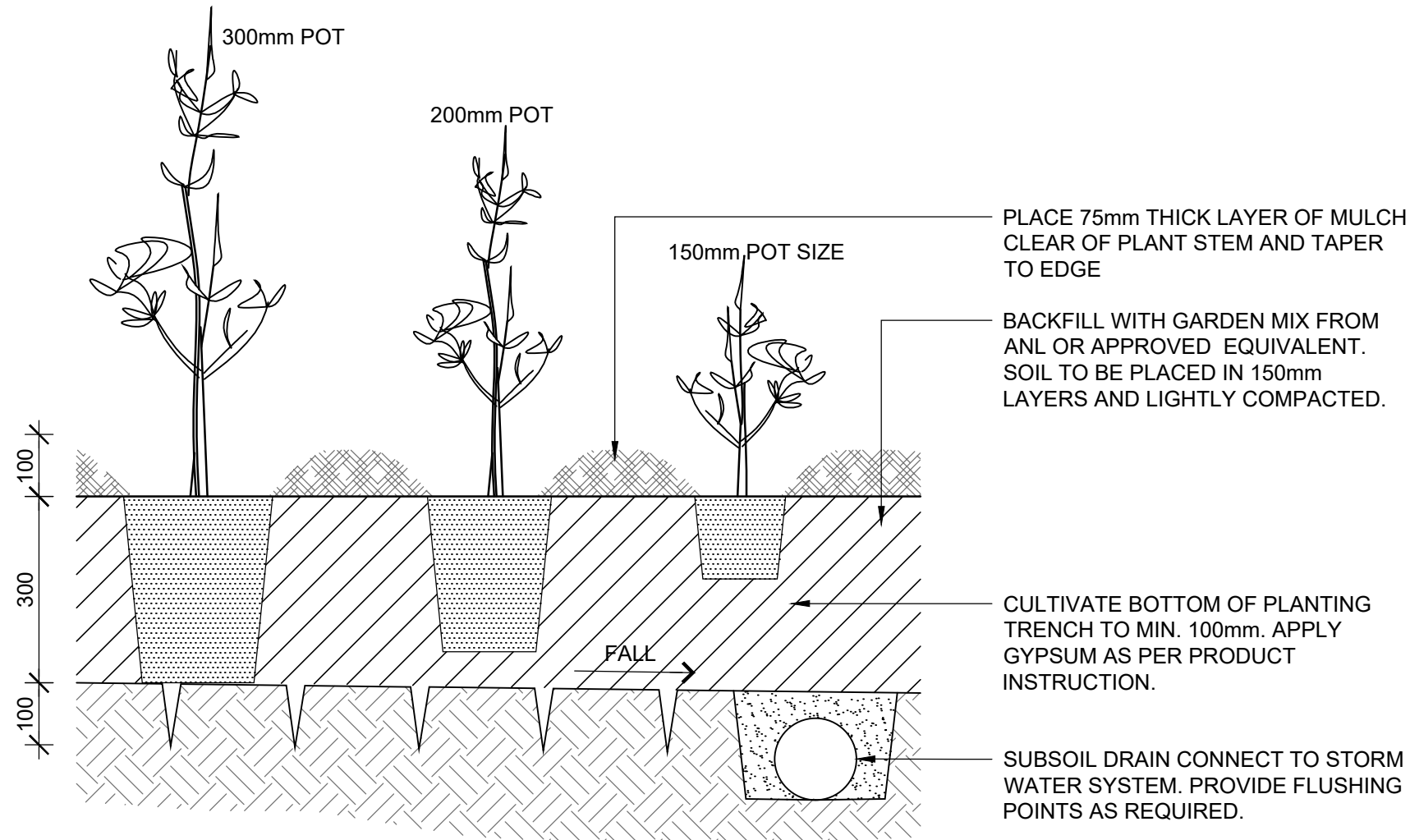
Senecio vitalis
Narrow-leaf Chalksticks

Landscape Typical Details and Maintenance Schedule

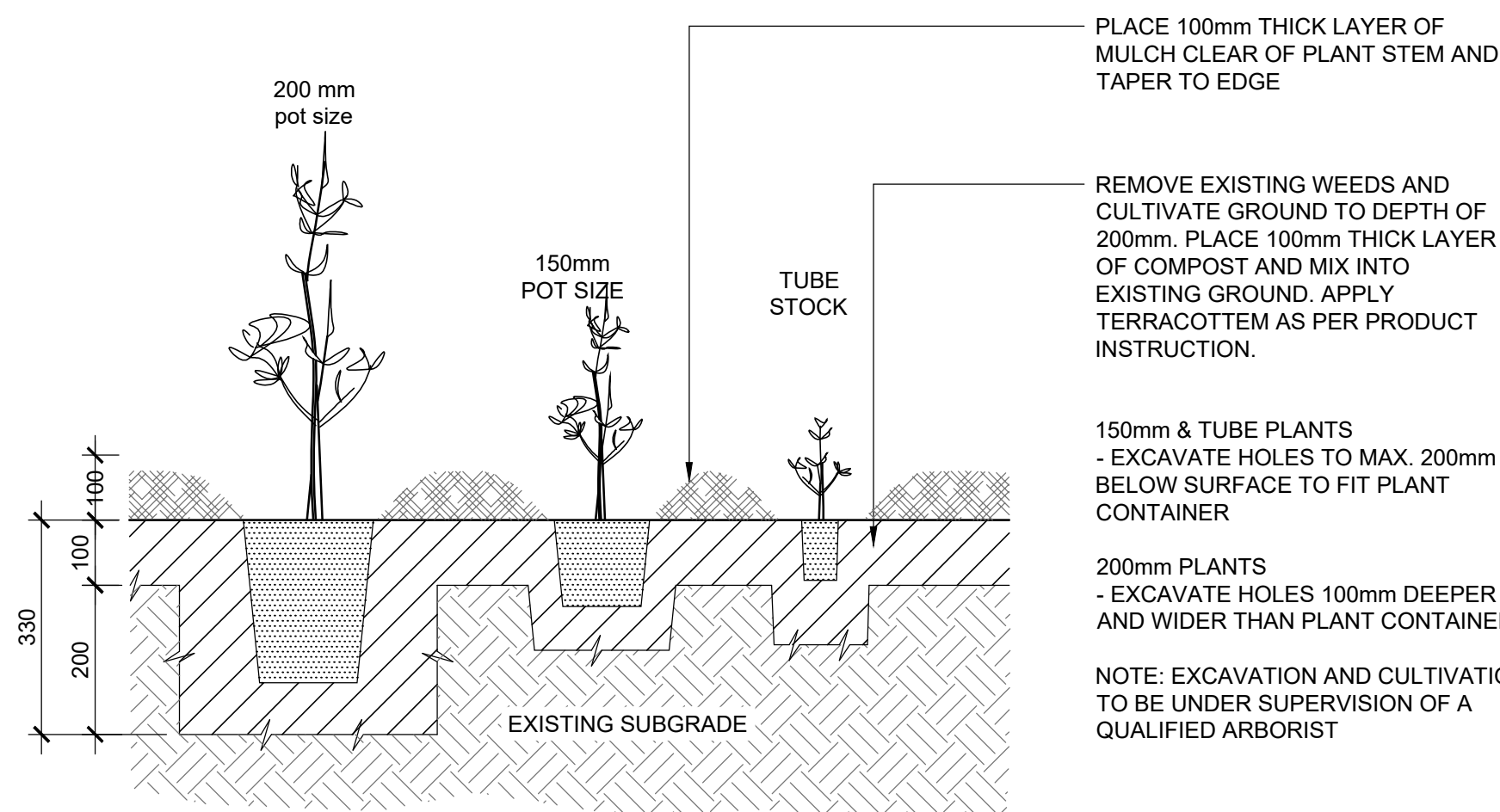
Typical Details



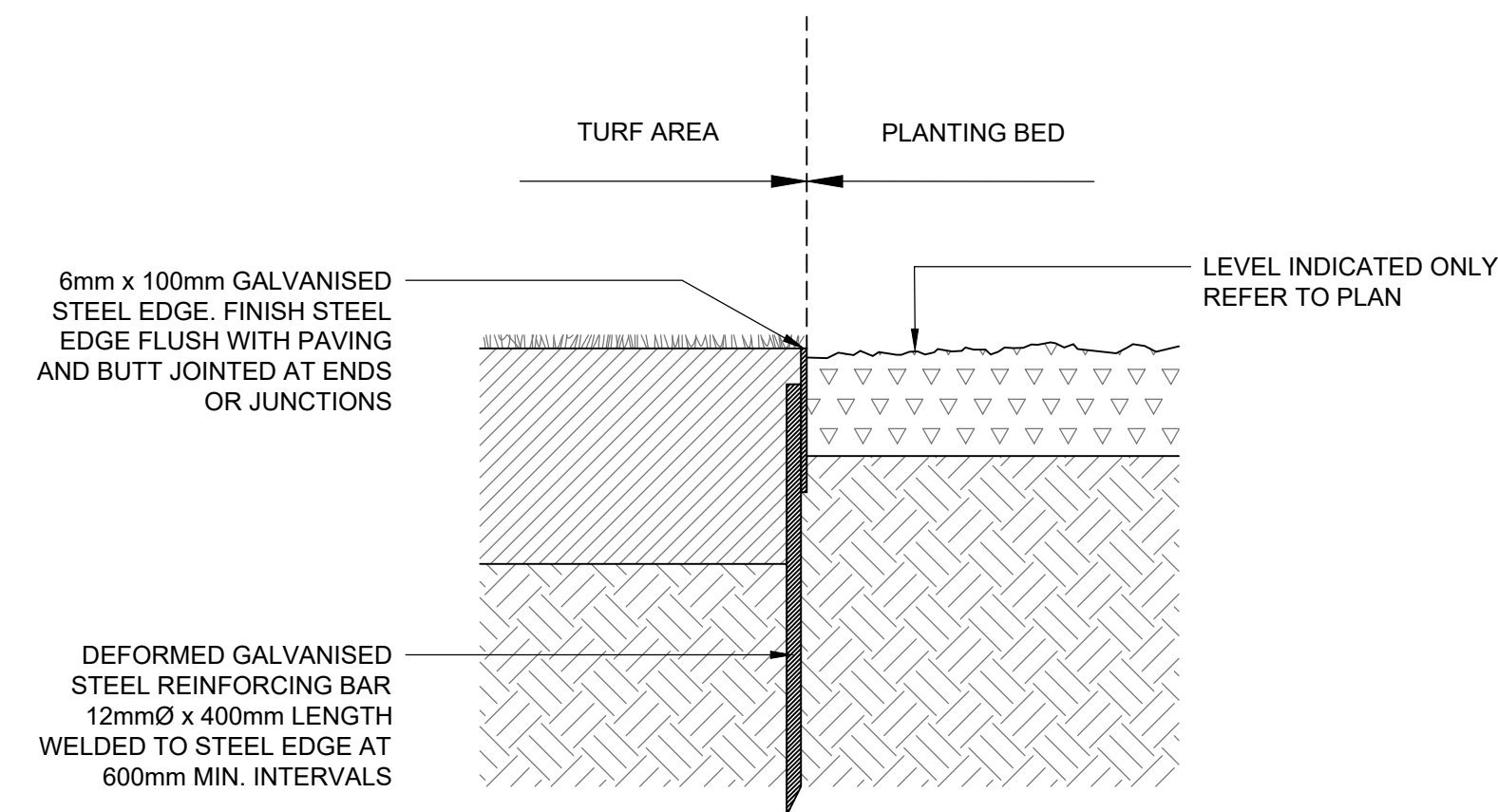
PL 1.0 TREE PLANTING 45L TO 100L TYPICAL
1:20 @ A1



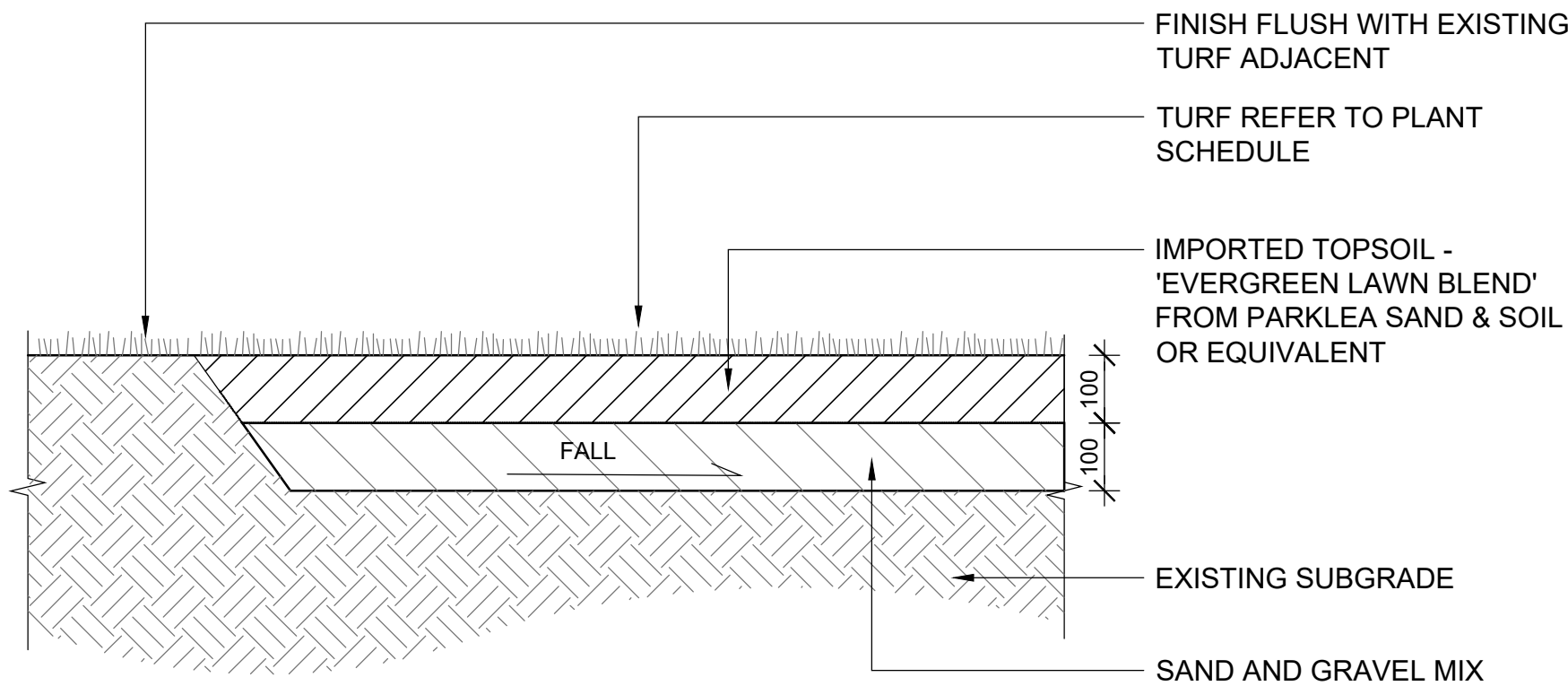
PL 2.0 MASS PLANTING TYPICAL
1:10 @ A1



PL 2.1 MASS PLANTING IN TREE PROTECTION AREA TYPICAL
1:10 @ A1



SE 1.0 STEEL EDGE
1:5 @ A1



PL 3.0 TURF TYPICAL
1:10 @ A1

Maintenance Schedule

TASK DESCRIPTION	0-9 MONTH FREQUENCY	9-12 MONTH FREQUENCY
TREES		
Visual inspection of all trees	Fortnightly in Summer / Monthly in Winter	Monthly in Summer / Once in Winter
Manually inspect water levels to trees	Fortnightly in Summer / Monthly in Winter	Monthly in Summer / Once in Winter
Inspect damage to trees	Fortnightly in Summer / Monthly in Winter	Monthly in Summer / Once in Winter
Replace any taping to trees	Fortnightly in Summer / Monthly in Winter	Monthly in Summer / Once in Winter
Prune dead or damaged branches	Fortnightly in Summer / Monthly in Winter	Monthly in Summer / Once in Winter
Check for pests & diseases	Fortnightly	Monthly
Replace failed or damaged trees	Fortnightly / As required	Monthly / As required
Spray in accordance with manufacturers recommendations	As required	As required
Adjust and / or replace stakes & ties where necessary	As required	As required
Monitor and apply fertiliser to tree planting area	6 month intervals - Autumn / Spring	Yearly
Watering	Weekly in summer / Monthly in Winter	Monthly
TURF		
Mow all turf areas to maintain height between 30-40mm	Weekly in Summer / Monthly in Winter	Fortnightly in Summer / 2-monthly in Winter
Trim edges of all turf areas	Weekly in Summer / Monthly in Winter	Fortnightly in Summer / 2-monthly in Winter
Remove clippings from site	Weekly in Summer / Monthly in Winter	Fortnightly in Summer / 2-monthly in Winter
Check for pests & diseases	Fortnightly	Monthly
Spray in accordance with manufacturers recommendations	As required	As required
Monitor and apply fertiliser to turf areas	6 month intervals - Autumn / Spring	Yearly
Watering	Weekly in Summer / Monthly in Winter	Monthly in Summer / Once in Winter
PLANTS		
Check for pests & diseases	Fortnightly	Monthly
Spray in accordance with manufacturers recommendations	Fortnightly	Monthly
Prune damaged or dead branches	Fortnightly	Monthly
Remove weed growth in plant areas	Fortnightly	Monthly
Replace failed or damaged plants	Fortnightly / As required	Monthly / As required
Adjust and / or replace stakes & ties where necessary	Fortnightly / As required	Monthly / As required
Watering	Fortnightly in Summer / Monthly in Winter	Monthly

Drawing Number

L5

Issue

Date

Description

Draft	15/3/2026	Draft issue for DA
A	12/7/2026	Issue for DA

Client

Mr Terry Jiang

Project

85 Eighth Avenue Campsie, NSW
Landscape Plan for Development Application

Landscape Architect



GEORGE WANG

Email: george@ripplelab.com.au
Phone: 0450 848 686

Scale

Landscape Specification Notes

LANDSCAPE WORKS SPECIFICATION NOTES: 1.0 PRELIMINARIES

1.1 SCOPE OF WORK

The works under this contract shall include the provision of all labour, supervision, tools, materials, supplies, equipment, plant, transportation and services required to complete the works.
The project location and type is identified in the title block. The project works may include, but is not limited to the construction fence; pathway; decking; pergola; walls; furniture installation; drainage works; earthworks; trenching & conduits; softworks; and planting. Refer to drawing package, including details and specification notes.

1.2 SETTING OUT OF THE WORK

Qualified surveyor should be appointed to set out the works. It is the Contractor's responsibility for ensuring final setout is correct and in accordance with all contract requirements. Any discrepancy, ambiguity, or error within the survey or documents identified by the Contractor shall be referred in writing to client prior to construction commencement. The Contractor shall supply a certificate stating that the setout conforms to the Drawings.

1.3 SERVICES

The Contractor is to establish the position of all/any service lines. Any associated service lids, vents and hydrants shall be exposed and not covered by any landscape finishes. The Contractor is to proceed cautiously with the excavation to avoid all service lines. Do not excavate by machine within 0.5 metres of existing underground services.
Any damage shall be notified to client immediately and rectified at the Contractor's expense.

1.4 ENVIRONMENTAL PROTECTION

The Contractor is to keep streets and pathways adjoining the works clean for the duration of the contract. All of these works are to conform to any relevant Australian Standards and the Protection of the Environment Operations Act 1997 and Protection of the Environment Operations (Waste) Regulation 2005.
- Remove all rubbish and debris arising from the works daily. Do not stockpile rubbish and debris on site. Site to be kept clean and tidy at all times. Items scheduled for disposal off site shall be deposited at an EPA approved tipping site. A copy of the dockets shall be submitted to client for approval.
- Plan and carry out the permanent works so as to avoid erosion, contamination and sedimentation of the site, surrounding areas and drainage systems.
- Discharges from the site must meet EPA requirements. Obtain all necessary EPA pollution control licenses and install all pollution, erosion, contamination and sedimentation control measures prior to commencement of works.
- Ensure that erosion, contamination and sedimentation measures are in place prior to commencement of work. Submit documents for approval outlining these measures if required.
- It is the responsibility of the Contractor to regularly maintain all sediment and erosion control devices and remove sediment from such devices before 50% of the capacity is used. All accumulated sediment shall be removed as instructed by client. The Contractor shall continue maintenance of the devices until such time when the disturbed areas have been rehabilitated to a condition satisfactory to client.

1.6 WORK HEALTH & SAFETY

The Contractor is to familiarise themselves with the NSW Work Health and Safety Act 2011 and the NSW Work Health and Safety Regulation 2011. The Contractor is to ensure that all employees carrying out construction work undertake specific (general, work activity and site specific) work health and safety induction training related to the works they are performing and hold a permit, issued under either federal or state industrial relations legislation, to enter the site.

1.7 SITE RESTORATION & REMOVAL OF TEMPORARY WORKS

Where existing ground surfaces are not identified as part of the works, restore them to the existing condition prior to the commencement of the contract. Ensure protection measures are in place to protect adjacent finishes from current works

Reinstate surfaces occupied for the purposes of the Contract in the following manner:

- Within the area of the permanent works finish as specified;
- Areas outside the permanent works which were formerly developed in any way shall be reinstated to their condition at commencement of the contract;
- Undeveloped areas outside the permanent works shall be reinstated to their condition at commencement of the Contract.

1.9 SITE ESTABLISHMENT

Any existing Services and Service Lines must be identified and clearly marked by the Contractor prior to commencement of construction works.
The Contractor's access on, and to around the site and the use of the site for temporary works and constructional plant, including sheds, working and storage areas shall be restricted to those areas approved by client and subject to such conditions as stated in the Contract.

2.0 DEMOLITION AND SITE PREPARATION

2.1 INSPECTIONS

Give sufficient notice (24 hours) to client so that inspection can be made of the following:
- Enclosures and tree protection measures in place before site establishment. Submit details of temporary fencing type and extent of to client before commencement of works. Maintain the tree protection measures in place and in good order for the duration of the construction period. The Contractor shall inform or advise client of any changes to the tree protection measures. Tree protection measures are to be confirmed in writing by client, client's Arborist or the Landscape Architect after a site inspection prior to the commencement of works.
- Setout of areas to be excavated;
- Site following regraded earthworks;
- Demolition/excavation to correct depths;
- Excavation completed and trimmed to contract levels;

2.2 STANDARDS

All demolition and site clearance work shall comply with the current edition of relevant Australian Standards including:
- Guide to Noise Control on Construction, Maintenance and Demolition Sites: To AS 2436 1981
- Demolition of Structures: To AS 2601 2001

2.3 TREE MANAGEMENT

Existing vegetation: Protect existing vegetation to remain at all times from all damage during construction works or as directed by client, client's Arborist or Landscape Architect. Take necessary precautions, including the following:
- Do not compact the ground under trees. This includes no parking of vehicles or placement of storage materials under trees.
- The Contractor shall be responsible for damage to or destruction of any existing trees and shall be rectified immediately and at the Contractor's expense.
- Do not fill or excavate within the drip line of existing trees.
- If it is necessary to excavate within the drip line of trees (including planting works), seek approval from client. Use hand methods such that the damage to root systems are minimised
- Where it is necessary to cut tree roots, use a saw or similar means such that the cutting does not unduly disturb or rock the remaining root system.
- Any branches that need to be removed to enable work to proceed shall be cut back properly by a qualified Arborist after approval has been obtained from client's Tree Preservation Order and Development Application Process.

2.4 GENERAL

Dewatering
Keep groundworks free of water by suitable and effective means.

2.5 DEMOLITION

Perform the demolition necessary to carry out the Works Under Contract as shown in the Documents. Protect property that is to remain on or adjacent the site from interference or damage.
- Remove from the site all demolished materials, debris resulting from site clearance and excavated material surplus to topsoil requirements, including topsoil not approved for re-use, unless otherwise specified. If required, stockpile spoil retained for future use on site in location determined on site with client. Establish stockpiles to sizes not exceeding 15m in height. Install measures to ensure protection of the stockpiles.
- The Contractor shall ensure that existing services are disconnected prior to commencing demolition.
- The Contractor shall not damage water, drainage, electricity, gas or telephone services which are in use or are required by the owners of the services.
- Items scheduled for disposal off site shall be deposited at an EPA approved tipping site. A copy of the dockets shall be submitted to client for approval.

2.6 CONTRACTORS SUBMISSIONS

- Submit calculations to show that proposed excavations and temporary supports, including where applicable supports for adjacent structures, will be stable and safe.
- Submit certification or test results which establish the compliance of imported fill with the contract.
- Submit details of material proposed.
- Submit the methods and equipment proposed for the groundworks, including the following:
-- excavation methods, stages, clearances and temporary supports.
-- Stockpiles.
-- placing and compaction methods and stages.

2.7 EXCAVATION

Tolerances:
For subgrade in earth and fill subgrade level, 15mm relative to a 3m straightedge. Finish groundworks to reasonably smooth and uniform surfaces conforming to the required tolerances.
Subgrade Levels:

The Contractor shall grade the subgrades to receive the specified depths of construction and soil preparation. Ensure that subgrade levels are calculated to achieve the specified minimum soil and mulch depths. To achieve the specified minimum construction and softwork depths. Refer to Details.

Subgrade:
- Subgrade comprising clay soils need to be retained moist within the range of -2% to +1% of optimum moisture content. To prevent drying out and to limit possible surface heave, immediately after compaction the subgrade should be covered by the first select fill pavement layer.
- The whole area shall be compacted to a depth of not less than 100mm to an in-situ density not less than 98% Maximum Dry Density.
- The site shall be re-trimmed if necessary after compaction.
Removal of Topsoil:
Extent: Remove the topsoil layer of the natural ground containing organic matter, over the areas to be excavated or regraded, and areas to be occupied by structures, pavements, embankments and the like, and other areas designated to have topsoil removed.
Topsoil stockpiles:
Stockpile site topsoil approved for re-use and add imported topsoil where necessary. Contractor to submit proposed locations for establishment of stockpiles to superintendent, stockpile heights not to exceed 15m. Provide adequate drainage and erosion protection. Do not burn off or remove plant growth which may occur during storage. Do not allow traffic on stockpiles. Protect the topsoil stockpiles from contamination by other excavated material, weeds and building debris.
Excess removal of topsoil:
Excess clean site material to be transported at the direction of client. Fill material to be delivered and spread / compacted at direction of Superintendent. Disposal at a State approved site for inert waste or equivalent (approved by Superintendent). Dockets and volumes need to be submitted to client by the Contractor.
Extent:
- Excavate over the site to give correct levels and profiles as the basis for construction, paving, filling and landscaping. Make allowances for compaction or settlement.
Maximum depth: Refer to drawings.
Footings:
Excavate for footings to the required sizes and depths. Confirm that bearing capacity of subgrade is adequate.
Proof Rolling:
Extent: Proof roll excavations for fill areas, and non-spanning slabs on ground to determine the extent of any bad ground. Proof roll area by multiple passes with a self propelled roller of a mass of at least 6 tonnes. Soft, loose and wet areas to be removed and replaced with approved material and compacted.

2.8 PLACING & COMPACTION

Fill material:
General Fill: inorganic, free of contaminants, well graded material, maximum particle size 75mm, plasticity index ≤55%. The fill will be graded hard material capable of being compacted to an even stable surface.
Garden Bed Fill: 90% approved for re-use site topsoil mixed with 10% double washed (coarse) river sand. Add Gypsum to manufacture's specification.
Sources:
Import fill on to the site from suitable sources free of contaminants unless the fill type can be provided from:
- spoil recovered from the excavations
Preparation for filling:
Prepare the ground surface before placing fill (including topsoil fill), ground slabs or load bearing elements. Remove loose material, debris and ground bearing elements. If required, the ground is regraded and cultivated. Provide an initial 100mm layer of clay fill to connect with cultivated subgrade. Place clean fill and compact the ground to achieve the required density.
Benching:
If fill is to be placed on a surface which slopes more than 1:4, bench the surface to form a key for the fill. As each layer of fill is placed, cut the existing ground surface progressively to form a series of horizontal steps at least 1m in width. Re-compact the excavated material as part of the filling.
Under slabs, paving and embankments:
Compact the ground to achieve the densities specified for these locations. If necessary loosen the ground to a depth of 200mm and adjust the moisture content before compaction.
Placing Fill
- Place General Fill in 100mm layers and compact to required density. Place Garden Bed Fill in 100mm layers and lightly compact to remove voids.
- Do not place fill against concrete until the concrete has been in place for fourteen days.
- Where necessary to achieve the required density or moisture content, adjust the moisture content of the fill before compaction. Required moisture content (%): within the range of 0 to 2% of the optimum moisture content as established by testing in accordance with AS 1289.5.2.1.
Extent:
- Place and compact fill to the designated dimensions, levels, grades and cross sections so that the surface is always self draining.
- Any soft or heavy areas encountered during proof-rolling shall be excavated and replaced with crushed rock having a maximum particle size of 75mm; at the direction of client.
Tolerances:
Finish the surface to the required level, grade and shape within the following tolerances:
- Existing earthworks: 61mm minimum, vibrating roller
- other ground surfaces: + / - 30mm, provided the area remains free draining and matches adjacent construction where required. Provide smoothness as normally produced by a scraper blade.
Test rolling:
Location: Top of subgrade
Extent: all areas to be paved, 10 passes pre proof rolling, 1 pass proof rolling
Roller type and size: 61mm minimum, vibrating roller
Acceptance criteria: no discernible movement
Base and Subbase Courses
- Base to be 150mm depth DGB20 compacted to 98% dry density. Grade base to uniform levels and falls as stated in drawings. Allow for compaction, settlement and depths of pavements.
- Spreading shall be undertaken by a method which will ensure segregation does not occur and movement of material is kept to a minimum.
- Each layer shall be uniformly compacted over its entire area and depth to correct levels.
- During compaction, the surface shall be trimmed and material added where necessary to produce a tight dense surface parallel with the finished wearing surface.
- Any base material placed by the Contractor that has attained the specified compaction but subsequently becomes wet or damaged shall be dried out and uniformly recompacted and retrimmed to the required density and tolerances in accordance with this clause.
- Compact each layer of fill to the required depth and density.
Protection:
Protect the works from damage due to compaction operations. Where necessary, limit the size of compaction equipment or the area to be compacted. Commence compacting each layer at the structure and proceed away from it.
Moisture content:
Adjust the moisture content of fill at the time of compaction within the range of 60-90% of the optimum moisture content determined by AS 1289.5.1.1 or AS 1289.5.2.1 as appropriate, in order to achieve the required density.
Grading:
Grade the surface to levels as shown on levels plan. Make an allowance for the profile of the finished surface.
The Contractor shall regrade the site to achieve correct level depths for proposed works as per specification listed above (section 2.0 - Demolition and Site Preparation of this specification).

3.0 HARDWORKS
3.1 INSPECTION OF WORKS
Give sufficient notice (24 hours) to client so that inspection may be made of the following:
- Setout of all hardworks;
- Base preparation and subgrade levels before covering;
- Completed formwork, and reinforcement, joints, cores, dowels and embedments fixed in place;
- Damp proof course in place;
- Flashings in position;
- Control/expansion/isolation joints ready for insertion of joint filler;
- Bottoms of cavities after cleaning out
- Bottoms of core holes before grouting
- Commencement of concrete placing;
- Completion of concrete works;
- Completed pavements, joints and finishes;
- Evaluation of the finish.

3.2 STANDARDS

All hardworks shall comply with the current edition of relevant Australian Standards including:
- Concrete Structures: To AS 3600
- Methods of Testing Concrete: To AS 1012
- Portland Cement: To AS 1315
- Ready Mixed Concrete: To AS 1379
- Formwork Code: To AS 1509
- Control of Concrete Surfaces-Formwork: To AS 1510
- AS/NZS 3661 (Slip Resistance of Pedestrian Surfaces Part 1 1993 Requirements, Part 2 1994).
- Concrete structures for retaining liquids: To AS 3735
- Reinforcement: To AS 1302 grade 250R, AS 1303 and AS 1304 and AS 3600 CL19.2
Any variations or ambiguity between the contract documents and Australian Standards shall be referred to client for decision before proceeding with the work.

3.3 Concrete Work General:

- All concrete works executed under the Specification shall be constructed in straight lines or curves, without local irregularities, true to the alignment and grade shown on the Drawings
- All concrete to be placed and not pumped unless directed by client. Use placing methods which minimise plastic settlement and shrinkage cracking.
- Place concrete in layers such that each succeeding layer is blended into the proceeding one by the compaction process.
- Place concrete uniformly over the width of the slab so that the face is generally vertical and normal to the direction of placing.
- Refer to drawings, specifications and details.
Formwork:
- Construct formwork so that the concrete, when cast on forms, will have the required dimensions, shape, profile, location and surface finish. Allow for deflections and cambers resulting from the application of prestressing forces, applied loads, temperature changes and concrete shrinkage and creep.
- Should any formwork be displaced during concreting, the concrete shall be removed between such limits as client may determine, construction joints shall be formed and the section of work shall be reconstructed.
- Concrete work which does not comply with the specification or which has other defects due to inadequacy of formwork, shall be removed and replaced, or the defects shall be rectified as directed by client.
Treatment of Form Surfaces
All form faces shall be treated prior to placing concrete with a suitable approved release agent. The release agent shall be applied uniformly without runs or puddles and shall be kept off reinforcement and construction joint surfaces. Removable portions of formwork ties and bolts shall be greased.
Removal of Forms
Removal shall be effected in such a manner as will not damage the concrete or affect the safety of the structure. Refer to Engineers drawings, specifications and details.
Placing and Fixing
- Dowels: Provide each dowel in one piece, straight, with square cut ends free from burrs. Apply 2 coats of bitumen emulsion or approved bond breaking compound to half the length of the dowel at one end (there is provision for alternative techniques ie: plastic sleeves, but to the approval of client's client). Embed the unpainted half of the dowels in the concrete placed first.
- All dowels shall be clean and free from oil, grease, loose rust and other foreign material when the concrete is placed to permit maximum bonding with the concrete for the unpainted portion of the dowels.
- Reinforcement: Secure the reinforcement against displacement by tying at the intersections with annealed iron wire ties not smaller than 1.25mm diameter, or by approved clips. Bend the ends of wire ties away from nearby faces of forms so that the ties do not project into the concrete cover.
- Provide protection for 'starter bars' and the like left projecting from cast concrete for future additions.
- Prior to concrete placing, all starter bars shall be positioned and secured by the Contractor, to ensure correct location and alignment of bars. Costs associated to redesign and/or relocate starter bars that have not been positioned and secured adequately shall be at the Contractors expense.
- Mats: For bar reinforcement in the form of a mat, secure each bar at alternate intersections and at other points as required.
- Beams: Tie ligatures to bars in each corner of each ligature. Fix other longitudinal bars to ligatures at not more than 1000MM intervals.
- Welding: Obtain permission before welding reinforcement. Do not weld reinforcement within 75mm of a section which has been affected by bending or re-bending.

Concrete Joints:	PRODUCT / METHOD	SUPPLIER
ITEM	Connelly Expansion Joint	By Contractor
Expansion Joints	Connelly KJ100 Key Joint - 100mm with Full mastic joint with dowels at 900mm centres	By Contractor
Isolation Joints		By Contractor
Formwork Joints		By Contractor
Full Plastic Joints		By Contractor
Control Joints	3.5mm wide and minimum 40mm deep sawcuts	By Contractor
Vee Joints (Dummy)	75mm wide Vee joint tool	By Contractor

Jointing
- Use jointing materials, including sealants, mastics, primers, gaskets, compressible fillers, and joint covers as recommended by the manufacturer for the location and type of joint, compatible when used together and non-staining to concrete in visible locations.
- Placing: Use placing methods which minimise plastic settlement and shrinkage cracking. Finish visible jointing material neatly flush with adjoining surfaces as shown on details, unless otherwise shown on drawings.
Concrete Strength
All concrete work associated with pavement shall have a minimum 28 day concrete compressive strength (F_c) of 25 MPa or 32 MPa as specified.
Transporting and Placing
- Prevent segregation, contamination, or loss of materials.
- Concrete mix shall not be freely dropped from a height greater than 1.5m without client's approval.
- The concrete placing shall be carried out continuously for each section to prevent formation of cold joints.
Compaction
- Use approved mechanical vibrators to form a solid concrete mass free from honeycombing and air bubbles.
- Internal vibrators shall be used systematically at uniformly spaced points. Vibrators shall not be allowed to be stationary in one position for more than 30 seconds.
Emergency Measures
- Where delays occur in concrete placing, a concrete batch may be held in the mixer or agitator for a period of up to 1 1/2 hours in suitable weather conditions.
- Concrete to which the initial mixing water was added more than 1-1/2 hours or which has been discharged from the mixer or agitator more than 30 minutes prior to placing, shall not be used in the work.
- The addition of water to partially hardened concrete or re-tempering will not be permitted.
- Where concrete placing is delayed until the concrete is in danger of taking its initial set, the line of stoppage shall be formed at a concrete joint. If the stoppage occurs in a position considered unsuitable for a construction joint by client, the concrete shall be removed from the forms back to a suitable location as directed by client.
Concrete Curing and Protection
- Freshly cast concrete shall be protected from premature drying, excessively hot or cold temperatures, rain, wind and damage from other causes.
- All exposed concrete surfaces shall be cured either by covering with an impermeable membrane in close contact with moistened concrete, or by applying an approved curing compound in accordance with the Manufacturer's recommendations. Use of curing compounds shall be subject to the written approval of client and in any case will not be permitted on the surface of construction joints, where subsequent finishes are to be applied, or where they could detract from the appearance of the finished concrete.
- In hot weather, rapid drying out after the curing period shall be prevented by occasional wetting.
- Newly finished concrete surfaces shall be protected from damage due to construction traffic, excessive loading or other causes.
Timing
- Concrete pours only to be carried out during weekday mornings. The contractor is to remain on site until the concrete has sufficiently cured so that the surface can not be vandalised
- All concrete shall be subject to inspection and approval by client after the stripping of formwork and before any patching or finishing work has commenced.
- Should any concrete be rejected, the whole of the concrete shall be removed between such limits as client may decide and replaced with acceptable concrete.
- Remedial work shall be carried out as soon as practical after removal of forms and inspection.
- Defects in concrete otherwise accepted by client shall be cut out. The surfaces of the resulting holes shall be cleaned, saturated with water and all free water removed. The holes shall be made good by packing with stiff mortar composed of cement and fine aggregate in the same proportion as used in the concrete or as directed by client. The mortar shall be brought to an even surface and finished and cured as specified for the surrounding concrete
Surface Finishes
- After the concrete has been placed, struck off, consolidated and levelled, the concrete shall not be worked further until ready for floating. Floating shall begin when the water sheen has disappeared and/or when the mix has stiffened sufficiently.
- The surface of the concrete shall be finished to true planes within 6mm in 3m, as determined by a 3m straight edge placed anywhere on the slab in any direction.

3.4 WALLS

Installation:
All concrete to walls to be in accordance with details.
Concrete: 32MPa concrete and 80mm slump to AS 3600 and AS 1379.
Concrete footing: Footings shall be constructed using materials and methods complying with the relevant requirements of AS 3600 and AS 3610. Concrete footing shall be as per details.
Reinforcement: As per details.
Construction: Ensure careful placement of concrete and thorough, uniform, compaction to minimise the revealing of blowholes (voids).
Joints:
Type: Refer to Jointing types and details.
Locations: Joint at 6m spacings or as shown on drawings. Joints shall be straight and continuous. Brace where required as formwork to prevent movement.
Sealant type:
Type and colour of sealant to match concrete wall and to be approved by Superintendent prior to construction.
Finish:
- Form 45° chamfers 25 x 25mm on the face of walls (refer to Concrete Formwork) unless otherwise detailed on drawings.

- Walls are to be minimum Class 2 as per the Australian Standards.
- To the top and face of wall; steel float finish.
Subsoil Drains:
Install subsoil drains as shown on Details.
Refer to Drainage; Subsoil Drainage.
Wall Completion:
Thoroughly clean down all walls to remove mortar. Remove surplus material off site. Leave site and structures in a clean and tidy condition to the satisfaction of client.

4.0 SOFTWORKS

4.1 INSPECTION OF WORKS

Give sufficient notice (24 hours) so that Inspections can be made of the following:
- plant material setout before planting;
- soil in place to correct levels;
- plants checked for correct species prior to planting;
- plant material setout before planting;
- mulch to correct levels;
- planting completed;
- practical completion.

4.2 STANDARDS

All landscape works shall comply with the current edition of relevant Australian Standards including:
- Composts and mulch: To AS 4454
- Soil for landscaping and garden use: To AS 4419
Any variations or ambiguity between the contract documents and Australian Standards shall be referred to client for decision before proceeding with the work.

4.3 SAMPLES

Submit representative samples of each material, packed to prevent contamination and labelled to indicate source and content:

Samples Schedule:	Quantity	Provide photos of batches
Item	1 of each species.	5 of each species
Proposed Trees	1 of each species	2 x trays or 1 sq m of pots
Proposed Shrubs	1 of each species	2 x trays or 1 sq m of pots
Proposed native grass plants	1 of each species	2 x trays or 1 sq m of pots
Proposed horticultural grade mulch (15mm)	5kg bag	N/A

4.4 PLANTS:

- Provide plants with the following characteristics:
- large healthy root systems, with no evidence of root curl, restriction or damage
- vigorous, well established, free from diseases or insect pests, of good form consistent with species or variety
- hardened off, not soft or forced, and suitable for planting in the natural climatic conditions prevailing at the site
- have foliage size, texture and colour consistent with that shown in healthy specimens of the species.
- Immediately reject dried out, damaged, pot bound or unhealthy plant material before planting.

Should plant material specified be unavailable then the Contractor shall inform client in writing with available substitutions for approval.

Plant Materials Requirements:
Plant size definitions are indicated only and are subject to variation in accordance with the natural growth habit of the species.

Caliper to be measured 200mm above base of rootball top, adjacent to and perpendicular to bole.

Replacements:
Using plants of the same type, quality and size, replace damaged and rejected plants during works under contract. Storage:

Delivery plant material to the site on a day-to-day basis and plant immediately after delivery. If this is not possible, keep the plants in a good condition on the site, adequately protected from frost, wind, sun and vermin by appropriate storage methods. Do not store plants on site without approval from Superintendent.

Watering:
Thoroughly water plants before planting begins, immediately after planting and thereafter as required to maintain growth rates free of stress for the duration of the maintenance period.

Plantings:
- Weed free
- Excavate the planting hole to depths as per the details. Loosen the compacted sides of the hole to prevent confinement of root growth.
Placing & backfilling:
Remove the plant from the container with minimum disturbance to the root ball, ensure that the root ball is moist and place it in its final position, in the centers of the hole and plumb. Backfill garden beds with soil as specified. Lightly tamp to eliminate air pockets. Ensure that soil is not placed over the root ball, so that the plant stem remains the same height above ground as it was in the container.

Insect and Disease Control:
Immediately give notice of evidence of insect attack or disease amongst plant material. Where required, spray with insecticide, fungicide or both with the manufacturer's recommendation. Submit proposal and obtain approval from Superintendent before starting this work.

Disposal:
Submit the supplier's written statement certifying that plants are true to the required species and type and are free from diseases, pests and weeds.

4.5 SOILS

General:
The following soil types shall be included in massed planting beds and tree pits:
Soil Type Composition Application
Soil Type A Garden Back Fill mixed with water crystal Tree Pits / Planting Beds / Turfed Areas
- terracottem and Gypsum to manufacturer's specification. refer details for depths

Imported Soils:
Imported soils shall be used only if Soil Type A is not possible. Imported soils will be confirmed by client if this situation arises. It is the Contractors responsibility under its Quality Assurance system to ensure imported fill meets the requirement of the specification. If variation in quality from the approved sample is found, all delivered materials are liable to rejection and replacement with material that meets the specification. The Contractor shall bear all costs that may be incurred if materials are so rejected.
Contamination: Where diesel oil, cement or other phytotoxic material has been spilt on the subsoil or soil mix, excavate the contaminated material, dispose of it off site, and replace it with new organic garden mix as directed to restore design levels.

Placement:
Ensure soil has a uniform grade free of localised lumps and / or depressions, sharp and / or hard material.
Drainage:
Grade garden beds to uniform fall as detailed.
Fertilisers:
No fertilisers shall be applied unless identified in details or soil mix specification. Only hydrated water crystals prior to planting.

5.8 MULCH

In locations shown on drawings, the Contractor shall supply and install 100mm depth mulch
- horticultural grade mulch with minimum 15mm size particles. ANL Forest Fines (15mm) or an equivalent alternative shall be approved by client.
- pebble mulch as shown on plan.
Provide mulch that is free of deleterious material and extraneous matter such as soil, weeds and sticks.
Installation:
Place mulch to the required depth, clear of plant stems, and rake to an even surface to finish flush with adjacent finished surfaces, or as shown on levels plan and details. Spread mulch so that after settling, or after rolling, it is smooth and evenly graded between design surface levels.

6.0 CONSOLIDATION AND MAINTENANCE

6.1 GENERAL:

The consolidation and maintenance period shall be a minimum of 26 weeks and shall be carried out by the Contractor. Consolidation and maintenance shall ensure that all plants are in optimum growing condition and appearance at all times. In addition to rectifying any defect that becomes apparent in the works under normal use, this shall include but not be limited to the following items where and as required:
- Watering - Insect and Disease Control - Soil Subsidence - Litter and Other Debris
- Mowing and Edging
- Plant Maintenance and Replacements - Weed Control - Re-mulching - Sediment & erosion control

6.2 ESTABLISHMENT PERIOD:

Failed plants are subject to an extended establishment period from the date of their replacement.

Drawing Number

L6

Issue

Date

Description

Draft	15/3/2026	Draft issue for DA
A	12/7/2026	Issue for DA

Client

Mr Terry Jiang

Project

85 Eighth Avenue Campsie, NSW
Landscape Plan for Development Application

Landscape Architect



GEORGE WANG

Email: george@ripplelab.com.au
Phone: 0450 848 686

Scale



RIPPLE DESIGN LAB

Email: george@rippledesignlab.com.au

Contact Number: 0450 848 686 ABN:
77660102241

ACN: 660102241

Landscape Architecture | Urban Design | 3D Visualisation | Graphic Design