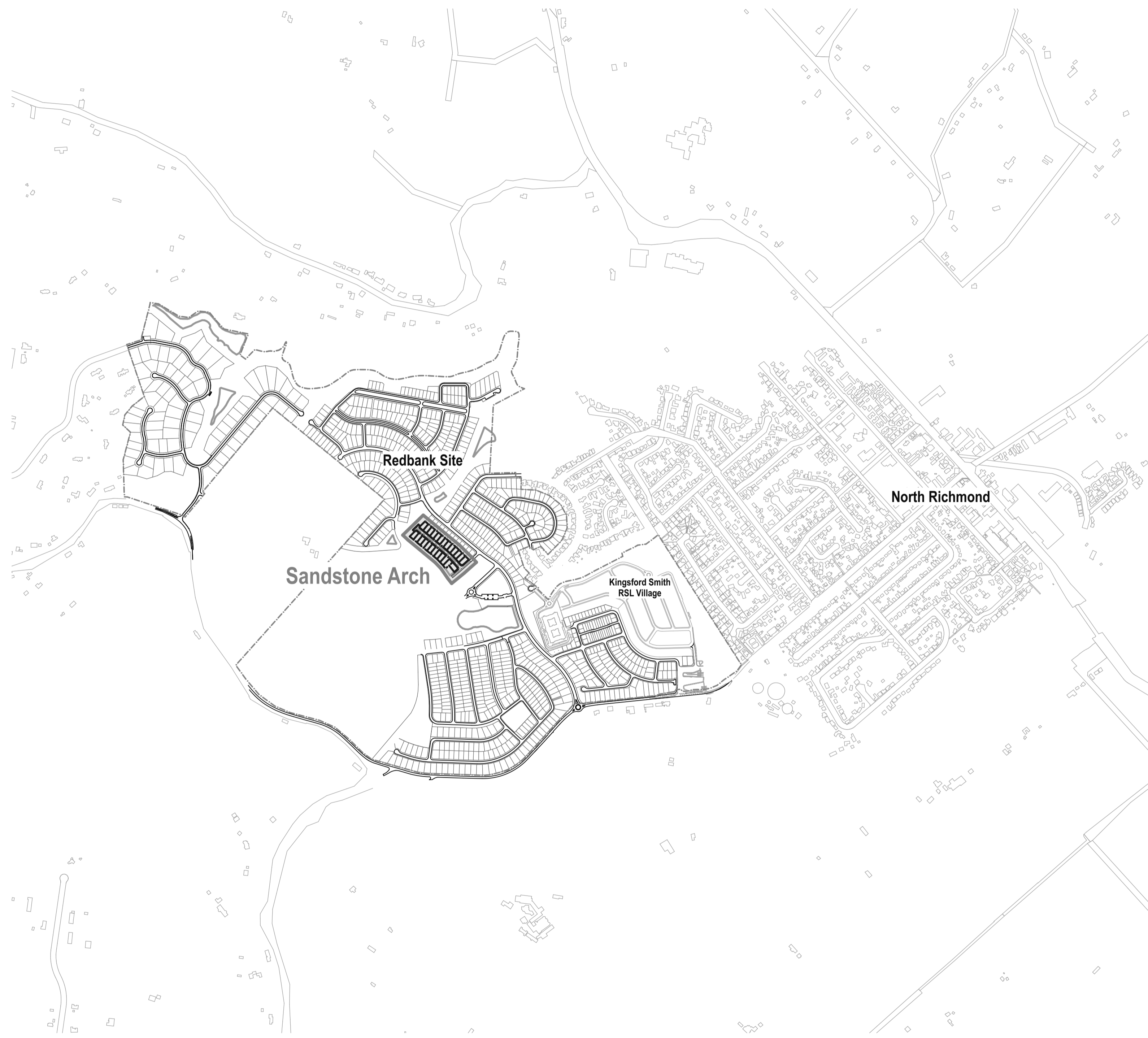


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PROJECT & CLIENT

# Redbank

Sandstone Arch CC  
 Grose Vale Road North Richmond NSW 2754

**DA 0430/19**

Prepared for :  
 Redbank Communities

## Landscape Works

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**SUBDIVISION WORKS CERTIFICATE**  
 Certificate No. 20130299SW52  
 Date of Issue 2/09/2020  
 Issuing Officer *D. Restin*  
 Accreditation No. BDC3367  
 These plans/specifications form part of the certificate issued 2nd of September 2020

WORK AS EXECUTED SHOWN IN RED  
 SIGNATURE *P.R. Warwick*  
 PETER ROBERT WARWICK  
 REGISTERED LAND SURVEYOR  
 VINCE MORGAN SURVEYORS PTY LTD  
 DATE: 14/01/21 REF: 16800-16

DATE :  
 02 September 2020

ISSUE :  
 For Construction Certificate Approval



## GENERAL REQUIREMENTS

### Scope and Extent of Work

The extent of the Landscape Works is described in the Material and Finishes Schedule, this Specification and on the drawings. It includes carrying out all ancillary work necessary for proper completion of the works. The Material and Finishes Schedule is a description of the major components of the project. It is included as a guide to aid in the clear understanding and pricing of the works. It is not intended to be a completely exhaustive list of all minor and incidental materials and tasks required to successfully complete the contracted works and must be read in conjunction with the other documents.

Where works are adjacent to existing works, the Contractor is responsible for making the proper junctions between new and existing works and for making good any damage caused by the Contractor to the adjoining works.

### Works in Conjunction with Landscape Works - Civil Works

The Ploughmans Precinct works involves the construction of new roads and services, retaining walls, grading, top soiling and grass seeding to new residential lots. This work is being undertaken by a civil contractor. It is anticipated that the majority of this work will be completed prior to the Contractor undertaking the landscape works.

The Contractor is to co-ordinate and work in conjunction with the other Contractors as required to install the proposed landscaping works.

### Workmanship and Material Quality

Materials and workmanship are to conform to the current edition of applicable Australian Standard Specifications and Codes.

Any work or materials, which, in the opinion of the Contract Manager (or their representative), do not meet appropriate industry standards of workmanship or quality, will be rejected. Rejected work shall be removed and reinstalled to an acceptable standard at no additional cost to the Client.

It is anticipated that the works will be carried out under the supervision of an appropriately qualified and experienced horticulturalist and/or landscape tradesperson.

### Workmanship & Installation Samples

Provide samples of finished installed works for approval by the Contract Manager prior to proceeding. Include typical junctions, joints, cuts, finishes and colours of the nominated sample. If not approved, samples are to be rejected or removed and replaced as required by the Contract Manager. Approved samples may be retained to form a part of the completed works. All remaining works are to meet and match the quality of the approved sample.

### Environmental Protection

Ensure that all materials and the execution of work are ecologically sound, environmentally benign and consistent with the principles of sustainable development. Take all practical precautions to ensure that dust and noise caused by the works are kept to a minimum. Take all practical precautions to prevent the spread of dirt and mud along adjacent roads and paths. Unless already in place, install suitable sedimentation control for all work and stockpiles.

### Existing Tree Protection

The Contractor is responsible to ensure that no damage occurs to any existing trees or other plants which:-

- Are specified to be retained.
- Are beyond the extent of works.
- Would reasonably not need to be removed or damaged during the course of the works.

All work around existing trees to be retained shall be in accordance with AS 4970-2009 Protection of Trees on development sites with the clear establishment of Tree Protection Zones (TPZ's).

### Topsoil Stripping and Stockpiling

Site topsoil is to be stripped and stockpiled by the civil contractor. Top soil is available to the contractor at no cost for the purpose of completing the works. The stock pile is located on the Redbank site within 1km of the works. The Contractor is to load, cart and ameliorate the soil.

### Fine Trimming and Grading

Grade and trim bulk subgrade surfaces to a depth below finished surface levels as determined by the specified depths of covering materials. Berms, swales and batters may require fine grading and shaping to the Landscape Architect's direction. Shaping shall be carried out by an experienced machine operator or shaper.

Such work shall include:

- Rounding of ridge line profiles
- Graduating ridge lines and formation of transition curves at top and bottom of batters
- Trimming back slope steepness
- Gradual tapering to intersections with walls and pavements
- Grading transitions to fence lines
- Grading transitions to meet back of road kerbs

Unless otherwise noted final grading shall achieve 1 in 100 minimum falls to drainage.

### Subsoil Drainage

Provide in accordance with the drawings and details, falling and connecting to the bio retention or stormwater pits or other approved receiving drainage device.

#### Drainage medium vertical and horizontal

Generally place specified drainage material to the depths detailed on the drawings.

Drainage medium shall be:-

20mm Aggregate washed free of all fines.

Filter fabric shall be:-

Geotextile fabric for horticultural purposes - Atlantis "Hydronet" or Bidim A14, or approved equivalent

#### Sand filter layer

Generally place and compact sand with particle size range of 0.02mm to 2.0mm diameter, washed free of organic debris and silts, sands, gravels and rocks outside these sizes, to the depths detailed on the drawings. Finished surface shall be smooth. Saturate the sand mass, allow to drain and settle and add sand to meet required finished grades prior to installing overlying soil mixes.

#### Perforated drainage pipe

Generally lay and join material to the grades and as detailed on the drawings. Excavate 300mm wide trenches and fall trench base 1 in 100 minimum without irregularities that would cause water to pond. Connect pipes to existing stormwater pits or manholes. Use existing spigot connections where available. Where not available, break-ins shall be made cleanly, the pipe inserted and the joint mortared over to provide a neat watertight joint.

Where subsoil drainage lines run under pavements, bed, join to and lay a rigid UPVC pipe instead of perforated pipe for the extent where it is under the paved surface.

Line trench with filter fabric and cover pipe with minimum 150mm drainage medium. Backfill with subgrade and re compact.

At the high end of each pipe line, curve drain pipe up and terminate flush with finished surface level. Construct flushing point as detailed, where shown on the drawings. Where not shown cap with UPVC cap immediately below mulch.

#### Flushing Test

Flush all subsoil drainage lines and layers upon installation. Observe outlets and continue flushing until clean water is discharged. Check integrity of slab waterproofing.

### Pavement Finishes Generally

Pavements are to be constructed true to the documented line and levels without local irregularities. For pavements:-

- curved edges are to have smooth transitions free from kinks
- level difference less than 3mm between different paving surfaces or pavers (unless specifically indicated on grading plan);
- maximum deviation from a 3m straight edge placed anywhere on surface of 12mm
- less than 10mm depth of water ponding (15 minutes after rain has stopped);
- no movement or hollow sound when walked upon.

Paving units and expansion joints, crack control joints are to laid out as indicated on the drawings. Unless otherwise documented, cuts are to be carried out to achieve a gap of no more than 3mm between adjoining paving units or other adjoining surfaces or structures. Ensure positive drainage to the adjoining gardens, kerb and drainage inlet grates to prevent ponding.

Each different pavement type is to have a uniform finish and colour.

Unless otherwise documented steps are to have a constant tread & riser height for each set/flight.

### Slip Resistance

Unless otherwise specified, all landscape pathways and paving shall comply with the following minimum slip resistance ratings in accordance with AS/NZS 4586:2013.

#### External Pavements (& Potentially Accessible Copings) Wet Pendulum Test Oil-Wet Ramp Test

General Pathways and Pedestrian Pavements (typically slopes less than 1:50)  
P3, P4 or P5 (Class X,W or V-under 2003 version) R11, R12 or R13

General Pathways and Pedestrian Pavements (typically up to slopes of 1:20)  
P4 or P5 (Class W or V-under 2003 version) R12 or R13

General Pathways and Pedestrian Pavements (For slopes between 1:20 and 1:14, or above)  
P5 (Class V- under2003 version) R13

Informational Note: Wood float or broom finished insitu concrete will typically provide a Class P5 rating using Wet Pendulum Test and Class C for Wet Bare Foot Test and R13.

### Concrete Paving & Footings

#### Foundations & Preparation

Foundations for concrete structures shall be excavated to neat lines and formed at the required depth below the surface level. All soft, yielding and otherwise unsuitable material shall be removed and replaced where necessary with approved material, and the foundations shall be thoroughly compacted and finished to a firm smooth surface of uniform bearing value.

Unless otherwise permitted, excavated material shall not be deposited on existing grassed areas. Excavation shall be deep enough to allow for the top surface of the slab to finish flush with the top of adjoining grass surfaces and pavement levels (or 25-50mm above adjoining garden levels).

#### Formwork

Formwork for concrete paving shall be fixed boards of seasoned, dressed timber planks or equivalent. Forms shall be designed and constructed so that they can be removed without injuring the concrete and shall be built true to line and braced in a substantial and unyielding manner. Forms shall be free of warps, kinks or bends.

#### Reinforcement - Pedestrian Pavements

Reinforcement shall be F72 mesh unless otherwise noted. Reinforcement is to be placed 30mm below the top surface of the pavement and not closer than 40mm to the sides. Reinforcement shall be secured against displacement arising from the flow or working of the concrete, and shall be tied with no. 16 SWG black iron wire or tack welded at all crossings.

#### Strength

Unless otherwise noted, concrete shall be a minimum strength of 32 MPa and shall be properly compacted via vibrating screeds or pokers.

#### Falls and Finish

Unless otherwise detailed, footpaths shall be constructed with a cross-fall between 2% and 3%, falling with general grades of the area. Longitudinal grades normally shall be in the range of 0.5% to 2.5%.

After placing and compaction, concrete shall be finished to a smooth even surface by means of steel floats and other suitable equipment. On completion of steel floating and before initial set, the surfaces of concrete paths shall be broomed to a 'non-skid' texture. This shall be achieved by drawing a moistened nylon broom lightly across the surface at right angles to the direction of the path or paving.

Contraction joints shall be formed with a jointing tool. Unless otherwise specified or detailed, the spacing of contraction joints shall be approximate to the width of the path with minor adjustments to avoid short closing lengths. Joint spacing shall not typically normally exceed three (3) metres.

Expansion joints shall be constructed for the full depth of the paving using Connelly expansion joints. They shall be provided wherever the paving abuts fixed structures and transversely at maximum intervals of 6 metres along the length of the pathway and at path intersections.

Protect green concrete from rain, flowing water and graffiti. Provide protection as necessary to prevent cracking of the concrete due to temperature changes during the curing period. Reinstate adjacent surfaces after stripping of formwork.

### Edging

#### Galvanised Steel Edging

Galvanised edge strip to be installed in the locations shown on the drawings. Top of edge strip to finish 50mm above the finished level of adjacent garden soil and flush with adjoining paving, kerbs and lawn.

#### Timber Edge

Timber edge strip to be installed in the locations shown on the drawings. Top of edge strip to finish 25mm above the finished level of adjacent garden soil and flush with adjoining paving, kerbs and lawn. Pegs to finish 25mm below finishes levels and are to be spaced at 1.5m centres. Where an edge board is less than 1.5m, pegs are to be set 100mm from the ends of the edge board.

### Fencing

Fences are to be constructed true to the documented line and levels and vertical with sufficient rigidity to withstand normally expected use and lateral forces.

### Wall Finishes

Walls are to be constructed true to the documented line and levels and vertical. Capping is to be level in both directions. There is to be no more than 2mm difference in height between adjoining facing segments or between adjoining capping segments. Expansion joints, facing and coping segments are to be set out as indicated on the drawings and as directed on site by the Contract Manager. Unless otherwise documented, cuts are to be carried out to achieve a gap of no more than 3mm between adjoining segments or other adjoining surfaces or structures. Slip resistance for the capping is to comply with AS 3661.1. Select materials and include admixtures to prevent the occurrence of efflorescence. Walls are to be less than 1% from vertical. Horizontal wall members are to not sag.

### Site Furniture

Site furniture is to be supplied as specified and installed in the locations shown on drawing. Each individual item is to be installed in accordance with the manufacturer's/supplier's instructions.

### Timber Work

Unless otherwise noted, timber shall be Hardwood with minimum stress grade F8 and 'Standard' appearance grade. All work shall be square, plumb, level or at angle detailed and accurately set out within the reasonable tolerance of the material. Solid bearings shall be made for all joints. Use timber in single long lengths wherever possible. Timber shall be drilled for fasteners as necessary to prevent splitting.

#### Fastenings Generally

All fixings, fastenings, anchors, lugs and the like shall be of approved type and shall transmit all imposed loads, stresses and ensure proper rigidity of the assembly. Bolts, nails and other fasteners shall be hot-dipped galvanised unless otherwise noted.

#### Finish:

All timber shall be painted with Timber Stain as specified. Wherever possible, or where specifically required, all cutting and forming shall be carried out prior to the preservative treatment. All cut, drilled or otherwise formed surfaces of treated timber shall be treated as recommended by the supplier according to the preservative treatment used. No timber joint of any kind shall be made without first protecting the joint interfaces by priming with a coating compatible with any specified stain or paint finish.

#### Exposed Edges and Ends

All exposed edges of sawn timber shall be arised where there is any risk of injury from splinters.

### SOFTSCAPE

#### Mulch

Any soil conditioners shall comply with AS4454-2003 Composts, Soil Conditioners and Mulches. Unless otherwise noted mulch shall be a minimum of 50mm depth and a maximum of 75mm depth. Mulch types shall be:-

- Recycled wood waste chip with no fines.
- Recycled wood waste generated from site.

### Herbicides

General use herbicides shall be:-

- a glyphosate based non-residual herbicide such as "Roundup® Biactive™"

Submit details of any other proposed herbicides prior to use. Follow all published safety and material handling data and properly store all chemicals used on site. Herbicides shall be diluted to manufacturer's recommendations in clean water with coloured dye added.

### Tree Planting, Garden and Lawn Area Preparation

Fair and trim to relative level to accommodate the required and specified overall soil depths. Ensure the installed, or natural sub grades, are not toxic to normal plant growth or unnaturally overly compacted. Notify Contract Manager immediately if there are any concerns with regard to the subsoil conditions.

Cultivate subsoil areas within all plant and lawn areas across the slopes and only when the subsoil is dry. Cultivate to a minimum depth of 100mm and to a width that shatters the entire subsoil surface. Pick and remove rocks, roots, sticks, building debris exceeding 100mm diameter brought to the surface during cultivation. Protect cultivated areas from trafficking, compaction and crust formation until the topsoil/ planting soil spreading.

### Soil

All soil shall be free of rubbish and debris. Imported soil is to comply with the requirements of AS 4419-2003 Soils for Landscaping and Garden Use. Ameliorated site soil is to comply with the Soil report B34279 by Sydney Environmental Science Laboratory (SESL) and as summarised in the soil schedule.

All planting soil is to be consolidated but not compacted.

### Plants and Planting

**Supply-** Plants are to be supplied and delivered under a separate contract between the Client and a Plant Supplier.

**Coordination-** The Contractor is to co-ordinate delivery of the plants with the Plant Supplier. Reasonable notice is to be given to the Supplier by the Contractor and the number of deliveries is to be minimised.

**Delivery-** The Contractor is to take delivery, check quantities and keep a register of incoming plants along with delivery dockets to be presented to the Contract Manager as requested.

**Quality-** Inspect all plants upon arrival at site. Check for quality, vigour, health, and other requirements. If the Contractor is not satisfied with the quality of the plants they are to be returned. The Contractor is to keep a sample of the returned plants and notify the Contract Manager immediately of the problem.

**Responsibility-** Once the Contractor has received the plants it will be assumed that the quality of the plants was accepted by the Contractor as suitable for the purposes of their work. The plants will be the responsibility of the Contractor for the duration of the Contract including the Establishment Maintenance period.

Thoroughly water the plants before planting. Water again at the end of the day's planting or progressively throughout the day. Place slow release organic fertiliser around the plants at time of planting, prior to mulching at the rate specified.

Suspend all planting during unsatisfactory weather conditions including the following:-

During very high wind conditions (especially when hot / dry);

In periods of extreme heat (ie. + 35°C)

When soil is extremely wet or waterlogged; and

During periods of expected frost.

After planting, remove all rubbish, plant tags and nursery stakes and containers from the site.

## SUBDIVISION WORKS CERTIFICATE

Certificate No. **20130299SW52**  
Date of Issue **2/09/2020**  
Issuing Officer **D. Rosta**  
Accreditation No. **BDC3367**

**These plans/specifications form part of the certificate issued 2nd of September 2020**

## WORK AS EXECUTED SHOWN IN RED

SIGNATURE.....  
PETER ROBERT WARWICK  
REGISTERED LAND SURVEYOR  
VINCE MORGAN SURVEYORS PTY LTD  
DATE: 14/01/21 REF: 16800-16

### Temporary Tree Staking

All trees supplied are to be self supporting. If plants are found to not be self supporting and are not rejected, the plants shall be staked. If prevailing environmental factors such as strong winds or potential vandalism dictate the plants shall also be staked.

All trees shall be staked with four 50 x 50 x 1800mm hardwood stakes spaced on either side of the tree. Tie each tree using 50mm wide hessian tape in two figure of "8" configurations. Ensure the tie is slack to facilitate movement of the stem. Stakes are not to be driven through the rootball.

All stakes and ties shall be removed prior to Final Completion. If trees are still not self supporting at this time they shall be replaced, at the Contractors expense, with self supporting specimens of the same size and species as originally specified.

### Turf Placement

The Contractor shall lay turf as indicated on drawings and as specified in the Schedule. All turf will be laid as soon as it arrives on site. Prepare turf underlay, using the specified soil mix spread and compacted to an extent where excessive heel prints are avoided when it is walked over.

Final shaping and smoothing of the lawn area will be conducted using an appropriate topdressing "float", to the finished levels, as indicated on the drawings. Care should be taken to remove all surface imperfections and soil lumps.

A header course of sods will be laid parallel and adjacent to all edges to the turf area. The turf sods shall then be placed horizontally across the slope in a 'stretcher' bond pattern, with all joints butted firmly together and neatly cut in. Any damaged or substandard areas will be cut out and replaced. Any small gaps between turf sods are to be filled in with soil. On steep slopes peg the turf as necessary to prevent down slope movement, and remove the pegs when the turf is established.

High points or imperfections will be lightly tamped out upon completion of laying to form an even surface. All turf is to finish flush with adjacent surfaces. All turf will be watered the same day it is laid. Topdressing or rolling will not be undertaken until lawn is established.

Boards, planks or other means will be employed to avoid damage to the base course screed and newly laid turf during the laying process. Protection will also be provided temporarily to prevent damage likely to be caused by pedestrian or vehicular movement and ongoing building works. This will not be left in place longer than is necessary to prevent damage and will be removed at the conclusion of each working day.

Allow for replacing all areas where the turf has failed to provide a healthy cover within 30 days from the date of laying. Provide comment as to why the turf may have failed so that rectification measures can be taken prior to re-turfing.

Topdressing, should it be deemed necessary by the Landscape Architect, will not be conducted within 6 weeks of laying the turf, without the prior consent of the Landscape Architect.

Topdressing will only be conducted to remove apparent surface depressions and will not constitute an addition to the contract value. Topdressing soil will be the same mix as used for the turf area base course to avoid layering of the soil profile.

Topdressing will be lightly applied and levelled and worked into the lawn using an appropriate topdressing "float".

Replant any areas that fail to establish with in 30 days.

### IRRIGATION

The irrigation system is to be designed and installed to meet and / or include the following requirements:

Minimum design life of 10 years.

Fully programmable and automatic with back to base monitoring and control.

Water supply is to be pumped from the existing water body.

The pump is to be housed in suitable cabinet with galvanised steel and/or treated pine frame with hardwood cladding.

The system is to be capable of delivering up to 30mm of water per week over the irrigated area.

Water is to be delivered via pop up sprays. The number of sprays is to be minimised and they are to be positioned to avoid over spray onto roads or private property.

All lines are to be buried.

### ESTABLISHMENT MAINTENANCE

#### Extent & Tasks

The Contractor shall monitor and maintain all turf, planting, pavements and associated landscaping works for the duration of the maintenance period. Carry out all maintenance activities for all new garden and lawn areas as required to ensure the plants and turf become established within the maintenance period and are kept in a healthy and tidy state in accordance with best horticultural practices. This will generally include watering, weed control, mowing and edging, sweeping and/or blowing, pruning, replacing failed plants, pest and disease control.

### Watering

Plants are to be watered upon completion of planting and then monitored for water stress by the Contractor. Watering requirements will be subject to season, prevailing weather conditions and the age and type of plant. Water as required for all plants and lawn areas to thrive without stress.

### Pests and Diseases

All trees are to be visually inspected for the presence of persistent and damaging insect pests or diseases once every 4 weeks, or upon written notification from the Contract Manager of a potential problem. The pest and / or disease and its extent and prevalence is to be identified and recorded along with the recommended control and action to be taken. The required control and/or eradication action is to be carried out in a timely manner.

### Weeding

All areas are to be visually inspected by the Contractor for the presence of woody and herbaceous weed species once 4 weeks. All occurrences of weeds are to be spot sprayed using a glyphosate based herbicide no later than 7 days after being identified. Weeds are to be re-inspected by the Contractor and retreated if required.

Weeds higher than 200mm in height are to be removed by hand before herbicide treatment. Smaller weeds shall be allowed to wither and rot in place.

### Plant Replacements

The cost of replacement plants that have failed due to failure of the Contractor to perform adequate maintenance, or implementing inappropriate handling procedures or planting operations shall be at born by the Contractor.

Replacements shall be undertaken within 7 days of the plant being identified as failed or unacceptably damaged. Note, severe wilting or water logging leading to death of foliage, breakage or wounding of main stem, damage to apical leaders or damage to significant second order branches shall be deemed to constitute failure.

The cost of plants that are damaged or killed by environmental factors outside the Contractors control such as severe storms, high winds, hail, flooding or vehicular accident shall be born by Contractor if prior to Practical Completion. The Contractor is advised to take out all necessary Construction Insurance to cover all the costs associated with re-supply, delivery and replanting.

The costs of replacing stolen plants and maliciously or carelessly damaged plants shall be covered by the Principal.



**TREE PROTECTION SPECIFICATIONS**

**1. Tree Protection Measures and Protocols.**

All work around existing trees to be retained shall be in accordance with AS 4970-2009 Protection of trees on development sites with the clear establishment of the required Tree Protection Zones (TPZ's). If the scope of work allowed within or the extent of the Tree Protection Zones of existing trees is not clear, please refer to the Contract Manager or Project Consulting Arborist for clarification.

Before any site works commence tree protection zones and other measures must be established and conveyed to those all working on the site. The Contractor shall ensure all subcontractors are inducted prior to working on the site. All inductions shall include description and identification of the Tree Protection Zones and the restriction on work and activities with regard to trees.

Damage to roots or degradation of the soil through compaction and/or excavation within TPZ's is likely to cause serious damage to the tree. Any work operations required within TPZ's must be carried out with extreme care. All trees, palms and other shrubs within TPZ's are to be retained unless shown otherwise on the Tree Protection Plan(s). Trees marked for retention shall not be used to display signage, or as fence or cable supports for any reason. No materials stockpiling, chemicals or washout areas are permitted immediately upslope of or within the Tree Protection Zone. The washing down of wheel barrows, paint cans/brushes, acids and the like shall not to be done near existing trees as the runoff is very harmful to tree roots.

No fuel powered pumps or generators or air compressors are to be placed within TPZ's. No fuel or chemicals shall be stored and no equipment or vehicles shall be serviced or re-fuelled within a TPZ.

**2. Controlled Construction Access**

Construction access points, stockpiling and storage areas shall be clearly identified on site and fenced off where appropriate. Uncontrolled access and parking of vehicles inside TPZ's shall be avoided. If access is required through a tree protection zone, the access way shall be treated with ground protection.

**3. Tree Protection Fencing & Signage**

The Tree Protection Plan(s) shows the extent of areas to be fenced and protected. Protection measures shall be certified as adequate by the Project Consulting Arborist. This fencing may form part of the general construction site fencing, where practical. It shall remain in place as long as possible and typically not be removed until the final landscape installation in those areas begins.

All tree protection fencing shall be 1800mm high galvanised chain wire or welded steel mesh. Fencing must be bolted together and secured with the necessary back stays and bracing.

Star pickets with bunting or danger tape shall not constitute acceptable tree protection fencing.

Suitable signage as defined by AS 4970-2009 Appendix C shall be affixed to the external side of the fencing at a spacing of not less than 1 sign per 20 lineal metres of fence.

If fence locations conflict with the proposed works, contact the Project Consulting Arborist and Contract Manager for resolution. No new services (unless under-bored) shall be located within or through the Tree Protection Zone.

**4. Trunk and Lower Branch Protection**

A trunk barrier is to be erected around the circumference of the tree trunk and root buttress where shown. This barrier will consist of a double layer of used carpet or carpet underfelt placed around the trunk. A layer of battens is to be placed over the underfelt. The battens are to have a maximum spacing of 50mm. The height of the battens is to be 2 metres or to the height of the first branches. Lower large branches may require the same protection if likely to be damaged by passing vehicles or equipment. Secure in place with galvanised steel bracing straps. Do not nail into or otherwise injure the trunk or bark. Battens may be made from any suitable waste timber of similar sizes and depths. All sharp or protruding edges are to be properly covered with tape or similar padding.

**5. Works within the TPZ**

All work within the root zone of existing trees shall be undertaken with the utmost care. If by necessity a tree requires removal of branches for building or access, pruning shall be done in strict accordance with accepted arboriculture techniques and AS 4373-2007. No rubbish, spoil or new materials shall be placed on the root zone of any existing tree or against their trunks.

**6. Ground Protection**

If it is proposed to create any access route, or similar, within the TPZ of a retained tree, the Contractor shall install rumble boards over the TPZ ground surface. No excavation shall be allowed. Contractor shall first place a suitable permeable geotextile to the extent required and then a 100mm thick layer of wood chip mulch or coarse no-fines gravel over the extent to be covered. Then place hardwood boards (minimum 3600 x 200 x 75mm) on their flat edge, side by side, with a 30 - 50mm gap to form a rumble strip. These boards are to be held together with three galvanised metal bracing straps nailed to each board. The two outer straps are to be approximately 200mm in from the ends of the boards. The third strap is to be along the centre line of the boards.

**7. Provision of Temporary Irrigation**

A temporary and automated (battery powered timer is sufficient) watering system to be placed within the TPZs of all trees to maintain adequate water to the retained trees and help maintain their healthy condition. This shall be a surface mounted 'residential-style' soaker hose and/or similar surface sprinkler systems. It is to be surface visible and spray delivered so that is operation can be easily visible and verified. It should be on a designated supply line, separate from other construction related water supplies to minimise its likelihood of being disconnected.

Typically, during spring and summer months it should be set to run for a minimum of 30 minutes every day, in the early morning. During, autumn and winter months it should be set to run for 1 hour once every week. The operation can be suspended temporarily in periods of extensive and prolonged rain.

The system is to remain in place for the duration of construction, or until the project consulting arborist approves it's removal. It may be removed to allow final landscape treatments to proceed. If accidentally disturbed or damaged by construction activities, it is to be reinstated as soon as practicable.

**8. Structural Demolition Within TPZ's**

Project Consulting Arborist shall be on site during all demolition work within the TPZ's to monitor and advise on tree protection. Secateurs and a handsaw shall be available to deal with and cleanly cut any exposed roots that have to be cut. Machines with a long reach may be used if they can work from outside TPZ's or from protected areas within TPZ's. They shall not encroach onto unprotected soil in TPZ's.

Debris to be removed from TPZ's must be moved across existing hard surfacing or temporary ground protection in a way that prevents compaction and disturbance of soil. Alternatively, it can be lifted out by machines provided this does not disturb TPZ's or damage the canopy. If appropriate, leave below ground structures such as footings and disused pipes in place if their removal will cause excessive root disturbance.

When pulling up existing paving the Contractor shall work backwards, lifting demolished paving back onto the existing paving. Roots may be found growing under the pavement and should not be trafficked. Roots growing into existing sub-base should be left and new surface finishes placed over the top without disturbance.

**9. Excavations or Trenching within TPZ's**

Excavation within TPZ's shall not be allowed using mechanical equipment such as excavators or backhoes. Excavation within TPZ's shall only be carried out carefully by hand taking care not to damage the bark and wood of any roots. Specialist tools for removing soil around roots using compressed air (air spade), or water vacuum extraction shall be an appropriate alternative to hand digging and is the preferred method.

Exposed roots to be removed shall be cut cleanly with a sharp saw or secateurs at the face of the excavation. Roots temporarily exposed must be protected by appropriate covering with damp hessian or sand. Roots greater than 50mm in diameter are to be retained and shall only be cut in exceptional circumstances and only after consultation with the Project Consulting Arborist. Roots greater than 100mm in diameter shall typically not be allowed to be cut and must be worked around.

**10. Soft Landscaping Installation**

Final trimming and planting shall be judiciously undertaken around trees. All soft landscaping within the tree protection zones will be installed with care to avoid root disturbance from irrigation trenching, lighting installation and the planting of larger plants. Permanent irrigation (if used) shall be installed as spray heads located outside of TPZ's and spraying inwards. All other services such as small-scale electrical services shall also be designed and installed to avoid any excavation or trenching around the trees.

No significant excavation or cultivation, especially by rotary hoes or excavators, shall occur within TPZs. Where new designs require the levels to be increased, good quality and permeable top soil shall be used. It should be firmed into place but not over compacted. All areas close to tree trunks shall be kept at the original ground level. Where turf is to be installed tree trunks shall have mulched rings applied rather than grass laid up to the trunk.

The size of the installed plants shall typically be less than 5L pots so that the maximum depth of the new root balls is less than 200mm. Any planting proposed that is larger than this shall be only installed outside of the SRZ and with care to not injure roots while digging planting holes.

**11. Canopy Pruning**

The Contractor shall prune branches of protected trees only as directed by the Project Consulting Arborist. Pruning is to be undertaken by a qualified arborist (under the supervision of a person with AQF Level 4 or above). The Project Consulting Arborist is to be present at all times during the pruning work. Work is to be in strict accordance with to AS4373 Pruning of Amenity Trees. Do not treat wounds.

**12. Root Pruning**

Pruning of roots of protected trees shall only be as directed the Project Consulting Arborist. The Tree Contractor shall use only a qualified arborist (AQF Level 4 or above). The Project Consulting Arborist is to be present at all times during the root pruning.

Roots are not to be cut using normal excavation machinery of any sort. This usually results in splitting and massive disturbance well past the intended line of cut. When required to cut roots, use hand methods and sharp hand tools (e.g. secateurs, hand saw) such that the remaining root systems are preserved intact and undamaged. Roots are to be cut back by hand square to the direction of the root travel (or edge of the excavation). Do not cut any tree roots exceeding 40mm diameter unless permitted. Excavations within root zones should be kept open for as short a period as possible. Any excavated face containing roots is to be temporarily supported, where necessary, to prevent soil loss from around the other retained roots.

**13. Accidental Tree Damage**

Should a tree be accidentally damaged, the Contractor shall immediately notify the Project Consulting Arborist. Timing can be of the essence, particularly with bark injuries, trunk damage or chemical contaminations.

If a branch has been broken, it shall be removed and the damaged end pruned to a suitable branch collar. If the branch has been torn out of the trunk, assessment shall be made and the damage cleaned up by as much as possible without further damage to the tree.

If roots are accidentally disturbed or excavated, any broken, crushed and torn sections shall be exposed and pruned leaving clean cuts to minimise risk of infection by fungal pathogens and promote good conditions for new root growth.

**SUBDIVISION WORKS CERTIFICATE**

Certificate No. .... **20130299SW52** .....

Date of Issue ..... **2/09/2020** .....

Issuing Officer *D. Restu*

Accreditation No. .... **BDC3367** .....

These plans/specifications form part of the certificate issued **2nd of September 2020**

**WORK AS EXECUTED SHOWN IN RED**

SIGNATURE..... *Peter Robert Warwick* .....

**PETER ROBERT WARWICK**  
REGISTERED LAND SURVEYOR

**VINCE MORGAN SURVEYORS PTY LTD**

DATE: 14/01/21 REF: 16800-16

# SCHEDULE OF LANDSCAPE HOLD POINTS

## SANDSTONE ARCH LANDSCAPE WORKS

Hold Point Description	Requirements
<b>1. GRADING, SOIL + FINISH PREPARATION</b>	
<b>a. Subgrade Preparation</b> Grading + cultivation/ripping of subgrade	Visual inspection Completed area marked up on plan and signed off
<b>b. Bulk in topsoil</b> Install topsoil to required depth.	Visual inspection Verify topsoil depth using spot holes
<b>b. Topsoil</b> Fine trimming of topsoil. Cultivate/rip compacted areas if required - prior to planting and/or laying of turf.	Visual inspection Completed area marked up on plan and signed off
<b>2. PATHS + GARDEN EDGING</b>	
<b>a. Boxing Out - Paths</b> Setout and levels of subgrade - Prior to installation of formwork	Visual inspection of sprayed/pegged alignment
<b>a. Formwork - Paths (Where formwork applicable)</b> Setout and levels of formwork - prior to pouring of concrete or installation of decomposed granite or softfall.	Visual Inspection of formwork
<b>d. Setout and Levels - Edges</b> Setout and levels of garden edging - prior to installation and planting and/or laying of turf.	Visual inspection of sprayed/pegged alignment
<b>3. FURNITURE, FENCING AND STRUCTURES</b>	
<b>a. Landscape Walls</b> setout and levels	Visual inspection of sprayed/pegged alignment and adjoining finish levels
<b>4. PLANTING</b>	
<b>a. Tree Setout</b> Setout of trees	Visual inspection of sprayed/pegged alignment
<b>a. Tree Pits</b> Appropriate size and drainage of tree pit - prior to backfilling	Visual inspection of a small sample of tree pits
<b>b. Tree Planting</b> Acceptable planting technique including watering berms/dishes.	Visual inspection of a small sample planted trees
<b>c. Shrub Planting</b> Acceptable planting technique and plant spacing.	Visual inspection of a small sample planted shrubs



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REVISION	DESCRIPTION	CHKD	DATE
B	For CC approval	DSO	13.08.20

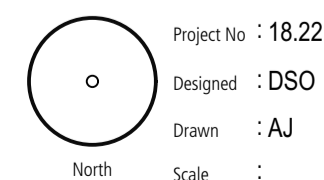
PROJECT & CLIENT

**Redbank**

Redbank Communities

DRAWING TITLE

**Landscape Specification**



Project No : 18.22  
Designed : DSO  
Drawn : AJ  
North  
Scale :


DRAWING NUMBER  
**L-CD-002**

REVISION  
**B**



# MATERIALS AND FINISHES SCHEDULE

## HARD FINISHES

CODE	NAME	DESCRIPTION	INDICATIVE IMAGE
P1	PAVEMENT TYPE 1 CONCRETE PAVING	<b>Finish:</b> Broom finish up to all edges - <u>No</u> <u>tooled margin as detailed</u>  <b>Colour:</b> standard grey	
E1	EDGING TYPE 1 - GALVANISED STEEL	<b>Edge Bar:</b> 6mm thick x 100mm tall flat bar <b>Pegs:</b> N12 deformed rod nom. 500mm long at 1.5m centres welded to flat bar.	No Image
E2	EDGE TYPE 2 - HARDWOOD TIMBER EDGING WITH PEGS	<b>Edge Board:</b> 100x38mm Hardwood Timber; pre-drilled and screw fixed to timber peg. <b>Pegs:</b> 450x50x50mm timber pegs, spaced at 1.5m centres. Where an edge board is less than 1.5m, pegs are to be set 100mm from the ends of the edge board.	No Image
W1	SANDSTONE LOG RETAINING WALL	<b>Colour:</b> Golden / banded <b>Size:</b> 0.5m x 0.5m x 2m <b>Finish:</b> Top, bottom and ends to be sawn. Front & back face to be split.	No Image
B1	BOLLARD TYPE 1 HARDWOOD TIMBER FIXED	<b>Bollard:</b> 150x150mm structural grade hardwood posts as detailed. Galvanised steel sleeve as detailed, when located in turf areas.  <b>Finish:</b> Sikkens timber stain	No Image
B2	BOLLARD TYPE 2 HARDWOOD TIMBER FOLD-DOWN	<b>Material:</b> Galvanised steel fold down base with Class 1 Australian hardwood body as detailed <b>Size:</b> 150 x 75 x 600 high. Sikkens timber stain	No Image
F1	FENCE TYPE 1 - TIMBER POST + FOUR RAIL HARDWOOD	<b>Posts:</b> 150x150mm treated pine posts as detailed. <b>Rails:</b> Four 150x40mm structural grade hardwood rails  <b>Finish:</b> Sikkens timber stain  <b>Mesh:</b> Black PVC coated, steel chainlink mesh	No Image

## SOFT FINISHES

PRODUCT & DESCRIPTION		INDICATIVE IMAGE
T2	<b>TURF</b> Kikuyu	No Image
M1	<b>MULCH</b> Site won mulch derived from <b>chipping</b> removed trees and stockpiling. (For use in amenity gardens, screen planting and tree surrounds)	No Image
M2	<b>MULCH</b> Site won mulch derived from <b>tub grinding</b> removed trees and stockpiling. (For use in broad scale revegetation and stabilisation areas only)	No Image
J1	<b>JUTE MESH</b> open weave 70G/M2, 20x20mm Grid. 100% biodegradable organic product made from Jute (hessian) Fastened with a "U" shaped pin  All Stakes or similar approved Jute Soil Saver Mesh	No Image

## TOP SOIL

PRODUCT & DESCRIPTION
<b>Site Top Soil</b>  Existing top soil to be stripped prior to civil works and stockpiled for re-use in turfing and landscape works.

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Date of Issue 2/09/2020  
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Accreditation No. BDC3367

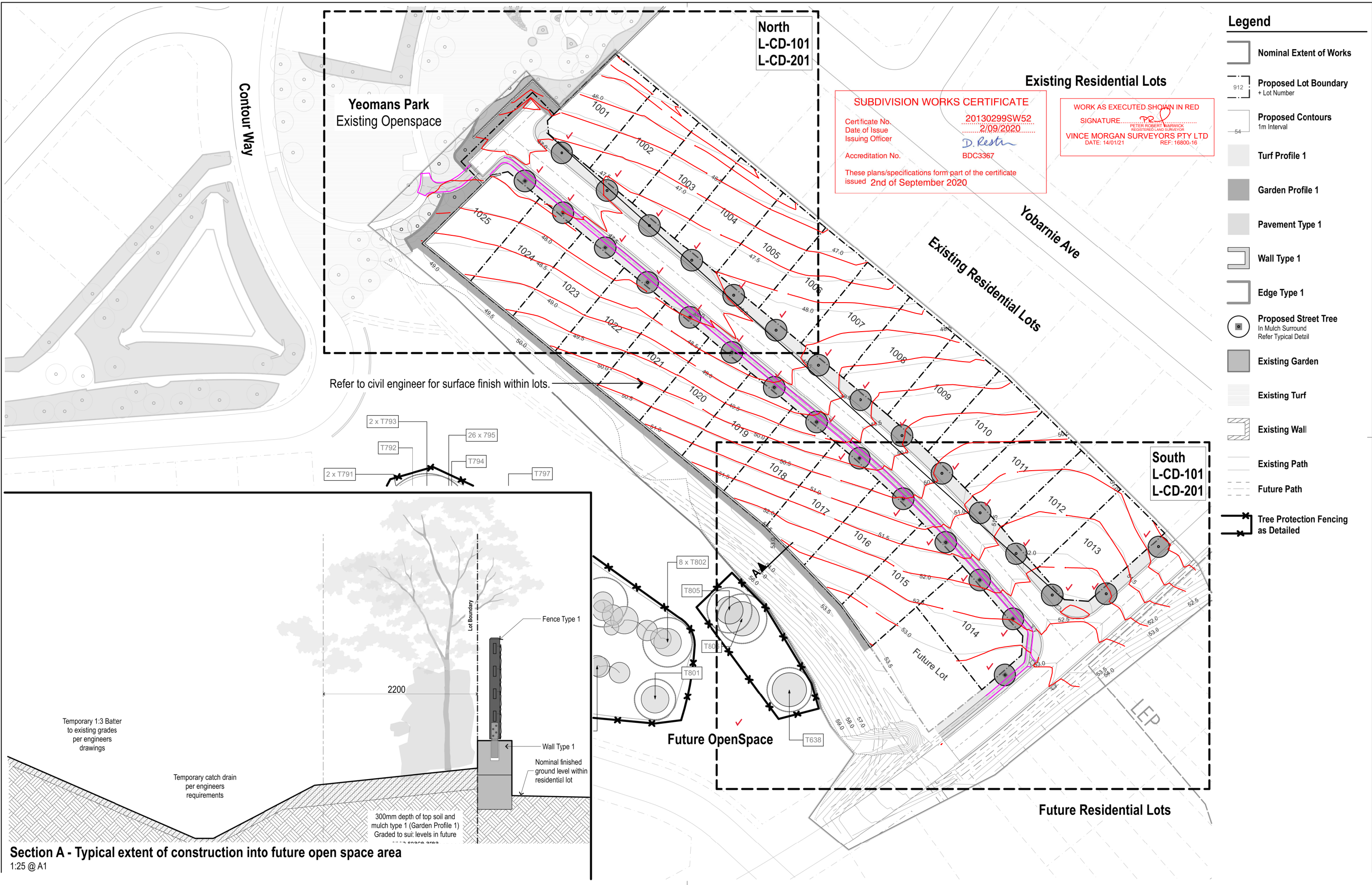
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SIGNATURE Peter Robert Warwick  
PETER ROBERT WARWICK  
REGISTERED LAND SURVEYOR  
**VINCE MORGAN SURVEYORS PTY LTD**  
DATE: 14/01/21 REF: 16800-16

# PLANTING SCHEDULE

Botanical Name	Common Name	Potential Height Reached	Container Size	plants / m2	Quantity
<b>STREET TREES</b>					
<i>Lophostemon confertus</i>	Brush Box	15-20m	100L	n/a	29
<b>OPENSOURCE PLANTING</b>					
<i>Callistemon citrinus</i> "Endeavour"	Red Bottle Brush	4m	25L	n/a	50
<i>Callistemon salignus</i>	White Bottle Brush	8m	25L	n/a	40
<i>Ceretopetalum gummiferum</i>	NSW Christmas Bush	6m	25L	n/a	4
<i>Eucalyptus crebra</i>	Narrow-Leaved Iron Bark	12m	25L	2	2
<i>Callistemon viminalis</i> "Little John"	Little John	1.5m	5L	1	50
<i>Lomandra confertifolia</i> "Little Con"	Little Con	0.5m	150mm	4	420
<i>Westringia fruticosa</i>	Coastal Rosemary	1m	5L	1	50



- Legend**
- Nominal Extent of Works
  - Proposed Lot Boundary + Lot Number
  - Proposed Contours 1m Interval
  - Turf Profile 1
  - Garden Profile 1
  - Pavement Type 1
  - Wall Type 1
  - Edge Type 1
  - Proposed Street Tree In Mulch Surround Refer Typical Detail
  - Existing Garden
  - Existing Turf
  - Existing Wall
  - Existing Path
  - Future Path
  - Tree Protection Fencing as Detailed

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 DATE: 14/01/21 REF: 16800-16





**Legend**

- 912 Proposed Lot Boundary + Lot Number
- Proposed Street Tree In Mulch Surround Refer Typical Detail
- Existing Path
- Future Path
- Fence Type 1
- Existing Post + 3 Rail Fence To be Retained and Protected
- Bollard Type 1
- Bollard Type 2
- Tree Protection Fencing as Detailed
- Wall Type 1

**SUBDIVISION WORKS CERTIFICATE**

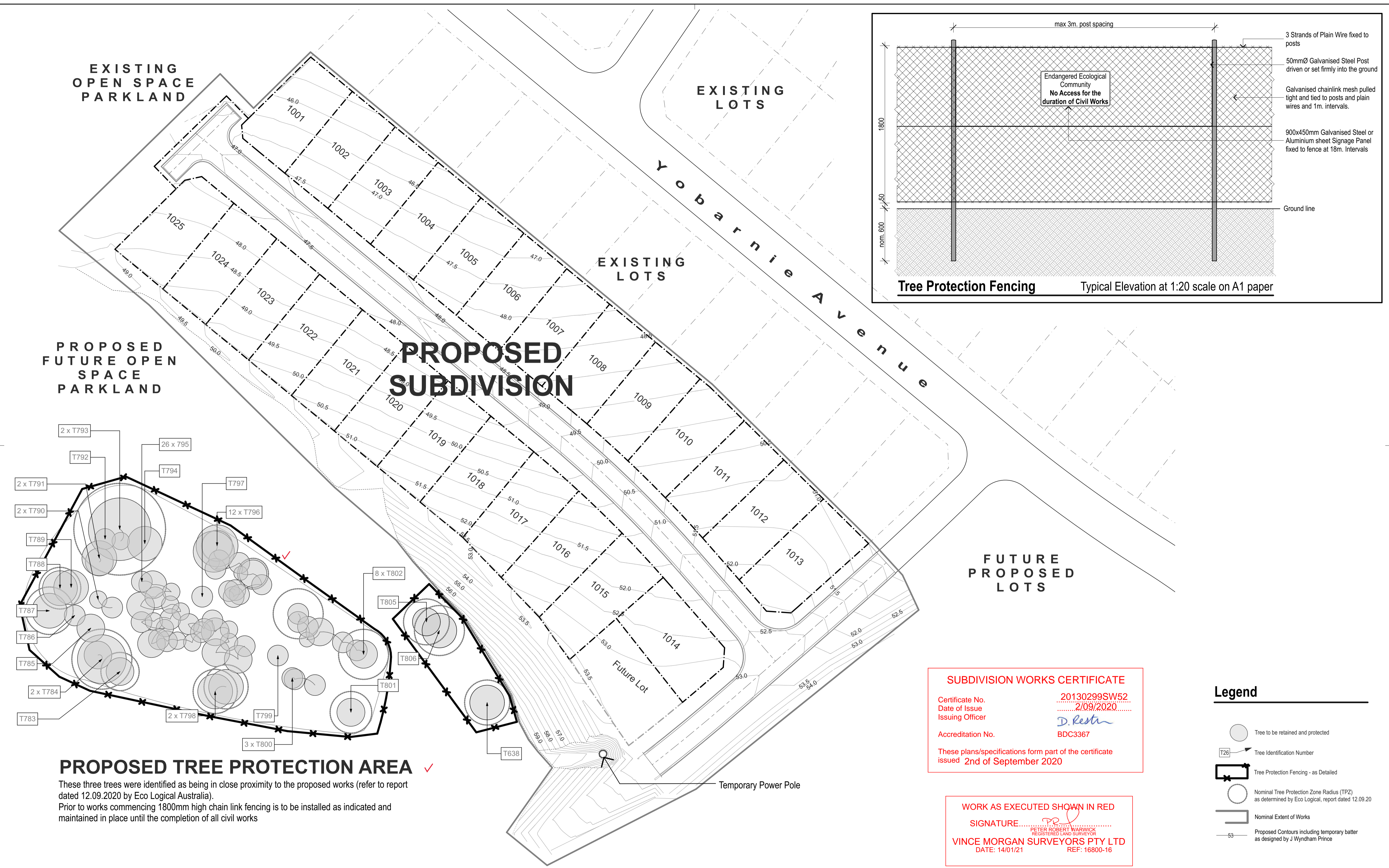
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 Issuing Officer *D. Resta*  
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**VINCE MORGAN SURVEYORS PTY LTD**  
 DATE: 14/01/21 REF: 16800-16





EXISTING  
OPEN SPACE  
PARKLAND

EXISTING  
LOTS

EXISTING  
LOTS

PROPOSED  
SUBDIVISION

PROPOSED  
FUTURE OPEN  
SPACE  
PARKLAND

FUTURE  
PROPOSED  
LOTS

**PROPOSED TREE PROTECTION AREA** ✓

These three trees were identified as being in close proximity to the proposed works (refer to report dated 12.09.2020 by Eco Logical Australia).  
Prior to works commencing 1800mm high chain link fencing is to be installed as indicated and maintained in place until the completion of all civil works

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DATE: 14/01/21 REF: 16800-16

**Legend**

- Tree to be retained and protected
- Tree Identification Number
- Tree Protection Fencing - as Detailed
- Nominal Tree Protection Zone Radius (TPZ) as determined by Eco Logical, report dated 12.09.20
- Nominal Extent of Works
- Proposed Contours including temporary batter as designed by J Wyndham Prince

Plan View at 1:500 scale on A1 or 1:1000 scale on A3 paper



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B	For CC approval	DSO	13.08.20

PROJECT & CLIENT  
**Redbank**

Redbank Communities

DRAWING TITLE  
**Tree Protection Plan**

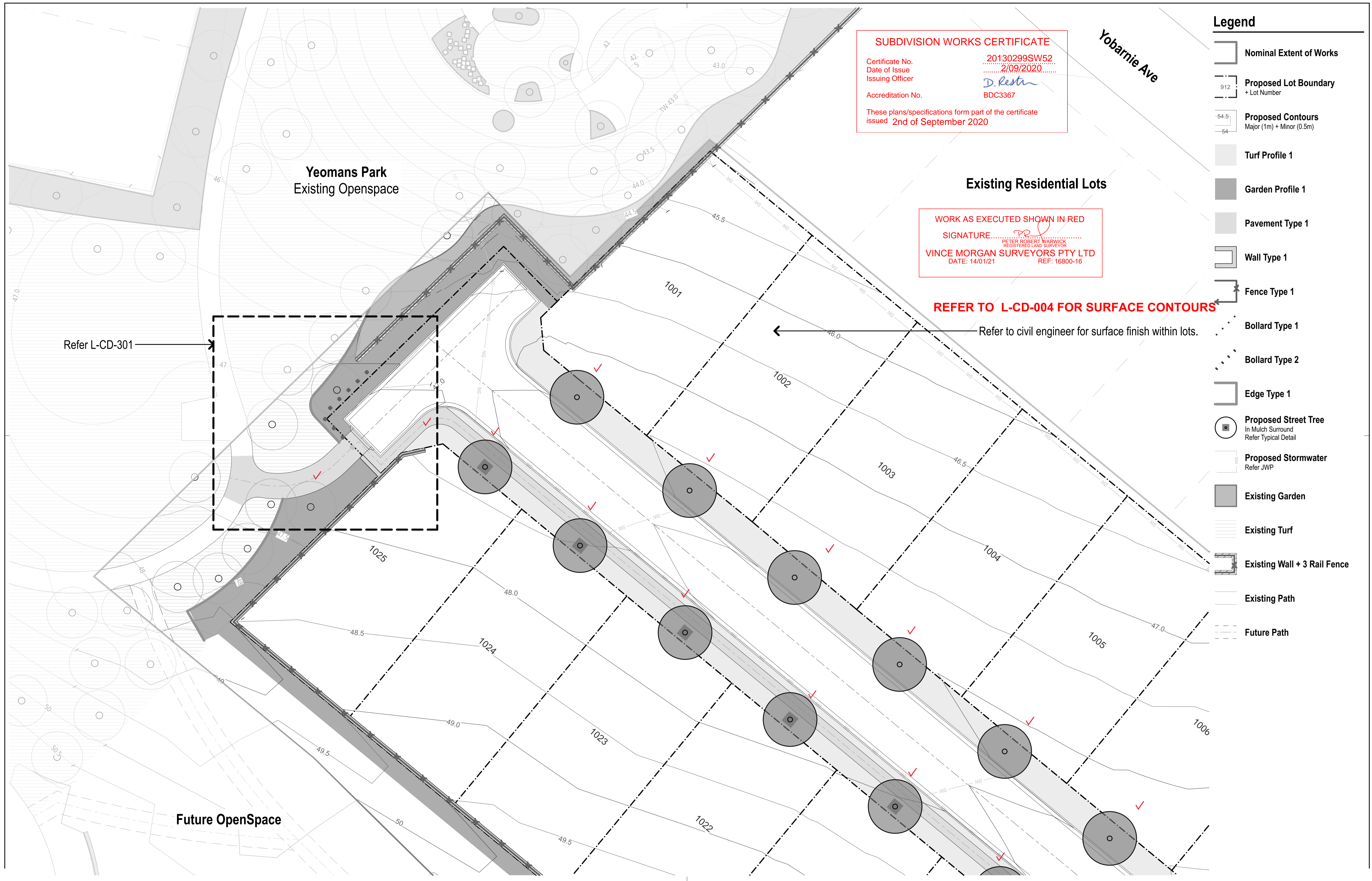
PROJECT No : 18.22  
Designed : DSO  
Drawn : AJ  
North Scale : 1:500@A1/1:1000@A3

DRAWING NUMBER  
**L-CD-006**

REVISION  
**B**

Printed at : 12:26 pm 2/9/20





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 PETER ROBERT WARWICK  
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**VINCE MORGAN SURVEYORS PTY LTD**  
 DATE: 14/01/21 REF: 16800-16

- Legend**
- Nominal Extent of Works
  - Proposed Lot Boundary + Lot Number
  - Proposed Contours Major (1m) + Minor (0.5m)
  - Turf Profile 1
  - Garden Profile 1
  - Pavement Type 1
  - Wall Type 1
  - Fence Type 1
  - Bollard Type 1
  - Bollard Type 2
  - Edge Type 1
  - Proposed Street Tree In Mulch Surround Refer Typical Detail
  - Proposed Stormwater Refer JWP
  - Existing Garden
  - Existing Turf
  - Existing Wall + 3 Rail Fence
  - Existing Path
  - Future Path

**Existing Residential Lots**

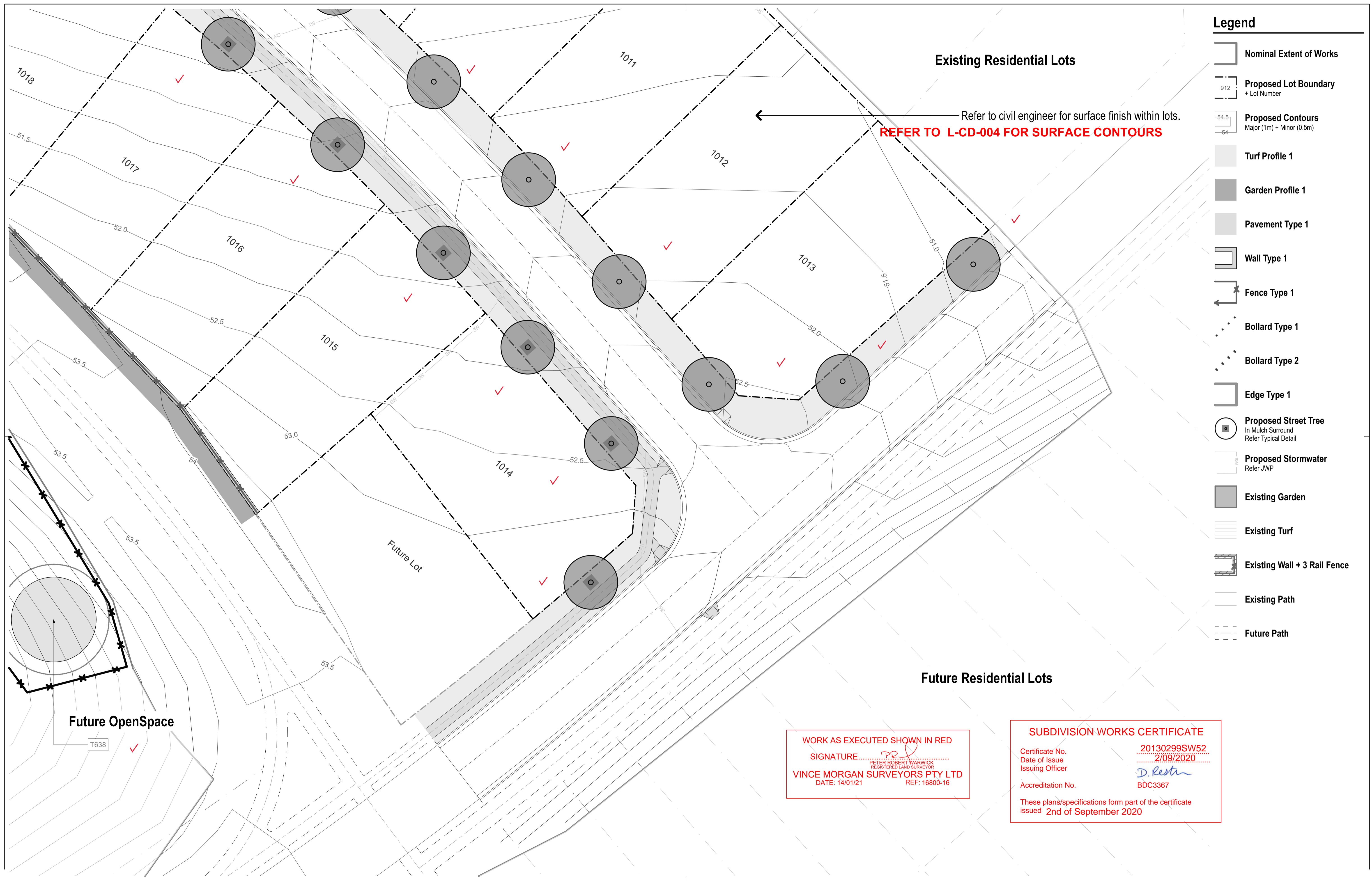
**REFER TO L-CD-004 FOR SURFACE CONTOURS**

Refer to civil engineer for surface finish within lots.

Refer L-CD-301

REVISION	DESCRIPTION	CHKD	DATE
B	For CC approval	DSO	13.08.20





- ### Legend
- Nominal Extent of Works
  - Proposed Lot Boundary + Lot Number
  - Proposed Contours  
Major (1m) + Minor (0.5m)
  - Turf Profile 1
  - Garden Profile 1
  - Pavement Type 1
  - Wall Type 1
  - Fence Type 1
  - Bollard Type 1
  - Bollard Type 2
  - Edge Type 1
  - Proposed Street Tree  
In Mulch Surround  
Refer Typical Detail
  - Proposed Stormwater  
Refer JWP
  - Existing Garden
  - Existing Turf
  - Existing Wall + 3 Rail Fence
  - Existing Path
  - Future Path

Existing Residential Lots

Refer to civil engineer for surface finish within lots.  
**REFER TO L-CD-004 FOR SURFACE CONTOURS**

Future Residential Lots

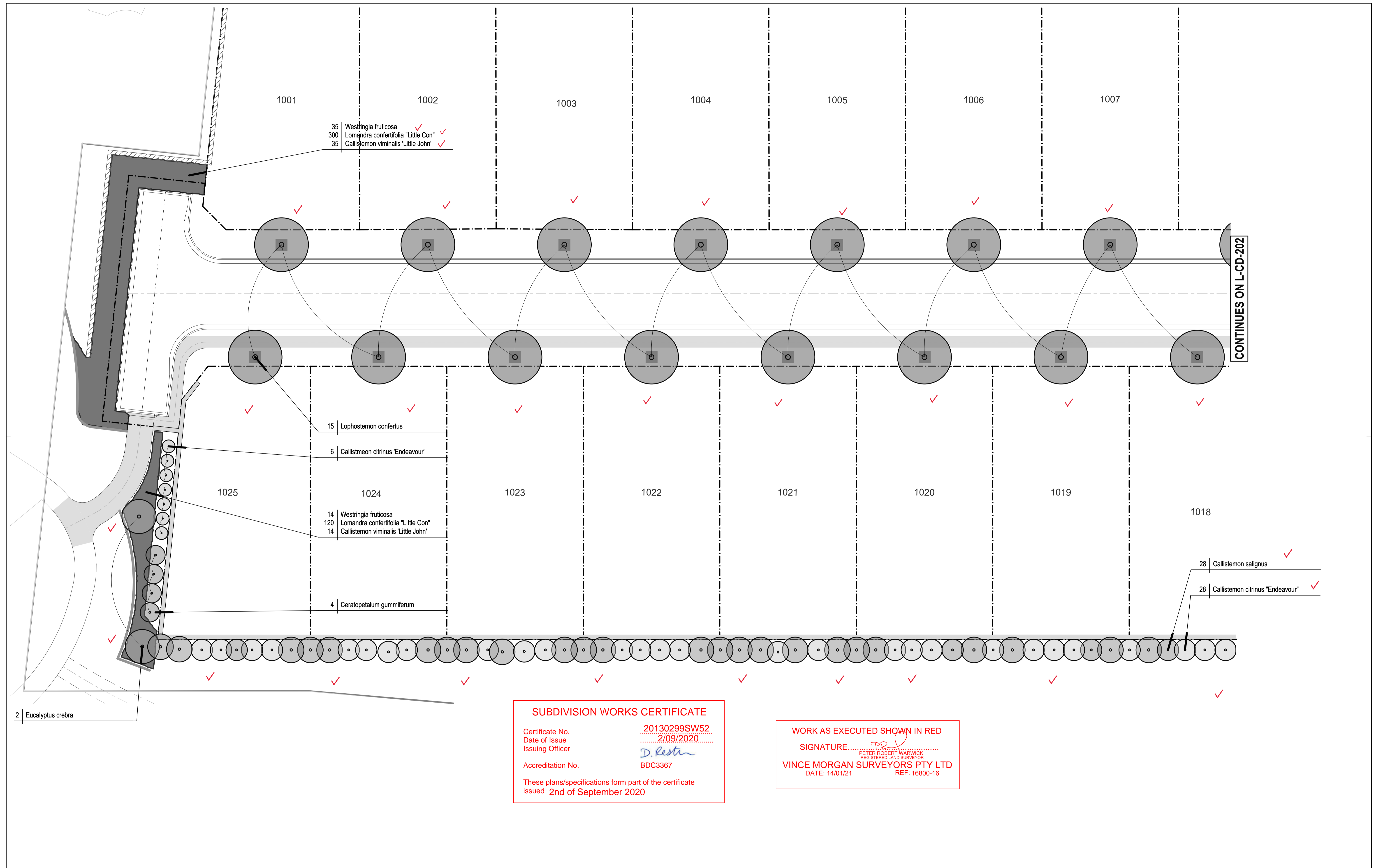
Future OpenSpace

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REGISTERED LAND SURVEYOR  
VINCE MORGAN SURVEYORS PTY LTD  
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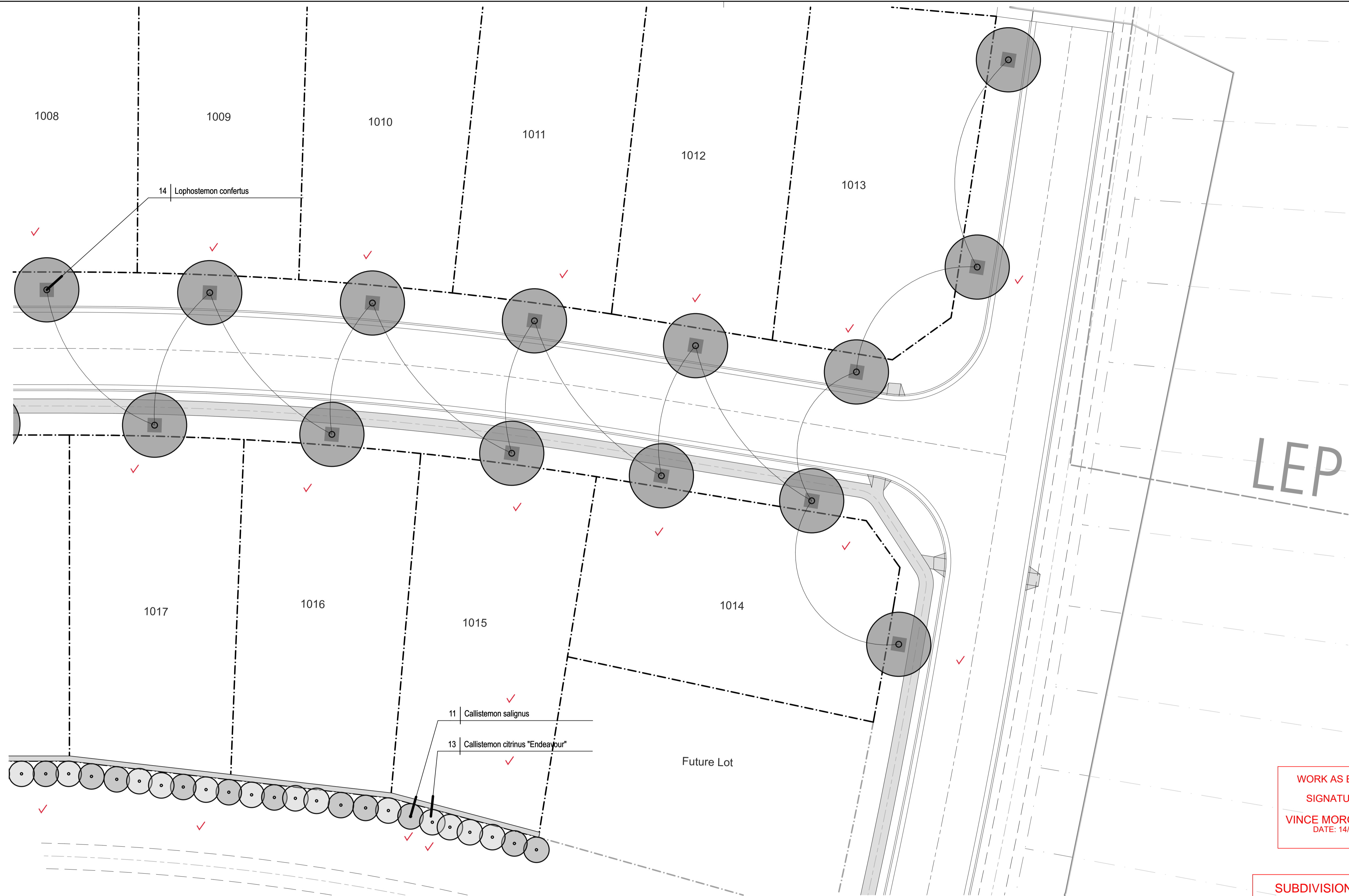
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Certificate No. 20130299SW52  
Date of Issue 2/09/2020  
Issuing Officer D. Restin  
Accreditation No. BDC3367  
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 DATE: 14/01/21 REF: 16800-16

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REVISION	DESCRIPTION	CHKD	DATE
B	For CC approval	DSO	13.08.20

PROJECT & CLIENT  
 Redbank

Redbank Communities

DRAWING TITLE  
 Planting Plan South



Project No : 18.22  
 Designed : DSO  
 Drawn : AJ  
 North Scale : 1:xx@A1/1:xx@A3

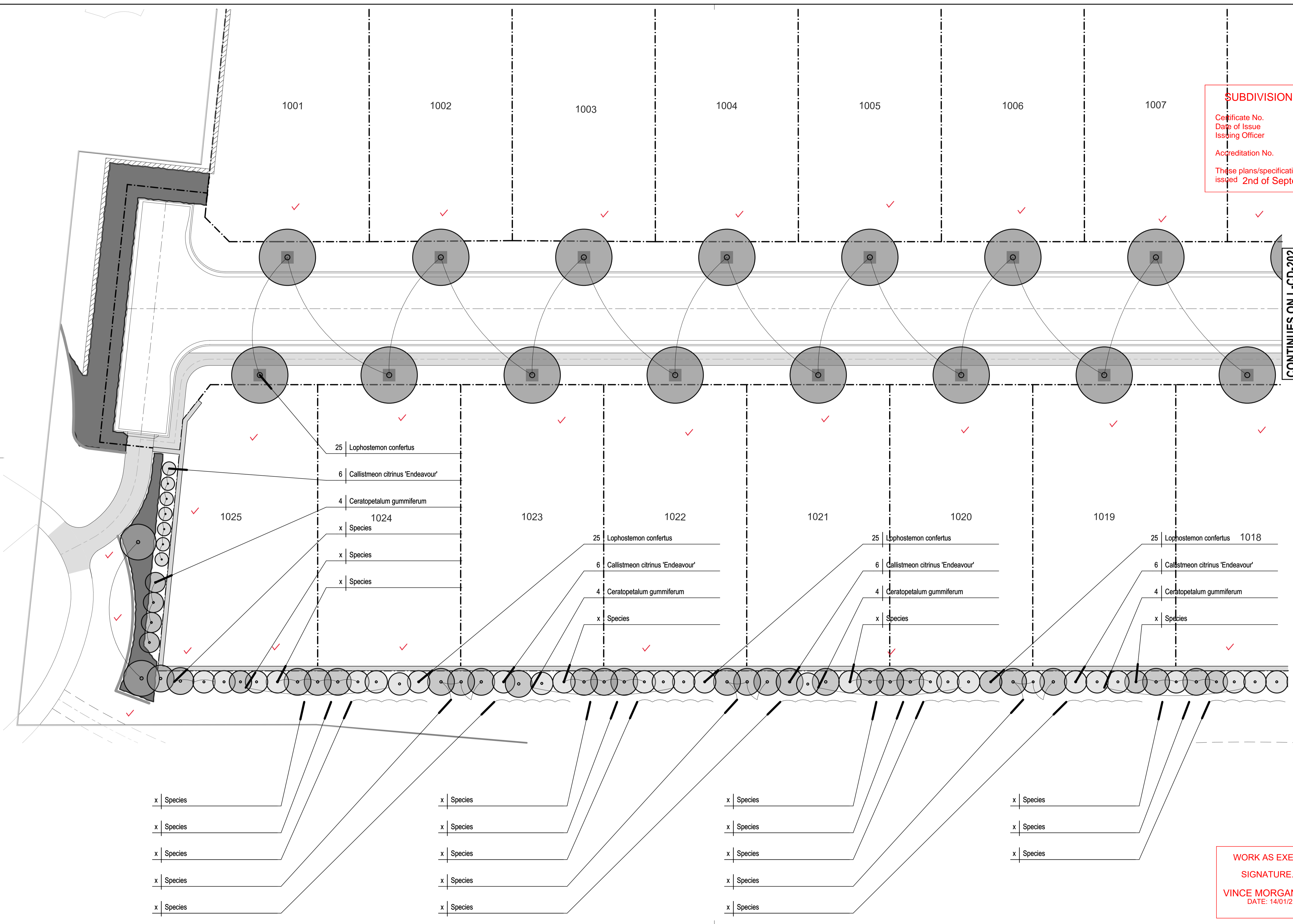
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 L-CD-202

REVISION  
 B

Plotted at : 12:26 pm 2/9/20



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 Certificate No. 20130299SW52  
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 SIGNATURE *P.R.*  
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**VINCE MORGAN SURVEYORS PTY LTD**  
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REVISION	DESCRIPTION	CHKD	DATE
A	For Tender	DSO	22.07.20

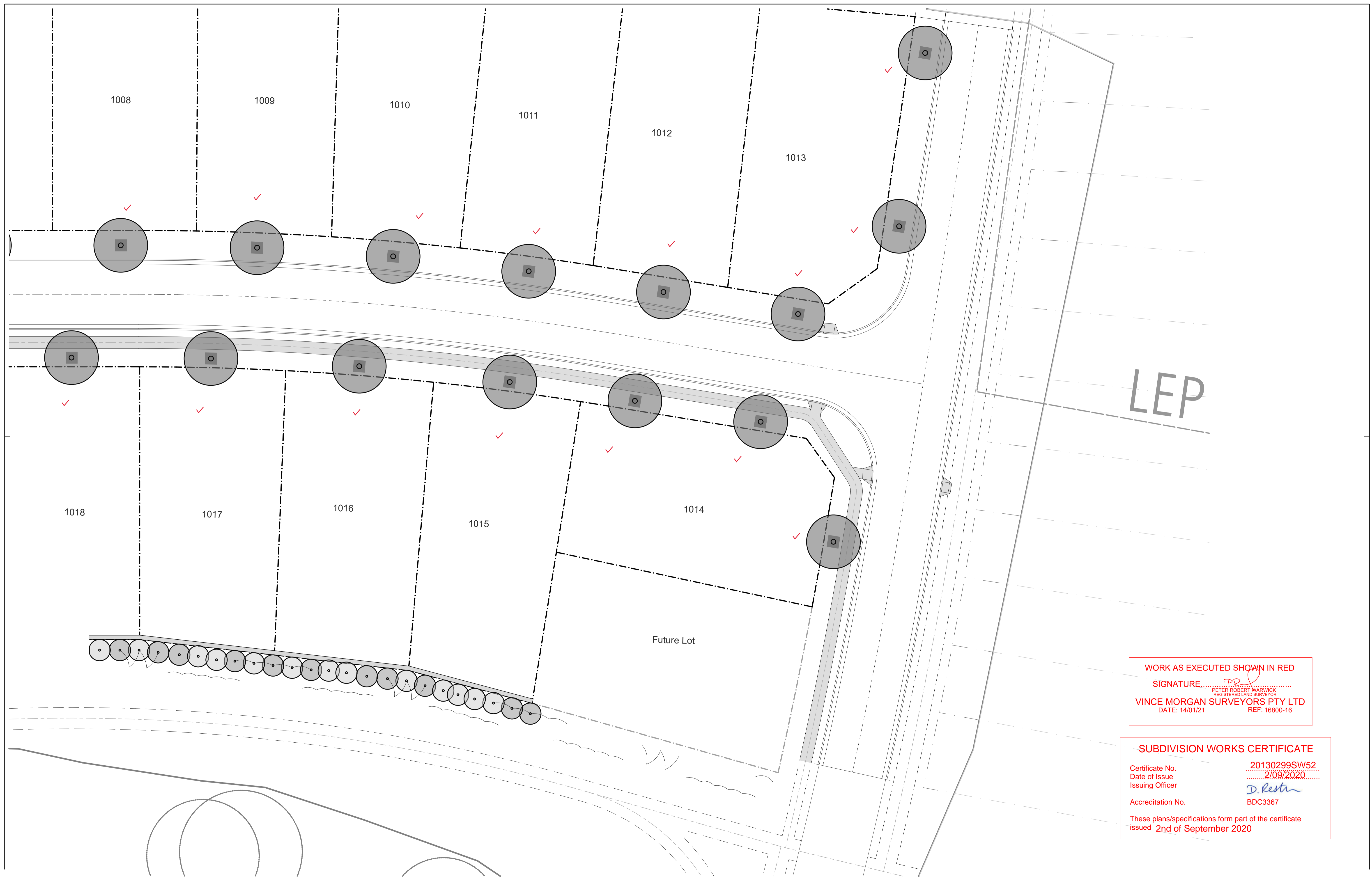
PROJECT & CLIENT  
**Redbank**

Redbank Communities

DRAWING TITLE  
**Planting Plan North SS**

Project No : 18.22  
 Designed : DSO  
 Drawn : AJ  
 North Scale : 1:xx@A1/1:xx@A3  
 DRAWING NUMBER  
 REVISION





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REVISION	DESCRIPTION	CHKD	DATE
A	For Tender	DSO	22.07.20

PROJECT & CLIENT  
 Redbank

Redbank Communities

DRAWING TITLE  
 Planting Plan South SS



Project No : 18.22  
 Designed : DSO  
 Drawn : AJ  
 North Scale : 1:xx@A1/1:xx@A3

DRAWING NUMBER

REVISION

A

Plotted at : 12:26 pm 2/9/20



Existing planting within Yeomans Park to be retained and protected

Existing 3 rail fence and retaining wall to be retained and protected

Existing trees within Yeomans Park to be retained and protected

Layback to engineers requirements

Saw cut existing pavement, then match and dowel proposed pavement into existing concrete footpath and make good any damage during construction. Dowel joint to engineers requirements.

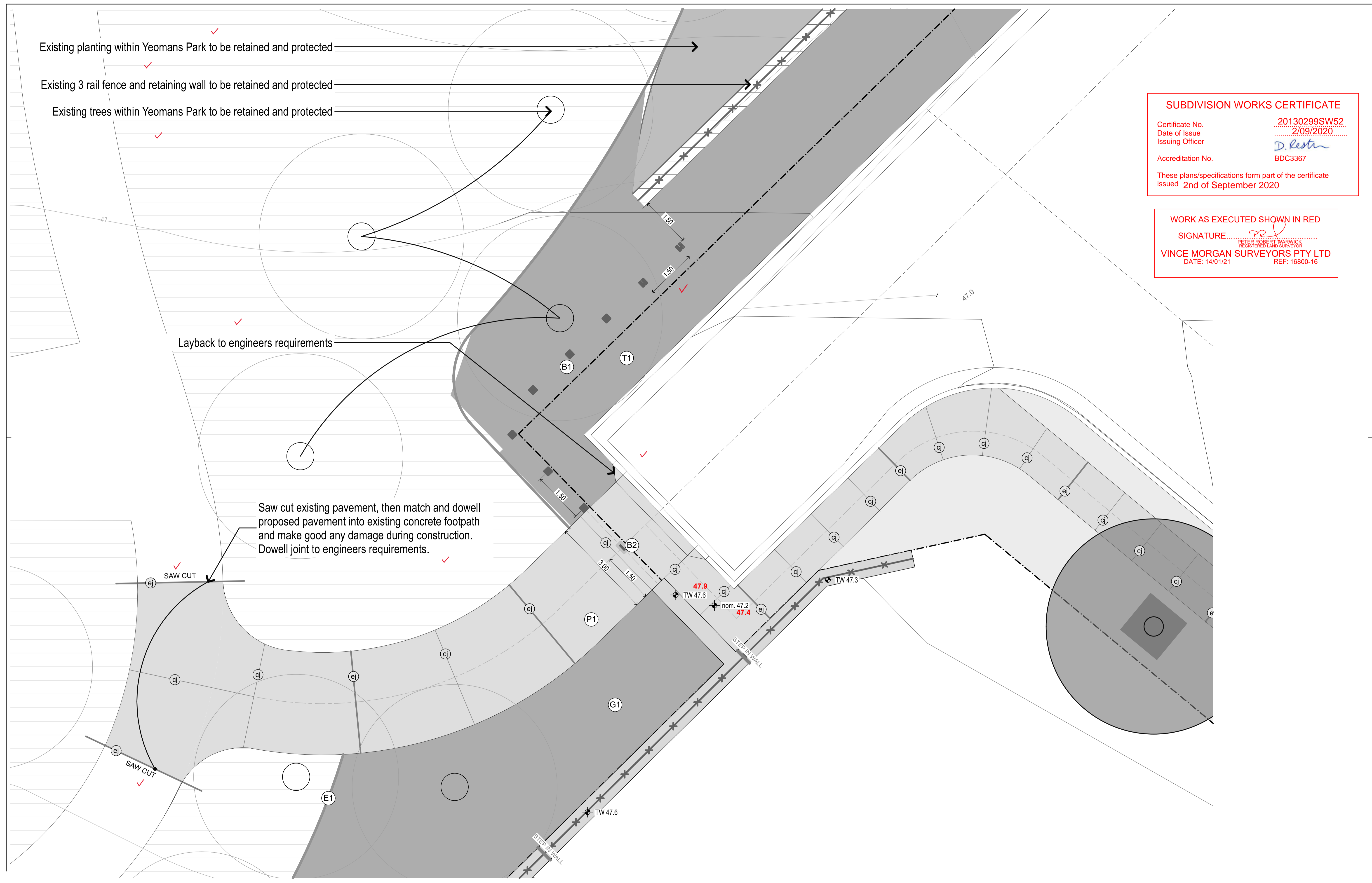
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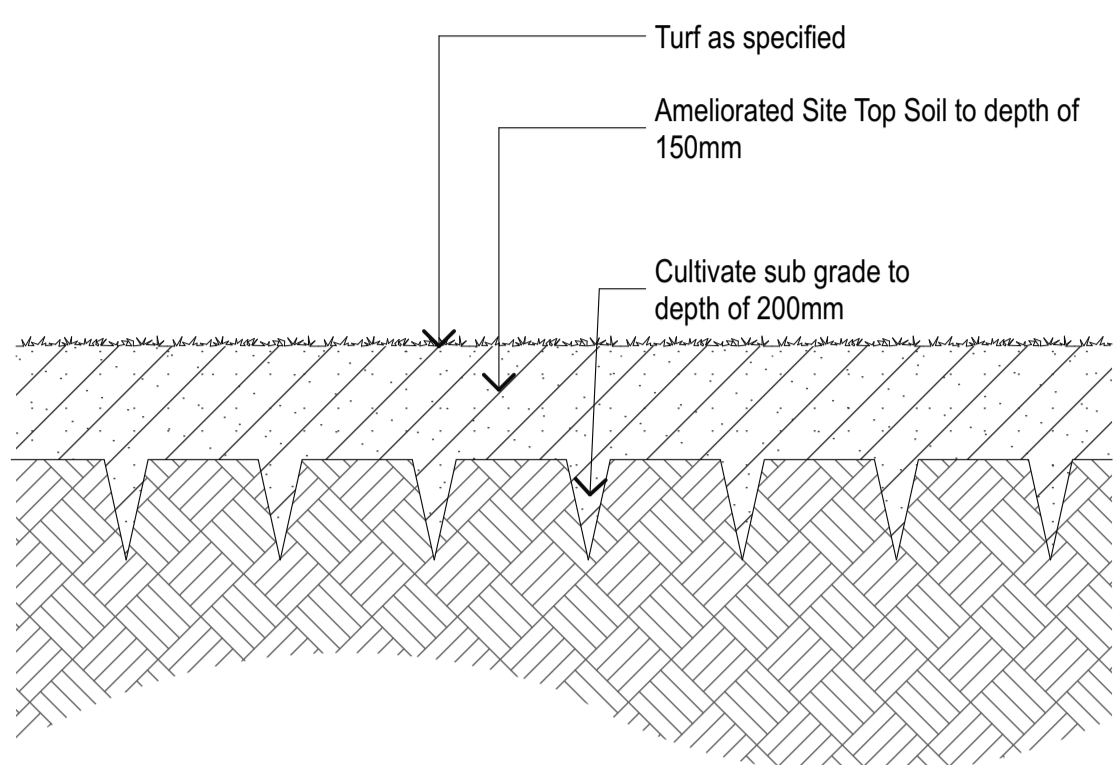
SIGNATURE *Peter Robert Warwick*  
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 REGISTERED LAND SURVEYOR  
 VINCE MORGAN SURVEYORS PTY LTD  
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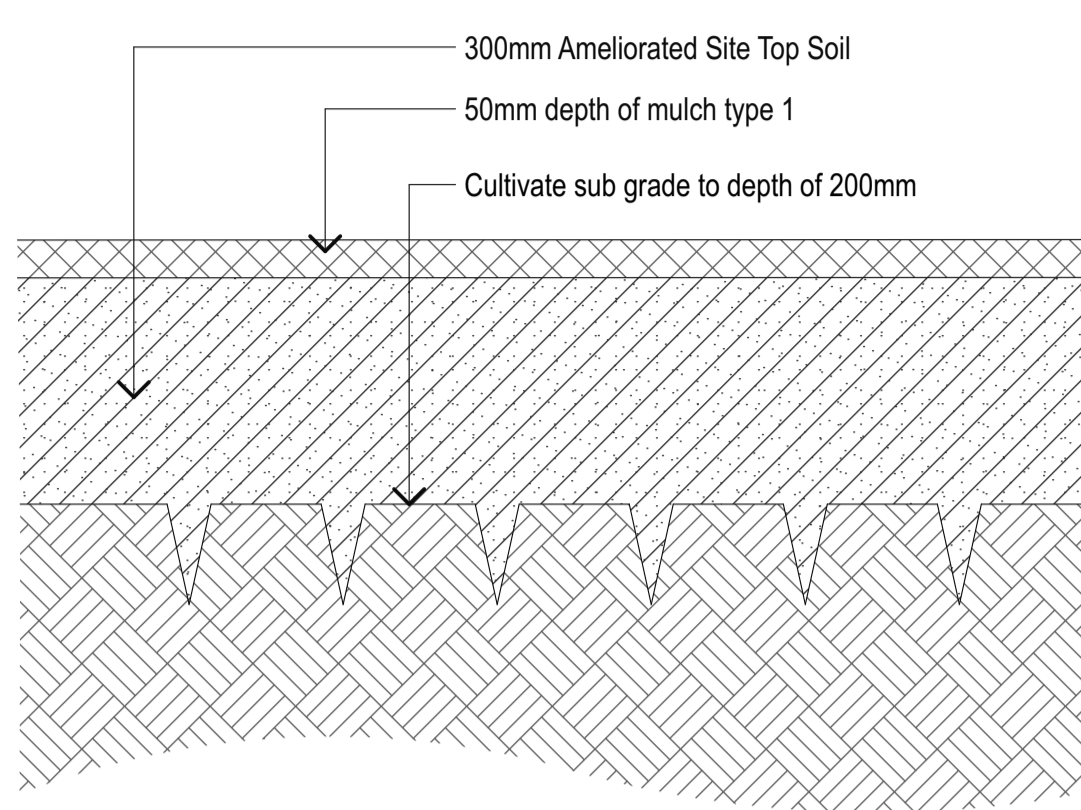
REVISION	DESCRIPTION	CHKD	DATE
B	For CC approval	DSO	02.09.20



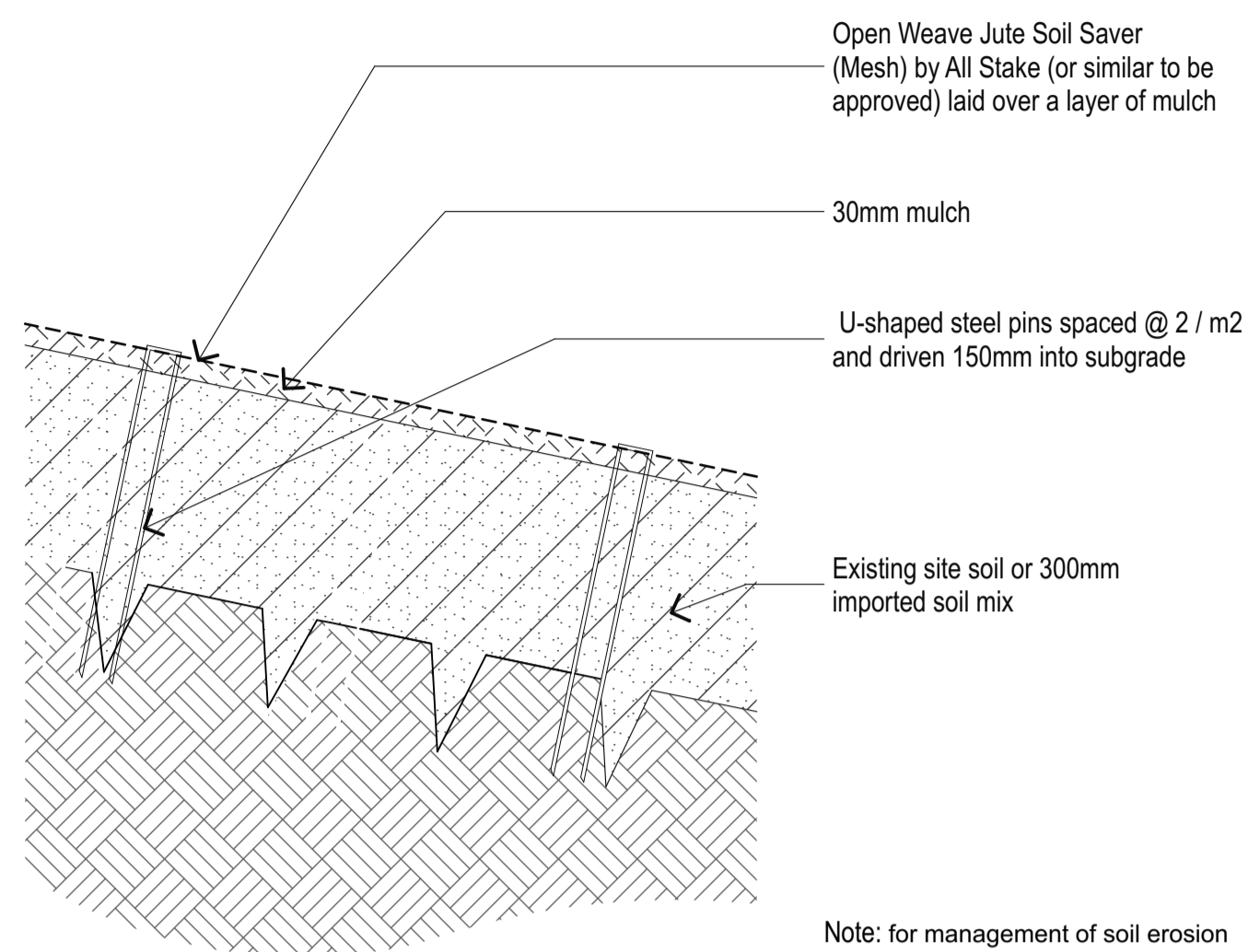
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**A** TURF PROFILE 1 Scale 1:10



**B** GARDEN PROFILE 1 Scale 1:10

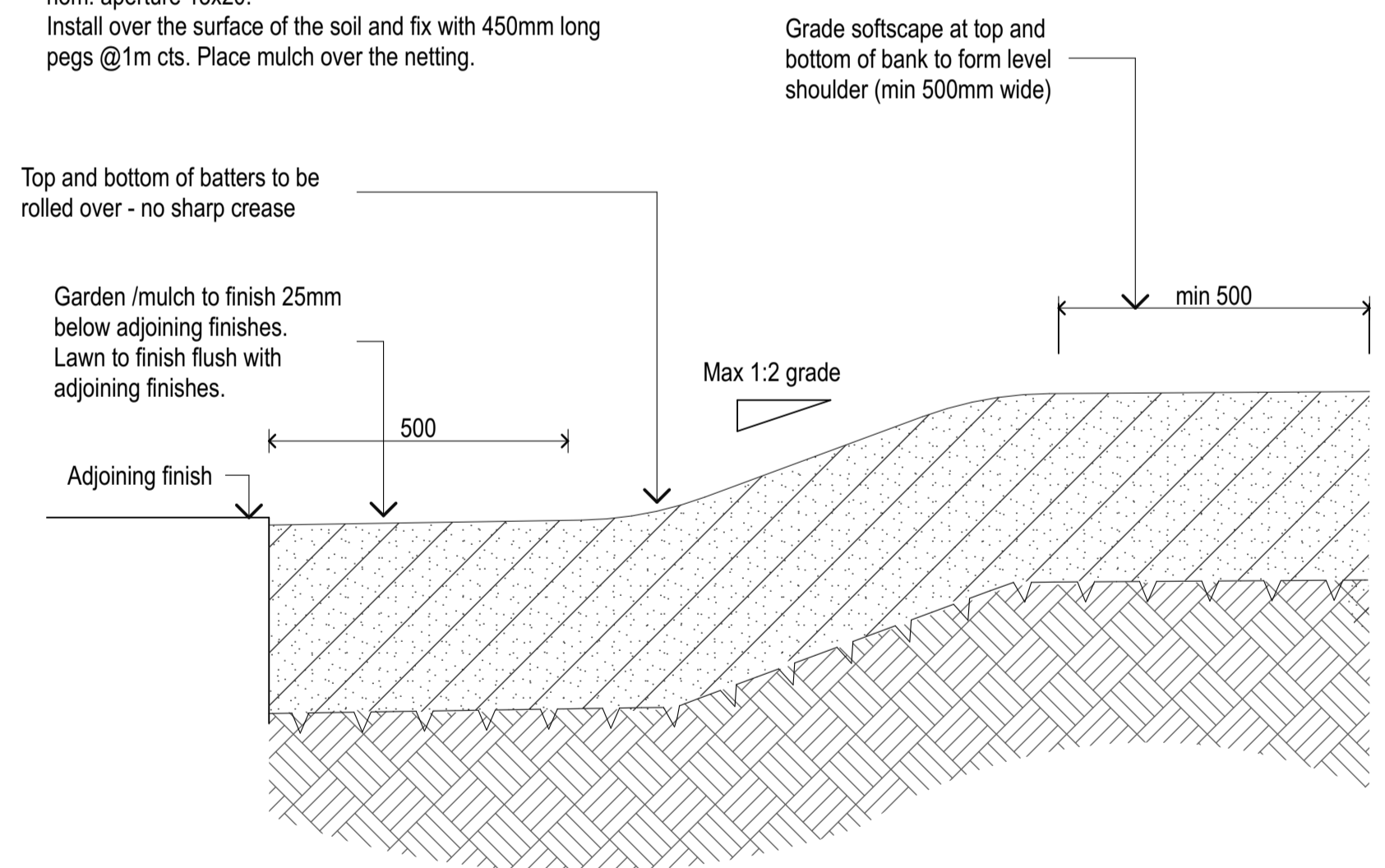


**C** TYPICAL EROSION CONTROL Scale 1:10

**Note:** Spray cover crop with round up. Mow or slash to the ground. The mulch stockpile is located on the Redbank site within 1km of the work area and is available to the contractor at no cost. Include loading and cartage from the stockpile to the work area.  
 As per the landscape schedule on L-CD-003, Mulch type 2 (Tub Ground) is only to be used in broad scale revegetation and stabilisation areas - **Not for use in garden profile 1**

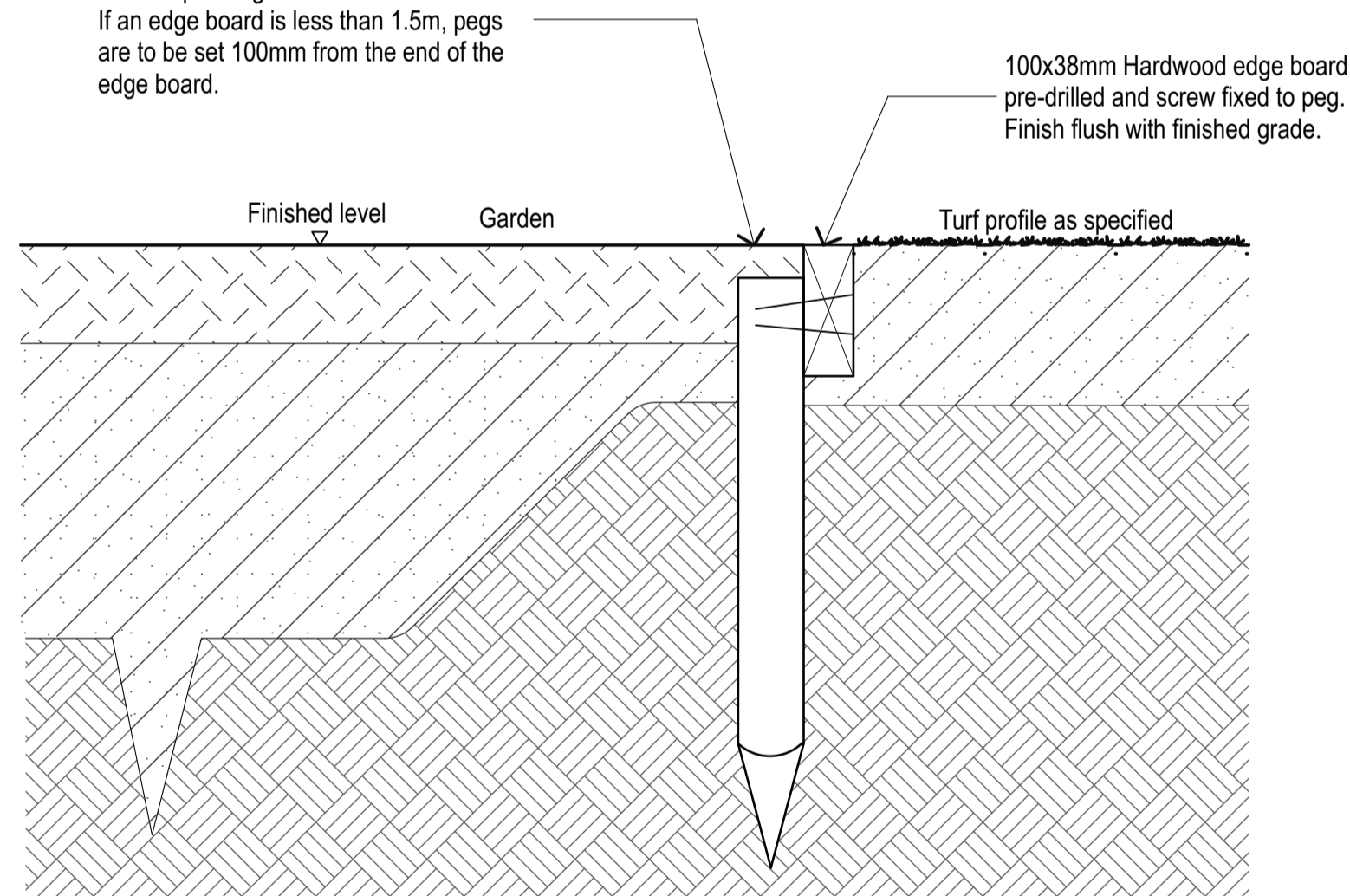
**Note:** for management of soil erosion in exposed / re-graded areas along the fire trail and along areas 1:2 grade, where required

**Note:** Where grades are steeper than 1:3 install erosion protection netting as required.  
 Erosion control netting (supplier All Stakes): Loosely-twisted jute fibre 5mm thick, woven to form an open weave mesh nom. aperture 13x20. Install over the surface of the soil and fix with 450mm long pegs @1m cts. Place mulch over the netting.



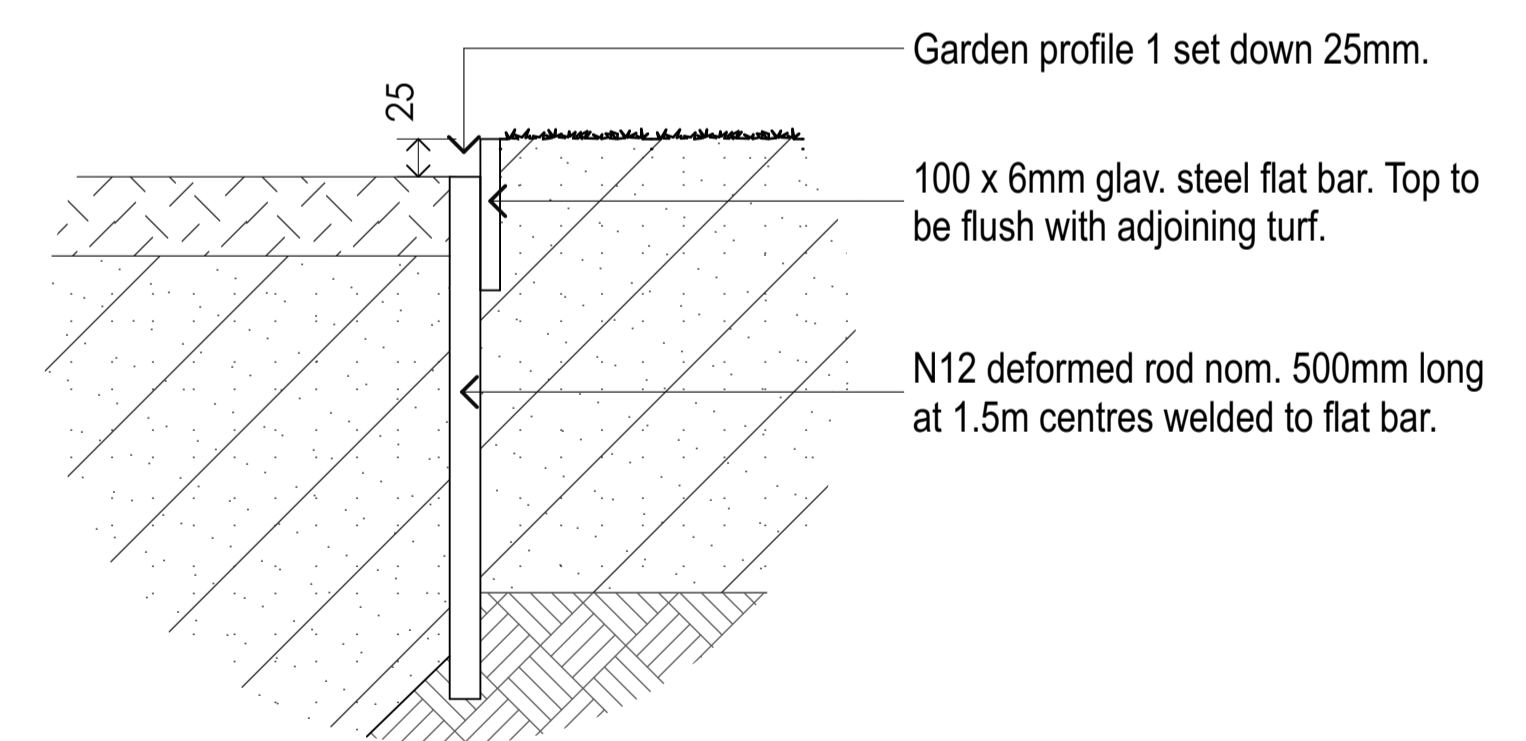
**D** TYPICAL EMBANKMENT GRADING Scale 1:10

450 x 50 x 50mm stakes to be set 25mm below top of edge board at 1.5m Centres. If an edge board is less than 1.5m, pegs are to be set 100mm from the end of the edge board.



**E** EDGE TYPE 2 HARDWOOD TIMBER EDGE Scale 1:5

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 Date of Issue 2/09/2020  
 Issuing Officer D. Restin  
 Accreditation No. BDC3367  
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**F** EDGE TYPE 1 - STEEL EDGE TYPICAL SECTION Scale 1:5



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 SUITE 602 / 51 RAWSON STREET, EPPING, NSW 2121  
 P 02 9957 2466 F 02 9957 3977 W ARTERRA.COM.AU

REVISION	DESCRIPTION	CHKD	DATE
B	For CC approval	DSO	13.08.20

PROJECT & CLIENT  
**Redbank**  
 Redbank Communities  
 DRAWING TITLE  
**Typical Details - Turf, Garden, Grading and Edges**  
 L-CD-401

Project No : 18.22  
 Designed : DSO  
 Drawn : AJ  
 North Scale : As Shown @ A1

Plotted at : 12:26 pm 2/9/20



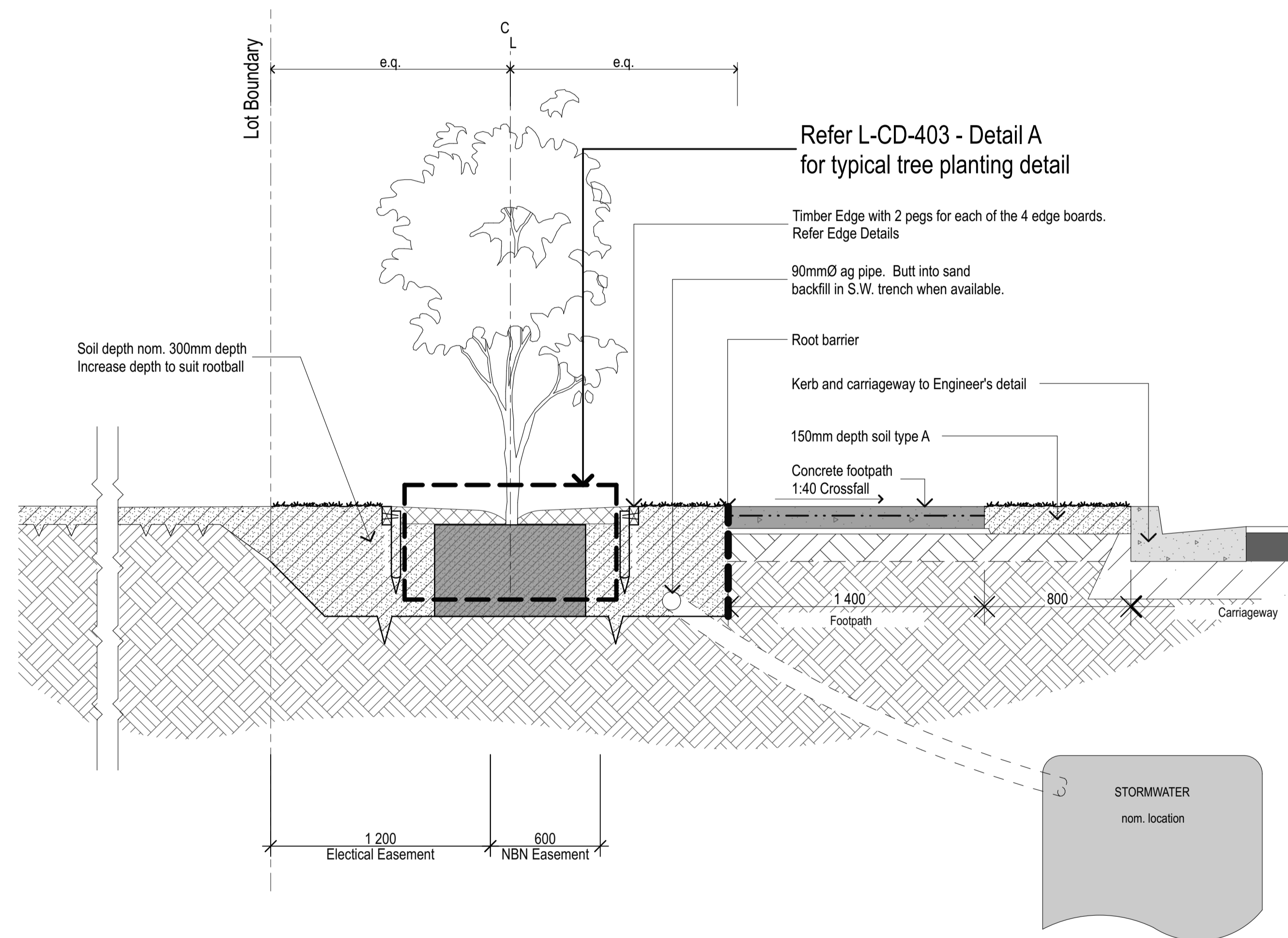
**SUBDIVISION WORKS CERTIFICATE**

Certificate No. 20130299SW52  
 Date of Issue 2/09/2020  
 Issuing Officer *D. Resta*  
 Accreditation No. BDC3367

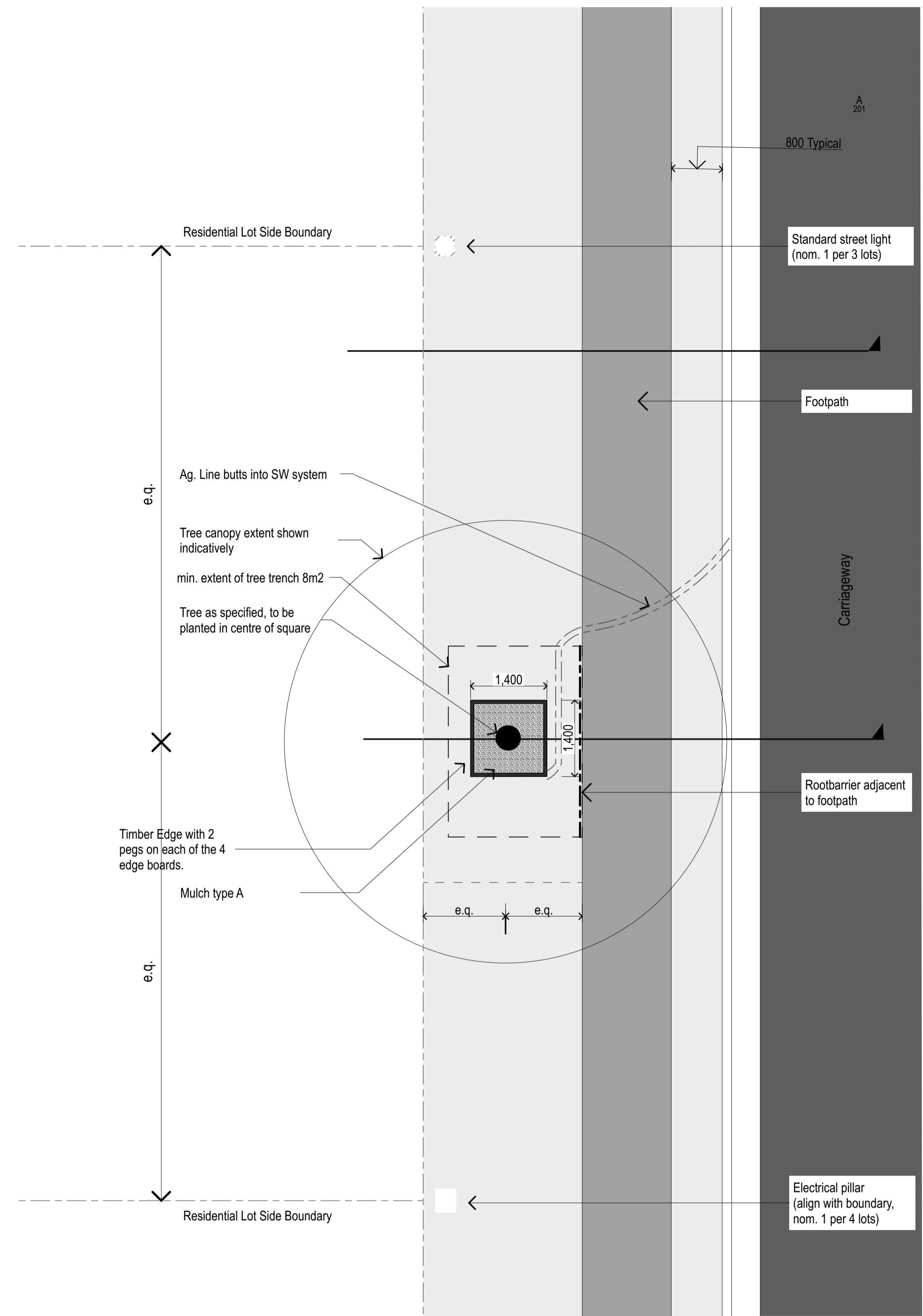
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**WORK AS EXECUTED SHOWN IN RED**

SIGNATURE *Peter Robert Warwick*  
 PETER ROBERT WARWICK  
 REGISTERED LAND SURVEYOR  
**VINCE MORGAN SURVEYORS PTY LTD**  
 DATE: 14/01/21 REF: 16800-16



**A** VERGE ARRANGEMENT & TREE PLANTING  
 TYPICAL SECTION Scale 1:20



**B** VERGE ARRANGEMENT & TREE PLANTING  
 TYPICAL PLAN Scale 1:50



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 PETER ROBERT WARWICK  
 REGISTERED LAND SURVEYOR  
**VINCE MORGAN SURVEYORS PTY LTD**  
 DATE: 14/01/21 REF: 16800-16

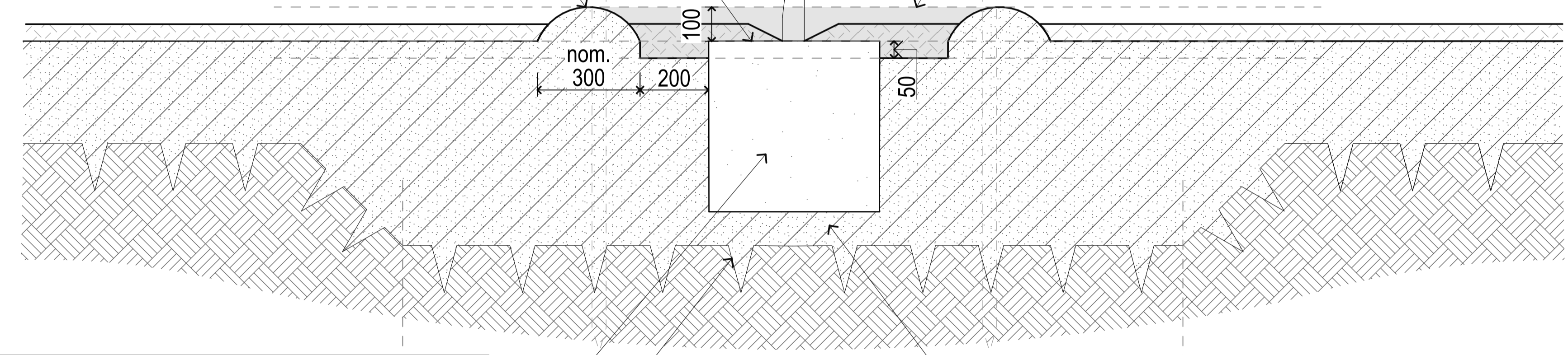
Install tree so that the rootball is level with adjoining finished soil level. Cover rootball w/ 50mm depth of mulch. **No site topsoil to be placed over rootball.**

Temporarily form a 100mm tall berm of consolidated top soil, and a 50mm deep x 200mm wide dish at the edge of the rootball to facilitate establishment watering.

**NOTE**  
 Berm and dish are to remain in place for 8-12 weeks before being filled in and mulch reinstated for the remainder of the maintenance period.

Stakes to be driven firmly into the ground outside of rootball and inside timber / spade edge, if applicable.

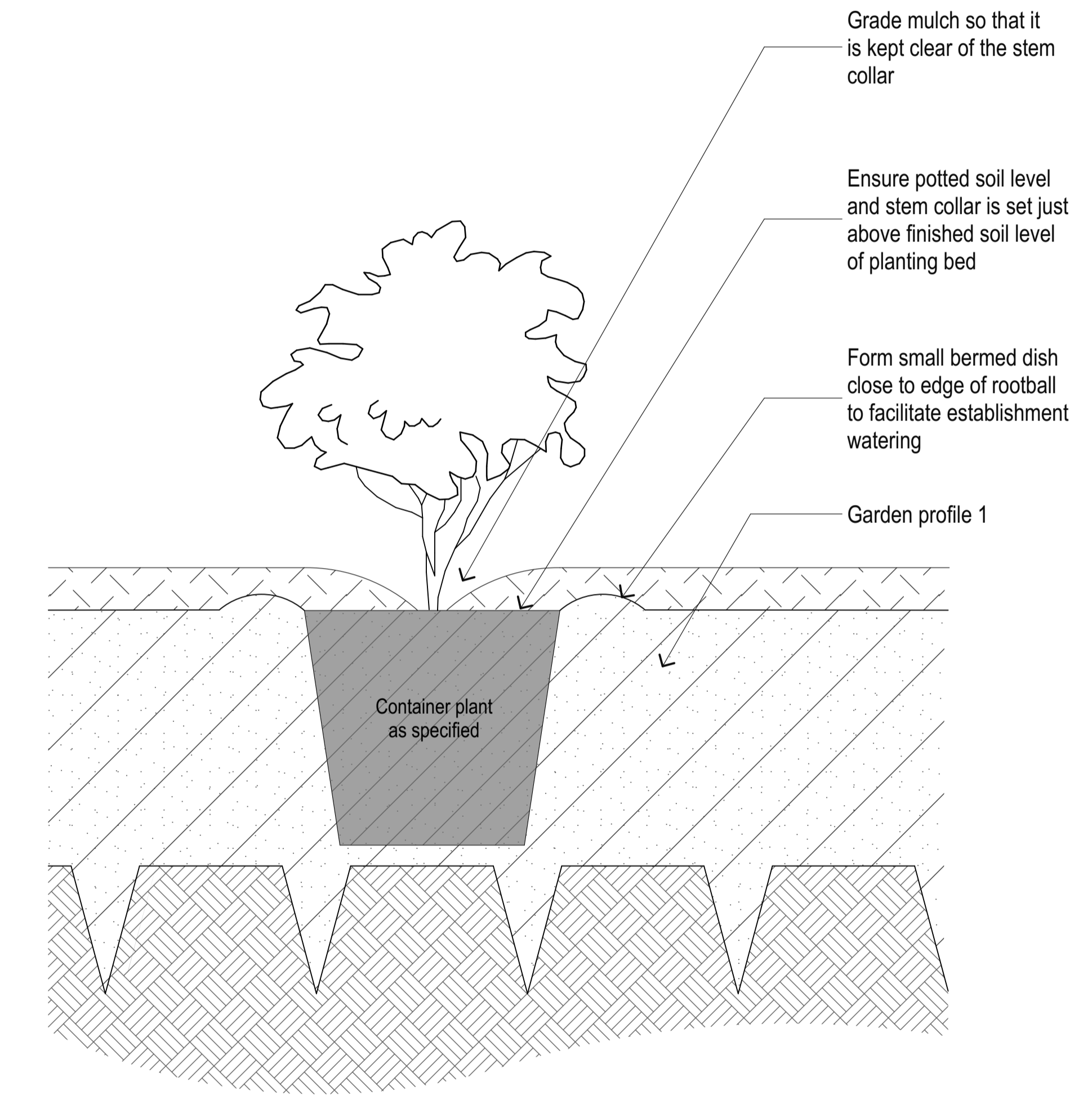
Watering dish is to be filled 100mm above rootball, allowed to soak into rootball and refilled as required to achieve watering volumes



Containerised plant as specified on plan  
 Rip/Break up base of tree pit for depth of 150mm

Consolidate soil directly beneath root ball at time of planting to prevent sinking

Extent of tree pit to be nominal 3200mmØ with 600mm depth. Shape can be varied and tree can be off centred but **total area of 8m2** must be maintained. Where there are grouping of trees, tree pits may be connected.



Grade mulch so that it is kept clear of the stem collar

Ensure potted soil level and stem collar is set just above finished soil level of planting bed

Form small bermed dish close to edge of rootball to facilitate establishment watering

Garden profile 1

Container plant as specified

**A** TREE PLANTING TYPICAL SECTION

Scale 1:10

**B** SHRUB PLANTING - 150mm-250L TYPICAL SECTION

Scale 1:5



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REVISION	DESCRIPTION	CHKD	DATE
B	For CC approval	DSO	13.08.20

PROJECT & CLIENT  
**Redbank**  
 Redbank Communities

Project No : 18.22  
 Designed : DSO  
 Drawn : AJ  
 North Scale : As Shown @ A1

DRAWING TITLE  
**Typical Details - Tree and Shrub Planting**

DRAWING NUMBER  
**L-CD-403**

REVISION  
**B**

Plotted at : 12:26 pm 2/9/20



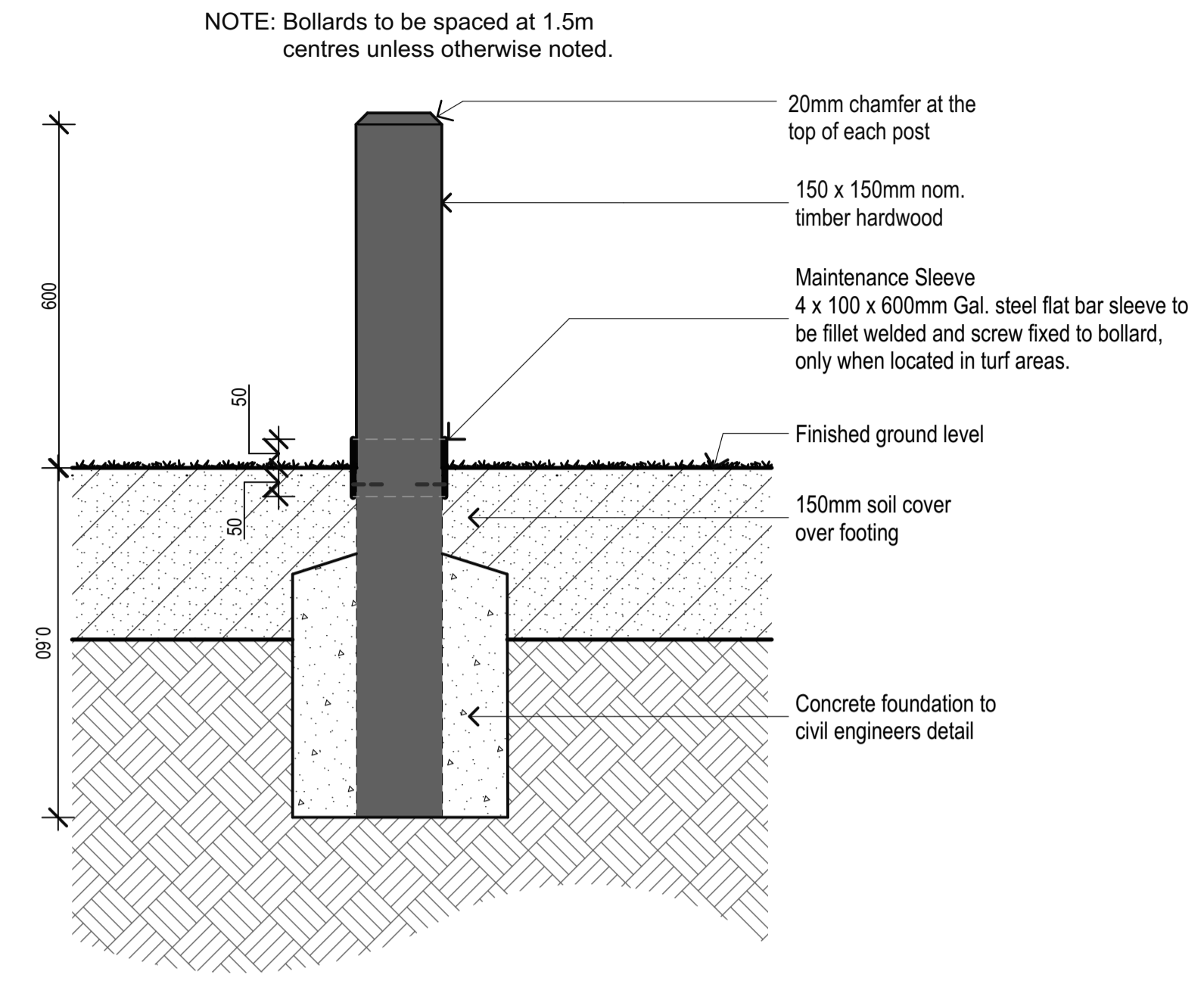
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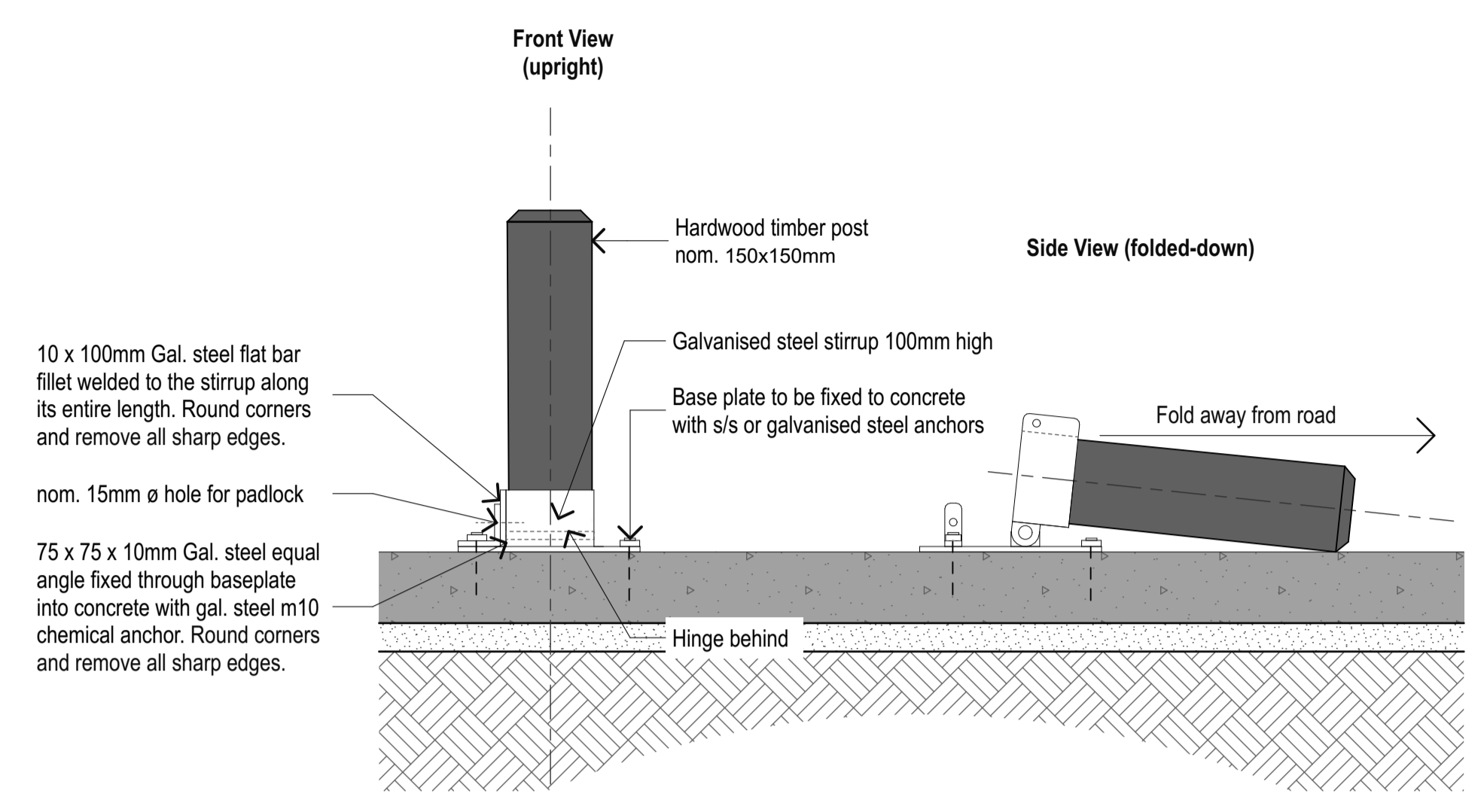
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SIGNATURE *Peter Robert Warwick*  
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 REGISTERED LAND SURVEYOR  
**VINCE MORGAN SURVEYORS PTY LTD**  
 DATE: 14/01/21 REF: 16800-16



**A** BOLLARD TYPE 1  
 HARDWOOD TIMBER Scale 1:10



**B** BOLLARD TYPE 2  
 FLOW DOWN Scale 1:10

**EXPANSION JOINTS** Scale 1:5

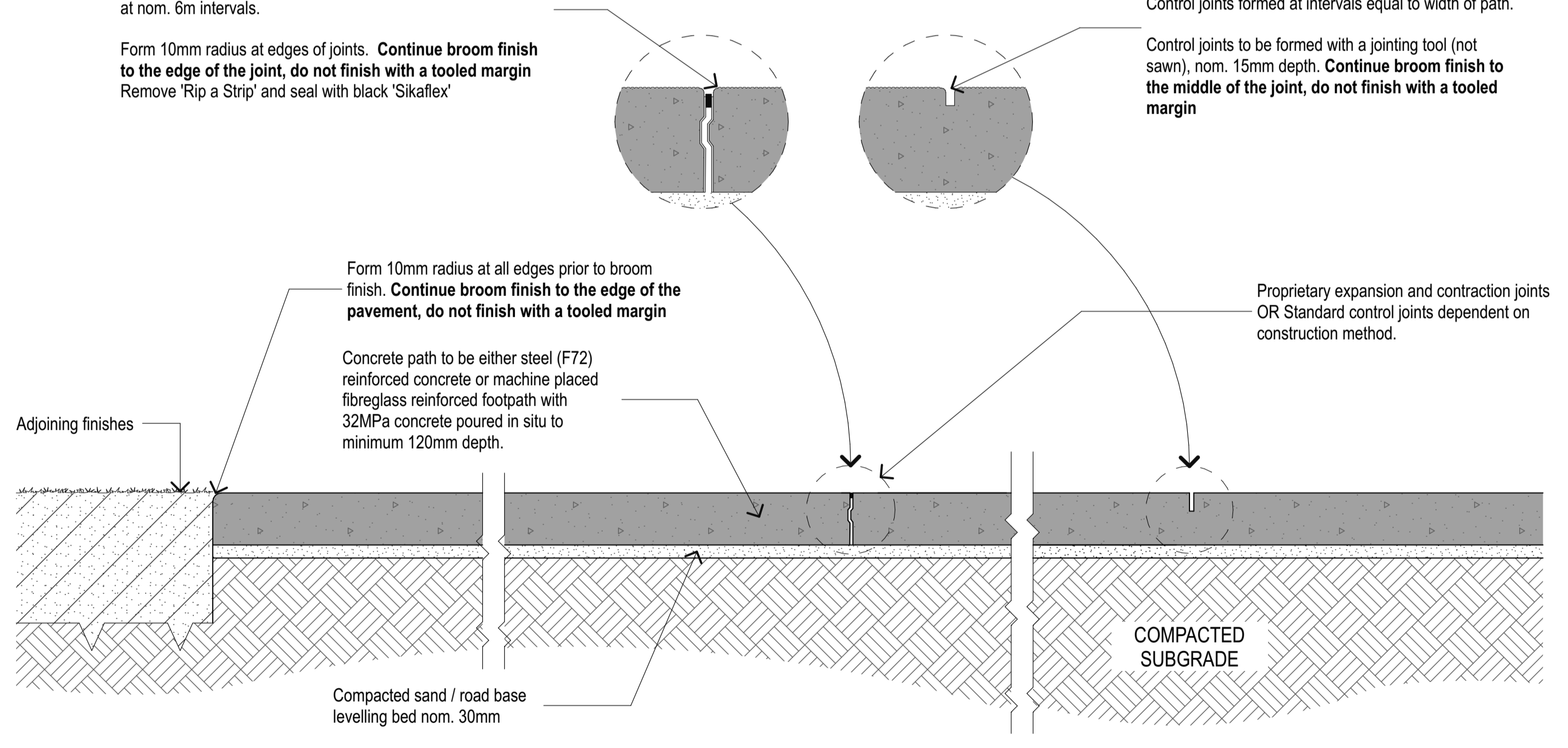
Expansion joints to be keyed and doweled OR proprietary joints at nom. 6m intervals.

Form 10mm radius at edges of joints. Continue broom finish to the edge of the joint, do not finish with a tooled margin. Remove 'Rip a Strip' and seal with black 'Sikaflex'

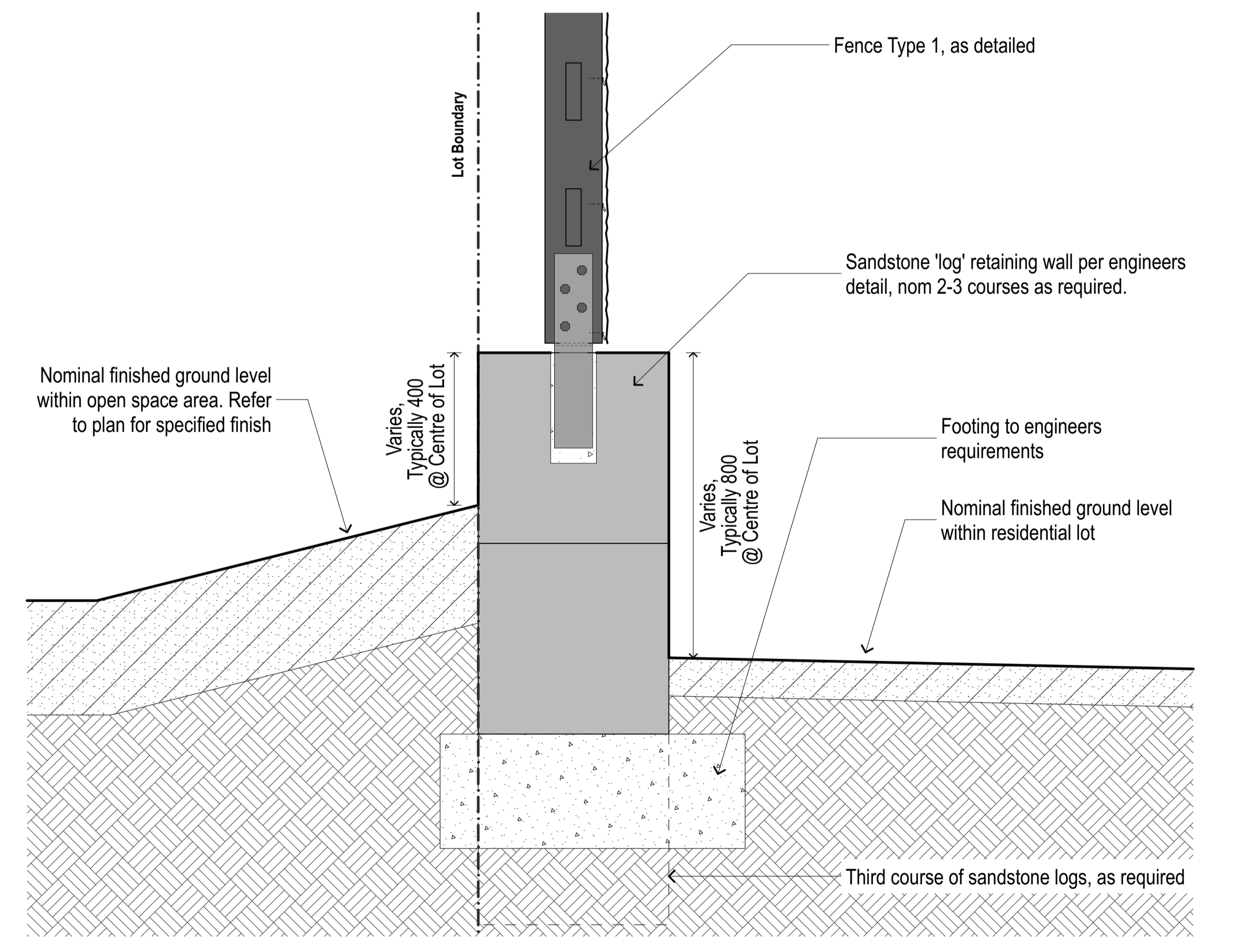
**CONTROL JOINTS** Scale 1:5

Control joints formed at intervals equal to width of path.

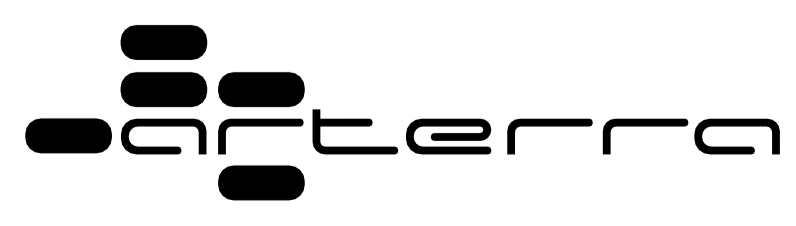
Control joints to be formed with a jointing tool (not sawn), nom. 15mm depth. Continue broom finish to the middle of the joint, do not finish with a tooled margin



**C** PAVEMENT TYPE 1  
 TYPICAL SECTION Scale 1:10



**D** WALL TYPE 1  
 TYPICAL SECTION Scale 1:10



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B	For CC approval	DSO	02.09.20

PROJECT & CLIENT  
**Redbank**  
 Redbank Communities

PROJECT No : 18.22  
 Designed : DSO  
 Drawn : AJ  
 North Scale : As Shown @ A1

DRAWING TITLE  
**Typical Details - Pavement, Bollards & Walls**

DRAWING NUMBER  
**L-CD-404**

REVISION  
**B**

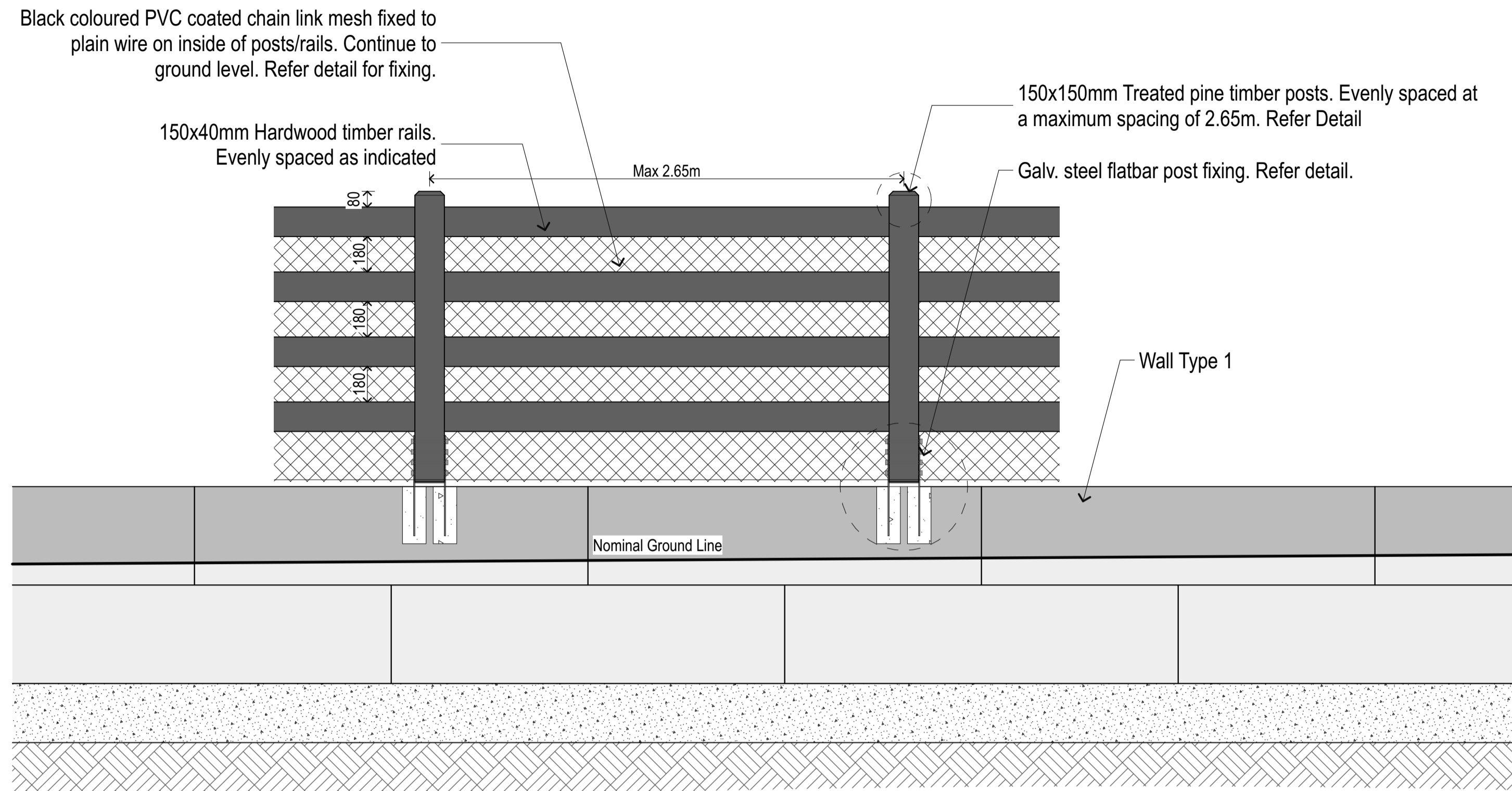
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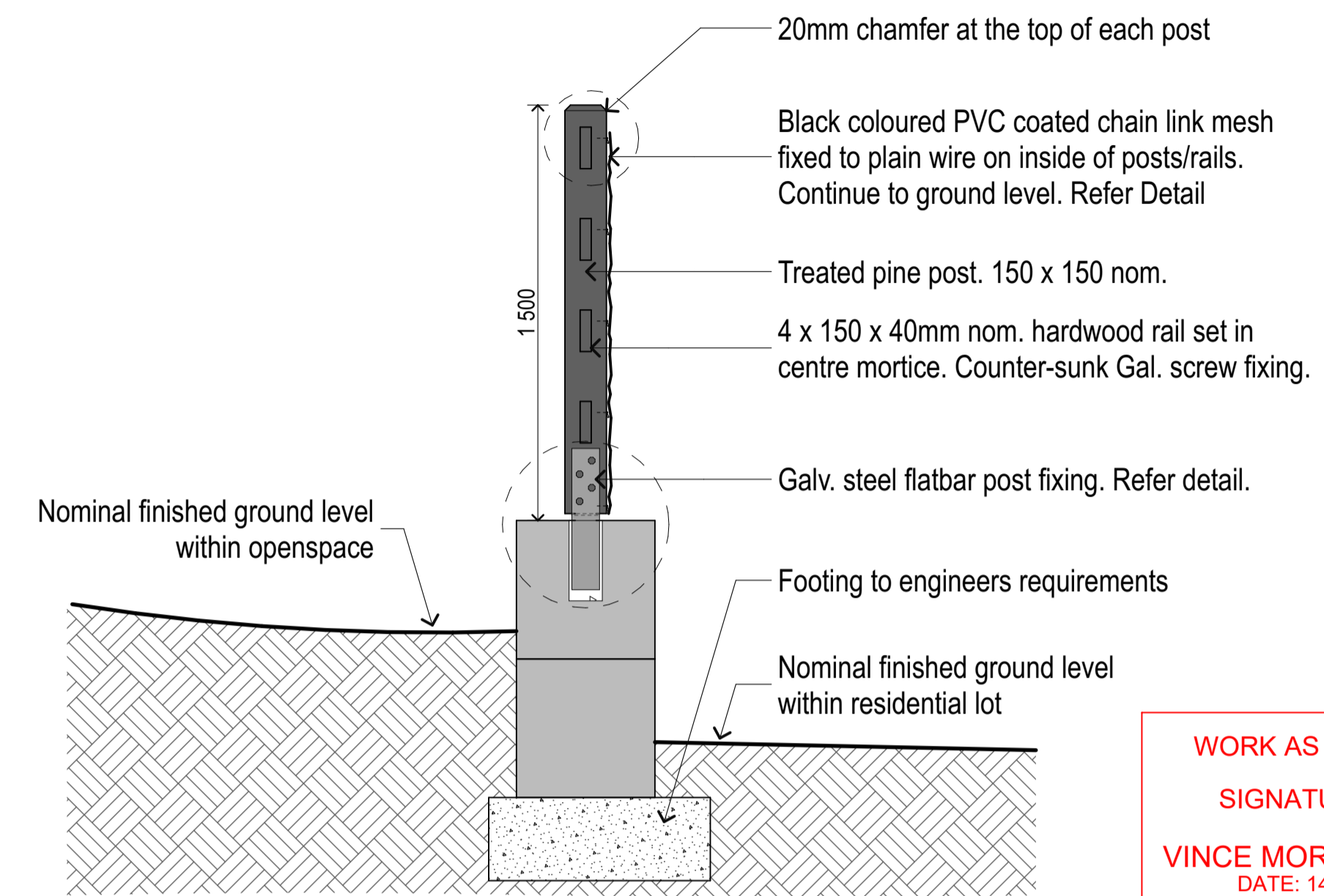
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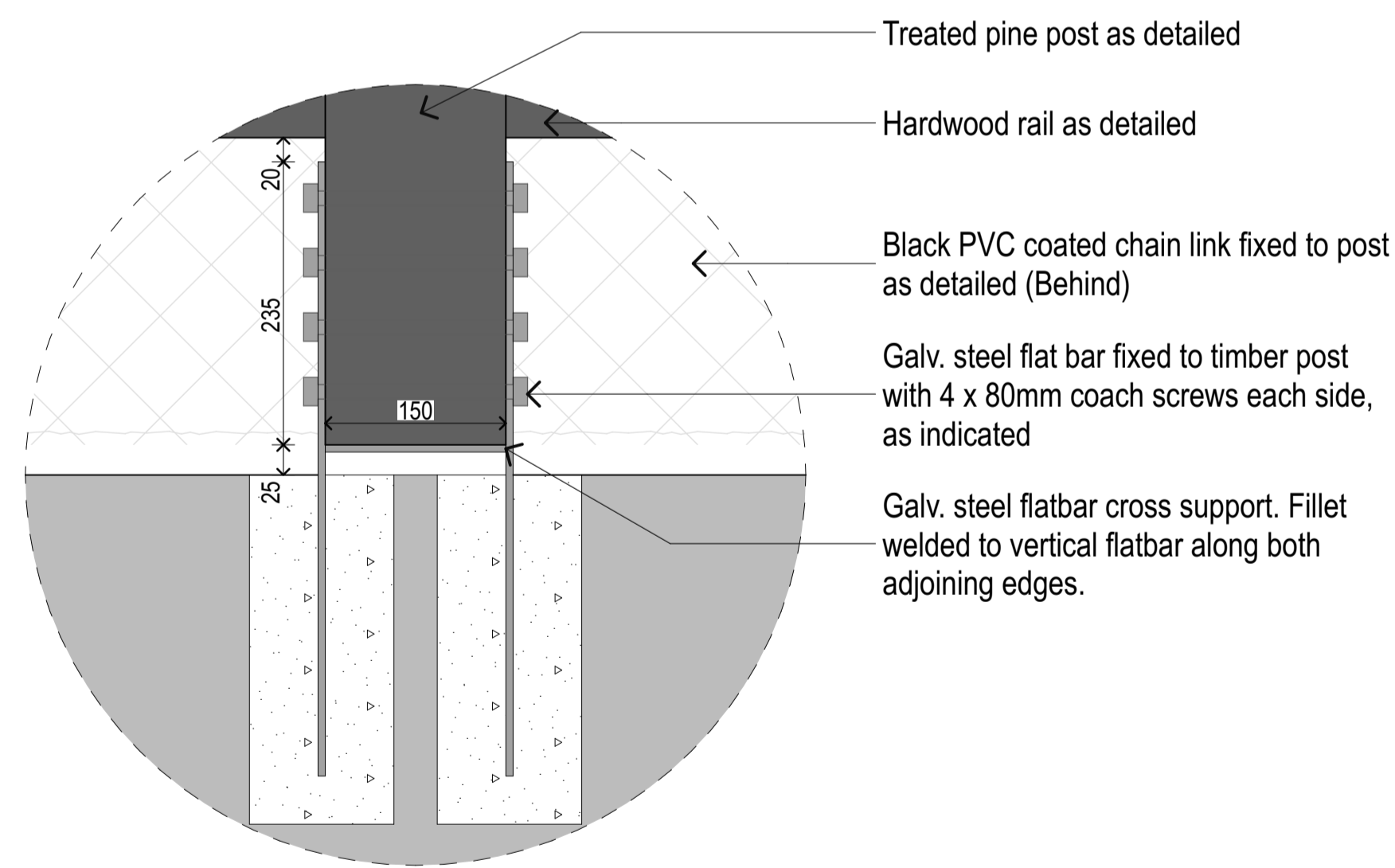


**A** FENCE TYPE 1 - POST + 4 RAIL  
 TYPICAL ELEVATION Scale 1:20

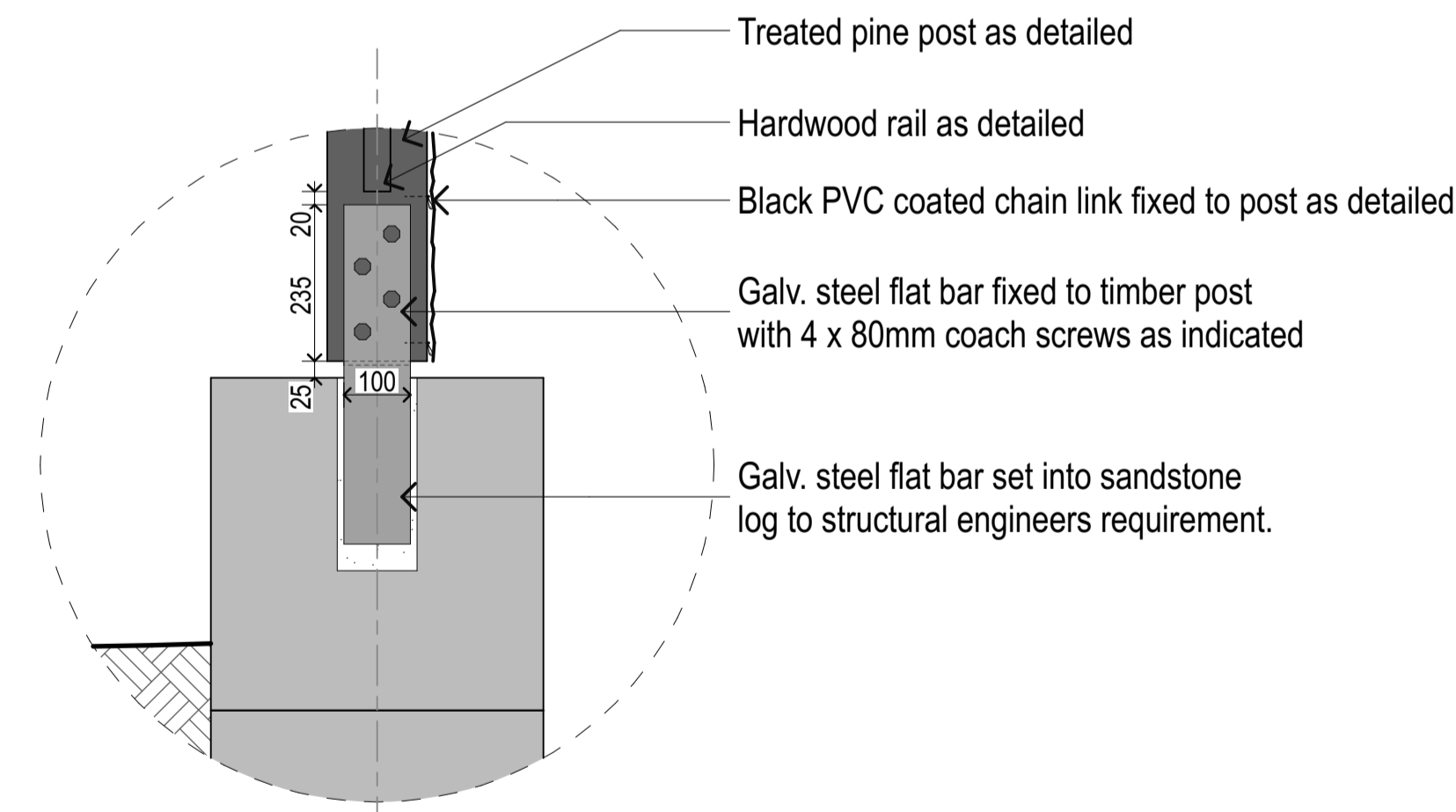


**B** FENCE TYPE 1 - POST + 4 RAIL  
 TYPICAL SECTION Scale 1:20

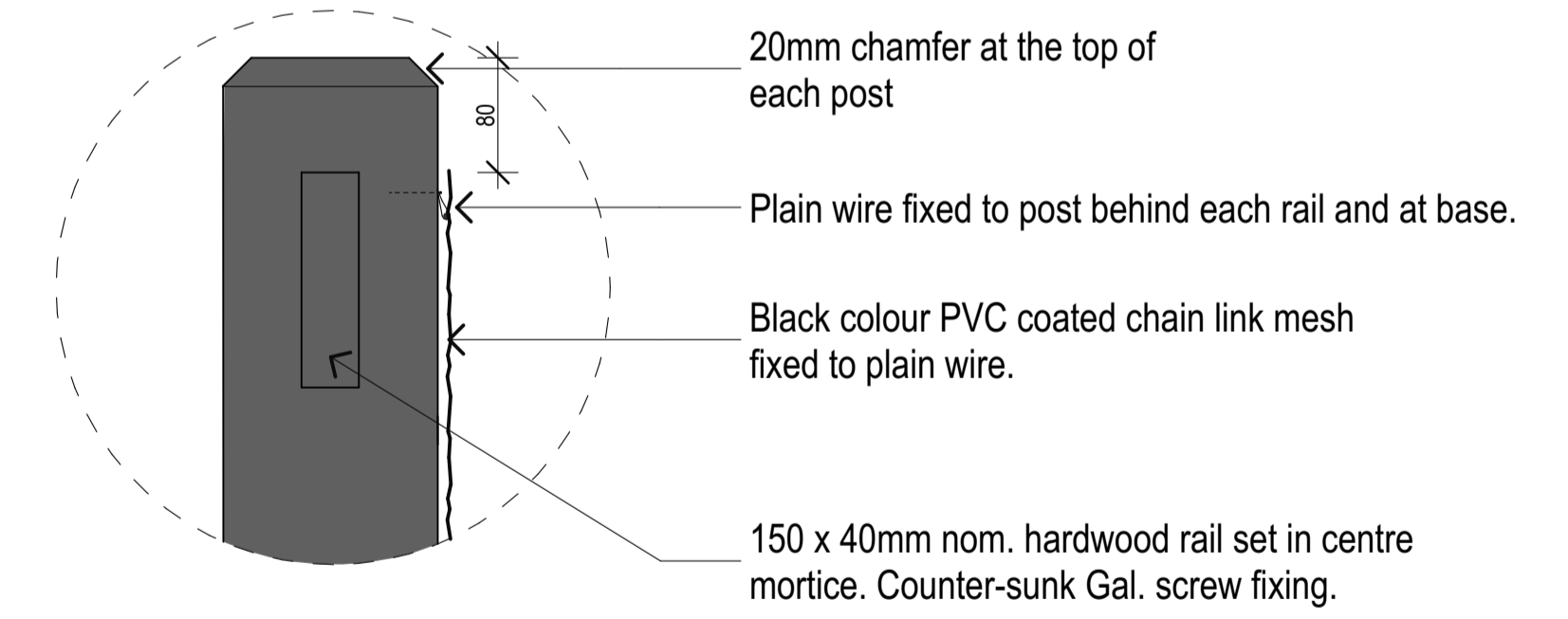
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 REGISTERED LAND SURVEYOR  
 VINCE MORGAN SURVEYORS PTY LTD  
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**C** FENCE TYPE 1 - POST + 4 RAIL  
 POST FIXING - TYPICAL SECTION Scale 1:5



**D** FENCE TYPE 1 - POST + 4 RAIL  
 POST FIXING - TYPICAL SECTION Scale 1:10



**E** FENCE TYPE 1 - POST + 4 RAIL  
 TOP OF POST - TYPICAL SECTION Scale 1:5

REVISION	DESCRIPTION	CHKD	DATE
B	For CC approval	DSO	13.08.20