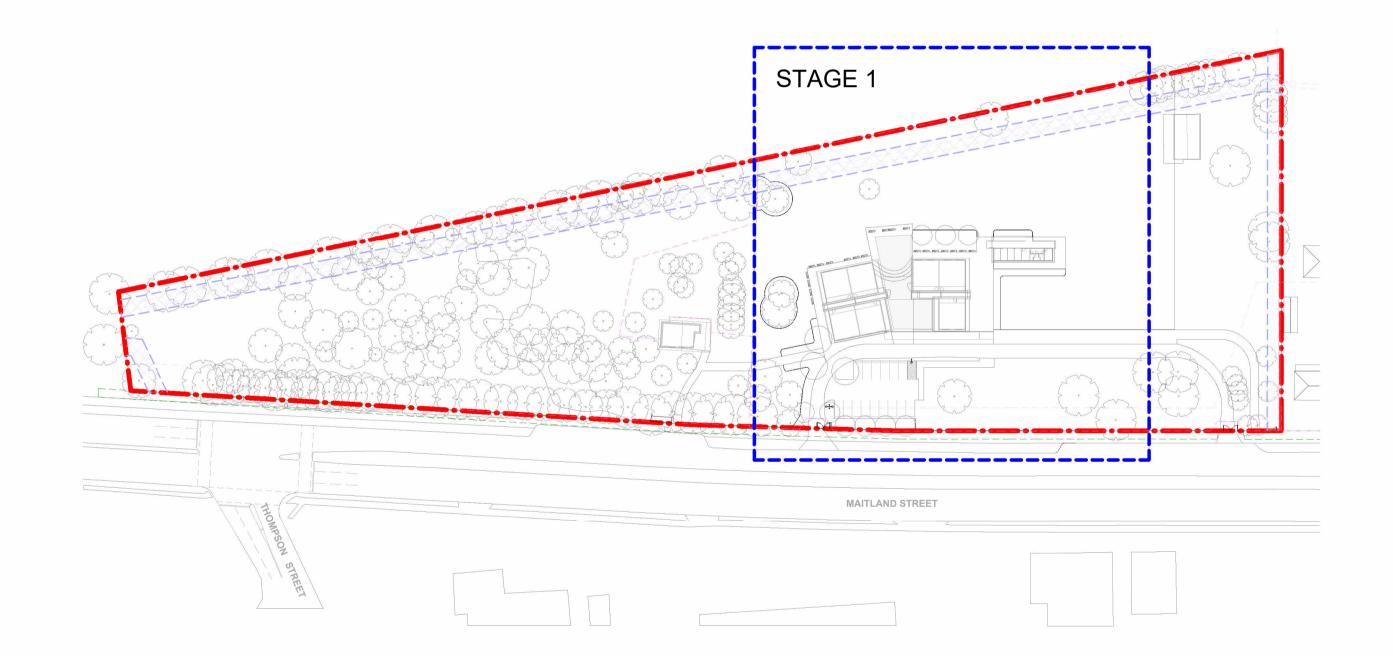


# PACIFIC BROOK CHRISTIAN SCHOOL

## DEVELOPMENT APPLICATION

## STAGE 1 - LANDSCAPE DRAWINGS



Drawing List			
Sheet Number	Sheet Name	Rev. No.	Rev. Date
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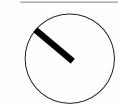
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Drawing Title **COVER SHEET** 



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All works to be undertaken in accordance with the relevant Australian Standards and as per the specifications.

Existing survey boxes and/or marks disturbed during construction shall be replaced to new positions as directed by Principal Contractor. Do not use vibratory equipment, except for hand held machines, over the subsurface services. It is the Principal Contractor's responsibility to ensure there is no damage to the services during the works. Replace all materials/surface damaged to private/ public property. Ensure dated photographs are taken to kerbs and gutters to clearly indicate the existing conditions or any other structures before commencement of construction - supply one set of photographs to The Principal and retain one set on site.

All existing service access pits, inspection pits and valve covers conflicting with finished surface levels are to be raised or lowered. The Principal Contractor is to ensure that these adjustments are undertaken in accordance with engineer's details.

#### **LEVELS**

- All Levels to be confirmed on site prior to construction. Setout all levels for construction and approve on site with marker stakes to which levels are notated and clearly marked
- Adjust all levels as instructed prior to final construction works - All falls are to be established as uniform grades between spot heights
- Paving to all landings to be profiled to provide 1:100 fall for stormwater over land flow. Threshold to buildings to be flush with interface and fall away from building.
- Confirm all levels on site prior to construction and notify landscape architect of any discrepancies.
- Service access pits refer plans, schedule and specification for pit type and infill treatment.
- Refer to landscape plans and detail for make good pavement treatments associated within boundary works and utility relocations.

#### **SHOP DRAWINGS**

- Shop drawings are to be produced for furniture and fixtures. - Shop drawings are to be reviewed and approved by engineer, landscape architect & architect before production commences.

#### SET OUT

- 1. Do not scale off drawings.
- 2. Setout alignment and levels of all structures for approval by Principal Contractor prior to commencement of works. If any discrepancy is found or doubt exists between setout and levels as indicated on drawings and site conditions this shall be referred to the Principal with adequate notice for provision of advice prior to the continuation of works.
- 3. Benchmarks will be clearly marked on site by the Contractor. Benchmark shall be maintained by the Contractor during the course of
- 4. All setting out shall be established by the contractor who will be responsible for the accuracy of lines and levels of finished work. If any discrepancy is found or doubt exists between setout and levels as indicated on dwgs and site conditions this shall be referred to the Principal Contractor with adequate notice for provision of advice prior to the continuation of works.
- 5. Setout locations of furniture items are to be verified on site by Principal Contractor prior to the excavation of footings and installation.

#### **SOIL MIX**

- Soil mix for planting areas refer to specification.

#### **FERTILISERS**

- Refer to specification.

## **PLANT MATERIALS**

The Contractor shall be responsible for the procurement, nursery stocking and delivery of all plant material as specified including the advanced tree stock, unless otherwise advised by the Client. All grown or purchased plant stock must conform to all the conditions and requirements given in NATSPEC Guide: Specifying Trees and outlined in the specification.

Plants shall be vigorous, well established, of good form, hardened off, free from disease and pests with large healthy root systems. Not soft. forced or pot bound. The root system shall be well balanced in relation to the size of the plant. Plants shall have been grown in their final containers for not less than twelve (12) weeks. Plant containers shall be free of weeds. Plants shall not exhibit signs of having being stressed at any stage during their development due to inadequate watering, excessive shade or sunlight, physical damage or have restricted growth due to nursery rows. No substitution shall be made unless approved in writing. At least one plant of each species in a batch shall be clearly

Advanced trees are to be planted in accordance with relevant advanced tree planting details. Stakes to be carefully aligned in a straight line. Refer to planting detail on Landscape Plans.

#### TREES TO BE RETAINED / REMOVED

- Mark trees and shrubs to be removed using suitable non-injurious, easily visible and removable means of identification.
- Protect from damage the trees and shrubs to be retained, including those beyond the site area, both above and below ground.
- Provide temporary protective enclosures or guards at the drip line. Keep the area within the dripline free of construction material and debris. Do not place bulk materials and harmful materials under or near trees. Do not place spoil from excavations against tree trunks. Prevent wind-blown materials such as cement from harming trees and plants
- Where excavations are to be made near trees, add continuous 900 mm high corrugated galvanized steel sheeting, bedded 150 mm into the ground, wired to the enclosure.
- Do not remove topsoil from, or add topsoil to, the area within the dripline of the trees. If excavation is required near trees to be retained, give notice and obtain instructions. Open up excavations under tree canopies for as short a period as possible.
- Use non-destructive methods to locate, expose and cleanly remove the roots on the line of excavation. If it is necessary to excavate within the drip line, use non-destructive methods such that root systems are preserved intact and undamaged.
- Do not cut tree roots exceeding 50 mm diameter. Where it is necessary to cut tree roots, use means such that the cutting does not unduly disturb the remaining root system. Immediately after cutting, apply a bituminous fungicidal sealant to the cut surface to prevent the incursion of rot or
- Backfill to excavations around tree roots with a mixture consisting of three parts by volume of topsoil and one part of well-rotted compost with a neutral pH value, free from weed growth and harmful materials. Place the backfill layers, each of 300 mm maximum depth, compacted to a dry density similar to that of the original or surrounding soil. Do not backfill around tree trunks to a height greater than 300 mm above the original ground surface. Immediately after backfilling, thoroughly water the root zone surrounding the tree.
- Water trees as necessary, including where roots are exposed at ambient temperature > 35oC.

#### **GENERAL**

The Scope of the irrigation supply and installation is;

1. Mass planted areas of the main swale and the surrounding central

The irrigation system should be designed, supplied and installed by an experienced specialist irrigation sub-Landscape Contractor, nominated by the Landscape Contractor and approved by the Principal Contractor. After selection they will be required to prepare detailed irrigation plans and specification for approval by the Principal Contractor prior to commencing work. The Landscape Contractor will co-ordinate the irrigation installation to the Principal Contractor's approval. Ensure completion of the irrigation system before the commencement of any other landscape works, so as to provide a readily available supply of water to planting areas.

A plan must be prepared within 21 days of the contract been let to show the comprehensive irrigation system as specified, including detailed locations of all conduits as required under paved surfaces throughout the site. The information must be suitable to permit the location and installation of such conduits during hardworks preparation. The Landscape Contractor is to liaise with Principal Contractor as required and to coordinate locations for conduit sleeves or wall penetrations for later installation of irrigation.

The work is to be provided by an experienced, reputable and approved irrigation Landscape Contractor. The irrigation Landscape Contractor shall be responsible for determining water pressure, flow rate and locations of water connection and electrical supply.

#### Conduits

All irrigation conduits are the responsibility of the Principal Contractor. Landscape Contractor to prepare D/C irrigation design drawings indicating locations of irrigation conduits. Drawings to be submitted to Principal Contractor for approval prior to installation. Once approved, the drawings to be issued for coordination and construction. Conduits are to be placed in the locations as required in accordance with future installation of irrigation control lines to the Irrigation designer's details. Ensure that these conduits are supplied with a draw cord and remain clearly marked throughout construction.

Obtain all necessary approvals from relevant authorities. The Landscape Contractor is also responsible for complying with the requirements of all authorities connected with the works.

#### Standards and authorities

All workmanship and materials must conform to the relevant Australian Standards and all Sydney Water requirements

#### Co-ordination of services

The Landscape Contractor shall be responsible for the co-ordination of the irrigation systems with other services throughout the site. The central electrical control box and timer shall be positioned in locations to be approved by Principal's Authorised Person.

### **Execution**

#### Irrigation design

Provide the following documents for approval within 3 weeks of approval of the proposed Landscape Subcontractor:

#### SUBSOIL DRAINAGE

All softscape and permeable paving to have subsoil drainage, detail refer to Civil Engineers Drawings.

#### OVERALL LANDSCAPE WATERING SYSTEM

Design plan at 1:200 scale indicating the overall layout of the proposed irrigation installation to the entire irrigated area including pipework and supply, defining pipe layout, control box location, type, and electricity supply. Ensure that all areas are fitted with an automated time controlled irrigation system.

All relevant information including the following details:

- Product data
- Performance data System description
- Water demands

The irrigations system shall be approved by the Principal Contractor prior to installation. The irrigation system shall be supplied and installed in accordance with the manufacturer's recommendations. However the following general principles apply:

#### 1. Water supply connections

Connections to water supply points to be made in copper and piping is to remain in copper until isolation valve. 2. Isolation and master valve

#### An isolation valve of approved type (Brass gate or ball) is to be installed

in an approved thermoplastic valve box. A master solenoid valve shall be installed downstream in the same box. 3. Backflow prevention

Backflow prevention will be obtained by the installation of a brass swing check valve downstream of the master valve and shall be in a separate thermoplastic valve box.

#### 4. Controller

The controller shall have a minimum of 2 programs (winter and summer) and shall be of approved type, Richdel, Irritrol, Rainbird, Hardie or Toro. There will be sufficient stations to run lawn and garden areas independently. A 240 volt general purpose outlet will be provided at

#### designated locations. 5. Piping

All piping sizes are to be established from allowable water velocities of no greater than 2m/s and the minimum pressure losses required to operate the sprays or drippers according to manufacturer's specifications. PVC piping to be CL 12 and to be set at minimum depth of 300mm below finished grade.

#### 6. Wiring

Wiring to be in conduit when above ground or any areas where there is no associated piping. In all other areas wire is to be fastened to irrigation pipes. Wire to be stranded multi core and all splices are to be watertight. 7. Valves

Valves to be of solenoid type (Rainbird, Richdel, Toro or Hardie) located in approved dark green or black coloured thermoplastic valve boxes set at grade in garden beds only.

#### 8. Drip system

Any drip system to have adequate filtration and pressure regulation provided in line, in accordance with the manufacturers specifications. Filter and pressure regulator shall be located together in separate valve box downstream from and adjacent to solenoid valve operating drip system. Dripper placement and numbers to provide adequate application rate for plant requirements as related to size and type. Low density polyethylene tubing on in-line tubing to be set 50mm below top of soil level. If drippers on micro-tube are to be used the dripper is to be located between mulch and soil level and is to be held in position with 150mm wire stakes. Drippers shall be diaphragm or turbulent flow (labyrinth)

#### 9. Spares

Provide spares at completion of irrigation work, properly packaged and labelled, and delivered to the Principal's Authorised Person or as directed. Allow 5% of risers/heads for spares. 10. Guarantees and warranties

Relating to the installation and products are to be handed to the Principal

### Contractor on completion of the works.

Works as executed drawing

Provide complete dimension drawings, based on the approved design plan, of the entire irrigation system as executed, clearly indicating the type and location of all sprinkler lines, heads, etc. Obtain approval and revise as required. Hand the WAE Drawings to the Principal Contractor upon completion of the works.

#### Completion

Completion and maintenance

Upon completion Landscape Contractor is to run through system to ensure system is operating correctly and instruct the client's representative in the correct operation and maintenance of the system. All instructions and programs are to be typed. Manuals, warranties, and a minimum of two programs, summer and winter to be provided to the Landscape Architect and the client's representative at the time of completion.

#### **Practical completion certificate**

Upon practical completion Landscape contractor is to provide a certificate to the Principal Contractor to confirm all landscape works have been carried out in accordance with all landscape documentation drawings and landscape specifications.

Upon practical completion (and following final inspection) Landscape architect is to provide a certificate to the Principal Contractor to confirm that the landscape works have been completed in accordance with landscape documentation drawings and landscape specifications

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Pacific Brook Christian School Ltd

#### Drawing Title

**GENERAL NOTES** 

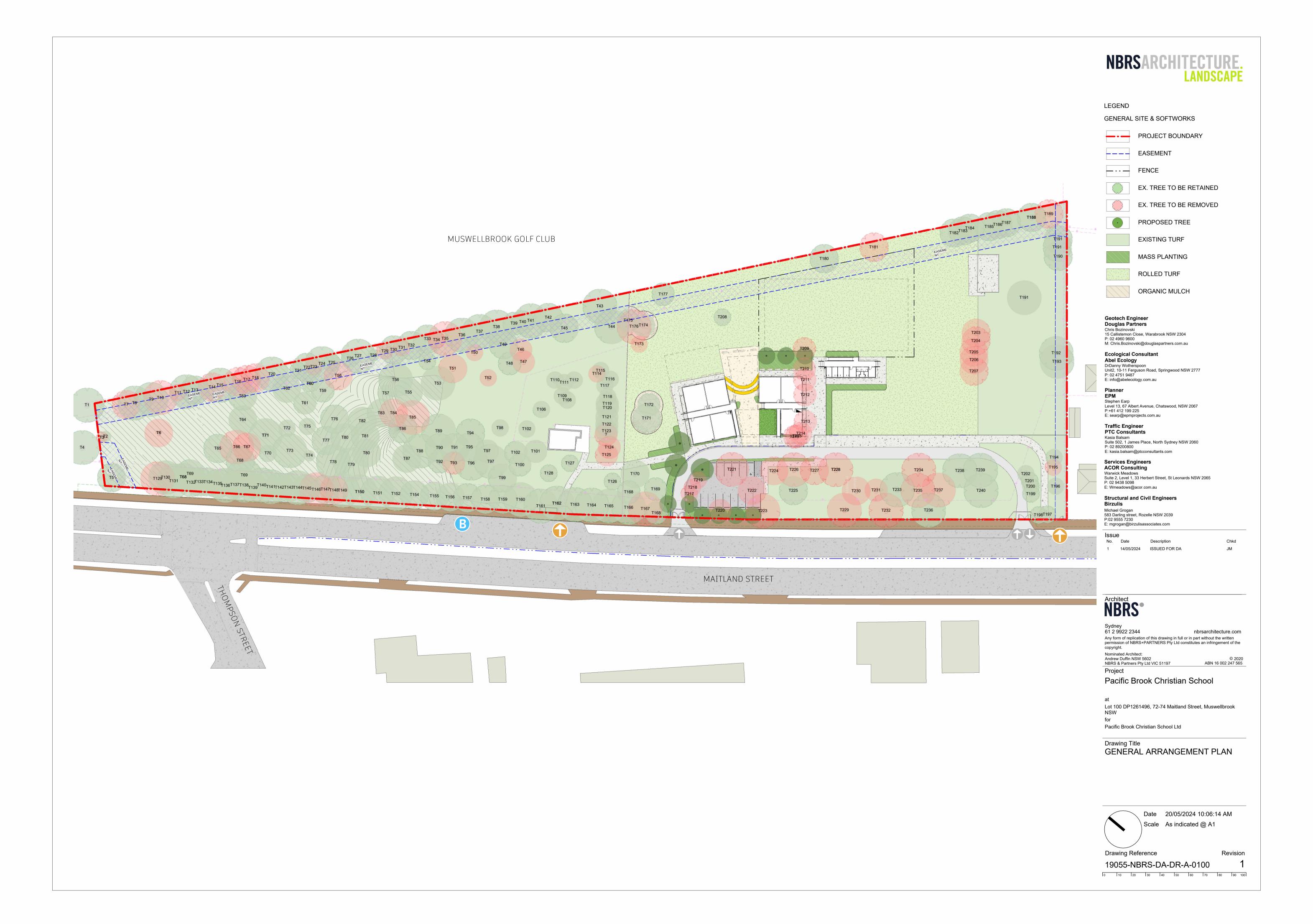
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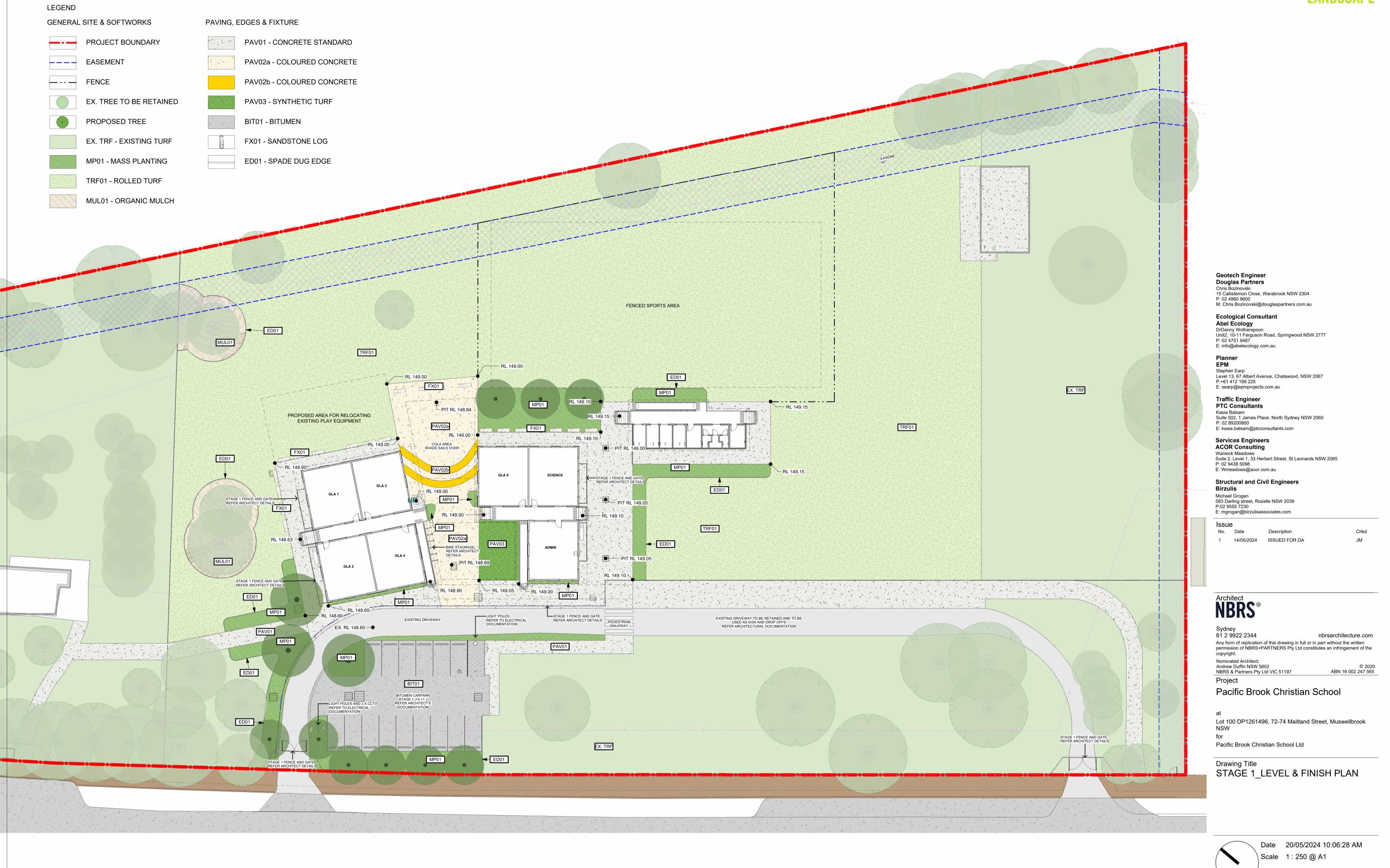
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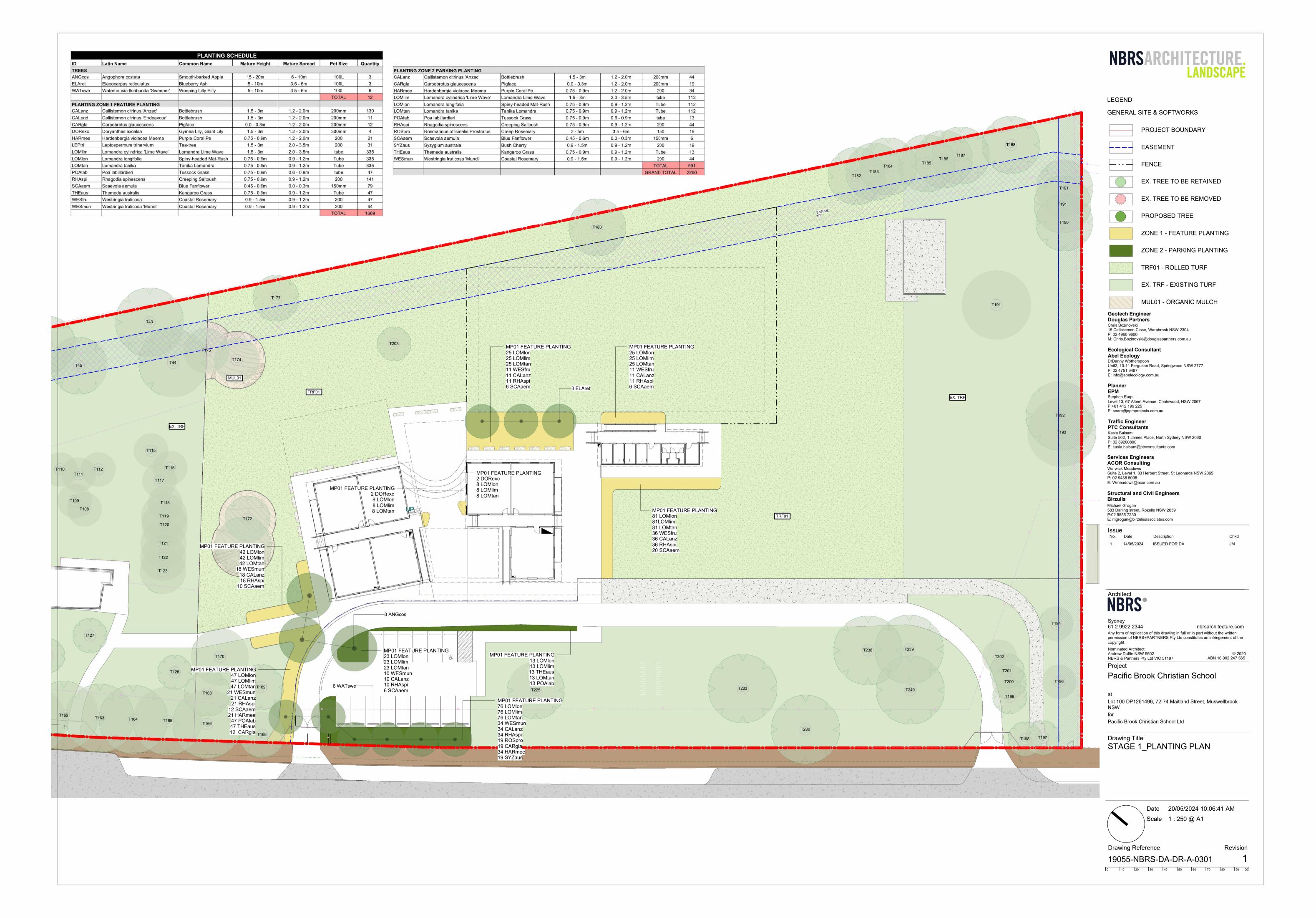


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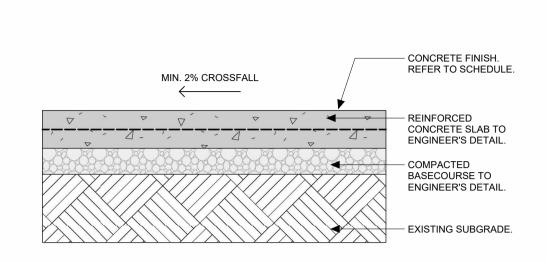
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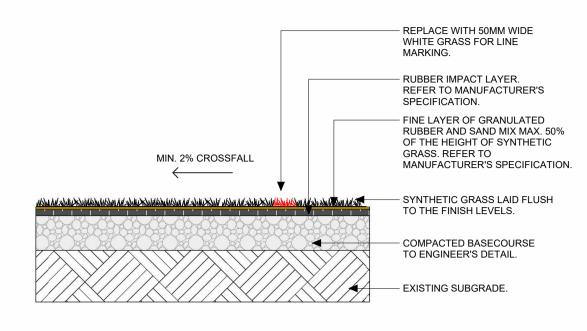
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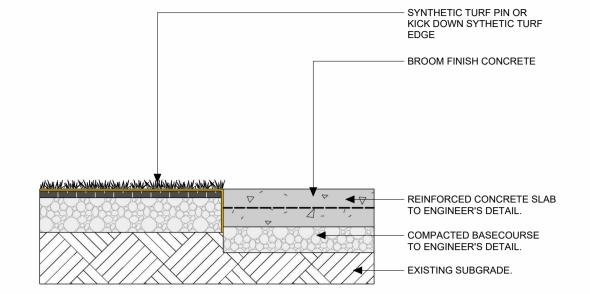




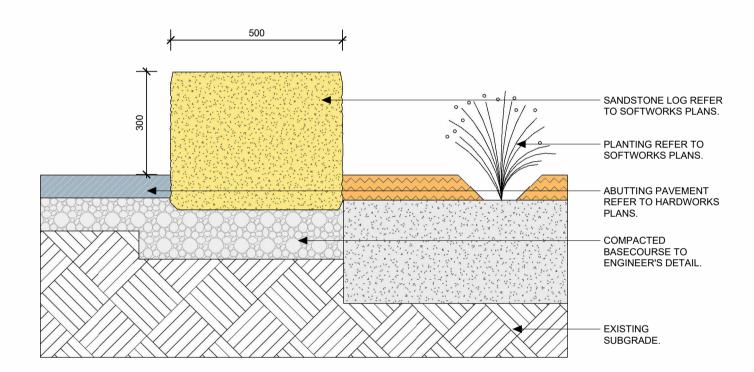












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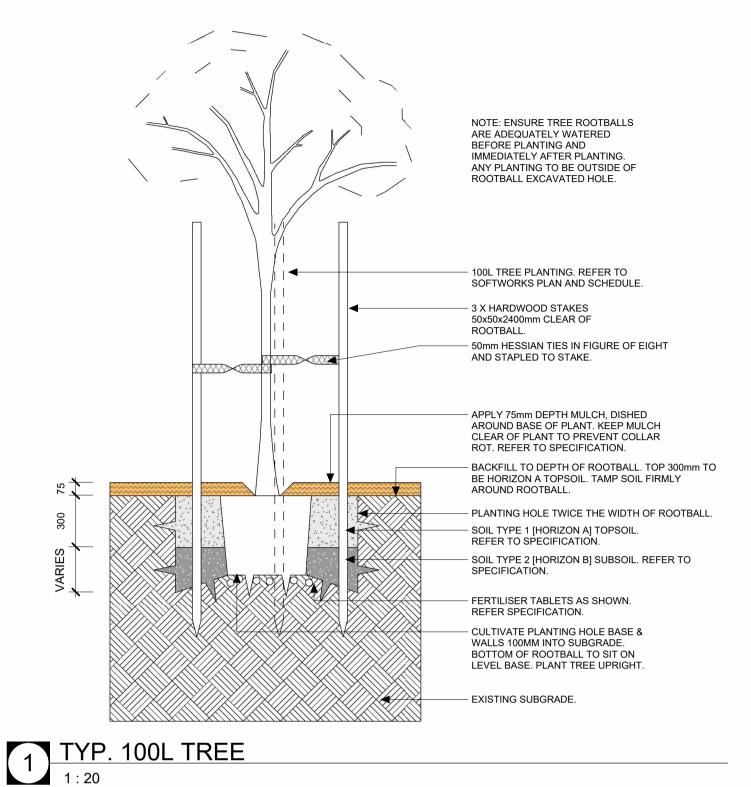
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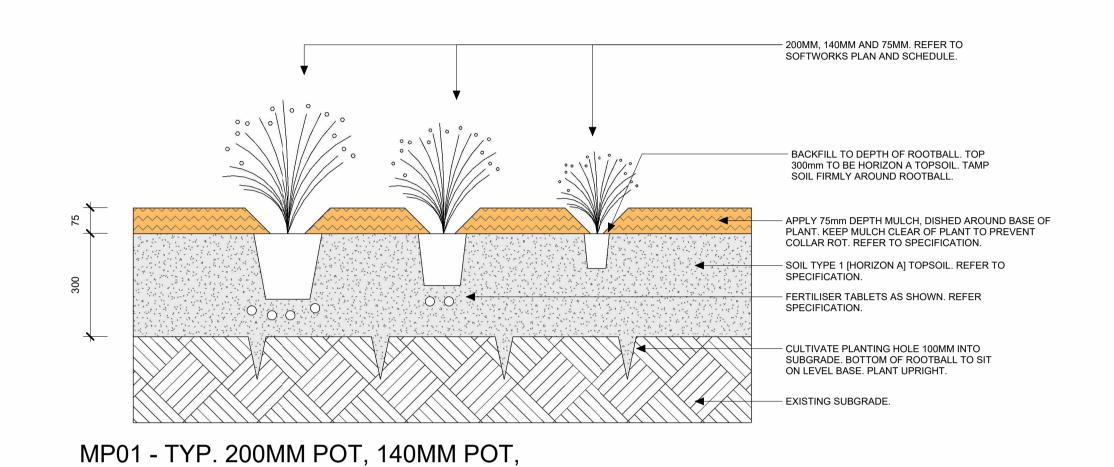
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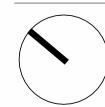
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