

10 June 2020

Enquiries: Neil Beck
Our Ref: OP 2020_3493/1 (956644)
Your Ref: 12520641

Administration Office
64 - 66 Front St Mossman
P 07 4099 9444
F 07 4098 2902

KS5 Pty Ltd
C/- Greg Applin - GHD
PO Box 819
CAIRNS QLD 4870

Dear Sir

**Development Application for Operational Works At 20-30 Langley Road Port Douglas On
Land Described as LOT: 5 RP: 804926**

Please find attached the Decision Notice for the above-mentioned development application.

Please quote Council's application number: OP3493/2020 in all subsequent correspondence relating to this development application.

Also find attached a 'Pre-Start' meeting template, which identifies the information that must be provided for Council approval, prior to the commencement of works.

The template also provides the Consulting Engineer with a format for conducting the meeting. An invitation to attend the meeting must be sent to Council's representative Neil Beck on telephone number 07 4099 9451, giving at least five (5) working days notification if possible.

In addition to the Decision Notice, Council provides the following 'Advice Statement' which relates to issues that are relevant to the proposed works:

1. The Consulting Engineer is to present all contractors with a copy of this Decision Notice and the Council approved plans, prior to the commencement of works.

Should you require any clarification regarding this, please contact Neil Beck on telephone 07 4099 9451.

Yours faithfully



For
Paul Hoyer
Manager Environment & Planning

encl.

- Decision Notice

- Approved Drawing(s) and/or Document(s)
 - Concurrence Agency Response
- Advice For Making Representations and Appeals



Decision Notice

Approval (with conditions)

Given under section 63 of the Planning Act 2016

Applicant Details

Name: KS5 Pty Ltd
Postal Address: C/- Greg Applin - GHD
PO Box 819
CAIRNS QLD 4870

Property Details

Street Address: 20-30 Langley Road PORT DOUGLAS
Real Property Description: LOT: 5 RP: 804926
Local Government Area: Douglas Shire Council

Details of Proposed Development

Development Permit for Operational Works

Decision

Date of Decision: 8 June 2020
Decision Details: Approved (subject to conditions)

Approved Drawing(s) and/or Document(s)

Copies of the following plans, specifications and/or drawings are enclosed.

<u>Drawing No.</u>	<u>Description</u>
42-12520641-C001	COVER SHEET & SITE PLAN
42-12520641-C002	STANDARD NOTES
42-12520641-C003	GENERAL ARRANGEMENT PLAN
42-12520641-C004	DEMOLITION / CLEARING PLAN
42-12520641-C005	CONTROL LINE SETOUT

42-12520641-C006	TYPE CROSS SECTIONS & DETAILS
42-12520641-C007	MISCELLANEOUS DETAILS
42-12520641-C008	LONGTITUDINAL SECTIONS – ROAD 01 & DRAIN 01
42-12520641-C009	LANGLEY ROAD CROSS SECTIONS SHEET 1 OF 2
42-12520641-C010	LANGLEY ROAD CROSS SECTIONS SHEET 2 OF 2
42-12520641-C011	ROAD 01 CROSS SECTIONS
42-12520641-C012	DRAIN 01 CROSS SECTIONS
42-12520641-C013	LANGLEY ROAD ROADWORKS PLAN
42-12520641-C014	LANGLEY ROAD SETOUT PLAN
42-12520641-C015	LANGLEY ROAD / ROAD 01 INTERSECTION PLAN
42-12520641-C016	TRENCH GRATE DETAILS
42-12520641-C017	ROAD 01 CUL-DE-SAC SETOUT PLAN
42-12520641-C018	SOLANDER BOULEVARD ACCESS - PLAN & DETAILS
42-12520641-C019	EARTHWORKS PLAN
42-12520641-C020	RETAINING WALLS AND FENCING PLAN
42-12520641-C021	RETAINING WALL DETAILS
42-12520641-C022	BEACH ACCESS STAIRS
42-12520641-C023	SEWER RETICULATION PLAN
42-12520641-C024	SEWER LONG SECTIONS
42-12520641-C025	WATER RETICULATION PLAN
42-12520641-C026	EROSION AND SEDIMENT CONTROL STRATEGY - PLAN
42-12520641-C027	EROSION AND SEDIMENT CONTROL STRATEGY - DETAILS SHEET 1 OF 2
42-12520641-C028	EROSION AND SEDIMENT CONTROL STRATEGY - DETAILS SHEET 2 OF 2

Landscape Plans

<u>Drawing No.</u>	<u>Description</u>
198-L00 Rev D	COVER PAGE
198-L101 Rev D	LANDSCAPE PLAN & PLANTING SCHEDULE
198-L102 Rev D	ENTRY WALL DETAILS
198-L103 Rev D	TYP. DETAILS
198-L200 Rev C	COVER PAGE
198-L201 Rev C	LANDSCAPE PLAN 01
198-L202 Rev C	LANDSCAPE PLAN 02 & DETAIL PLANS
198-L203 Rev C	TYP. DETAILS & PLANTING SCHEDULE
198-L204 Rev C	ENTRY WALL, RET WALL AND STAIR DETAILS

Note – The plans referenced above will require amending in order to comply with conditions of this Decision Notice.

Assessment Manager Conditions & Advices

1. General

- a. Drawings must be submitted “for construction” and must be certified as approved by a registered professional engineer of Queensland (RPEQ).

2. Earthworks

- a. The applicant is to ensure that any earthworks undertaken as part of the works maintains a free draining surface with no ponding of standing water resulting. Any amendments proposed to the existing finished surface profiles are to be identified

and reported to Council prior to being undertaken on site. Resultant amendments shall be recorded on as constructed drawings to be submitted at the completion of the project.

- b. Earthworks on Stage 2 lots (Lot 7 and 9) are to be completed for a minimum of 1.5m east from the Stage 1 boundary to ensure no interfacing issues in the future stage.

3. Roads and Paths

- a. Pavement design details are to be confirmed prior to pavement construction. Details provided to Council shall include subgrade CBR results for each pavement section, confirmation of traffic loadings adopted (as per FNQROC requirements) and final pavement design.
- b. The integrity of the pavement at the proposed new intersection between Road 01 and Langley Road must be investigated by a suitably qualified and experienced person (RPEQ) and must be certified as suitable for the additional traffic loading and movements at the intersection. Council requires justification on why the pavement between Ch 40m and 70m is not being reconstructed consistent with the section up to Ch40m.
- c. Amended drawings are to be provided to include the 50mm AC overlay for the new intersection being created where the new cul-de-sac intersects with Langley Road. The applicant is to confirm the underlying pavement condition and may need to replace the pavement between Ch 40 and 70 subject to the outcomes of the pavement review.
- d. The applicant is to demonstrate that vehicles can turn around at Solander Boulevard without relying on the concrete pathway to complete the turn around manoeuvre. Turning templates for the B99 vehicle are to be provided to demonstrate that sufficient footprint exists. The turnaround area is to be imperviously sealed and must have a minimum 200mm gravel pavement for the full extent of the turning area as defined from the turn templates.
- e. The pathway in Solander Boulevard is to be constructed for the full frontage of the site as a concrete pathway in accordance with the FNQROC Development Manual;
- f. Tactile indicators are to be included on access ramps on footpaths and at other locations where required for compliance;
- g. An additional Bollard is to be placed on the Langley Road side of the drain and culvert to prevent vehicles using the pathway to turn around.

4. Stormwater

- a. The proposed development must not create ponding nuisances and/or a concentration of stormwater flows to adjoining properties.
- b. All stormwater from the property must be directed to a lawful point of discharge such that it does not adversely affect surrounding properties or properties downstream, in accordance with the Queensland Urban Drainage Manual, Fourth Edition (2016).

- c. Unless an alternative surface treatment is approved, otherwise approved, the full extent of the batters on the open drain on Langley Road and Solander Boulevard are to be turfed .

5. Sewer

- a. Unless otherwise agreed with Council, the property connection branches for Lot 7 and 9 are to be completed with Stage 1 and finished 1m below the surface with appropriate marker, (minimum requirement is locator tape and surface picket to denote location).

6. Water

- a. The water reticulation layout is to be amended as follows:
 - i. All road crossings are to be minimum 100mm DICL, road crossing between lot 1 and Lot 8 to be amended;
 - ii. The section of water main nominated as DN125 main is to be replaced with DN150mm,
 - iii. All hose connection tappings are to be completed by the developer and the individual water service connections extended into the property by 0.5m. The property connections are to be located in the mid-point of the lot frontages unless otherwise approved by Council.
- b. Include on the water reticulation plan the location of light pole footings and confirm the clearance between the footing and the water main. The revised drawing is to be endorsed by Council prior to commencement of water reticulation works.
- c. The minimum clearance between light pole footings and water mains are to be in accordance with WSA and verified and recorded by the consulting engineer during construction.

7. Erosion and Sediment Control

- a. A copy of the Contractor's Erosion and Sediment Control (ESC) Plan is to be submitted to Council and endorsed by the Consulting Engineer, prior to commencement of any works. In particular, the ESC Plan must address the Institution of Engineers Australia Guidelines for Soil Erosion and Sediment Control and the Environment Protection (Water) Policy and Clauses CP1.05, CP1.13 and D5.10 of Council's FNQROC Development Manual.

8. Landscape Plan

- a. Street trees are to be planted a minimum of 2000mm from back of kerb. Amended drawings are to nominate the location of trees and include this minimum offset.
- b. Replace Terminalia Muelleri with a non deciduous tree species such as Malaleuca Viridiflora or other suitable tree species in order to avoid blockages in drains and grates due to leaf drop and improve overall aesthetics.

- c. All entry works and wall features are to be contained within the allotments and not located on road reserve. All landscape plantings other than street trees will be the Applicant or future owner's responsibility to maintain. Future owners are to be advised in writing of this requirement at the time of purchasing the land.

9. Miscellaneous

- a. The applicant is to provide a street lighting plan and show the locations of the street lights on the relevant civil plans prior to the pre-start meeting to confirm any conflicts between light pole locations and other services.
- b. Prior to the pre-start meeting, the applicant must provide written evidence from Ergon and Telstra confirming arrangements have been made for the provision of services to the stage.
- c. The applicant is to provide an acid sulphate report prior to the Prestart meeting and ensure that the Contractor is aware of the management measures and testing requirements where applicable.
- d. CCTV inspections are to be reviewed by the supervising engineer and the Engineering Report and Certification by an RPEQ provided to Council prior to Works Acceptance as required under FNQROC Development Manual CP1.25 Project Documentation.
- e. The applicant is to confirm that the fence is design has considered wind loading noting its total height and more exposed location on the top of the retaining walls.

Further Development Permits

Not applicable

Concurrence Agency Response

None Applicable

Currency Period for the Approval

This approval, granted under the provisions of the *Planning Act 2016*, shall lapse two (2) years from the day the approval takes effect in accordance with the provisions of Section 85 of the *Planning Act 2016*.

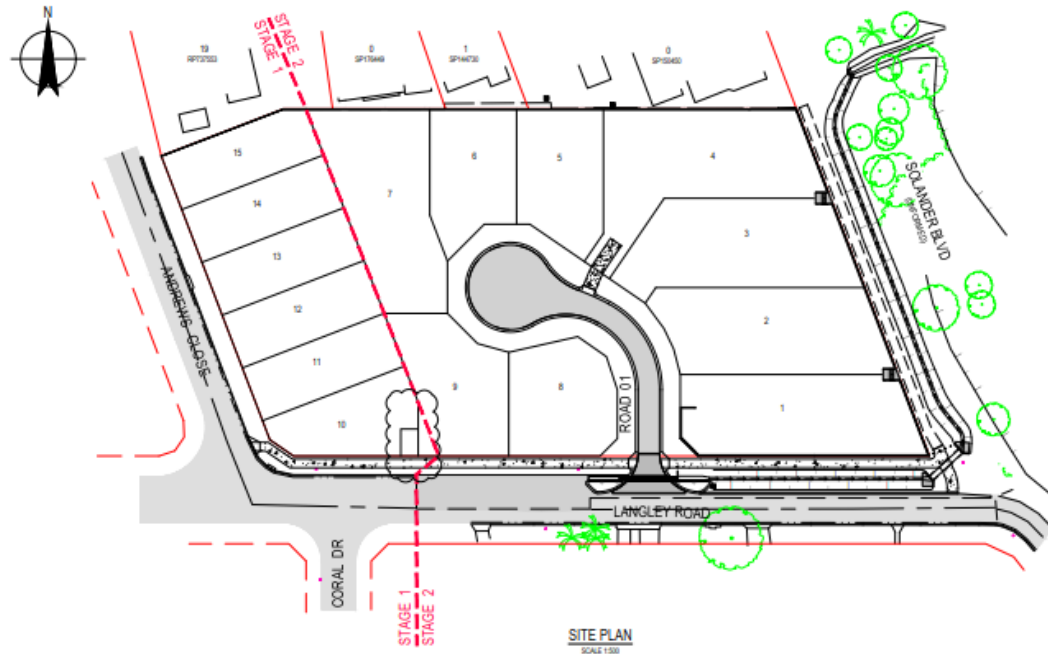
Rights to make Representations & Rights of Appeal

The rights of applicants to make representations and rights to appeal to a Tribunal or the Planning and Environment Court against decisions about a development application are set out in Chapter 6, Part 1 of the *Planning Act 2016*.

A copy of the relevant appeal provisions are attached.



KS5 PTY LTD 20-30 LANGLEY ROAD, PORT DOUGLAS SUBDIVISION



DRG No.	DRAWING TITLE
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SURVEY CONTROL NOTES

1. SURVEY CONDUCTED BY GARY POZD - COUNTRAL SURVEYOR, PH OF 4027 7177
 SURVEY ORIGIN AND LEVEL DATA ORIGIN OF LEVELS: MGD 2016/12/10
 MGD 2016/12/10 MGD 2016/12/10

GENERAL NOTES

1. ALL WORKS MUST BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT FNRCO DEVELOPMENT MANUAL SPECIFICATIONS, WHERE DIFFERENCES EXIST BETWEEN THE PLAN AND THE DEVELOPMENT MANUAL, THESE PLANS SHALL TAKE PRECEDENCE.
2. THE CONTRACTOR IS TO ENSURE A COPY OF THE OPERATIONAL WORKS APPROVAL IS AVAILABLE ON SITE. THE FOREMAN IS TO ENSURE ALL WORKS ARE UNDERTAKEN IN ACCORDANCE WITH THE APPROVAL.
3. THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN APPROXIMATED FROM THE KNOWN POSITIONS OF VALVES, MANHOLES, ETC PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON SITE. THE CONTRACTOR MUST CONTACT RELEVANT AUTHORITIES FOR POSSIBLE LOCATION OF FURTHER SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.
4. EXISTING SERVICES ARE TO BE PROTECTED FROM DAMAGE DURING CONSTRUCTION, WHERE NECESSARY THE CONTRACTOR SHALL CONFIRM THE DEPTH TO EXISTING SERVICES BY POT-HOLING BEFORE COMMENCING WORKS. THE SUPERINTENDENT SHALL BE CONSULTED WHERE THE CONTRACTOR CONSIDERS SPECIFIC PROTECTION WORKS NECESSARY TO PROTECT THE SERVICE.
5. ALL DIMENSIONS AND RADII ARE EXPRESSED IN METRES UNLESS NOTED OTHERWISE.
6. WHERE REFERENCE IS MADE TO THE STANDARD DRAWINGS, THE CONTRACTOR SHALL ENSURE THAT THE LATEST VERSION ISSUED BY THE RELEVANT AUTHORITY, AT THE TIME OF CONSTRUCTION, IS USED.

EROSION AND SEDIMENT CONTROL NOTES

1. PRIOR TO CONSTRUCTION COMMENCING, THE CONTRACTOR MUST PREPARE AN EROSION & SEDIMENT CONTROL PLAN TO MANAGE THE SITE DURING CONSTRUCTION AND THE DEFECT LIABILITY PERIOD.
2. THE ESCP MUST BE CONSISTENT WITH THE APPROVED EROSION & SEDIMENT CONTROL STRATEGY (ESCS) AND SHALL TAKE INTO CONSIDERATION THE CONTRACTORS PROPOSED CONSTRUCTION METHODOLOGY AND PROGRAM.
3. AN ESCP THAT DIFFERS TO THE APPROVED ESCS MUST BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO SUBMITTING TO COUNCIL.
4. NO EARTHWORKS SHALL COMMENCE ON ANY PART OF THE SITE PRIOR TO APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES BEING INSTALLED DOWNSTREAM OF THE SITE AND IN ACCORDANCE WITH THE APPROVED ESCP.
5. AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS AND TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTION.
6. THE IMPACT ON THE ENVIRONMENT SHALL BE MINIMISED BY OBSERVING THE FOLLOWING CONSTRUCTION PRACTICES:
 - AREAS DISTURBED BY CONSTRUCTION TRAFFIC AND PROCEDURES SHALL BE MINIMISED.
 - MINIMISE TRAFFIC MOVEMENTS AND SPEEDS ON EXPOSED SURFACES.
 - REVEGETATION OF DISTURBED AREAS SHALL BE CARRIED OUT SOON AFTER THE COMPLETION OF TOPSOIL PLACEMENT.
 - FLOW DIVERSION SHALL BE CARRIED OUT BY EARLY INSTALLATION OF DRAINS ALONG TOPS OF BATTERS WITH APPROPRIATE SLOTTATION CONTROL DEVICES.
 - SEDIMENT INTERCEPTION BY THE PLACEMENT OF SUITABLE RETENTION SYSTEMS ACROSS DRAINAGE LINES AND AT INTERCEPTION POINTS FOR BOTH THE CONSTRUCTION AND STOCKPILE AREAS.
4. ALL ACCESS TO AND FROM THE SITE SHALL BE VIA A TEMPORARY CONSTRUCTION ENTRY/EXIT. THE CONTRACTOR SHALL NOMINATE A PROPOSED ACCESS LOCATION ON THE ESC PLAN FOR APPROVAL BY THE SUPERINTENDENT.
5. STOCKPILES SHALL ONLY BE LOCATED IN AREAS NOMINATED ON THE PROJECT DRAWINGS OR APPROVED BY THE SUPERINTENDENT. ALL STOCKPILES MUST HAVE APPROPRIATE ESC MEASURES INSTALLED TO PREVENT SEDIMENT TRANSPORT. THE MINIMUM HEIGHT OF ALL STOCKPILES MUST BE LIMITED TO 2.0m.
6. ALL TEMPORARY AND TEMPORARY UNLINED DRAINS AND DRAINS MUST HAVE APPROPRIATE TEMPORARY EROSION PROTECTION.
7. ALL PARTIALLY CONSTRUCTED DRAINAGE STRUCTURES MUST BE PROTECTED AGAINST SEDIMENT INFILTRATION DURING CONSTRUCTION.
8. ALL COMPLETED DRAINAGE STRUCTURES MUST BE PROTECTED AGAINST SEDIMENT INFILTRATION UNTIL GRASSING IS ESTABLISHED.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF DUST EMANATING FROM THE SITE AT ALL TIMES FOR THE DURATION OF CONSTRUCTION. WET SUPPRESSION METHODS TO BE USED.
10. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE CHECKED FOR DAMAGE, CLEANED OUT AND FULLY REINSTATED AFTER EACH RAINFALL EVENT RESULTING IN RUNOFF.
11. IF EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN FOUND TO BE DEFICIENT OR FAILED IN SERVICE, DUE TO UNFORESEEN CIRCUMSTANCES, CORRECTIVE ACTION IS TO BE UNDERTAKEN IMMEDIATELY WHICH MAY INCLUDE AMENDMENTS ACCORDING TO THE ORIGINAL APPROVED EROSION CONTROL PLAN.
12. THE INSTALLATION, REMOVAL, RELOCATION OR MODIFICATION TO EROSION AND SEDIMENT CONTROL DEVICES MAY BE MADE BY DOUGLAS SHIRE COUNCIL, IF DEEMED NECESSARY AND RELEVANT.
13. EROSION AND SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE TREATMENT AREA IS SUITABLY STABILISED/VEGETATED.
14. THE CONTRACTOR SHALL UNDERTAKE A FORMAL COMPLIANCE AUDIT OF THE ESC AT SIX WEEKS INTERVALS DURING THE CONSTRUCTION PERIOD OF THE PROJECT. RECORDS OF THE AUDIT SHALL BE RETAINED ON SITE. WHERE IDENTIFIED AS PART OF THE AUDIT THE ESCP SHALL BE UPDATED AND PROVIDED TO THE SUPERINTENDENT.

EARTHWORKS NOTES

1. ALL EARTHWORKS MUST BE CARRIED OUT IN ACCORDANCE WITH AS3780 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENT. GEOTECHNICAL TESTING SERVICES SHALL BE AS DETERMINED BY LEVEL 1 IN ACCORDANCE WITH AS 5100. ALL CERTIFICATION AND TEST RESULTS ARE TO BE COMPLETED AND PROVIDED TO THE SUPERINTENDENT PRIOR TO WORKS ACCEPTANCE.
2. NO VEGETATION SHALL BE REMOVED WITHOUT PRIOR APPROVAL OF THE SUPERINTENDENT UNLESS NOTED ON THE PROJECT DRAWINGS.
3. FINISHED SURFACE LEVELS SHOWN ON PROJECT DRAWINGS ARE AFTER ALL EARTHWORKS ARE COMPLETE INCLUDING TOPSOILING. ALL AREAS ARE TO BE GRADDED EVENLY BETWEEN FINISHED SURFACE LEVELS UNLESS NOTED OTHERWISE.
4. SOIL DENSITY RATIOS AS REFERRED TO IN THESE NOTES IS THE DATIO DETERMINED IN ACCORDANCE WITH AS 2885.1.1 OF COMPACTED DRY DENSITY BY THE SUPERINTENDENT. TOPSOIL SHALL BE STOCKPILED ON SITE FOR HOUSE. MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH AS 2885.1.1.1 (STANDARD COMPACTION).
5. ALL VEGETAL MATTER, TOPSOIL AND OTHER UNSUITABLE MATERIAL SHALL BE STRIPPED/REMOVED FROM AREAS TO BE EXCAVATED OR FILLED. ALL VEGETAL MATTER AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF-SITE UNLESS ADVISED OTHERWISE BY THE SUPERINTENDENT. TOPSOIL SHALL BE STOCKPILED ON SITE FOR HOUSE. SURPLUS TOPSOIL SHALL BE DISPOSED OF OFF-SITE.
6. SHOULD ANY SOFT OR UNSUITABLE MATERIAL BE IDENTIFIED, THE CONTRACTOR SHALL INFORM THE SUPERINTENDENT IMMEDIATELY AND SEEK THE ADVICE OF THE SUPERINTENDENT OR GTA.
7. COMPACT FILL TO 10% DRY DENSITY RATIO IN LAYERS OF THICKNESS APPROPRIATE TO THE COMPACTION PLANT EMPLOYED BUT NOT EXCEEDING 300mm.
8. IMPORTED FILL MUST HAVE A MINIMUM SITE CLASSIFICATION OF 'M' AS PER TABLE 2.1 OF AS 8201 (THAT IS MODERATELY REACTIVE CLAY OR SILT OR BETTER).

ROADS & PATHWAYS NOTES

1. NEW ROADS PATHS AND KERBS SHALL JOIN SMOOTHLY TO EXISTING WORKS. WHERE NECESSARY, EXISTING WORKS SHALL BE CUT BACK TO FORM A NEAT JOIN.
2. ALL PATHWAYS SHALL BE 2.0m WIDE (UNLESS NOTED OTHERWISE) IN ACCORDANCE WITH FNRCO STD DRAWING 5306. PATHWAY CROSSFALL MUST NOT EXCEED 3%.
3. ALL KERB PROFILES TO BE AS PER FNRCO STD DRAWING 5306 UNLESS NOTED OTHERWISE.
4. ALL KERB RAMP SLOPES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FNRCO STD DRG 5316. WIDTH OF RAMP SHALL MATCH PATHWAY WIDTH.
5. ALL STREET SIGNS AND TRAFFIC SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH FNRCO STD DRAWINGS 5306 AND 5341.
6. PAVEMENT DESIGN STATED HEREON IS FOR A RANGE OF SUBGRADE OR VALUES. THE CONTRACTOR IS TO CONFIRM THE SUBGRADE OR BY TESTING IN ACCORDANCE WITH THE SPECIFICATION. RESULTS ARE TO BE PROVIDED TO THE SUPERINTENDENT FOR FINAL PAVEMENT SELECTION.

DRAINAGE NOTES

1. EXCAVATION, BEDDING AND BACKFILL FOR PRECAST BOX CULVERTS SHALL BE CARRIED OUT IN ACCORDANCE WITH FNRCO STD DRAWING 5346.
2. REINFORCED CONCRETE BASES FOR CULVERTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT OF HIGHWAYS STD DRAWING 5348.
3. SUBSIDY DRAINAGE SHALL BE PROVIDED WHERE SHOWN ON THE PROJECT DRAWINGS. DRAINS SHALL ACHIEVE A MINIMUM 0.5% GRADE. SLEWING POINTS AND OUTLETS TO BE PROVIDED IN ACCORDANCE WITH FNRCO STD DRAWING 5346.

WATER RETICULATION NOTES

1. ALL PVC AND PE PIPES SHALL BE CLASS PN16. PVC PIPES SHALL BE RUBBER RING JOINTED AND OUTLETS IRON COMPATIBLE.
2. DUC PIPES SHALL BE CLASS PN16 'TYTON' TYPE RUBBER RING JOINTED.
3. FOR MAIN TRENCHING, BEDDING AND ANCHORAGE DETAILS REFER FNRCO STD DRG 5335 & 5336. ENSURE COVER TO WATER MAINS IS 800mm MINIMUM UNDER ROADWAYS AND 600mm MINIMUM ELSEWHERE.
4. ALL WATER MAINS SHALL BE INSTALLED ON A STANDARD 2.0m OFFSET FROM THE PROPERTY BOUNDARY UNLESS NOTED OTHERWISE ON PLANS.
5. FOR MAIN CONNECTION DETAILS, REFER FNRCO STD DRAWING 5336.
6. DOUGLAS SHIRE COUNCIL MUST BE CONTACTED TO PERFORM ANY DIRECT CONNECTION OR ALTERATION TO THE WATER MAINS. THE CONTRACTOR SHALL LODGE WITH COUNCIL THE APPROPRIATE APPLICATION FORMS AND FEES FOR THESE WORKS TO BE COMPLETED. IT MAY BE POSSIBLE FOR SOME WORKS TO BE PERFORMED BY THE CONTRACTOR UNDER SPECIAL CIRCUMSTANCES AND SUBJECT TO APPROPRIATE CONDITIONS AGREED TO WITH COUNCIL.
7. ALL HYDRANTS AND VALVES TO BE LOCATED OPPOSITE PROPERTY BOUNDARY. TRUNCATIONS AND CORNERS UNLESS NOTED OTHERWISE ON PLANS. FOR VALVES & HYDRANT BOXES INSTALLATION DETAILS REFER FNRCO STD DRAWINGS 5338 & 5339.
8. HYDRANTS OR VALVES CONSTRUCTED IN CONCRETE ARE TO HAVE A COMPRESSIBLE LAYER (ABLE-FLIX) INSTALLED ON THE SURROUND. REFER FNRCO STD DRG 3950.
9. KERB MARKER PLATES SHALL BE PROVIDED TO IDENTIFY THE POSITION OF ALL VALVES AND HYDRANTS IN ACCORDANCE WITH FNRCO STD DRAWING 5210 VERSION 4-2008. IN ADDITION TO KERB MARKER PLATES, HYDRANTS SHALL ALSO HAVE TRAPROOF MARKERS AND BLUE RETRO-REFLECTIVE MARKERS PROVIDED ON THE ROAD PAVEMENT IN ACCORDANCE WITH FNRCO STD DRAWING 5316 VERSION 4-2008.

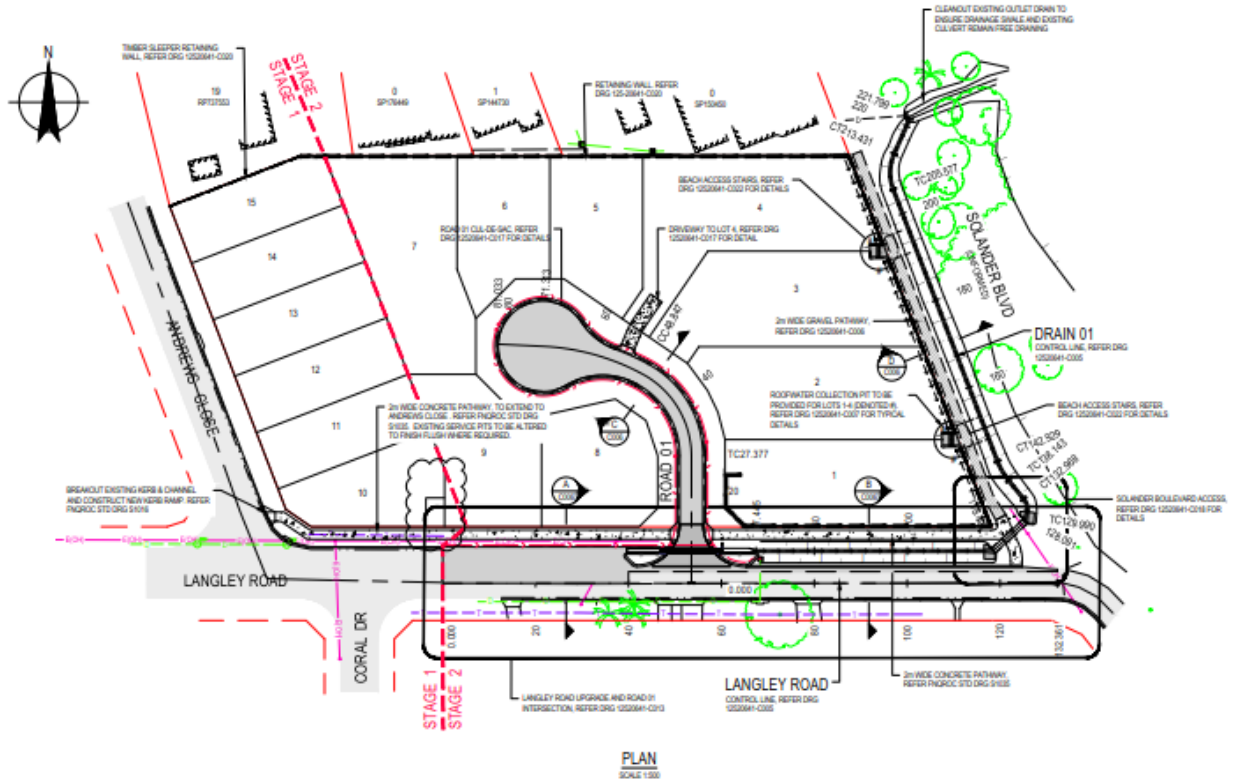
SEWER RETICULATION NOTES

1. ALL NEW SEWER MAINS SHALL BE UNPLASTICISED PVC (PVC-A) CLASS 080 SUITABLE FOR RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
2. ALL NEW SEWER MAINS AND MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH FNRCO STD DRAWINGS 5303 AND 5315.
3. ALL SEWER MANHOLE COVERS SHALL BE CIRCULAR UNLESS NOTED OTHERWISE ON SEWER LONG SECTIONS. COVERS SHALL BE TYPE B INSECT PROTECTED AND TYPE C DRAINAGE.
4. ALL SEWER MANHOLE COVER LEVELS TO BE 30mm ABOVE FINISHED SURFACE LEVEL UNLESS NOTED OTHERWISE.
5. THE CONTRACTOR SHALL ENSURE THAT A FLAT AREA OF 1.5m RADII FROM THE CENTRE OF THE MANHOLE IS PROVIDED AROUND ALL MANHOLES.
6. ALL HOUSE CONNECTION BRANCHES TO NEW SEWER MAINS TO BE CONSTRUCTED IN ACCORDANCE WITH FNRCO STD DRAWING 5303. BRANCHES SHALL BE CLOSELY MINDED IN ACCORDANCE WITH THE SPECIFICATION.
7. DOUGLAS SHIRE COUNCIL MUST BE CONTACTED TO PERFORM ANY DIRECT CONNECTION TO THE SEWER MAINS. THE CONTRACTOR SHALL LODGE WITH COUNCIL THE APPROPRIATE APPLICATION FORMS AND FEES FOR THESE WORKS TO BE COMPLETED. IT MAY BE POSSIBLE FOR SOME WORKS TO BE PERFORMED BY THE CONTRACTOR UNDER SPECIAL CIRCUMSTANCES AND SUBJECT TO APPROPRIATE CONDITIONS AGREED TO WITH COUNCIL.
8. THE CONTRACTOR SHALL CARRY OUT A CCTV INSPECTION THROUGH ALL SEWERS CONSTRUCTED AS PART OF THE DEVELOPMENT AND PROVIDE THE FOOTAGE TO THE SUPERINTENDENT FOR ASSESSMENT. ANY DEFECTS OF SEWER CONSIDERED SUB-STANDARD SHALL BE RECTIFIED TO THE SATISFACTION OF COUNCIL.

SITE SPECIFIC NOTES

1. NO CLEARING OR VEGETATION REMOVAL IS TO TAKE PLACE UNTIL CERTIFICATION IS PROVIDED FOR ANY PLANT RELOCATION (ANY PLANT RELOCATION BY OTHERS)

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<table border="1"> <tr> <td>1</td> <td>SUBSTITUTION AND STAGING ADDED - ISSUED FOR APPROVAL</td> <td>IRM</td> <td>GA</td> <td>PF</td> <td>20.05.20</td> </tr> <tr> <td>0</td> <td>FOR APPROVAL</td> <td>GB</td> <td>PF</td> <td>PF</td> <td>23.03.20</td> </tr> </table> <p>Rev: 1</p>					1	SUBSTITUTION AND STAGING ADDED - ISSUED FOR APPROVAL	IRM	GA	PF	20.05.20	0	FOR APPROVAL	GB	PF	PF	23.03.20				
1	SUBSTITUTION AND STAGING ADDED - ISSUED FOR APPROVAL	IRM	GA	PF	20.05.20															
0	FOR APPROVAL	GB	PF	PF	23.03.20															



LEGEND

	CONCRETE FOOTPATH/ROADWAY
	GRAVEL PATHWAY
	SUBSURFACE DRAINAGE (WITH FLUSH POINTS & OUTLETS)
	PEDESTRIAN KERB RAMP
	WATER TOP
	RETAINING WALL
	ROOFWATER COLLECTION PIT REFER DRG 12520641-C007
	EXISTING PAVEMENT
	NEW FLEXIBLE PAVEMENT
	NEW CONCRETE PAVEMENT WITH PORPHYRY GABBLE STONE FINISH

PLAN
SCALE 1:500

- NOTES**
- REFER DRG 12520641-C002 FOR STANDARD NOTES.
 - REFER DRG 12520641-C005 FOR CONTROL LINE SETOUT.

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1 SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL 0 FOR APPROVAL	BRM GA PF 03.05.20 GB PF 03.03.20			Scale: 1:500 This Drawing must not be used for Construction unless agreed as Approved	A1 Drawing No: 42-12520641-C003 Rev: 1	



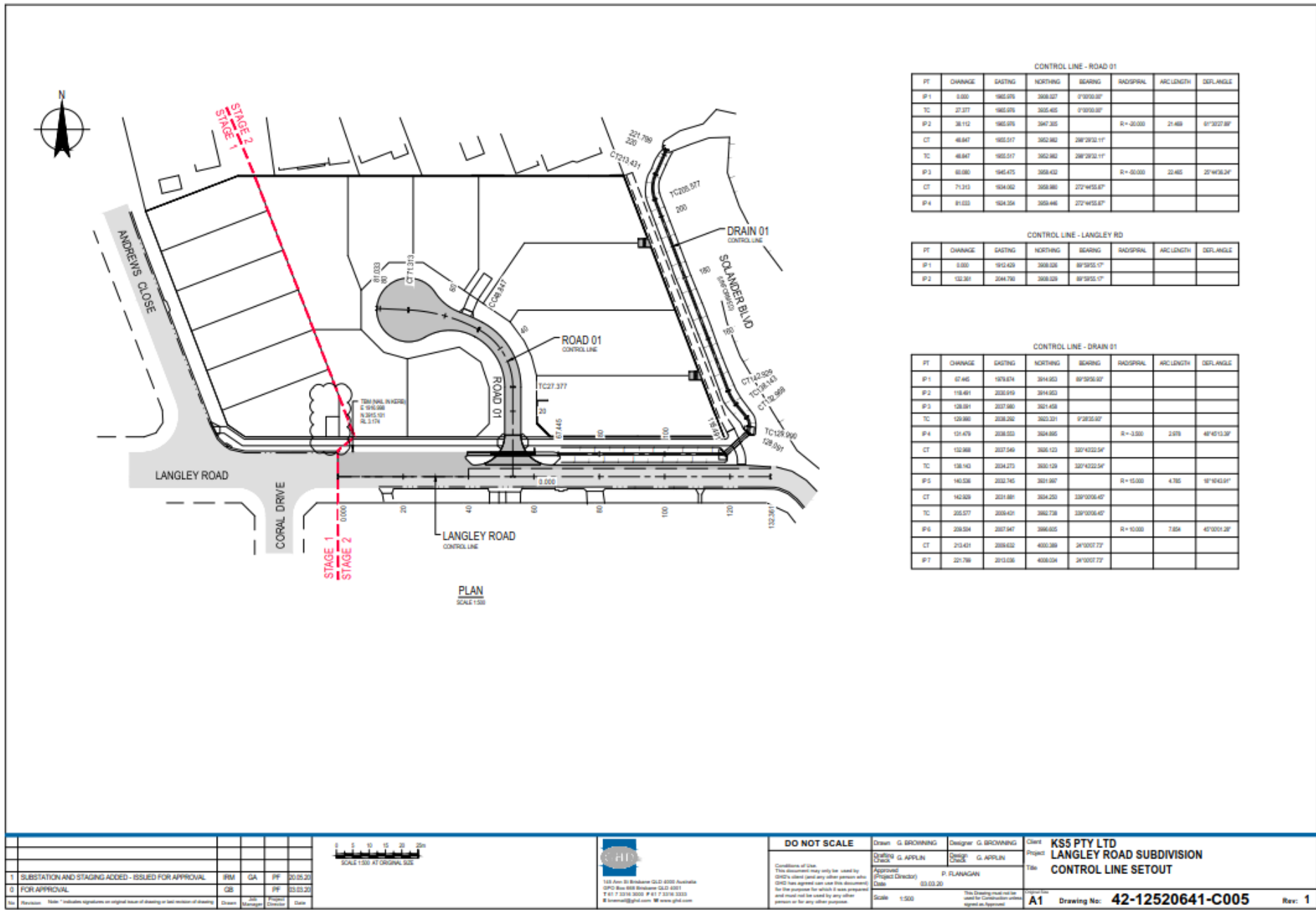
- LEGEND**
- EXISTING KERB & CHANNEL TO BE REMOVED
 - EXISTING PAVEMENT TO BE REMOVED
 - - - - EXISTING FENCE / BOLLARDS TO BE REMOVED
 - / / / / / EXISTING REDUNDANT SERVICE
 - * * * * * EXISTING TREE/PALM TO BE REMOVED
 - EXISTING VEGETATION TO BE REMOVED
 - - - - - EXISTING BUILDING LINE
 - - - - - EXISTING FENCE
 - EXISTING SEWER MAIN
 - EXISTING OHN ELECTRICITY
 - EXISTING WATER MAIN
 - EXISTING TELSTRA
 - * * * * * EXISTING PALMTREE TO REMAIN
 - - - - - EXISTING VEGETATION LINE

NOTES

- 1 REFER TO ENG. QUOTATION FOR STAGING/STAGE 1 TO INCLUDE CLEARING OF TREES FROM THE STAGES 1 AND 2.

PLAN
SCALE 1:500

<p>1 SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL</p>		IRM	GA	PF	03.05.20						
<p>0 FOR APPROVAL</p>		QB	PF	03.03.20							
<p>Rev: 01</p>		<p>Author: [Signature]</p>		<p>Check: [Signature]</p>		<p>Date: [Signature]</p>					
<p>Plot Date: 20/05/2020 11:08 AM</p>		<p>Plotted by: Rick Moulton</p>		<p>Call File No: C:\Operations\Design\Temporary\Plan\Drawings\Draw\12520641-C004.dwg</p>							
<p>1:5 5 10 15 20 25m</p> <p>SCALE 1:500 AT ORIGINAL SIZE</p>				<p>110 Ann St Brisbane QLD 4000 Australia GPO Box 999 Brisbane QLD 4001 Tel: 7 2316 2000 Fax: 7 2316 2003 # hiron@hi.com.au www.hi.com.au</p>		<p>DO NOT SCALE</p> <p>Conditions of Use: This document may only be used by GRDC's client (and any other person who GRDC has agreed can use this document) for the purposes for which it has prepared and must not be used by any other person or for any other purpose.</p>		<p>Drawn: G. BROWNING Checked: G. APPLIN Design: G. APPLIN Approved: P. FLANAGAN Date: 03.03.20</p>		<p>Client: KS5 PTY LTD Project: LANGLEY ROAD SUBDIVISION Title: DEMOLITION / CLEARING PLAN</p>	
<p>Scale: 1:500</p>		<p>This Drawing must not be used for Construction unless agreed on Approval</p>		<p>Sheet No: A1</p>		<p>Drawing No: 42-12520641-C004</p>		<p>Rev: 1</p>			



CONTROL LINE - ROAD 01

PT	CHANGE	EASTING	NORTHING	BEARING	RADIUS	ARC LENGTH	DEF. ANGLE
IP1	5.800	1965.076	3008.527	9°50'53.87"			
TC	27.377	1965.076	3008.485	9°50'53.87"			
IP2	38.112	1965.076	3047.305		R = 20.000	21.468	61°30'27.89"
CT	48.847	1965.077	3052.882	28°29'32.11"			
TC	48.847	1965.077	3052.882	28°29'32.11"			
IP3	60.080	1945.475	3058.432		R = 60.000	22.485	25°43'36.24"
CT	71.313	1924.002	3059.880	27°44'55.87"			
IP4	81.023	1924.004	3059.446	27°44'55.87"			

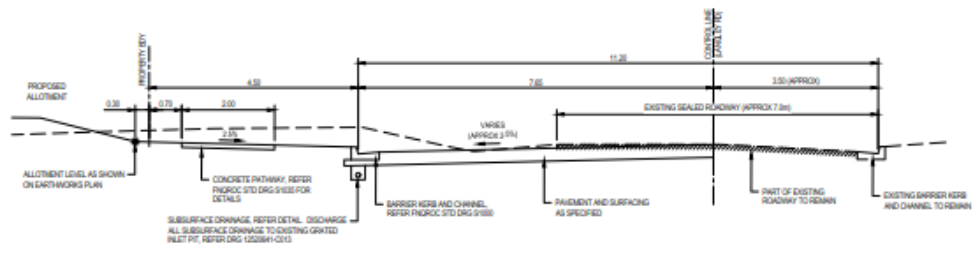
CONTROL LINE - LANGLEY RD

PT	CHANGE	EASTING	NORTHING	BEARING	RADIUS	ARC LENGTH	DEF. ANGLE
IP1	5.800	1912.429	3008.526	8°59'55.17"			
IP2	132.301	2044.790	3008.229	8°59'55.17"			

CONTROL LINE - DRAIN 01

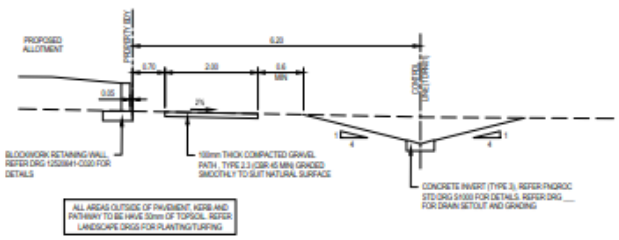
PT	CHANGE	EASTING	NORTHING	BEARING	RADIUS	ARC LENGTH	DEF. ANGLE
IP1	67.945	1976.674	3014.823	8°59'55.17"			
IP2	118.461	2026.919	3014.823				
IP3	128.381	2037.960	3021.458				
TC	129.888	2038.292	3023.291	9°28'15.97"			
IP4	121.478	2038.020	3024.895		R = 3.000	2.078	48°40'15.38"
CT	132.868	2037.549	3026.123	33°43'22.54"			
TC	128.143	2034.273	3020.129	33°43'22.54"			
IP5	140.528	2022.745	3021.967		R = 10.000	4.785	18°54'43.91"
CT	142.828	2021.881	3024.220	33°00'06.40"			
TC	205.077	2028.421	3062.728	33°00'06.40"			
IP6	208.524	2027.947	3066.605		R = 10.000	7.854	45°00'42.28"
CT	214.421	2028.622	4001.389	24°00'07.77"			
IP7	221.798	2013.026	4008.024	24°00'07.77"			

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		QB	PF	22.03.20	
<p>Scale: 1:500</p> <p>Scale 1:500 AT ORIGINAL SIZE</p>				<p>118 Ann St Brisbane QLD 4000 Australia GPO Box 999 Brisbane QLD 4001 T 61 7 3216 3222 F 61 7 3216 3223 @ hcn.com.au W www.hcn.com.au</p>	
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<p>Plot Date: 20/05/2020 11:54 AM Plotted by: Rick Stanton</p>		<p>Scale: 1:500</p>		<p>Version: A1 Drawing No: 42-12520641-C005 Rev: 1</p>	



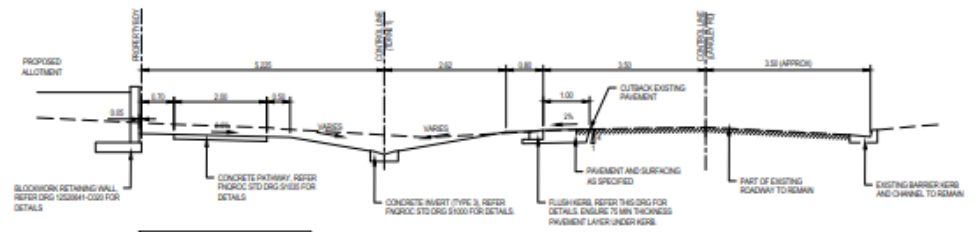
LANGLEY ROAD (CH 50 - END)

A SECTION
 1:50 CH 50
 SCALE 1:30



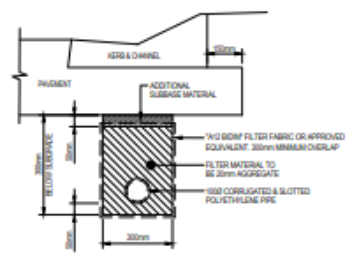
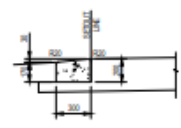
SOLANDER BOULEVARD (PATH AND DRAIN)

D SECTION
 1:50 CH 50
 SCALE 1:30



LANGLEY ROAD (START - CH 50)

B SECTION
 1:50 CH 50
 SCALE 1:30



SUBSURFACE DRAINAGE

NOT TO SCALE

LANGLEY ROAD - PAVEMENT DETAILS

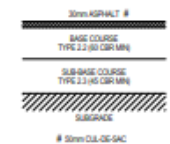
SUBGRADE CBR	BASE (mm)	SUB-BASE (mm)
3	100	280
5	100	190
7	100	140
10	100	100

DESIGN TRAFFIC 1 x 10⁶ (ACCESS STREET)

ROAD 01 - PAVEMENT DETAILS

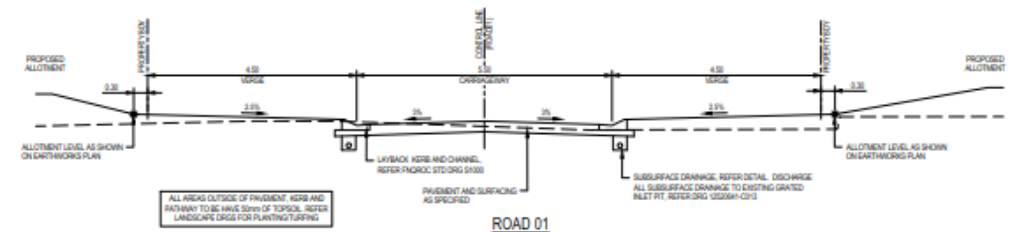
SUBGRADE CBR	BASE (mm)	SUB-BASE (mm)
3	100	270
5	100	180
7	100	130
10	100	100

DESIGN TRAFFIC 5 x 10⁶ (ACCESS PLACE)



FLEXIBLE PAVEMENT DETAILS

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ROAD 01

C SECTION
 1:50 CH 50
 SCALE 1:30



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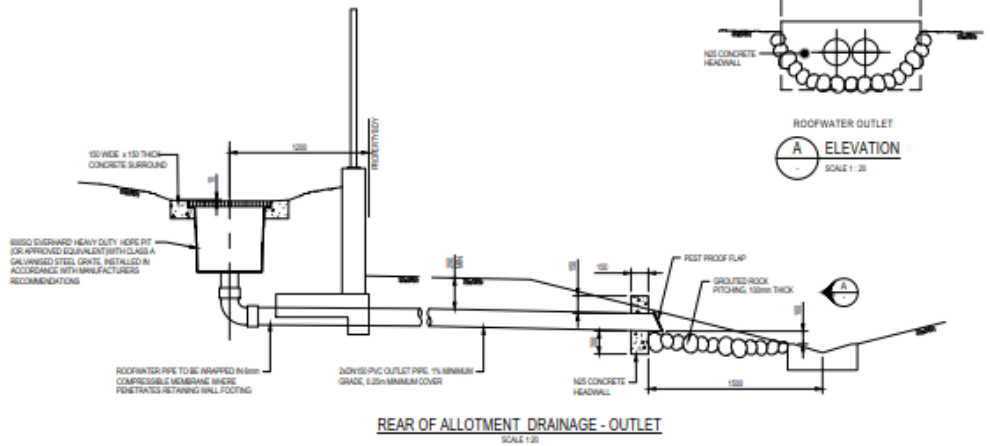
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Approved (Project Director): P. FLANAGAN	Date: 03.03.20
Scale: 1:100	This Drawing must not be used for Construction unless agreed as Appointed

Client: **KS5 PTY LTD**
 Project: **LANGLEY ROAD SUBDIVISION**
 Title: **TYPE CROSS SECTIONS AND DETAILS**

Sheet No: **A1** Drawing No: **42-12520641-C006** Rev: **1**

Rev	Reason	Date	By	Check
1	SUBSTANTIATION AND STAGING ADDED - ISSUED FOR APPROVAL	03.05.20	GB	GA
0	FOR APPROVAL	03.03.20	GB	GA



1	SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL	IRM	GA	PF	20.05.20
0	FOR APPROVAL	QB	PF	22.03.20	
Rev	Revision	Issue	Job Manager	Project Engineer	Date



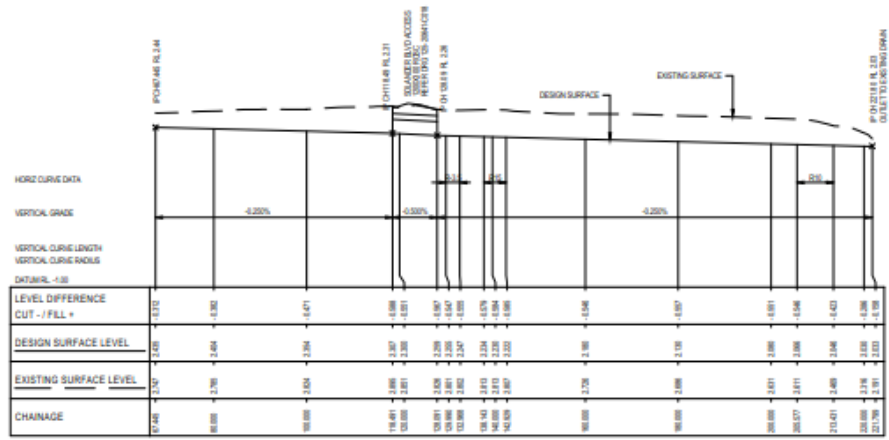
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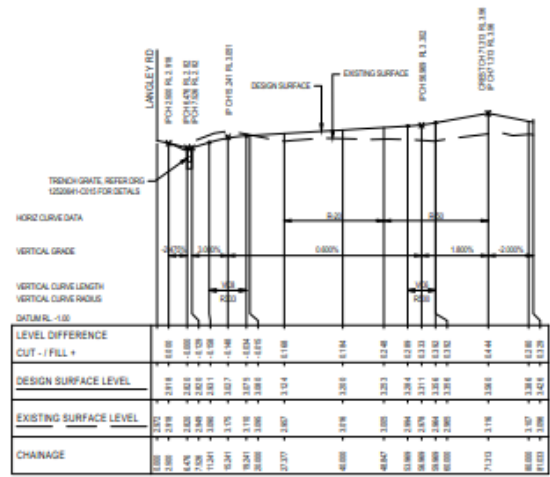
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	Checked	G. APRILIN	Design Check	G. APRILIN
	Approved (Project Director)	P. FLANAGAN		
	Date	22.03.20		
Scale	AS SHOWN			

Client	KS5 PTY LTD		
Project	LANGLEY ROAD SUBDIVISION		
Title	MISCELLANEOUS DETAILS		
Version	A1	Drawing No:	42-12520641-C007
Rev:	1		

Plot Date: 20/05/2020 11:56 AM Pinned by: Rick Stanton Cad File No: C:\Users\rickstano\Desktop\Temp\Drawings\Drawings\42-12520641-C007.dwg

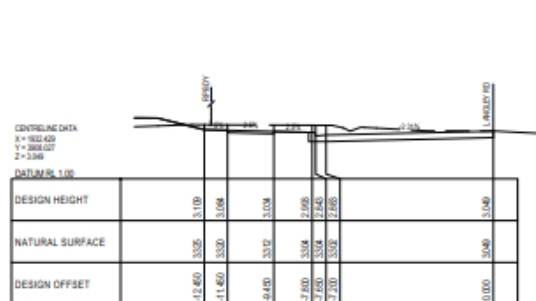


LONGITUDINAL SECTION - DRAIN 01
HORIZ 1:500 VERT 1:50

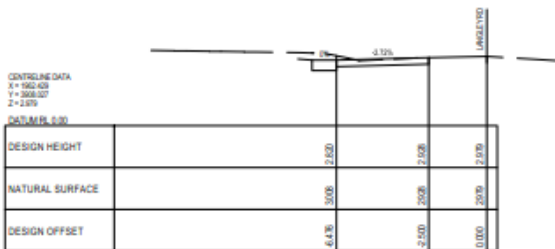


LONGITUDINAL SECTION - ROAD 01
HORIZ 1:500 VERT 1:50

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<p>1 SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL</p> <p>2 FOR APPROVAL</p>	<p>IRM GA 20.05.20</p> <p>GB PF 22.03.20</p>		<p>Approved (Project Director): P. FLANAGAN Date: 03.03.20</p> <p>Scale: 1:500 H / 1:50 V</p> <p>This Drawing must not be used for Construction unless agreed as Approved</p>	<p>Version: A1 Drawing No: 42-12520641-C008 Rev: 1</p>	



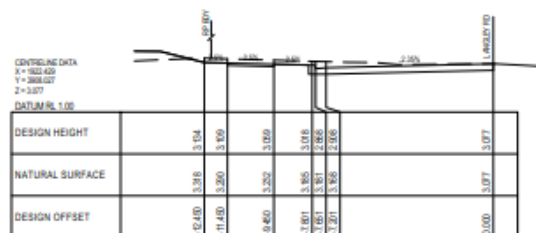
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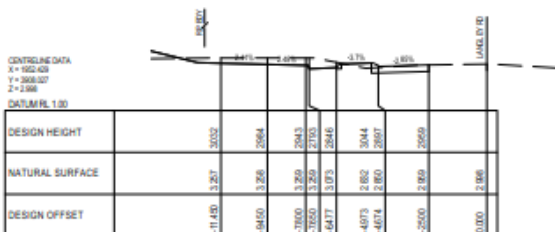
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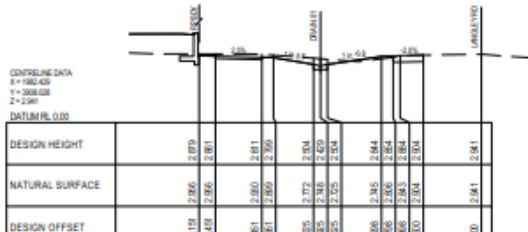
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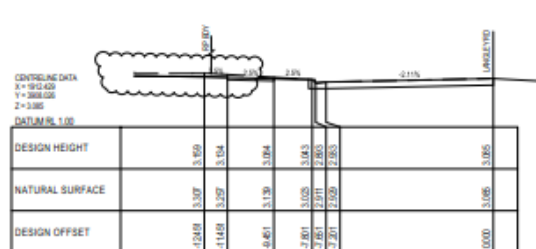
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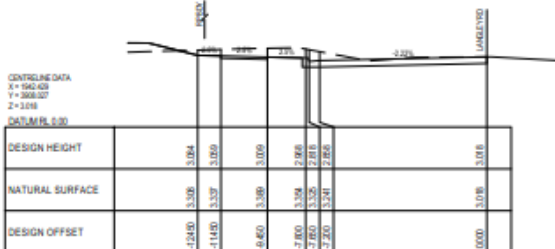
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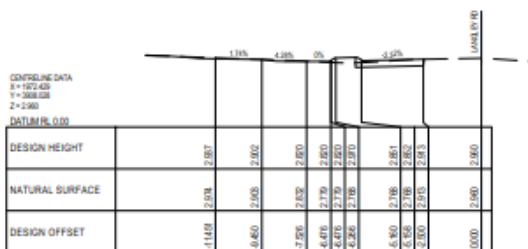
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0.000



30.000



60.000

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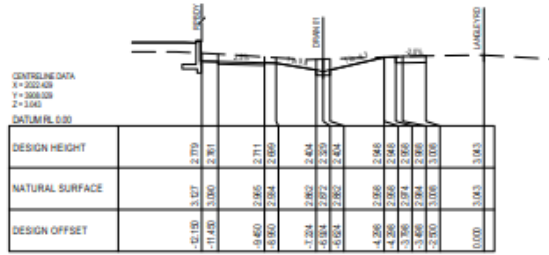
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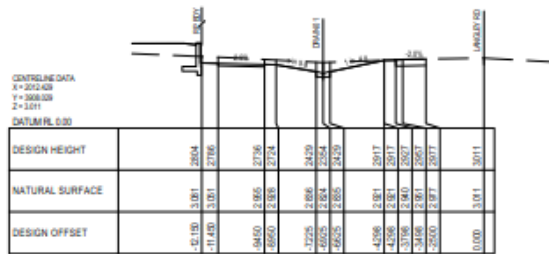
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Checked	G. APRIN	Design Check	G. APRIN
Approved (Project Director)	P. FLANAGAN		
Date	03.03.20		
Scale	1:100		

Client **KS5 PTY LTD**
Project **LANGLEY ROAD SUBDIVISION**
Title **LANGLEY ROAD CROSS SECTIONS SHEET 1 OF 2**

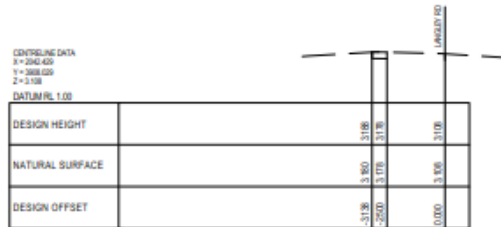
Version **A1** Drawing No: **42-12520641-C009** Rev: **1**



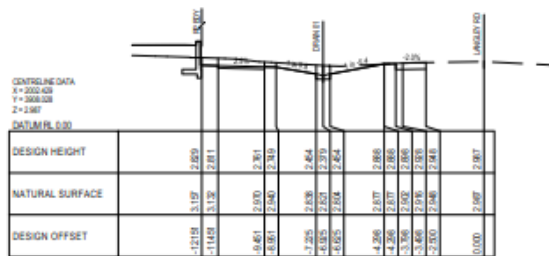
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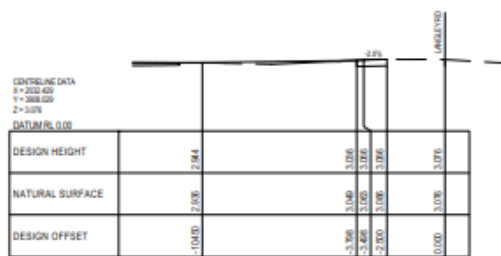
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130.000



90.000



120.000



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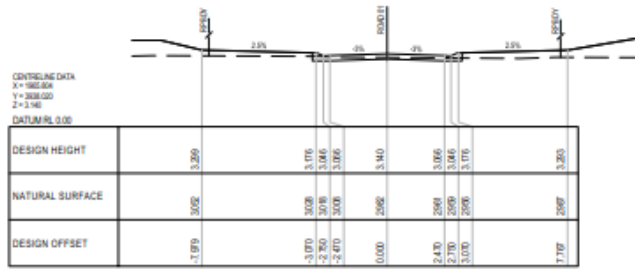
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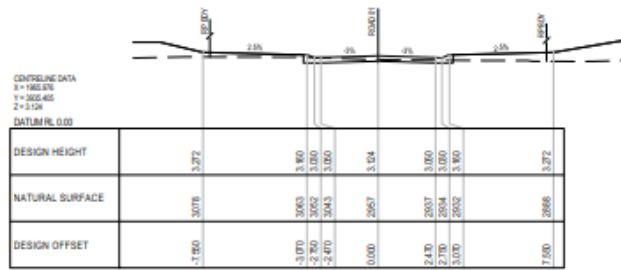
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Checked	G. APRILIN	Design	G. APRILIN
Approved (Project Director)	P. FLANAGAN	Date	03.03.20
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Client **KS5 PTY LTD**
 Project **LANGLEY ROAD SUBDIVISION**
 Title **LANGLEY ROAD CROSS SECTIONS SHEET 2 OF 2**
 Version **A1** Drawing No: **42-12520641-C010** Rev: **1**

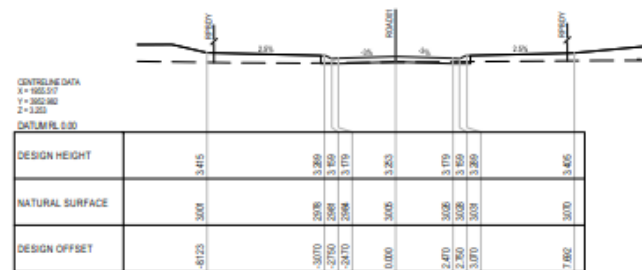
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0	FOR APPROVAL	03.03.20	PF	PF	PF



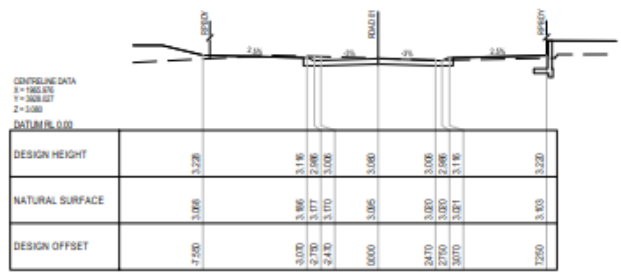
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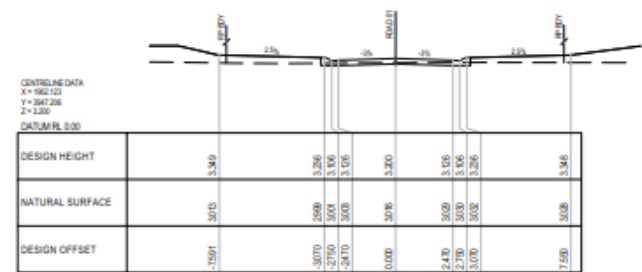
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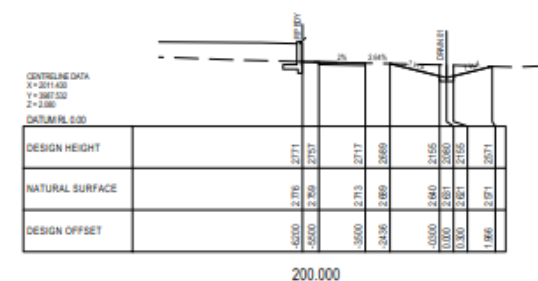
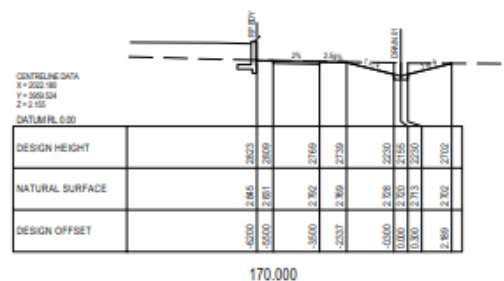
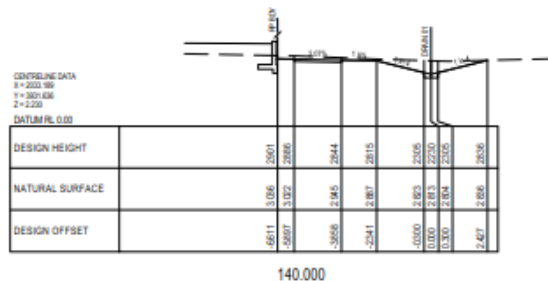
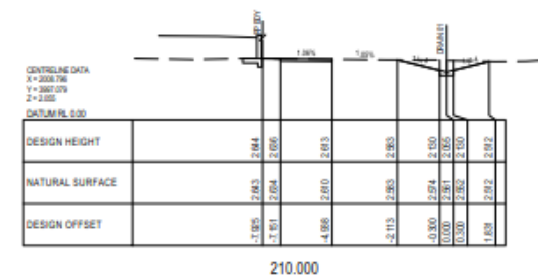
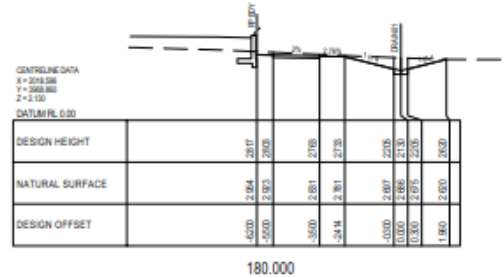
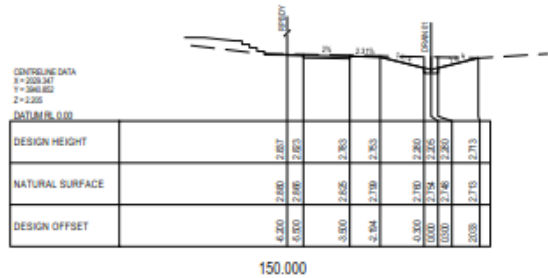
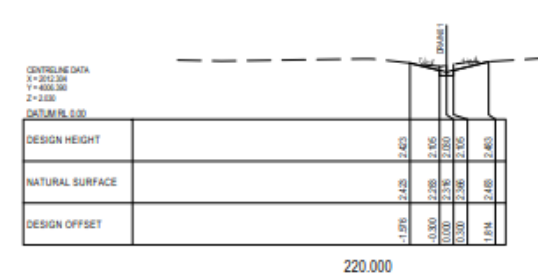
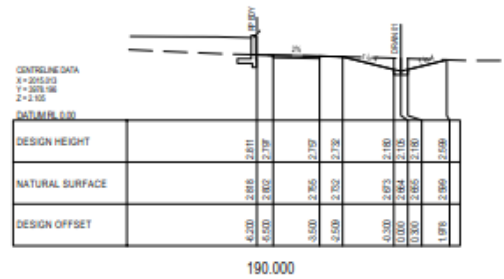
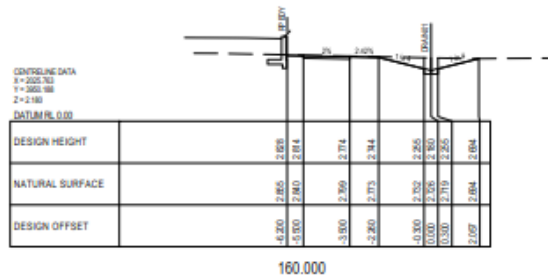


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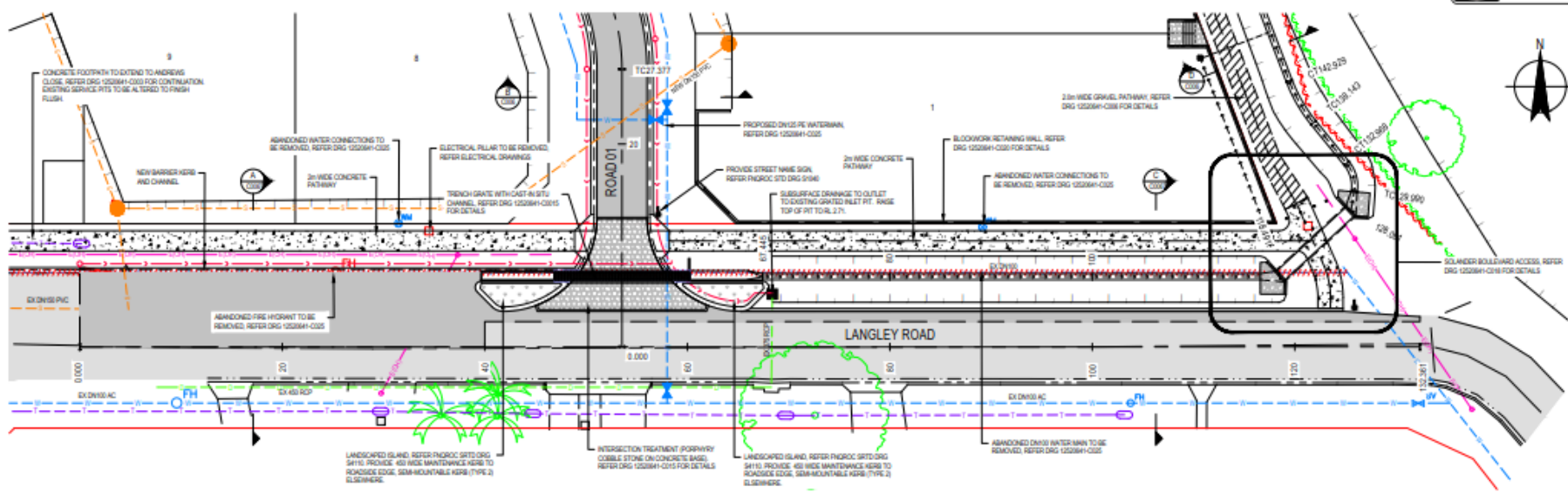


40.000

		<p>Level 4, 211 Victoria Square Adelaide SA 5000 Australia GPO Box 2002 Adelaide SA 5001 T 81 8 8111 8822 F 81 8 8111 8899 h.adrian@ghl.com.au W www.ghl.com.au</p>	<p>DO NOT SCALE</p> <p>Conditions of Use: This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purposes for which it has prepared and must not be used by any other person or for any other purpose.</p>	Drawn G. BROWNING Checked G. APRILIN Date 03.03.20	Designer G. BROWNING Design Check G. APRILIN P. FLANAGAN Date 03.03.20	Client KS5 PTY LTD Project LANGLEY ROAD SUBDIVISION Title ROAD 01 CROSS SECTIONS
1 SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL 0 FOR APPROVAL	BRM GA PF 20.05.20 GB PF 03.03.20			Scale 1:100 This Drawing must not be used for Construction unless agreed as approved	A1 Drawing No: 42-12520641-C011 Rev: 1	



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1 SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL 0 FOR APPROVAL	IRM GA 00.05.20 QB PF 03.03.20			Scale 1:100 AT ORIGINAL SIZE		



PLAN
SCALE 1:200

LEGEND

- EXISTING PAVEMENT
- NEW PAVEMENT
- NEW CONCRETE PATHWAY
- NEW GRAVEL PATHWAY
- INTERSECTION TREATMENT (PORPHYRY COBBLE STONE ON CONCRETE BASE)
- LANDSCAPED ISLAND
- GRAVELLED ROCK APRON
- EXISTING OH ELECTRICITY
- EXISTING WATER MAIN
- EXISTING WATER MAIN TO BE REMOVED
- PROPOSED FENCE
- SUBSURFACE DRAINAGE
- BATTER TOP
- EXISTING VEGETATION LINE
- BOLLARD
- REMOVABLE BOLLARD
- SIGN

NOTES

1. REFER TO DRG 12520641-C002 FOR STANDARD NOTES.
2. FOR DEMOLITION WORKS, REFER DRAWING 12520641-C004.
3. REFER DRG 12520641-C014 FOR SETOUT.

1	SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL	IRM	GA	PF	20.05.20
0	FOR APPROVAL	QB	PF	PF	23.03.20



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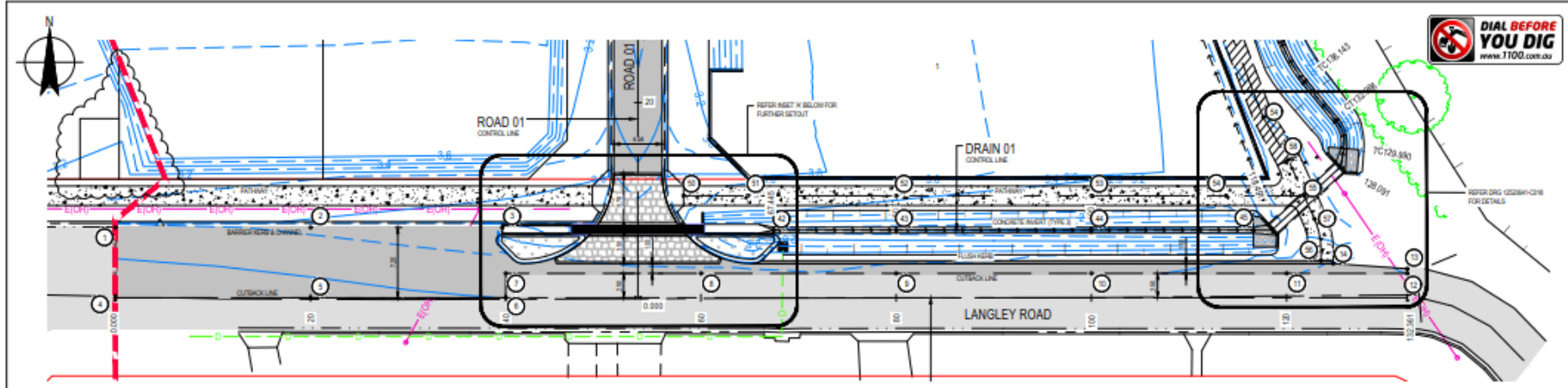
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Drawn	G. BROWNING	Designer	G. BROWNING
Checked	G. APPLIN	Design	G. APPLIN
Approved	P. FLANAGAN	Project Director	
Date	03.03.20		
Scale	1:200		

Client	KS5 PTY LTD
Project	LANGLEY ROAD SUBDIVISION
Title	LANGLEY ROAD ROADWORKS PLAN
Revision	A1 Drawing No: 42-12520641-C013
Rev:	1

Plot Date: 20/05/2020 1:03 PM Pinned by: Rick Moulton Cad File No: C:\Operations\Design\Temporary\Plan\Adelaide_Cad\Drawings\01\220641-C013.dwg



LEGEND

- EXISTING PAVEMENT
- NEW PAVEMENT
- INTERSECTION TREATMENT (FORWARDLY COBBLE STONE ON CONCRETE BASE)
- NEW CONCRETE PATHWAY
- NEW GRAVEL PATHWAY
- LANDSCAPED ISLAND
- SETOUT POINT
- E(OH) EXISTING OVERHEAD ELECTRICITY
- FINISHED SURFACE CONTOUR (0.5% INTERNAL)

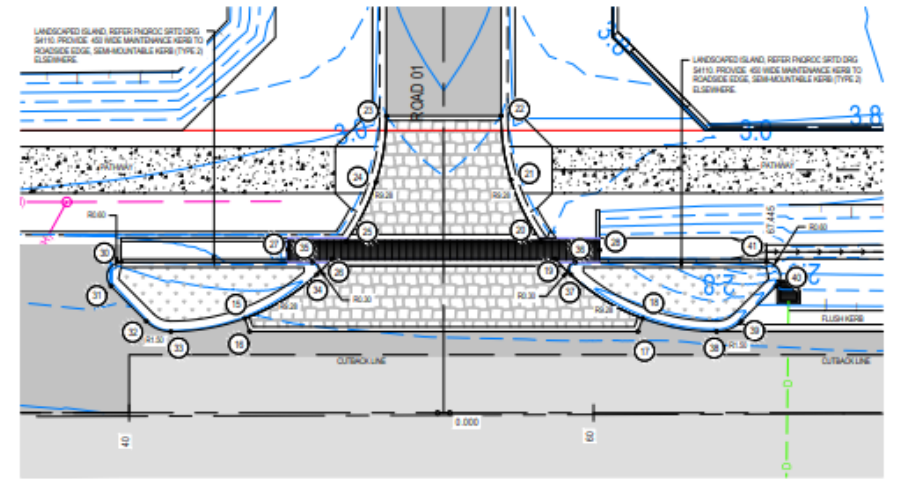
PLAN
SCALE 1:200

NOTES

- REFER TO DRG 12028H-030 FOR STANDARD NOTES.
- REFER TO DRG 12028H-030 FOR CONTROL LINE SETOUT.

SETOUT POINTS				
POINT	EASTING	NORTHING		COMMENT
1	1912.429	3915.229	2.933	LP OF KERB & CHANNEL
2	1922.428	3915.229	2.983	LP OF KERB & CHANNEL
3	1932.428	3915.229	2.934	LP OF KERB & CHANNEL
4	1912.429	3908.528	3.083	PAVEMENT CUTBACK
5	1922.429	3908.527	3.049	PAVEMENT CUTBACK
6	1932.429	3908.527	3.049	PAVEMENT CUTBACK
7	1922.429	3915.527	2.929	PAVEMENT CUTBACK
8	1912.429	3915.528	2.913	PAVEMENT CUTBACK
9	1922.429	3915.528	2.922	PAVEMENT CUTBACK
10	2012.429	3915.529	2.977	PAVEMENT CUTBACK
11	2022.429	3915.529	3.049	PAVEMENT CUTBACK
12	2044.790	3915.529	3.159	PAVEMENT CUTBACK
13	2044.790	3911.824	3.213	EDGE OF PAVEMENT
14	2037.299	3911.829	3.128	EDGE OF PAVEMENT
15	1927.411	3912.031	2.927	EDGE OF CONCRETE
16	1927.417	3911.527	2.919	EDGE OF CONCRETE
17	1974.525	3911.527	2.983	EDGE OF CONCRETE
18	1974.540	3912.030	2.982	EDGE OF CONCRETE
19	1970.762	3914.822	2.820	EDGE OF CONCRETE
20	1970.762	3915.424	2.820	LP OF KERB
21	1988.884	3918.227	2.946	LP OF KERB
22	1988.885	3920.828	2.920	LP OF KERB
23	1988.885	3923.528	2.920	LP OF KERB
24	1988.885	3917.822	2.946	LP OF KERB
25	1981.772	3915.424	2.820	LP OF KERB
26	1981.175	3914.824	2.820	EDGE OF CONCRETE
27	1959.294	3915.046	2.520	TRENCH GRATE INVERT

SETOUT POINTS				
POINT	EASTING	NORTHING		COMMENT
28	1972.586	3915.528	2.453	TRENCH GRATE INVERT
29	1922.076	3914.922	2.933	FACE OF KERB
30	1921.652	3913.480	2.976	FACE OF KERB
31	1922.705	3911.888	2.914	FACE OF KERB
32	1934.228	3911.527	2.933	FACE OF KERB
33	1940.575	3913.862	2.916	FACE OF KERB
34	1940.572	3914.524	2.920	FACE OF KERB
35	1971.840	3914.524	2.920	FACE OF KERB
36	1971.407	3913.863	2.921	FACE OF KERB
37	1977.726	3911.528	2.989	FACE OF KERB
38	1978.790	3911.887	2.880	FACE OF KERB
39	1982.289	3913.476	2.955	FACE OF KERB
40	1979.819	3914.922	2.460	FACE OF KERB
41	1979.819	3914.922	2.455	CONCRETE INVERT
42	1982.428	3914.922	2.454	CONCRETE INVERT
43	2029.628	3914.922	2.312	CONCRETE INVERT
44	2029.628	3914.922	2.304	CONCRETE INVERT
45	1970.647	3918.476	2.946	PATH CENTRALINE
46	1977.226	3918.476	2.946	PATH CENTRALINE
47	1982.429	3918.476	2.911	PATH CENTRALINE
48	2024.429	3918.476	2.751	PATH CENTRALINE
49	2024.226	3918.476	2.727	PATH CENTRALINE
50	2024.226	3918.476	2.920	PATH CENTRALINE
51	2022.924	3911.828	2.945	PATH CENTRALINE
52	2022.274	3918.128	2.920	PATH CENTRALINE
53	2022.822	3922.171	2.913	PATH CENTRALINE
54	2020.024	3922.024	2.981	PATH CENTRALINE



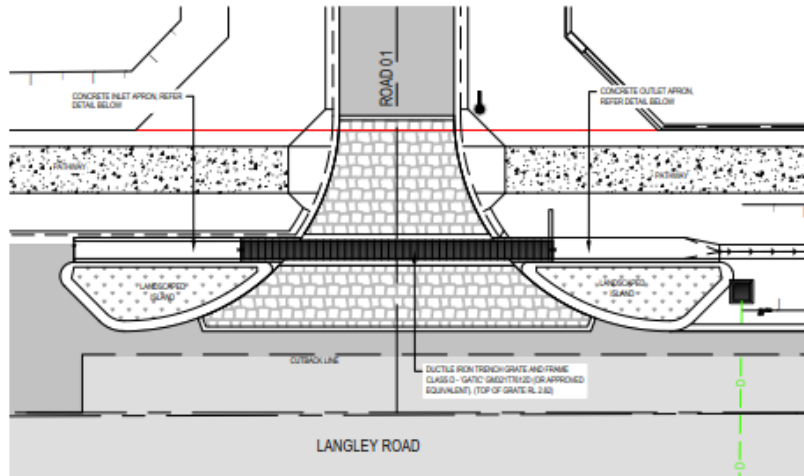
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0	FOR APPROVAL	GB	PF	PF	23.03.20

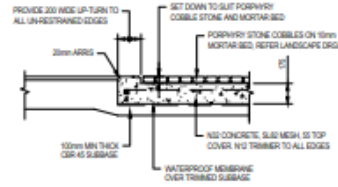


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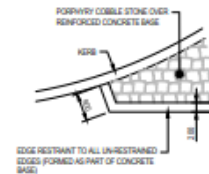
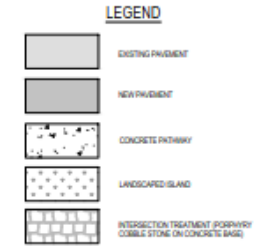
DO NOT SCALE	Drawn: G. BROWNING Checked: G. APRILIN	Designer: G. BROWNING Design Check: G. APRILIN	Client: KS5 PTY LTD Project: LANGLEY ROAD SUBDIVISION Title: LANGLEY ROAD SETOUT PLAN
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PLAN
SCALE 1:100

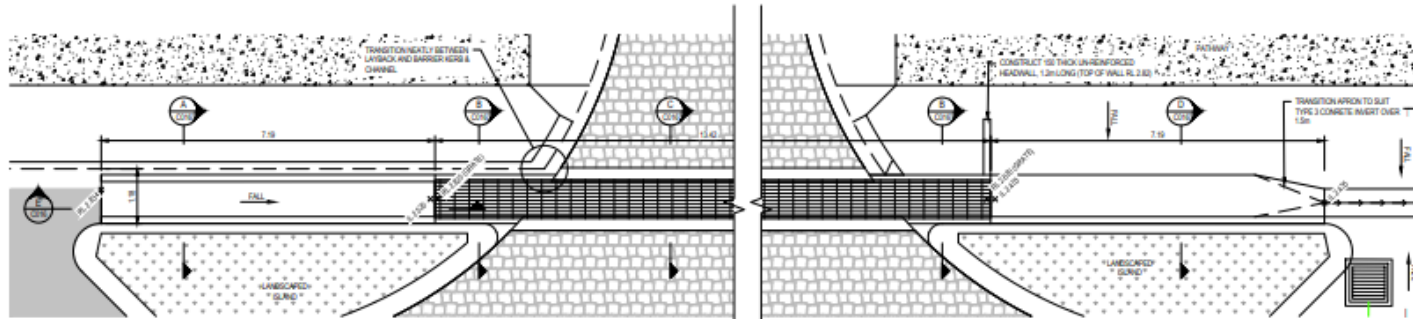


INTERSECTION TREATMENT
SCALE 1:20



INTERSECTION THRESHOLD DETAIL
NOT TO SCALE

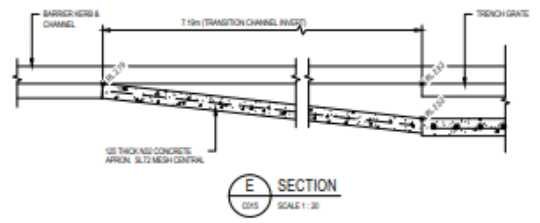
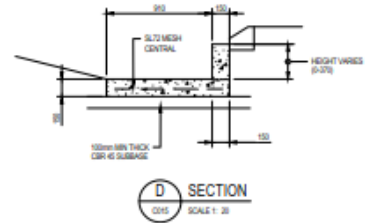
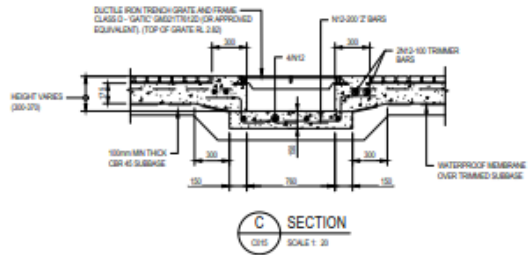
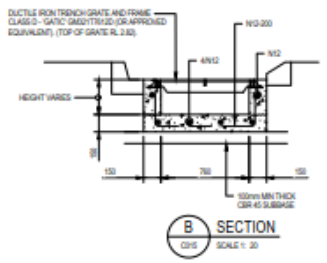
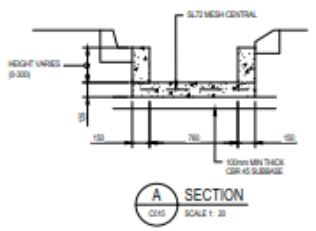
- NOTES**
- REFER TO DRG 15226H-C005 FOR STANDARD NOTES
 - REFER TO DRG 15226H-C005 FOR SETOUT



CONCRETE INLET APRON
SCALE 1:20

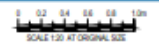
CONCRETE OUTLET APRON
SCALE 1:20

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<p>1 SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL</p> <p>2 FOR APPROVAL</p>	<p>IRM</p> <p>GA</p> <p>PF</p> <p>00.05.20</p>	<p>QB</p> <p>PF</p> <p>03.03.20</p>	<p>0 0.2 0.4 0.6 0.8 1.0m</p> <p>SCALE 1:20 AT ORIGINAL SIZE</p> <p>0 0.5 1.0 1.5 2.0 2.5m</p> <p>SCALE 1:10 AT ORIGINAL SIZE</p> <p>0 1 2 3 4 5m</p> <p>SCALE 1:10 AT ORIGINAL SIZE</p>			<p>Level 1, 211 Victoria Square Adelaide SA 5000 Australia</p> <p>GPO Box 2002 Adelaide SA 5001</p> <p>Tel: 8 8211 8600 P 81 8 8211 8689</p> <p>E: adrian@ghl.com.au W: www.ghl.com.au</p>	<p>Drawn: G. BROWNING</p> <p>Checked: G. APRILIN</p> <p>Approved: P. FLANAGAN</p> <p>Date: 03.03.20</p> <p>Scale: AS SHOWN</p>	<p>Designer: G. BROWNING</p> <p>Design Check: G. APRILIN</p> <p>Project Director: P. FLANAGAN</p> <p>Date: 03.03.20</p> <p>This Drawing must not be used for Construction unless agreed on Approval</p>



- NOTES**
- REFER TO DRG 125XXXXX-C111 FOR STANDARD NOTES
 - ALL CONCRETE TO BE 150 MIN (UNLESS NOTED OTHERWISE) IN ACCORDANCE WITH AS1379 AND 4086B

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2	FOR APPROVAL	GB	PF	23.03.20	

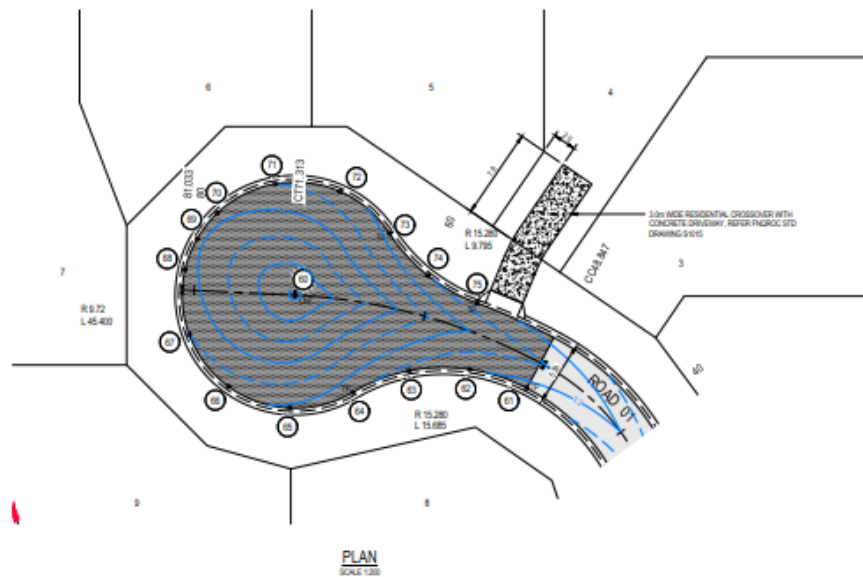


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	Checked: G. APRILIN	Design Check: G. APRILIN
	Approved (Project Director): P. FLANAGAN	Date: 03.03.20
Scale: AS SHOWN	This Drawing must not be used for Construction unless agreed as Approved	

Client	KS5 PTY LTD
Project	LANGLEY ROAD SUBDIVISION
Title	TRENCH GRATE DETAILS
Version	A1
Drawing No:	42-12520641-C016
Rev:	1

Plot Date: 20/05/2020 1:43 PM Plotted by: Rick Stanton Cad File No: C:\Users\rick\OneDrive\Temporary Files\Drawings\Draw\Drawings\42\2020\41\C016.dwg



PLAN
SCALE 1:200

LEGEND

- R 15.280
L 15.080
KERR RADIUS
KERR ARC LENGTH
- TP (T) SETOUT POINT
- 0.15m --- FINISHED SURFACE CONTOUR
(0.15m INTERNAL)
- [Hatched Box] LIMITS OF 3.0m ASPHALT

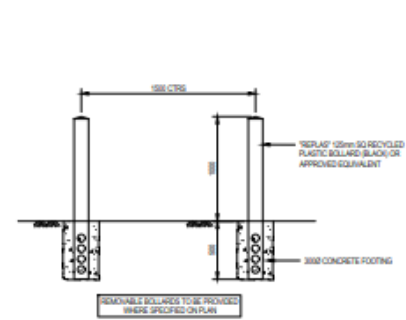
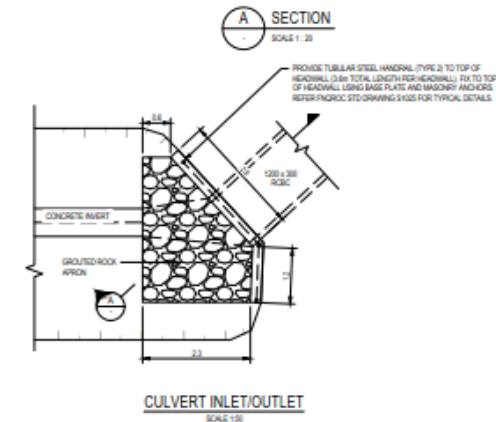
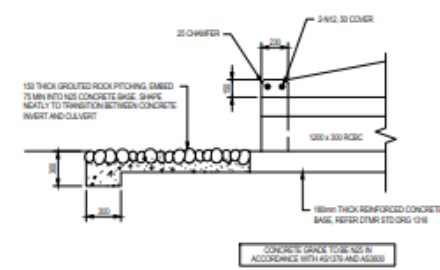
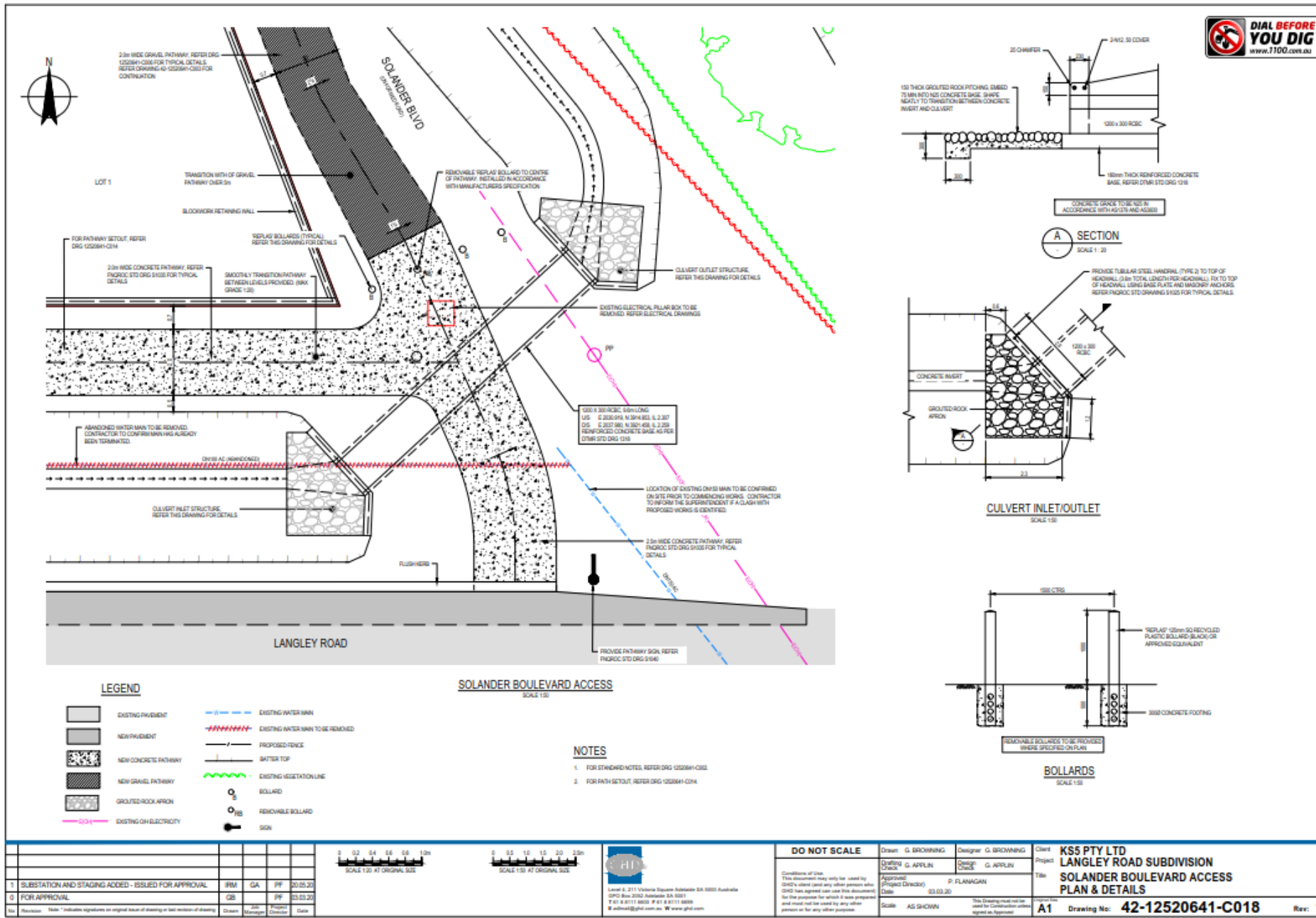
SETOUT POINTS

POINT	EASTING	NORTHING	3.00
01	194.802	268.860	3.30
01	194.802	268.875	3.181
02	194.990	268.807	3.258
03	194.888	262.486	3.226
04	193.631	262.626	3.261
05	192.802	248.271	3.280
06	193.527	201.133	3.320
07	194.851	202.094	3.348
08	194.594	241.176	3.378
09	192.627	248.810	3.388
10	192.274	248.032	3.394
11	192.279	248.032	3.351
12	192.824	247.808	3.377
13	194.202	248.282	3.383
14	194.485	248.688	3.254
15	194.738	268.207	3.027

NOTES

1. FOR STANDARD NOTES, REFER TO: G550M-C00.
2. SETOUT SHOWN IS TO LIP OF KERR AND CHANNEL.

		<p>Level 9, 10 Lake Street, Cairns QLD 4870 Australia PO Box 818, Cairns QLD 4870 T 61 7 4344 2222 F 61 7 4344 2288 R cairs@ghd.com.au W www.ghd.com.au</p>	<p>DO NOT SCALE</p> <p><small>Conditions of Use: This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purposes for which it has prepared and must not be used by any other person or for any other purpose.</small></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Drawn: G. BROWNING</td> <td>Designer: G. BROWNING</td> </tr> <tr> <td>Checked: G. APPLIN</td> <td>Design Check: G. APPLIN</td> </tr> <tr> <td>Approved (Project Director): P. FLANAGAN</td> <td>Date: 03.03.20</td> </tr> <tr> <td>Scale: 1:200</td> <td><small>This Drawing must not be used for Construction unless agreed as Approved</small></td> </tr> </table>	Drawn: G. BROWNING	Designer: G. BROWNING	Checked: G. APPLIN	Design Check: G. APPLIN	Approved (Project Director): P. FLANAGAN	Date: 03.03.20	Scale: 1:200	<small>This Drawing must not be used for Construction unless agreed as Approved</small>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Client: KS5 PTY LTD</td> </tr> <tr> <td>Project: LANGLEY ROAD SUBDIVISION</td> </tr> <tr> <td>Title: ROAD 01 CUL-DE-SAC SETOUT PLAN</td> </tr> <tr> <td>Version: A1</td> </tr> <tr> <td>Drawing No: 42-12520641-C017</td> </tr> <tr> <td>Rev: 1</td> </tr> </table>	Client: KS5 PTY LTD	Project: LANGLEY ROAD SUBDIVISION	Title: ROAD 01 CUL-DE-SAC SETOUT PLAN	Version: A1	Drawing No: 42-12520641-C017	Rev: 1
Drawn: G. BROWNING	Designer: G. BROWNING																		
Checked: G. APPLIN	Design Check: G. APPLIN																		
Approved (Project Director): P. FLANAGAN	Date: 03.03.20																		
Scale: 1:200	<small>This Drawing must not be used for Construction unless agreed as Approved</small>																		
Client: KS5 PTY LTD																			
Project: LANGLEY ROAD SUBDIVISION																			
Title: ROAD 01 CUL-DE-SAC SETOUT PLAN																			
Version: A1																			
Drawing No: 42-12520641-C017																			
Rev: 1																			
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1 SUBSTANTIATION AND STAGING ADDED - ISSUED FOR APPROVAL	IRM	GA	PF	03.05.20															
0 FOR APPROVAL	GB	PF	03.03.20																



LEGEND

- EXISTING PAVEMENT
- NEW PAVEMENT
- NEW CONCRETE PATHWAY
- NEW GRAVEL PATHWAY
- GROUTED ROCK APRON
- EXISTING OH ELECTRICITY
- EXISTING WATER MAIN
- EXISTING WATER MAIN TO BE REMOVED
- PROPOSED FENCE
- BATTER TOP
- EXISTING VEGETATION LINE
- BOLLARD
- REMOVABLE BOLLARD
- SIGN

SOLANDER BOULEVARD ACCESS
SCALE 1:50

NOTES

- FOR STANDARD NOTES, REFER DRG 1025641-C018
- FOR PATH SETOUT, REFER DRG 1025641-C014



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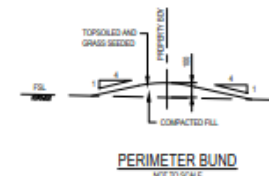
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Checked	G. APPLIN	Design	G. APPLIN
Approved (Project Director)	P. PLANAGAN	Date	03.03.20
Scale	AS SHOWN	This Drawing must not be used for Construction unless agreed as approved.	

Client	KS5 PTY LTD
Project	LANGLEY ROAD SUBDIVISION
Title	SOLANDER BOULEVARD ACCESS PLAN & DETAILS
Sheet No.	A1
Drawing No.	42-12520641-C018
Rev.	1

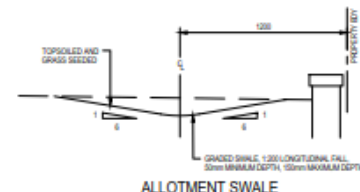
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PLAN
SCALE 1:500



PERIMETER BUND
NOT TO SCALE



ALLOTMENT SWALE
NOT TO SCALE

LEGEND

- 0.5m INTERVAL --- EXISTING SURFACE CONTOUR (0.5m INTERVAL)
- 0.5m INTERVAL --- FINISHED SURFACE CONTOUR (0.5m INTERVAL)
- 100 FINISHED SURFACE LEVEL
- 100 EXISTING SURFACE LEVEL
- PERIMETER BUND
- ALLOTMENT SWALE
- █ EARTHWORKS IN FILL
- █ EARTHWORKS IN CUT

EARTHWORKS VOLUMES	
CUT	673m ³
FILL	5763m ³
1. VOLUMES SHOWN ARE MEASURED IN PLACE VOLUMES AND INCLUDE NO ALLOWANCE FOR BUILDING COMPACTION. 2. STRIPPING OF TOPSOIL TO A DEPTH OF 100mm AND RE-SPREADING TOPSOIL ON COMPLETION OF EARTHWORKS TO A DEPTH OF 100mm HAS BEEN ACCOUNTED FOR. 3. EARTHWORKS VOLUMES INCLUDE BOXING OUT FOR ROAD PAVEMENTS, KERBS AND FOOTPATHS.	

NOTES

1. REFER TO DRG 12520641-C000 FOR STANDARD NOTES.
2. ALL BATTERS WITHIN ALLOTMENTS SHALL AS FOLLOWS (UNLESS NOTED OTHERWISE):
 - ROAD FRONTAGE 1:0n4
 - SIDE BOUNDARY 1:0n2
 - REAR BOUNDARY 1:0n2

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0	FOR APPROVAL	GB	PF	PF	23.03.20



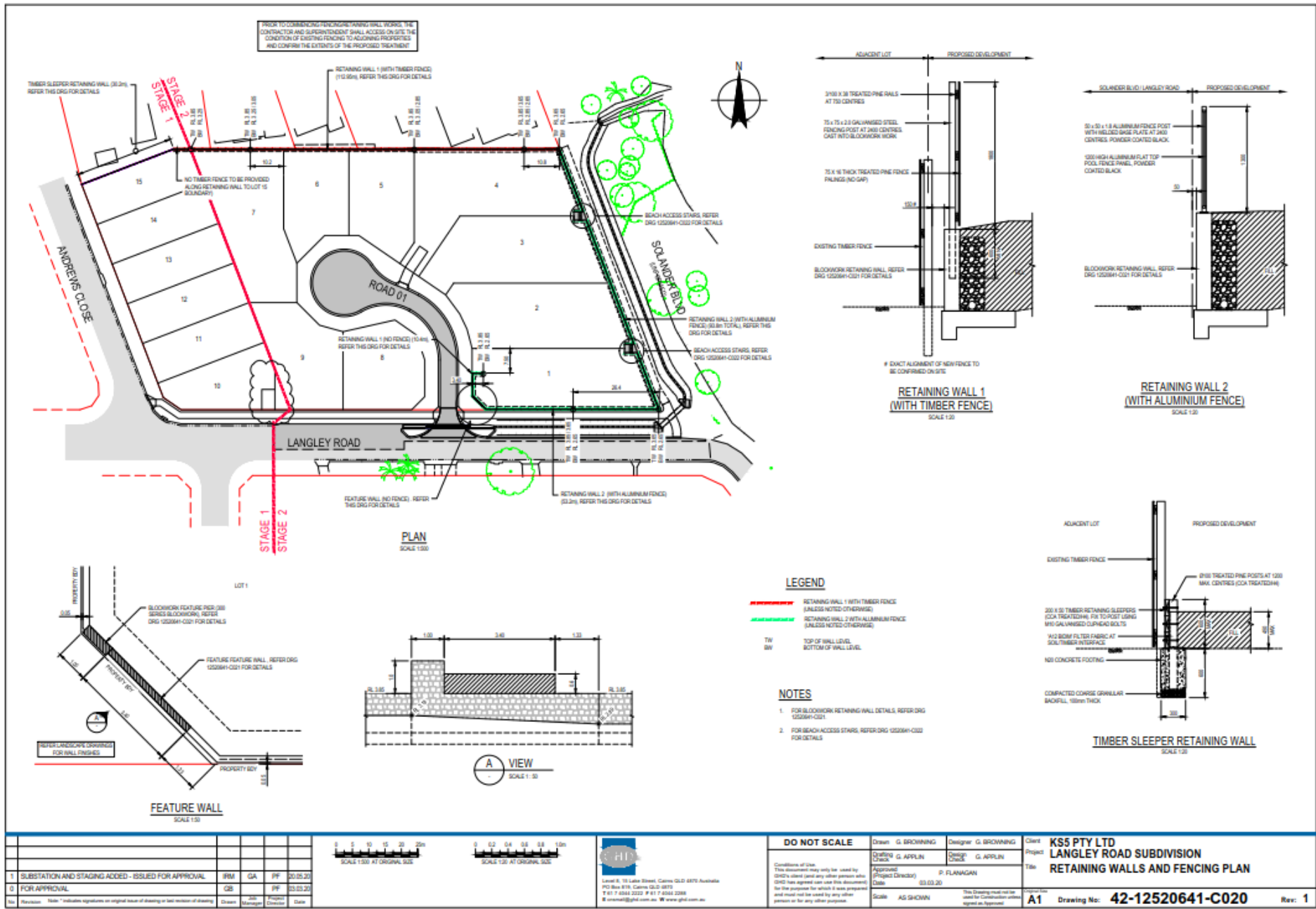
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Approved (Project Director)	P. FLANAGAN	Date	03.03.20
Scale	AS SHOWN	This Drawing must not be used for Construction unless agreed as Approved	

Client	KS5 PTY LTD
Project	LANGLEY ROAD SUBDIVISION
Title	EARTHWORKS PLAN
Version	A1
Drawing No:	42-12520641-C019
Rev:	1



1	SUBSTANTIATION AND STAGING ADDED - ISSUED FOR APPROVAL	IRM	GA	PF	20.05.20
2	FOR APPROVAL	GB	PF	PF	23.03.20



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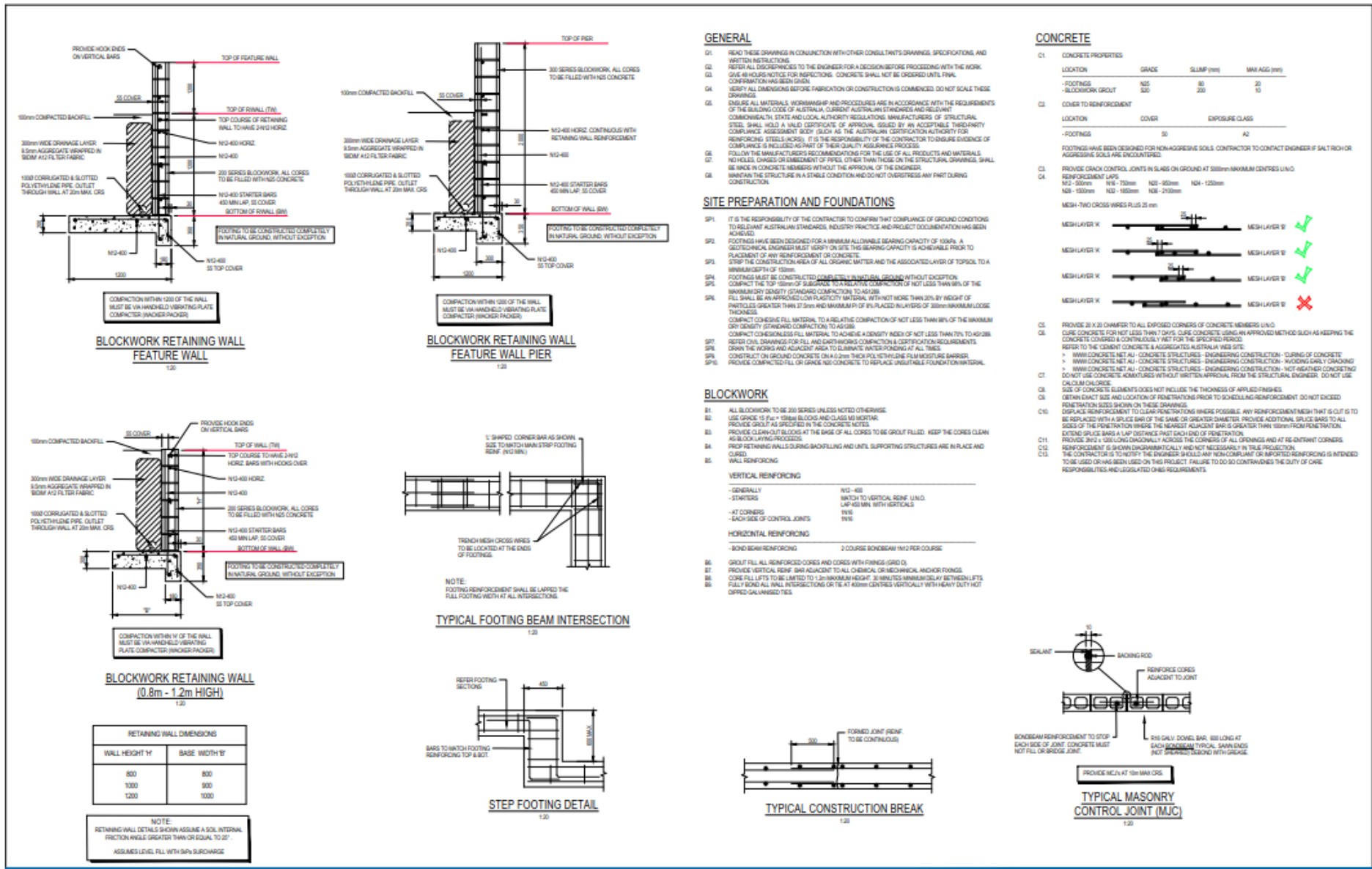
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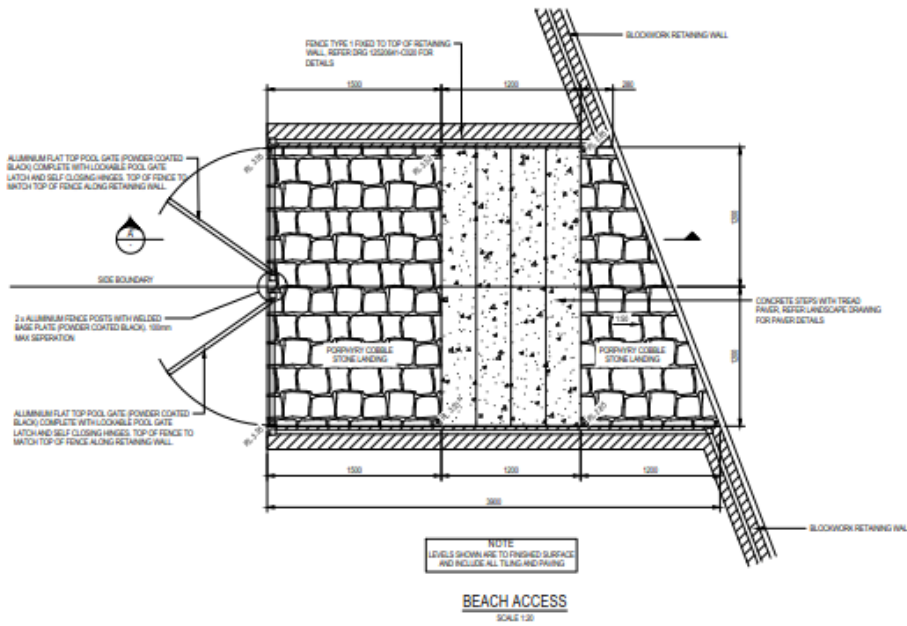
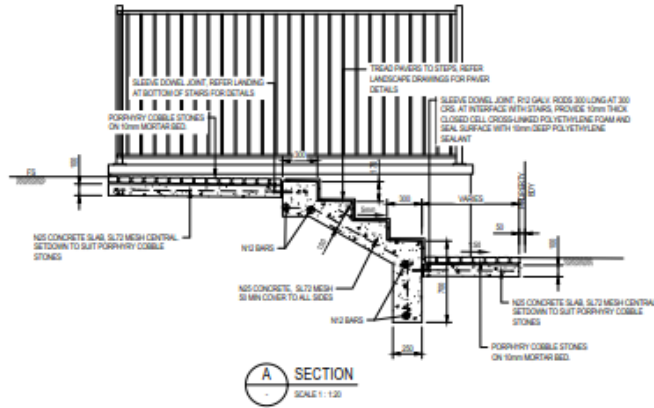
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Client: **KS5 PTY LTD**
 Project: **LANGLEY ROAD SUBDIVISION**
 Title: **RETAINING WALLS AND FENCING PLAN**

Scale: **A1** Drawing No: **42-12520641-C020** Rev: **1**



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IRM	GA	PF	03.05.20									
GB	PF	PF	03.03.20									



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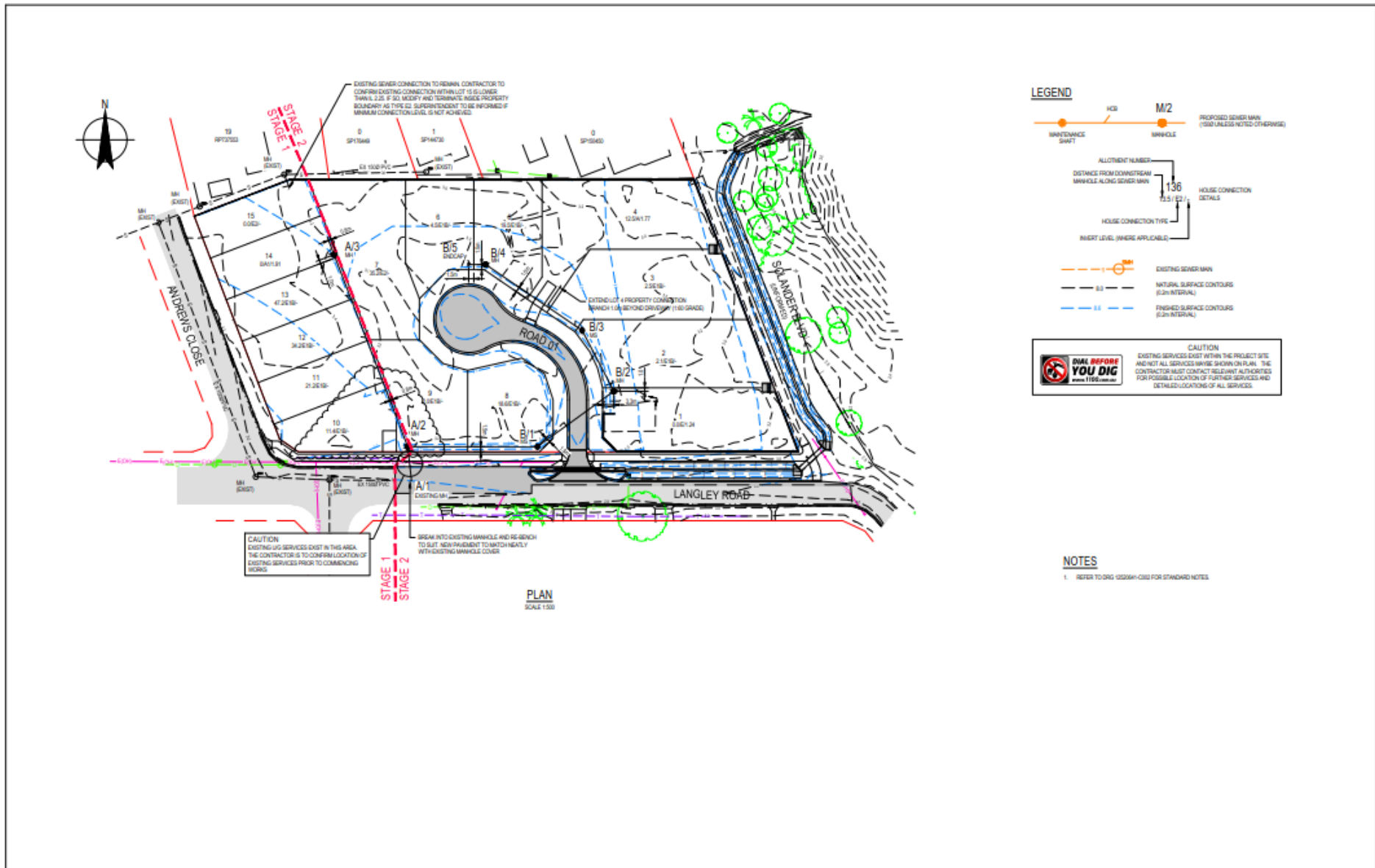
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Approved		(Project Director)	P. FLANAGAN
Date	03.03.20		
Scale	AS SHOWN		

Client	KS5 PTY LTD
Project	LANGLEY ROAD SUBDIVISION
Title	BEACH ACCESS STAIRS

Drawing No: **42-12520641-C022** Rev: **1**

Plot Date: 20/05/2020 2:28 PM
 Plotted by: Rick Stanton
 Cad File No: C:\Operations\Drawings\Temporary\Plot\Aurora_Cad\Drawings\42-12520641-C022.dwg



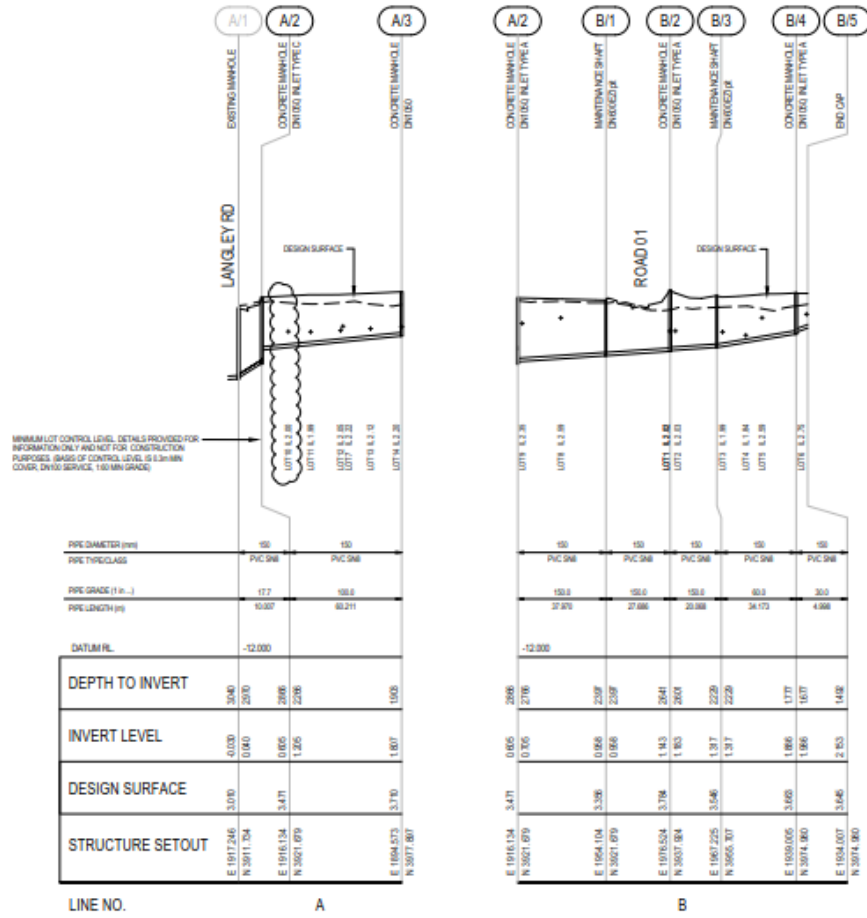
LEGEND

- Maintenance Shaft
- Manhole
- Proposed Sewer Main (500 UNLESS NOTED OTHERWISE)
- Allocation Number
- Distance from Downstream Manhole Along Sewer Main
- House Connection Details
- House Connection Type
- Invert Level (Where Applicable)
- Existing Sewer Main
- Natural Surface Contours (0.2m Interval)
- Finished Surface Contours (0.2m Interval)

CAUTION
EXISTING SERVICES EXIST WITHIN THE PROJECT SITE AND NOT ALL SERVICES HAVE BEEN SHOWN ON PLAN. THE CONTRACTOR MUST CONTACT RELEVANT AUTHORITIES FOR POSSIBLE LOCATION OF FURTHER SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.

NOTES
1. REFER TO DRG 12520641-C020 FOR STANDARD NOTES.

<p>1 SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL</p> <p>2 FOR APPROVAL</p>		<p>IRM GA PF 20.05.20</p> <p>QB PF 22.03.20</p>	<p>0 5 10 15 20 25m</p> <p>SCALE 1:100 AT ORIGINAL SIZE</p>	<p>Level 9, 10 Lake Street, Cairns QLD 4870 Australia PO Box 616, Cairns QLD 4870 T: 61 7 4344 2222 F: 61 7 4344 2266 E: enquire@hid.com.au W: www.hid.com.au</p>	<p>DO NOT SCALE</p> <p>Conditions of Use: This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purposes for which it has prepared and must not be used by any other person or for any other purpose.</p>	<p>Drawn: G. BROWNING Designer: G. BROWNING</p> <p>Checking: G. APPLIN Design Check: G. APPLIN</p> <p>Approved (Project Director): P. FLANAGAN</p> <p>Date: 03.03.20</p> <p>Scale: 1:500</p>	<p>Client: KS5 PTY LTD</p> <p>Project: LANGLEY ROAD SUBDIVISION</p> <p>Title: SEWER RETICULATION PLAN</p> <p>Sheet No: A1 Drawing No: 42-12520641-C023 Rev: 1</p>
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MINIMUM LOT CONTROL LEVEL DETAILS PROVIDED FOR INFORMATION ONLY AND NOT FOR CONSTRUCTION PURPOSES (BASIS OF CONTROL LEVEL IS 0.3m MIN CORNER DN150 SERVICE, 1.60 MIN GRADE)

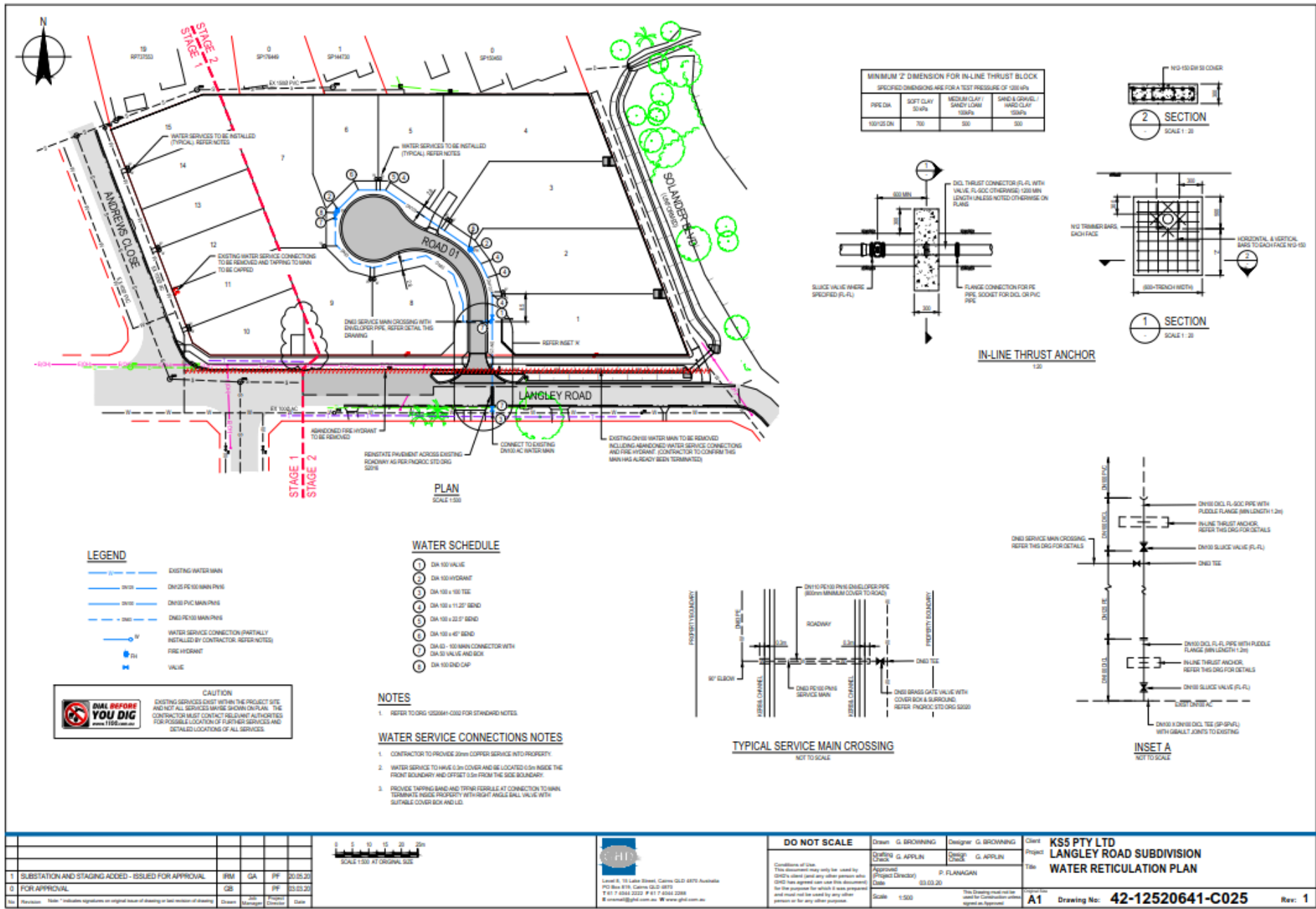
PIPE DIAMETER (mm)	150	150
PIPE TYPE/CLASS	PVC 508	PVC 508
PIPE GRADE (1 in -)	17.7	18.8
PIPE LENGTH (m)	40.07	40.21
DATUM RL	-12.000	
DEPTH TO INVERT	3.040 2.970	2.986 2.916
INVERT LEVEL	-0.030 0.040	0.005 0.085
DESIGN SURFACE	3.070 3.471	3.170 3.710
STRUCTURE SETOUT	E 1917.246 N 3011.254	E 1916.124 N 3021.879

PIPE DIAMETER (mm)	150	150	150	150	150
PIPE TYPE/CLASS	PVC 508	PVC 508	PVC 508	PVC 508	PVC 508
PIPE GRADE (1 in -)	19.0	19.0	19.0	19.0	20.0
PIPE LENGTH (m)	32.25	27.66	20.98	34.173	4.98
DATUM RL	-12.000				
DEPTH TO INVERT	2.986 2.916	2.597 2.527	2.641 2.601	2.229 2.229	1.777 1.677
INVERT LEVEL	0.005 0.085	0.858 0.858	1.453 1.353	1.317 1.317	1.889 1.989
DESIGN SURFACE	3.471 3.471	3.336 3.336	3.716 3.716	3.546 3.546	3.645 3.645
STRUCTURE SETOUT	E 1916.124 N 3021.879	E 1924.104 N 3021.879	E 1916.524 N 3037.984	E 1907.225 N 3055.707	E 1909.005 N 3074.960

LINE NO. A

LINE NO. B

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1 SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL 0 FOR APPROVAL	BRM GA PF 20.05.20 GB PF 23.03.20	Scale: 1:500 H / 1:50 V This Drawing must not be used for Construction unless agreed as Approved	Rev: 1				



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0	FOR APPROVAL	GB	PF	23.03.20	



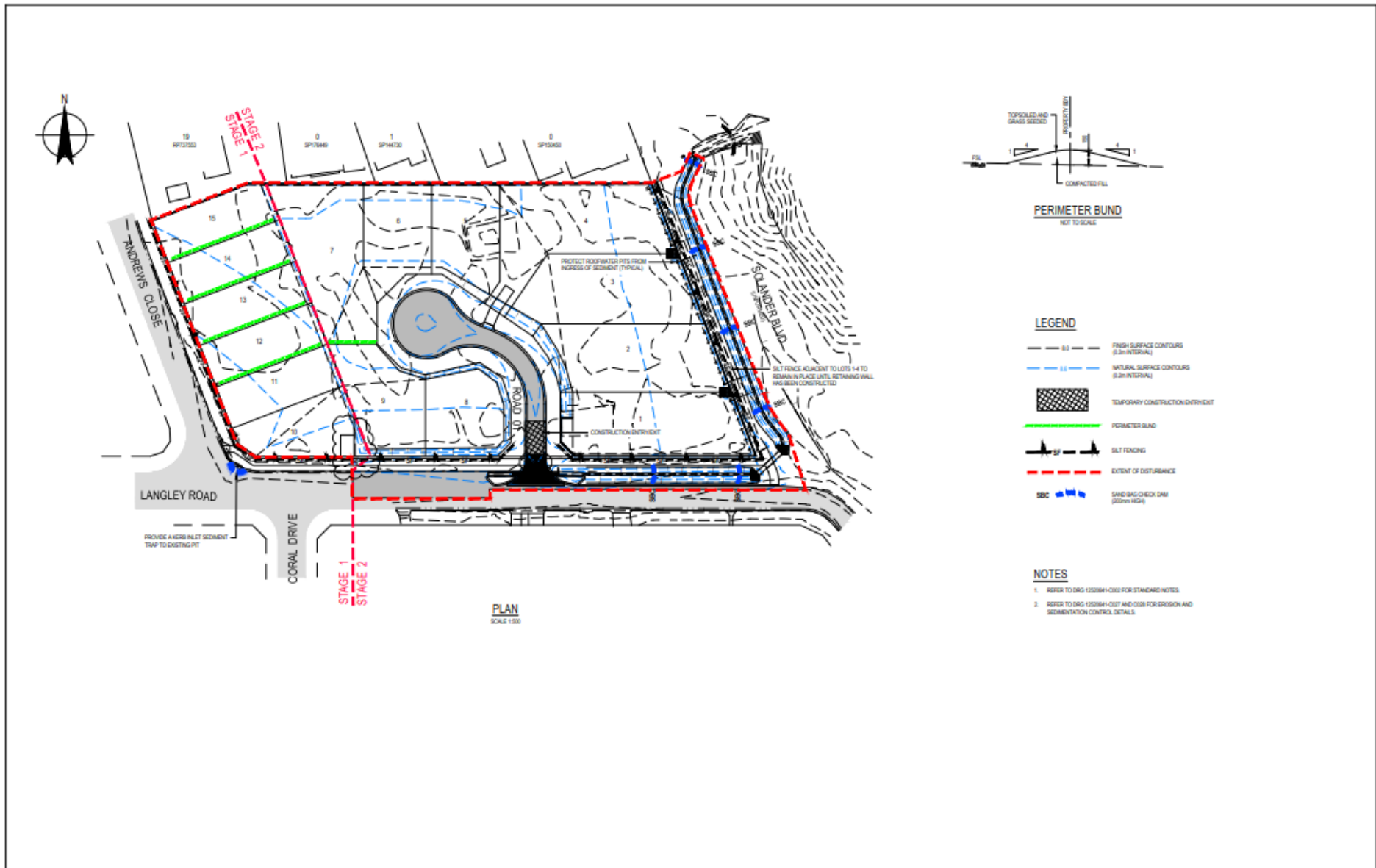
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Approved	(Project Director)	P. FLANAGAN	
Date	03.03.20		
Scale	1:500	This Drawing must not be used for Construction unless agreed as Approved	

Client	KS5 PTY LTD
Project	LANGLEY ROAD SUBDIVISION
Title	WATER RETICULATION PLAN
Version	A1
Drawing No:	42-12520641-C025
Rev:	1

Print Date: 20/05/2020 2:28 PM Plotted By: Rick Moulton C:\Users\rickm\OneDrive\Temporary Files\Drawings_Cover\Drawings\02-12520641-C025.dwg



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QB	PF	03.03.20			
<p>Scale: 1:500</p> <p>Client: KS5 PTY LTD</p> <p>Project: LANGLEY ROAD SUBDIVISION</p> <p>Title: EROSION AND SEDIMENT CONTROL STRATEGY PLAN</p> <p>Sheet: A1 Drawing No: 42-12520641-C026 Rev: 1</p>					

SEDIMENT FENCE

MATERIAL

FABRIC: POLYPROPYLENE, POLYVAISE, NYLON, POLYESTER, OR POLYETHYLENE WOVEN OR NON-WOVEN FABRIC AT LEAST 750mm IN WIDTH AND A MINIMUM LIFT HEIGHT OF 450mm. ALL FABRICS TO CONTAIN TRAVELER INVERTORS AND STABILISERS TO PROVIDE A MINIMUM OF 6 MONTHS OF USABLE CONSTRUCTION LIFE (A TRAVELER STABILITY EXCEEDING 70%).

CHAIN DEVELOPMENT: WIRE OR STEEL WIRE WITH A MINIMUM 14-GAUGE WITH A MINIMUM MESH SPACING OF 250mm.

ADDITIONAL INFORMATION: 200mm² MIN. SOFTWOOD, OR 1.5kg/m² MIN. STEEL STAR POINTS SUITABLE FOR ATTACHING FABRIC.

INSTALLATION

- REFER TO APPROVED PLANS FOR LOCATION, EXTENT AND REQUIRED TYPE OF FABRIC IF SPECIFIED. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, EXTENT, FABRIC TYPE, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
- TO THE MAXIMUM DEGREE PRACTICAL, AND WHERE THE PLANS ALLOW, ENSURE THE FENCE IS LOCATED:
 - TOTALLY WITHIN THE PROPERTY BOUNDARIES
 - ALONG A LINE OF CONSTANT ELEVATION WHERE PRACTICAL
 - AT LEAST 2m FROM THE TOE OF ANY FILLING OPERATIONS THAT MAY RESULT IN SHIFTING SOILS DRAINING THE FENCE
- INSTALL RETURN WITHIN THE FENCE AT MAXIMUM 20m INTERVALS IF THE FENCE IS INSTALLED ALONG THE CONTOUR. SET TO 15m MAXIMUM SPACING (DEPENDS ON SLOPE) IF THE FENCE IS INSTALLED AT AN ANGLE TO THE CONTOUR. THE RETURN SHALL CONSIST OF EITHER:
 - V-SHAPED SECTION EXTENDING AT LEAST 1.5m UP THE SLOPE, OR
 - SPRINGING OR ROCK/AGGREGATE CHECK DAM A MINIMUM 10 AND MAXIMUM 10 FENCE HEIGHT, AND EXTENDING AT LEAST 1.5m UP THE SLOPE.
- ENSURE THE EXTREME ENDS OF THE FENCE ARE TURNED UP THE SLOPE AT LEAST 15m, OR AS NECESSARY, TO MINIMIZE WATER PENETRATING AROUND THE FENCE.
- ENSURE THE SEDIMENT FENCE IS INSTALLED IN A MANNER THAT AVOIDS THE CONCENTRATION OF FLOW ALONG THE FENCE, AND THE UNDESIRABLE DISCHARGE OF WATER AROUND THE CREST OF THE FENCE. IF THE SEDIMENT FENCE IS TO BE INSTALLED ALONG THE EDGE OF EXISTING TRENCH, ENSURE CARE IS TAKEN TO PROTECT THE TRENCH AND THEIR ROOT SYSTEMS DURING INSTALLATION OF THE FENCE. DO NOT ATTACH THE FABRIC TO THE TREES.
- UNLESS DIRECTED BY THE SITE SUPERVISOR OR THE APPROVED PLANS, EXCAVATE A 200mm WIDE BY 200mm DEEP TRENCH ALONG THE PROPOSED FENCE LINE, PLACING THE EXCAVATED MATERIAL ON THE UP-SLOPE SIDE OF THE TRENCH.
- ALONG THE LOWER SIDE OF THE TRENCH APPROPRIATELY SECURE THE STAKES INTO THE GROUND SPACED NO GREATER THAN 3m IF SUPPORTED BY A TOP SUPPORT WIRE OR HIGH MESH SPACING, OTHERWISE NO GREATER THAN 2m.
- IF SPECIFIED, SECURELY ATTACH THE SUPPORT WIRE OR MESH TO THE UP-SLOPE SIDE OF THE STAKES WITH THE MESH EXTENDING AT LEAST 200mm INTO THE EXCAVATED TRENCH. ENSURE THE MESH AND FABRIC IS ATTACHED TO THE UP-SLOPE SIDE OF THE STAKES EVEN WHEN DIRECTING A FENCE AROUND A CORNER OR SHARP CHANGE OF DIRECTION.
- WHEREVER POSSIBLE, CONSTRUCT THE SEDIMENT FENCE FROM A CONTINUOUS ROLL OF FABRIC. TO JOIN FABRIC ENDS:
 - ATTACH EACH END TO TWO OVERLAPPING STAKES WITH THE FABRIC FOLDING AROUND THE ASSOCIATED STAKE ONE TURN, AND WITH THE TWO STAKES TIED TOGETHER WITH WIRE, OR
 - OVERLAP THE FABRIC TO THE NEXT ADJACENT SUPPORT POST.
- SECURELY ATTACH THE FABRIC TO THE SUPPORT POSTS USING 25 X 12mm STAPLES, OR THE WIRE AT MAXIMUM 150mm SPACING.
- SECURELY ATTACH THE FABRIC TO THE SUPPORT WIRE/MESH IF ANY AT A MAXIMUM SPACING OF 1m.
- ENSURE THE COMPLETED SEDIMENT FENCE IS AT 450mm, BUT NOT MORE THAN 700mm HIGH. IF A SPILL-THROUGH WEIR IS INSTALLED, ENSURE THE CREST OF THE WEIR IS AT LEAST 300mm ABOVE GROUND LEVEL.
- BACKFILL THE TRENCH AND TAMP THE FILL TO FULLY ANCHOR THE BOTTOM OF THE FABRIC AND MESH TO PREVENT WATER FROM FLOWING UNDER THE FENCE.

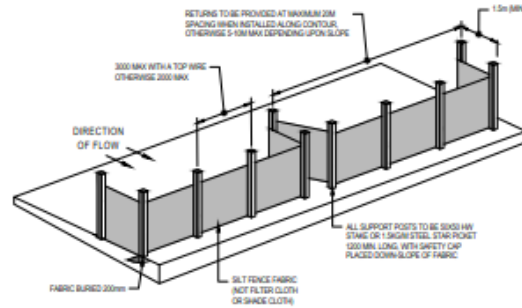
- ADDITIONAL REQUIREMENTS FOR THE INSTALLATION OF SPILL-THROUGH WEIR**
- LOCATE THE SPILL-THROUGH WEIR SUCH THAT THE WEIR CREST WILL BE LOWER THAN THE GROUND LEVEL AT EACH END OF THE FENCE.
 - ENSURE THE CREST OF THE SPILL-THROUGH WEIR IS AT LEAST 300mm ABOVE GROUND ELEVATION.
 - SECURELY TIE A HORIZONTAL CROSS MEMBER WIRE TO THE SUPPORT POSTS AT EACH END OF THE WEIR. CUT THE FABRIC DOWN THE SIDE OF EACH POST AND FOLD THE FABRIC OVER THE CROSS MEMBER AND APPROPRIATELY SECURE THE FABRIC.
 - INSTALL A FILTER FABRIC OR SAND/AGGREGATE CHUTE IMMEDIATELY DOWN-SLOPE OF THE SPILL-THROUGH WEIR TO CONTROL SOIL EROSION AND APPROPRIATELY DISCHARGE THE CONCENTRATED FLOW PASSING OVER THE WEIR.

MAINTENANCE

- INSPECT THE SEDIMENT FENCE AT LEAST WEEKLY AND AFTER ANY SIGNIFICANT RAIN. MAKE NECESSARY REPAIRS IMMEDIATELY.
- REPAIR ANY TORN SECTIONS WITH A CONTINUOUS PIECE OF FABRIC FROM POST TO POST.
- WHEN MAKING REPAIRS, ALWAYS RESTORE THE SYSTEM TO ITS ORIGINAL CONFIGURATION UNLESS AN AMENDED LAYOUT IS REQUIRED OR SPECIFIED.
- IF THE FENCE IS SAGGING BETWEEN STAKES, INSTALL ADDITIONAL SUPPORT POSTS.
- REMOVE ACCUMULATED SEDIMENT IF THE SEDIMENT DEPOSIT EXCEEDS A DEPTH OF 10 THE HEIGHT OF THE FENCE.
- DISPOSE OF SEDIMENT IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.
- REPLACE THE FABRIC AT THE SERVICE LIFE OF THE EXISTING FABRIC EXCEEDS 6 MONTHS.

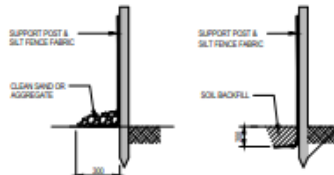
REMOVAL

- WHEN DISTURBED AREAS UP-SLOPE OF THE SEDIMENT FENCE ARE SUFFICIENTLY STABILISED TO RESTRAIN EROSION, THE FENCE MUST BE REMOVED.
- REMOVE MATERIALS AND COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.
- REPAIR/REVEGETATE THE DISTURBED GROUND AS NECESSARY TO MINIMIZE THE EROSION HAZARD.



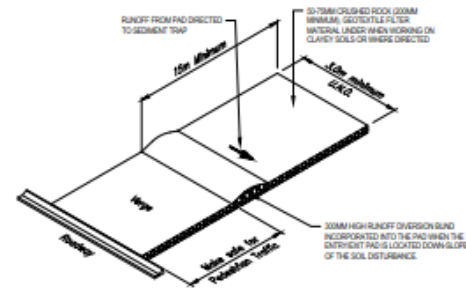
SEDIMENT FENCE

NOT TO SCALE



ANCHORING BASE OF FABRIC

NOT TO SCALE



TEMPORARY CONSTRUCTION ENTRY / EXIT

NOT TO SCALE

TEMPORARY CONSTRUCTION ENTRY / EXIT

MATERIAL

ROCK: WELL GRAINED, HARD, ANGULAR, EROSION RESISTANT ROCK, NOMINAL DIAMETER OF 30 TO 75mm (SMALL DISTURBANCES) OR 100 TO 150mm (LARGE DISTURBANCES). ALL REASONABLE MEASURES MUST BE TAKEN TO OBTAIN ROCK OF NEAR UNIFORM SIZE.

FABRIC/SPILL-THROUGH AGGREGATE: AS TO BE DETERMINED OR APPROVED.

SEDIMENT FABRIC: HEAVY-DUTY, TRINEXE-PUNCHES, NON-WOVEN FILTER CLOTH (BROOM AN OR EQUIVALENT).

INSTALLATION

- REFER TO APPROVED PLANS FOR LOCATION AND DIMENSIONAL DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS, OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
- CLEAR THE LOCATION OF THE ROCK PAD, REMOVING STAMPS, ROOTS AND OTHER VEGETATION TO PREVENT A FIRM FOUNDATION SO THAT THE ROCK IS NOT PRESSED INTO SOFT GROUND. CLEAR SUFFICIENT WIDTH TO ALLOW PASSAGE OF LARGE VEHICLES (BUT CLEAR ONLY THAT NECESSARY FOR THE EXIT). DO NOT CLEAR ADJACENT AREAS INTO THE REQUIRED EROSION AND SEDIMENT CONTROL DEVICES ARE IN PLACE.
- IF THE EXPOSED SOIL IS SOFT PLASTIC OR CLAYEY, PLACE A SUB-BASE OF CRUSHED ROCK OR A LAYER OF HEAVY-DUTY FILTER CLOTH TO PROVIDE A FIRM FOUNDATION.
- PLACE THE ROCK PAD FORMING A MINIMUM 300mm THICK LAYER OF CLEAN, DRY-WOOD ROVER.
- IF THE ASSOCIATED CONSTRUCTION SITE IS UP-SLOPE OF THE ROCK PAD, THIS CAUSING STORMWATER RUNOFF TO FLOW TOWARDS THE ROCK PAD, THEN FORM A MINIMUM 300mm HIGH FLOW CONTROL BARRIERS ACROSS THE ROCK PAD TO DIVERT SLOSH-RUNOFF TO A SUITABLE SEDIMENT TRAP.
- THE LENGTH OF THE ROCK-PAD SHOULD BE AT LEAST 15m WHERE PRACTICAL, AND AS WIDE AS THE FULL WIDTH OF THE ENTRY OR EXIT AND AT LEAST 3m. THE ROCK-PAD SHOULD COMMENCE AT THE EDGE OF THE OFF-SITE SEALED ROAD OR PAVEMENT.
- FLARE THE END OF THE ROCK PAD WHERE IT MEETS THE PAVEMENT SO THAT THE WHEELS OF TURNING VEHICLES DO NOT TRAVEL OVER UNPROTECTED SOIL.
- IF THE FOOTPATH IS OPEN TO PEDDESTRIAN MOVEMENT, COVER THE COARSE ROCK WITH FINE AGGREGATE OR GRASS, OR OTHERWISE TAKE WHATEVER MEASURES ARE NEEDED TO MAKE THE AREA SAFE.

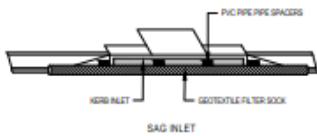
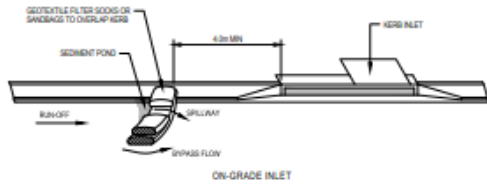
MAINTENANCE

- INSPECT ALL SITE ENTRY AND EXIT POINTS PRIOR TO FORECAST RAIN, DAILY DURING EXTENDED PERIODS OF RAINFALL, AFTER RUNOFF PRODUCING RAINFALL, OR OTHERWISE AT FORTNIGHTLY INTERVALS.
- IF SAND, SOIL, SEDIMENT OR GRASS IS TRACKED OR WASHED ONTO THE ADJACENT SEALED ROADWAY, THEN SUCH MATERIAL MUST BE PHYSICALLY REMOVED, FIRST USING A SQUARE-EDGED SHOVEL, AND THEN A STIFF-BRISTLED BROOM, AND THEN BY A MECHANICAL VACUUM UNIT IF AVAILABLE.
- IF NECESSARY FOR SAFETY REASONS, THE ROADWAY SHALL ONLY BE WASHED CLEAN AFTER ALL REASONABLE EFFORTS HAVE BEEN TAKEN TO SHOVEL AND SWEEP THE MATERIAL FROM THE ROADWAY.
- WHEN THE VOID BETWEEN THE ROCK (SECOND) FILLED WITH MATERIAL, AND THE EFFECTIVENESS OF THE ROCK PAD IS REDUCED TO A POINT WHERE SEDIMENT IS BEING TRACKED OFF THE SITE, A NEW 150MM-LAYER OF ROCK MUST BE ADDED AROUND THE ROCK PAD MUST BE EXTENDED.
- ENSURE ANY ASSOCIATED EROSION CONTROL MEASURES (e.g. FLOW CONTROL BARRIERS) ARE MAINTAINED IN ACCORDANCE WITH THEIR DESIRED OPERATIONAL CONDITIONS.
- DISPOSE OF SEDIMENT AND GRASS IN A MANNER THAT WILL NOT CREATE AN EROSION OR POLLUTION HAZARD.

REMOVAL

- THE ROCK PAD SHOULD BE REMOVED ONLY AFTER IT IS NO LONGER NEEDED AS A SEDIMENT TRAP.
- REMOVE MATERIALS AND COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.
- RE-GRADE AND STABILISE THE DISTURBED GROUND AS NECESSARY TO MINIMIZE THE EROSION HAZARD.

				DO NOT SCALE		Drawn: G. BROWNING Design: G. BROWNING Checked: G. APPLIN Design: G. APPLIN Approved (Project Director): P. FLANAGAN Date: 03.03.20	Client: KS5 PTY LTD Project: LANGLEY ROAD SUBDIVISION Title: EROSION AND SEDIMENT CONTROL STRATEGY Details Sheet 1 OF 2
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1 SUBSTANTIATION AND STAGING ADDED - ISSUED FOR APPROVAL 0 FOR APPROVAL	IRM GA 00.05.20	GB PF 03.03.20	Date:	Date:	Date:	Date:	



KERB INLET SEDIMENT TRAP
NOT TO SCALE

KERB INLET SEDIMENT TRAP

MATERIALS

SOCKS
150mm DIAMETER SYNTHETIC OR BIODEGRADABLE TUBES MANUFACTURED FROM NON-WOVEN OR COMPOSITE FABRIC SUITABLE FOR THE FILTRATION OF COARSE SEDIMENT.

FILL MATERIAL

STONY OR BALLON COMPOSITE MATERIAL (H444); COARSE SAND OR CLEAN AGGREGATE.

INSTALLATION

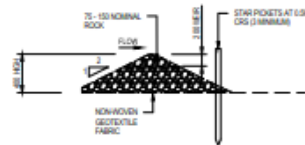
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- ENSURE THE SOCKS ARE PLACED INDIVIDUALLY OR COLLECTIVELY (AS A SINGLE SEDIMENT TRAP) SUCH THAT:
 - LEAKAGE AROUND OR UNDER THE SOCKS IS MINIMISED;
 - ADJOINING SOCKS ARE TIGHTLY BUTTED OR OVERLAPPED AT LEAST 450mm;
 - THE SURFACE AREA OF POTENTIAL WATER PONDING OR SPILLAGE OF EACH SEDIMENT TRAP IS MINIMISED;
 - TO THE MAXIMUM DEGREE PRACTICAL, ALL SEDIMENT-LADEN WATER WILL PASS THROUGH THE FORMED POND BEFORE FLOWING OVER THE DOWNSTREAM END OF THE SEDIMENT TRAP.
- WHEN PLACED ACROSS THE INLET OF ANY DRAIN, ENSURE THE SOCKS ARE PLACED SUCH THAT:
 - THE CREST OF THE DOWNSTREAM SOCK IS LEVEL WITH THE CHANNEL INVERT AT THE IMMEDIATE UPSTREAM SOCK IF ANY;
 - EACH SOCK EXTENDS UP THE CHANNEL BANKS SUCH THAT THE CREST OF THE SOCK AT ITS LOWEST POINT IS LOWER THAN GROUND LEVEL AT EITHER END OF THE SOCK.
- IF CHECKS ARE REQUIRED TO ANCHOR THE SOCKS, THEIR SPACING DOES NOT EXCEED 1.2m OR SIX TIMES THE SOCK DIAMETER (WHICHEVER IS THE LESSER). A MINIMUM STAKE SPACING OF 0.3m APPLIES WHEN USED TO FORM CHECK DAMS.

MAINTENANCE

- INSPECT ALL FILTER SOCKS PRIOR TO FORECAST RAIN ONLY DURING EXTENDED PERIODS OF RAINFALL, AFTER SIGNIFICANT RUNOFF PRODUCING STORMS OR OTHERWISE AT REGULAR INTERVALS.
- REPAIR OR REPLACE DAMAGED SOCKS.
- THE BULK OF THE SEDIMENT COLLECTED BEHIND THE FILTER SOCKS SHOULD BE REMOVED BY SHOVEL AFTER EACH STORM EVENT.
- REMOVE COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

REMOVAL

- ALL SAND, SOIL, SEDIMENT OR MUD MUST BE PHYSICALLY REMOVED FROM SEALED SURFACES, FIRST USING A SQUARE-EDGED SHOVEL, AND THEN A STIFF-BRISTLED BROOM AND THEN BY A MECHANICAL VACUUM UNIT, IF AVAILABLE.
- IF NECESSARY FOR SAFETY REASONS, THE SEALED SURFACE SHALL ONLY BE WASHED-CLEAN AFTER ALL REASONABLE EFFORTS HAVE BEEN TAKEN TO SHOVEL AND SWEEP THE MATERIALS FROM THE SURFACE.
- DISPOSE OF COLLECTED SEDIMENT IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.
- ALL SYNTHETIC (PLASTIC MESH) OR OTHER NON-READY BIODEGRADABLE MATERIALS MUST BE REMOVED FROM THE SITE ONCE THE SLOPE OR DRAIN IS STABILISED, OR THE SOCKS HAVE DETERIORATED TO A POINT WHERE THEY ARE NO LONGER PROVIDING THEIR INTENDED DRAINAGE OR SEDIMENT CONTROL FUNCTION.



ROCK FILTER DAM
NOT TO SCALE

ROCK FILTER DAM

MATERIALS

ROCK
75 TO 150mm NOMINAL DIAMETER, HARD, EROSION-RESISTANT ROCK.

GEOTEXTILE FABRIC

HEAVY-DUTY, THICK-PUNCHED, NON-WOVEN FILTER CLOTH (SOM A5H OR EQUIVALENT).

INSTALLATION

- REFER TO APPROVED PLANS FOR LOCATION AND INSTALLATION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION OR METHOD OF INSTALLATION, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
- BEFORE TOY PLACEMENT OF THE FILTER DAM, ENSURE THE TYPE AND SIZE OF EACH CHECK DAMS WILL NOT CAUSE A SAFETY HAZARD OR CAUSE WATER TO SPILL OUT OF THE DRAIN.
- CONSTRUCT THE FILTER DAM TO THE DIMENSIONS AND PROFILE SHOWN WITHIN THE APPROVED PLAN.
- UNLESS SPECIFIED, THE FILTER DAM SHALL BE CONSTRUCTED ON A SHEET OF GEOTEXTILE FABRIC USED AS A DOWNSTREAM SPLASH PAD.

MAINTENANCE

- INSPECT EACH FILTER DAM AND THE DRAINAGE CHANNEL AT LEAST REGULARLY AND AFTER RUNOFF PRODUCING RAINFALL.
- CHECK FOR DISPLACEMENT OF THE FILTER DAM.
- CHECK FOR SOIL SCOUR AROUND THE ENDS OF THE FILTER DAM. IF SUCH EROSION IS OCCURRING, CONSIDER EXTENDING THE WIDTH OF THE FILTER DAM TO AVOID SUCH PROBLEMS.
- IF SEVERE SOIL EROSION OCCURS UP OR UNDER OR AROUND THE FILTER DAM, THEN SEEK EXPERT ADVICE ON AN ALTERNATIVE TREATMENT MEASURE.
- REMOVE AND SEDIMENT ACCUMULATED BY THE FILTER DAM, UNLESS IT IS INTENDED THAT THIS SEDIMENT WILL REMAIN WITHIN THE CHANNEL.
- DISPOSE OF COLLECTED SEDIMENT IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

REMOVAL

- WHEN CONSTRUCTION WORK WITHIN THE DRAINAGE AREA ABOVE THE FILTER DAM HAS BEEN COMPLETED, AND THE DISTURBED AREAS AND THE DRAINAGE CHANNEL ARE SUFFICIENTLY STABILISED TO RESTRAIN EROSION, ALL TEMPORARY CHECK DAMS MUST BE REMOVED.
- REMOVE THE FILTER DAM AND ASSOCIATED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

1	SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL	IRM	GA	PF	20.05.20
0	FOR APPROVAL	GB	PF	23.03.20	

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Checked	G. APPLIN	Design	G. APPLIN
Approved (Project Director)	P. FLANAGAN		
Date	03.03.20		
Scale	AS SHOWN		

Client **KS5 PTY LTD**
Project **LANGLEY ROAD SUBDIVISION**
Title **EROSION AND SEDIMENT CONTROL STRATEGY**
DETAILS SHEET 2 OF 2

Version **A1** Drawing No: **42-12520641-C028** Rev: **1**

LANDSCAPE DESIGN

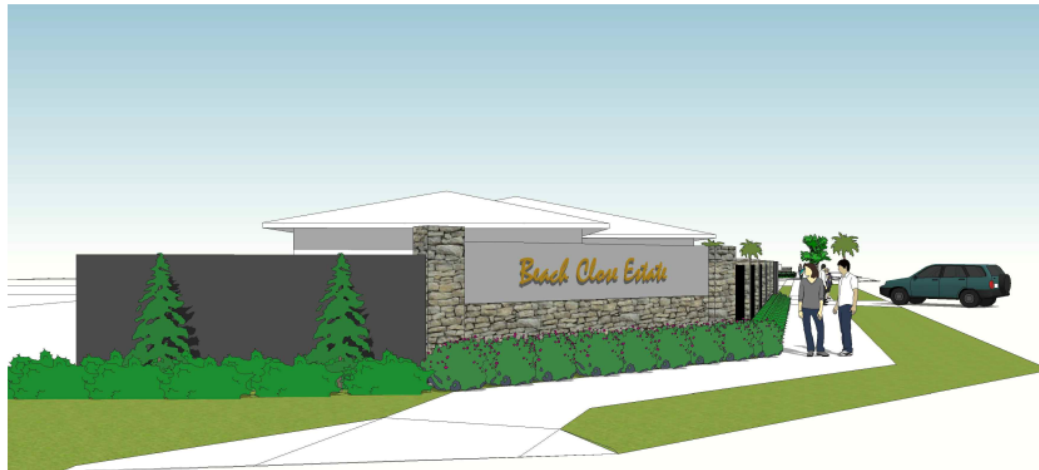
LANGLEY RD SUBDIVISION - STAGE 1

LANGLEY ROAD, PORT DOUGLAS, QLD

JUNE 2020 - TENDER ISSUE

DRAWING LIST

DWG NO.	REV	DRAWING NAME	SCALE (A3 SIZE)
198-L100	D	COVER PAGE	As Shown
198-L101	D	LANDSCAPE PLAN & PLANTING SCHEDULE	1:400
198-L102	D	ENTRY WALL DETAILS	As Shown
198-L103	D	TYP. DETAILS	As Shown



STANDARD NOTES

1. SETOUT AND DIMENSIONS

THE CONTRACTOR SHALL SET OUT ALL PATHS, WALLS, HARD SURFACES AND ELEMENTS EITHER ON OR OFF SITE PRIOR TO CONSTRUCTION AND SHALL OBTAIN THE SUPERINTENDENTS SET OUT APPROVAL PRIOR TO WORKS COMMENCING. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE. CHECK ALL DRAWINGS SCALES IN CONJUNCTION WITH DRAWINGS SIZE. COORDINATE ALL WORKS WITH OTHER TRADES AND HEAD CONTRACTOR.

2. SERVICES AND SITE ASSETS

THE CONTRACTOR SHALL INVESTIGATE THE NATURE AND LOCATION OF ALL EXISTING SERVICES AND RETAINED SITE ASSETS AFFECTED BY THEIR WORKS. FAILURE TO TAKE DUE CARE SHALL NOT LIMIT THE CONTRACTORS LIABILITIES.

3. REFERENCES

THE CONTRACTOR SHALL REFER TO ALL CONTRACT DOCUMENTS, THE SPECIFICATION AND DRAWINGS PRIOR TO AND DURING THE WORKS.

4. DISCREPANCIES

NOTIFY SUPERINTENDENT OF ANY SUSPECTED OR KNOWN DISCREPANCIES OR ERRORS PRIOR TO THE ORDERING OF AFFECTED MATERIALS AND/OR CONSTRUCTION OF AFFECTED WORKS.

5. RELEVANT STANDARDS

THE CONTRACTOR SHALL UNDERTAKE ALL PRICING AND WORKS IN ACCORDANCE WITH CURRENT INDUSTRY BEST PRACTICE AND ALL RELEVANT AUSTRALIAN AND LOCAL STANDARDS AND THE FNQROC.

6. SERVICE LOCATOR

THE CONTRACTOR SHALL UNDERTAKE A DIAL BEFORE YOU DIG PROCESS PRIOR TO COMMENCING WORKS ON SITE. THE CONTRACTOR SHALL ENGAGE A SERVICE LOCATOR TO MAP THE SPECIFIC LOCATIONS AND DEPTH OF ALL SERVICES AND ADVISE ALL RELEVANT STAFF AND SUBCONTRACTORS IN WRITING PRIOR TO COMMENCING WORKS ON SITE.

7. SOFT LANDSCAPE

1. ALL CONTAINER STOCK SHALL BE INSPECTED IN THE NURSERY PRIOR TO TRANSPORT TO SITE.
2. ALL CONTAINER STOCK PLANTING SHALL BE INSPECTED PRIOR TO PLANTING ON SITE. GIVE (5) WORKING DAYS NOTICE PRIOR TO SUCH ACTIVITY TO ALLOW LANDSCAPE ARCHITECT'S REPRESENTATIVE TO ATTEND.
3. ALL SOIL BLENDS APPROVED TO AUSTRALIAN STANDARDS / AS4419.
4. TURF SHALL CONSIST OF 25MM DEPTH OF DENSE, WELL ROOTED, VIGOROUS GRASS GROWTH WITH 25MM DEPTH OF TOPSOIL.
5. TURF TO BE USED SHOULD BE ROLLED B GRADE TURF MIX OF SPECIES 80% BUFFALO GRASS (AXONOPUS COMPRESSUS) & 20% COUCH GRASS VARIETIES.
6. EXCAVATE EXISTING SITE SOIL ON ALL GARDEN BEDS TO 300mm DEPTH AND REPLACE WITH APPROVED SOIL BLENDS. USE SITE STOCKED TOPSOIL AND AMEND WHERE POSSIBLE. LANDSCAPE CONTRACTOR TO ASSESS SUITABILITY FOR REUSE. IF UNSUITABLE, TOPSOIL TO BE REMOVED BY OTHERS.
7. ENSURE COMPACTED ROAD BASE IS NOT LOCATED DIRECTLY BELOW THE GARDEN BED. IF SO THEN REMOVE/EXCAVATE THE COMPACTED ROAD BASE SO SOIL PROFILE CAN DRAIN TO NATURAL GROUND.

8. HARD LANDSCAPE

SAMPLES: UNLESS OTHERWISE NOTED, ALL ITEMS MUST BE APPROVED PRIOR TO INSTALLATION AND MUST MEET CURRENT AUSTRALIAN STANDARDS AND BEST PRACTICE GUIDELINES. PROVIDE SAMPLES OF ALL SURFACE FINISHES AND MATERIALS TO BE PLACED IN THE CONSTRUCTED LANDSCAPE. ESPECIALLY ALTERNATIVES TO PROPRIETARY ITEMS SPECIFIED. GIVE FIVE (5) WORK DAYS NOTICE TO THE SUPERINTENDENTS REPRESENTATIVE TO ATTEND OR REVIEW THE SAMPLE FOR COMMENT OR REJECTION. PROVIDE MANUFACTURER'S GUIDES AND REPLACEMENT WARRANTIES AND INSTALLATION SPECIFICATIONS WHERE APPLICABLE.

9. IRRIGATION

DESIGN AND CONSTRUCT IRRIGATION SYSTEM TO FNQROC STANDARDS, CERTIFIED BY AN IAA CID (IRRIGATION AUSTRALIAN ASSOCIATION CERTIFIED IRRIGATION DESIGNER) AND TO CLIENT'S APPROVAL.

10. PLANT ESTABLISHMENT & MAINTENANCE

AREAS OF PLANTING CAN ONLY BE GIVEN FINAL COMPLETION AFTER MINIMUM 13 WEEKS ESTABLISHMENT POST PRACTICAL COMPLETION. REPLACE ALL DEAD PLANT STOCK DURING THIS PERIOD AND NEW STOCK ESTABLISHED FOR MINIMUM 13 WEEKS. FINAL COMPLETION IS GIVEN AT 13 WEEKS POST PRACTICAL COMPLETION AND ONGOING MAINTENANCE BEGINS.

11. WORK HEALTH & SAFETY (WHS)

THE CONTRACTOR SHALL FOLLOW THE APPROVED & CURRENT PROJECT WORK HEALTH & SAFETY MANUAL.

Drawing Revisions

Issue	Date	Subject	Authorised
D	04.06.2020	TENDER ISSUE	JMC
C	03.06.2020	TENDER ISSUE	JMC
B	27.05.2020	FOR APPROVAL	JMC
A	22.05.2020	FOR APPROVAL	JMC


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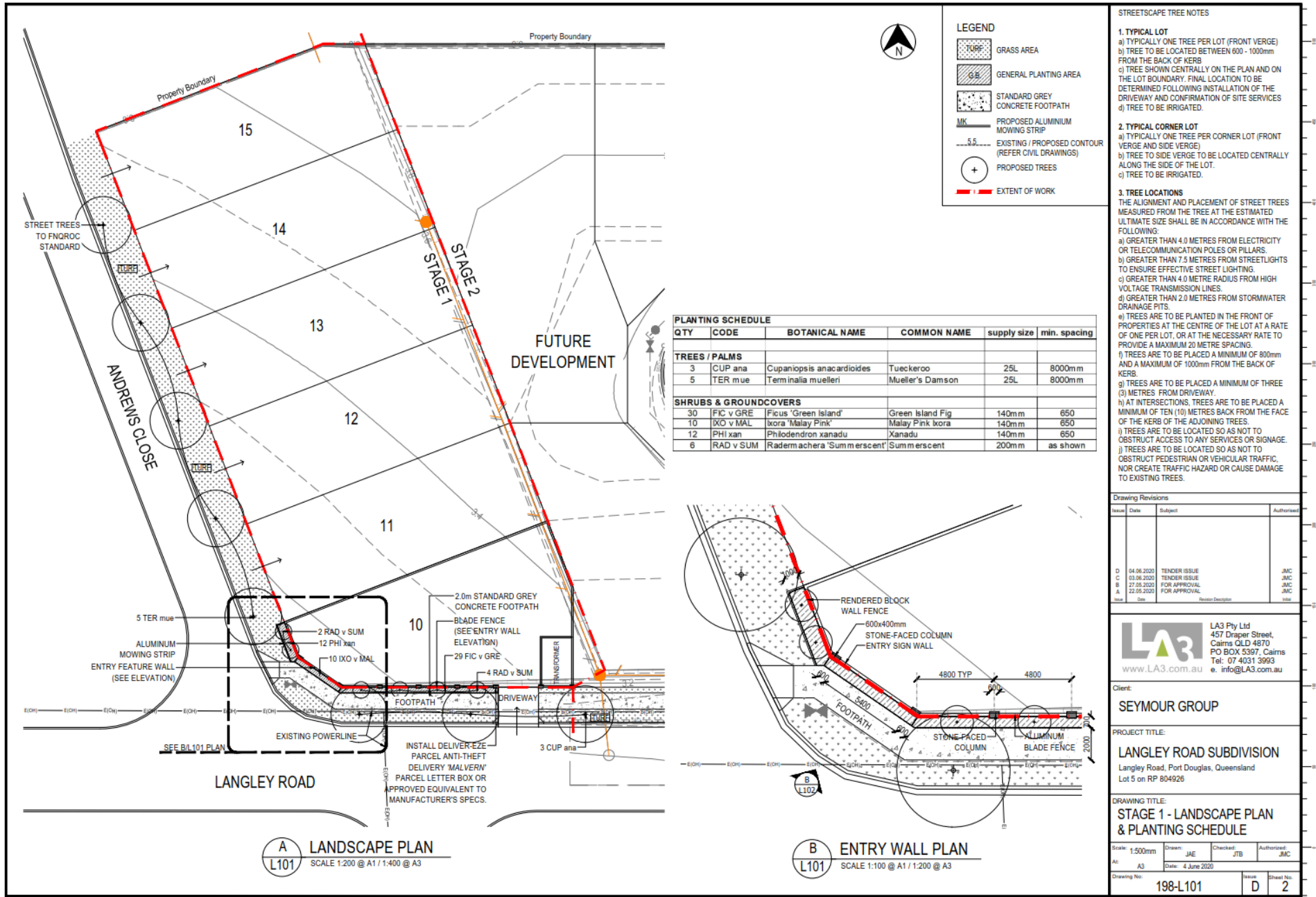
PROJECT TITLE:

LANGLEY ROAD SUBDIVISION
 Langley Road, Port Douglas, Queensland
 Lot 5 on RP 804926

DRAWING TITLE:

STAGE 1 - COVER PAGE

Scale:	As Shown	Drawn:	JAE	Checked:	JTB	Authorised:	JMC
At:	A3	Date:	4 June 2020				
Drawing No:	198-L100	Issue:	D	Sheet No.:	1		



PLANTING SCHEDULE

QTY	CODE	BOTANICAL NAME	COMMON NAME	supply size	min. spacing
TREES / PALMS					
3	CUP ana	Cupaniopsis anacardioides	Tueckeroo	25L	8000mm
5	TER mue	Terminalia muelleri	Mueller's Damson	25L	8000mm
SHRUBS & GROUNDCOVERS					
30	FIC v GRE	Ficus 'Green Island'	Green Island Fig	140mm	650
10	IXO v MAL	Ixora 'Malay Pink'	Malay Pink Ixora	140mm	650
12	PHI xan	Phlodendron xanadu	Xanadu	140mm	650
6	RAD v SUM	Radermachera 'Summerscent'	Summerscent	200mm	as shown

STREETSCAPE TREE NOTES

1. TYPICAL LOT
a) TYPICALLY ONE TREE PER LOT (FRONT VERGE)
b) TREE TO BE LOCATED BETWEEN 600 - 1000mm FROM THE BACK OF KERB
c) TREE SHOWN CENTRALLY ON THE PLAN AND ON THE LOT BOUNDARY. FINAL LOCATION TO BE DETERMINED FOLLOWING INSTALLATION OF THE DRIVEWAY AND CONFIRMATION OF SITE SERVICES
d) TREE TO BE IRRIGATED.

2. TYPICAL CORNER LOT
a) TYPICALLY ONE TREE PER CORNER LOT (FRONT VERGE AND SIDE VERGE)
b) TREE TO SIDE VERGE TO BE LOCATED CENTRALLY ALONG THE SIDE OF THE LOT.
c) TREE TO BE IRRIGATED.

3. TREE LOCATIONS
THE ALIGNMENT AND PLACEMENT OF STREET TREES MEASURED FROM THE TREE AT THE ESTIMATED ULTIMATE SIZE SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
a) GREATER THAN 4.0 METRES FROM ELECTRICITY OR TELECOMMUNICATION POLES OR PILLARS.
b) GREATER THAN 7.5 METRES FROM STREETLIGHTS TO ENSURE EFFECTIVE STREET LIGHTING.
c) GREATER THAN 4.0 METRE RADIUS FROM HIGH VOLTAGE TRANSMISSION LINES.
d) GREATER THAN 2.0 METRES FROM STORMWATER DRAINAGE PITS.
e) TREES ARE TO BE PLANTED IN THE FRONT OF PROPERTIES AT THE CENTRE OF THE LOT AT A RATE OF ONE PER LOT, OR AT THE NECESSARY RATE TO PROVIDE A MAXIMUM 20 METRE SPACING.
f) TREES ARE TO BE PLACED A MINIMUM OF 800mm AND A MAXIMUM OF 1000mm FROM THE BACK OF KERB.
g) TREES ARE TO BE PLACED A MINIMUM OF THREE (3) METRES FROM DRIVEWAY.
h) AT INTERSECTIONS, TREES ARE TO BE PLACED A MINIMUM OF TEN (10) METRES BACK FROM THE FACE OF THE KERB OF THE ADJOINING TREES.
i) TREES ARE TO BE LOCATED SO AS NOT TO OBSTRUCT ACCESS TO ANY SERVICES OR SIGNAGE.
j) TREES ARE TO BE LOCATED SO AS NOT TO OBSTRUCT PEDESTRIAN OR VEHICULAR TRAFFIC, NOR CREATE TRAFFIC HAZARD OR CAUSE DAMAGE TO EXISTING TREES.

Drawing Revisions

Issue	Date	Subject	Authorised
D	04.06.2020	TENDER ISSUE	JMC
C	03.06.2020	TENDER ISSUE	JMC
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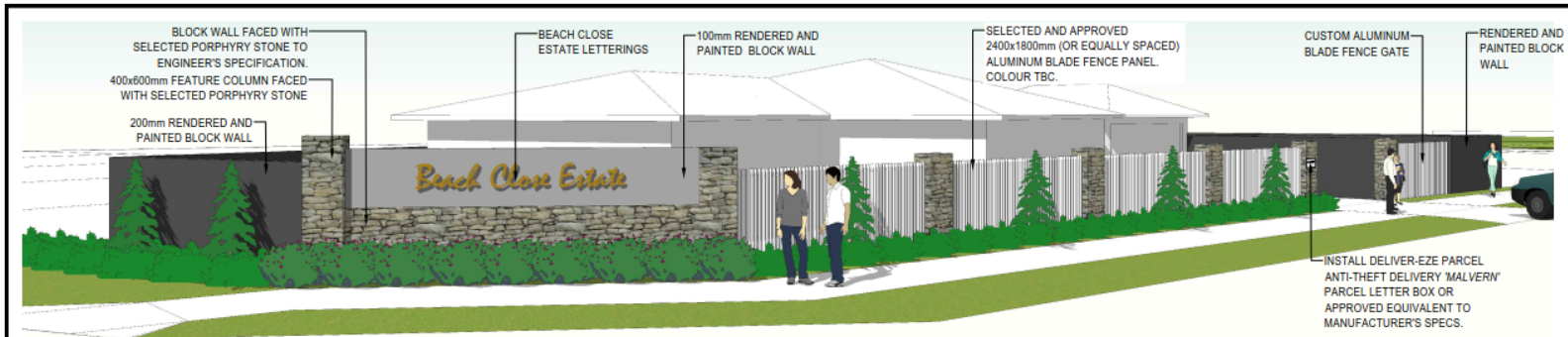
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PROJECT TITLE:
LANGLEY ROAD SUBDIVISION
Langley Road, Port Douglas, Queensland
Lot 5 on RP 804926

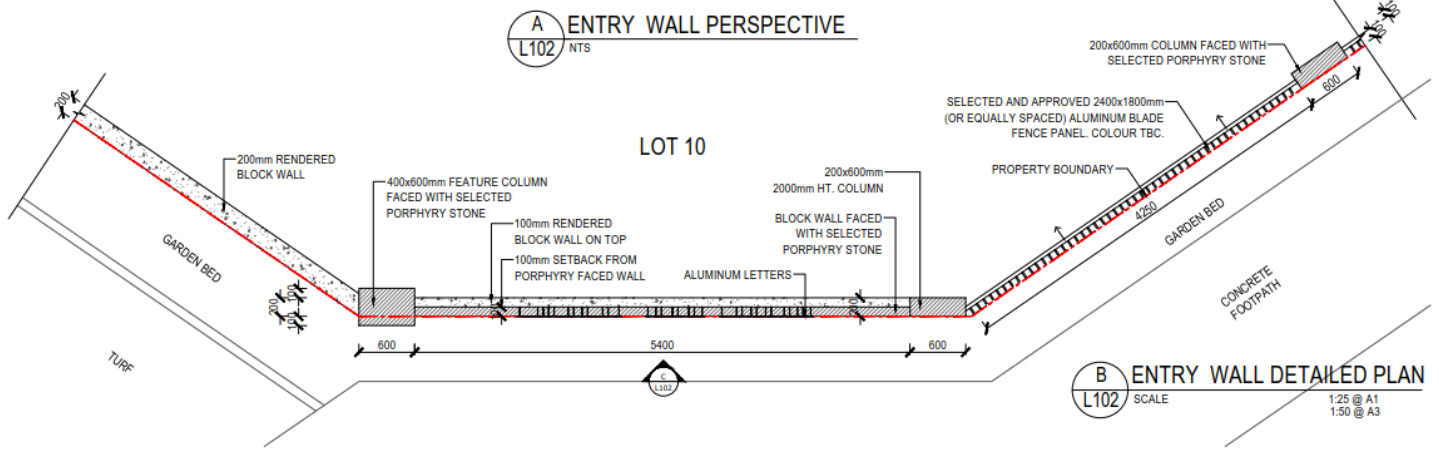
DRAWING TITLE:
STAGE 1 - LANDSCAPE PLAN & PLANTING SCHEDULE

Scale: 1:500mm Drawn: JAE Checked: JTB Authorised: JMC
A3 Date: 4 June 2020

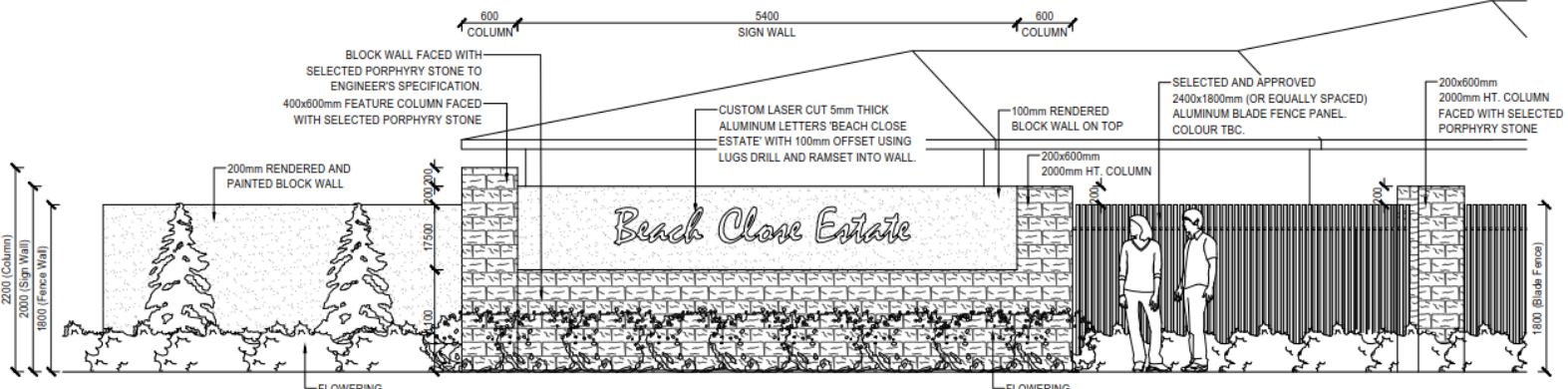
Drawing No:	Issue	Sheet No.
198-L101	D	2



A ENTRY WALL PERSPECTIVE
L102 NTS



B ENTRY WALL DETAILED PLAN
L102 SCALE 1:25 @ A1, 1:50 @ A3



C ENTRY WALL ELEVATION
L102 SCALE 1:25 @ A1, 1:50 @ A3

Drawing Revisions			
Issue	Date	Subject	Authorised
D	04.06.2020	TENDER ISSUE	JMC
C	03.06.2020	TENDER ISSUE	JMC
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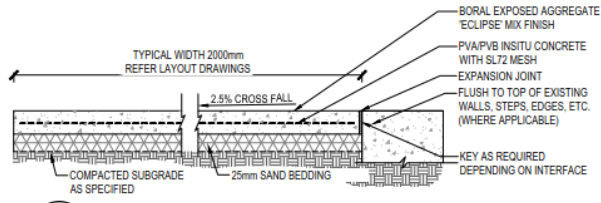
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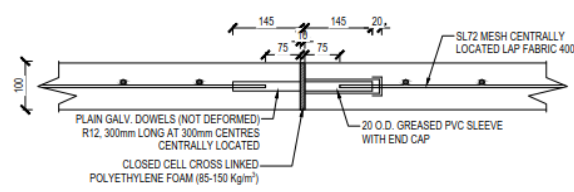
PROJECT TITLE:
LANGLEY ROAD SUBDIVISION
Langley Road, Port Douglas, Queensland
Lot 5 on RP 804926

DRAWING TITLE:
STAGE 1 - MAIN ENTRY WALL ELEVATION

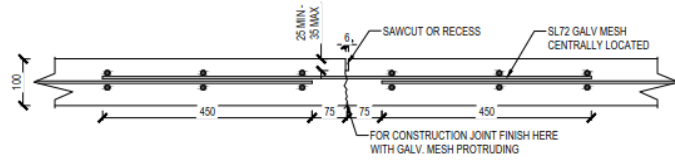
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At: A3	Date: 4 June 2020	Issue: D	Sheet No: 3



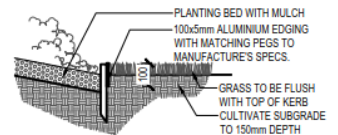
A 2.0m WIDE CONCRETE FOOTPATH
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 1:20 @ A3



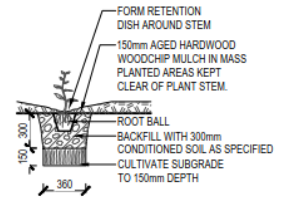
B FOOTPATH - EXPANSION JOINT
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 1:10 @ A3



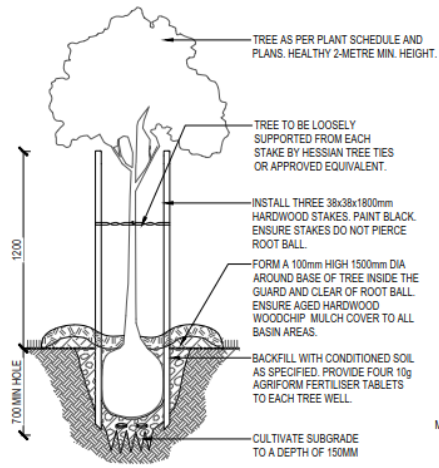
C FOOTPATH - CONTROL JOINT
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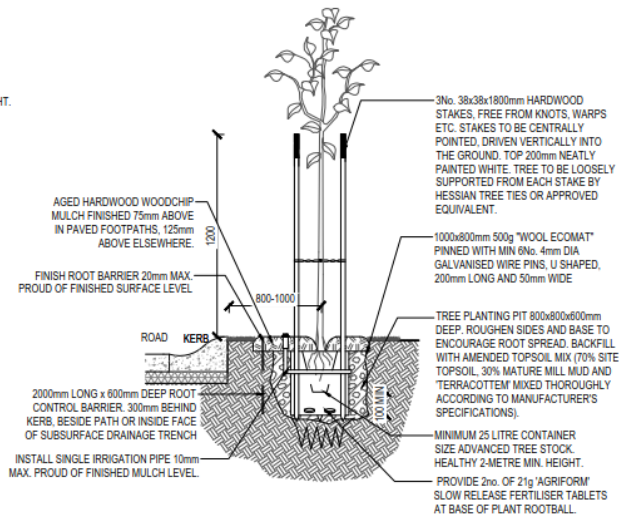
D MOWING STRIP DETAIL
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 1:20 @ A3



E TYPICAL POT PLANTING
 SCALE 1:20 @ A1
 1:40 @ A3



F TYP 25-L TREE PLANTING IN GARDEN BED
 SCALE 1:20 @ A1
 1:40 @ A3



G STREET TREE TO FNQROC STANDARDS
 SECTION SCALE 1:20 @ A1
 1:40 @ A3

STANDARD NOTES

CONCRETE FOOTPATH REQUIREMENTS AND GUIDELINES TO BE INSTALLED AS PER FNQROC DETAILS

- PATHWAYS LOCATED IN ROAD RESERVES ARE TO BE CONSTRUCTED 600mm CLEAR OF PROPERTY BOUNDARY UNLESS APPROVED OTHERWISE BY COUNCIL
- PRIOR TO CONSTRUCTION OF PATHWAY / BIKEWAY, THE CONTRACTOR SHALL LIAISE WITH TELSTRA TO ENSURE THAT ANY REQUIRED CABLE CONNECTION PITS ARE INSTALLED TO MATCH TOP OF PATHWAY LEVEL AND ENABLE CONCRETE PATHWAY / BIKEWAY TO BE CONSTRUCTED IN A SINGLE POUR.
- FINISHED SURFACE LEVEL OF CONCRETE TO BE NOT MORE THAN 20mm ABOVE FINISHED SURFACE LEVEL OF ADJOINING GROUND AND SHALL FINISH FLUSH WITH ADJOINING SURFACES.
- CONCRETE PATHWAYS, ADJOINING EXISTING DRIVEWAYS ARE TO BE TRANSITIONED OVER MINIMUM 500mm LENGTH
- CONCRETE N25 IN ACCORDANCE WITH AS1379 AND AS3600.
- ALL CONCRETE TO BE BROOM FINISHED.
- DOWELS TO BE GRADE 250 STEEL TO AS1302. MESH TO AS1304.
- GALVANISING TO AS1650.
- ALL DIMENSIONS IN MILLIMETRES.
- THE MAXIMUM GRADIENT SHALL BE 16 PER CENT WITH A MAXIMUM CROSSFALL OF 2.5 PER CENT. WHERE THE PATHWAY IS PARALLEL WITH A ROAD WITH A GRADE GREATER THAN 16 PER CENT FOOTPATH GRADIENT SHALL MATCH THAT OF THE ROAD.

NOTE:

- FULL CONSTRUCTION JOINT EVERY 30m² MIN.
- 12mm EXPANSION JOINT AS SPECIFIED WHERE PATH ABUTS WALLS, KERBS AND THE LIKE.

Drawing Revisions

Issue	Date	Subject	Author
D	04.08.2020	TENDER ISSUE	JMC
C	03.06.2020	TENDER ISSUE	JMC
B	27.05.2020	FOR APPROVAL	JMC
A	24.03.2020	FOR APPROVAL	JMC

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Client:
SEYMOUR GROUP

PROJECT TITLE:
LANGLEY ROAD SUBDIVISION
 Langley Road, Port Douglas, Queensland
 Lot 5 on RP 804926

DRAWING TITLE:
STAGE 1 - TYP. HARD & SOFT LANDSCAPE DETAILS

Scale: AS SHOWN	Drawn: JAE	Checked: JTB	Authorised: JMC
At: A3	Date: 4 June 2020		
Drawing No: 198 - L103	Issue: D	Sheet No: 4	

LANDSCAPE DESIGN

LANGLEY RD SUBDIVISION - STAGE 2

LANGLEY ROAD, PORT DOUGLAS, QLD

JUNE 2020 - TENDER ISSUE

DRAWING LIST

DWG NO.	REV	DRAWING NAME	SCALE (A3 SIZE)
198-L200	C	COVER PAGE	As Shown
198-L201	C	LANDSCAPE PLAN 01	1:500
198-L202	C	LANDSCAPE PLAN 02 & DETAIL PLANS	As Shown
198-L203	C	TYP. DETAILS & PLANTING SCHEDULE	As Shown
198-L204	C	ENTRY WALL, RET. WALL AND STAIRS DETAILS	As Shown



STANDARD NOTES

1. SETOUT AND DIMENSIONS

THE CONTRACTOR SHALL SET OUT ALL PATHS, WALLS, HARD SURFACES AND ELEMENTS EITHER ON OR OFF SITE PRIOR TO CONSTRUCTION AND SHALL OBTAIN THE SUPERINTENDENTS SET OUT APPROVAL PRIOR TO WORKS COMMENCING. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE. CHECK ALL DRAWINGS SCALES IN CONJUNCTION WITH DRAWINGS SIZE. COORDINATE ALL WORKS WITH OTHER TRADES AND HEAD CONTRACTOR.

2. SERVICES AND SITE ASSETS

THE CONTRACTOR SHALL INVESTIGATE THE NATURE AND LOCATION OF ALL EXISTING SERVICES AND RETAINED SITE ASSETS AFFECTED BY THEIR WORKS. FAILURE TO TAKE DUE CARE SHALL NOT LIMIT THE CONTRACTORS LIABILITIES.

3. REFERENCES

THE CONTRACTOR SHALL REFER TO ALL CONTRACT DOCUMENTS, THE SPECIFICATION AND DRAWINGS PRIOR TO AND DURING THE WORKS.

4. DISCREPANCIES

NOTIFY SUPERINTENDENT OF ANY SUSPECTED OR KNOWN DISCREPANCIES OR ERRORS PRIOR TO THE ORDERING OF AFFECTED MATERIALS AND/OR CONSTRUCTION OF AFFECTED WORKS.

5. RELEVANT STANDARDS

THE CONTRACTOR SHALL UNDERTAKE ALL PRICING AND WORKS IN ACCORDANCE WITH CURRENT INDUSTRY BEST PRACTICE AND ALL RELEVANT AUSTRALIAN AND LOCAL STANDARDS AND THE FNQROC.

6. SERVICE LOCATOR

THE CONTRACTOR SHALL UNDERTAKE A DIAL BEFORE YOU DIG PROCESS PRIOR TO COMMENCING WORKS ON SITE. THE CONTRACTOR SHALL ENGAGE A SERVICE LOCATOR TO MAP THE SPECIFIC LOCATIONS AND DEPTH OF ALL SERVICES AND ADVISE ALL RELEVANT STAFF AND SUBCONTRACTORS IN WRITING PRIOR TO COMMENCING WORKS ON SITE.

7. SOFT LANDSCAPE

1. ALL CONTAINER STOCK SHALL BE INSPECTED IN THE NURSERY PRIOR TO TRANSPORT TO SITE.
2. ALL CONTAINER STOCK PLANTING SHALL BE INSPECTED PRIOR TO PLANTING ON SITE. GIVE (5) WORKING DAYS NOTICE PRIOR TO SUCH ACTIVITY TO ALLOW LANDSCAPE ARCHITECT'S REPRESENTATIVE TO ATTEND.
3. ALL SOIL BLENDS APPROVED TO AUSTRALIAN STANDARDS / AS4419.
4. TURF SHALL CONSIST OF 25MM DEPTH OF DENSE, WELL ROOTED, VIGOROUS GRASS GROWTH WITH 25MM DEPTH OF TOPSOIL.
5. TURF TO BE USED SHOULD BE ROLLED B GRADE TURF MIX OF SPECIES 80% BUFFALO GRASS (AXONOPUS COMPRESSUS) & 20% COUCH GRASS VARIETIES.
6. EXCAVATE EXISTING SITE SOIL ON ALL GARDEN BEDS TO 300mm DEPTH AND REPLACE WITH APPROVED SOIL BLENDS. USE SITE STOCKED TOPSOIL AND AMEND WHERE POSSIBLE. LANDSCAPE CONTRACTOR TO ASSESS SUITABILITY FOR REUSE. IF UNSUITABLE, TOPSOIL TO BE REMOVED BY OTHERS.
7. ENSURE COMPACTED ROAD BASE IS NOT LOCATED DIRECTLY BELOW THE GARDEN BED. IF SO THEN REMOVE/EXCAVATE THE COMPACTED ROAD BASE SO SOIL PROFILE CAN DRAIN TO NATURAL GROUND.

8. HARD LANDSCAPE

SAMPLES: UNLESS OTHERWISE NOTED, ALL ITEMS MUST BE APPROVED PRIOR TO INSTALLATION AND MUST MEET CURRENT AUSTRALIAN STANDARDS AND BEST PRACTICE GUIDELINES. PROVIDE SAMPLES OF ALL SURFACE FINISHES AND MATERIALS TO BE PLACED IN THE CONSTRUCTED LANDSCAPE. ESPECIALLY ALTERNATIVES TO PROPRIETARY ITEMS SPECIFIED. GIVE FIVE (5) WORK DAYS NOTICE TO THE SUPERINTENDENTS REPRESENTATIVE TO ATTEND OR REVIEW THE SAMPLE FOR COMMENT OR REJECTION. PROVIDE MANUFACTURER'S GUIDES AND REPLACEMENT WARRANTIES AND INSTALLATION SPECIFICATIONS WHERE APPLICABLE.

9. IRRIGATION

DESIGN AND CONSTRUCT IRRIGATION SYSTEM TO FNQROC STANDARDS, CERTIFIED BY AN IAA CID (IRRIGATION AUSTRALIAN ASSOCIATION CERTIFIED IRRIGATION DESIGNER) AND TO CLIENT'S APPROVAL.

10. PLANT ESTABLISHMENT & MAINTENANCE

AREAS OF PLANTING CAN ONLY BE GIVEN FINAL COMPLETION AFTER MINIMUM 13 WEEKS ESTABLISHMENT POST PRACTICAL COMPLETION. REPLACE ALL DEAD PLANT STOCK DURING THIS PERIOD AND NEW STOCK ESTABLISHED FOR MINIMUM 13 WEEKS. FINAL COMPLETION IS GIVEN AT 13 WEEKS POST PRACTICAL COMPLETION AND ONGOING MAINTENANCE BEGINS.

11. WORK HEALTH & SAFETY (WHS)

THE CONTRACTOR SHALL FOLLOW THE APPROVED & CURRENT PROJECT WORK HEALTH & SAFETY MANUAL.

Drawing Revisions

Issue	Date	Subject	Authorised
C	03.06.2020	TENDER ISSUE	JMC
B	16.03.2020	COUNCIL APPROVAL	JMC
A	21.02.2019	FOR APPROVAL	JMC
Issue	Date	Revision Description	Issue



Client:

SEYMOUR GROUP

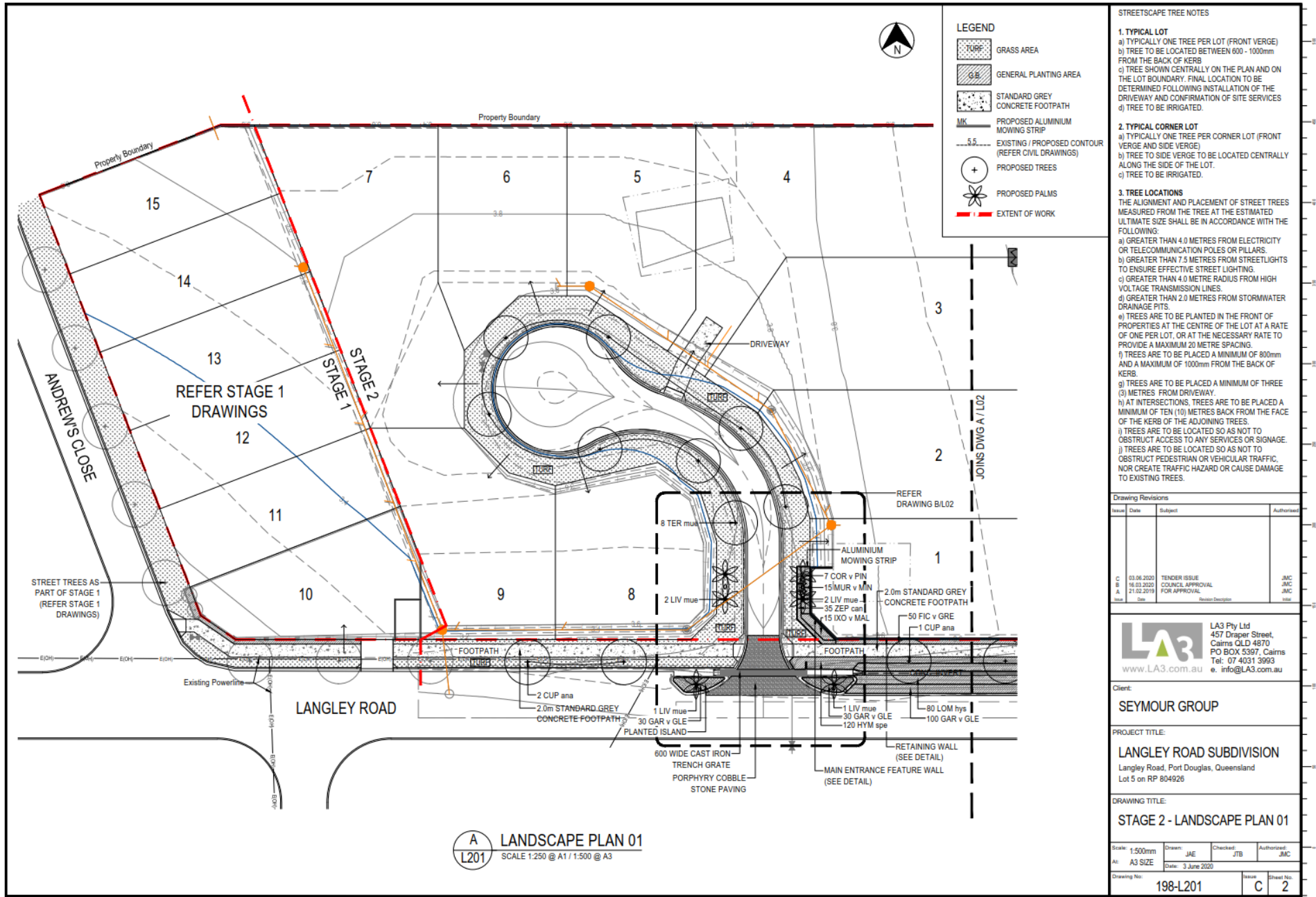
PROJECT TITLE:

LANGLEY ROAD SUBDIVISION
Langley Road, Port Douglas, Queensland
Lot 5 on RP 804926

DRAWING TITLE:

STAGE 2 - COVER PAGE

Scale:	Drawn:	Checked:	Authorised:
As Shown	JAE	JTB	JMC
A3 SIZE			
Date:	3 June 2020		
Drawing No:	Issue	Sheet No.	
198-L200	C	1	



STREETSCAPE TREE NOTES

- TYPICAL LOT**
 - TYPICALLY ONE TREE PER LOT (FRONT VERGE)
 - TREE TO BE LOCATED BETWEEN 600 - 1000mm FROM THE BACK OF KERB
 - TREE SHOWN CENTRALLY ON THE PLAN AND ON THE LOT BOUNDARY. FINAL LOCATION TO BE DETERMINED FOLLOWINGS INSTALLATION OF THE DRIVEWAY AND CONFIRMATION OF SITE SERVICES
 - TREE TO BE IRRIGATED.
- TYPICAL CORNER LOT**
 - TYPICALLY ONE TREE PER CORNER LOT (FRONT VERGE AND SIDE VERGE)
 - TREE TO SIDE VERGE TO BE LOCATED CENTRALLY ALONG THE SIDE OF THE LOT.
 - TREE TO BE IRRIGATED.
- TREE LOCATIONS**
THE ALIGNMENT AND PLACEMENT OF STREET TREES MEASURED FROM THE TREE AT THE ESTIMATED ULTIMATE SIZE SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
 - GREATER THAN 4.0 METRES FROM ELECTRICITY OR TELECOMMUNICATION POLES OR PILLARS.
 - GREATER THAN 7.5 METRES FROM STREETLIGHTS TO ENSURE EFFECTIVE STREET LIGHTING.
 - GREATER THAN 4.0 METRE RADIUS FROM HIGH VOLTAGE TRANSMISSION LINES.
 - GREATER THAN 2.0 METRES FROM STORMWATER DRAINAGE PITS.
 - TREES ARE TO BE PLANTED IN THE FRONT OF PROPERTIES AT THE CENTRE OF THE LOT AT A RATE OF ONE PER LOT, OR AT THE NECESSARY RATE TO PROVIDE A MAXIMUM 20 METRE SPACING.
 - TREES ARE TO BE PLACED A MINIMUM OF 800mm AND A MAXIMUM OF 1000mm FROM THE BACK OF KERB.
 - TREES ARE TO BE PLACED A MINIMUM OF THREE (3) METRES FROM DRIVEWAY.
 - AT INTERSECTIONS, TREES ARE TO BE PLACED A MINIMUM OF TEN (10) METRES BACK FROM THE FACE OF THE KERB OF THE ADJOINING TREES.
 - TREES ARE TO BE LOCATED SO AS NOT TO OBSTRUCT ACCESS TO ANY SERVICES OR SIGNAGE.
 - TREES ARE TO BE LOCATED SO AS NOT TO OBSTRUCT PEDESTRIAN OR VEHICULAR TRAFFIC, NOR CREATE TRAFFIC HAZARD OR CAUSE DAMAGE TO EXISTING TREES.

Drawing Revisions			
Issue	Date	Subject	Authorised
C	03.06.2020	TENDER ISSUE	JMC
B	16.03.2020	COUNCIL APPROVAL	JMC
A	21.02.2019	FOR APPROVAL	JMC

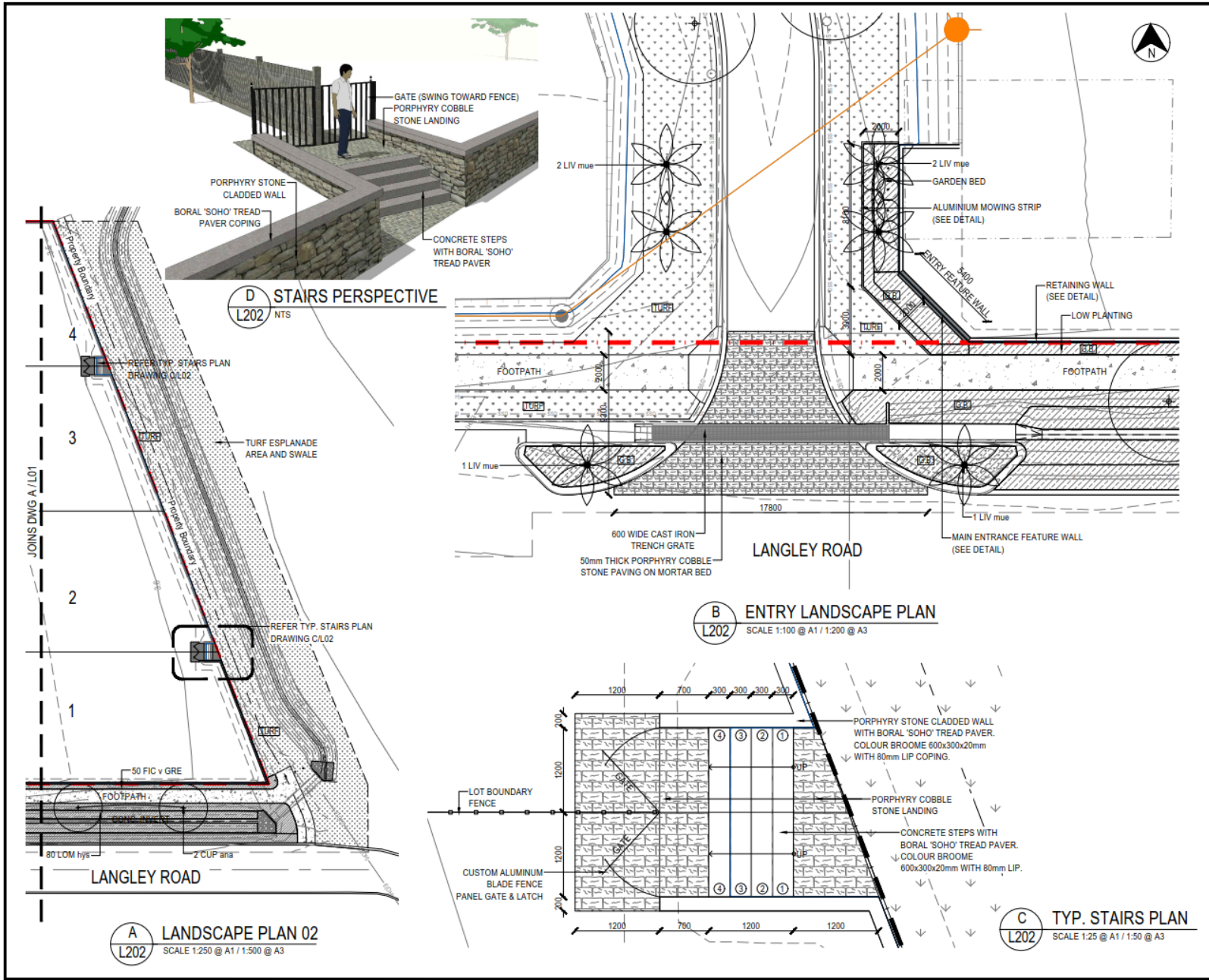
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Client: **SEYMOUR GROUP**

PROJECT TITLE:
LANGLEY ROAD SUBDIVISION
Langley Road, Port Douglas, Queensland
Lot 5 on RP 804926

DRAWING TITLE:
STAGE 2 - LANDSCAPE PLAN 01

Scale: 1:500mm	Drawn: JAE	Checked: JTB	Authorised: JMC
At: A3 SIZE	Date: 3 June 2020	Issue:	Sheet No:
Drawing No: 198-L201	Issue: C	Sheet No: 2	



STREETSCAPE TREE NOTES

- TYPICAL LOT**
 - TYPICALLY ONE TREE PER LOT (FRONT VERGE)
 - TREE TO BE LOCATED BETWEEN 600 - 1000mm FROM THE BACK OF KERB
 - TREE SHOWN CENTRALLY ON THE PLAN AND ON THE LOT BOUNDARY. FINAL LOCATION TO BE DETERMINED FOLLOWING INSTALLATION OF THE DRIVEWAY AND CONFIRMATION OF SITE SERVICES
 - TREE TO BE IRRIGATED.
- TYPICAL CORNER LOT**
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- TREE LOCATIONS**
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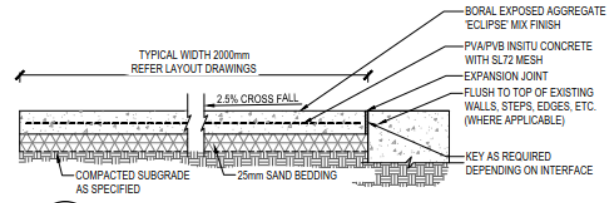
Drawing Revisions			
Issue	Date	Subject	Authorised
C	03.06.2020	TENDER ISSUE	JMC
B	16.03.2020	COUNCIL APPROVAL	JMC
A	21.02.2019	FOR APPROVAL	JMC
Issue	Date	Revision Description	Issue

Client: SEYMOUR GROUP

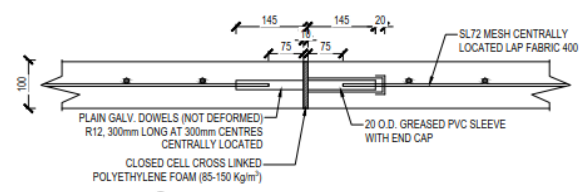
PROJECT TITLE: LANGLEY ROAD SUBDIVISION
Langley Road, Port Douglas, Queensland
Lot 5 on RP 804926

DRAWING TITLE: STAGE 2 - LANDSCAPE PLAN 02 / ENTRY AND STAIRS PLANS

Scale: As Shown	Drawn: JAE	Checked: JTB	Authorised: JMC
At: A3 SIZE	Date: 3 June 2020		
Drawing No: 198-L202	Issue: C	Sheet No: 3	

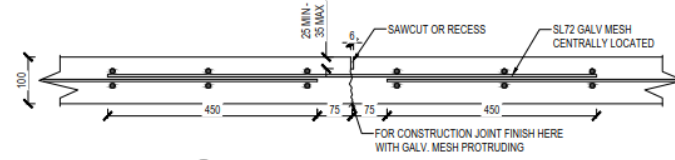


A 2.0m WIDE CONCRETE FOOTPATH
 SCALE 1:10 @ A1, 1:20 @ A3

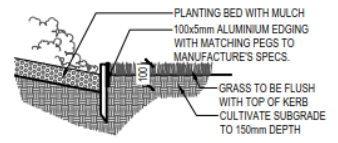


B FOOTPATH - EXPANSION JOINT
 SCALE 1:5 @ A1, 1:10 @ A3

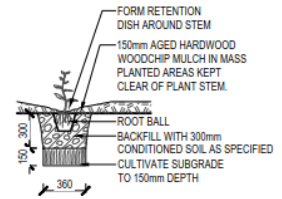
PLANTING SCHEDULE					
QTY	CODE	BOTANICAL NAME	COMMON NAME	supply size	min. spacing
TREES / PALMS					
5	CUP ana	Cupaniopsis anacardioides	Tueckeroo	25L	as shown
8	TER mue	Terminalia muelleri	Mueller's Damson	25L	as shown
6	LIV mue	Livistona muelleri	Dwarf Fan Palm	100L	3000mm
SHRUBS & GROUNDCOVERS					
7	COR v PIN	Cordyline fruticosa 'Pink Diamond'	Pink Diamond Cordyline	200mm	800
100	FIC v GRE	Ficus 'Green Island'	Green Island Fig	140mm	650
160	GAR v GLE	Gardenia psidioides 'Glennie River'	Glennie River Gardenia	140mm	650
15	IXO v MAL	Ixora 'Malay Pink'	Malay Pink Ixora	140mm	650
120	HYM spe	Hymenocallis speciosa	Spiderlily	140mm	650
160	LOM hys	Lomandra hystrix	Green Mat-rush	140mm	650
15	MUR v MIN	Murraya 'Min-a-min'	Mini Murraya	140mm	650
35	ZEP can	Zephyranthes candida	Rain Lily	140mm	650



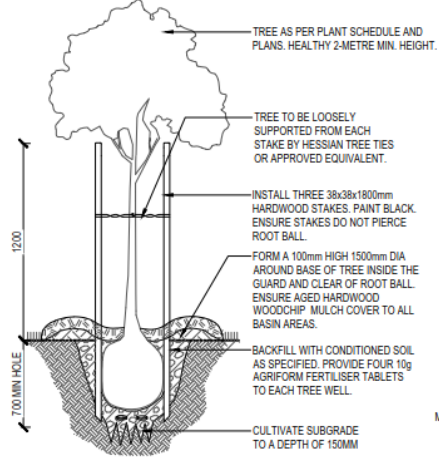
C FOOTPATH - CONTROL JOINT
 SCALE 1:5 @ A1, 1:10 @ A3



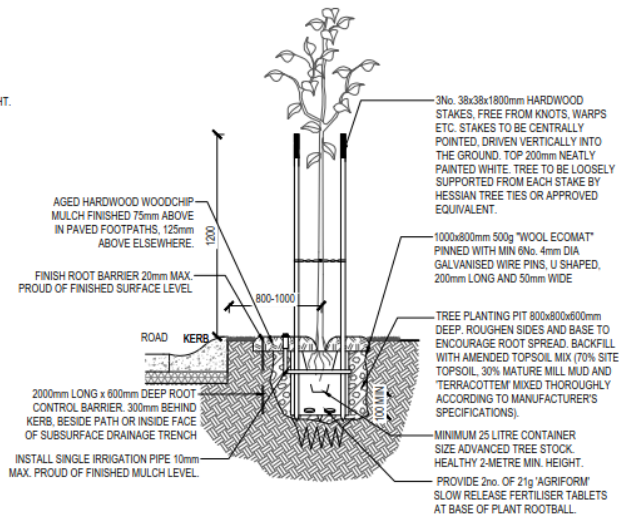
D MOWIG STRIP DETAIL
 SCALE 1:10 @ A1, 1:20 @ A3



E TYPICAL POT PLANTING
 SCALE 1:20 @ A1, 1:40 @ A3



F TYP 25-L TREE PLANTING IN GARDEN BED
 SCALE 1:20 @ A1, 1:40 @ A3



G STREET TREE TO FNQROC STANDARDS
 SECTION SCALE 1:20 @ A1, 1:40 @ A3

STANDARD NOTES

- CONCRETE FOOTPATH REQUIREMENTS AND GUIDELINES TO BE INSTALLED AS PER FNQROC DETAILS**
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 - FINISHED SURFACE LEVEL OF CONCRETE TO BE NOT MORE THAN 20mm ABOVE FINISHED SURFACE LEVEL OF ADJOINING GROUND AND SHALL FINISH FLUSH WITH ADJOINING SURFACES.
 - CONCRETE PATHWAYS, ADJOINING EXISTING DRIVEWAYS ARE TO BE TRANSITIONED OVER MINIMUM 500mm LENGTH.
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 - ALL CONCRETE TO BE BROOM FINISHED.
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 - ALL DIMENSIONS IN MILLIMETRES.
 - THE MAXIMUM GRADIENT SHALL BE 16 PER CENT WITH A MAXIMUM CROSSFALL OF 2.5 PER CENT, WHERE THE PATHWAY IS PARALLEL WITH A ROAD WITH A GRADE GREATER THAN 16 PER CENT FOOTPATH GRADIENT SHALL MATCH THAT OF THE ROAD.
- NOTE:
- FULL CONSTRUCTION JOINT EVERY 30m² MIN.
 - 12mm EXPANSION JOINT AS SPECIFIED WHERE PATH ABUTS WALLS, KERBS AND THE LIKE.

Drawing Revisions

Issue	Date	Subject	Author
C	03.06.2020	TENDER ISSUE	JMC
B	16.03.2020	COUNCIL APPROVAL	JMC
A	21.02.2019	FOR APPROVAL	JMC

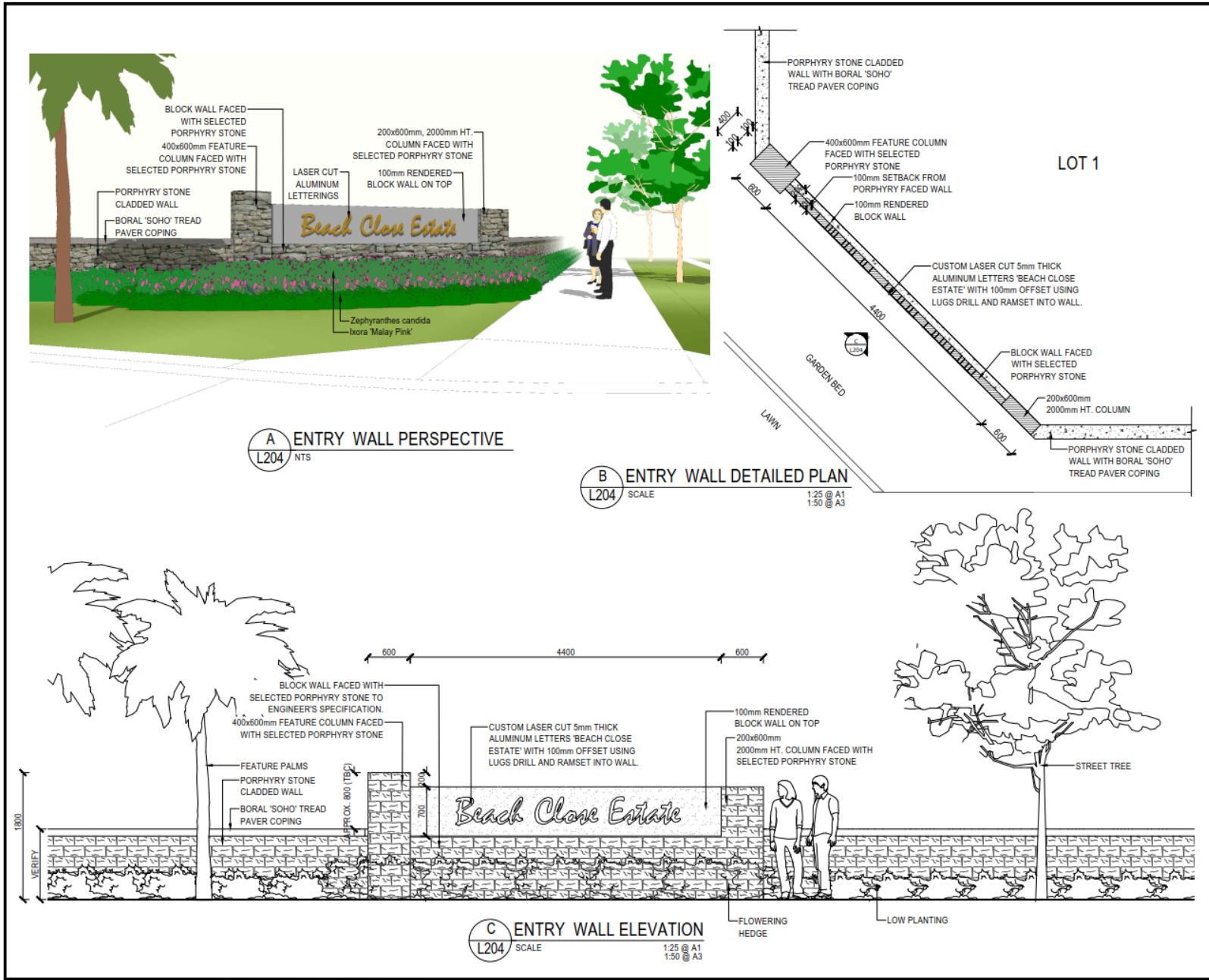
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Client: **SEYMOUR GROUP**

PROJECT TITLE: **LANGLEY ROAD SUBDIVISION**
 Langley Road, Port Douglas, Queensland
 Lot 5 on RP 804926

DRAWING TITLE: **STAGE 2 - TYP. LANDSCAPE DETAILS & PLANTING SCHEDULE**

Scale: AS SHOWN	Drawn: JAE	Checked: JTB	Authorised: JMC
At: A3 SIZE	Date: 3 June 2020		
Drawing No: 198 - L203	Issue: C	Sheet No: 4	



Drawing Revisions			
Issue	Date	Subject	Authorised
C	03.06.2020	TENDER ISSUE	JMC
B	16.03.2020	COUNCIL APPROVAL	JMC
A	21.02.2019	FOR APPROVAL	JMC
Issue	Date	Revision Description	Issue

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Client:
SEYMOUR GROUP

PROJECT TITLE:
LANGLEY ROAD SUBDIVISION
 Langley Road, Port Douglas, Queensland
 Lot 5 on RP 804926

DRAWING TITLE:
**STAGE 2 - MAIN ENTRY WALL
 DETAILS**

Scale: AS SHOWN	Drawn: JAE	Checked: JTB	Authorised: JMC
At:	Date: 3 June 2020	Issue:	Sheet No.:
Drawing No.:	198-L204	Issue:	C
			5

Division 2 Changing development approvals

Subdivision 1 Changes during appeal period

74 What this subdivision is about

- (1) This subdivision is about changing a development approval before the applicant's appeal period for the approval ends.
- (2) This subdivision also applies to an approval of a change application, other than a change application for a minor change to a development approval.
- (3) For subsection (2), sections 75 and 76 apply—
 - (a) as if a reference in section 75 to a development approval were a reference to an approval of a change application; and
 - (b) as if a reference in the sections to the assessment manager were a reference to the responsible entity; and
 - (c) as if a reference in section 76 to a development application were a reference to a change application; and
 - (d) as if the reference in section 76(3)(b) to section 63(2) and (3) were a reference to section 83(4); and
 - (e) with any other necessary changes.

75 Making change representations

- (1) The applicant may make representations (*change representations*) to the assessment manager, during the applicant's appeal period for the development approval, about changing—
 - (a) a matter in the development approval, other than—
 - (i) a matter stated because of a referral agency's response; or

-
- (ii) a development condition imposed under a direction made by the Minister under chapter 3, part 6, division 2; or
 - (b) if the development approval is a deemed approval—the standard conditions taken to be included in the deemed approval under section 64(8)(c).
 - (2) If the applicant needs more time to make the change representations, the applicant may, during the applicant's appeal period for the approval, suspend the appeal period by a notice given to the assessment manager.
 - (3) Only 1 notice may be given.
 - (4) If a notice is given, the appeal period is suspended—
 - (a) if the change representations are not made within a period of 20 business days after the notice is given to the assessment manager—until the end of that period; or
 - (b) if the change representations are made within 20 business days after the notice is given to the assessment manager, until—
 - (i) the applicant withdraws the notice, by giving another notice to the assessment manager; or
 - (ii) the applicant receives notice that the assessment manager does not agree with the change representations; or
 - (iii) the end of 20 business days after the change representations are made, or a longer period agreed in writing between the applicant and the assessment manager.
 - (5) However, if the assessment manager gives the applicant a negotiated decision notice, the appeal period starts again on the day after the negotiated decision notice is given.

76 Deciding change representations

- (1) The assessment manager must assess the change representations against and having regard to the matters that

- must be considered when assessing a development application, to the extent those matters are relevant.
- (2) The assessment manager must, within 5 business days after deciding the change representations, give a decision notice to—
 - (a) the applicant; and
 - (b) if the assessment manager agrees with any of the change representations—
 - (i) each principal submitter; and
 - (ii) each referral agency; and
 - (iii) if the assessment manager is not a local government and the development is in a local government area—the relevant local government; and
 - (iv) if the assessment manager is a chosen assessment manager—the prescribed assessment manager; and
 - (v) another person prescribed by regulation.
 - (3) A decision notice (a *negotiated decision notice*) that states the assessment manager agrees with a change representation must—
 - (a) state the nature of the change agreed to; and
 - (b) comply with section 63(2) and (3).
 - (4) A negotiated decision notice replaces the decision notice for the development application.
 - (5) Only 1 negotiated decision notice may be given.
 - (6) If a negotiated decision notice is given to an applicant, a local government may give a replacement infrastructure charges notice to the applicant.

Extracts from the Planning Act 2016 – Appeal Rights

Planning Act 2016
Chapter 6 Dispute resolution

[s 229]

- (2) The person is taken to have engaged in the representative's conduct, unless the person proves the person could not have prevented the conduct by exercising reasonable diligence.
- (3) In this section—

conduct means an act or omission.

representative means—

 - (a) of a corporation—an executive officer, employee or agent of the corporation; or
 - (b) of an individual—an employee or agent of the individual.

state of mind, of a person, includes the person's—

 - (a) knowledge, intention, opinion, belief or purpose; and
 - (b) reasons for the intention, opinion, belief or purpose.

Chapter 6 Dispute resolution

Part 1 Appeal rights

229 Appeals to tribunal or P&E Court

- (1) Schedule 1 states—
 - (a) matters that may be appealed to—
 - (i) either a tribunal or the P&E Court; or
 - (ii) only a tribunal; or
 - (iii) only the P&E Court; and
 - (b) the person—
 - (i) who may appeal a matter (the *appellant*); and
 - (ii) who is a respondent in an appeal of the matter; and

-
- (iii) who is a co-respondent in an appeal of the matter;
and
 - (iv) who may elect to be a co-respondent in an appeal of the matter.
- (2) An appellant may start an appeal within the appeal period.
- (3) The *appeal period* is—
- (a) for an appeal by a building advisory agency—10 business days after a decision notice for the decision is given to the agency; or
 - (b) for an appeal against a deemed refusal—at any time after the deemed refusal happens; or
 - (c) for an appeal against a decision of the Minister, under chapter 7, part 4, to register premises or to renew the registration of premises—20 business days after a notice is published under section 269(3)(a) or (4); or
 - (d) for an appeal against an infrastructure charges notice—20 business days after the infrastructure charges notice is given to the person; or
 - (e) for an appeal about a deemed approval of a development application for which a decision notice has not been given—30 business days after the applicant gives the deemed approval notice to the assessment manager; or
 - (f) for an appeal relating to the *Plumbing and Drainage Act 2018*—
 - (i) for an appeal against an enforcement notice given because of a belief mentioned in the *Plumbing and Drainage Act 2018*, section 143(2)(a)(i), (b) or (c)—5 business days after the day the notice is given; or
 - (ii) for an appeal against a decision of a local government or an inspector to give an action notice under the *Plumbing and Drainage Act 2018*—5 business days after the notice is given; or

- (iii) otherwise—20 business days after the day the notice is given; or
- (g) for any other appeal—20 business days after a notice of the decision for the matter, including an enforcement notice, is given to the person.

Note—

See the P&E Court Act for the court's power to extend the appeal period.

- (4) Each respondent and co-respondent for an appeal may be heard in the appeal.
- (5) If an appeal is only about a referral agency's response, the assessment manager may apply to the tribunal or P&E Court to withdraw from the appeal.
- (6) To remove any doubt, it is declared that an appeal against an infrastructure charges notice must not be about—
 - (a) the adopted charge itself; or
 - (b) for a decision about an offset or refund—
 - (i) the establishment cost of trunk infrastructure identified in a LGIP; or
 - (ii) the cost of infrastructure decided using the method included in the local government's charges resolution.

230 Notice of appeal

- (1) An appellant starts an appeal by lodging, with the registrar of the tribunal or P&E Court, a notice of appeal that—
 - (a) is in the approved form; and
 - (b) succinctly states the grounds of the appeal.
- (2) The notice of appeal must be accompanied by the required fee.
- (3) The appellant or, for an appeal to a tribunal, the registrar, must, within the service period, give a copy of the notice of appeal to—

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- (a) the respondent for the appeal; and
 - (b) each co-respondent for the appeal; and
 - (c) for an appeal about a development application under schedule 1, section 1, table 1, item 1—each principal submitter for the application whose submission has not been withdrawn; and
 - (d) for an appeal about a change application under schedule 1, section 1, table 1, item 2—each principal submitter for the application whose submission has not been withdrawn; and
 - (e) each person who may elect to be a co-respondent for the appeal other than an eligible submitter for a development application or change application the subject of the appeal; and
 - (f) for an appeal to the P&E Court—the chief executive; and
 - (g) for an appeal to a tribunal under another Act—any other person who the registrar considers appropriate.
- (4) The *service period* is—
- (a) if a submitter or advice agency started the appeal in the P&E Court—2 business days after the appeal is started; or
 - (b) otherwise—10 business days after the appeal is started.
- (5) A notice of appeal given to a person who may elect to be a co-respondent must state the effect of subsection (6).
- (6) A person elects to be a co-respondent to an appeal by filing a notice of election in the approved form—
- (a) if a copy of the notice of appeal is given to the person—within 10 business days after the copy is given to the person; or
 - (b) otherwise—within 15 business days after the notice of appeal is lodged with the registrar of the tribunal or the P&E Court.

- (7) Despite any other Act or rules of court to the contrary, a copy of a notice of appeal may be given to the chief executive by emailing the copy to the chief executive at the email address stated on the department's website for this purpose.

231 Non-appealable decisions and matters

- (1) Subject to this chapter, schedule 1 and the P&E Court Act, unless the Supreme Court decides a decision or other matter under this Act is affected by jurisdictional error, the decision or matter is non-appealable.
- (2) The *Judicial Review Act 1991*, part 5 applies to the decision or matter to the extent it is affected by jurisdictional error.
- (3) A person who, but for subsection (1) could have made an application under the *Judicial Review Act 1991* in relation to the decision or matter, may apply under part 4 of that Act for a statement of reasons in relation to the decision or matter.
- (4) In this section—
- decision** includes—
- (a) conduct engaged in for the purpose of making a decision; and
 - (b) other conduct that relates to the making of a decision; and
 - (c) the making of a decision or the failure to make a decision; and
 - (d) a purported decision; and
 - (e) a deemed refusal.

non-appealable, for a decision or matter, means the decision or matter—

- (a) is final and conclusive; and
- (b) may not be challenged, appealed against, reviewed, quashed, set aside or called into question in any other way under the *Judicial Review Act 1991* or otherwise,

whether by the Supreme Court, another court, any tribunal or another entity; and

- (c) is not subject to any declaratory, injunctive or other order of the Supreme Court, another court, any tribunal or another entity on any ground.

232 Rules of the P&E Court

- (1) A person who is appealing to the P&E Court must comply with the rules of the court that apply to the appeal.
- (2) However, the P&E Court may hear and decide an appeal even if the person has not complied with rules of the P&E Court.

Part 2 Development tribunal

Division 1 General

233 Appointment of referees

- (1) The Minister, or chief executive, (the *appointer*) may appoint a person to be a referee, by an appointment notice, if the appointer considers the person—
 - (a) has the qualifications or experience prescribed by regulation; and
 - (b) has demonstrated an ability—
 - (i) to negotiate and mediate outcomes between parties to a proceeding; and
 - (ii) to apply the principles of natural justice; and
 - (iii) to analyse complex technical issues; and
 - (iv) to communicate effectively, including, for example, to write informed succinct and well-organised decisions, reports, submissions or other documents.