



14 September 2020

Neil Beck
Team Leader - Planning
Douglas Shire Council
PO Box 273
Mossman QLD 4873

Our ref: 12520641-18480-12
Your ref: ROL 2019_3601/1

Dear Sir/Madam

Andrews Close Subdivision Change Application - Minor Change

Under instructions from, and on behalf of KS5 Pty Ltd, and pursuant to section 78 of the *Planning Act 2016*, we submit this Change Application (Minor Change) request to Change a Development Approval for a Reconfiguration of a Lot (1 lot into 15 lots) at 20-30 Langley Road – Council reference ROL 2019_3601/1.

Background

On 3rd December 2019, Douglas Shire Council (DSC) issued a Development Application Decision Notice to allow the reconfiguration of Lot 5 on RP804926 into 15 residential allotments. A copy of Council's Decision Notice is attached.

On 10th June 2020, DSC issued a Development Application Decision Notice for Operational Works associated with the 15 lot subdivision. The operational works have substantially commenced and are expected to be completed by December 2020, weather permitting.

A copy of Council's Decision Notice is attached.

Change Application

While the operational works have substantially commenced, there remains issues associated with access to the proposed Lot 9. Condition 3(b) of the Development Application Decision Notice ROL 2019_3601/1 requires the following:

Access

3. *b. Vehicle access to proposed Lot 9 is limited to Langley Road. No vehicle access to and from Lot 9 is permitted to the internal cul-de-sac.*

Recent advices from DSC indicate that this access condition was required for Lot 9 for a number of reasons including:

- alleged conflict with pedestrians within the cul-de-sac due to the number of proposed cross-overs within the cul-de-sac
- traffic congestion within the cul-de-sac

The Applicant does not agree that access from the proposed Lot 9 to the cul-de-sac will cause additional traffic congestion or any additional conflicts with pedestrians. The 9 residential lots with access to the cul-de-sac would only generate about 7-8 traffic movements / hour during the morning and afternoon peaks and could hardly be defined as traffic congestion. Nine proposed lots to a cul-de-sac is not considered unusual; in fact there are a number of cul-de-sacs within the Port Douglas areas where there are significantly more accesses to a cul-de-sac.

While it is acknowledged that Langley Road is a No Through Road at this location, the new northern verge concrete footpath will provide direct access to Solander Blvd for pedestrians. Should Lot 9 be conditioned to provide a driveway, it will create a greater conflict for pedestrians than the cul-de-sac. It does not make sense to create additional traffic/pedestrian conflict on Langley Road, when access to the proposed Lot 9 can be gained from a lower order road. A driveway in the cul-de-sac is a far safer outcome for pedestrians than on Langley Road.

Change Application – section 78 of the Planning Act 2016

The Change Application (Minor Change) is required to be lodged with Douglas Shire Council in accordance with section 78 of the Act. Specifically, section 78(2) of the Act states that the Change Application must be made to the responsible entity. Section 78(3) of the Act states the **responsible entity** is –

- a. *for a change application for a minor change to a development condition that the referral agency imposes – the referral agency; or*
- b. *The P&E Court if –*
 - i. *the change application is for a minor change; and*
 - ii. *the development approval was given because of an order of the court; and*
 - iii. *there were properly made submissions for the development application; or*
- c. *otherwise the assessment manager.*

Further, in accordance with section 80(1) of the *Planning Act 2016*, the chief executive is not an affected entity for the Minor Change if the change satisfies the definition of a Minor Change provided in Schedule of the Act.

Schedule 2 states that a Minor Change means a change that –

- a) *for a development approval –*
 - i. *does not result in a substantially different development*
 - ii. *if a development application for the development, including the change, were made when the change is made – would not cause –*
 - A. *the inclusion of prohibited development in the application; or*
 - B. *referral to a referral agency, other than the chief executive, if there were not referral agencies for the development application;*
 - C. *or referral to extra referral agencies, other than the chief executive; or*

- D. a referral agency to assess the application against, or have regard to, matters prescribed by regulation under section 55(2), other than matters the referral agency must have assessed the application against, or have regard to, when the application was made; or*
- E. public notification if public notification was not required for the development application.*

Accordingly, an assessment of how the proposed Change Application satisfies the criteria of a Minor Change, as defined in the *Planning Act 2016*, is provided below.

- i. does not result in a substantially different development; and*

Schedule 1 of the Development Assessment Rules provides advice on determining what is substantially different development. The relocation of the access for the proposed Lot 9 from Langley Road to the cul-de-sac does not constitute substantially different development.

The proposed change is not considered substantially different development for the following reasons:

- the proposed change does not involve a new use, rather the relocation of a proposed access to a lower order road for safety to reduce additional traffic conflicts.
- The change does not result in the application applying to a new parcel of land.
- The proposed change does not change the built form of the development. The approved development constitutes a reconfiguration of a lot.
- The proposed change does not alter the ability of the development to operate as intended.
- The proposed change does not remove a component of the development that is integral to the operation of the development.
- The proposed change does not impact on traffic flow. The 9 residential lots with access to the cul-de-sac would only generate about 7-8 traffic movements / hour during the morning and afternoon peaks. This does not impact on the safety or efficiency of the cul-de-sac or traffic flow within the cul-de-sac.
- The relocation of the access from Langley Road to the cul-de-sac for the proposed Lot 9 does not introduce new impacts. The relocation of the access reduces possible additional traffic/pedestrian conflicts in Langley Road and supports the Planning Scheme intent of providing access to lower order roads.
- There is no incentive or offset component associated with the development approval.
- The proposed change will not have any impacts on infrastructure provisions.

- ii. if a development application for the development, including the change, were made when the change application is made would not cause –*

- A. the inclusion of prohibited development; or*

The proposed change does not result in the inclusion of prohibited development in the application.

- B. referral to a referral agency, other than the chief executive, if there were no referral agencies for the development application; or*
- C. referral to extra referral agencies, other than the chief executive; or*
- D. a referral agency to assess the application against, or have regard to, matters prescribed by regulation under section 55(2), other than matters the referral agency must have assessed the application against, or have regard to, when the application was made; or*

The original application required referral to the Department of Environment and Science for a wetland protection area. If the application were remade today, including the proposed change, it would still require referral to the State, with the Department of Environment and Science as a technical advice agency. The proposed change does not trigger any additional referral agencies for any other matters.

- E. public notification if public notification was not required for the development application.*

The original development application was code assessable. If the application were remade today, including the proposed change, the application would still be code assessable.

Based on the above, the Applicant considers the proposed change a Minor Change for the following reasons:

- The proposed change does not result in a substantially different development.
- The proposed change does not introduce a new use.
- The proposed change does not introduce development that would be considered prohibited development.
- The proposed change has no effect on referral agencies.
- The proposed change would still result in a code assessable application if the application were remade today.

Accordingly, the Applicant requests that Condition 3b be deleted from the Development Application Decision Notice and access to the proposed Lot 9 be allowed from the cul-de-sac.

The application fee for the Change Application (Minor Change) is \$1,174.90 based on Council's 2020/2021 Fes and Charges Schedule. The Applicant will pay this fee directly to Council following lodgement. The *Planning Act 2016* Change Application form is also attached.

We trust the representations contained in the Change Application are sufficient for Council's purposes. We look forward to receiving Council Decision Notice for the proposed Change Application at Council's earliest convenience.

Please don't hesitate to contact the undersigned should you have any further questions.

Sincerely
GHD

A handwritten signature in black ink that reads "Erin Campbell". The script is cursive and fluid.

Erin Campbell
Senior Planner
+61 7 47200434

Change application form

Planning Act Form 5 (version 1.2 effective 7 February 2020) made under Section 282 of the Planning Act 2016.

This form is to be used for a change application made under section 78 of the *Planning Act 2016*. It is important when making a change application to be aware of whether the application is for a minor change that will be assessed under section 81 of the *Planning Act 2016* or for an other change that will be assessed under section 82 of the *Planning Act 2016*.

An applicant must complete all parts of this form, and provide any supporting information that the form identifies as being required to accompany the change application, unless stated otherwise. Additional pages may be attached if there is insufficient space on the form to complete any part.

Note: All terms used in this form have the meaning given under the *Planning Act 2016*, the *Planning Regulation 2017*, or the *Development Assessment Rules (DA Rules)*.

PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) (individual or company full name)	KS3 Pty Ltd
Contact name (only applicable for companies)	C/- GHD (Erin Campbell)
Postal address (P.O. Box or street address)	PO Box 930
Suburb	Townsville
State	QLD
Postcode	4810
Country	
Email address (non-mandatory)	Erin.Campbell@ghd.com
Mobile number (non-mandatory)	
Applicant's reference number(s) (if applicable)	

2) Owner's consent - Is written consent of the owner required for this change application?	
Note: Section 79(1A) of the <i>Planning Act 2016</i> states the requirements in relation to owner's consent.	
<input type="checkbox"/> Yes – the written consent of the owner(s) is attached to this change application	
<input checked="" type="checkbox"/> No	

PART 2 – LOCATION DETAILS

3) Location of the premises (complete 3.1) or 3.2), and 3.3) as applicable)				
3.1) Street address and lot on plan				
<input checked="" type="checkbox"/> Street address AND lot on plan (all lots must be listed), or				
<input type="checkbox"/> Street address AND lot on plan for an adjoining or adjacent property of the premises (appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon. All lots must be listed).				
a)	Unit No.	Street No.	Street Name and Type	Suburb
		20-30	Langley Road	Port Douglas
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
	4877	5	SP804926	Douglas Shire Council
b)	Unit No.	Street No.	Street Name and Type	Suburb
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)

3.2) Coordinates of premises (appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay)

Note: Place each set of coordinates in a separate row.

☐ Coordinates of premises by longitude and latitude

Longitude(s)	Latitude(s)	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other:	

☐ Coordinates of premises by easting and northing

Easting(s)	Northing(s)	Zone Ref.	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56	<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other:	

3.3) Additional premises

- ☐ Additional premises are relevant to the original development approval and the details of these premises have been attached in a schedule to this application
- ☒ Not required

PART 3 – RESPONSIBLE ENTITY DETAILS

4) Identify the responsible entity that will be assessing this change application

Note: see section 78(3) of the Planning Act 2016

Douglas Shire Council

PART 4 – CHANGE DETAILS

5) Provide details of the existing development approval subject to this change application

Approval type	Reference number	Date issued	Assessment manager/approval entity
<input checked="" type="checkbox"/> Development permit <input type="checkbox"/> Preliminary approval	ROL 2019_3061/1	3 December 2019	Douglas Shire Council
<input type="checkbox"/> Development permit <input type="checkbox"/> Preliminary approval			

6) Type of change proposed

6.1) Provide a brief description of the changes proposed to the development approval (e.g. changing a development approval for a five unit apartment building to provide for a six unit apartment building):

Deletion of Condition from Development Application Decision Notice

6.2) What type of change does this application propose?

- ☒ Minor change application – proceed to Part 5
- ☐ Other change application – proceed to Part 6

PART 5 – MINOR CHANGE APPLICATION REQUIREMENTS

7) Are there any affected entities for this change application

☒ No – proceed to Part 7

☐ Yes – list all affected entities below and proceed to Part 7

Note: section 80(1) of the Planning Act 2016 states that the person making the change application must give notice of the proposal and the details of the change to each affected entity as identified in section 80(2) of the Planning Act 2016.

Affected entity	Pre-request response provided? (where a pre-request response notice for the application has been given, a copy of the notice must accompany this change application)	Date notice given (where no pre-request response provided)
	<input type="checkbox"/> No <input type="checkbox"/> Yes – pre-request response is attached to this change application	
	<input type="checkbox"/> No <input type="checkbox"/> Yes – pre-request response is attached to this change application	
	<input type="checkbox"/> No <input type="checkbox"/> Yes – pre-request response is attached to this change application	

PART 6 – OTHER CHANGE APPLICATION REQUIREMENTS

Note: To complete this part it will be necessary for you to complete parts of DA Form 1 – Development application details and in some instances parts of DA Form 2 – Building work details, as mentioned below. These forms are available at <https://planning.dsdmip.qld.gov.au>.

8) Location details - Are there any additional premises included in this change application that were not part of the original development approval?

☐ No

☐ Yes

9) Development details

9.1) Is there any change to the type of development, approval type, or level of assessment in this change application?

☐ No

☐ Yes – the completed Sections 1 and 2 of Part 3 (Development details) of DA Form 1 – Development application details as these sections relate to the new or changed aspects of development are provided with this application.

9.2) Does the change application involve building work?

☐ No

☐ Yes – the completed Part 5 (Building work details) of DA Form 2 – Building work details as it relates to the change application is provided with this application.

10) Referral details – Does the change application require referral for any referral requirements?

Note: The application must be referred to each referral agency triggered by the change application as if the change application was the original development application including the proposed change.

☐ No

☐ Yes – the completed Part 5 (Referral details) of DA Form 1 – Development application details as it relates to the change application is provided with this application. Where referral is required for matters relating to building work the [Referral checklist for building work](#) is also completed.

11) Information request under Part 3 of the DA Rules

☐ I agree to receive an information request if determined necessary for this change application

☐ I do not agree to accept an information request for this change application

Note: By not agreeing to accept an information request I, the applicant, acknowledge:

- that this change application will be assessed and decided based on the information provided when making this change application and the assessment manager and any referral agencies relevant to the change application are not obligated under the DA Rules to accept any additional information provided by the applicant for the change application unless agreed to by the relevant parties
 - Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules.
- Further advice about information requests is contained in the [DA Forms Guide: Forms 1 and 2](#).

12) Further details

- ☐ Part 7 of *DA Form 1 – Development application details* is completed as if the change application was a development application and is provided with this application.

PART 7 – CHECKLIST AND APPLICANT DECLARATION

13) Change application checklist

I have identified the:

- responsible entity in 4); and
- for a minor change, any affected entities; and ☒ Yes
- for an other change all relevant referral requirement(s) in 10)

Note: See the *Planning Regulation 2017* for referral requirements

For an other change application, the relevant sections of [DA Form 1 – Development application details](#) have been completed and is attached to this application ☐ Yes
☒ Not applicable

For an other change application, where building work is associated with the change application, the relevant sections of [DA Form 2 – Building work details](#) have been completed and is attached to this application ☐ Yes
☒ Not applicable

Supporting information addressing any applicable assessment benchmarks is attached to this application ☒ Yes

Note: This includes any templates provided under 23.6 and 23.7 of *DA Form 1 – Development application details* that are relevant as a result of the change application, a planning report and any technical reports required by the relevant categorising instrument(s) (e.g. the local government planning scheme, State Planning Policy, State Development Assessment Provisions). For further information, see [DA Forms Guide: Planning report template](#).

Relevant plans of the development are attached to this development application ☒ Yes

Note: Relevant plans are required to be submitted for all relevant aspects of this change application. For further information, see [DA Forms Guide: Relevant plans](#).

14) Applicant declaration

- ☒ By making this change application, I declare that all information in this change application is true and correct.
- ☒ Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the responsible entity and any relevant affected entity or referral agency for the change application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001*.

Note: It is unlawful to intentionally provide false or misleading information.

Privacy – Personal information collected in this form will be used by the responsible entity and/or chosen assessment manager, any relevant affected entity or referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the change application.

All information relating to this change application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website.

Personal information will not be disclosed for a purpose unrelated to the *Planning Act 2016*, *Planning Regulation 2017* and the DA Rules except where:

- such disclosure is in accordance with the provisions about public access to documents contained in the *Planning Act 2016* and the *Planning Regulation 2017*, and the access rules made under the *Planning Act 2016* and *Planning Regulation 2017*; or
- required by other legislation (including the *Right to Information Act 2009*); or
- otherwise required by law.

This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

PART 8 – FOR COMPLETION OF THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY

Date received: Reference number(s):

QLeave notification and payment

Note: For completion by assessment manager if applicable

Description of the work			
QLeave project number			
Amount paid (\$)		Date paid (dd/mm/yy)	
Date receipted form sighted by assessment manager			
Name of officer who sighted the form			

3 December 2019

Enquiries: Jenny Elphinstone
Our Ref: ROL 2019_3061/1 (Doc ID 931072)
Your Ref: FGC: 6038/01 L-EC2114

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

KS3 Pty Ltd
C/- Flanagan Consulting Group
C/ GHD
71 Stanley Street
TOWNSVILLE QLD 4810

Email: Erin.Campbell@ghd.com

Attention Ms Erin Campbell

Dear Madam

**Development Application for Reconfiguring of a Lot (1 Lot into 15 Lots)
At 20-30 Langley Road Port Douglas
On land described as Lot 5 on RP804926**

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

Please quote Council's application number: ROL 2019_3061/1 in all subsequent correspondence relating to this development application.

Should you require any clarification regarding this, please contact Jenny Elphinstone on telephone 07 4099 9482.

Yours faithfully


Paul Hoyer
Manager Environment & Planning

cc. State Assessment and Referral Agency (SARA) E: CairnsSARA@dilgp.qld.gov.au

encl.

- Decision Notice
 - Approved Drawing(s) and/or Document(s)
 - Concurrence Agency Response
 - Reasons for Decision - non-compliance with assessment benchmark.
- Advice For Making Representations and Appeals (Decision Notice)
- Adopted Infrastructure Charges Notice
- Advice For Making Representations and Appeals (Infrastructure Charges)



Decision Notice

Approval (with conditions)

Given under section 63 of the Planning Act 2016

Applicant Details

Name: KS3 Pty Ltd
Postal Address: C/- Flanagan Consulting Group
C/ GHD
71 Stanley Street
Townsville Qld 4810
Email: Erin.Campbell@ghd.com

Property Details

Street Address: 20-30 Langley Road, Port Douglas
Real Property Description: Lot 5 on RP804926
Local Government Area: Douglas Shire Council

Details of Proposed Development

Development Permit for Reconfiguring of a Lot (1 Lot into 15 Lots).

Decision

Date of Decision: 3 December 2019
Decision Details: Development Permit Approved (subject to conditions).

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

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

The term 'approved drawing(s) and / or document(s)' or other similar expressions means generally the following plans together with any amendments as required by the Conditions of the approval:

Drawing or Document	Reference	Date
Proposal Plan	Flanagan Consulting Group Drawing 6038-SK01 F (Council Document ID 912385).	13 September 2019
Roadworks and Drainage Plan	Flanagan Consulting Group Drawing 6038-SK02 e (Council Document ID 928437).	12 November 2019.
Concept Site Grading	Flanagan Consulting Group Drawing 6038-SK05 e (Council Document ID 928437).	12 November 2019.
Sewerage Reticulation Plan	Flanagan Consulting Group Drawing 6038-SK04 D (Council Document ID 928437).	12 November 2019.
Water Reticulation Plan	Flanagan Consulting Group Drawing 6038-SK03 E dated 19 December 2019 and as annotated by Council (Council Document ID 930021)	26 November 2019.

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

Assessment Manager Conditions & Advices

Assessment Manager Conditions

1. Carry out the approved development generally in accordance with the approved drawing(s) and/or document(s), and in accordance with:
 - a. The specifications, facts and circumstances as set out in the application submitted to Council; and
 - b. The following conditions of approval and the requirements of Council's Planning Scheme and the FNQROC Development Manual.

Except where modified by these conditions of approval.

Timing of Effect

2. The conditions of the Development Permit must be effected prior to the lodgement of the Survey Plan for signing and dating, except where specified otherwise in these conditions of approval.

Access

3.
 - a. No lot is to have vehicle access to or from Solander Boulevard.
 - b. Vehicle Access to proposed Lot 9 is limited to Langley Road. No vehicle access to and from Lot 9 is permitted to the internal cul-de-sac.

Building and Structure setbacks

4. No buildings or structures are to be located within 3 m of the Solander Boulevard frontage of the site on Lots 1-4 unless otherwise approved by the Chief Executive Officer.

Street Layout and Design

5. The street layout and design is to be generally in accordance with Flanagan Consulting Group Proposal Plan 6038-SK02e dated 19 November 2019 and must comply with Queensland Streets and the FNQROC Development Manual, to the satisfaction of the Chief Executive Officer. In particular:

- a. The new internal road must have a minimum road reserve width of 14.5 metres;
- b. Langley Road must be upgraded to reflect the road form and geometry of the existing constructed Langley Road west from Andrews Close for the full frontage of the site. Unless otherwise approved, the road upgrade must include new kerb and channel, subsoil drains and road pavement to the crown of the road;
- c. The upgrade of Langley Road must include the provision of a two (2) metre wide concrete footpath along the frontage of the site including a new kerb ramp on Andrews Close;
- d. The upgrade of Langley Road must be designed to ensure that the intersection with Solander Boulevard is designed to suitable enable Council vehicle access and public pedestrian access onto Solander Boulevard;
- e. Detail of proposed retaining structure along the Solander Boulevard frontage of the site that may include a single pedestrian access for each lot fronting Solander Boulevard and must be provided prior to seeking a Development Permit for Operational Work. The retaining structure is to have regard to protection from future storm tide inundation and amenity to the neighbouring Solander Boulevard. These works are to be undertaken at the time of other civil work associated with the development.

f. Provision of a fill on each lot whereby:

- i. Fill areas for the lots are at a level to provide an immunity to a 1% storm tide event (having regard to a 0.8m sea level rise for the year 2100 or a lower level if nominated under a State Planning Policy at the time of lodgement of the application for Operational Work) and a 1% flood event.

The nominated fill level to provide immunity to the 1% AEP stormtide event is to be as per the Cairns BMT-WMB Cairns Region Storm Tide Inundation Study, Final Report and Mapping January 2013 (Council reference Doc ID: 462510) or another superseding report or individual study approved or found satisfactory to the satisfaction of the Chief Executive Officer.

Where the freeboard applied relevant to the BMT WMB report (Page 45 of the Study report) is less than the report recommendation, such lesser height must be qualified by the study author as suitable for the land to the satisfaction of the Chief Executive Officer. Alternatively, the qualification may be provided by a peer coastal engineer to the satisfaction of the Chief Executive Officer;

- ii. All fill is to drain to lawful point of discharge and must not detrimentally impact on upstream, downstream or surrounding land and/or proposed lots;
- iii. Fill areas must be suitably retained with suitably revetment protection from coastal erosion and impacts of storm tide inundation;
- v. Where the minimum fill results in an increase of ground level of 1m or greater to the neighbouring northern boundary for proposed lots 4, 5, 6 and 7, section and site plans are to be provided, for each of the adjacent lots and at least at the highest point, detailing the proposed height and proposed treatment(s) including landscaping to ensure the continued amenity of the neighbouring lots. The design is to ensure no ponding occurs to neighbouring properties and all drainage received from the neighbouring land is adequately catered for. These works are to be undertaken at the time of other civil work associated with the development;

- vi. Where the minimum fill results in an increase of ground level of less than 1m, to the neighbouring northern boundary for proposed lots 4, 5, 6 and 7, the fill may be constructed to the boundary provided no ponding occurs to neighbouring properties and all drainage received from the neighbouring land is adequately catered for;

- g. All lots must provide for suitable vehicle access.

An amended plan incorporating the above requirements must be submitted prior to the issue of a Development Permit for Operational Work.

All works must be carried out in accordance with the approved plans, to the requirements and satisfaction of the Chief Executive Officer prior to the lodgement of a Survey Plan for signing and dating.

Water Supply and Sewerage Works Internal

- 6. Undertake the following water supply and sewerage works internal to the subject land generally in accordance with Flanagan Consulting Group Sketches 6038-SK03D and 6038-SK04D:

- a. Provide a single internal sewer connection to each lot in accordance with the FNQROC Development Manual;
- b. If any existing sewer connections or property connection branches are proposed to be retained, further detail is to be provided to support the condition and capacity of the connection. CCTV footage is required to confirm the suitability of the existing connections for reuse. Existing sewer connections not retained must be decommissioned.
- c. Provide a minimum 100mm (PN16, Blue Brute) diameter water main in the new cul-de-sac with a 63mm (HDPE, PN16 blue) OD loop main in accordance with the FNQROC Development Manual requirements;
- d. Provide a minimum 125mm HDPE SDR11 PN 16 road crossing connecting to the 100mm main on the southern side of Langley Road connected with Hot Tap (tapping under pressure) and under DSC water supervision. The 100mm road crossing must be on the eastern side of the new cul-de-sac;
- e. Services to be installed and tapped during the main laying, bring service into property boundary 500mm and 300mm deep, If driveways/cross overs have not been allocated then service is to be installed in the middle of block, this avoids the chance of the service being under a driveway,
- f. Provide all fittings and valving in accordance with the FNQROC Development Manual requirements; and
- g. Decommission and remove the existing AC water main along the Langley Road frontage of the site and any existing water meters or water supply connections into the site.

All the above works must be designed and constructed in accordance with the FNQROC Development Manual and generally as the annotated water reticulation plan.

Engineering design plans incorporating the above requirements must be submitted prior to the issue of a Development Permit for Operational Work.

All works must be carried out in accordance with the approved plans, to the requirements and satisfaction of the Chief Executive Officer prior to the lodgement of the Survey Plan for signing and dating.

Damage to Infrastructure

7. In the event that any part of Council's existing sewer / water infrastructure is damaged as a result of construction activities occurring on the site, including but not limited to, mobilisation of heavy earthmoving equipment, stripping and grubbing, the applicant / owner must notify Council immediately of the affected infrastructure and have it repaired or replaced by Council, at the developer's cost, prior to the lodgement of the Survey Plan for signing and dating.

Acid Sulfate Soil Management Plan

8. a. Undertake an Acid Sulfate Soil sampling, investigation and analysis in the area to be affected by this development in accordance with:
 - i. the Queensland Acid Sulfate Soil Technical Manual Soil Management Guidelines version 4.0 (2014);
 - ii. the Acid Sulfate Soils - Laboratory Methods Guidelines (version. 2.1, June 2004; and
 - iii. the State Planning Policy 2017.
- b. Provide a statement to Council that
 - i. present Acid Sulfate Soils and/or Possible Acid Sulfate Soils are not present; or
 - ii. that management of present Acid Sulfate Soils and/or Possible Acid Sulfate Soils has been incorporated into an Acid Sulfate Soils Environmental Management Plan prepared in accordance with the abovementioned documents.

Identification of soils with a pyrite content in excess of the action levels will trigger a Acid Sulfate Soil Environmental Management Plan which must be prepared to the satisfaction of the Chief Executive Officer.

Where earthworks are undertaken without a Development Permit for Operational Work, the results of this investigation must be submitted to Council for approval, ten (10) business days prior to any earthworks or clearing being commenced on the site.

Where earthworks are undertaken in association with a Development Permit for Operational Work, the results must accompany such application lodged to Council.

Drainage Study of Site and drainage Design Plan

9. Undertake a local drainage study of the site to determine the drainage impacts on upstream and downstream properties and the mitigation measures required to minimise such impacts. In particular, the study must address the following:
 - a. The contributing catchment boundaries, including specifically the drainage from northern properties entering the site and discharging via surface drainage and pipe systems through proposed lot 4 and within Solander Boulevard to the east of proposed lot 4;
 - b. The extent of the 100 year ARI flood event in relation to the site both pre- and post-development;
 - d. Primary and secondary flow paths for the 5 and 100 year ARI flood events, including external flows currently discharging through the site;
 - e. Identify any requirement for drainage easements;
 - f. Identify the need and tenure for flood detention areas to ensure a no-worsening impact on downstream properties for the entire development;

- g. In the absence of flood detention, the drainage study provides a concept design to limit the primary piped drainage flows entering the existing drainage system that drains to the west to no more than the pre-development flows and ensure that all overland flows are able to be conveyed to Langley Road east to Solander Boulevard to the existing drainage swale outlet near the northern property boundary on Solander Boulevard. Depth and width of flows in Langley Road east from the cul-de-sac in the minor event are to be provided in the supporting calculations for the operational works submission;
- h. Information on the proposed works and any impacts proposed at the drainage outlet from the proposed development; and
- i. Lawful point of discharge.

A plan of proposed drainage works must then be prepared to show the study outcomes and include the following considerations:

- i. Drainage infrastructure in accordance with FNQROC Development Manual except as modified under (g) above.
- ii. All new allotments shall have immunity from flooding associated with the ARI 100 year rainfall event and the 100 year storm tide event;
- iii. Where practical, all new allotments must be drained to the road frontages, drainage easements or drainage reserves and discharged to the existing drainage system via stormwater quality device(s);
- iv. Existing surface drainage along the northern property boundary must be addressed in the plan of drainage works unless otherwise approved by Council following review of the outcomes of the drainage study; and
- v. The underground drainage network to the west is to be limited to the predevelopment flows and any additional runoff is to be conveyed overland in Langley Road east to Solander Boulevard

The study and the proposed drainage works plan must be endorsed by the Chief Executive Officer prior to the issue of a Development Permit for Operational Work.

Access Construction

- 10. Construct a concrete driveway or other approved surface to the nominated building area located in Lot 4.

All works must be carried out in accordance with the approved plans and must be to the requirements and satisfaction of the Chief Executive Officer prior to the lodgement of the Survey Plan for signing and dating.

Demolish Structures

- 11. All structures not associated with the approved development (including disused services and utilities) must be demolished and/or removed from the subject land prior to the lodgement of the Survey Plan for signing and dating.

Stockpiling and Transportation of Fill Material

- 12. Soil used for filling or spoil from the excavation is not to be stockpiled in locations that can be viewed from adjoining premises or a road frontage for any longer than one (1) month from the commencement of works.

Transportation of fill or spoil to and from the site must not occur within:

- a. peak traffic times; or
- b. before 7:00 am or after 6:00 pm Monday to Friday; or
- c. before 7:00 am or after 1:00 pm Saturdays; or

d. on Sundays or Public Holidays.

13. Dust emissions or other air pollutants must not extend beyond the boundary of the site and cause a nuisance to surrounding properties.

Storage of Machinery and Plant

14. The storage of any machinery, material and vehicles must not cause a nuisance to surrounding properties, to the satisfaction of the Chief Executive Officer.

Construction Access

15. Vehicular access to the site for construction and demolition purposes must be provided from Langley Road only, unless authorised by the Chief Executive Officer.

Sediment and Erosion Control

16. A sediment and erosion control plan must be submitted prior the issue of a Development Permit for Operational Works. Such plans must be installed / implemented prior to discharge of water from the site, such that no external stormwater flow from the site adversely affects surrounding or downstream properties (in accordance with the requirements of the Environmental Protection Act 1994, and the FNQROC Development Manual).

Existing Services

17. Written confirmation of the location of existing services for the land must be provided. In any instance where existing services are contained within another lot, the following applies, either:
 - a. Relocate the services to comply with this requirement; or
 - b. Arrange registration of necessary easements over services located within another lot prior to, or in conjunction with, the lodgement of a Survey Plan for signing and dating to create a lot.

Electricity Supply

18. Written evidence from Ergon Energy advising if distribution substation/s are required within the development must be provided. If required, details regarding the location of these facilities must be submitted to the Chief Executive Officer accompanied by written confirmation from Ergon Energy. Details regarding electricity supply must be provided prior to the issue of a Development Permit for Operational Work.

Electricity and Telecommunications

19. Written evidence of negotiations with Ergon Energy and the telecommunication authority must be submitted to Council stating that both an underground electricity supply and telecommunications service will be provided to the development prior to the lodgement of a Survey Plan for signing and dating.

Street Lighting

20. The following arrangements for the installation of street lighting within the proposed subdivision must be prior to the lodgement of a Survey Plan for signing and dating:
 - a. Prior to the issue of a Development Permit for Operational Work a Rate 2 lighting scheme is to be prepared by an Ergon Energy approved consultant and submitted to the Chief Executive Officer for approval. The Rate 2 lighting scheme is to be designed in accordance with the relevant Road Lighting Standard AS/NZS 1158 and the FNQROC Development Manual. The applicable lighting category is to be determined from the Road Hierarchy Table D1.1 and the corresponding applicable Lighting Categories Table D8.1 as identified in the FNQROC Development Manual.

The lighting scheme must show light pole locations that align with property boundaries that represent the permitted design spacing and demonstrates no conflicts with stormwater, kerb inlet pits and other services.

The design must provide the applicable illumination level specified in the Road Lighting Standard AS/NZS 1158 at the following road elements:

- i. Intersections
- ii. Pedestrian Refuges
- iii. Cul-de-sacs
- iv. LATM Devices

LATM Devices are to be shown on the civil layout design, the electrical services and street lighting design must be submitted in accordance with Ergon Energy's latest Distribution Design Drafting Standard.

- b. Prior to the issue of a Compliance Certificate for the Plan of Survey written confirmation that the relevant capital contribution required by Ergon Energy has been paid must be submitted, to ensure that the street lighting will be constructed.
- c. Where a new intersection is formed on an existing roadway for the purpose of accessing a new subdivision development, the intersection and existing road approaches must be provided with street lighting for a distance equivalent to at least two (2) spans either side of the intersection to the relevant Lighting Category.
- d. Where an existing intersection is required to be upgraded as part of a development approval, the intersection and existing road approaches must be provided with street lighting for a distance equivalent to at least two (2) spans either side of the intersection to the relevant Lighting Category.

Damage to Council Infrastructure

- 21. In the event that any part of Council's existing infrastructure is damaged as a result of construction activities occurring on the site, including but not limited to; mobilisation of heavy construction equipment, stripping and grubbing, the applicant/owner must notify Council immediately of the affected infrastructure and have it repaired or replaced at the developer's/owners/builders cost, prior to the lodgement of the Survey Plan for signing and dating.

Landscape Plan

- 22. Undertake landscaping of the street frontages of new roads, Langley Road and Andrews Close in accordance with FNQROC Development Manual and in accordance with a landscape plan.

Where Solander Boulevard is disturbed for drainage purposes, the area is to be grassed and in a mowable condition with a maximum profile of 1:4.

The landscape plan must be to the satisfaction of the Chief Executive Officer prior to the issue of a Development Permit for Operational Work. In particular, the plan must show:

- a. Planting of the footpath with trees, using appropriate species with regard to any overhead powerline constraints;
- b. The revegetation of cut and fill batters;
- c. Species to have regard to the Planning Scheme Landscaping Policy;
- d. Remediation and revegetation works to be undertaken within the both the major drainage line and the drainage reserve, including any works in Solander Boulevard;
- e. Inclusion of all requirements as detailed in other relevant conditions included in this Approval, with a copy of this Development Approval to be given to the applicant's Landscape Architect / Designer.

The landscape plan must be endorsed by the Chief Executive Officer prior to the issue of a Development Permit for Operational Work. Areas to be landscaped must be established prior to lodgement of the survey Plan for signing and dating. Landscaping must be maintained for the duration of the on-maintenance period to the satisfaction of the Chief Executive Officer.

Construction Signage

23. Prior to the commencement of any construction works associated with the development, a sign detailing the project team must be placed on the road frontage of the site and must be located in a prominent position. The sign must detail the relevant project coordinator for the works being undertaken on the site, and must list the following parties (where relevant) including telephone contacts:
 - a. Developer;
 - b. Project Coordinator;
 - c. Civil Engineer; and
 - d. Civil Contractor.

Advice

1. This approval, granted under the provisions of the *Planning Act 2016*, shall lapse four (4) years from the day the approval takes effect in accordance with sections 85(1)(b) and 71 of the *Planning Act 2016*.
2. This approval does not negate the requirement for compliance with all relevant Local Laws and statutory requirements.
3. For information relating to the *Planning Act 2016* log on to www.dsdmip.qld.gov.au. To access the *FNQROC Development Manual*, Local Laws and other applicable Policies, log on to www.douglas.qld.gov.au.
4. The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* applies to action that has, will have or is likely to have a significant impact on matters of national environmental significance.

Further information on the *EPBC Act* can be obtained from the Department of the Environment, Water, Heritage and the Arts website www.environment.gov.au/epbc EPBC Act Policy Statement 1.1 Significant Impact Guidelines Matters of National Environmental Significance (Oct. 2009).

Infrastructure Charges Notice

5. A charge levied for the supply of trunk infrastructure is payable to Council towards the provision of trunk infrastructure in accordance with the Infrastructure Charges Notice, a copy of which is attached for reference purposes only. The original Infrastructure Charges Notice will be provided under cover of a separate letter.

The amount in the Infrastructure Charges Notice has been calculated according to Council's Infrastructure Charges Resolution.

Please note that this Decision Notice and the Infrastructure Charges Notice are stand-alone documents. The *Planning Act 2016* confers rights to make representations and appeal in relation to a Decision Notice and an Infrastructure Charges Notice separately.

The amount in the Infrastructure Charges Notice is subject to index adjustments and may be different at the time of payment. Please contact the Development Assessment Team at council for review of the charge amount prior to payment.

The time when payment is due is contained in the Infrastructure Charges Notice.

Further Development Permits

Please be advised that the following development permits are required to be obtained before the development can be carried out:

- All Operational Work

All Plumbing and Drainage Work must only be carried in compliance with the Queensland *Plumbing and Drainage Act 2018*.

Concurrence Agency Response

Concurrence Agency	Concurrence Agency Reference	Date	Council Electronic Reference
State Department Manufacturing, Infrastructure and Planning	1904-10894 SRA	30 May 2019	904465

Note – Concurrence Agency Response is attached. This Concurrence Agency Response maybe amended by agreement with the respective agency.

Currency Period for the Approval

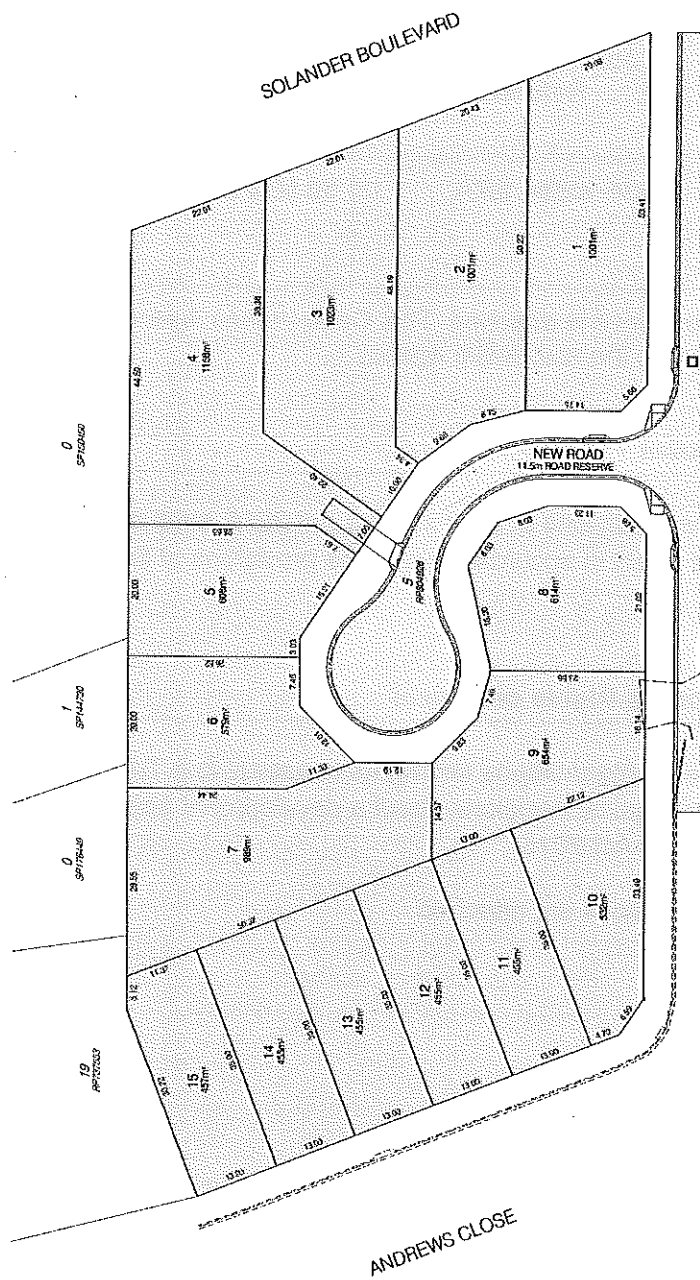
This approval, granted under the provisions of the *Planning Act 2016*, shall lapse four (4) years from the day the approval takes effect in accordance with the provisions of Section 85 of the *Planning Act 2016*.

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.

Two teams of 250,000 and 500,000 people of American consulting group, a registered lobbyist that is under investigation by the FBI, said they will stay and will not be discouraged about their presence.



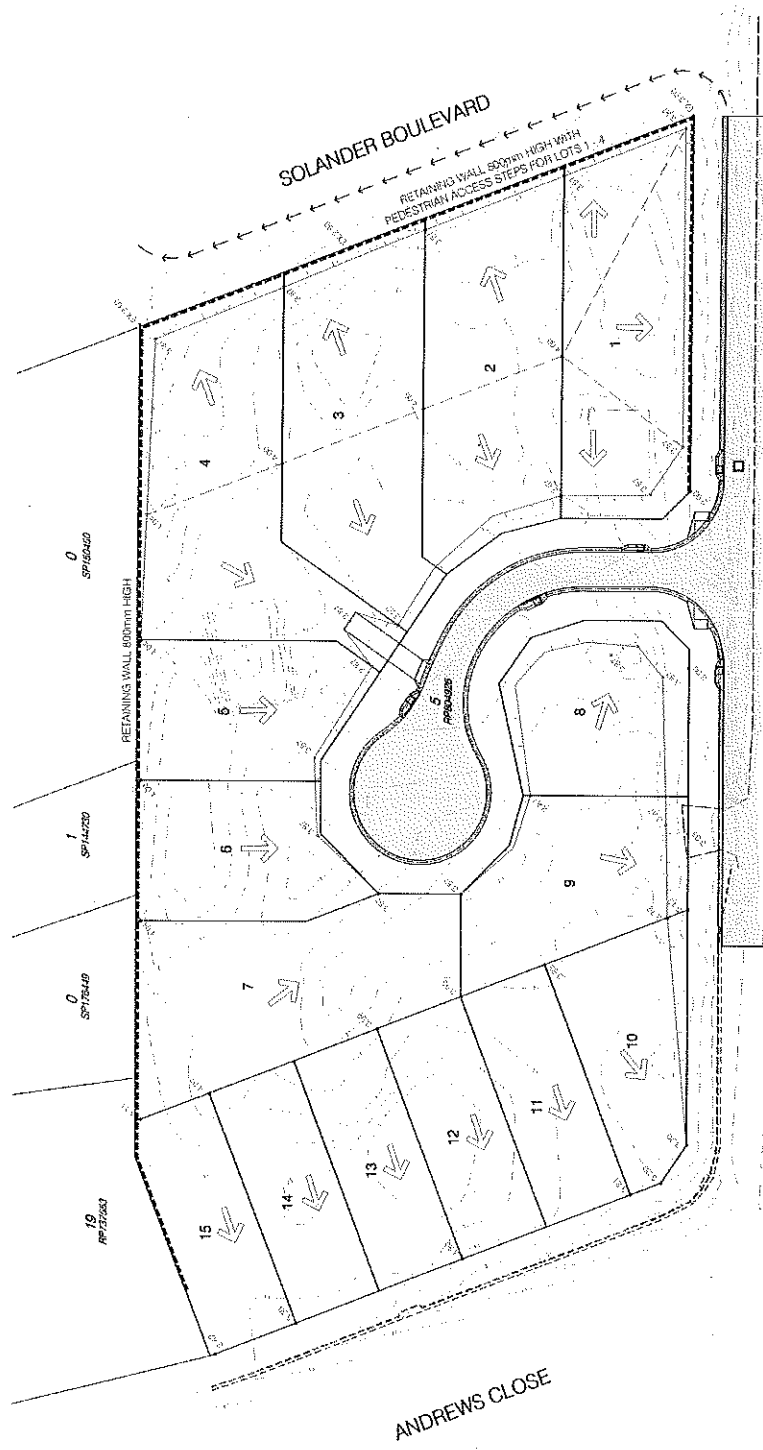
FLANAGAN
CONSULTING GROUP
ENVIRONMENTAL CONSULTANTS • PROJECT MANAGEMENT • FINANCIAL PLANNING
CARRIS DARTMOUTH HANCOCK TOWNVILLE
207-431-7744 401-846-1626 227-446-1326 207-874-3727
www.flanagangroup.com

PROPOSAL PLAN

6038-SK01 F
1:300
At Full Size
Accession No. 6038-SK01
13 September 2019



The owner is advised that the information contained herein is for general information only and should not be relied upon for any specific purpose. The information is provided as a guide only and is not intended to constitute any warranty or representation.



LEGEND

- EXISTING SURFACE CONTOURS
- FINISHED SURFACE LEVEL
- DIRECTION OF FLOW
- PROPOSED TOP OF WATER ALL BATTERS SHOWN INDICATIVELY AT 1:1 RATIO
- CHANGE OF GRADE
- PROPOSED RETAINING WALL

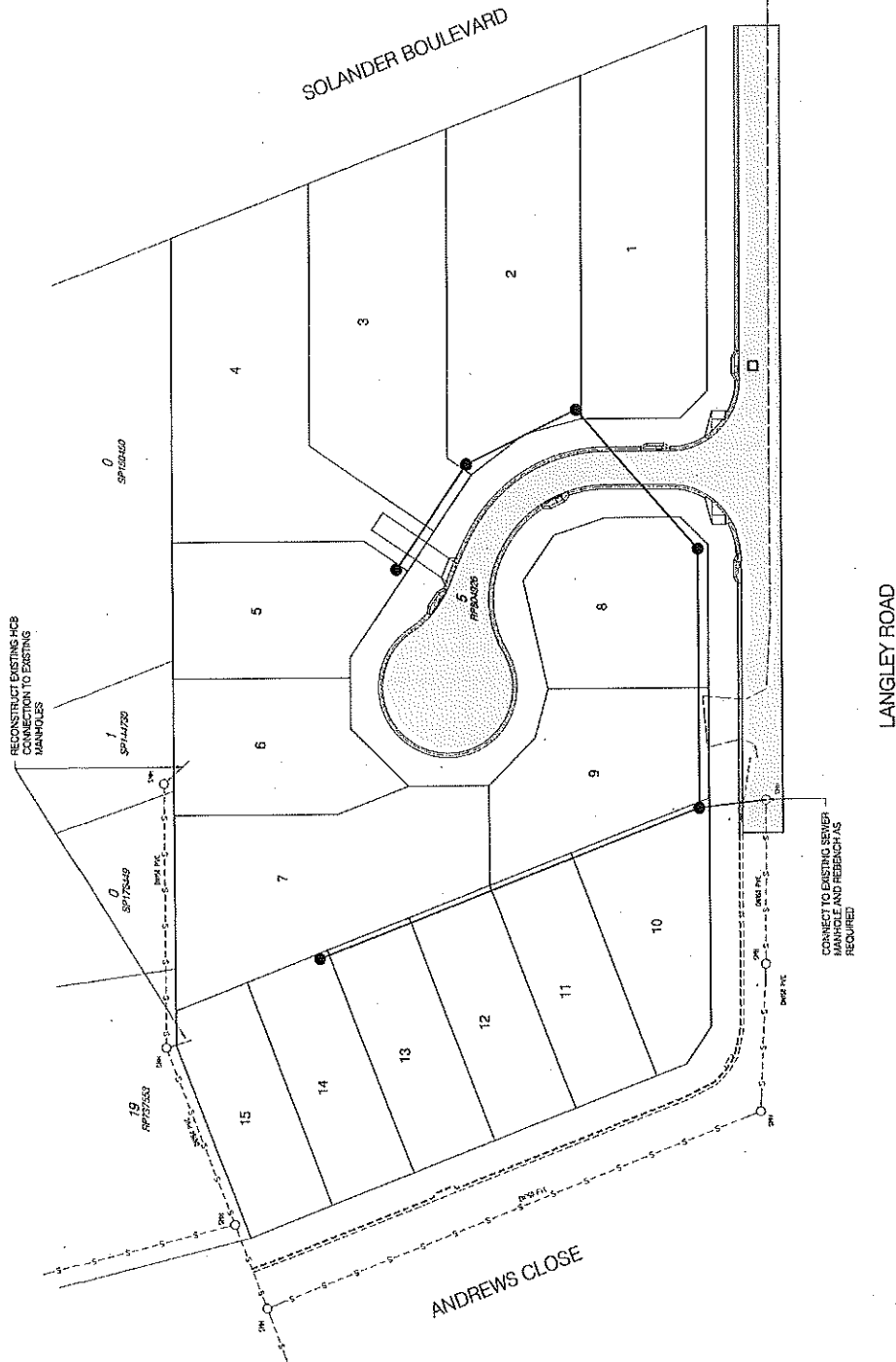
MINIMUM ALLOWABLE RILL LEVELS
 3.87 MHD < 200m SETBACK FROM COASTLINE
 2.70 MHD > 200m SETBACK FROM COASTLINE
 (REF Cairns Region Storm Tide inundation Study - 2017 prepared by BMT WBM)

FLANAGAN CONSULTING GROUP
 CONSULTING ENGINEERS
 CURRAN DARWIN MACQUAY TOWNSVILLE
 08 894222 08 894222 08 894222
 08 894222 08 894222 08 894222

RECONFIGURATION OF LOT
 LOT 5 on RP 804926
 15 Lot Subdivision
CONCEPT SITE GRADING
 6038-SK05 E
 1:300
 A1 PLS
 12 November 2019

1.5. DRAINAGE & SEWERAGE: THE LOCATION OF EXISTING SEWERAGE DRAINAGE
 INFRASTRUCTURE IS SHOWN FOR INFORMATION ONLY. THE LOCATION OF
 ANY NEW DRAINAGE OR SEWERAGE IS SHOWN IN THE DRAINAGE PLAN.

NOTES



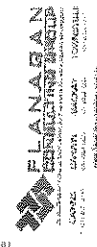
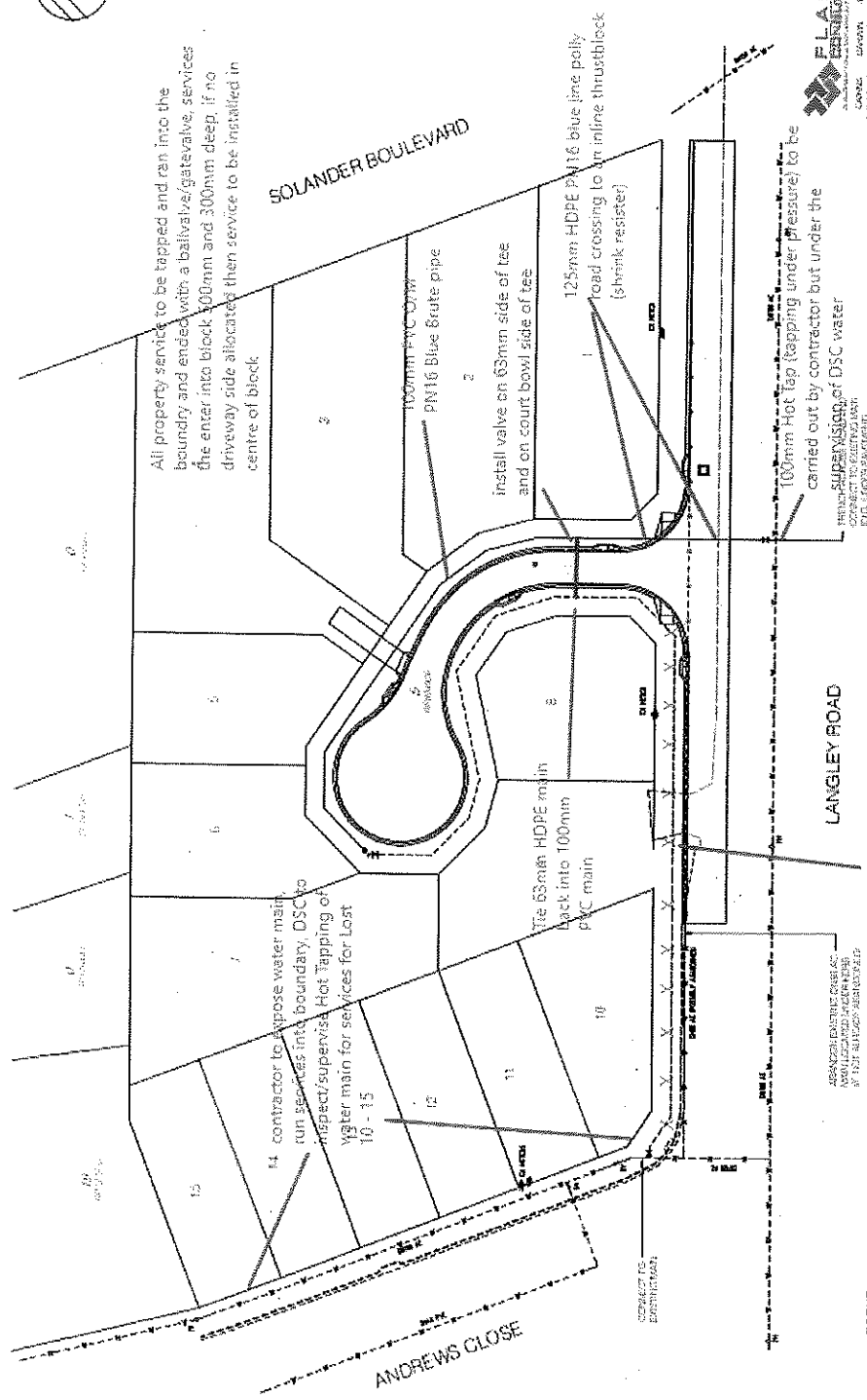
ELANAGAN CONSULTING GROUP
 CONSULTING ENGINEERS
 15/155 DUNDAS STREET EAST
 SUITE 200
 TORONTO, ONTARIO M5G 1L5
 TEL: (416) 593-8888
 FAX: (416) 593-8889
 WWW.ELANAGANCONSULTING.COM

RECONFIGURATION OF LOT
 LOT 5 on RP 804926
 15 Lot Subdivision
SEWERAGE RETICULATION

6038-SK04-D	1:300
ALP 1509	12 NOVEMBER 2010

LEGEND
 —●— EXISTING SEWER MAIN
 —○— PROPOSED SEWER MAIN

1. All work to be done in accordance with the relevant standards and specifications.
2. All work to be done in accordance with the relevant standards and specifications.
3. All work to be done in accordance with the relevant standards and specifications.



RECONFIGURATION OF LOT 12	
LOT 12 SANITARY	
12 Lot Substation	
WATER RETICULATION	
8038-SK03 D	1:200
Author: 08/01/2019	8/1/2019
Drawn: 08/01/2019	8/1/2019

ADOPTED INFRASTRUCTURE CHARGES NOTICE

KS3 Pty Ltd		0	0
DEVELOPERS NAME		ESTATE NAME	STAGE
20-30 Langley Road		L5 RP804926	1528
STREET No. & NAME		LOT & RP No.s	PARCEL No.
ROL 16 lots		ROL 2019_3061	4
DEVELOPMENT TYPE		COUNCIL FILE NO.	VALIDITY PERIOD (year)
Doc ID: 921611		Payment prior to lodgment of survey plan for endorsement	
DSC Reference Doc. No.		VERSION No.	
1			

Adopted Charges as resolved by Council at the Ordinary Meeting held on 5 June 2018, Local Government Infrastructure Plan, Planning Scheme Amendment (effect on and from 2 July 2018)

Locality	Charge per Use	rate	Floor area/No.	Amount	Amount Paid	Receipt Code & GL Code
Port Douglas						
Proposed Demand						
Residential Lots	Separate house	Per House lot	15	292,365.00		
	Total Demand			292,365.00		
Existing Credit						
Residential Lot	Vacant Lot	Per House lot	1	19,491.00		
	Total Credit			19,491.00		
						Code 895 GL 07600.0135.0825

Required Payment or Credit

TOTAL

\$272,874.00

Prepared by	J Elphinstone	26-Sep-19	Amount Paid
Checked by	D Lamond	30-Sep-19	Date Paid
Date Payable	Prior to endorsement of survey plan		Receipt No.
Amendments		Date	Cashier

Note:

The Infrastructure Charges in this Notice are payable in accordance with Sections 119 and 120 of the *Planning Act 2016* as from Council's resolution from the Ordinary Meeting held on 5 June 2018.

Charge rates under the current Policy are not currently subject to indexing.

Any Infrastructure Agreement for trunk works must be determined and agreed to prior to issue of Development Permit for Operational Work.

Charges are payable to: Douglas Shire Council. You can make payment at any of Council's Business Offices or by mail with your cheque or money order to Douglas Shire Council, PO Box 723, Mossman QLD 4873. Cheques must be made payable to Douglas Shire Council and marked 'Not Negotiable.' Acceptance of a cheque is subject to collection of the proceeds. Post dated cheques will not be accepted

Any enquiries regarding Infrastructure Charges can be directed to the Development & Environment, Douglas Shire Council on 07 4099 9444 or by email on enquiries@douglas.qld.gov.au

Concurrence Agency Conditions

RA6-N



Department of
State Development,
Manufacturing,
Infrastructure and Planning

SARA reference: 1904-10894 SRA
Council reference: ROL 3061/2019
Applicant reference: 6038/01-L-EC2114

30 May 2019

Chief Executive Officer
Douglas Shire Council
PO Box 723
Mossman Qld 4873
enquiries@douglas.qld.gov.au

Attention: Jenny Elphinstone

Dear Sir/Madam

SARA response—20-30 Langley Road, Port Douglas
(Referral agency response given under section 56 of the *Planning Act 2016*)

The development application described below was confirmed as properly referred by the Department of State Development, Manufacturing, Infrastructure and Planning on 30 April 2019.

Response

Outcome:	Referral agency response – with conditions.
Date of response:	30 May 2019
Conditions:	The conditions in Attachment 1 must be attached to any development approval.
Advice:	Advice to the applicant is in Attachment 2 .
Reasons:	The reasons for the referral agency response are in Attachment 3 .

Development details

Description:	Development permit	Reconfiguring a lot (1 lot into 13 lots)
SARA role:	Referral Agency	
SARA trigger:	Schedule 10, Part 20, Division 4, Table 2, Table 1 (Planning Regulation 2017)	
	Wetland protection area	
SARA reference:	1904-10894 SRA	
Assessment Manager:	Douglas Shire Council	

Page 1 of 6

Far North Queensland regional office
Ground Floor, Orr Graham and Hantley
Street, Cairns
PO Box 2358, Cairns QLD 4870

Street address: 20-30 Langley Road, Port Douglas
Real property description: Lot 5 on RP804926
Applicant name: KS3 Pty Ltd
Applicant contact details: PO Box 891
TOWNSVILLE QLD 4810
erin@flanaganconsulting.com.au

Representations

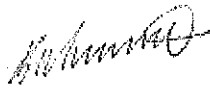
An applicant may make representations to a concurrence agency, at any time before the application is decided, about changing a matter in the referral agency response (s.30 Development Assessment Rules)

Copies of the relevant provisions are in **Attachment 4**.

A copy of this response has been sent to the applicant for their information.

For further information please contact Joanne Manson, Principal Planning Officer, SARA Far North QLD on 40373228 or via email CairnsSARA@dsdmip.qld.gov.au who will be pleased to assist.

Yours sincerely



Brett Nancarrow
Manager (Planning)

cc KS3 Pty Ltd, c/- Flanagan Consulting, erin@flanaganconsulting.com.au

enc Attachment 1 - Referral agency conditions
Attachment 2 - Advice to the applicant
Attachment 3 - Reasons for referral agency response
Attachment 4 - Change representation provisions

Attachment 1—Referral agency conditions

(Under section 56(1)(b)(i) of the *Planning Act 2016* the following conditions must be attached to any development approval relating to this application)

No.	Conditions	Condition timing
Reconfiguring a lot		
Schedule 10, Part 20, Division 4, Table 2, Table 1 - Wetland protection area —The chief executive administering the <i>Planning Act 2016</i> nominates the Director-General of the Department of Environment and Science to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following conditions:		
1.	<p>Erosion and sediment control measures which are in accordance with the <i>Best Practice Erosion and Sediment Control (BPESC) guidelines for Australia (International Erosion Control Association)</i>, are to be installed and maintained to prevent the release of sediment to the HES wetland as shown on the map of referable wetlands as defined in the Environmental Protection Regulation 2008.</p> <p>Note: HES referable wetlands are wetlands shown on the map of referable wetlands as defined in the Environmental Protection Regulation 2008.</p>	For the duration of the works
2.	<p>Stormwater discharge must be treated in accordance with the Queensland Best Practice Environmental Management Guidelines before stormwater flow enters the HES wetland as shown on the map of referable wetlands as defined in the Environmental Protection Regulation 2008.</p> <p>Note: HES referable wetlands are wetlands shown on the map of referable wetlands as defined in the Environmental Protection Regulation 2008.</p>	At all times
3.	<p>(a) A Fauna Spotter Catcher (an authorised person who holds a rehabilitation permit with a spotter catcher endorsement under the <i>Nature Conservation Act 1992</i>), must be present on site to monitor earthworks and to respond to any situations that may arise from the discovery of native wildlife.</p> <p>(b) If any native wildlife are identified onsite, work must cease. The Fauna Spotter Catcher must supervise the relocation of any identified wildlife prior to clearing and earthwork operations recommencing and relocate any found wildlife species at an appropriate location in close proximity of the subject site.</p>	<p>(a) Prior to works commencing</p> <p>(b) While clearing/earthworks are occurring</p>

Attachment 2—Advice to the applicant

General advice	
1.	Terms and phrases used in this document are defined in the <i>Planning Act 2016</i> its regulation or the State Development Assessment Provisions (SDAP) [v2.4]. If a word remains undefined it has its ordinary meaning.
Tampering with an Animal Breeding Place of a Protected Species	
2.	<p>Under the Nature Conservation (Wildlife Management) Regulation 2006, in order to tamper with the breeding place of a protected species (identified in the <i>Nature Conservation Act 1992</i>) appropriate authorisation is required.</p> <p>For further guidance on this please see the Species Management Program information on the Department of Environment and Science's website.</p>
Protected plants	
3.	<p>A clearing permit under the <i>Nature Conservation Act 1992</i> will be required to remove any protected plants from the premises.</p> <p>More information on the clearing of protected plants can be found on the Department of Environment and Science's website.</p> <p>It is recommended you meet with the Department of Environment and Science prior to applying for a permit under the <i>Nature Conservation Act 1992</i>.</p> <p>The completed pre-design conference application form should submit to palm@des.qld.gov.au.</p> <p>The Department of Environment and Science can be contacted via email at palm@des.qld.gov.au or by contacting 1300 130 372 (option 4) for information regarding clearing requirements under the <i>Nature Conservation Act 1992</i>.</p>

Attachment 3—Reasons for referral agency response

(Given under section 56(7) of the Planning Act 2016)

The reasons for the department's decision are:

- The department carried out an assessment of the development application against the relevant state codes and complies with the relevant performance outcomes.
- The proposed development is not located in a high ecological significance wetland.
- The proposed development avoids adverse impacts on the adjacent high ecological significance wetland.
- With conditions the proposed development does not impact on matters of state environmental significance.

Material used in the assessment of the application:

- The development application material and submitted plans
- *Planning Act 2016*
- *Planning Regulation 2017*
- The *State Development Assessment Provisions* (version 2.4), as published by the department
- The Development Assessment Rules
- SARA DA Mapping system
- State Planning Policy mapping system

Attachment 4—Change representation provisions

(page left intentionally blank – attached separately)

Reasons for Decision

The reasons for this decision are:

1. Sections 60, 62 and 63 of the *Planning Act 2016*:
 - a. to ensure the development satisfies the benchmarks of the 2018 Douglas Shire Planning Scheme Version 1.0; and
 - b. to ensure compliance with the *Planning Act 2016*.
2. Findings on material questions of fact:
 - a. the development application was properly lodged to the Douglas Shire Council on the 26 March 2019 under section 51 of the *Planning Act 2016* and Part 1 of the *Development Assessment Rules*; and
 - b. the development application contained information from the applicant which Council reviewed together with Council's own assessment against the 2017 State Planning Policy and the 2018 Douglas Shire Planning Scheme Version 1.0 in making its assessment manager decision; and
3. Evidence or other material on which findings were based:
 - a. the development triggered assessable development under the Assessment Table associated with the Tourist Accommodation Zone Code;
 - b. Council undertook an assessment in accordance with the provisions of sections 60, 62 and 63 of the *Planning Act 2016*; and
 - c. the applicant's reasons have been considered and the following findings are made:
 - i. Subject to conditions, the development satisfactorily meets the Planning Scheme benchmarks.

Non-Compliance with Assessment Benchmarks

Benchmark Reference	Alternative Measure/Comment
<p>Tourist Accommodation Zone Code: PO10-PO12:</p> <p>New lots contain a minimum area of 1,000m².</p> <p>New lots have a minimum road frontage of 20 metres.</p> <p>New lots contain a 25m x 20m rectangle.</p>	<p>Some of the proposed lots do not meet the Performance Outcomes. The development meets the Code Purpose (3)(a) providing for "a range of accommodation activities, with an emphasis on short-term accommodation is established at a scale and density to service tourist needs." The layout provides a range of lot sizes that can provide for a range of accommodation activities including self-assessable dwelling houses and code assessable short-term accommodation, both activities that meet the Code Purpose. The development complies with the code.</p>
<p>Local Plan Code:</p> <p>AO2.1 Development provides for the retention and enhancement of existing mature trees and character vegetation that contribute to the lush tropical character of the town.</p> <p>PO2 Development retains and enhances key landscape elements including character trees and areas of significant vegetation contributing to the character and quality of the local plan area and significant views and vistas and other landmarks important in the context of the Port Douglas/ Craiglie Township Plan map contained in Schedule 2).</p>	<p>The development is unable to retain mature vegetation that currently exists on the land due to the need to fill to achieve suitable ground heights respective to coastal processes (storm tide inundation). The vegetation was reviewed and found to not be of state significance. The land is not at a gateway. The vegetation on the nearby road and Reserve provides a physical and aesthetic buffer to the coastline. The development meets the Performance Outcome.</p>
<p>Reconfiguring of a Lot Code</p> <p>PO1 Lots comply with the lot reconfiguration outcomes of the applicable Zone Code.</p>	<p>Despite the non achievement of the lot configuration outcomes, the development achieves many of the ROL Code Purposes, namely</p> <ul style="list-style-type: none"> (a) development results in a well-designed pattern of streets supporting walkable communities; (b) lots have sufficient areas, dimensions and shapes to be suitable for their intend use taking into account environmental features and site constraints; (c) road networks provide connectivity that is integrated with adjoining existing or planned development while also catering for the safe and efficient access for pedestrians, cyclists and for public transport;

Benchmark Reference	Alternative Measure/Comment
	<p>(d) lots are arranged to front all streets and parkland such that development enhances personal safety, traffic safety, property safety and security; and contributes to streetscape and open space quality;</p> <p>(f) people and property are not placed at risk from natural hazards;</p> <p>The development complies with the Code.</p>
<p>Vegetation Management Code</p> <p>AO1 An acceptable outcome provides for vegetation damage where the removal facilitates an approved development.</p> <p>PO1 (includes) Vegetation is protected to ensure that:</p> <p>(a) the character and amenity of the local area is maintained;</p> <p>(b) vegetation damage does not result in fragmentation of habitats;</p> <p>(c) vegetation damage is undertaken in a sustainable manner;</p> <p>(d) the Shire's biodiversity and ecological values are maintained and protected;</p> <p>Code Purpose includes:</p> <p>(a) vegetation is protected from inappropriate damage; (b) where vegetation damage does occur it is undertaken in a sustainable manner; c) significant trees are maintained and protected;</p> <p>(d) biodiversity and ecological values are protected and maintained;</p> <p>(e) habitats for rare, threatened and endemic species of flora and fauna are protected and maintained;</p> <p>(f) landscape character and scenic amenity is protected and maintained;</p>	<p>The development is supported despite the conflict with the vegetation management code. The development meets the State Planning Policy (SPP) regarding Natural Hazards of Storm Tide Inundation. Under section 1.5 of the Planning Scheme, the Overlay Code and the State Planning Policy prevail over the Vegetation Management Code.</p>

3 December 2019

Enquiries: Jenny Elphinstone
Our Ref: ROL 2019_3061 (Doc ID)
Your Ref: 6038/01 L-EC2114

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

KS3 Pty Ltd
C/- Flanagan Consulting Group
C/ GHD
71 Stanley Street
TOWNSVILLE QLD 4810

Email: Erin.Campbell@ghd.com

Attention Ms Erin Campbell

Dear Madam

**Adopted Infrastructure Charge Notice
For Development Application for Reconfiguring of a Lot (1 Lot into 15 Lots)
At 20-30 Langley Road Port Douglas
On land described as Lot 5 on RP804926**

Please find attached the Adopted Infrastructure Charges Notice issued in accordance with section 119 of the *Planning Act 2016*.

The amount in the Adopted Infrastructure Charges Notice has been calculated according to Council's Adopted Infrastructure Charges Resolution.

Please also find attached extracts from the Act regarding the following:

- your right to make representations to Council about the Adopted Infrastructure Charges Notice; and
- your Appeal rights with respect to the Adopted Infrastructure Charges Notice.

Please quote Council's application number: ROL 2019_3061 in all subsequent correspondence relating to this matter.

Should you require any clarification regarding this, please contact Jenny Elphinstone on telephone 07 4099 9444.

Yours faithfully


Paul Hoyer
Manager Environment & Planning

encl.

- Adopted Infrastructure Charges Notice
- Rights to Make Representations and Appeals Regarding Infrastructure Charges

Adopted Infrastructure Charges Notice



2018 Douglas Shire Planning Scheme version 1.0 Applications

ADOPTED INFRASTRUCTURE CHARGES NOTICE

KS3 Pty Ltd		0	0
DEVELOPERS NAME		ESTATE NAME	STAGE
20-30 Langley Road		L5 RP804926	1528
STREET No. & NAME		LOT & RP No.s	PARCEL No.
ROL 15 lots		ROL 2019_3061	4
DEVELOPMENT TYPE		COUNCIL FILE NO.	VALIDITY PERIOD (year)
Doc ID: 921611		Payment prior to lodgment of survey plan for endorsement	
DSC Reference Doc. No.		VERSION No.	

Adopted Charges as resolved by Council at the Ordinary Meeting held on 5 June 2018, Local Government Infrastructure Plan, Planning Scheme Amendment (effect on and from 2 July 2018)

Locality	Charge per Use	rate	Floor area/No.	Amount	Amount Paid	Receipt Code & GL Code
Port Douglas						
Proposed Demand						
Residential Lots	Separate house	Per House lot	15	292,365.00		
	Total Demand			292,365.00		
Existing Credit						
Residential Lot	Vacant Lot	Per House lot	1	19,491.00		
	Total Credit			19,491.00		
						Code 895 GL 07500.0135.0825

Required Payment or Credit **TOTAL** \$272,874.00

Prepared by	J Elphinstone	26-Sep-19	Amount Paid
Checked by	D Lamond	30-Sep-19	Date Paid
Date Payable	Prior to endorsement of survey plan		Receipt No.
Amendments		Date	Cashier

Note:

The Infrastructure Charges in this Notice are payable in accordance with Sections 119 and 120 of the *Planning Act 2016* as from Council's resolution from the Ordinary Meeting held on 5 June 2018.

Charge rates under the current Policy are not currently subject to indexing.
Any Infrastructure Agreement for trunk works must be determined and agreed to prior to issue of Development Permit for Operational Work.

Charges are payable to: Douglas Shire Council. You can make payment at any of Council's Business Offices or by mail with your cheque or money order to Douglas Shire Council, PO Box 723, Mossman QLD 4873. Cheques must be made payable to Douglas Shire Council and marked 'Not Negotiable.' Acceptance of a cheque is subject to collection of the proceeds. Post dated cheques will not be accepted

Any enquiries regarding Infrastructure Charges can be directed to the Development & Environment, Douglas Shire Council on 07 4099 9444 or by email on enquiries@douglas.qld.gov.au

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

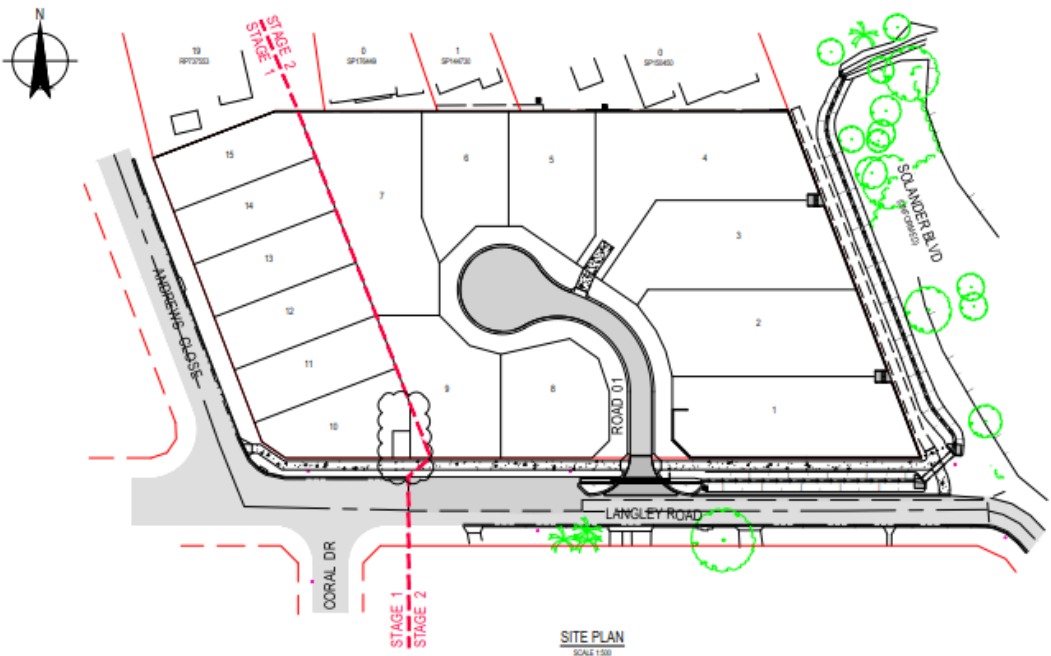
The rights of applicants to make representations and rights to appeal to a Tribunal or the Planning and Environment Court against decisions about a development application are set out in Chapter 6, Part 1 of the *Planning Act 2016*.

A copy of the relevant appeal provisions are attached.

KS5 PTY LTD

20-30 LANGLEY ROAD, PORT DOUGLAS

SUBDIVISION



DRAWING LIST	
DRG No.	DRAWING TITLE
42-12520641-C001	COVER SHEET AND 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 AND DETAILS
42-12520641-C007	MISCELLANEOUS DETAILS
42-12520641-C008	LONGITUDINAL SECTIONS - ROAD 01 AND 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 DETOUT PLAN
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42-12520641-C028	EROSION AND SEDIMENT CONTROL STRATEGY - DETAILS SHEET 2 OF 2

1 SUBSTANTIATION AND STAGING ADDED - ISSUED FOR APPROVAL				IRM	GA	PF	20.05.20
2 FOR APPROVAL				GB	PF	20.05.20	
Revision: Note: * indicates revisions on original issue of drawing or last revision of drawing							
No.	Revision	Note	Date	Drawn	Checked	Approved	Date
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SURVEY CONTROL NOTES

1. SURVEY CONDUCTED BY GARY POZZI - CADASTRAL SURVEYOR, PH 07 4307 7177

SURVEY ORIGIN
LEVEL DATUM
ORIGIN OF LEVELS
MEDIUM

AND
FPM 5000 RL 1.041
NSM ZONE 55

GENERAL NOTES

1. ALL WORKS MUST BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT FPMDC DEVELOPMENT MANUAL SPECIFICATIONS. WHERE DIFFERENCES EXIST BETWEEN THE PLANS 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 SITE 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 SPECIAL 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 (ESCP) 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 SLOTTED CONTROL DEVICES.
 - SEDIMENT INTERCEPTION BY THE PLACEMENT OF SUITABLE RETENTION SYSTEMS ACROSS DRAINAGE LINES AND AT INTERCEPTION POINTS FOR BOTH THE CONSTRUCTION AND STOOPPILE AREAS.
7. 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.
8. STOOPPILES SHALL ONLY BE LOCATED IN AREAS NOMINATED ON THE PROJECT DRAWINGS OR APPROVED BY THE SUPERINTENDENT. ALL STOOPPILES MUST HAVE APPROPRIATE ESC MEASURES INSTALLED TO PREVENT SEDIMENT TRANSPORT. THE MAXIMUM HEIGHT OF ALL STOOPPILES MUST BE LIMITED TO 2.0m.
9. ALL PERMANENT AND TEMPORARY UNLINED DRAINS AND DRAINS MUST HAVE APPROPRIATE TEMPORARY EROSION PROTECTION.
10. ALL PARTIALLY CONSTRUCTED DRAINAGE STRUCTURES MUST BE PROTECTED AGAINST SEDIMENT INFILTRATION DURING CONSTRUCTION.
11. ALL COMPLETED DRAINAGE STRUCTURES MUST BE PROTECTED AGAINST SEDIMENT INFILTRATION UNTIL GRASSING IS ESTABLISHED.
12. 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.
13. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE CHECKED FOR DAMAGE, CLEANED OUT AND FULLY REINSTATED AFTER EACH RAINFALL EVENT RESULTING IN RUNOFF.
14. IF EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN FOUND TO BE DEFICIENT OR FAILED IN SERVICE, DUE TO UNDESIRABLE CIRCUMSTANCES, CORRECTIVE ACTION IS TO BE UNDERTAKEN IMMEDIATELY WHICH MAY INCLUDE AMENDMENTS/ADDITIONS TO THE ORIGINAL APPROVED EROSION CONTROL PLANS.
15. THE INSTALLATION, REMOVAL, RELOCATION OR MODIFICATION TO EROSION AND SEDIMENT CONTROL DEVICES MAY BE MADE BY DOUGLAS SHIRE COUNCIL IF DEEMED NECESSARY AND RELEVANT.
16. EROSION AND SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE TREATMENT AREA IS SUITABLY STABILISED/VEGETATED.
17. 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 AS2611 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENT. GEOTECHNICAL TESTING SERVICES SHALL BE AS DETERMINED BY LEVEL 1 IN ACCORDANCE WITH AS 2611. ALL CERTIFICATION AND TEST RESULTS ARE TO BE COMPLIED 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 FOLLOWING TOPSOILING. ALL AREAS ARE TO BE GRADDED EVENLY BETWEEN FINISHED SURFACE LEVELS UNLESS NOTED OTHERWISE.
4. DRY DENSITY RATIO AS REFERRED TO IN THESE NOTES IS THE DENSITY DETERMINED IN ACCORDANCE WITH AS 1013.1.1 OF COMPACTED DRY DENSITY IN ACCORDANCE WITH AS 1013.1.1 OR AS 1013.1.1 TO THE STANDARD MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH AS 1013.1.1.1 (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 REUSE. 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 95% 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 8020 (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 FPMDC STD DRAWING 5100. PATHWAY CROSSFALL MUST NOT EXCEED 2.5%.
3. ALL KERB PROFILES TO BE AS PER FPMDC STD DRAWING 5100 UNLESS NOTED OTHERWISE.
4. ALL KERB RAMPES SHALL BE CONSTRUCTED IN ACCORDANCE WITH FPMDC STD STD 5100. WIDTH OF RAMP SHALL MATCH PATHWAY WIDTH.
5. ALL STREET SIGNS AND TRAFFIC SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH FPMDC STD DRAWINGS 5100 AND 5101.
6. PAVEMENT DESIGN STATION (HERON) IS FOR A RANGE OF SUBGRADE CBR VALUES. THE CONTRACTOR IS TO CONFIRM THE SUBGRADE CBR 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 FPMDC STD DRAWING 5100.
2. REINFORCED CONCRETE BASES FOR CULVERTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT OF HIGHWAYS STD DRAWING 5100.
3. SUBSID, DRAINAGE SHALL BE PROVIDED WHERE SHOWN ON THE PROJECT DRAWINGS. DRAINS SHALL ACHIEVE A MINIMUM 0.5% GRADE. FLOWING POINTS AND OUTLETS TO BE PROVIDED IN ACCORDANCE WITH FPMDC STD DRAWING 5100.

WATER RETICULATION NOTES

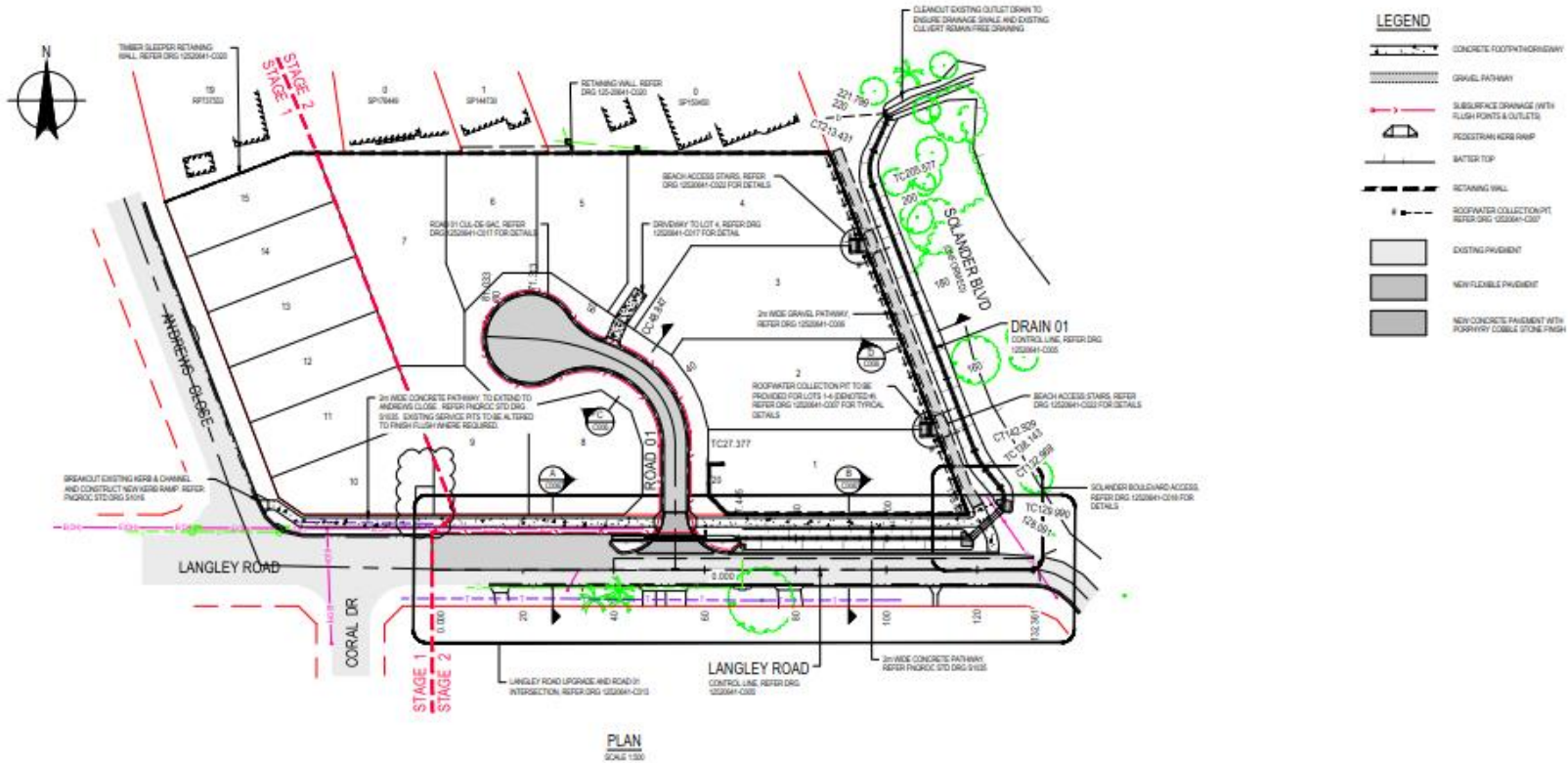
1. ALL PVC AND PE PIPES SHALL BE CLASS PN16. PVC PIPES SHALL BE RUBBER RING JOINTED AND CULVERT IRON COMPATIBLE.
2. DCL PIPES SHALL BE CLASS PN16 "TYTON" TYPE RUBBER RING JOINTED.
3. FOR SHAW TRENCHING, BEDDING & ANCHORAGE DETAILS REFER FPMDC STD ORGS 5210 & 5215. ENSURE COVER TO WATER MAINS IS 800mm 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 SHAW CONNECTION DETAILS, REFER FPMDC STD DRAWING 5200.
6. DOUGLAS SHIRE COUNCIL MUST BE CONTACTED TO PERFORM ANY DIRECT CONNECTION OR ALTERATION TO LINE 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 FPMDC STD DRAWINGS 5200 & 5205.
8. HYDRANTS OR VALVES CONSTRUCTED IN CONCRETE ARE TO HAVE A COMPRESSIBLE LAYER (MILBLEX) INSTALLED ON THE SURROUND. REFER FPMDC STD ORG 2000.
9. KERB MARKER PLATES SHALL BE PROVIDED TO IDENTIFY THE POSITION OF ALL VALVES AND HYDRANTS IN ACCORDANCE WITH FPMDC STD DRAWING 5210 VERSION 4/2008. IN ADDITION TO KERB MARKER PLATES, HYDRANTS SHALL ALSO HAVE TENDROP MARKERS AND BLUE RETRO-REFLECTIVE MARKERS PROVIDED ON THE ROAD PAVEMENT IN ACCORDANCE WITH FPMDC STD DRAWING 5101 VERSION 4/2008.

SEWER RETICULATION NOTES

1. ALL NEW SEWER MAINS SHALL BE UNPLASTICISED PVC (PVC-U) CLASS D16 SUITABLE FOR RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
2. ALL NEW SEWER MAINS AND MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH FPMDC STD DRAWINGS 5300 AND 5305.
3. ALL SEWER MANHOLE COVERS SHALL BE CIRCULAR UNLESS NOTED OTHERWISE ON SEWER LONG SECTIONS. COVERS SHALL BE TYPE A INSE PROPERTIES AND TYPE C GLIDING.
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 RADIUS 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 FPMDC STD DRAWING 5300. BRANCHES SHALL BE CIRCULARLY MINOR IN ACCORDANCE WITH THE SPECIFICATION.
7. DOUGLAS SHIRE COUNCIL MUST BE CONTACTED TO PERFORM ANY DIRECT CONNECTION TO LINE 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 THIS DEVELOPMENT AND PROVIDE THE FOOTAGE TO THE SUPERINTENDENT FOR ASSESSMENT. ANY SECTIONS OF SEWER CONSIDERED SUB-STANDARD SHALL BE RECTIFIED TO THE SATISFACTION OF COUNCIL.

SITE SPECIFIC NOTES

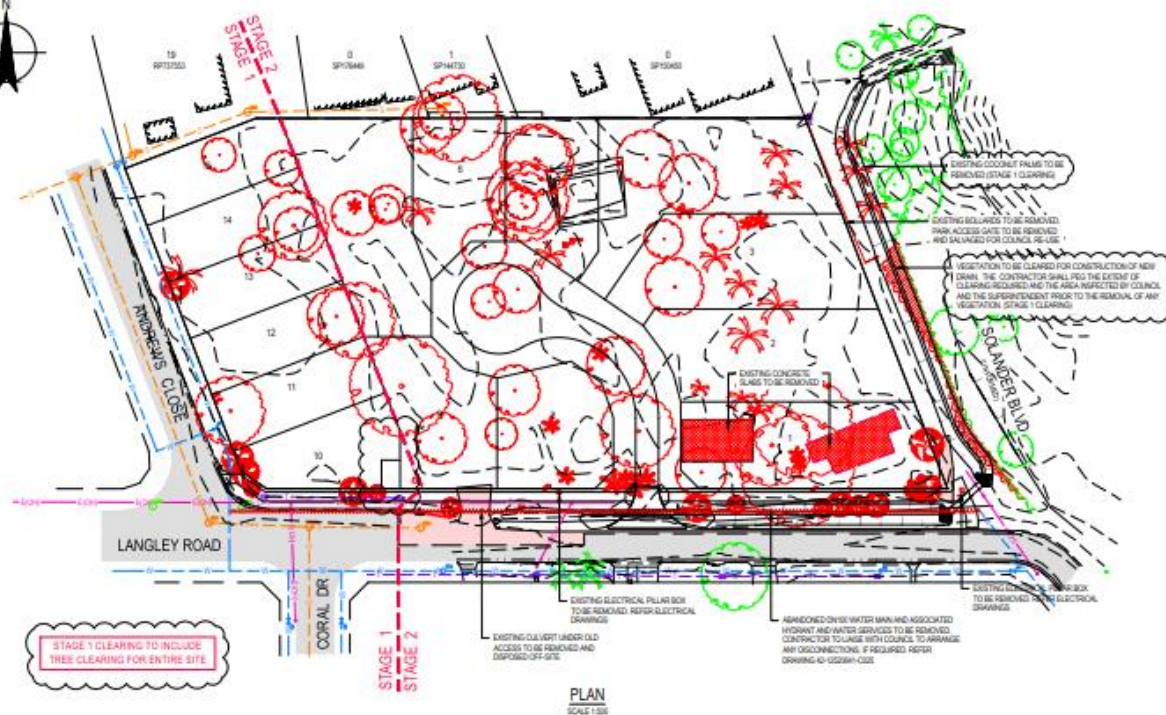
1. NO CLEARING OR VEGETATION REMOVAL IS TO TAKE PLACE UNTIL CERTIFICATION IS PROVIDED FOR ANY PLANT RELOCATION (ANY PLANT RELOCATION BY OTHERS).



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

							DO NOT SCALE <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 was prepared and must not be used by any other person or for any other purpose.</small>	Drawn: G. BROWNING Checked: G. APRILIN Approved (Project Director): P. FLANNAGAN Date: 03.03.20 Scale: 1:500	Design: G. APRILIN Checked: Approved: Date:	Client: KS5 PTY LTD Project: LANGLEY ROAD SUBDIVISION Title: GENERAL ARRANGEMENT PLAN Drawing No: 42-12520641-C003 Rev: 1
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Rev: Revision: Note: Indication indicates an original issue of drawing or last revision of drawing.
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Plotted by: Rick Stables
User File No: C:\Users\GHD\Documents\Projects\Langley Road\Drawings\42-12520641-C003.dwg



LEGEND

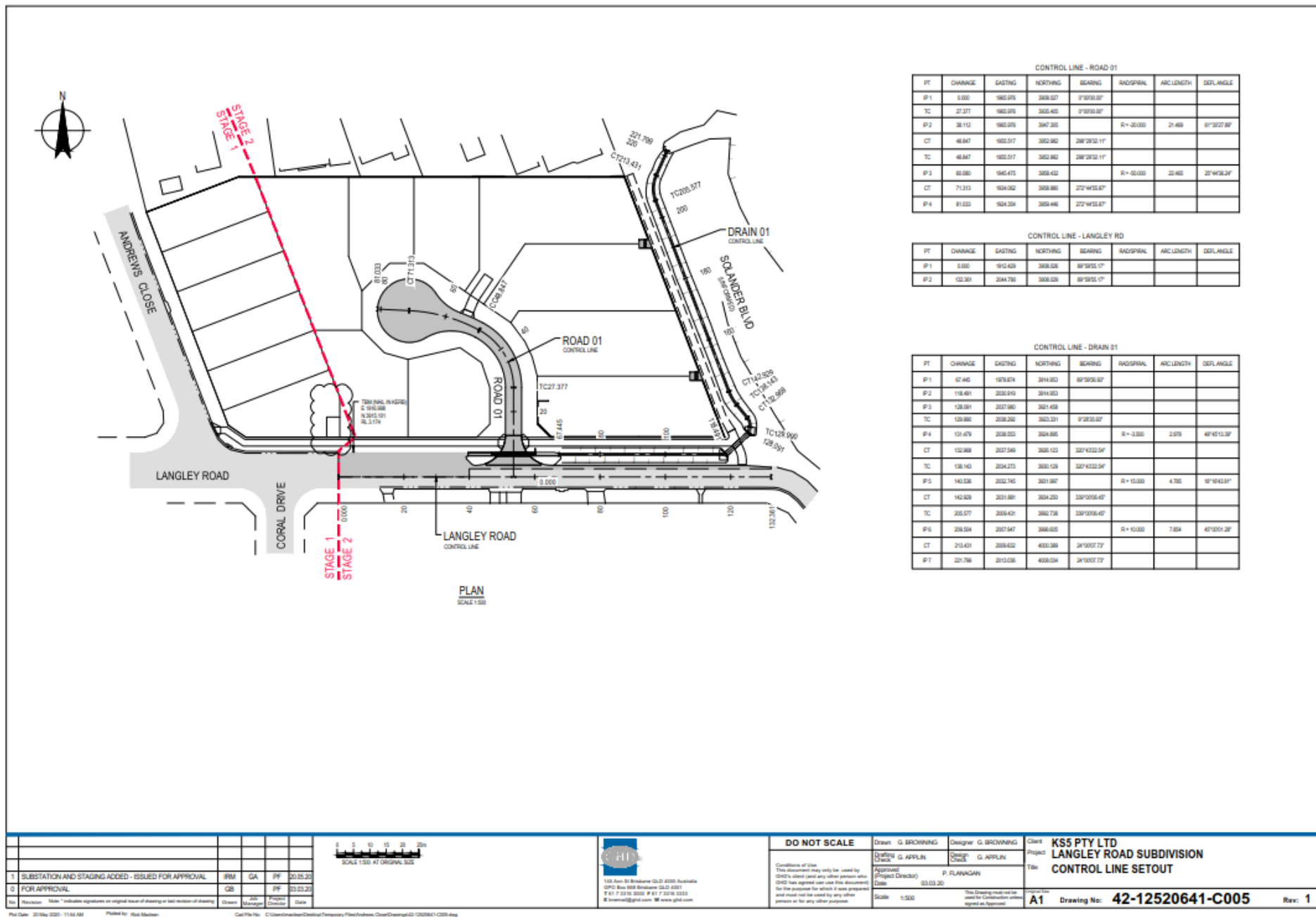
- EXISTING KERB & CHANNEL TO BE REMOVED
- EXISTING PAVEMENT TO BE REMOVED
- EXISTING FENCE / BOLLARDS TO BE REMOVED
- EXISTING REDUNDANT SERVICE
- EXISTING TREE PALM TO BE REMOVED
- EXISTING VEGETATION TO BE REMOVED
- EXISTING BUILDING LINE
- EXISTING FENCE
- EXISTING SEWER MAIN
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- EXISTING WATER MAIN
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- EXISTING PALM TREE TO REMAIN
- EXISTING VEGETATION LINE

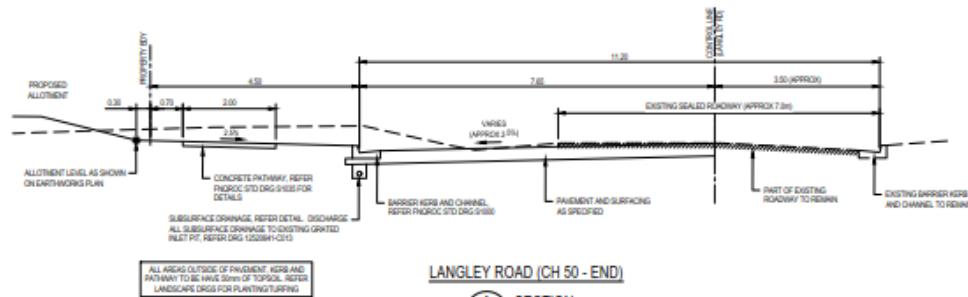
NOTES

- REFER TO DMS 100000 FOR STAGERS/NOTES
- STAGE 1 TO INCLUDE CLEARING OF TREES FROM THE STAGES 1 AND 2.

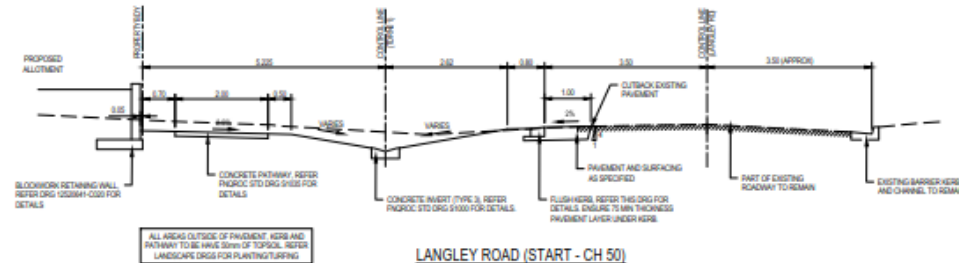
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0	FOR APPROVAL				GB	PF	PF	03.03.20													
Rev: _____					Note: "_____" indicates signatures on original issue of drawing or last revision of drawing					Job Manager: _____		Project Director: _____		Date: _____							

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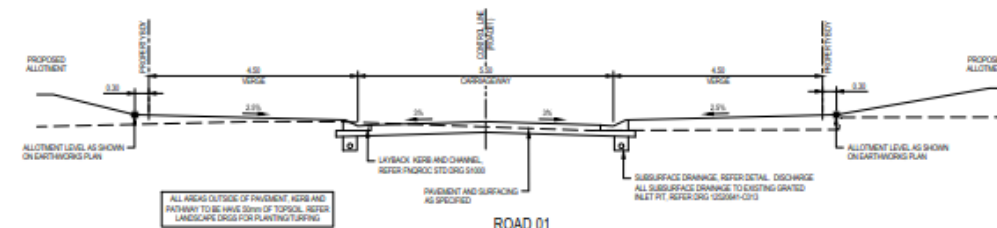




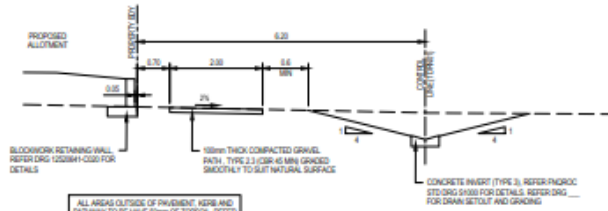
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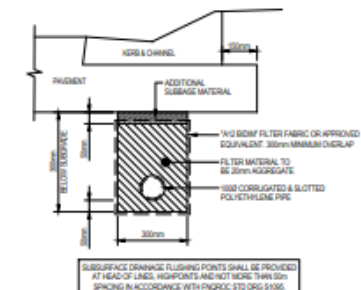
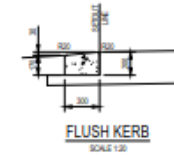
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C SECTION
SCALE 1:30



D SECTION
SCALE 1:30



LANGLEY ROAD - PAVEMENT DETAILS

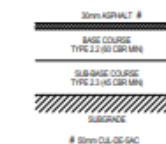
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5	100	190
7	100	140
10	100	100

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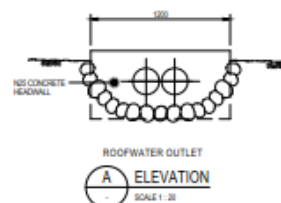
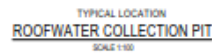
ROAD 01 - PAVEMENT DETAILS

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10	100	100

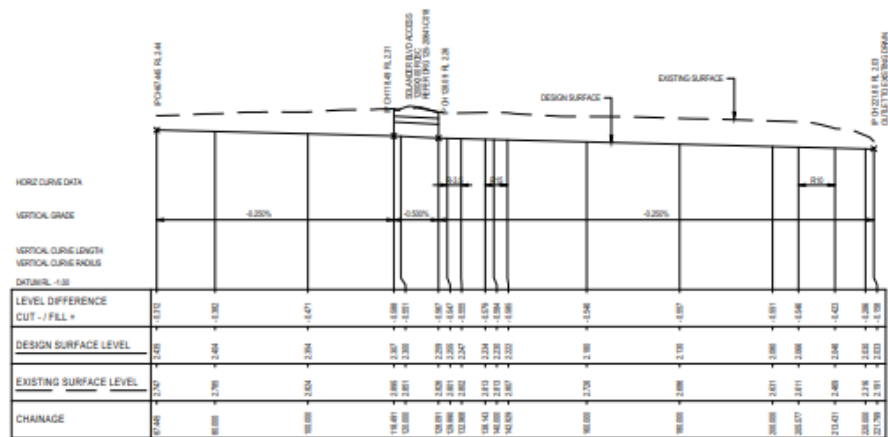
DESIGN TRAFFIC 5×10^4 (ACCESS PLACE)



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2	FOR APPROVAL	GB	PP	23.03.20	



Plot Date: 20 May 2020 - 11:04 AM Plotted by: Rick Malinen Cad File No.: C:\Users\malinen\Desktop\Temporary Files\Arctomet_CloudDrawings\ID 1200611_C007.dwg



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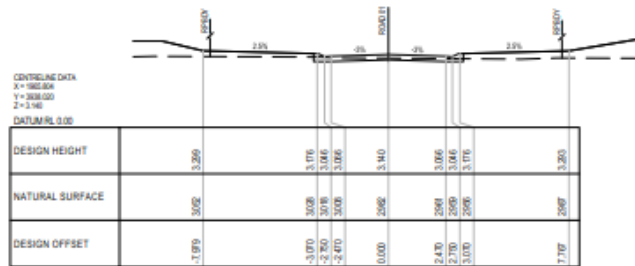
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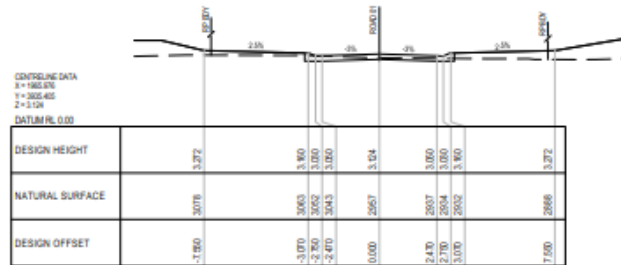
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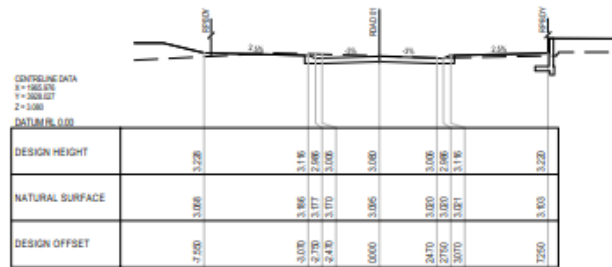
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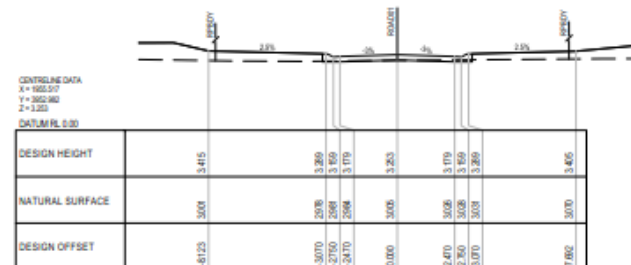
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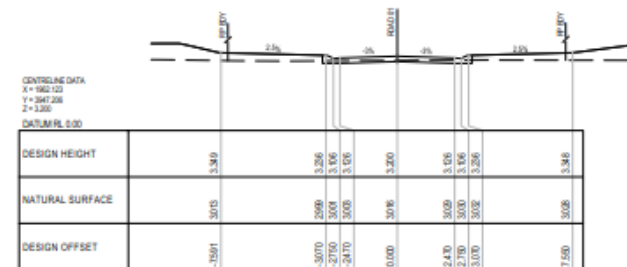
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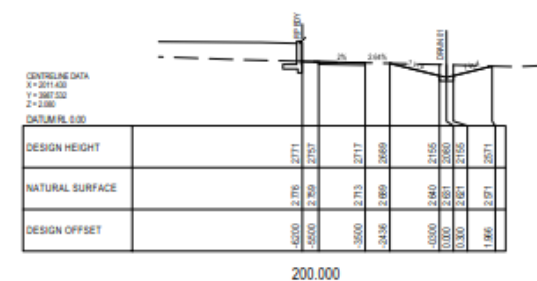
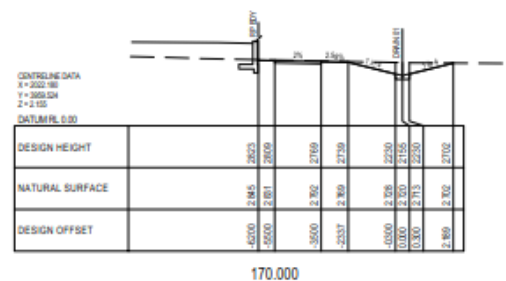
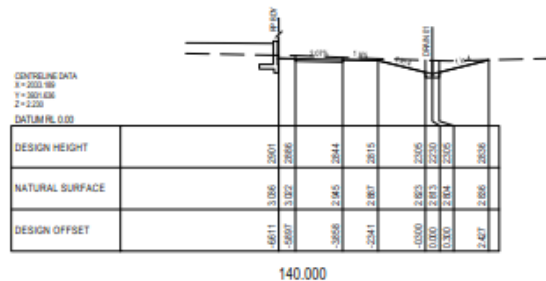
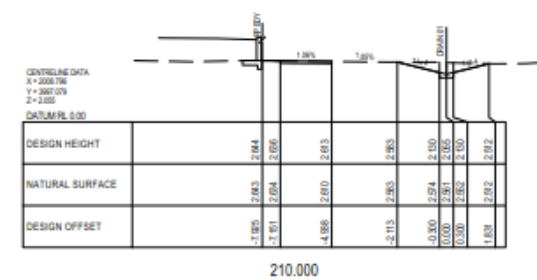
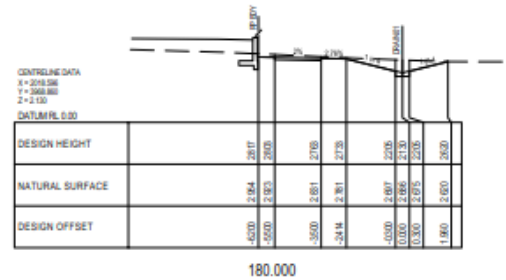
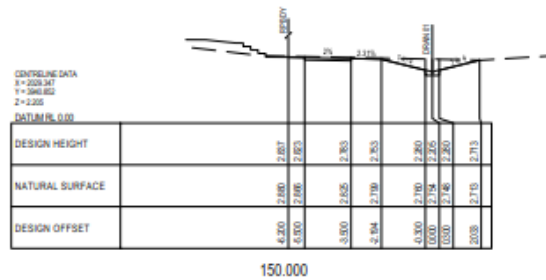
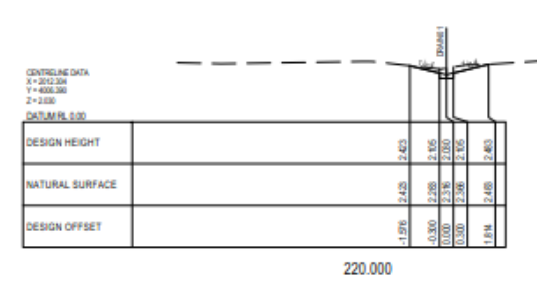
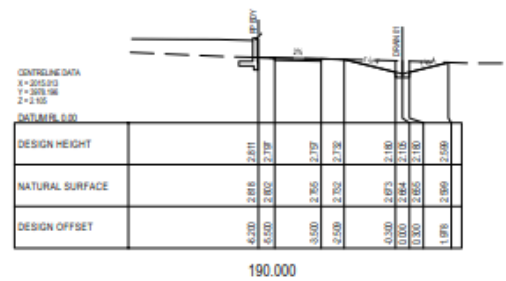
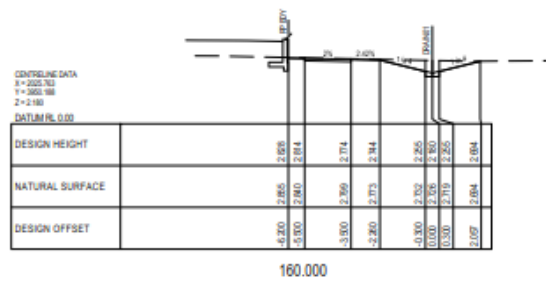


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Drawn	G. BROWNING	Designer	G. BROWNING																																																												
Drafting	G. APPLIN	Design	G. APPLIN																																																												
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Version	A1																																																														
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1	SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL	PM	GA	PF	03.03.20																																																										
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<p>1 SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL</p> <p>2 FOR APPROVAL</p>				<p>DATE</p> <p>30.03.20</p>	<p>DESIGNER</p> <p>GA</p>	<p>PROJECT</p> <p>PP</p>	<p>DATE</p> <p>30.03.20</p>
<p>Rev: 1</p>				<p>DATE</p> <p>30.03.20</p>	<p>DESIGNER</p> <p>GA</p>	<p>PROJECT</p> <p>PP</p>	<p>DATE</p> <p>30.03.20</p>

SCALE 1:100 AT ORIGINAL SIZE

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Drawn: G. BROWNING

Checked: G. APPLIN

Approved (Project Director): P. FLANNAGAN

Date: 05.03.20

Scale: 1:100

Client: **KPS PTY LTD**

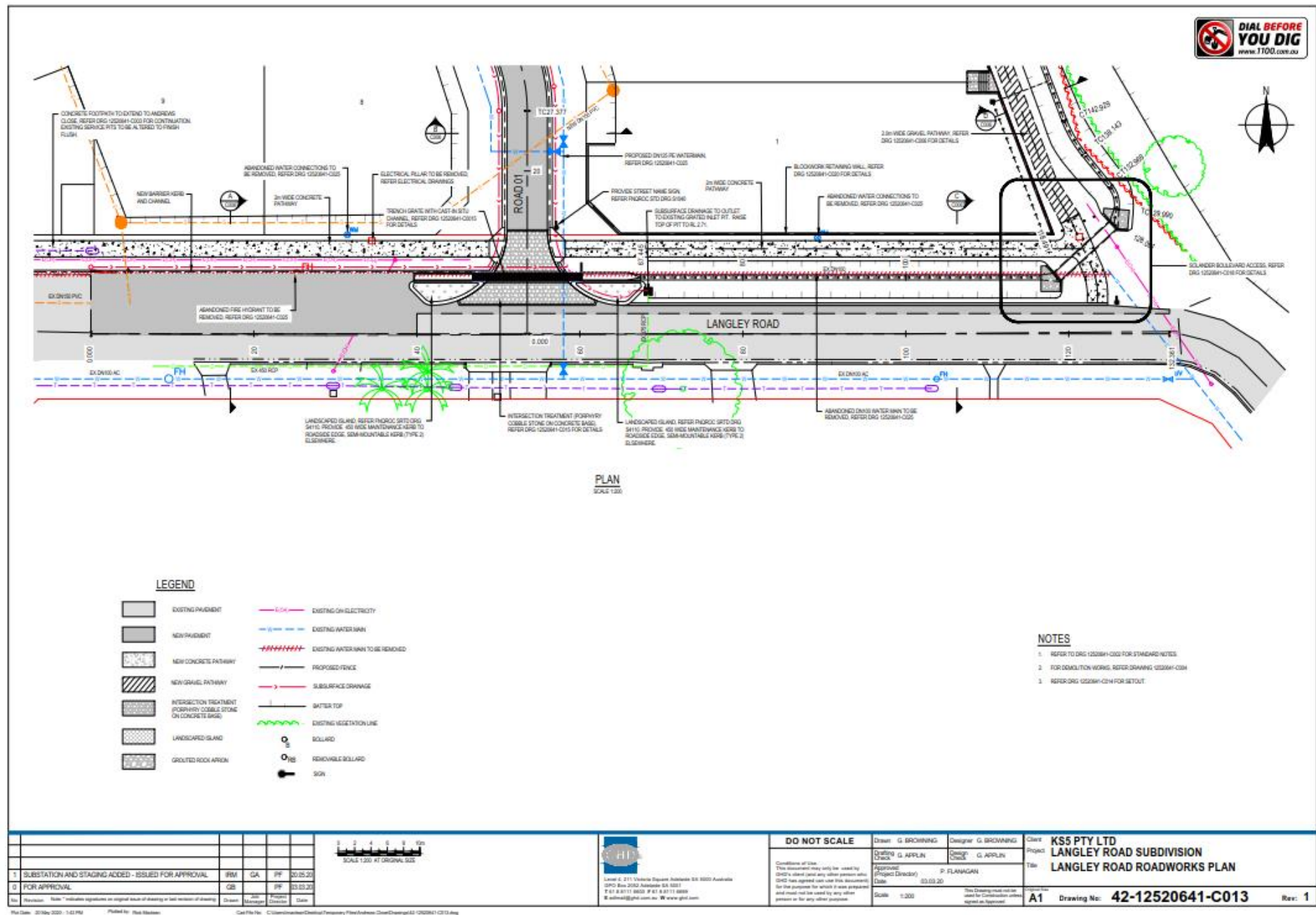
Project: **LANGLEY ROAD SUBDIVISION**

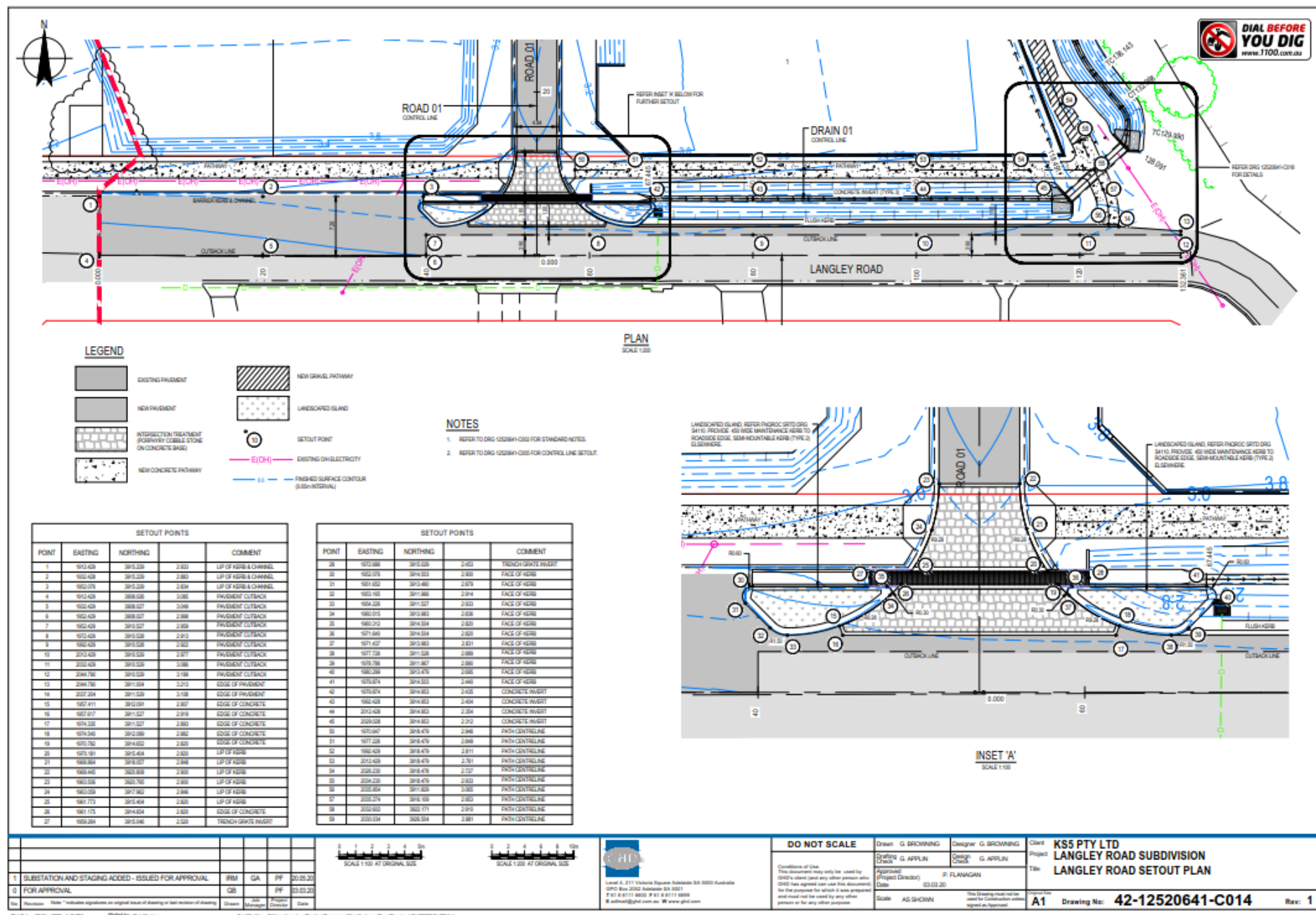
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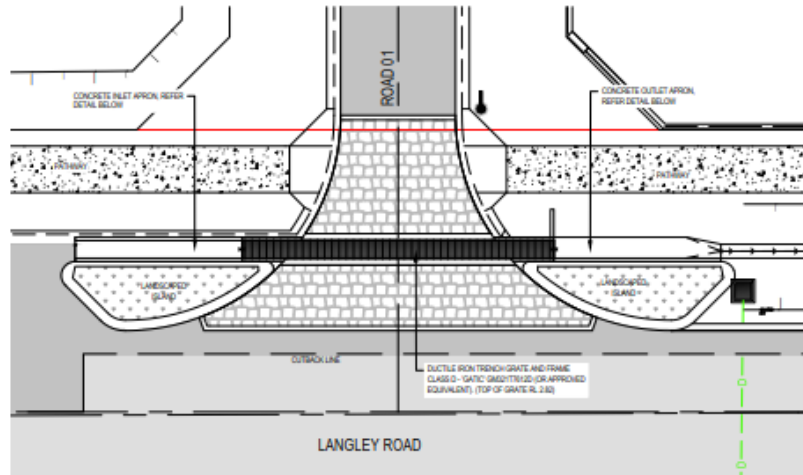
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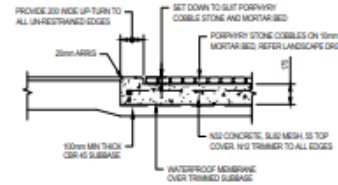
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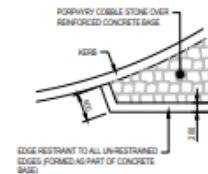




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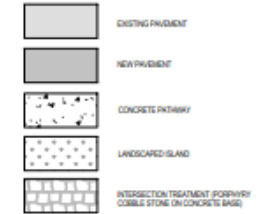


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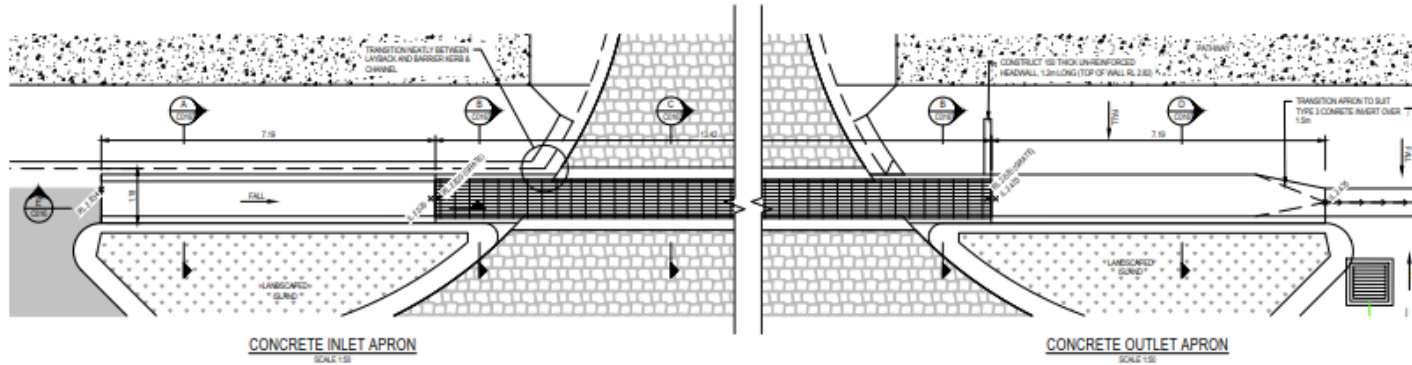
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LEGEND



NOTES

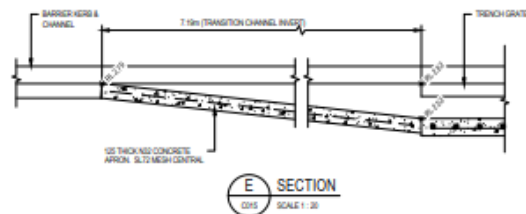
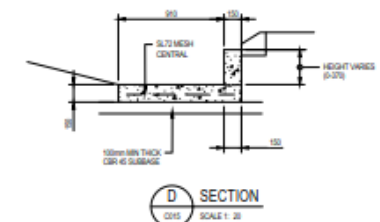
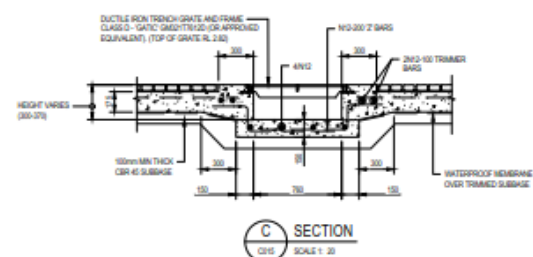
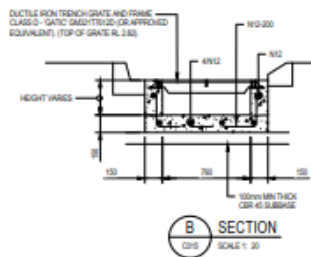
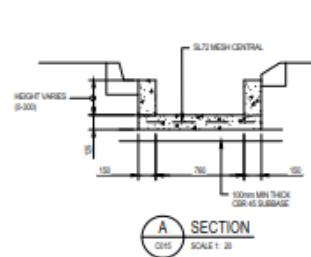
1. REFER TO DRG 12520641-C002 FOR STANDARD NOTES.
2. REFER TO DRG 12520641-C003 FOR SETOUT.



CONCRETE INLET APRON
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CONCRETE OUTLET APRON
SCALE 1:50

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<p>2. FOR APPROVAL</p>				GB	PF	23.03.20	
<p>3. Revision: Note: Indicate signature on original issue of drawing or last revision of drawing.</p>				Drawn	Check	Project Engineer	Date
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<p>30. Scale: 1:50 AT ORIGINAL SIZE</p>				<p>31. Scale: 1:20 AT ORIGINAL SIZE</p>			
<p>31. Scale: 1:50 AT ORIGINAL SIZE</p>				<p>32. Scale: 1:20 AT ORIGINAL SIZE</p>			
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NOTES

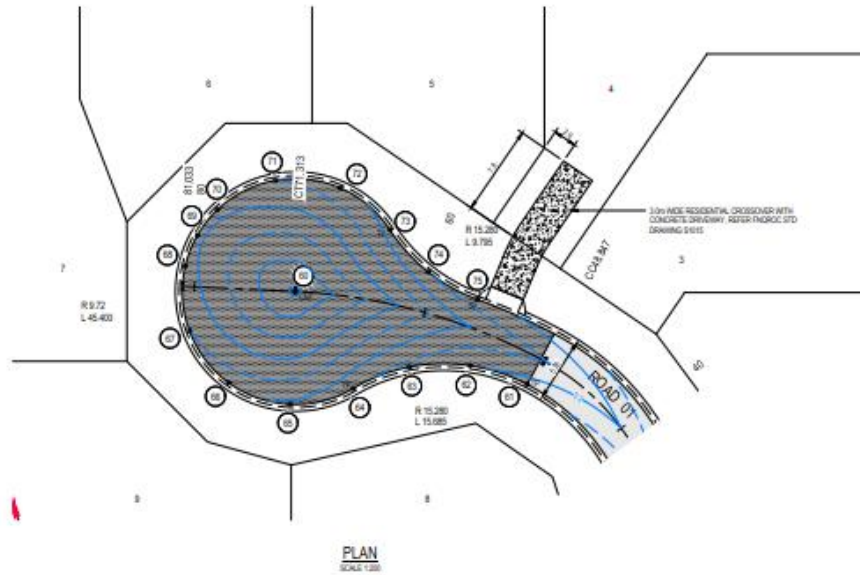
1. REFER TO DRG 12500000-C177 FOR STANDARD NOTES.
2. ALL CONCRETE TO BE 45 MPa (UNLESS NOTED OTHERWISE) IN ACCORDANCE WITH AS 1379 AND 4588.

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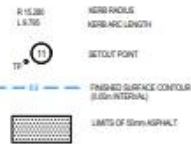
Plot Date: 20 May 2020 - 1:03 PM

Plotted by: Rick Madden

Calc File No: C:\Users\madden\Desktop\Temporary\Plan\Subdivisions_Civil\Drawings\42-12520641-C016.dwg



LEGEND



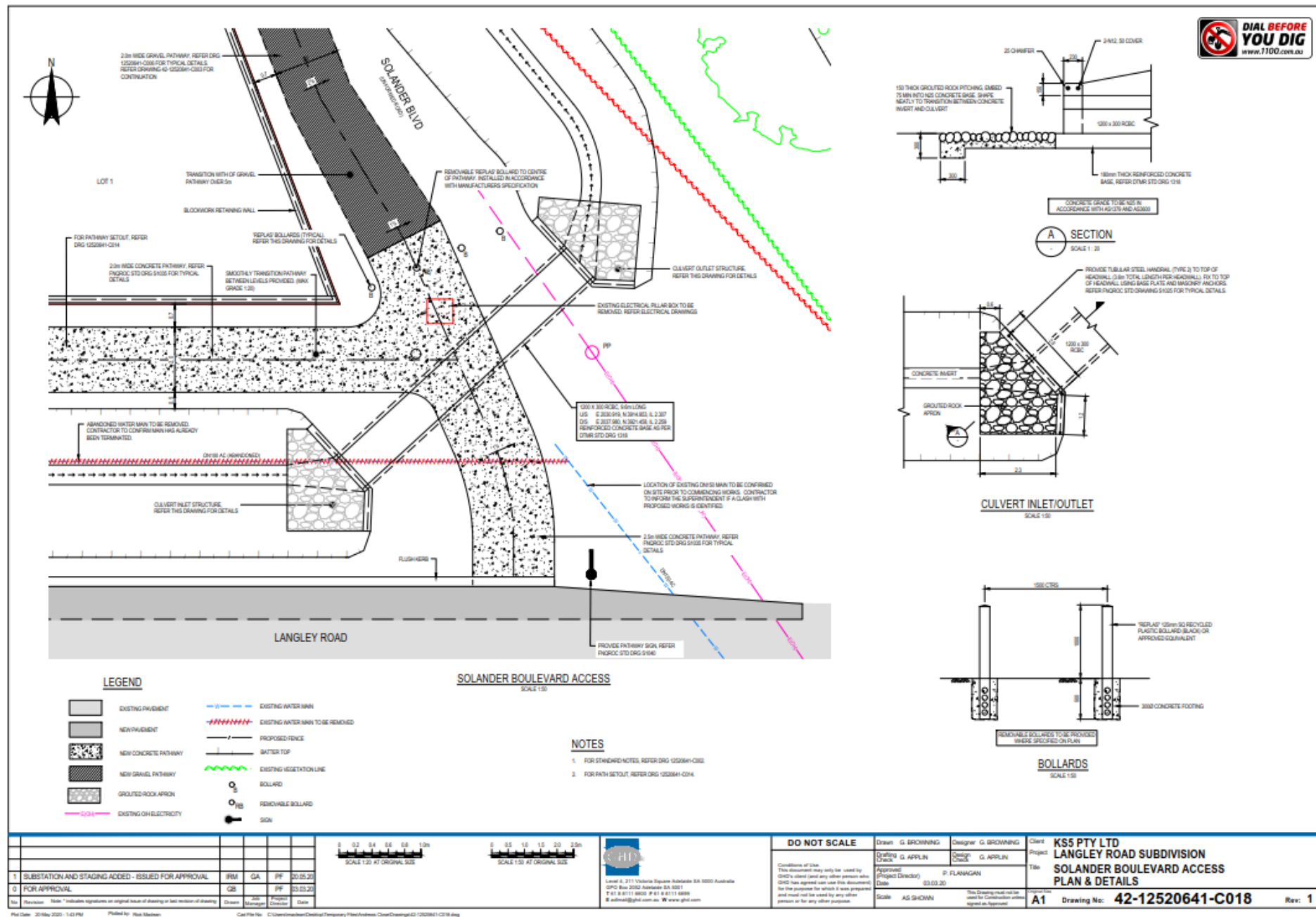
SETOUT POINTS

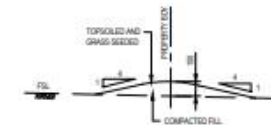
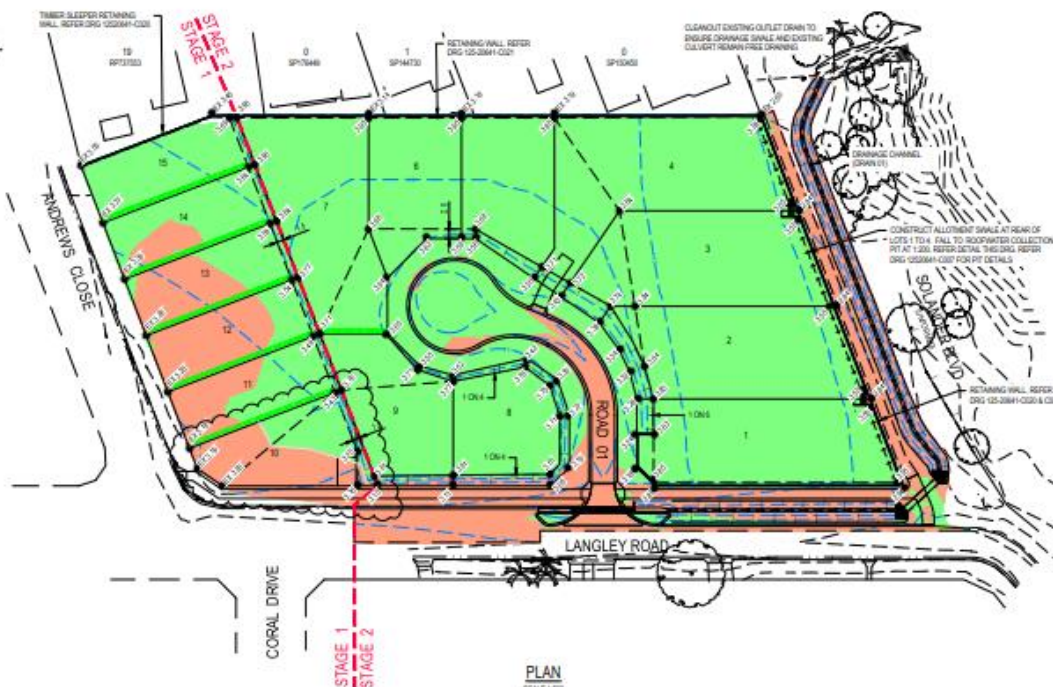
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61	1904.933	2658.875
62	1904.984	2658.857
63	1905.088	2658.806
64	1905.031	2658.626
65	1905.803	2649.271
66	1905.527	2651.133
67	1904.851	2655.594
68	1904.584	2661.175
69	1905.027	2663.810
70	1907.574	2668.033
71	1902.576	2668.033
72	1902.806	2667.806
73	1902.203	2668.262
74	1903.480	2668.888
75	1904.758	2658.207

NOTES

- FOR STANDARD NOTES, REFER DRG 12520641-C002.
- SETOUT SHOWN IS TO TOP OF KERB AND CHANNEL.

1. SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL		IRM	GA	PF	20.05.20
2. FOR APPROVAL		GB	PF	23.03.20	
Rev: Revision: Note: ** indicates revisions on original issue of drawing or last revision of drawing		Drawn	Checked	Project	Date
Plot Date: 20/05/2020 1:43 PM		Plotted by: Rick Madden		C:\Users\madden\OneDrive\Temporary Files\Drawings\Drawings\12520641-C017.dwg	
Scale: 1:200		DO NOT SCALE		Conditions of Use: This drawing may only be used by the client (and any other person who has agreed to use this drawing) for the purposes for which it was prepared and must not be used by any other person or for any other purpose.	
Drawn: G. BROWNING		Designer: G. BROWNING		Client: KS5 PTY LTD	
Checked: G. APPLIN		Design: G. APPLIN		Project: LANGLEY ROAD SUBDIVISION	
Approved (Project Director): P. FLANNAGAN		Date: 03.03.20		Title: ROAD 01 CUL-DE-SAC SETOUT PLAN	
Scale: 1:200		This drawing must not be used for construction unless agreed as approved		A1 Drawing No: 42-12520641-C017	
				Rev: 1	





PERIMETER BUND
NOT TO SCALE



ALLOTMENT SWALE
NOT TO SCALE

EARTHWORKS VOLUMES

CUT 673m³
FILL 5183m³

- VOLUMES SHOWN ARE MEASURED IN PLACE VOLUMES AND INCLUDING ALLOWANCE FOR BUILDING COMPACTION.
- 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.
- EARTHWORKS VOLUMES INCLUDE BORING OUT FOR ROAD PAVEMENTS, KERBS AND FOOTPATHS.

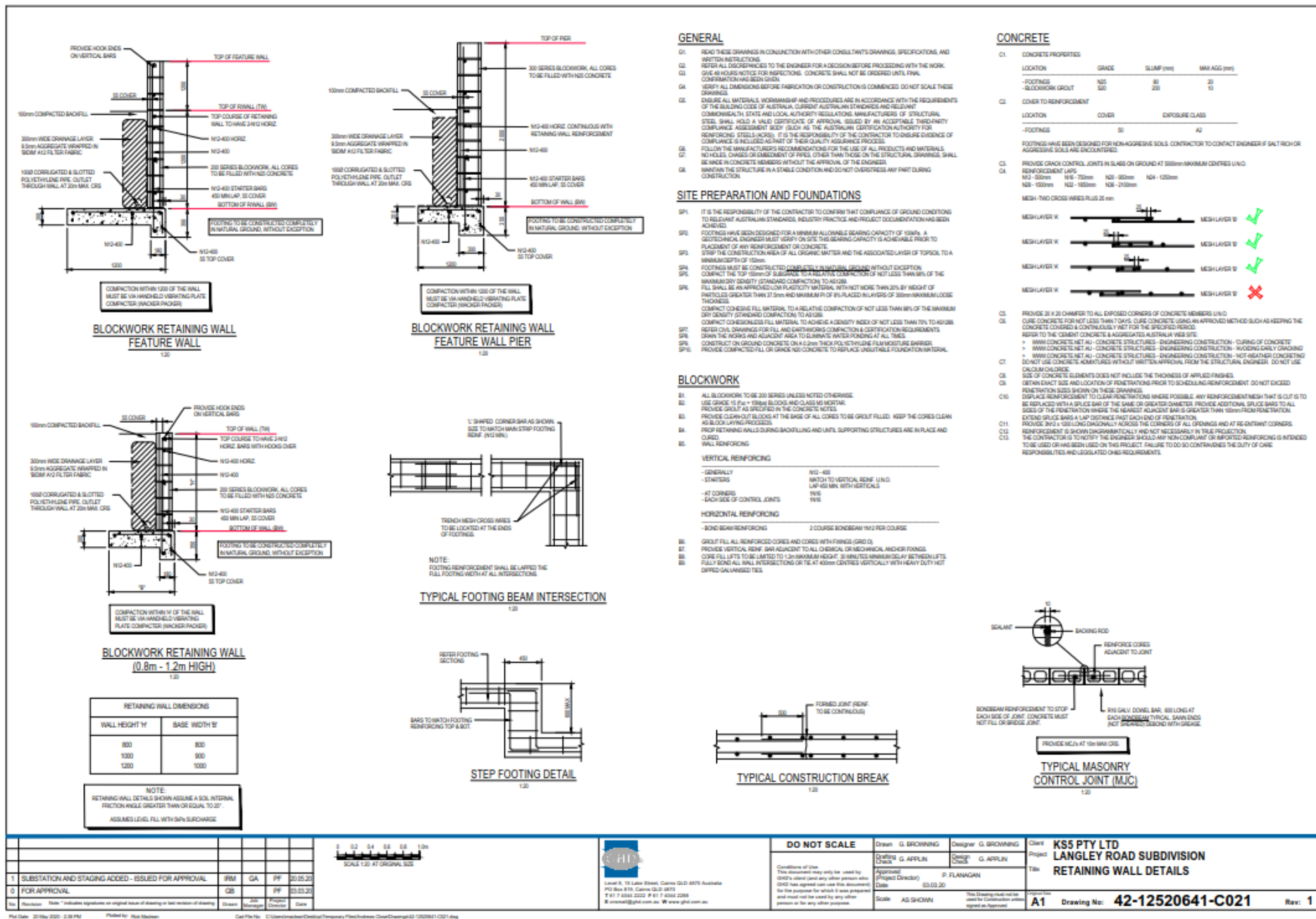
LEGEND

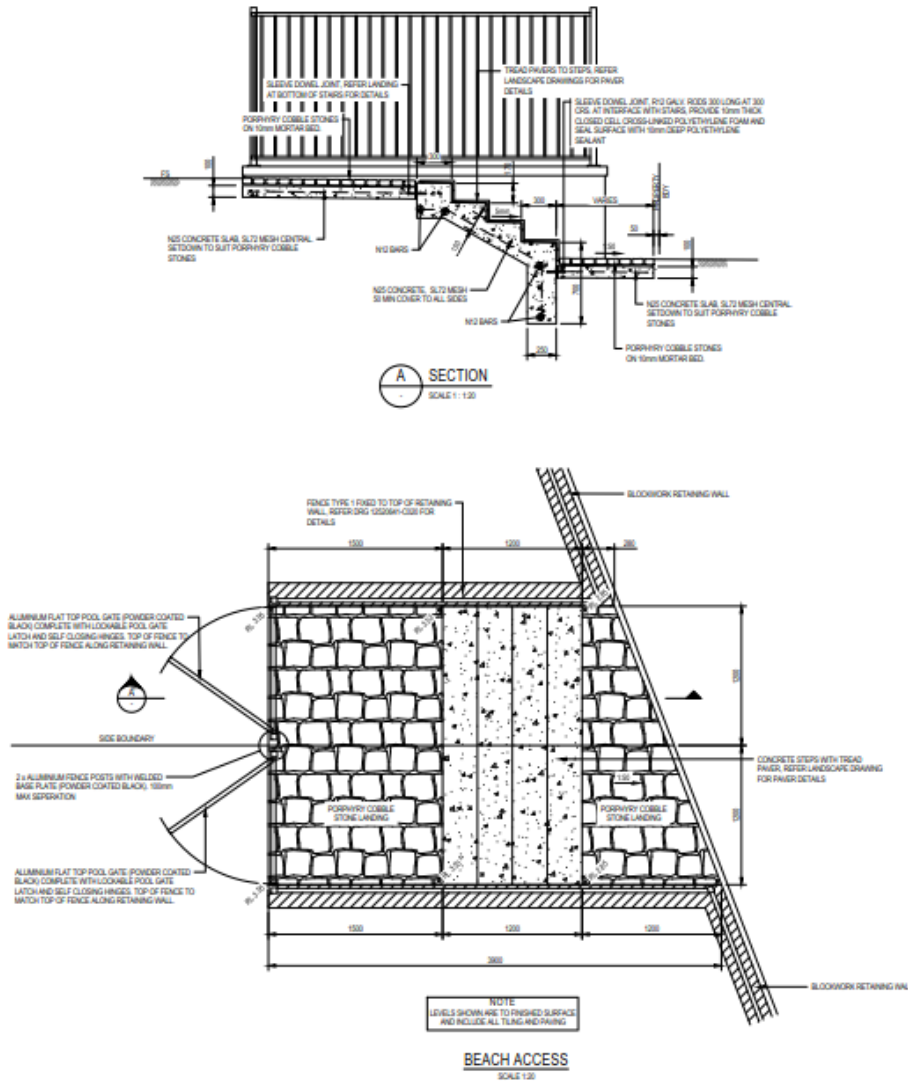
- EXISTING SURFACE CONTOUR (0.2m INTERVAL)
- FINISHED SURFACE CONTOUR (0.2m INTERVAL)
- FINISHED SURFACE LEVEL
- EXISTING SURFACE LEVEL
- PERIMETER BUND
- ALLOTMENT SWALE
- EARTHWORKS IN FILL
- EARTHWORKS IN CUT

NOTES

- REFER TO DRG 12520641-C002 FOR STANDARD NOTES.
- ALL BATTERS WITHIN ALLOTMENTS SHALL AS FOLLOWS UNLESS NOTED (75:40:25):
 - ROAD FRONTAGE 1:0N:1
 - SIDE BOUNDARY 1:0N:2
 - REAR BOUNDARY 1:0N:2

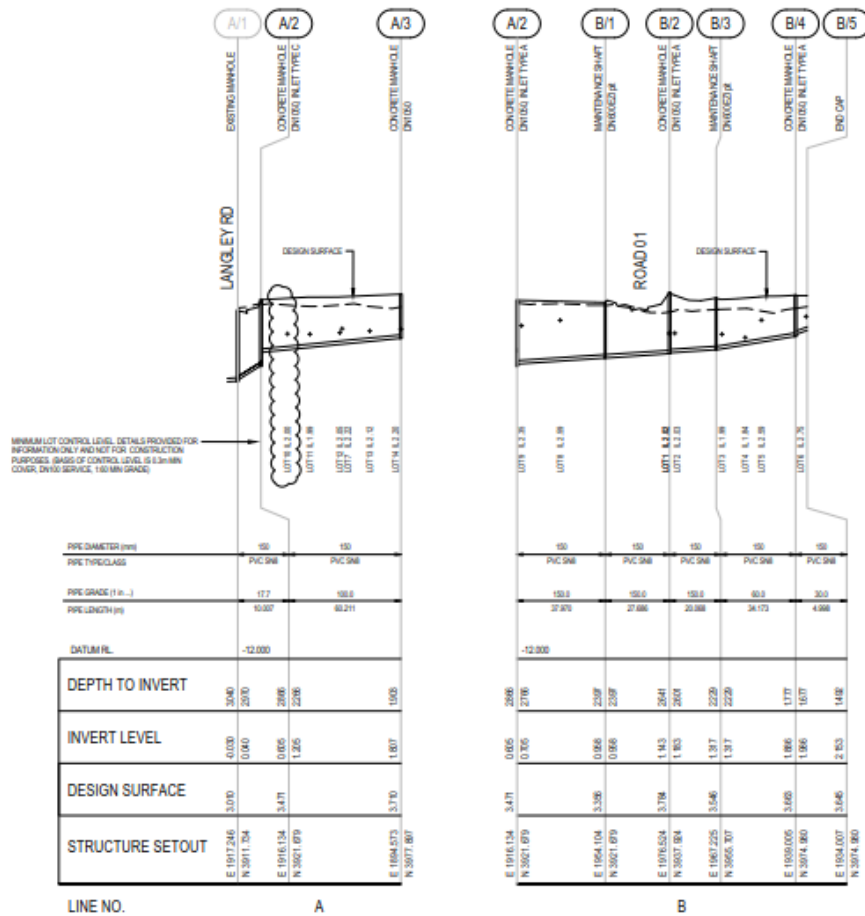
												DO NOT SCALE				Drawn: G. BROWNING Designer: G. BROWNING		Client: KSS PTY LTD							
																Project: LANGLEY ROAD SUBDIVISION									
																Title: EARTHWORKS PLAN									
1 SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL				PM		GA		PF		20.05.20		Approve: P. FLAVAGAN (Project Director)				Date: 03.03.20									
2 FOR APPROVAL				GS		PF		20.05.20		Conditions of Use: This document may only be used by GHD, its client (and any other person who GHD has agreed not to use this document). It is the property of GHD and is not to be used, copied or reproduced in any form without the prior written consent of GHD. It is to be used for the purposes for which it was prepared and must not be used for any other purpose or for any other person.				Scale: AS SHOWN				This Drawing must not be used for any other purpose or for any other person or for any other purpose.		Issue No: A1		Drawing No: 42-12520641-C019		Rev: 1	
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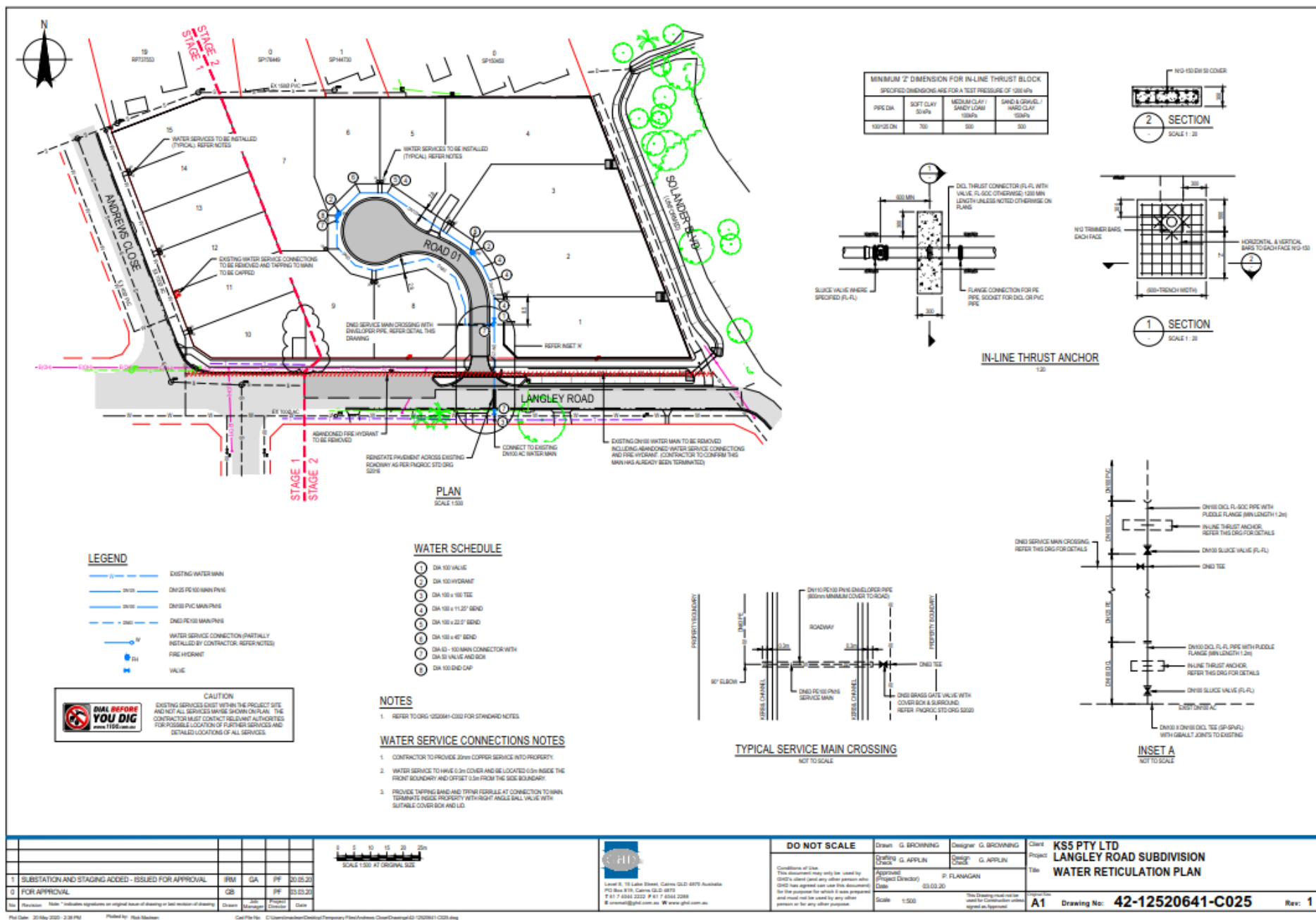


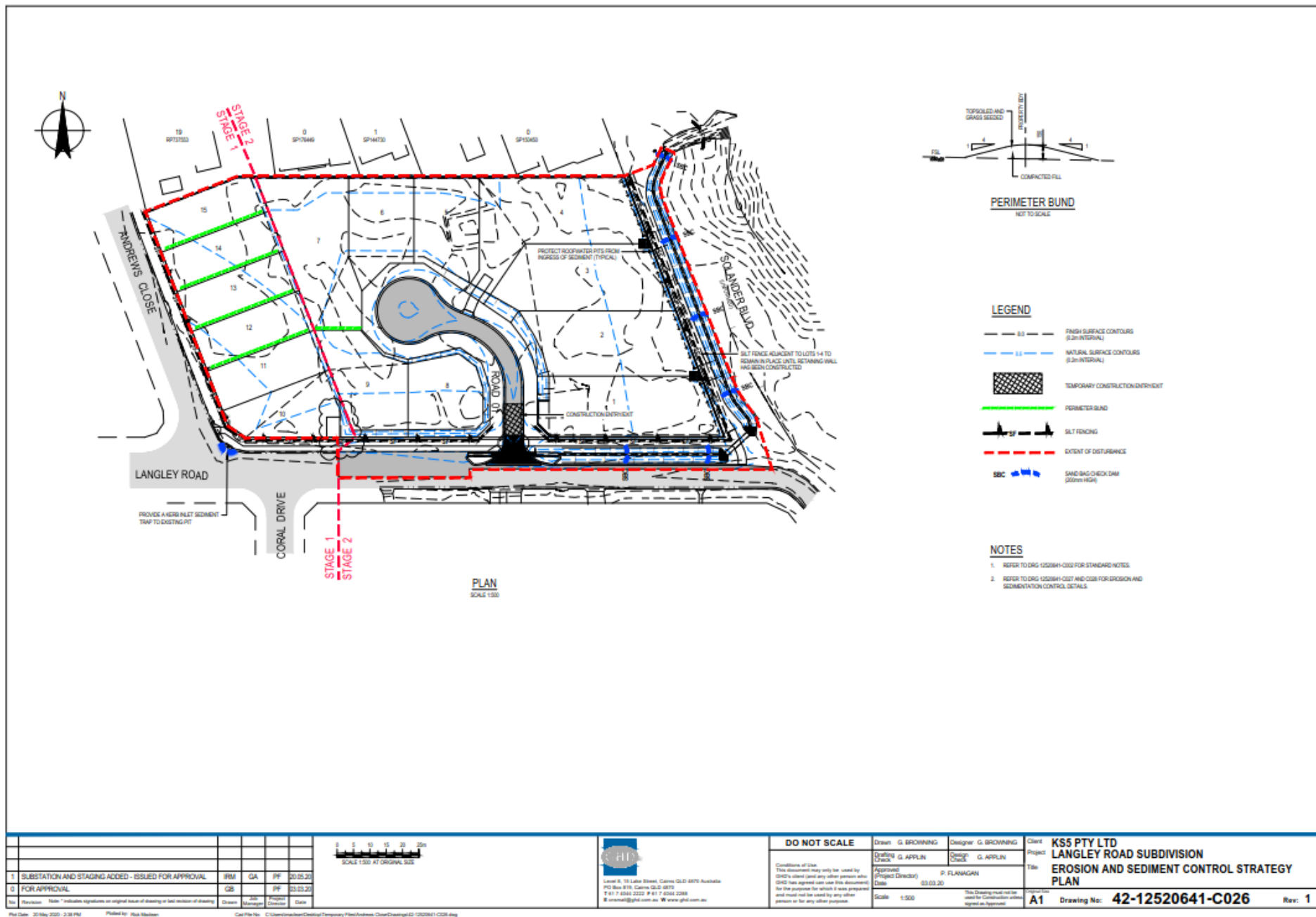
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								Conditions of Use: This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purposes for which it was prepared and must not be used by any other person or for any other purpose.				Drafting: G. APPLIN Design: G. APPLIN		Project: LANGLEY ROAD SUBDIVISION	
								Approved (Project Director): P. FLANNAGAN Date: 05.03.20				Scale: AS SHOWN		Title: BEACH ACCESS STAIRS	
								This drawing must not be used for construction unless agreed as approved.				Revision: A1		Drawing No: 42-12520641-C022	
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										Level 6, 271 Victoria Square Adelaide SA 5000 Australia GPO Box 2022 Adelaide SA 5001 P 61 8 7411 8888 F 61 8 7411 8889 E adelaide@ghd.com.au W www.ghd.com				Conditions of Use: This document may only be used by GHD's client (and any other person who GHD has agreed, in writing, to use this document) for the purposes for which it was prepared and must not be used by any other person or for any other purpose.		Scale: 1:500 H / 1:50 V This Drawing must not be used for Construction unless agreed as approved.		Rev: 1					
1. SUBSTATION AND STAGING ADDED - ISSUED FOR APPROVAL										IFM	GA	PP	20.05.20										
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Rev: Revision: Note: * indicates alterations or original issue of drawing or last revision of drawing										Drawn	Checked	Project Director	Date										
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SEDIMENT FENCE

MATERIAL

POLYPROPYLENE, POLYMER, NYLON, POLYESTER, OR POLYETHYLENE WOVEN OR NON-WOVEN FABRIC, AT LEAST 150mm IN WIDTH AND A MINIMUM TENSILE STRENGTH OF 1000N/m. ALL FABRICS TO CONTAIN TRAVELTIGHT HITCHES AND STAPLES TO PROVIDE A MINIMUM OF 6 MONTHS OF USABLE CONSTRUCTION LIFE (A TRAVELTIGHT STABILITY EXCEEDING 70%).

CONSTRUCTION

WIRE OR STEEL WESH MINIMUM 14-GAUGE WITH A MAXIMUM MESH SPACING OF 200mm.

INSTALLATION

1. 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.

2. TO THE MAXIMUM DEGREE PRACTICAL, AND WHERE THE PLANS ALLOW, ENSURE THE FENCE IS LOCATED:

1. TOTALLY WITHIN THE PROPERTY BOUNDARIES.

2. ALONG A LINE OF CONSTANT ELEVATION WHEREVER PRACTICAL.

3. AT LEAST 2m FROM THE TOE OF ANY FILLING OPERATIONS THAT MAY RESULT IN SHIFTING SOILS, DAMAGING THE FENCE.

4. ENSURE THE EXTREME ENDS OF THE FENCE ARE TURNED UP THE SLOPE AT LEAST 1.5m, OR AS NECESSARY, TO MINIMISE WATER SPRINGING AROUND THE FENCE.

5. 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 ENDS OF THE FENCE.

6. IF THE SEDIMENT FENCE IS TO BE INSTALLED ALONG THE EDGE OF EXISTING TREES, ENSURE CARE IS TAKEN TO PROTECT THE TREES AND THEIR ROOT SYSTEMS DURING INSTALLATION OF THE FENCE. DO NOT ATTACH THE FABRIC TO THE TREES.

7. 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.

8. 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 WIRE HIGH BACKING, OTHERWISE NO GREATER THAN 2m.

9. 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.

10. WHEREVER POSSIBLE, CONSTRUCT THE SEDIMENT FENCE FROM A CONTINUOUS ROLL OF FABRIC. TO JOIN FABRIC, EITHER:

1. 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

2. OVERLAP THE FABRIC TO THE NEXT ADJACENT SUPPORT POST.

11. SECURELY ATTACH THE FABRIC TO THE SUPPORT POSTS USING 25 X 125mm STAPLES, OR THE WIRE AT MAXIMUM 150mm SPACING.

12. SECURELY ATTACH THE FABRIC TO THE SUPPORT WIRE/MESH (IF ANY) AT A MAXIMUM SPACING OF 1m.

13. ENSURE THE COMPLETED SEDIMENT FENCE IS AT LEAST 400mm, BUT NOT MORE THAN 1000mm HIGH. IF A SPILL-THROUGH WEIR IS INSTALLED, ENSURE THE CREST OF THE WEIR IS AT LEAST 300mm ABOVE GROUND LEVEL.

14. BACKFILL THE TRENCH AND TAMP THE FILL TO FORM A MINIMUM 100mm HIGH FLOW CONTROL BERM AROUND THE PERIMETER OF THE FENCE. ENSURE THE BERM IS AT LEAST 100mm HIGH AND IS AT LEAST 100mm WIDE.

15. PREVENT WATER FROM FLOWING UNDER THE FENCE.

16. WHEREVER POSSIBLE, CONSTRUCT THE SEDIMENT FENCE FROM A CONTINUOUS ROLL OF FABRIC. TO JOIN FABRIC, EITHER:

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21. PREVENT WATER FROM FLOWING UNDER THE FENCE.

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27. PREVENT WATER FROM FLOWING UNDER THE FENCE.

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35. SECURELY ATTACH THE FABRIC TO THE SUPPORT POSTS USING 25 X 125mm STAPLES, OR THE WIRE AT MAXIMUM 150mm SPACING.

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41. SECURELY ATTACH THE FABRIC TO THE SUPPORT POSTS USING 25 X 125mm STAPLES, OR THE WIRE AT MAXIMUM 150mm SPACING.

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45. PREVENT WATER FROM FLOWING UNDER THE FENCE.

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2. OVERLAP THE FABRIC TO THE NEXT ADJACENT SUPPORT POST.

47. SECURELY ATTACH THE FABRIC TO THE SUPPORT POSTS USING 25 X 125mm STAPLES, OR THE WIRE AT MAXIMUM 150mm SPACING.

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51. PREVENT WATER FROM FLOWING UNDER THE FENCE.

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57. PREVENT WATER FROM FLOWING UNDER THE FENCE.

58. WHEREVER POSSIBLE, CONSTRUCT THE SEDIMENT FENCE FROM A CONTINUOUS ROLL OF FABRIC. TO JOIN FABRIC, EITHER:

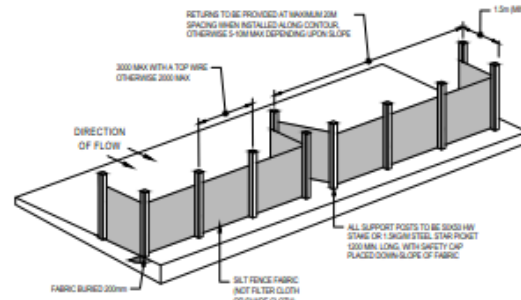
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2. OVERLAP THE FABRIC TO THE NEXT ADJACENT SUPPORT POST.

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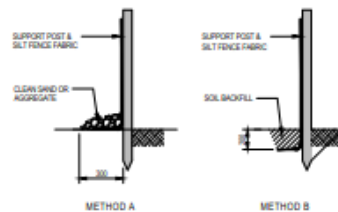
60. SECURELY ATTACH THE FABRIC TO THE SUPPORT WIRE/MESH (IF ANY) AT A MAXIMUM SPACING OF 1m.

61. ENSURE THE COMPLETED SEDIMENT FENCE IS AT LEAST 400mm, BUT NOT MORE THAN 1000mm HIGH. IF A SPILL-THROUGH WEIR IS INSTALLED, ENSURE THE CREST OF THE WEIR IS AT LEAST 300mm ABOVE GROUND LEVEL.



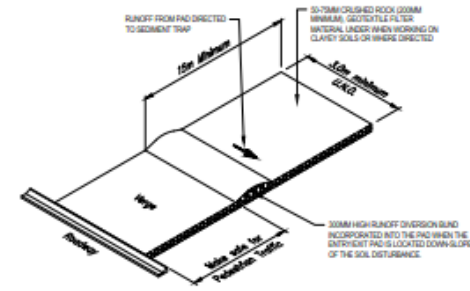
SEDIMENT FENCE

NOT TO SCALE



ANCHORING BASE OF FABRIC

NOT TO SCALE



TEMPORARY CONSTRUCTION ENTRY / EXIT

NOT TO SCALE

TEMPORARY CONSTRUCTION ENTRY / EXIT

MATERIAL

ROCK

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

FOOTPATH STABILISING AGGREGATE

AS TO SOFT SPREAD, OR EQUIVALENT.

PERMEABLE FABRIC

HEAVY DUTY, TRIPLEX-PUNCHES, NON-WOVEN FILTER CLOTH (BODM 400 OR EQUIVALENT).

INSTALLATION

1. 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.

2. CLEAR THE LOCATION OF THE ROCK PAD, REMOVING STUMPS, ROOTS AND OTHER VEGETATION TO PROVIDE A FIRM FOUNDATION SO THAT THE ROCK IS NOT PRESTRESSED INTO SOFT GROUND. CLEAR SURFACING WORTH TO ALLOW PASSAGE OF LARGE VEHICLES, BUT CLEAR ONLY THAT NECESSARY FOR THE EXIT. DO NOT CLEAR ADJACENT AREAS UNTIL THE REQUIRED EROSION AND SEDIMENT CONTROL DEVICES ARE IN PLACE.

3. IF THE EXPOSED SOIL IS SOFT, PLASTIC OR CLAYEY, PLACE A SUB-LAYER OF CRUSHED ROCK OR A LAYER OF HEAVY DUTY FILTER CLOTH TO PROVIDE A FIRM FOUNDATION.

4. PLACE THE ROCK PAD FORMING A MINIMUM 200mm THICK LAYER OF CLEAN, OPEN-VOID ROCK.

5. 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 BERM AROUND THE ROCK PAD TO DIVERT RUNOFF TO A SUITABLE SEDIMENT TRAP.

6. THE LENGTH OF THE ROCK PAD SHOULD BE AT LEAST 10m WHERE PRACTICABLE, 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.

7. PLACE THE END OF THE ROCK PAD WHERE IT MEETS THE PAVEMENT SO THAT THE WHEELS OF TURNING VEHICLES DO NOT TRAVEL OVER UNPROTECTED SOIL.

8. IF THE FOOTPATH IS OPEN TO PREDESTINATION MOVEMENT, THE COVER THE COARSE ROCK WITH FINE AGGREGATE OR GRASS, OR OTHERWISE TAKE WHATEVER MEASURES ARE NEEDED TO MAKE THE AREA SAFE.

MAINTENANCE

9. INSPECT ALL SITE ENTRY AND EXIT POINTS PRIOR TO FORECAST RAIN, DAILY DURING EXTENDED PERIODS OF RAINFALL, AFTER RAINFALL PRODUCING RAINFALL, OR OTHERWISE AT FOURTEEN-DAY INTERVALS.

10. 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.

11. 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.

12. WHEN THE VICES BETWEEN THE ROCK PAD AND THE ADJACENT SEALED ROADWAY ARE MAINTAINED, THE ROCK PAD IS REDUCED TO A POINT WHERE SEDIMENT IS BEING TRACKED OFF THE SITE. A NEW 100mm LAYER OF ROCK MUST BE ADDED AND/OR THE ROCK PAD MUST BE EXTENDED.

13. ENSURE ANY ASSOCIATED EROSION CONTROL MEASURES (e.g. FLOW CONTROL BERM) ARE MAINTAINED IN ACCORDANCE WITH THEIR DESIGNED OPERATIONAL CONDITIONS.

14. DISPOSE OF SEDIMENT AND GRASS IN A MANNER THAT WILL NOT CREATE AN EROSION OR POLLUTION HAZARD.

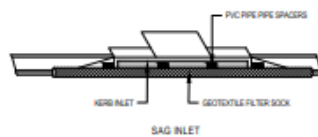
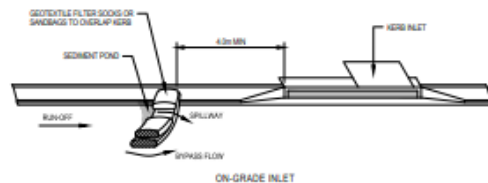
REMOVAL

15. THE ROCK PAD SHOULD BE REMOVED ONLY AFTER IT IS NO LONGER NEEDED AS A SEDIMENT TRAP.

16. REMOVE MATERIALS AND COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

17. RE-GRASS AND STABILISE THE DISTURBED GROUND AS NECESSARY TO MINIMISE THE EROSION HAZARD.

								DO NOT SCALE		Drawn: G. BROWNING Designer: G. BROWNING		Client: KS5 PTY LTD Project: LANGLEY ROAD SUBDIVISION	
						Level 2, 211 Victoria Square Adelaide SA 5000 Australia GPO Box 2002 Adelaide SA 5001 T 81 8 8111 8888 F 81 8 8111 8889 e info@ks5.com.au W www.ks5.com		Conditions of Use: This document may only be used by KS5 Pty Ltd (and any other person who KS5 Pty Ltd agrees can use this document) for the purposes for which it was prepared and must not be used by any other person or for any other purpose.		Drafting: G. APPLIN Design: G. APPLIN		Title: EROSION AND SEDIMENT CONTROL STRATEGY DETAILS SHEET 1 OF 2	
1 SUBSTANTIATION AND STAGING ADDED - ISSUED FOR APPROVAL						IRM GA PP 20.05.20				Approved (Project Director): P. FLANNAGAN Date: 03.03.20			
0 FOR APPROVAL						GB PP 20.05.20				Scale: AS SHOWN		Revision: A1 Drawing No: 42-12520641-C027 Rev: 1	
Rev: Revision: Note: " " indicates signatures on original issue of drawing or last revision of drawing						Drawn: Job Manager: Project Director: 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 CRUSH (BULK) COMPOSITE MATERIAL (AGASS) COARSE SAND OR CLEAN AGGREGATE.

INSTALLATION

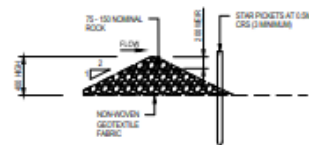
- REFER TO APPROVED PLANS FOR THE LOCATION AND INSTALLATION DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS OR METHOD OF INSTALLATION CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.
- ENSURE THE SOCKS ARE PLACED INDIVIDUALLY OR COLLECTIVELY (AS A SINGLE SEDIMENT TRAP) SUCH THAT:
 - LEAKAGE AROUND OR UNDER THE SOCKS IS MINIMISED;
 - ADJOINING SOCKS ARE TIGHTLY BUTTED OR OVERLAPPED AT LEAST 45mm;
 - THE SURFACE AREA OF POTENTIAL WATER PONDING OR SLOPE 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 DOWNSLOPE END OF THE SEDIMENT TRAP.
- WHEN PLACED ACROSS THE INVERT OF MANHOLE DRAIN, ENSURE THE SOCKS ARE PLACED SUCH THAT:
 - THE CREST OF THE DOWNSLOPE SOCK IS LEVEL WITH THE CHANNEL INVERT AT THE MANHOLE;
 - 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 OTHER END OF THE SOCK.
- IF SOCKS ARE REQUIRED TO ANCHOR THE SOCKS, THEIR SPACING DOES NOT EXCEED 1.2m OR SIX TIMES THE SOCK DIAMETER (WHICHEVER IS THE LESSER). A MAXIMUM STAKE SPACING OF 0.3m APPLIES WHEN USED TO FORM CHECK DAMS.

MAINTENANCE

- INSPECT ALL FILTER SOCKS PRIOR TO FORECAST DRAIN DURING EXTENDED PERIODS OF RAINFALL AFTER SIGNIFICANT RUNOFF PRODUCING STORMS OR OTHERWISE AT WEEKLY 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 MATERIAL 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-REALLY 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, NEEDLE-PUNCHES, NON-WOVEN FILTER CLOTH (BOM ASH 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.
- PRIOR TO 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.
- WHERE SPECIFIED, THE FILTER DAM SHALL BE CONSTRUCTED ON A SHEET OF GEOTEXTILE FABRIC USED AS A DOWNSLOPE SPLASH PAD.

MAINTENANCE

- INSPECT EACH FILTER DAM AND THE DRAINAGE CHANNEL AT LEAST WEEKLY 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 DAMS AND ASSOCIATED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

Rev	Revised	Note	Issued	By	Check	Approved	Date
1		SUBSTANTIATION AND STAGING ADDED - ISSUED FOR APPROVAL	IFM	GA	PP		20.05.20
0		FOR APPROVAL	GB	PP	PP		23.03.20

Plot Date: 20 May 2020 2:38 PM Printed By: Rick Madden Case File No: C:\Users\madden\OneDrive\Temporary Files\Drawings - Client\Drawings\42-12520641-C028.dwg



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Drawn	G. BROWNING	Designer	G. BROWNING
Checked	G. APPLIN	Design	G. APPLIN
Approved	(Project Director)	Scale	AS SHOWN
Date	05.03.20		

Client	KS5 PTY LTD
Project	LANGLEY ROAD SUBDIVISION
Title	EROSION AND SEDIMENT CONTROL STRATEGY
	DETAILS SHEET 2 OF 2
Revision	
A1	Drawing No: 42-12520641-C028
Rev: 1	

LANDSCAPE DESIGN

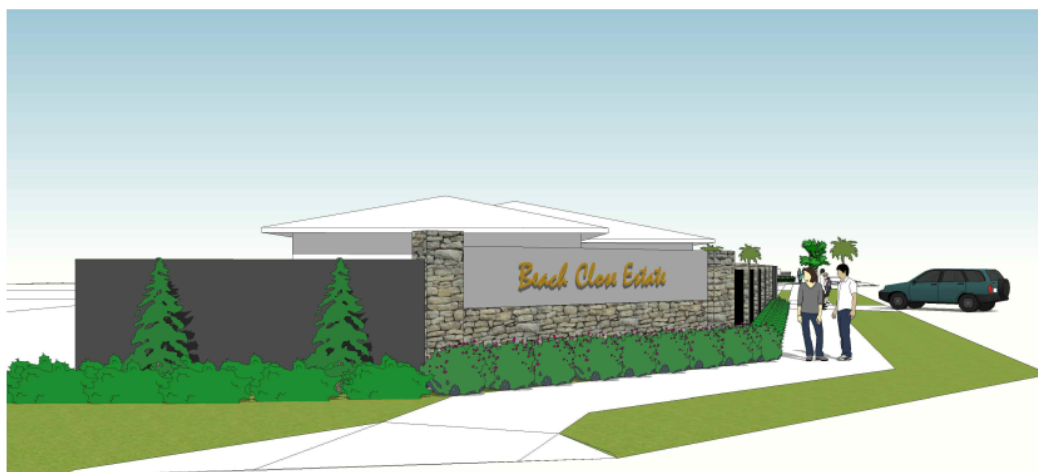
LANGLEY RD SUBDIVISION - STAGE 1

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

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

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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.

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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.

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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	23.05.2020	FOR APPROVAL	JMC



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Client:

SEYMOUR GROUP

PROJECT TITLE:

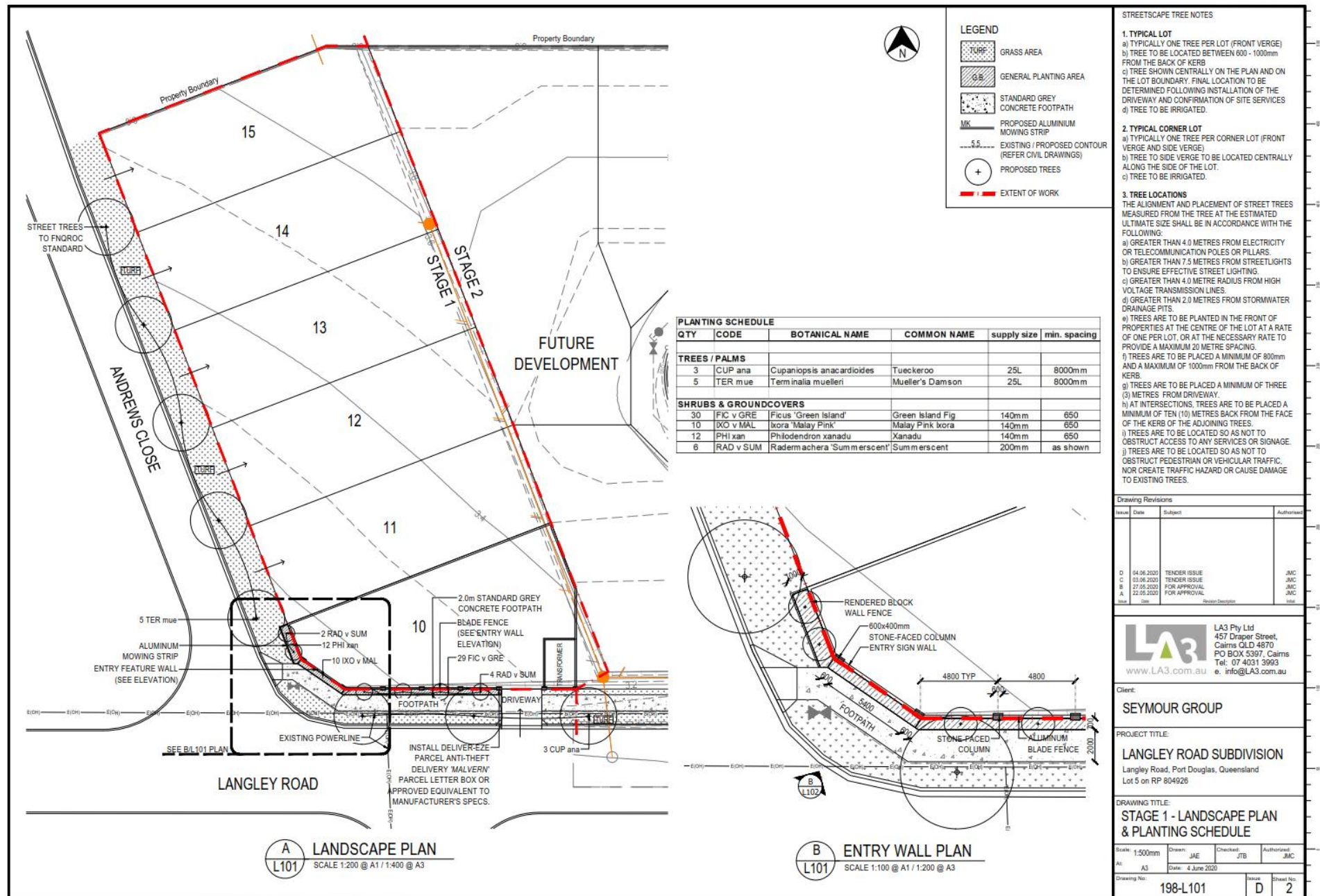
LANGLEY ROAD SUBDIVISION

Langley Road, Port Douglas, Queensland
Lot 5 on RP 804926

DRAWING TITLE:

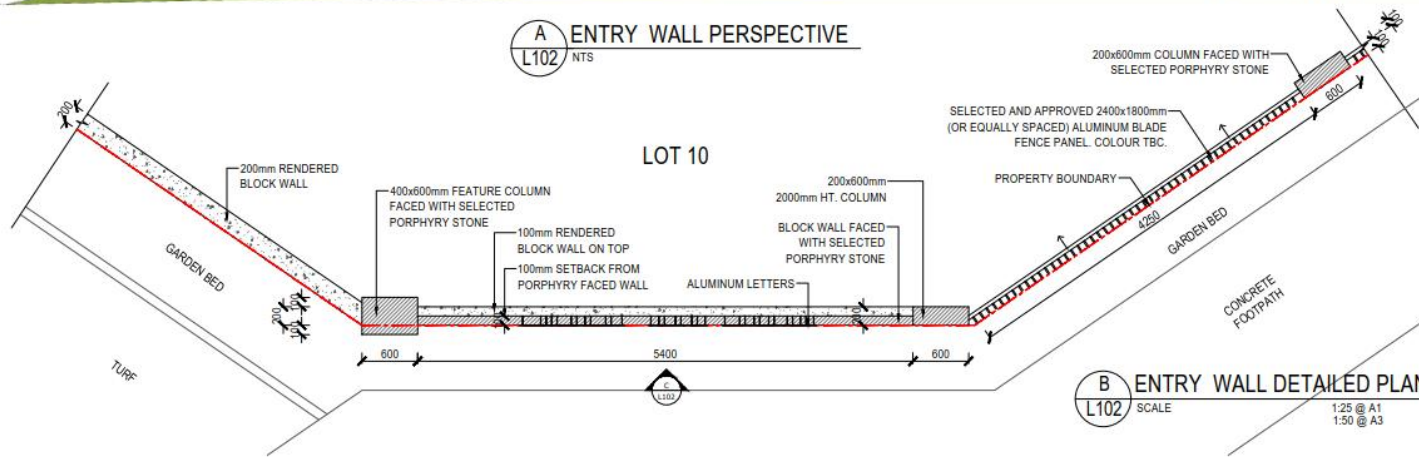
STAGE 1 - COVER PAGE

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At:	A3	Date:	4 June 2020				
Drawing No:	198-L100	Issue:	D	Sheet No:	1		

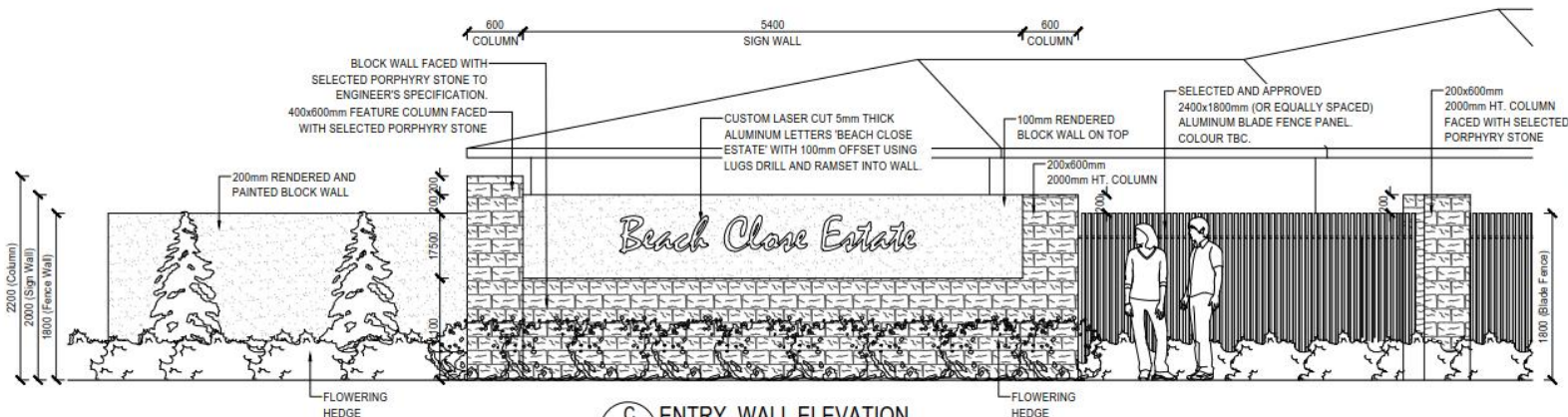




A ENTRY WALL PERSPECTIVE
L102 NTS



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

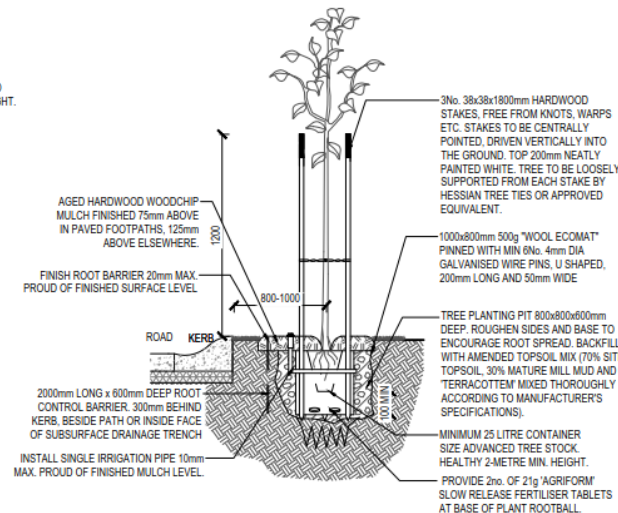
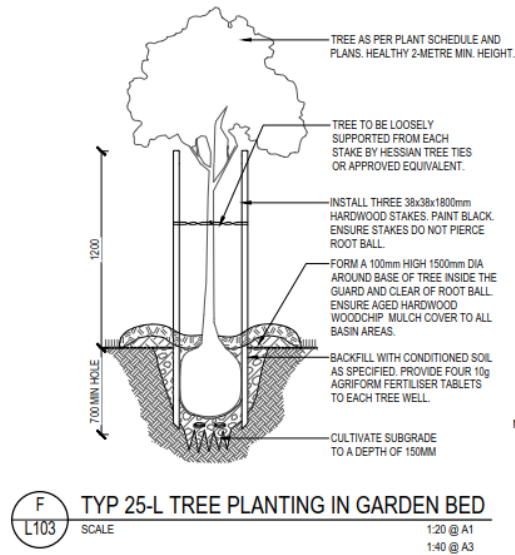
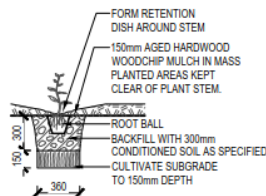
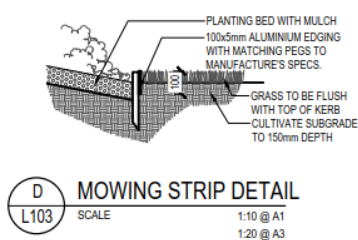
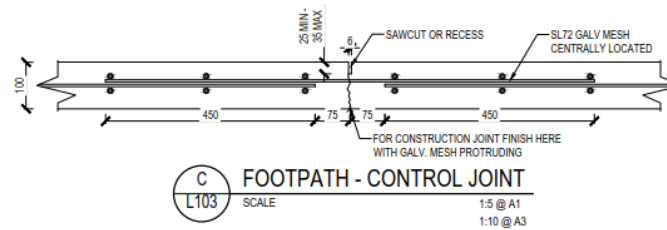
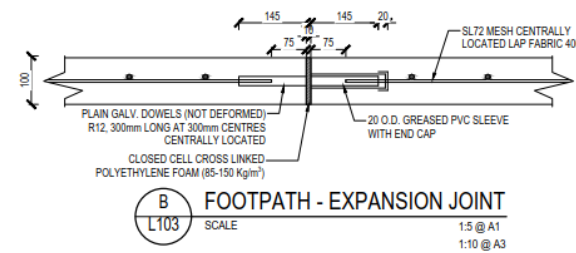
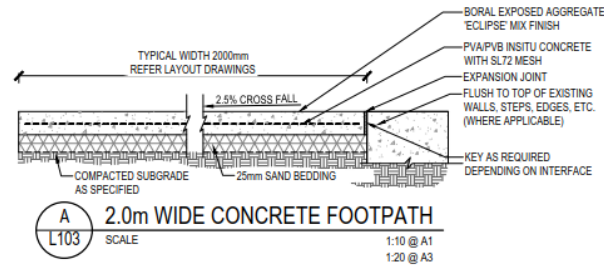


C ENTRY WALL ELEVATION
L102 SCALE 1:25 @ A1 1:50 @ A3

Drawing Revisions			
Issue	Date	Subject	Authorised
D	04.06.2020	TENDER ISSUE	JMC
C	03.06.2020	TENDER ISSUE	JMC
B	27.05.2020	FOR APPROVAL	JMC
A	23.05.2020	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 - MAIN ENTRY WALL ELEVATION	
Scale: AS SHOWN	Drawn: JAE	Checked: JTB	Authorised: JMC
At: A3	Date: 4 June 2020	Issue: D	Sheet No: 3
Drawing No: 198-L102			



STANDARD NOTES

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

1. PATHWAYS LOCATED IN ROAD RESERVES ARE TO BE CONSTRUCTED 600mm CLEAR OF PROPERTY BOUNDARY UNLESS APPROVED OTHERWISE BY COUNCIL.
2. 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.
3. 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.
4. CONCRETE PATHWAYS, ADJOINING EXISTING DRIVEWAYS ARE TO BE TRANSITIONED OVER MINIMUM 500mm LENGTH.
5. CONCRETE N25 IN ACCORDANCE WITH AS1379 AND AS3600.
6. ALL CONCRETE TO BE BROOM FINISHED.
7. DOWELS TO BE GRADE 250 STEEL TO AS1302. MESH TO AS1304.
8. GALVANISING TO AS1650.
9. ALL DIMENSIONS IN MILLIMETRES.
10. 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	Authorised
D	04.06.2020	TENDER ISSUE	JMC
C	03.06.2020	TENDER ISSUE	JMC
B	27.05.2020	FOR APPROVAL	JMC
A	23.05.2020	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



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Drawing Revisions

Issue	Date	Subject	Authorised
C	03.06.2020	TENDER ISSUE	JMC
B	18.03.2020	COUNCIL APPROVAL	JMC
A	21.02.2019	FOR APPROVAL	JMC

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Client:

SEYMOUR GROUP

PROJECT TITLE:

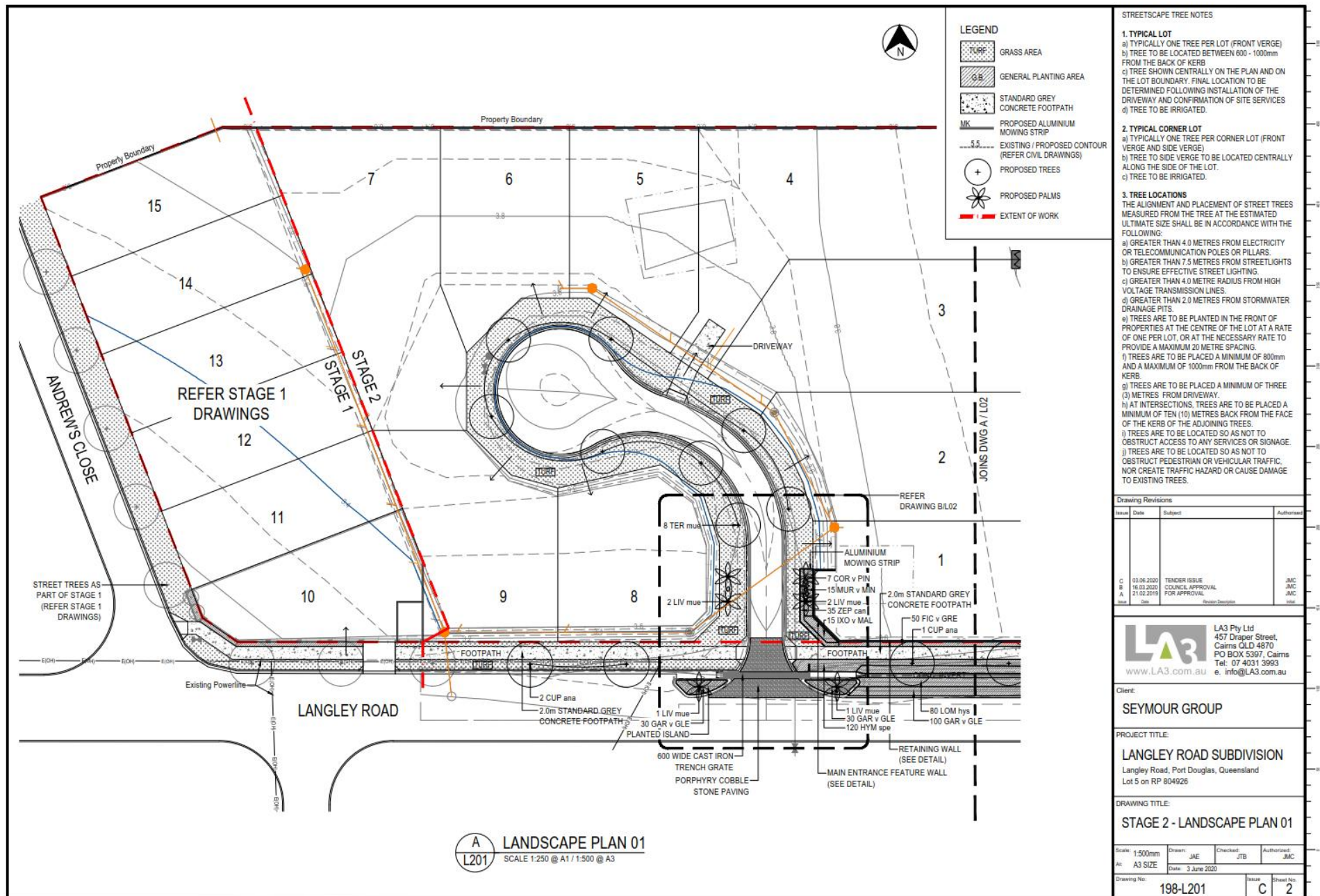
LANGLEY ROAD SUBDIVISION

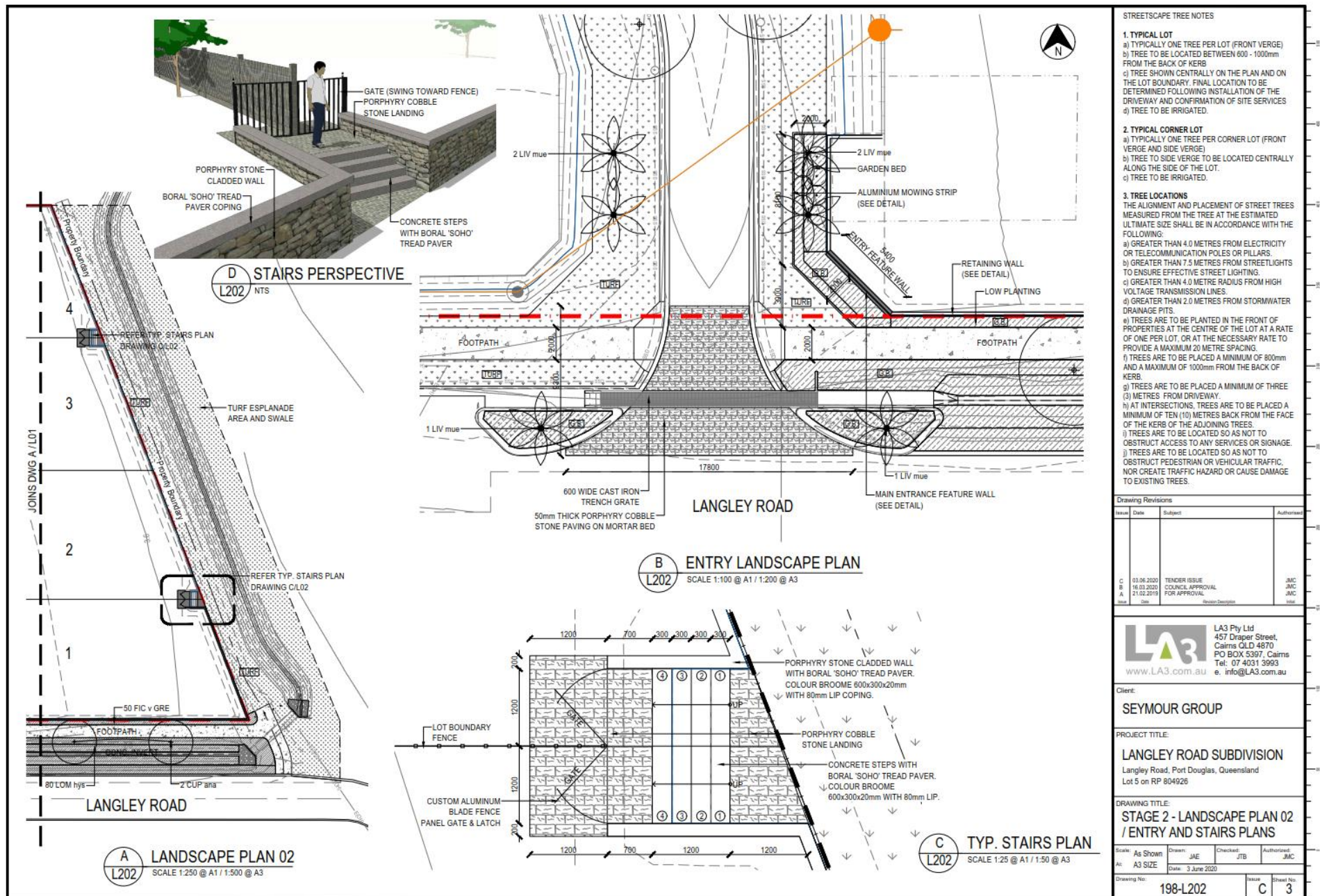
Langley Road, Port Douglas, Queensland
Lot 5 on RP 804926

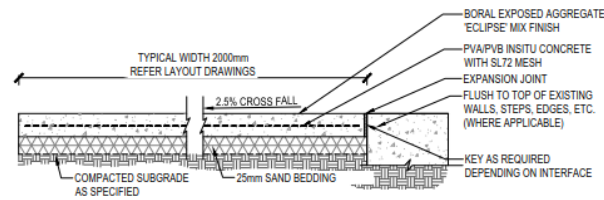
DRAWING TITLE:

STAGE 2 - COVER PAGE

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

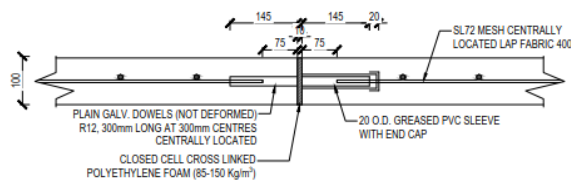






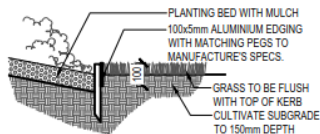
A 2.0m WIDE CONCRETE FOOTPATH

SCALE 1:10 @ A1
1:20 @ A3



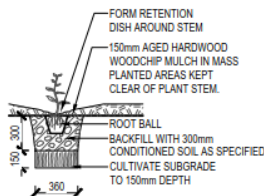
B FOOTPATH - EXPANSION JOINT

SCALE 1:5 @ A1
1:10 @ A3



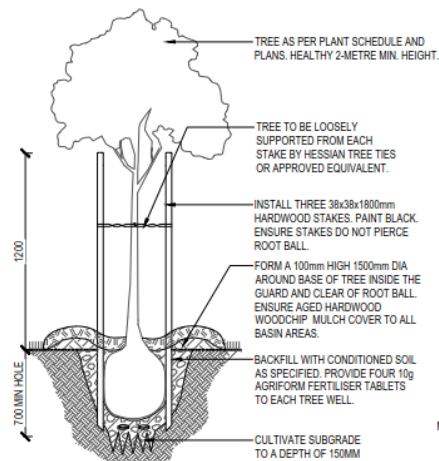
D MOWIG STRIP DETAIL

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1:20 @ A3



E TYPICAL POT PLANTING

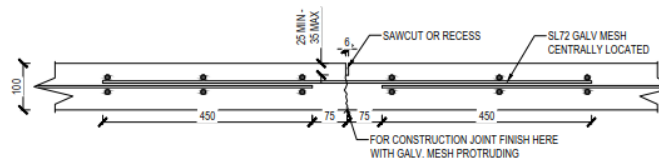
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1:40 @ A3



F TYP 25-L TREE PLANTING IN GARDEN BED

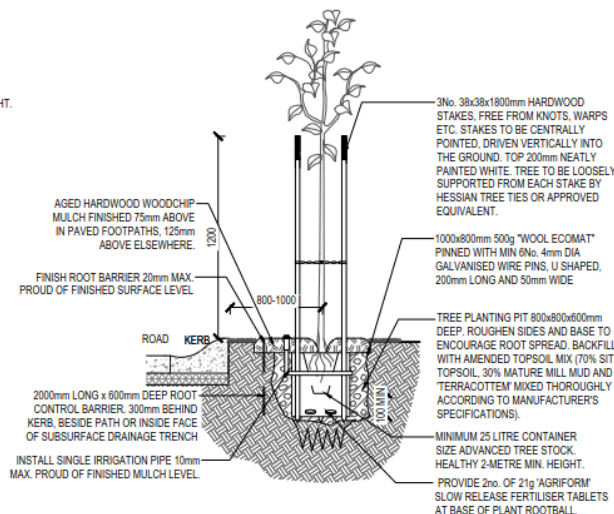
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1:40 @ A3

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	Muraya 'Min-a-min'	Mini Muraya	140mm	650
35	ZEP can	Zephyranthes candida	Rain Lily	140mm	650



C FOOTPATH - CONTROL JOINT

SCALE 1:5 @ A1
1:10 @ 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	Authorised
C	03.06.2020	TENDER ISSUE	JMC
B	18.03.2020	COUNCIL APPROVAL	JMC
A	21.02.2019	FOR APPROVAL	JMC

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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:	Issue	Sheet No.
198 - L203	C	4

