

26 March 2019

**CHIEF EXECUTIVE OFFICER
CITY OF GOLD COAST
PO BOX 5042
GOLD COAST MC 9729**

Attention: Planning, Building and Development Assessment

icubed consulting
innovation ingenuity inspiration
ABN 89 106 675 156

Dear Sir/Madam,

**RE OPERATIONAL WORKS PERMIT (SUBDIVISION CIVIL WORKS) ON LAND DESCRIBED AS LOT
334 SP193431, LOCATED AT 84-160 CHRISTENSEN ROAD SOUTH, STAPYLTON**

Please find below our response to Councils Information Request dated 6th March 2019. Please be advised that we provide a full response to Councils Information Request and request the assessment of the application continue.

- 1) City Plan Version 6 – Code Template
- a) The applicant is requested to complete and submit section 9.4.1.2 Specific Benchmarks for Assessment, Table 9.4.1-1 the City Plan Version 6 – Code templates (link below) and address the PO and/or AO within the appropriate column i.e. Does the proposal meet the acceptable outcome? If not, justify how the proposal meets either the performance outcome or overall outcome.

The Specific Benchmarks for Assessment have been completed. Refer attached Item 1 documents.

- b) The applicant is requested to complete and submit section 9.4.15.3 Specific benchmarks for assessment, Table 9.4.15-1: 'Works for infrastructure code – for assessable development only', the City Plan Version 6 - Code templates (link below) and address the PO and/or AO within the appropriate column i.e. Does the proposal meet the acceptable outcome? If not, justify how the proposal meets either the performance outcome or overall outcome.

The Specific Benchmarks for Assessment have been completed. Refer attached Item 1 documents.

- 2) Portable Long Service Leave

The Portable Long Service Levy remittance will be forwarded asap – fees will be paid on 3rd April, 2019.

- 3) Amend Stormwater pipe design in accordance with City Plan, Land Development Guideline (LDG) SC6.11

- a) The applicant has shown Class 2 pipes, the current City Plan, Land Development Guideline version 6, SC6.11 - 4.4.18.3 state class 3, it is requested the applicant amend all the relevant drawings to be pipe Class 3.

Class 3 RCP pipes have been noted on the stormwater longitudinal sections.

- b) Amend Stormwater pipe design with the 'herringbone' type as per LDG section 4.4.17 Drainline Location
The stormwater pipe design has been amended to reflect the drainline alignment following the centerline of the street.

- 4) Applicant must demonstrate compliance with ROL201800026 Conditions as Mentioned
- a) Demonstrate compliance with ROL201800026 condition 29 and provide evidence of a council approved road name and submit amended drawings with the approved road name.

Refer to the approved Road Name correspondence to comply with Condition 29.

- 5) Sewer Reticulation
- a) The sewer long section drawing C120-02 does not show any vertical clearances between the sewer main and other underground services and mains. Amend the drawing to show all vertical clearances. Ensure all clearances comply with Table 4.2 of the WSA 02- 2002-2.3 (SEQ WS&S D&C Code V1.2-2016)

The vertical clearances have been shown on the sewer longitudinal sections. All clearances comply with Table 4.2 of WSA-02.

- b) Council records do not show an existing stormwater crossing between manhole 1/1 and 1/3. Clarify if this stormwater drainage is present and was verified through site inspection.

The stormwater crossing between manholes 1/1 and 1/3 has been newly constructed and will be found under GCCC Application OPW201801421.

- c) Council records also do not show an existing rising main running along the north side of Christensen Road South. Clarify if the rising main is present and was verified through site inspection.

Refer attached documentation to show that the existing rising main is present.

- d) From the plan view it can be seen that the existing 1350mm diameter stormwater drain is crossing the sewer main between manhole 1/1 and EX/1. This crossing is not shown on the long section. Amend the drawing to show the crossing and ensure the clearance comply with Table 4.2 of the WSA 02- 2002-2.3 (SEQ WS&S D&C Code V1.2-2016).

The existing 1350mm diameter stormwater drain has been shown on the longsection. Note that this is an existing service crossing constructed under GCCC Application OPW201801421.

- e) The pipe grade between manhole 2/2 and 1/2 (existing) is designed as 1:200. This grade does not comply with the SEQ WS&S D&C Code Design Criteria. Amend the design and drawing to comply with the design criteria.

The levels of sewer line 2 have been designed to work within the constraints of the site and existing infrastructure. The levels of existing manhole 1/2 do not permit line 2 to be installed on a grade steeper than 1:200, without having large portions of the site classed as un-serviceable by the gravity sewer reticulation.

- f) As line 2 is inside the property boundary, provide a 3 metre easement over the line and manholes 1/2 and 2/2.

A 3.0m easement has been noted over the line and manholes 1/2 and 2/2.

- g) Council does not support sewer mains to be installed under carriageways. Hence amend the design and move line 3 from under the carriageway to the northern verge of Christensen Road South. Ensure that the lid type on manhole 1/1 and 1/3 is amended accordingly to be non-trafficable.

Enclosed with this response is a sketch of the current verge profile outside Lot 12. There is not a lot of free area for services in this location which is why line 3 has been designed within the road reserve. Installing the proposed line 3 within the carriageway also ensures that all horizontal clearances to existing services have been met, in accordance with the WSA Code.

The alignment of the sewer line 3 was also designed such that the specified vertical clearances can be met to the existing Lot 12 stormwater connection (refer GCCC Application OPW201801421). If the line is installed

any closer to the verge, the correct vertical clearances cannot be achieved, with noting that the line between manholes 2/1 and EX/1 is existing.

- h) The section of line 1, which is crossing under Christensen Road South between manholes 1/1 and EX/1 should be installed using tunnel boring. Ensure that the design complies with standard drawings SEQ-SEW-1402-1 and SEQ-SEW-1403-1.

The section of line 1 was tunnel bored when it was installed under GCCC Application OPW201801421.

- i) Drawing C120-02 shows that the type P2 manhole is a 1000mm dia. Amend the design and drawing to change it to a 1050mm diameter manhole.

The P2 manhole notes has been amended to reflect a 1050mm diameter manhole.

- j) All lot connections into manholes 6/1, 5/1, 2/1, and 2/2 need to be shown in the long section drawing. All relevant details including the drop type, grade etc. should be shown in the drawings. Ensure lot connection drops are as per standard drawings.

All lot connections into manholes 6/1, 5/1, 2/1, 2/2 have been shown.

- Lot 10 – refer line 3
- Lot 11 – refer line 1
- Lot 12 – refer line 1
- Lot 13 – refer line 2
- Lot 14 – refer line 2
- Lot 15 – refer line 5
- Lot 16 – refer line 4
- Lot 17 – refer line 1

- k) As per Clause 4.4.5.2 of the WSA 02-2002-2.3 (SEQ WS&S D&C Code V1.2-2016) stormwater drains over 600mm diameter crossing over a sewer main shall be supported by a bridge structure that spans the sewer trench. Ensure that the bridge structure is installed under all proposed and existing stormwater drains

The bridging structures have been noted for the sewer crossing under the stormwater mains. Refer 17-209-C120-03.

6) Water Reticulation

- a) PE pipe is not accepted by Council as a water main. As per the SEQ WS&S D&C Code IPAM list change the water main material to either PVC-M PN20 or DICL for industrial estates. Amend the drawing.

The pipework has been noted as PVC-M PN20 on the water reticulation plans.

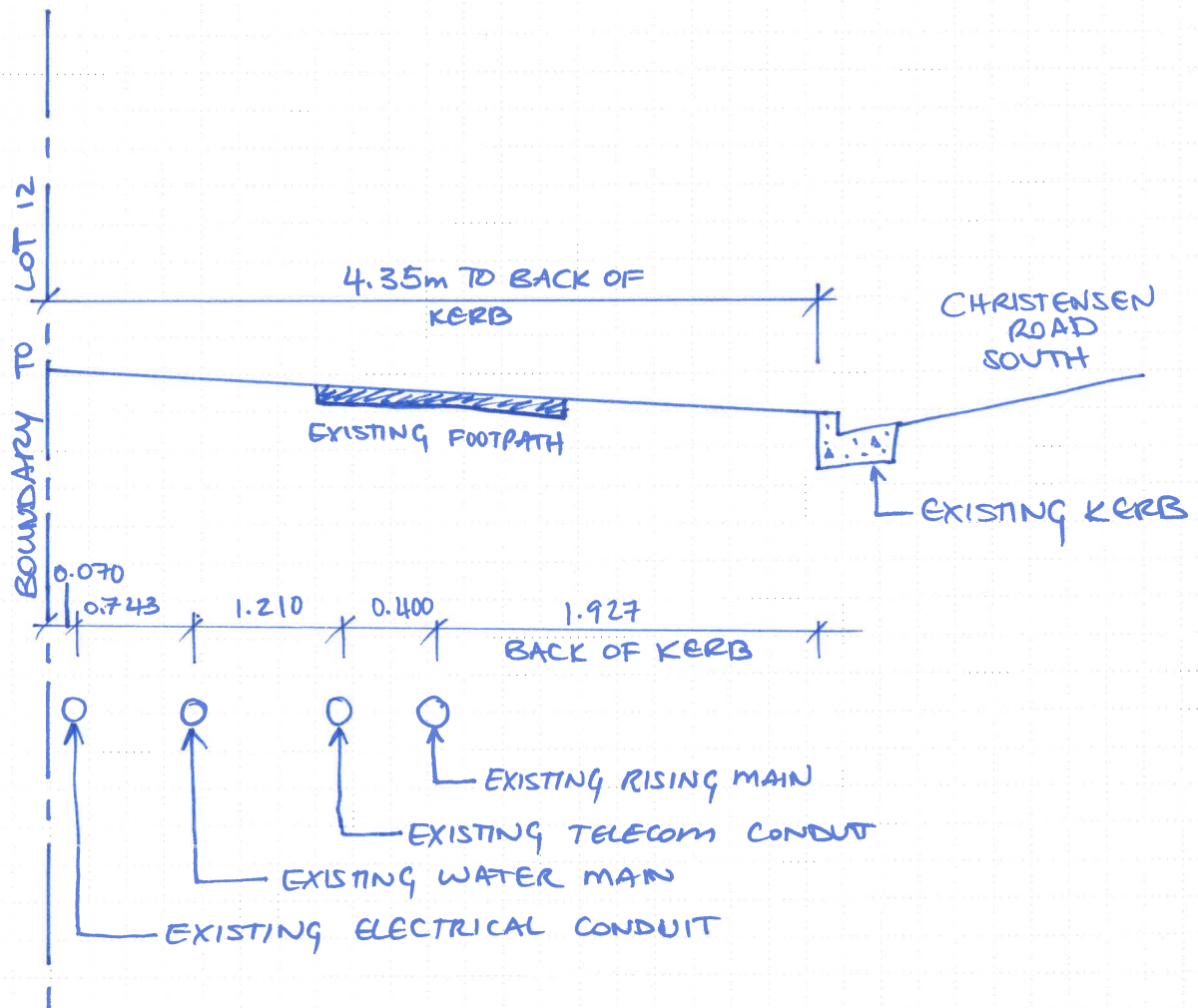
Given the above supporting material, we submit that this operational works application should be **APPROVED**. Should you require any further information, please do not hesitate to contact us.

Yours faithfully,

Katherine Leggett
Civil Engineer
i³ consulting pty ltd
encl.

Project Name: Christensen Road South Project Number: 17-209 Sheet No: 1 of 1

Description: Verge Profile Prepared By: KL Checked By: TJ Date: 26/03/19



* ALL DIMENSIONS IN (m)
* HEIGHTS INDICATIVE ONLY

Revisions:

Revisions: