

place design group.

ROCKHAMPTON RAILYARDS

AURIZON

NOT FOR

Α	PRE	SUBI	DIVISIO	NC	PLAN	EP	CK	30.01.19
В	PRE	SUBI	OIMSI	NC	PLAN	EP	CK	05.02.19
C	PRE	SUBI	OMSK	NC	PLAN	SC	SS	25.02.19
D	PRE	SUBI	OMSIC	NC	PLAN	SC	SS	15,03,19
Е	PRE	SUBI	DIVISIO	NC	PLAN	SC	SS	30.04.19
	-							
_	-	_		_				
	-							
				_				
	-			_				
_	_			_				

DRAWING TITLE

PRELIMINARY SUBDIVISION **PLAN**

DOCUMENT : PRE PROJECT : 1118065

SHEET NUMBER REVISION



63 Charles Street
North Rockhampton Q 4700
PO Box 2149
Wandal Q 4701
P (07) 4921 1780
E mail@mcmengineers.com

Project No. 0911819

Date: 28-May-19

To:
Nick Holt
Place Design Group
Nick.h@placedesigngroup.com

From:
Lachlan McMurtrie
McMurtrie Consulting Engineers
Lachlan@mcmengineers.com

Aurizon Rockhampton Workshop – Reconfiguration of a Lot (ROL)

Introduction

Re:

McMurtrie Consulting Engineers (MCE) have been engaged by Aurizon to provide a basic services plan that addresses sewer, water and stormwater as well as commentary on flooding and site access.

Background

Aurizon is preparing a development application to subdivide their property at 380 Bolsover street into three lots. This memo is intended to form part of the Subdivision and Reconfiguration of a Lot (ROL) application, to provide a basic services plan that addresses the sewer, water and stormwater connections for each individual lot. In addition to this, a plan addressing how stormwater will be dealt with and addressed on site is required. Flooding has also been addressed and some commentary has been provided on how the site interacts with Q100 flood levels.

The proposed subdivision and new lot boundaries are shown in Figure 1 - Proposed Subdivision.

ROCKHAMPTON REGIONAL COUNCIL APPROVED PLANS

These plans are approved subject to the current conditions of approval associated with

Development Permit No.: D/40-2019

Dated: 21 February 2020





Figure 1 - Proposed Subdivision

Flooding

A flood impact report of the ground levels for 338-380 Bolsover street was obtained from Rockhampton Regional Council. The report only considers the ground levels of the lot and does not report on how buildings may be impacted by flood levels.

The report indicates that Lots 1, 2 and 3 will all be impacted by a 1% AEP (Annual Exceedance Probability) flood of the Fitzroy River.

Lot 1 is impacted by flooding on the Denison and South St boundaries as well as on the south western boundary that adjoins lot 3 as shown in Figure 2 – Flood Report. The 1% AEP flood levels appear to impact some buildings on lot that are not planned to be demolished, however as the flood report only considers the ground levels, the level of inundation of the building cannot currently be determined.

Lot 2 is impacted by flooding on the South St and Bolsover St Boundaries as shown in **Figure** 2 – Flood Report. The 1% AEP flood levels appear to impact some buildings on lot that are not planned to be demolished, however as the flood report only considers the ground levels, the level of inundation of the building cannot currently be determined.

Lot 3 is impacted over the majority of the lot; however, the majority of Lot 3 is currently used as storage area and many of the structures seen on the aerial images appear to be shipping containers. The flood report show water impacting some of the permanent buildings, however the demolition plan shows that these buildings are awnings which are planned to be demolished. Therefore, as much of the site is used for storage and the existing awnings are planned to be demolished, the flood report does not appear to affect any of the existing permanent buildings.





Figure 2 - Flood Report

Site Access

The existing lot currently has 9 existing formal accesses points consisting mainly of concrete driveways with steel gates and fencing all around. There are additional informal access locations, however it is presumed that access via these sites will be limited.

Lot 1 may be accessed at 249 and 271 Dennison Street, as well as at the intersection of Denison and South Street.

- Lot 2 may be accessed at the intersection of Alma and South Street.
- Lot 3 may be accessed at 331, 339, 349 and 363 Bolsover Street.

See Appendix D - Services Plan, for a map of the site accesses on the lots.

Stormwater Assets

REV A

The lot in its existing configuration is currently free draining to the stormwater network located on the roads adjacent to the property. The reconfiguration of lot only considers the realignment of the boundaries and there is no intent or plans to change the contours or levels of the lot and therefore there is no foreseeable change to the way stormwater will be managed on site.

There is however existing stormwater infrastructure adjacent to the existing lot. For future development purposes, the reconfigured lots have the following infrastructure available:



- Lot 1 may connect to stormwater infrastructure at 261 Denison Street, 40 South Street and the intersection of Alma and South Street, to pits that are adjacent to the property boundary.
- Lot 2 may connect to stormwater infrastructure at 24 South Street, at the intersection of Bolsover and South Street and at 307 Bolsover Street, to pits that are adjacent to the property boundary.
- Lot 3 is naturally free draining to the south where excess stormwater is collected by a field gulley at the Wood St boundary of the lot.

Figure 3 – Existing Stormwater infrastructure shows the existing stormwater infrastructure adjacent to the lot.

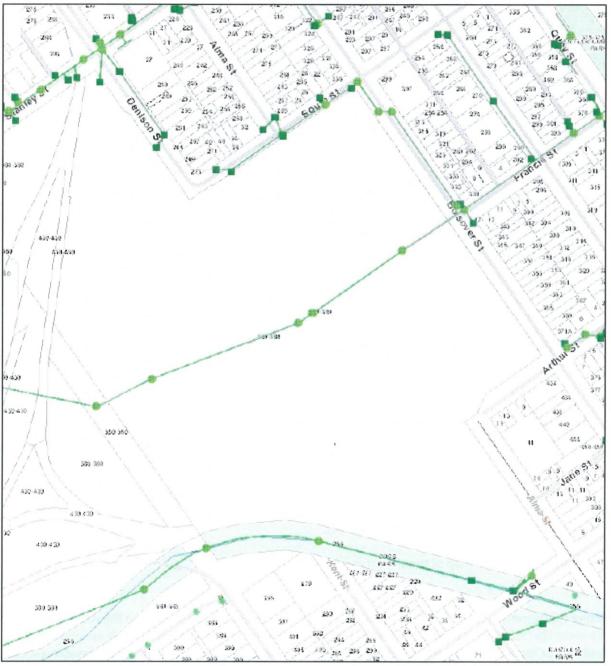


Figure 3 - Existing Stormwater infrastructure



Water Services

The subdivided lots may be serviced by the existing connections provided to the site. Rockhampton Online Mapping Portal shows 4 existing connections to the site.

For future development purposes, the reconfigured lots have the following infrastructure available:

- Lot 1 − 150mm diam Cast Iron Pipe connected adjacent to 273 Denison St
- Lot 2 100mm diam AC pipe connected adjacent to 26 South St
- Lot 3 100mm diam MPVC pipe connected at Francis St
- Lot 3 150mm diam MPVC pipe connected at 365 Bolsover St

Figure 4 - Existing Water Connections shows the existing water connections as shown on the Rockhampton Online Mapping Portal.

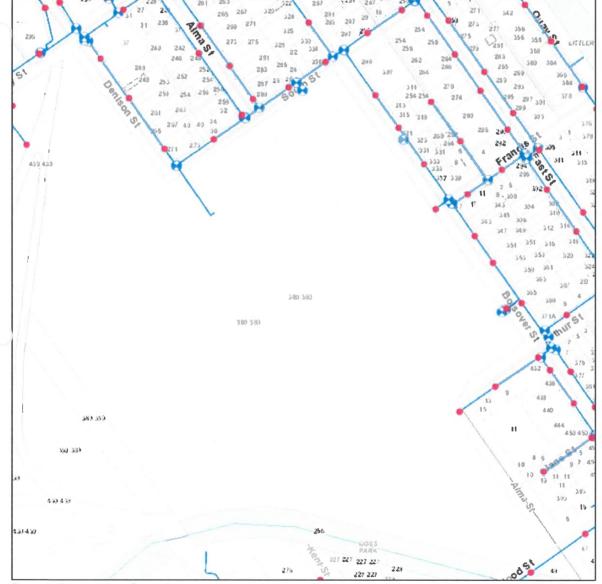


Figure 4 - Existing Water Connections



Sewer Services

The existing buildings on the lot are currently connected to the sewer network, however the exact connection points are currently unknown.

For future development purposes the reconfigured lots have the following infrastructure available:

- Lot 1 may be connected at 253 Dennison Street by a 150 mm earthenware pipe.
- Lot 2 may be connected at 315 Bolsover Street by a 150mm earthenware pipe.
- There are no existing connections to the proposed Lot 3; however, the sewer may be connected to the 300 mm earthenware pipe that runs along Arthur St on the southern boundary of the lot.

Site specific investigation have been undertaken to determine the invert levels of the sewer manholes.

The invert level of the sewer manhole at 315 Bolsover St were not able to be determined as RRC staff were unable to access the site at the time of the investigation, however, as this sewer pit already services buildings on the lot, it may be assumed that Lot 1 and some of Lot 2 may be serviced by this pit. The Rockhampton Regional Council Online Mapping Portal does not show the connections on the public site, however, the connections between the buildings and the sewer pit have been confirmed by RRC Staff.

Site investigations of the sewer pit at 253 Denison St confirmed that the invert level of the 150mm Earthenware pipe is 2.040 m below the surface of the pit, therefore the approximate RL of the invert of this pit is estimated to be 5.96m. The design specifications set forth in CMDG, Sewerage Systems, D12 Design Guidelines dictate that for a 150mm sewer system, the maximum distance commanded by the pit is 246m. Therefore, based on the information provided by RRC, most of Lot 2 may be serviced by the sewer pit at 253 Denison St.

Site investigations of the sewer pit at 13 Arthur St confirmed that the invert level of the 300mm Earthenware pipe is 5.5m below the surface of the pit, therefore the approximate RL of the invert of this pit is estimated to be 0.5m. The design specifications set forth in CMDG, Sewerage Systems, D12 Design Guidelines dictate that the maximum depth to the invert of a reticulation sewer main is to be 3.5 m, hence for a 150mm sewer system, the maximum distance commanded by the pit is 465m. Therefore, based on the information provided by RRC, all of Lot 3 may be serviced by the sewer pit at 13 Arthur st.

The existing site is very flat across the whole of the lot and therefore the contours have not been taken into consideration when determining the area commanded by the sewer pits. Detailed investigation and surveys should be undertaken when planning for future buildings.

The sketch shown in Appendix G – RRC Sewer Assets shows what area may be serviced by the sewer pits at Arthur St and Denison St.

Figure 5 - Existing Sewer Connections shows the existing sewer connections to the existing lot and Figure 6 — Area Commanded by Sewer Pits shows the area commanded by the pits on Arthur St and Denison St



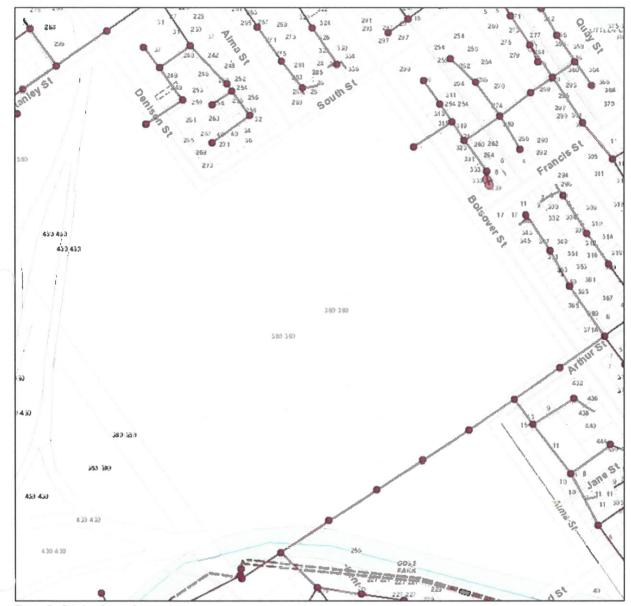


Figure 5 - Existing Sewer Connections



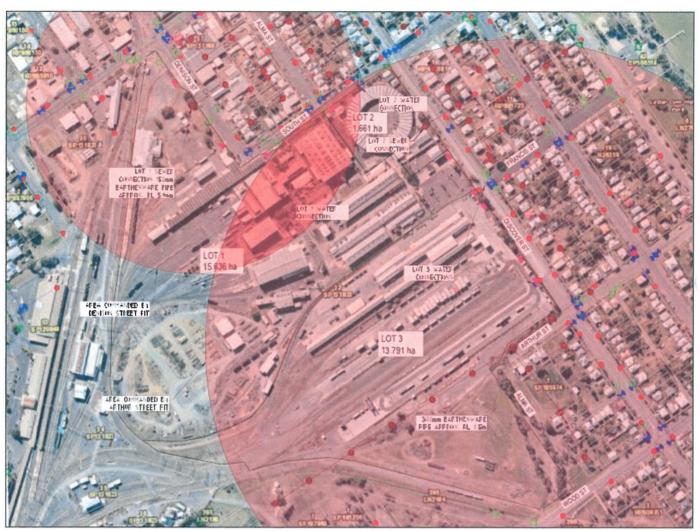


Figure 6 – Area Commanded by Sewer Pits



Summary

Generally, the proposed ROL allows for each lot to be easily serviced with the opportunity for future developments to be connected to Water and Sewer infrastructure. The ROL ensures that each lot may be accessed through independent sites that connect to the RRC road network.

The ROL also does not change how stormwater is managed on site and flood reports provided by RRC show that the property is subject to limited impact of the flood plain during 1% AEP Flooding of the Fitzroy River.

Kind regards,

Lachlan McMurtrieOperations Manager

Attachments

Attachment A – Proposed Subdivision

Attachment B – RRC Flood Report

Attachment C-Services Plan

Attachment D – RRC Stormwater Assets

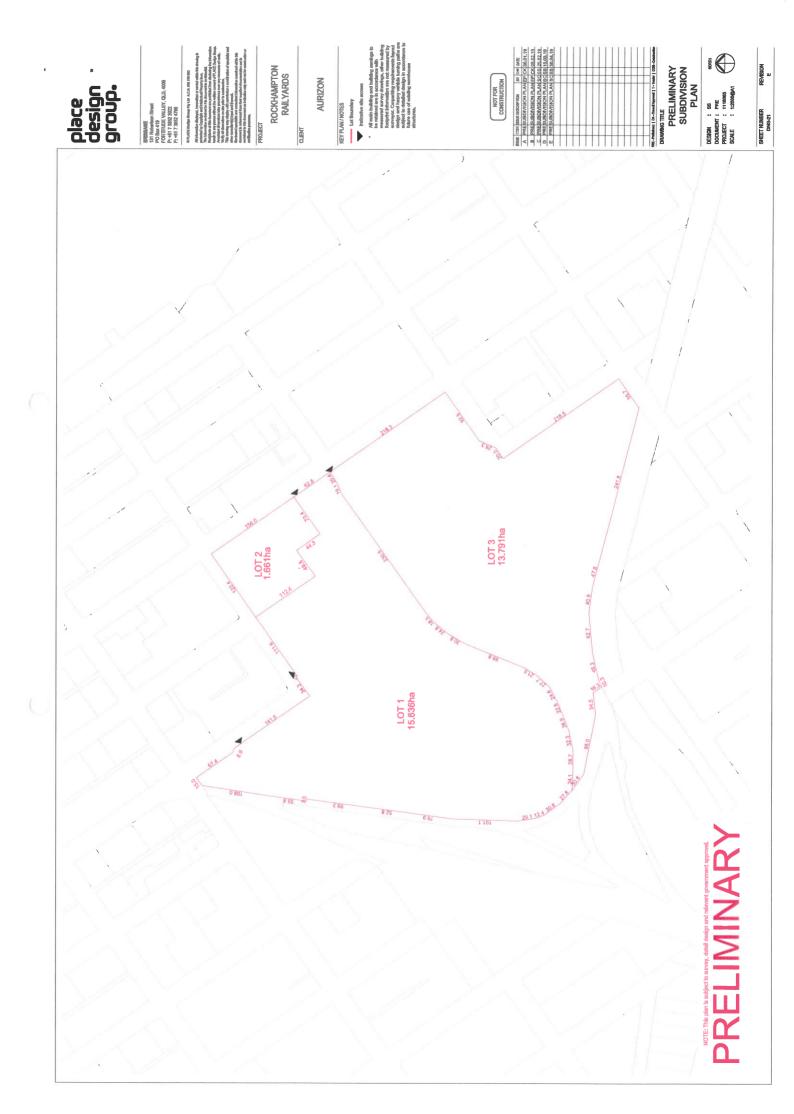
Attachment E – Water Reticulation Assets

Attachment F – Sewer Assets



ATTACHMENT A

Proposed Subdivision





ATTACHMENT B

Demolition Plan





ATTACHMENT C

RRC Flood Report



Rockhampton Office

232 Bolsover St. Rockhampton

Gracemere Office

1 Ranger St, Gracemere

Mount Morgan Office 32 Hall St, Mount Morgan

18 April 2019

Our Ref:

566441

Telephone:

07 4936 8099 or 1300 22 55 77 developmentadvice@rrc.qld.gov.au

Mathev Mayur
McMurtrie Consulting Engineers
mayur@mcmengineers.com

Dear Sir / Madam

FLOOD INFORMATION REQUEST - 338-380 BOLSOVER STREET, DEPOT HILL - LOT 32 AND 33 ON SP131823

Council is in receipt of your application dated 12 April 2019 requesting flood information for 338-380 Bolsover Street, Depot Hill and more properly described as Lot 32 and 33 on SP131823.

Council records show that the abovementioned land is affected by a 1% AEP flooding event in the Fitzroy River and Local Creeks.

Annual Exceedance Probability (AEP) is the probability of a flood event of a given magnitude being equalled or exceeded in any one year. A 1% AEP event means there is statistically a 1% (or 1 in 100) probability that an event of that magnitude will occur or be exceeded in any year.

Please find attached a Flood Search Property Report for your reference. Should you have any queries regarding this information please contact Council's Development Engineering section using the contact information above.

Yours faithfully

Mohit Paudyal

Senior Development Engineer

Planning and Regulatory Services

Enc

Flood Search Property Report

Flood Property Map

Rockhampton Regional Council Flood Search Property Report

Property Address: 338-380 Bolsover Street,

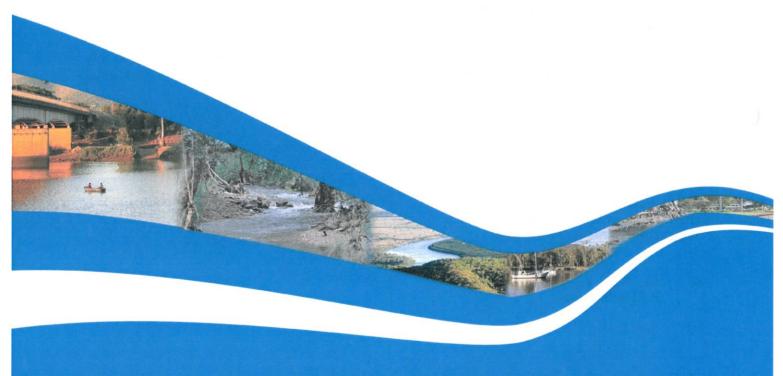
Depot Hill

Lot Details:

Lot 32 and 33 on SP131823

Date of Issue:

18 April 2019



Planning and Regulatory Services - Engineering PO Box 1860, Rockhampton Q 4700 Phone: 07 4932 9000 or 1300 22 55 77 Email: enquiries@rrc.qld.gov.au

Web: www.rrc.qld.gov.au



Flood Search Property Report Overview

Flood studies and associated modelling assist Council to better understand flooding and implement plans to avoid and mitigate its impacts on the community. Flood modelling of the Fitzroy River has been progressively refined over a long period of time. The flood modelling addresses riverine impacts on Rockhampton and surrounding areas, including Alton Downs, Pink Lily, Nine Mile, Fairy Bower, Midgee and Port Curtis. Local Creek Catchment Flood Studies model how local creek catchments are expected to respond during varying intensities and durations of rainfall events. Local Creek Catchment Flood Studies currently address urban creek catchments in North Rockhampton and Gracemere only.

Information provided in this report utilises information from flood studies available to Council at the date of issue of the report. As modelling will be refined and updated over time as better information is collected and modelling capabilities develop, report information may be subject to change.

Flood Studies are available on Council's website www.rrc.qld.gov.au

When reading this report, please consider:

- If a property is affected by Fitzroy River and/ or Local Creek Catchment flooding, the highest maximum flood heights should be used to establish minimum building and development levels. For large property parcels there may be a significant difference between the minimum and maximum flood heights for a particular flood type. In these situations you may need to seek further advice from Council regarding the flood height that is appropriate for the exact location of the proposed building or development.
- Council does not provide flood height information for overland flow areas.
- The values provided do not provide any freeboard (i.e. tolerance above the modelled flood level). Refer to Council's Planning Scheme to determine the applicable freeboard requirements.
- The flood maps included with this report display flood extent only. All maps generated from the Flood Studies are available on Council's website.
- The flood maps provided only provide flood extents under existing climate and catchment conditions.
- If preparing a new building and/or development application, it is recommended that you confirm all flood related provisions within Council's Planning Scheme relevant to the property.

What is flood modelling?

Flood modelling uses sophisticated computer software to estimate how rainfall of various intensities and duration produce stormwater flows along creek and river catchments.

Flood modelling is used to estimate:

- The inundation extents of the areas that may be flooded;
- The peak depths of flood waters; and
- The hazard related to the depth of water, or how quickly the water flows (velocity).

Flood modelling estimates a range of design floods based on a statistical analysis of rainfall information provided by the Bureau of Meteorology. This information is used to establish the likelihood of a rainfall or flood event.

Rockhampton Regional Council Flood Search Property Report

Property Details

Address:

338-380 Bolsover Street, Depot Hill

Lot and plan:

Lot 32 and 33 on SP131823

Property Ground Levels:

Property ground levels can be found on the attached property flood report.

Should the extent of flooding at a property need to be more accurately predicted, then individual property level information (e.g. building floor levels) could be utilised in conjunction with Council's flood information. Council does not undertake this level of investigation or survey on behalf of property owners.

For your information:

AHD (Australian Height Datum) is the National Mapping Datum used throughout Australia. The level of o.om AHD is approximately mean sea level.

Elevation Data Source: The digital elevation model used in the flood modelling is generated on a regional scale and utilises ground level elevations from aerial laser surveys performed in 2009 and 2010. The survey data used to determine the extent and depth of potential inundation is captured and updated periodically and may not reflect inundation of land that has recently been modified, such as a new subdivision.

Flood Information

Riverine Flood:

Affected

The property is impacted by a Fitzroy River Flood. A property flood report displaying the 1% AEP (Annual Exceedance Probability) flood extent on the property is attached.

For your information:

AEP (Annual Exceedance Probability) is the probability of a flood event of a given size occurring or being exceeded in any one year.

Information in relation to more or less likely floods and the full flood plain extent can be accessed on Council's website.

Creek Catchment Flood:

Not Affected

Property Flood Report

SP131823/32 Location Address: Lot/Plan:

338-380 Bolsover Street Depot Hill QLD 4700

Transport Terminal

Land Use:

Owner Address: Owners:

C/- Rcc, PO BOX 243, ROCKHAMPTON QLD 4700 Queensland Rail Limited



Ground Elevation (Max) 10.136 Creeks AEP 1% WSL Min N/A
Second Elevation (Min) 4.042
Ground Elevation (Min) 4 Ground Elevation (Min) 4 Bivertine AEP 1% WSL Min 7 AEP 1% WSL Min 7 AEP 1% Velocity Min 0 AEP 2% WSL Min 7 AEP 5% WSL Min 7 AEP 5% WSL Min 0 AEP 10% Velocity Min 0 AEP 10% Ve
GOSS PARKS SO
GOSS PARKS SE

Copyright protects this publication. Reproduction by whatever means is prohibited without prior written permission of the Chief Executive Officer, Rockhampton Regional Council. Rockhampton Regional Council will not be held liable under any circumstances in connection with or arising out of the use of this data nor does it warrant that the data is error free. Any queries should be directed to the Customer Service Centre, Rockhampton Regional Council or telephone 1300 22 55 77. The Digital Cadestral DataBase is current as at April 2019 ® The State Government of Queensland (Department of Natural Resources and Mines) 2019. All other data ® Rockhampton Regional Council 2019. This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Property Flood Report

SP131823/33 Lot/Plan:

338-380 Bolsover Street Depot Hill QLD 4700 Location Address:

Transport Terminal

Land Use:

Owner Address: Owners:

QRN Property Pty Ltd

1/305 Edward St, BRISBANE QLD 4000



٨

٨ Ϋ́ ¥. Ϋ́ ¥ N ΑX ΑN Ϋ́ ΑX ΑX Ϋ́ Ν Α× ¥. Š

2	z	Z	Z	Z	Z	Z	Z	z	Z	Z	Z	Z	Z	Z	Z	Z	z	Z	Z	
Creeks AEP 1% WSL Min	Creeks AEP 1% WSL Max	Creeks AEP 1% Velocity Min	Creeks AEP 1% Velocity Max	Creeks AEP 2% WSL Min	Creeks AEP 2% WSL Max	Creeks AEP 2% Velocity Min	Creeks AEP 2% Velocity Max	Creeks AEP 5% WSL Min	Creeks AEP 5% WSL Max	Creeks AEP 5% Velocity Min	Creeks AEP 5% Velocity Max	Creeks AEP 10% WSL Min	Creeks AEP 10% WSL Max	Creeks AEP 10% Velocity Min	Creeks AEP 10% Velocity Max	Creeks AEP 20% WSL Min	Creeks AEP 20% WSL Max	Creeks AEP 20% Velocity Min	Creeks AEP 20% Velocity Max	Fitzroy River 2014 Flood Study NJA N/A
6.892	10.754			7.8293	7.8508	0.0002	0.2545	7.4891	7.4896	0.0040	0.0266	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Fitzroy R N/A N/A
Ground Elevation (Min)	Ground Elevation (Max)		Riverine	AEP 1% WSL Min	AEP 1% WSL Max	AEP 1% Velocity Min	AEP 1% Velocity Max	AEP 2% WSL Min	AEP 2% WSL Max	AEP 2% Velocity Min	AEP 2% Velocity Max	AEP 5% WSL Min	AEP 5% WSL Max	AEP 5% Velocity Min	AEP 5% Velocity Max	AEP 10% WSL Min	AEP 10% WSL Max	AEP 10% Velocity Min	AEP 10% Velocity Max	Riverine Catchment Creek Catchment Mitigation Area
			/	Spirik23/d	SP131824		VLGt 32-c	Lot-339 SP131823	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	DEPOTHILL	Proof Section 1	Lotion	SP131823		מוספ מוספן מוספן מוספן מוספן מוספן מוספן	SP131823	2000 C2000 WILL WAR WILL WAR	Sering 84,000 n.m. 0018 0115 0887 004 0048	A COLUMN TO THE PERSON TO THE	0.001=1,0,003-0.017-0.05-0.004-0.002-0.027-0.042-0.054-04-0.096 Constant Constant

Α×

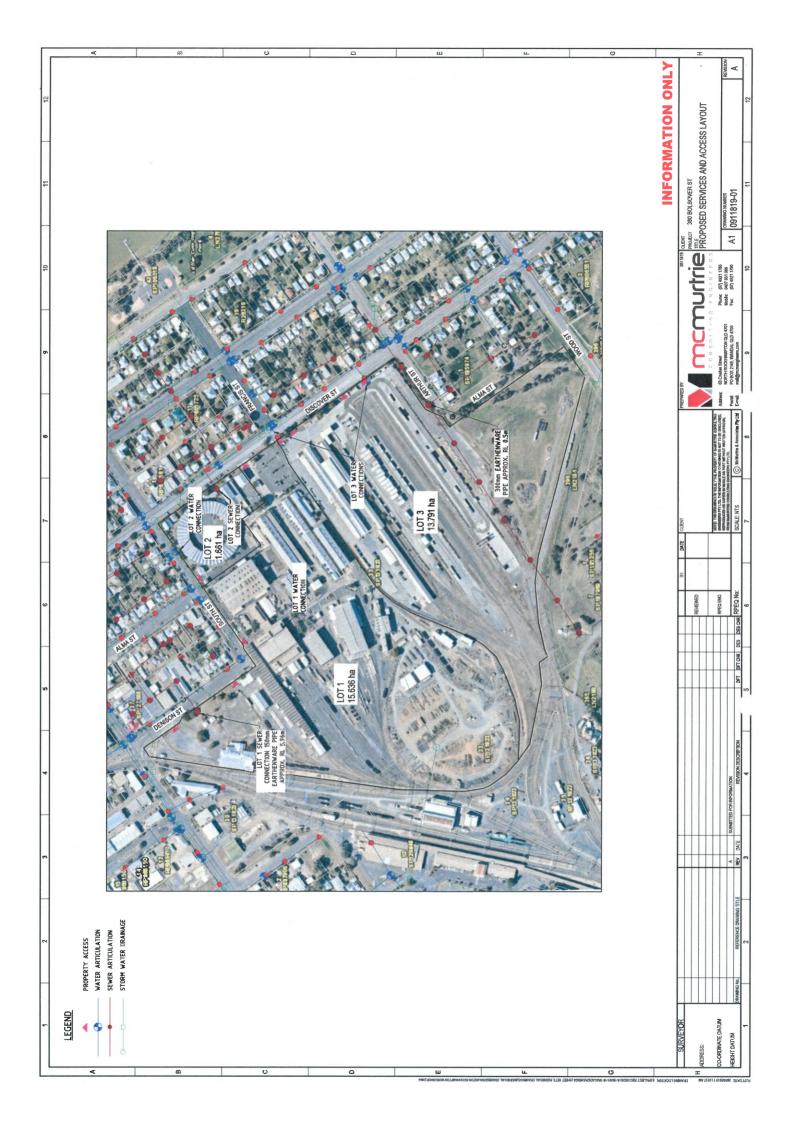
×

ΑX ٨ Copyright protects this publication. Reproduction by whatever means is prohibited without prior written permission of the Chief Executive Officer, Rockhampton Regional Council will not be held liable under any circumstances in connection with or arising out of the use of this data nor does it warrant that the data is error free. Any queries should be directed to the Customer Service Centre, Rockhampton Regional Council or telephone 1300 22 55 77. The Digital Cadastral DataBase is current as at April 2019 ® The State Government of Queensland (Department of Natural Resources and Mines) 2019. All other data ® Rockhampton Regional Council 2019. This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.



ATTACHMENT D

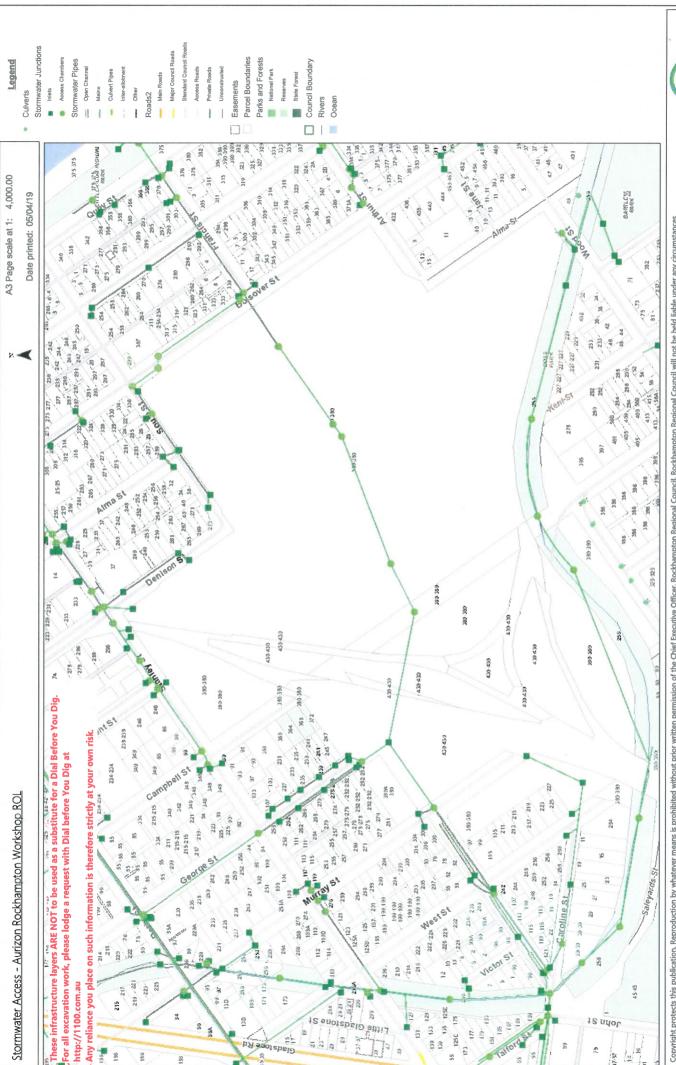
Services Plan





ATTACHMENT E

RRC Stormwater Assets



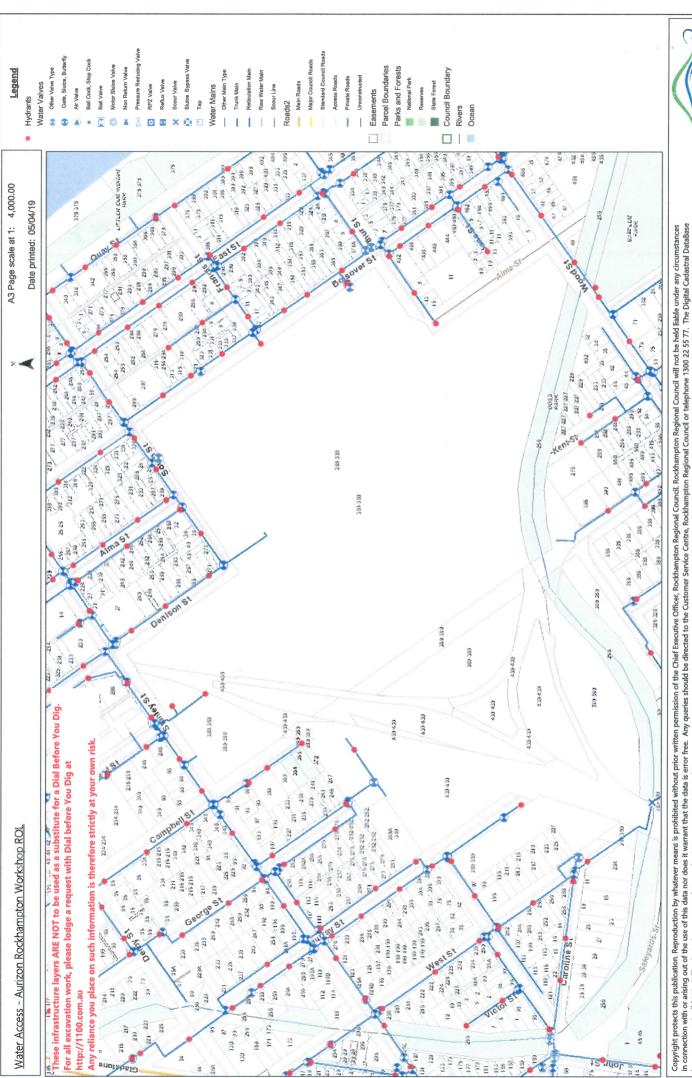
Copyright protects this publication. Reproduction by whatever means is prohibited without prior written permission of the Chief Executive Officer, Rockhampton Regional Council Rockhampton Regional Council will not be held liable under any circumstances in connection with or arising out of the use of this data nor does it warrant that the data is error free. Any queries should be directed to the Customer Service Centre, Rockhampton Regional Council or telephone 1300 22 55 77. The Digital Cadastral DataBase is current as at April 2019. © The State Government of Queensland (Department of Natural Resources and Mines) 2019. All other data © Rockhampton Regional Council 2019. This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current or otherwise reliable.





ATTACHMENT F

RRC Water Reticulation Assets

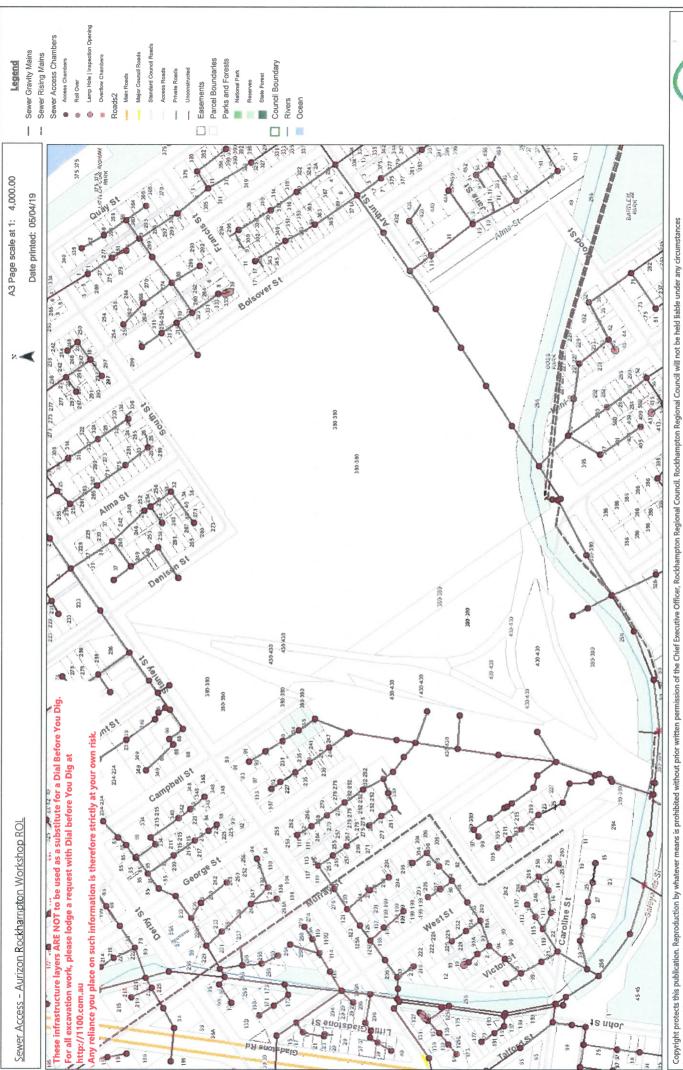


Copyright protects this publication. Reproduction by whatever means is prohibited without prior written permission of the Chief Executive Officer, Rockhampton Regional Council Rockhampton Regional Council or telephone 1300 22 55 77. The Digital Cadastral Database in connection with or arising out of the use of this data nor does it warrant that the data is error free. Any quaries should be directed to the Customer Service Centre, Rockhampton Regional Council or telephone 1300 22 55 77. The Digital Cadastral Database is current as at April 2019. © The State Government of Queensland (Department of Natural Resources and Mines) 2019. All other data © Rockhampton Regional Council 2019. This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current or otherwise reliable.



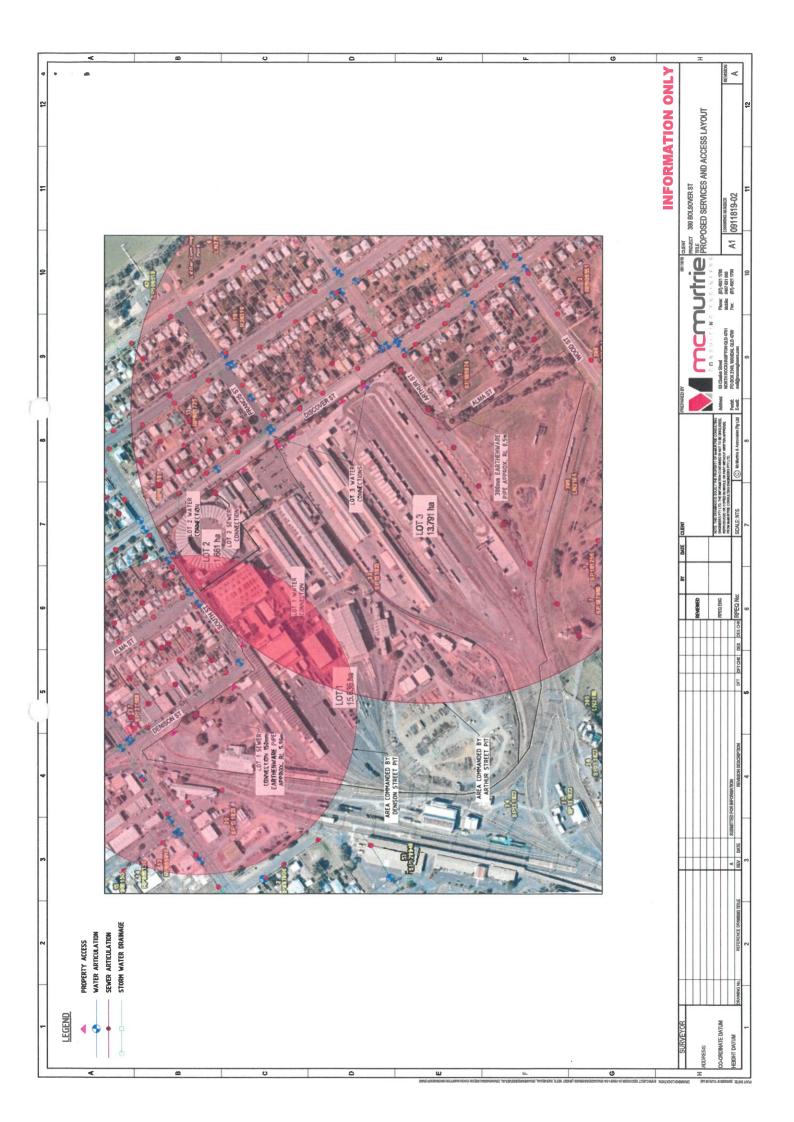
ATTACHMENT G

RRC Sewer Assets



In connection with or arising out of the use of this data nor does it warrant that the data is error free. Any queries should be directed to the Customer Service Centre, Rockhampton Regional Council or telephone 1300 22 55 77. The Digital Cadastral DataBase is current as at April 2019. © The State Government of Queensland (Department of Natural Resources and Mines) 2019. All other data © Rockhampton Regional Council 2019. This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current or otherwise reliable.







P (07) 4921 1780 F (07) 4921 1790

E mail@mcmengineers.com mcmengineers.com

ABN 69 958 286 371

PO Box 2149, Wandal Q 4700 63 Charles Street North Rockhampton Q 4701

OUR AFFILIATIONS









ACN 82370063 131 Robertson Street

4 November 2019

Development Assessment Section Rockhampton Regional Council PO Box 1860 Rockhampton QLD 4700 Via Email: enquiries@rrc.ald.gov.au

placedesigngroup.com

creating great places

Phone +61 7 3852 3922

Place Design Group Pty Ltd

Fortitude Valley, QLD 4006 Australia

brisbane@placedesigngroup.com

Attention: Bevan Koelmeyer

RE: Response to Information Request for a development application involving the Reconfiguring a lot over land at 338 – 380 Bolsover Street, Depot Hill QLD 4700 (Council Reference: D/40-2019)

Dear Bevan,

We write on behalf of our client, Aurizon Operations Limited, and provide a full response to the Information Request issued by Rockhampton Regional Council (Council) on 31st May 2019. Additionally, the items raised in Council's informal email dated 25th June 2019 have been addressed in this letter.

In accordance with section 13.2(a) of the Development Assessment Rules (**DA Rules**), responses to all items in Council's information request are enclosed, along with the following documentation:

- Attachment A: Engineering Response prepared by McMurtrie Consulting Engineers;
- Attachment B: Swept Paths prepared by McMurtrie Consulting Engineers; and
- Attachment C: Response from Thom Blake Historian for Rockhampton Railyards application on behalf of Aurizon.

We trust that the enclosed information adequately addresses your request for further information and will assist with your ongoing assessment of the development application. Should you require any further information, please do not hesitate to contact our office on 07 3852 3922.

Kind Regards, Place Design Group

Laura Daly Senior Planner

ROCKHAMPTON REGIONAL COUNCIL APPROVED PLANS

These plans are approved subject to the current conditions of approval associated with

Development Permit No.: D/40-2019

Dated: 21 February 2020

A005226303 - Response to Information Request

Information Request

Item 1 Existing Services

1.1 Sewerage

Please confirm the location of the sewerage connection point(s) and internal sanitary drainage works for the site's existing buildings. Furthermore, please provide details as to what internal sanitary drainage works require relocation to ensure all trespassing services will be eliminated. Please note, the internal sanitary drainage of existing buildings must be wholly contained within the lot it services.

1.2 Stormwater

Please investigate the site's internal stormwater drainage system and provide further information to confirm all stormwater connections for each lot being serviced are wholly located within their respective lot boundaries. Please note, any connections and/or infrastructure which is not wholly located within the lot it is servicing, will require private stormwater easement(s) to be provided.

Furthermore, with respect to the 600mm diameter stormwater main traversing through proposed Lot 1, it is preferred this infrastructure be dedicated to Council via an easement, please provide comments.

Response

In terms of item 1.1, the proposed sewer connections for each proposed lot is as follows:

- Proposed Lot 1:
 - Manhole at 253 Denison Street via existing connections, and;
 - Manhole at 315 Bolsover Street via existing connections.
- Proposed Lot 2:
 - Manhole at 315 Bolsover Street via existing connections,
- Proposed Lot 3:
 - Manhole at 13 Arthur Street via new connection.

For further details, refer to the attached response prepared by McMurtrie Consulting Engineers which addresses the sewer connections for each proposed allotment (Attachment A).

With respect to the stormwater (item 1.2), Building and Plumbing Records provided by Rockhampton Regional Council show the stormwater connections for each lot, all of which are connected to the 600 RCP which runs through Lot 1 and along the boundary of Lot 3. It is proposed that an easement would be provided over the existing infrastructure, in favour of Council. Refer to the Engineering Response in **Attachment A** for further details on the proposed easements.

Informal Email

Item 1 Proposed Lot 2

What is the anticipated use of Lot 2? Being an industrial site it is anticipated future uses to occupy the site will be of a similar nature and therefore there will be a need for heavy vehicles to be able to safely and efficiently traverse the site.

Please provide a swept path analysis to Council which demonstrates heavy vehicles can complete all ingress and egress turning movements within the site in a forward gear. Separately, Council consider another viable option to assist may be to make provision for an access easement within Lot 1 in favour of Lot 2 to provide legal access to this lot via Bolsover Street

Response

A swept path has been provided by McMurtrie Consulting Engineers (Attachment B), indicating that heavy vehicles can ingress and egress the site in a forward gear.

Item 2 Proposed Lot 2

How will light vehicles be able to access Lot 2's existing carpark (please see aerial below)? The new alignment of the boundaries removes the primary legal access to this carpark from Bolsover Street. Please provide an access easement within Lot 1 in favour of Lot 2 in order to maintain this access (p.s. this may also assist with the above question regarding heavy vehicle access) and/or the buildings earmarked for demolition (please see site plan below) will



A005226303 - Response to Information Request

need to be removed as part of this subdivision in order to facilitate access within the site to this carpark.

Response

Vehicles will be able to access the existing Lot 2 carpark by following the general alignment which runs from South Street to Bolsover Street. It is confirmed that the existing heritage buildings will not be impacted, nor require removal or demolition to facilitate vehicular access through the site.

As noted above, an access easement is proposed through the site to provide lawful access to the existing carpark within proposed Lot 2. Refer to the Engineering Response in **Attachment** A for further details.

Item 3

Proposed Lot 2
There has been some preliminary discussions with

There has been some preliminary discussions with McMurtrie Engineers with respect to a potential easement required within Lot 2 for sanitary drainage servicing building's located within Lot 1. Please note updated comments from the Department of Environment and Science with respect to the heritage exemption certificate provided, will be required to reflect the provision of any easements or other proposed changes related to Lot 2.

Response

Refer to the attached heritage advice prepared by Thom Blake which addresses item 3 (Attachment C).





63 Charles Street
North Rockhampton Q 4700
PO Box 2149
Wandal Q 4701
P (07) 4921 1780
E mail@mcmengineers.com

14 October 2019

Our Reference: 091-18-19

Place Design Group 131 Robertson Street Fortitude Valley, QLD, 4006

Att: Mr. Bevan Koelmeyer

RE: Rockhampton Aurizon Workshop Council Reference: D/40-2019 (ROL)

Situated at 338-380 Bolsover Street, Rockhampton

Described as Lot 32 and 33 on SP131823 and Lot 38 on SP131824 Response to Council's Information Request (31 May 2019)

Dear Bevan.

I refer to Council's Information Request dated 31 May 2019 and provide the following responses:

1.0 Existing Service

1.1 Sewerage

Please confirm the location of the sewerage connection point(s) and internal sanitary drainage works for the site's existing buildings. Furthermore, please provide details as to what internal sanitary drainage works require relocation to ensure all trespassing services will be eliminated. Please note, the internal sanitary drainage of existing buildings must be wholly contained within the lot it services.

The proposed sewer connections for the reconfigured lots are as follows:

- Lot 1
 - o Manhole at 253 Denison Street via existing connections, and;
 - o Manhole at 315 Bolsover Street via existing connections,
- Lot 2
 - Manhole at 315 Bolsover Street via existing connections.
- Lot 3
 - o Manhole at 13 Arthur Street via new connection.

The elevation and connectivity of the aforesaid manholes has been discussed in the initial services plan submitted to council.

Building and Plumbing searches provided by Rockhampton Regional Council (RRC) show that existing sanitary drainage infrastructure from Lot 1 will trespass onto Lot 2 due to the configuration of the existing connections. The connection at 315 Bolsover Street is located inside Lot 2 and most of the buildings sanitary drains are connected to this manhole.

It is understood that Councils preference is for all sanitary sewer assets to be wholly located in the lot which they service however, relocating the sanitary drainage from existing buildings is not practicable and would require extensive resources and funds to achieve.

It is therefore proposed that a private easement be put in place over the existing sanitary drainage in Lot 2 to service the existing buildings in Lot 1 as shown in the sanitary drainage easements plan (attached). This connection would serve the existing buildings currently connected to the sewerage network as well as future buildings in Lot 1, provided the capacity is acceptable.

The sanitary drainage easements plan shows the indicative location of the easement.

Desktop analysis and aerial images (RRC Infrastructure Planning Maps) appear to show the sewer lines located underneath the existing building; however the attached Sanitary Drainage Plan from the Building and Plumbing Report shows the sewer traversing around the buildings.



1.2 Stormwater

Please investigate the site's internal stormwater drainage systems and provide further information to confirm all stormwater connections for each lot being serviced are wholly located within their respective lot boundaries. Please note, any connections and/or infrastructure which is not wholly located within the lot it is servicing, will require private stormwater easement(s) to be provided.

Furthermore, with respect to the 600mm diameter main traversing through Lot 1, it is preferred this infrastructure be dedicated via an easement, please provide comments.

Building and Plumbing Records provided by Rockhampton Regional Council show the stormwater connections for each lot, all of which are connected to the 600 RCP which runs through Lot 1 and along the boundary of Lot 3.

Although there is currently no easement in place for the council owned 600mm RCP running through the existing lots, it is proposed that this infrastructure be dedicated to council via an easement.

Due to the realignment of the property boundaries, existing services in Lot 1 drain through assets located in Lot 2, which continue through Lot 1 to the council own 600mm RCP. Additionally, existing services in Lot 2 drain to the council owned 600mm RCP through assets located in Lot 1.

It is proposed to maintain the existing services and place an easement of the trespassing assets to provide stormwater drainage across the site.

The alignment of the proposed stormwater connection is shown below in Figure 1.



Figure 1: Proposed Stormwater Connection



I believe the above responses meets Council's requirements and satisfies the information request submitted by Council. If you require any further information, please contact me on (07) 49211780.

Yours sincerely

Lachlan McMurtrie

Operations Manager

ATTACHMENTS

Attachment 1 – Sanitary Drainage Easement Plan

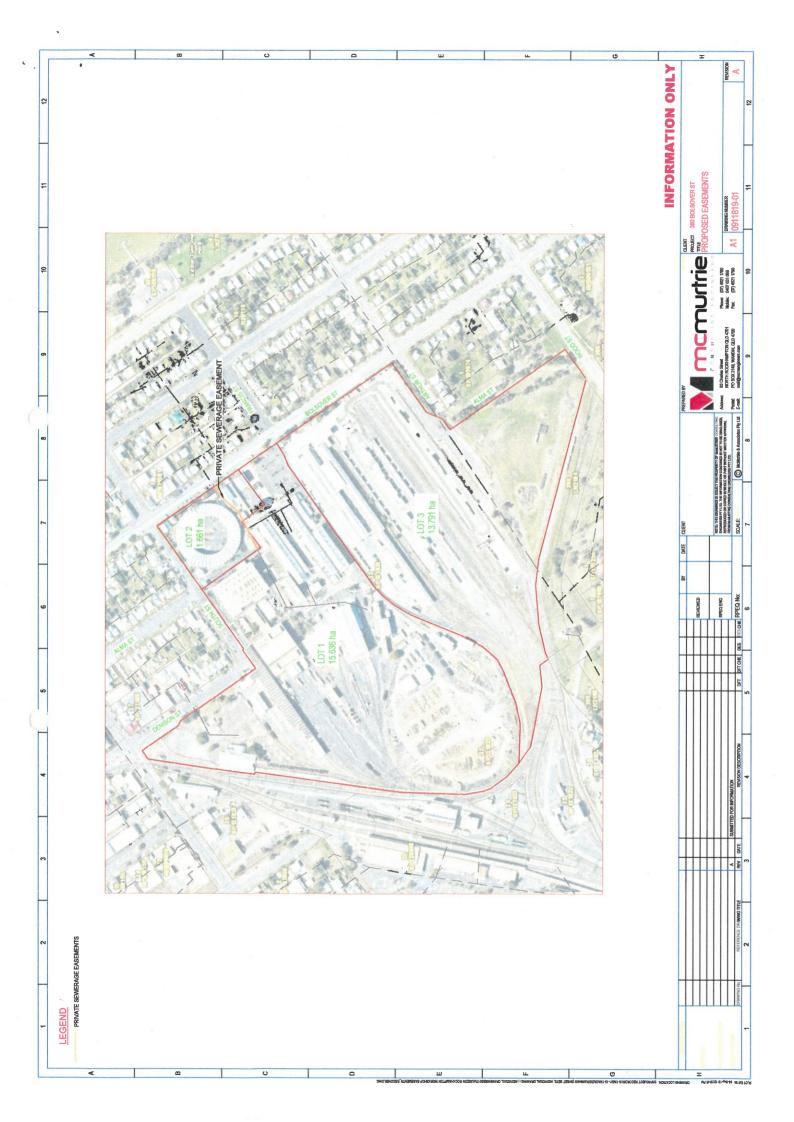
Attachment 2 – Stormwater Easement Plan

Attachment 3 – Sanitary Drainage Plan



ATTACHMENT 1

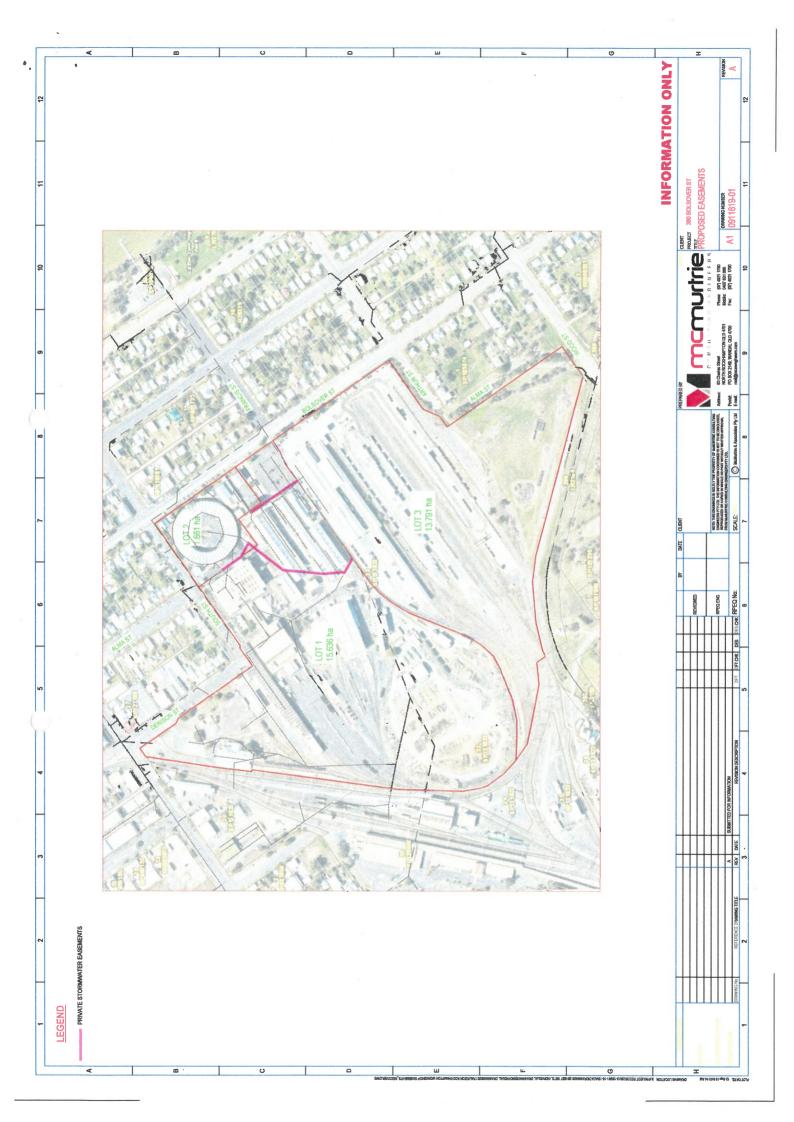
Sanitary Drainage Easement Plan





ATTACHMENT 2

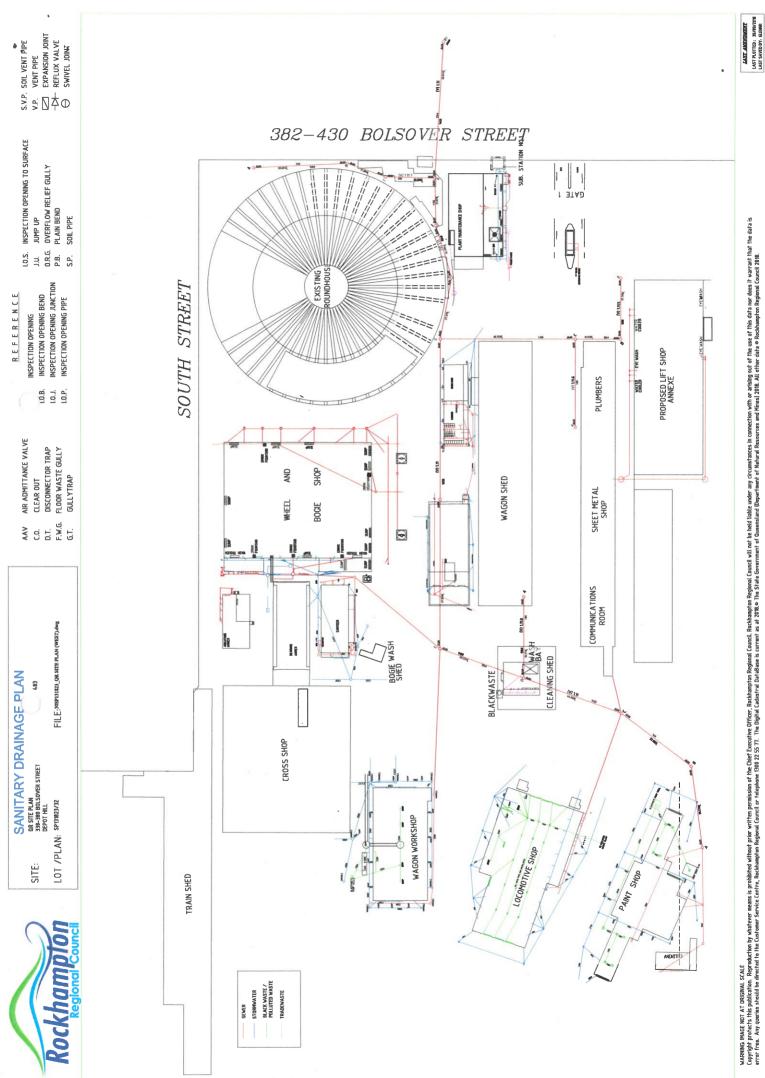
Stormwater Easement Plan





ATTACHMENT 3

Sanitary Drainage Plan – from Building and Plumbing Report



MARRING WAGE NOT AT DRICKALE.

Copyright protest his ballichair or an expression of the Chief Executive Officer, Rackhampton Regional Council vill not be held liable under any circumstances in connection with or arising out of the use of this data nor dees it warrant that the data is expressionable without prior written permission of the Chief Executive and Winst 2018. All other data is Rechampton Regional Council 2018. All other data is Rechampton Regional Council 2018. All other data is Rechampton Regional Council 2018.



P (07) 4921 1780

F (07) 4921 1790

E mail@mcmengineers.com

mcmengineers.com

ABN 69 958 286 371

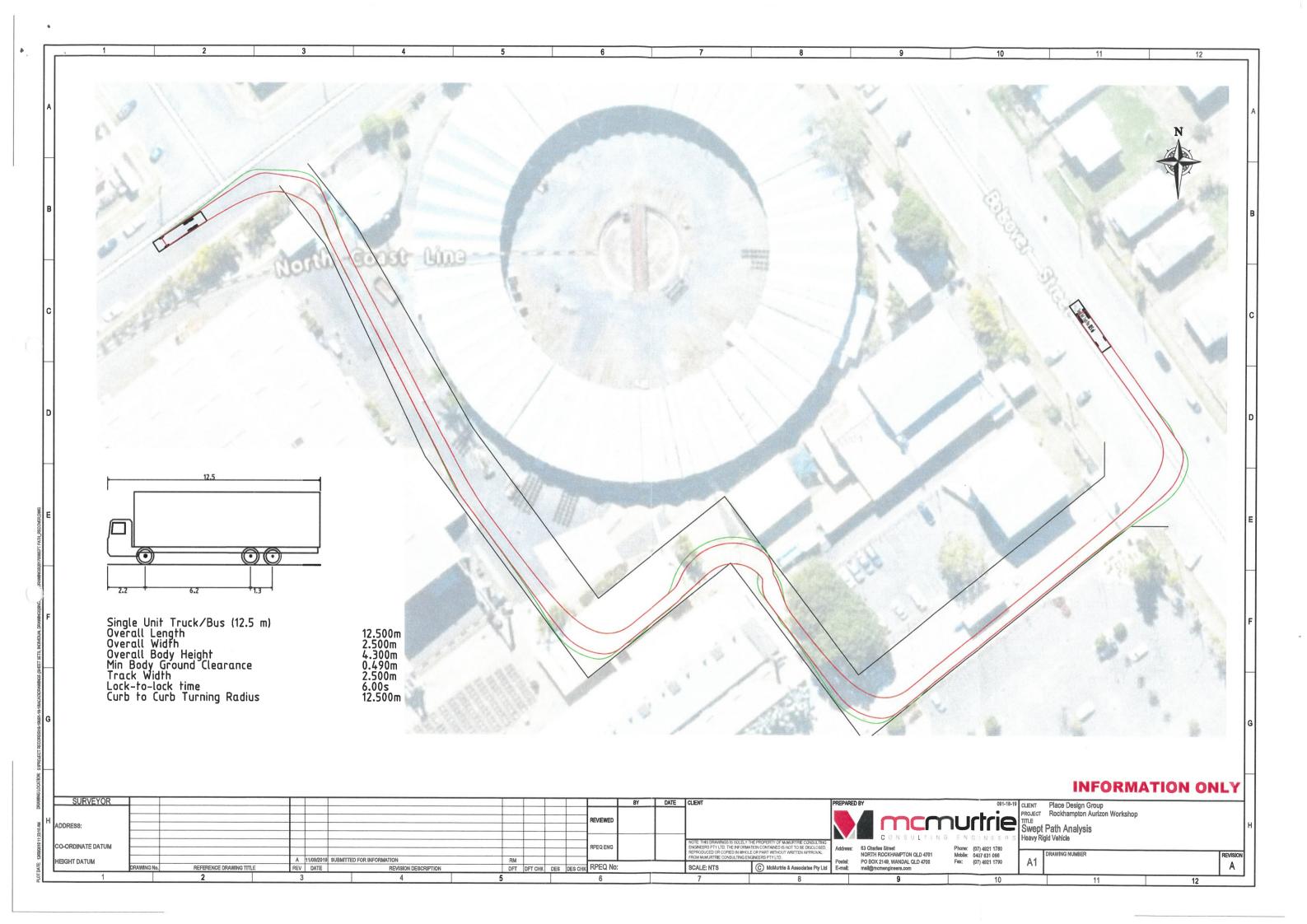
PO Box 2149, Wandal Q 4700 63 Charles Street North Rockhampton Q 4701

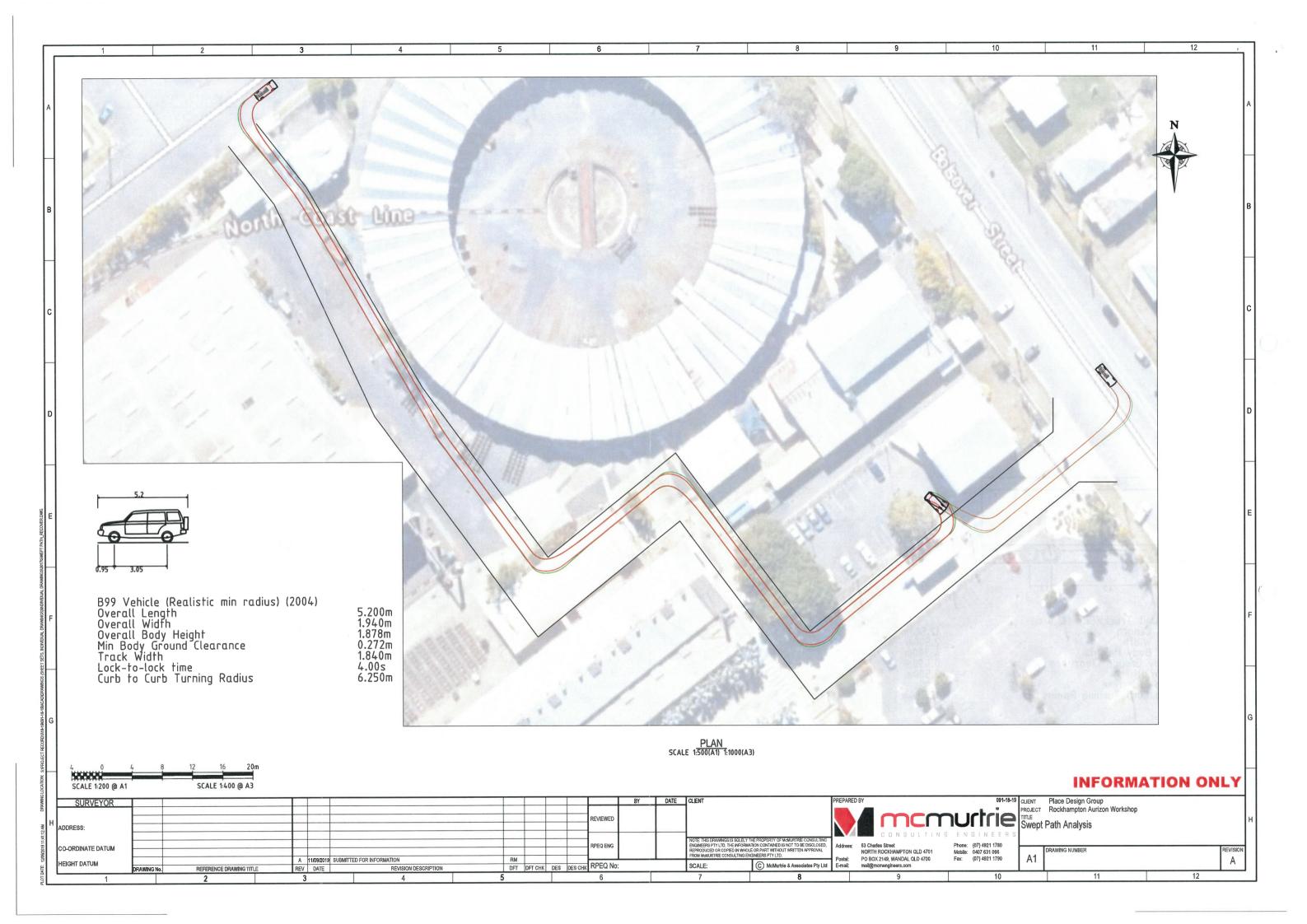
OUR AFFILIATIONS

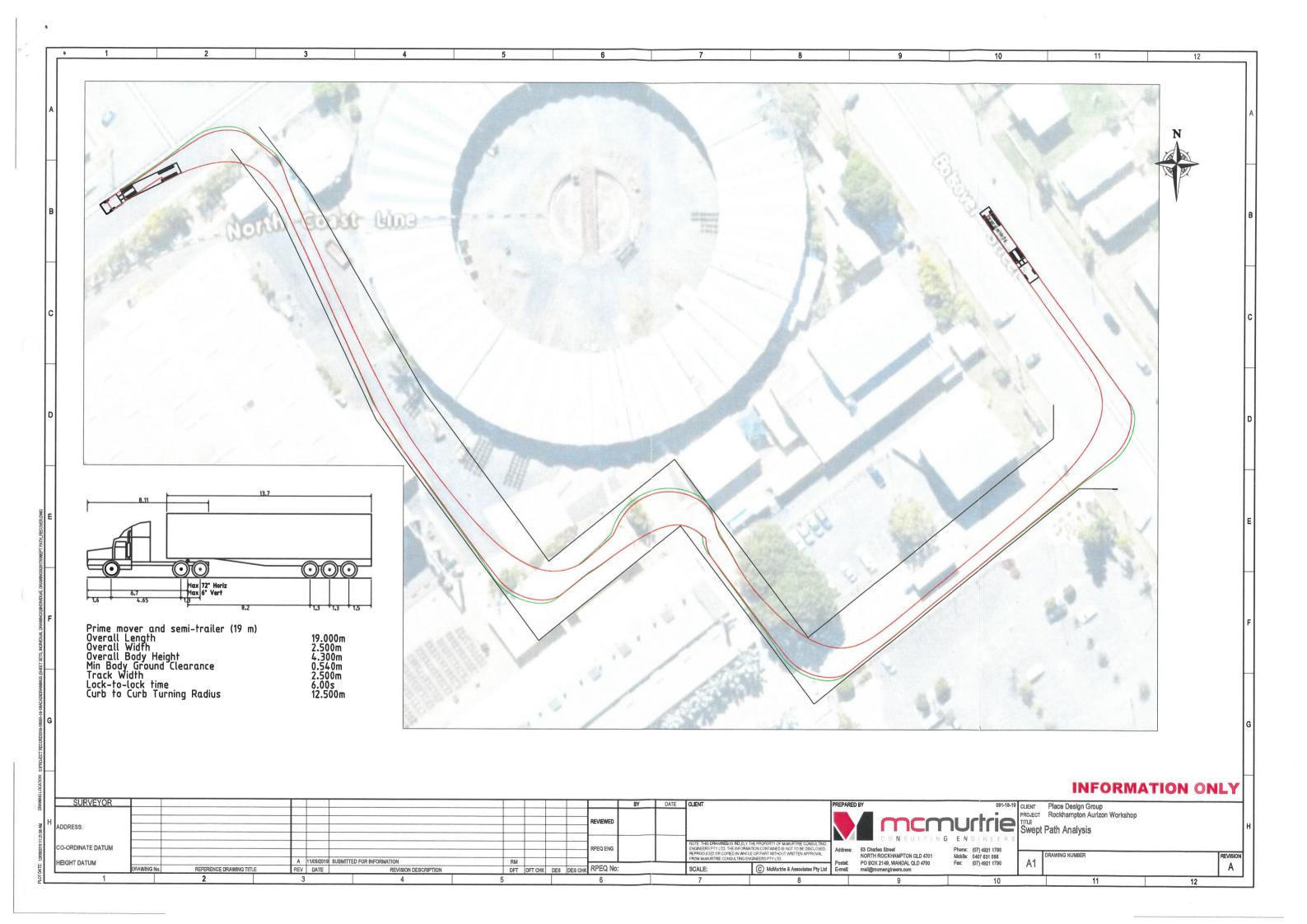












4 November 2019

Nick Holt Placedesign Group 131 Robertson Street Fortitude Valley 3006 Qld

Dear Nick

Proposed easement - Rockhampton Railway workshops: Heritage issues

The purpose of the proposed easement on Lot 2 is to ensure that the owners of Lot 1 has access to South Street via the existing gates that are located on the boundary of Lot 2

The designation of the easement does no more than provide rights of access to a certain parcel of land. It does not infer that any works or changes are proposed on the proposed parcel that will be designated an easement. No works are proposed that would impact on the significance of the place- or more specifically the Apprentice Master's building, the Commercial office or the Roundhouse.

Obviously if building works are proposed within the easement, they would be subject to the normal assessment processes for heritage places as it within the heritage boundary. Any works would need to be asses as to their impact on the cultural heritage significance of the place.

Work requiring formal assessment by the Department of Environment and Science would normally be part of an overall application using MyDAS under the Planning Act 2016 and lodged through the local authority which acts as assessment manager. In this case, the Department of Environment and Science acts as a referral agency.

Works that potentially no impact on significance could be approved directly by the Department of Environment and Science through the issue of an exemption certificate.

Regards

Thom Blake

900

1 Foch Street Ashgrove Q 4060

1 07 3306 1177

ABN 15 865 408 855

