

143-179 FLINDERS AVENUE, LARA

INFRASTRUCTURE & SERVICING ASSESSMENT

November 2016

Rev01

TGM GROUP PTY. LTD.

Level 1, 27-31 Myers Street

Geelong, Victoria 3220

Phone: (03) 5202 4600

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Client: L. Bisinella Developments Pty. Ltd.

Project Name: 143-179 Flinders Avenue, Lara

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Project Name:	143-179 Flinders Avenue, Lara
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APPENDIX A – SERVICE AUTHORITY ADVICE

1. EXECUTIVE SUMMARY

TGM has been engaged to undertake an Infrastructure and Servicing Assessment that outlines the necessary infrastructure to provide all essential services to the proposed residential subdivision at 143-179 Flinders Avenue, Lara.

This document is to support the combined rezoning and subdivision application for 143-179 Flinders Avenue, Lara, from Rural Living Zone (RLZ) to General Residential Zone (GRZ1) via a Planning Scheme Amendment and subdivision.

The purpose of the assessment is to recognise and review existing infrastructure and services to identify the necessary future infrastructure required to service the proposed subdivision. Services that have been investigated include water, sewer, electricity, gas, telecommunications, stormwater and road infrastructure. Development and design responses have been formulated for each respective service to ensure the subdivision can be serviced in an economical, efficient and sustainable manner.

The proposed 143-179 Flinders Avenue Lara rezoning and subdivision will result in a lot yield of 23 residential lots with the balance lot remaining as RLZ, based on the proposed Outline Development Plan.

Preliminary investigations with service authorities has confirmed there is sufficient capacity within the existing supply networks to provide all essential services to facilitate the proposed subdivision without the need for major augmentation.

The engineering assessment also identified that road and drainage design of the proposed subdivision can be completed in accordance with City of Greater Geelong design standards.

2. BACKGROUND

TGM has been requested by L.Bisinella Developments Pty. Ltd., for the property at 143-179 Flinders Avenue, Lara, to undertake an Infrastructure & Servicing Assessment. The report will review existing infrastructure and assess the feasibility and availability of services to the subject land. The development group intend to subdivide the site for residential land use consistent with the Geelong Planning Scheme.

Services include:

- Potable Water
- Sewerage
- Recycled Water
- Electricity
- Gas
- Telecommunications
- Stormwater
- Roads

Contact was made to all Responsible Authorities to determine the provision of the essential services, their responses have been reviewed and the impacts and constraints discussed within this report.

Copies of the responses are provided in the Appendix at the end of this document.

3. EXISTING SITE CONDITIONS

The total proposed subdivision is approximately 2.05 ha in area located on the northern boundary of Lara (see Figure 1). The proposed site is currently zoned Rural Living Zone with a frontage to Flinders Avenue with connections to Spoonbill Court and Firetail Way.

Existing terrain within the site falls in a south westerly direction. Stormwater runoff generated onsite is directed west through existing developments to Serendip Creek.

4. PROPOSED DEVELOPMENT LAYOUT

The subject land is approximately 2.05 hectares. The proposed subdivision layout is shown in Figure 1.

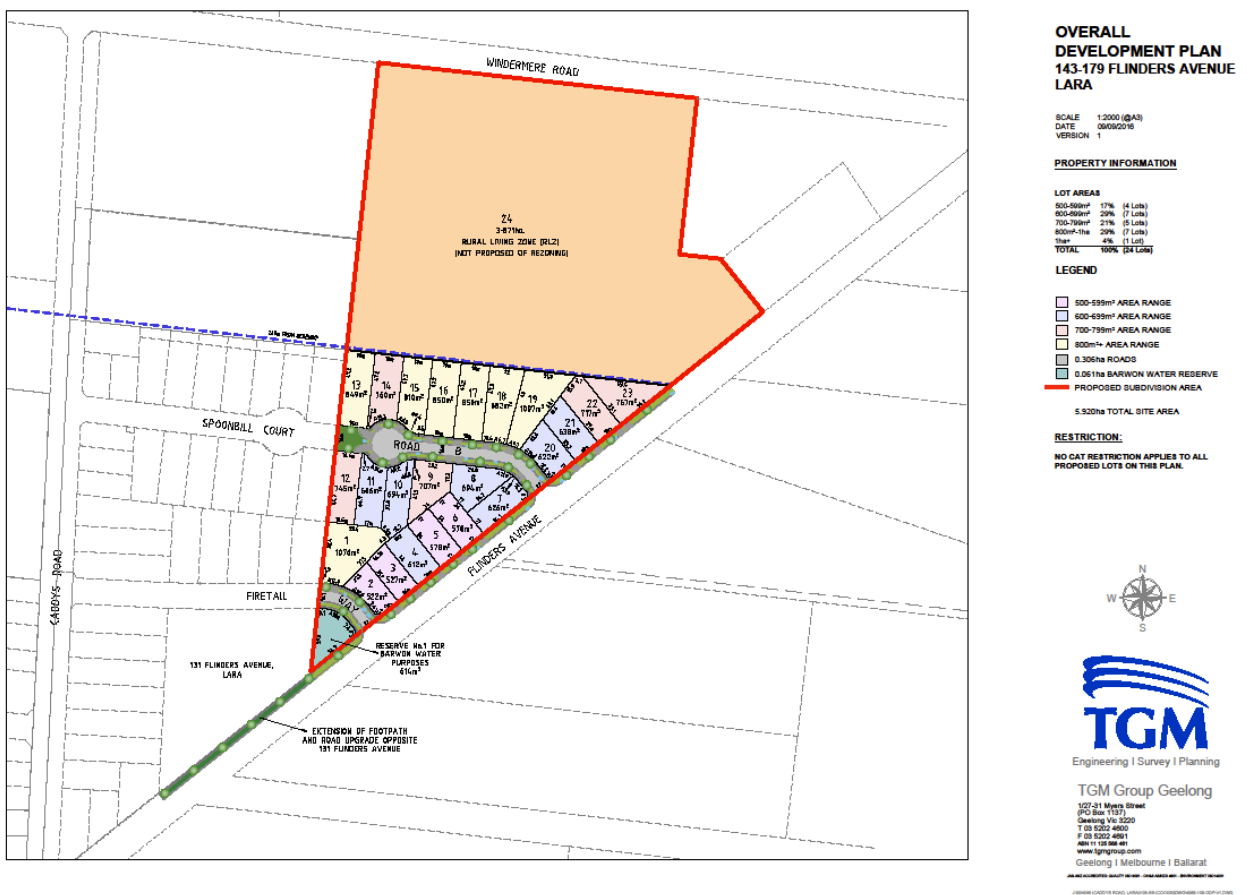


Figure 1: Proposed Subdivision Layout

5. POTABLE WATER

Barwon Water provides reticulated potable water supply to residential and industrial customers within its designated region and is responsible for water supply in Lara.

Barwon Water has advised there is adequate capacity in the existing 150mm main running along Flinders Avenue to service the proposed development. As part of the development works, the existing water mains in Firetail Way and Spoonbill Court will be extended through the subdivision to Flinders Avenue.

6. SEWERAGE

Barwon Water is the responsible authority for the collection, pumping, treatment and disposal of sewage to all customers within their designated region and is responsible for all sewerage collection within Geelong including Lara.

The existing surface levels on the site are too low to be adequately serviced by the existing Barwon Water gravity sewer system. While consideration has been given to filling the lots to allow them to discharge into the existing gravity system, the depth of fill was considered excessive. Accordingly, as outlined by Barwon Water, a new sewer pump station (SPS) is required to be constructed to cater for the sewer from the site.

The SPS is proposed to be located at the southern end of the proposed development and a reserve for Barwon Water purposes is provided in the Overall Development Plan. The SPS is proposed to discharge via a rising main to the existing Barwon Water gravity network at the intersection of Firetail Court and Caddy's Road.

7. RECYCLED WATER (BARWON WATER)

The Lara area is remote from any sources of recycled water. Barwon Water does not have any proposal to supply or develop systems to provide recycled water in the area.

8. ELECTRICITY

Powercor is the supply service authority for power supply in the region and is responsible for building, operating and maintaining the electricity network within the Geelong region.

Powercor advise that the existing network can supply to the subject land if rezoned to residential land. Powercor have advised that the proposed development will be serviced by an extension of the existing underground systems in Firetail Way and Spoonbill Court, provision of new underground cabling and retirement of existing overhead cabling in Flinders Avenue.

9. GAS SUPPLY

AusNet Services are the local gas distributor for reticulated gas supply in the Geelong region. No response has been received from AusNet at the time of this report, however the gas assets have been reviewed based on DBYD plans.

There are gas assets located in Flinders Avenue, Firetail Way and Spoonbill Court which would be extended to provide supply to the proposed development at 143-179 Flinders Avenue.

10. TELECOMMUNICATIONS

The Developer has an arrangement with Opticomm Co. Pty. Ltd. for the provision of telecommunication services instead of NBNCo. or Telstra. Opticomm have fibre optic communication assets located in the adjoining Firetail Way and Spoonbill Court to the west of the proposed development. Opticomm Co Pty Ltd have advised that these services can be extended to supply Fibre Optic communications to the proposed development at 143 – 149 Flinders Avenue Lara.

11. STORMWATER

The proposed development is proposed to be drained to the existing stormwater basin constructed as part of Stage 1 of the Lara Central Estate to the west. As demonstrated in the site stormwater management plan SWMP 004986-200CE Addendum 1A prepared by TGM Group, and the Flood Impact Assessment by BMT WBM, the site can be satisfactorily drained westwards via the existing infrastructure constructed in the earlier stages of the Lara Central Development. As outlined in the reports, the exiting stormwater basin is sized sufficiently to meet all authority requirements for water quality and water detention.

12. ROADS

The subject land has single road frontage to Flinders Avenue and connections to Firetail Way and Spoonbill Court.

Upgrade works of Flinders Avenue will be required as a part of the overall development, and extension of Firetail Way will be required as part of the development. A pedestrian connection will be created from the proposed new court to Spoonbill Court.

13. CONCLUSION

The Infrastructure and Servicing Assessment undertaken and presented in this report has identified that the proposed residential subdivision at 143-179 Flinders Avenue, Lara, can be readily serviced and infrastructure provided for water supply, sewer, electricity, gas and telecommunications. The relevant service authorities have confirmed supply capacity available from current assets or additional infrastructure requirements to service the overall development.

This report outlines the necessary infrastructure to provide all essential services to the proposed residential subdivision 143-179 Flinders Avenue, Lara.

TGM notes that additional fees and charges will apply for the provision of infrastructure and essential services from the relevant authorities at the time of development. The Developer will be responsible for these costs. Fees will vary depending on the relevant authority and will be confirmed under formal supply applications.

APPENDIX A - *Authority Responses*

Barwon Water
Powercor
Opticomm
Ausnet

Our Ref: L013555
Enquiries To: Kylie Clark

11 October 2016

TGM Group Pty Ltd
PO Box 1137
GEELONG VIC 3220

By email: nicoled@tgmgroup.com

Dear Nicole,

RE: No. 143-179 Flinders Avenue, Lara – Rezoning to Residential Land

I refer to your request dated 14 September 2016 for water and sewer servicing advice for a 23 lot subdivision at No. 143-179 Flinders Avenue, Lara. This servicing advice is considered 'preliminary advice' and based on information provided by you. Barwon Water will confirm requirements with any response to planning permit referral or application for costs and conditions.

Water

The lots fronting Flinders Avenue can be serviced via the existing 150mm water main. The existing 150mm water mains located in Firetail and Spoonbill Court are to be extended through to the existing 150mm water main in Flinders Avenue.

Sewer

The proposed development area appears to be quite flat and has very little fall towards the existing sewer system. If the proposed development was to connect by gravity sewer then the land may require significant fill to allow a gravity connection.

An alternate sewerage connection option involves discharging into a new reticulation size sewer pump station (SPS). The proposed SPS would discharge sewage flow via a rising main (RM) into the an existing manhole (shown as GID 5337638 on Figure 1) located at the intersection of Caddy's Road and Firetail Court. Plans indicate there may be a reserve made available for Barwon Water purposes at the southern end of the land. This proposed reserve could be used for the new SPS location.

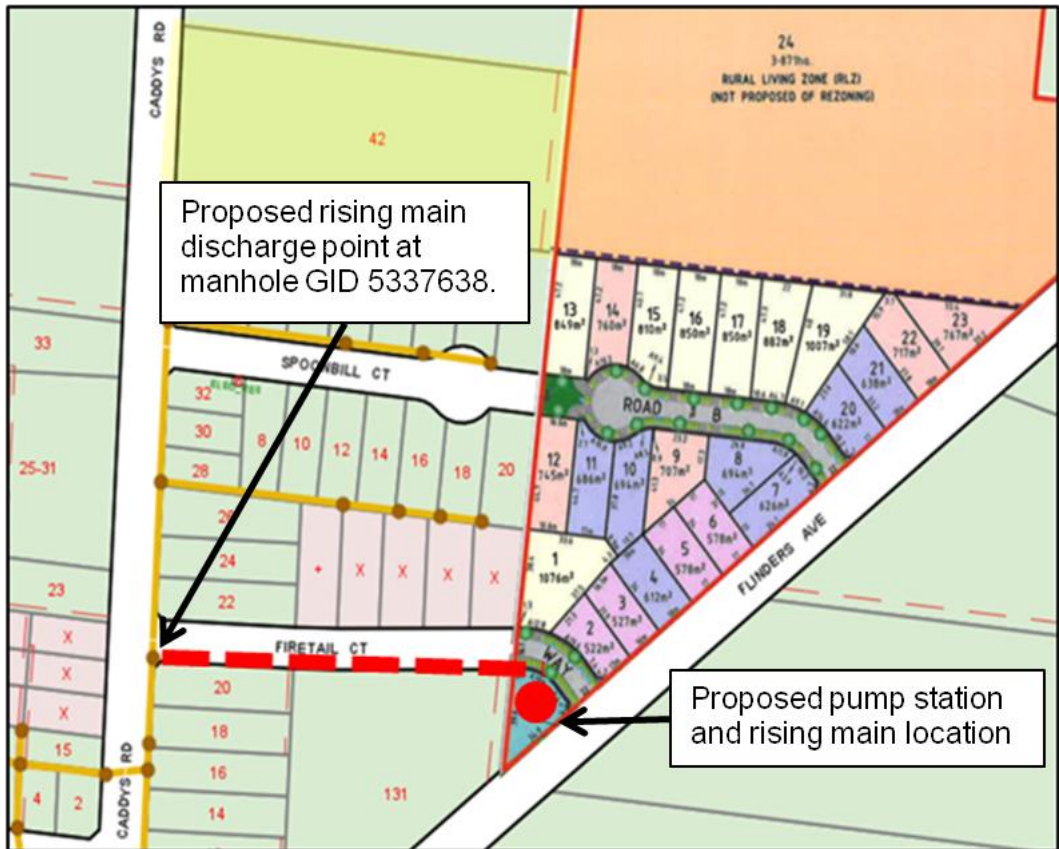


Figure 2 - Proposed SPS and RM proposed location.

Should you wish to discuss this letter further, please contact Barwon Water’s representative listed above at our Lonsdale Street office, South Geelong.

Yours faithfully,

Steven Wallner
Land Development Coordinator
Development Services

POLE 3
(LIS 61088)
NEW LV CHP
(GEI21, 400A LV FSD)

NEW LV MAINS CABLES ARE
185mm² 4/c lv. sa. x.

RETIRE POLE 4 (LIS 731696)
RESERVE 160 FLINDERS LANE
FROM NEW LV U/G MAINS

RETIRE LV POLE (LIS 58023)

RESERVE No.1 FOR
BARROW WATER
PURPOSES
614m²

EXTENSION OF FOOTPATH
AND ROAD UPGRADE OPPOSITE

200m FROM SERENCP

WINBILL COURT

FIRETAIL

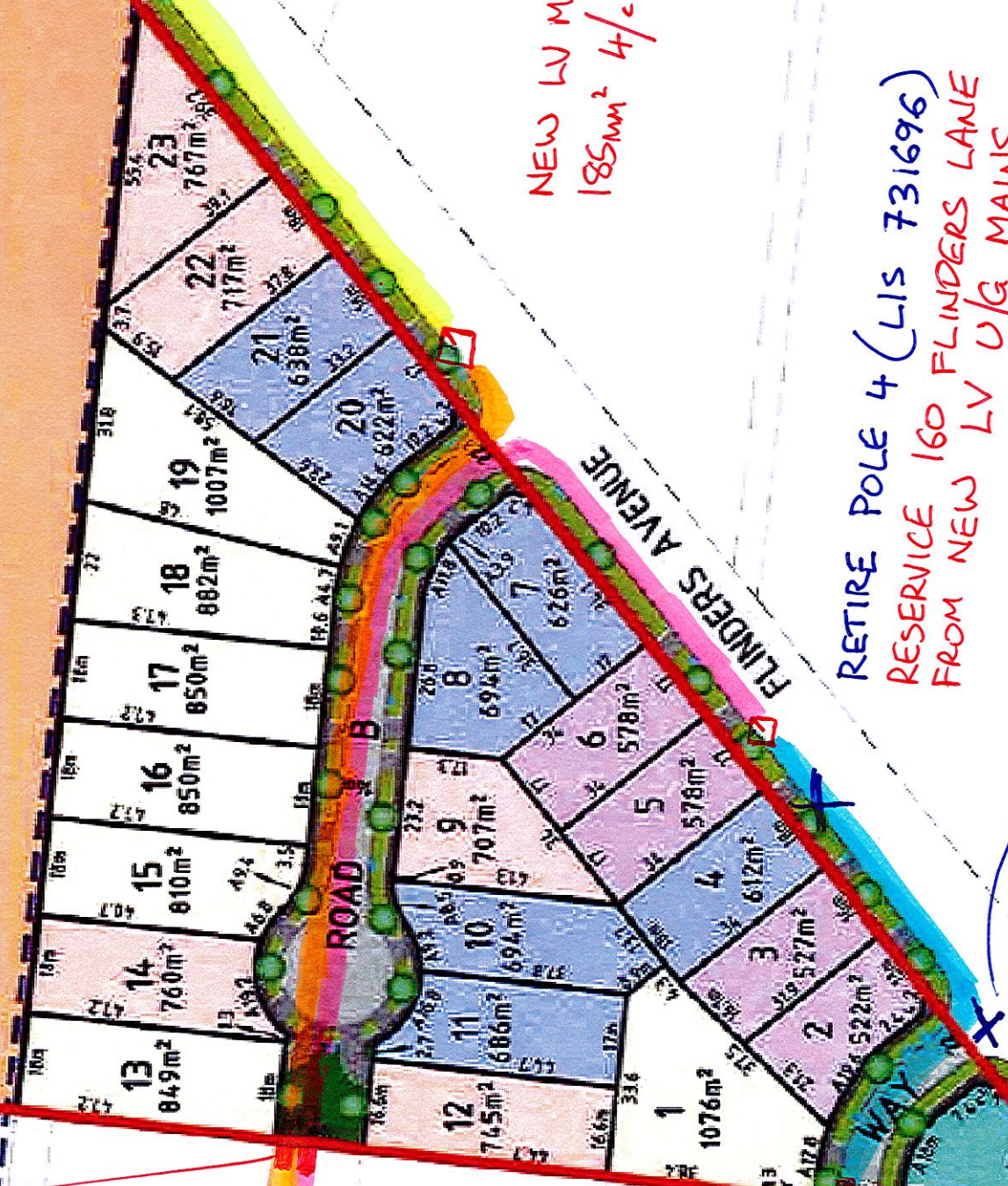
TRAIGHT JOINT

ERS AVENUE,
ARA

FLINDERS AVENUE

ROAD B

WAY



14 October 2016

L.Bisinella Development Pty Ltd
C/- TGM Group Pty Ltd
PO BOX 1137
Geelong VIC 3220

Dear Nicole

**TELECOMMUNICATIONS INFRASTRUCTURE PROVISIONING CONFIRMATION for
143-179 Flinders Avenue Lara VIC 3212
Rezoning of Residential Land**

OptiComm Co Pty Ltd, ACN 117 414 776 (OptiComm) confirms that satisfactory arrangements are in place for telecommunications infrastructure in the following development and that this is in accordance to the Federal Telecommunications Act (1997). OptiComm confirms that the telecommunications network infrastructure in the captioned development site has been provisioned and consents to the certification of plan of subdivision and hereby issues a Statement of Compliance pursuant to the provisions of Section 8(1) of the subdivision Act 1988:

Lot Number(s)	Plan of Sub-Division Number
Creating 23 Lot Subdivision	N/A
LOCATION	
143-179 Flinders Avenue Lara VIC 3212	

The proposed fibre optic telecommunications infrastructure will be operated in accordance to the 2010 amendment to the Telecommunications Act (1997) that requires a network capable of speeds over 25Mbps to be operated on a wholesale basis.

This confirmation is issued for this development only and is issued and given solely on the basis of the information provided by to OptiComm as at the date of this confirmation.

Additional works are still required in order for telecommunications services to be provided to customers in the development and these works will be carried out at OptiComm sole discretion base on Fibre to the Premise network being an undeclared service under the ACMA USO obligation.

OptiComm and the contractor issuing this letter on its behalf is not responsible to **L.Bisinella Development Pty Ltd C/- TGM Group Pty Ltd** a recipient of this confirmation or anyone else for any loss suffered in connection with this confirmation or any of the content and excludes, to the maximum extent permitted by law, any liability which may arise as a result of the issue of this confirmation or its content.

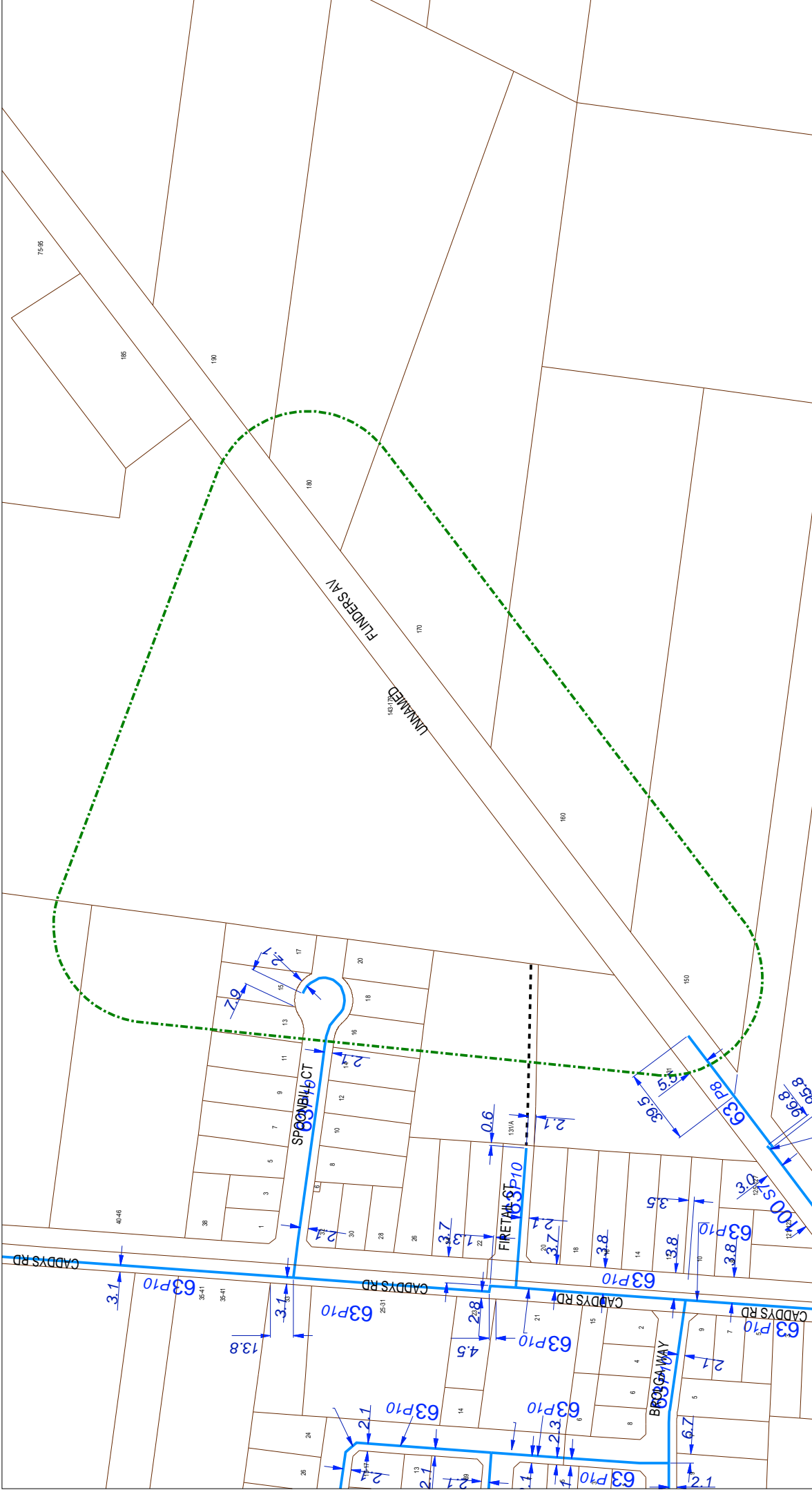
If you have any enquiries or require any further information please contact me at the above address.

Yours faithfully,
For and on behalf of OptiComm Co Pty Ltd



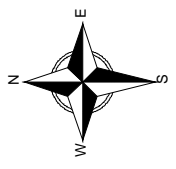
Phil Smith
Chief Regulatory Officer

0m 100m 200m 300m 400m 500m 600m



NOTE: AusNet Services has taken care to ensure that the locations of Gas Mains shown on this plan are accurate however some variations from records do exist and complete accuracy is not guaranteed. It is essential that the position of pipes be proved on site by hand excavation. AusNet Services shall not be liable for any loss damage claim or demand incurred either directly or indirectly resulting from any act or omission which was made in reliance in whole or in part upon this plan.

- - - - - Gas Transmission Pipeline
- Gas Distribution Mains
- - - - - Planned Gas Assets
- · - · - · Requested Area



Warning - Take Precautions if Printing this Plot in Black & White.
All planned mains shall be treated as live mains, as mains under pressure may be in existence.