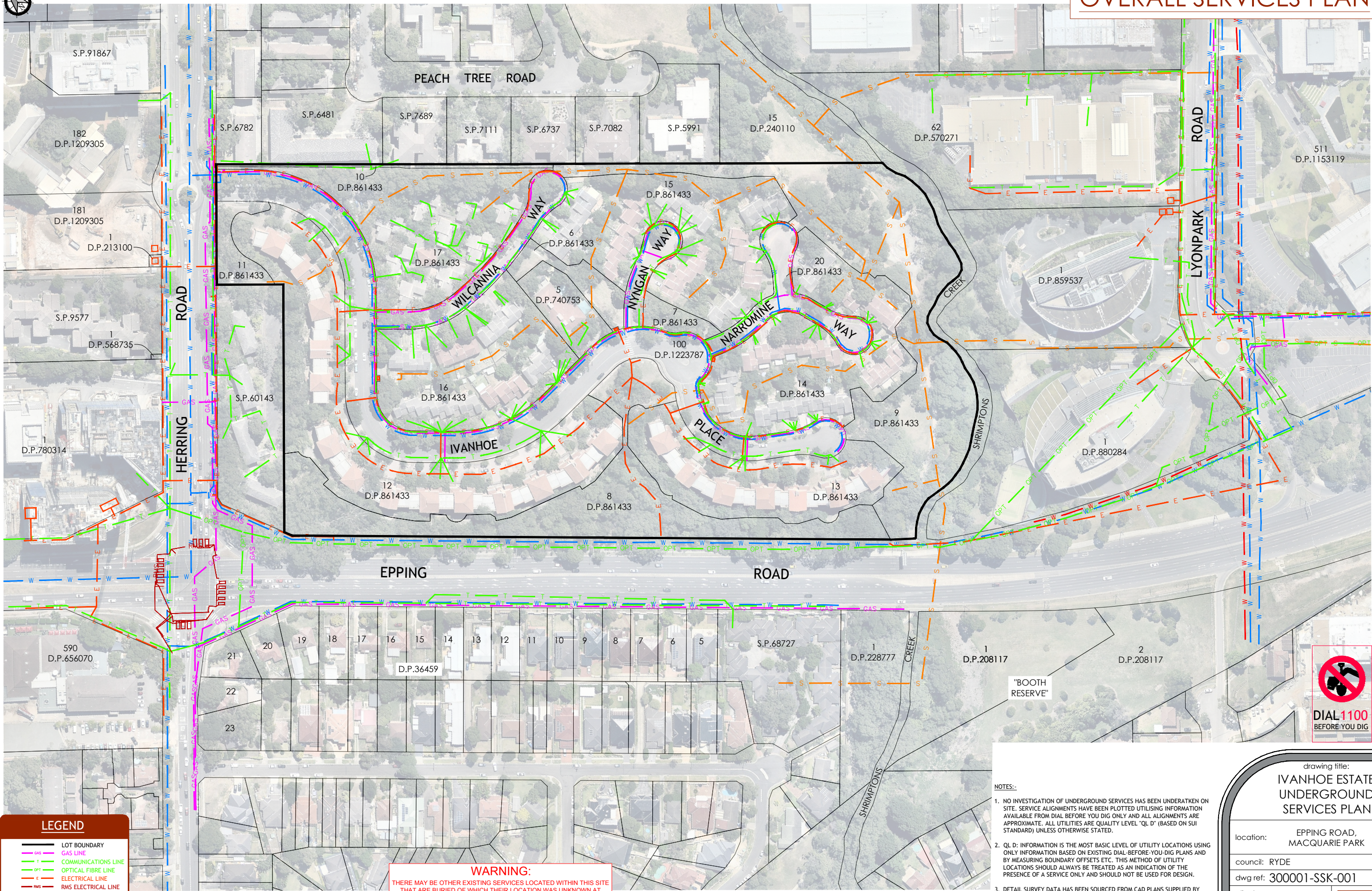


OVERALL SERVICES PLAN



**LEGEND**

- LOT BOUNDARY
- GAS LINE
- COMMUNICATIONS LINE
- OPTICAL FIBRE LINE
- ELECTRICAL LINE
- RMS ELECTRICAL LINE
- WATER LINE
- SEWER LINE

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drawing title:  
**IVANHOE ESTATE UNDERGROUND SERVICES PLAN**

location: EPPING ROAD, MACQUARIE PARK

council: RYDE

dwg ref: 300001-SSK-001

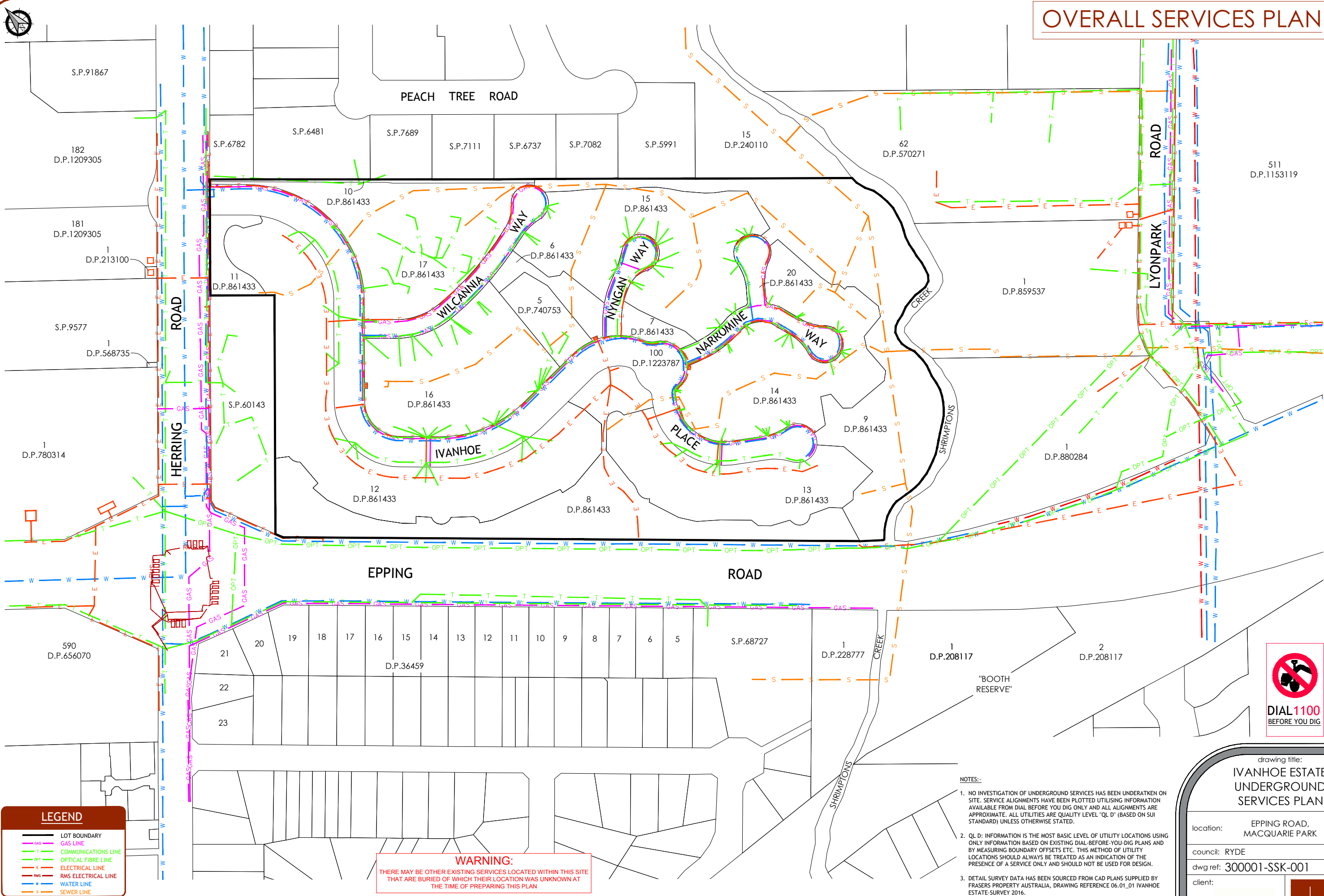
client:

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central coast office ph: (02) 4305 4300  
hunter office ph: (02) 4978 5100  
www.adwjohnson.com.au





OVERALL SERVICES PLAN

**LEGEND**

- LOT BOUNDARY
- GAS LINE
- COMMUNICATIONS LINE
- OPTICAL FIBRE LINE
- ELECTRICAL LINE
- RMS ELECTRICAL LINE
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drawing title:  
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council: RYDE

dwg ref: 300001-SSK-001

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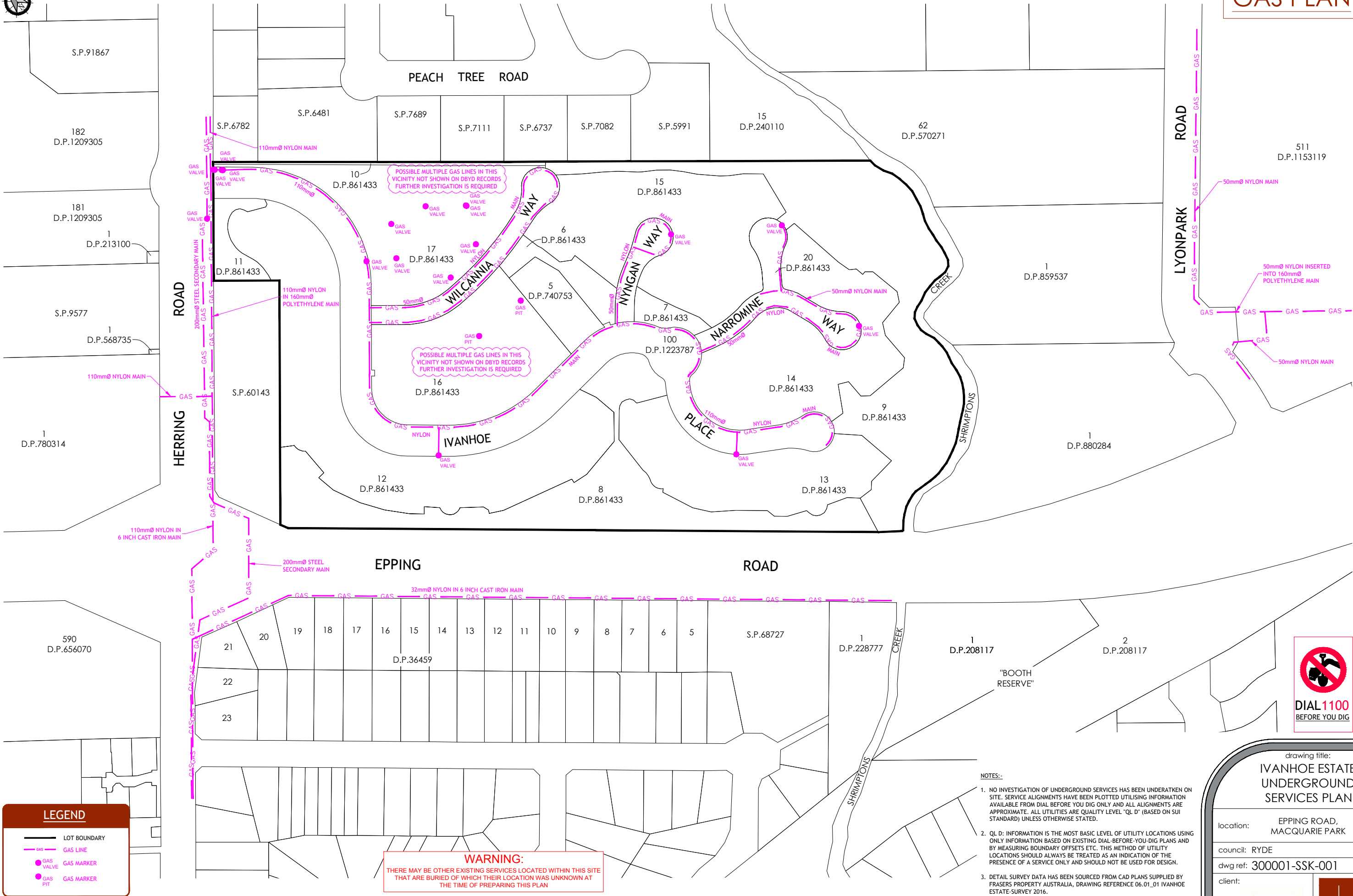
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GAS PLAN



LEGEND

LOT BOUNDARY

GAS LINE

GAS VALVE

GAS MARKER

GAS VALVE

GAS MARKER

GAS PIT

GAS MARKER

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EPPING ROAD,  
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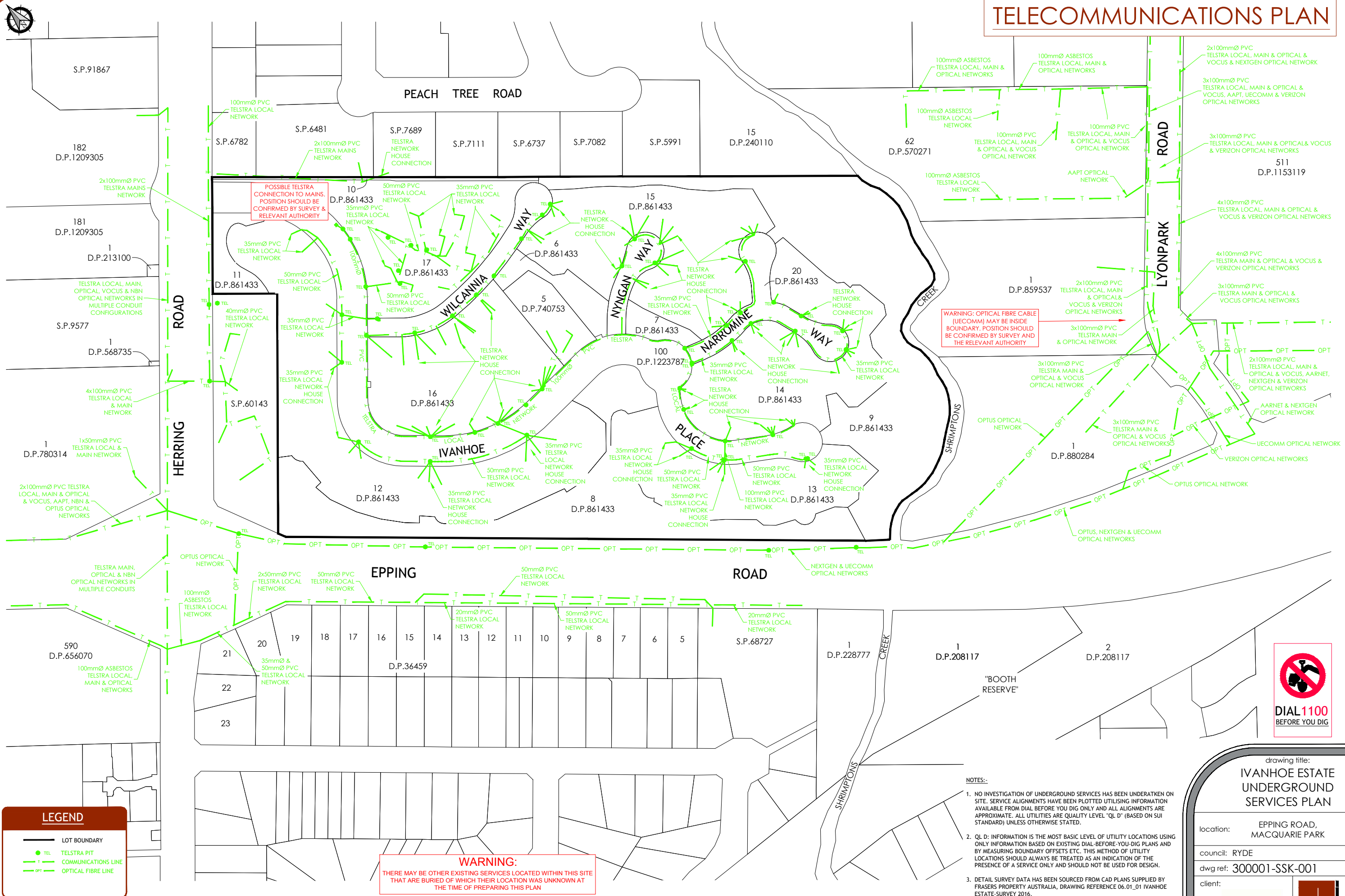
council: RYDE

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• project management • civil engineering • infrastructure • superintendency • economic analysis • social impact • town planning • surveying • development feasibility • visualisation • urban design



drawing title:  
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UNDERGROUND  
SERVICES PLAN**

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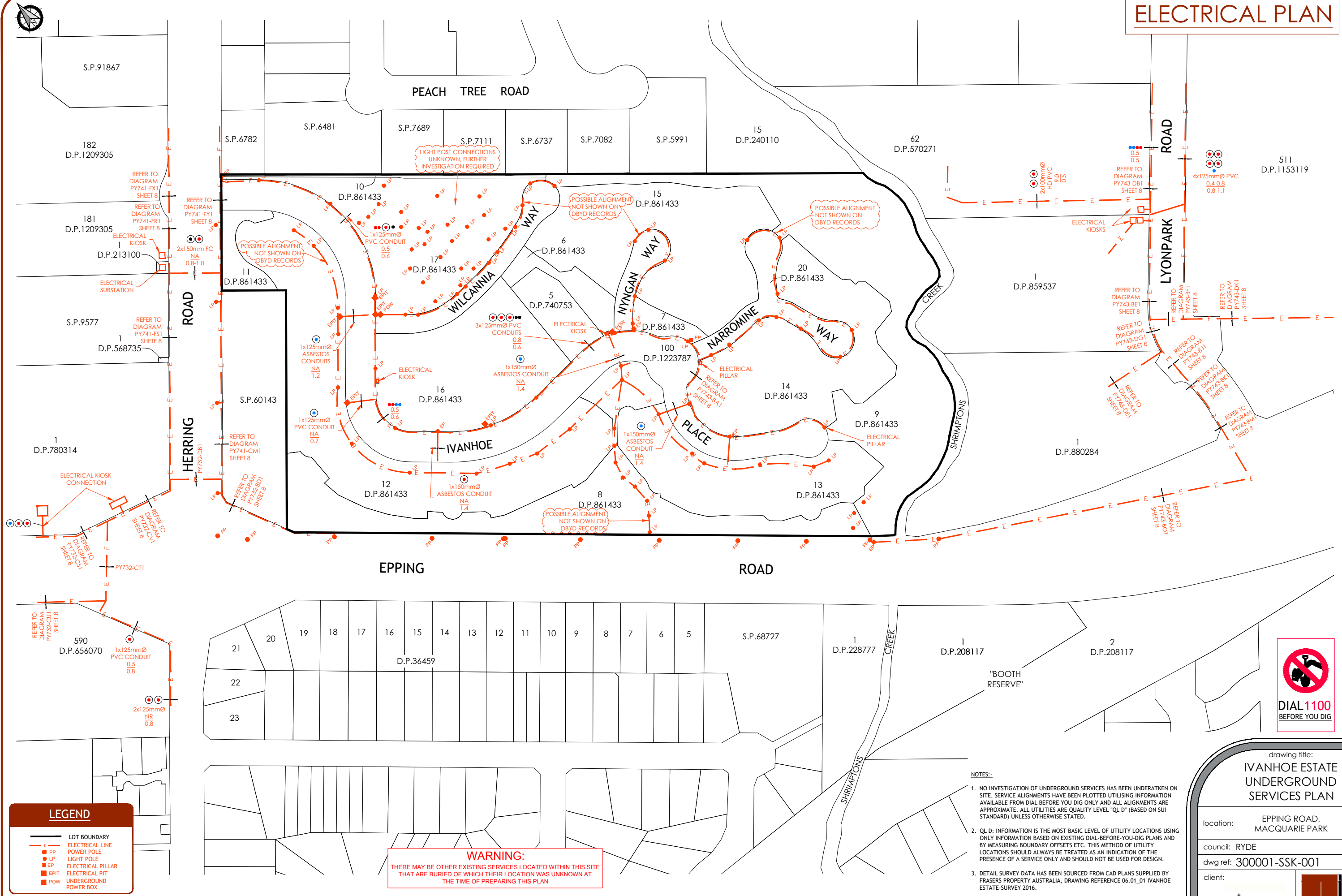
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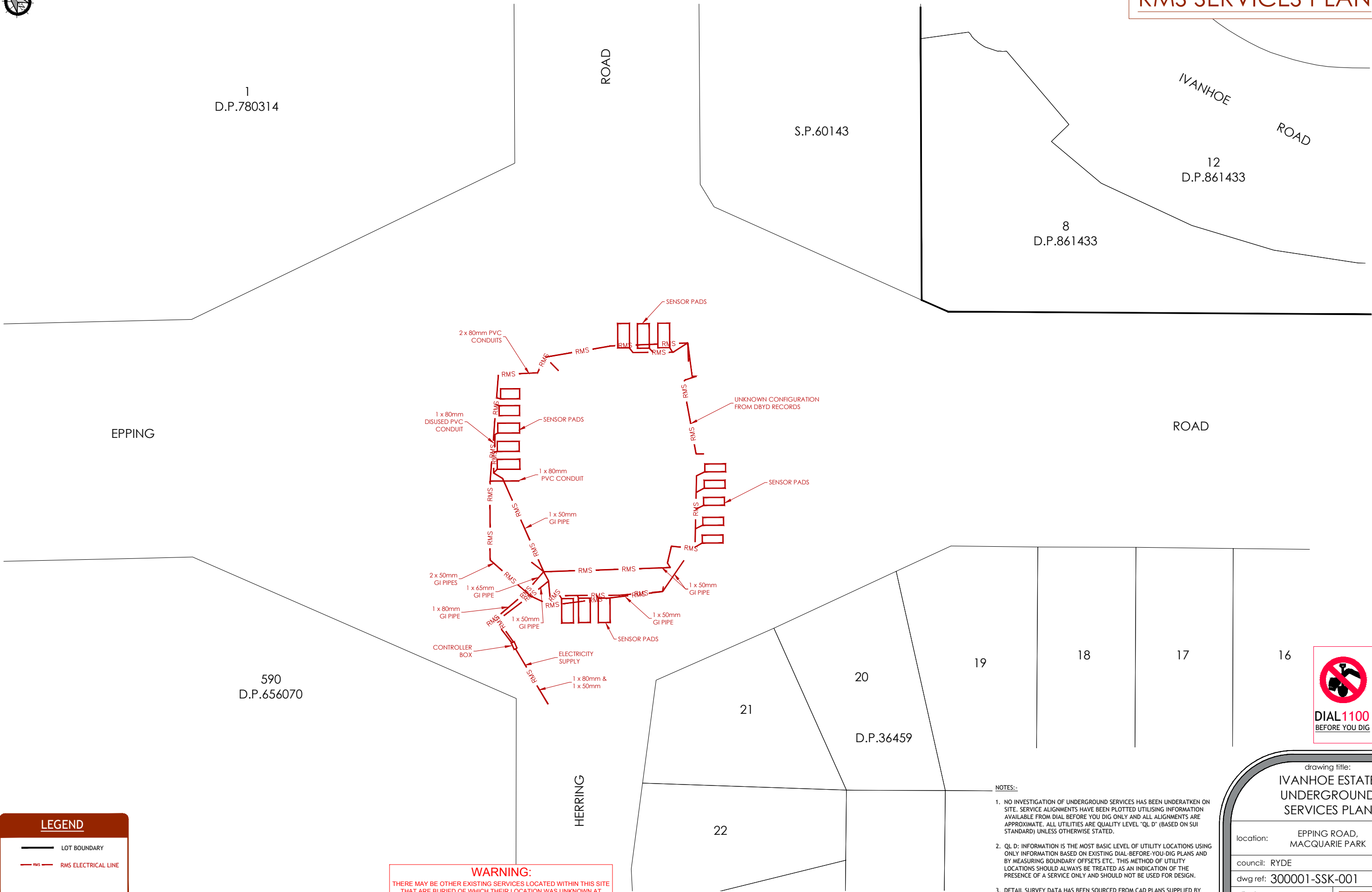


working beyond expectations





# RMS SERVICES PLAN



LEGEND

LOT BOUNDARY

RMS ELECTRICAL LINE

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drawing title:  
IVANHOE ESTATE  
UNDERGROUND  
SERVICES PLAN

location:  
EPPING ROAD,  
MACQUARIE PARK

council: RYDE

dwg ref: 300001-SSK-001

client:

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PROPERTY

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johnson

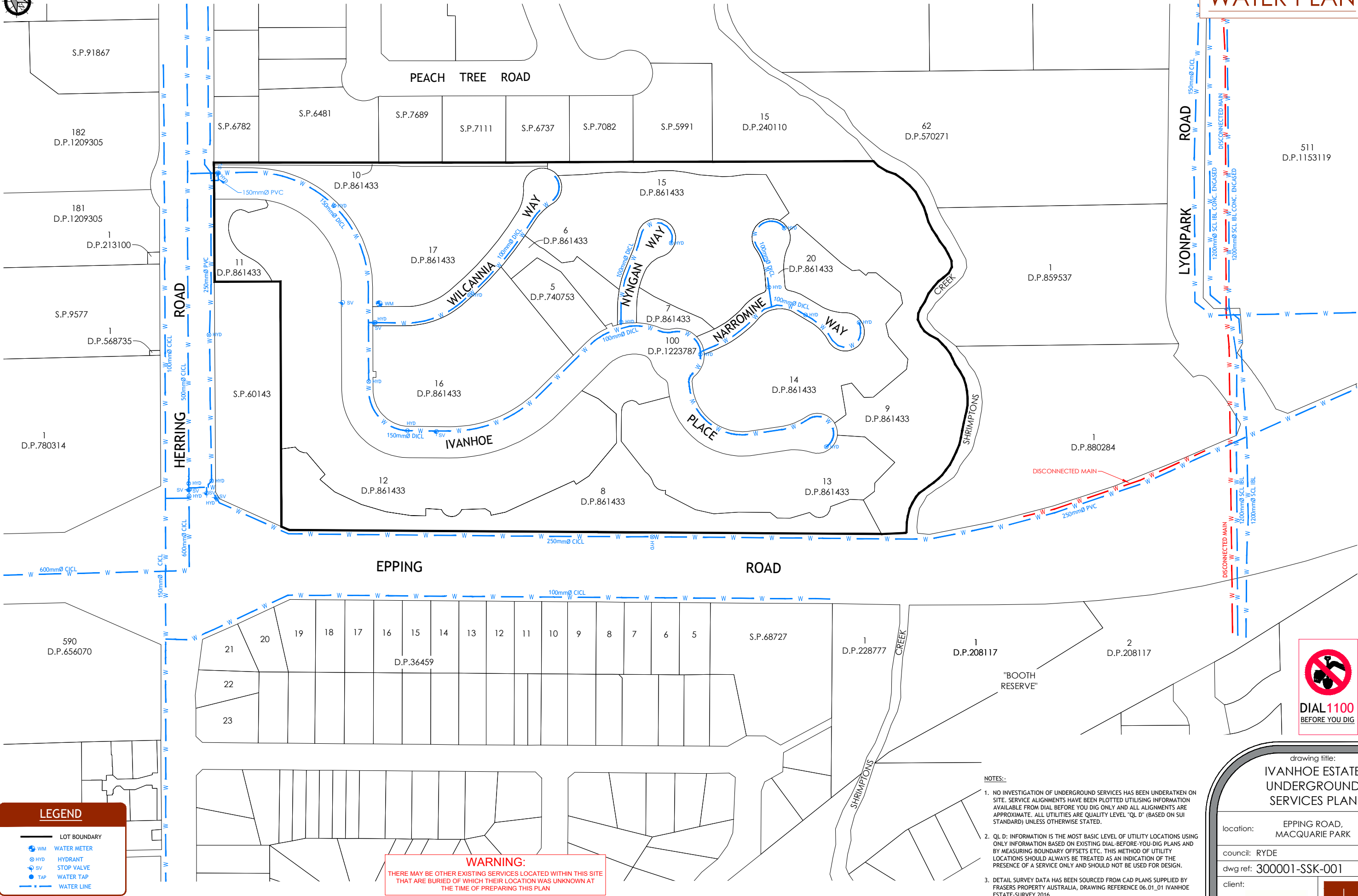
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WATER PLAN



LEGEND

LOT BOUNDARY

WM WATER METER

HYD HYDRANT

SV STOP VALVE

TAP WATER TAP

WATER LINE

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drawing title:  
**IVANHOE ESTATE  
UNDERGROUND  
SERVICES PLAN**

location: EPPING ROAD,  
MACQUARIE PARK

council: RYDE

dwg ref: 300001-SSK-001

client:

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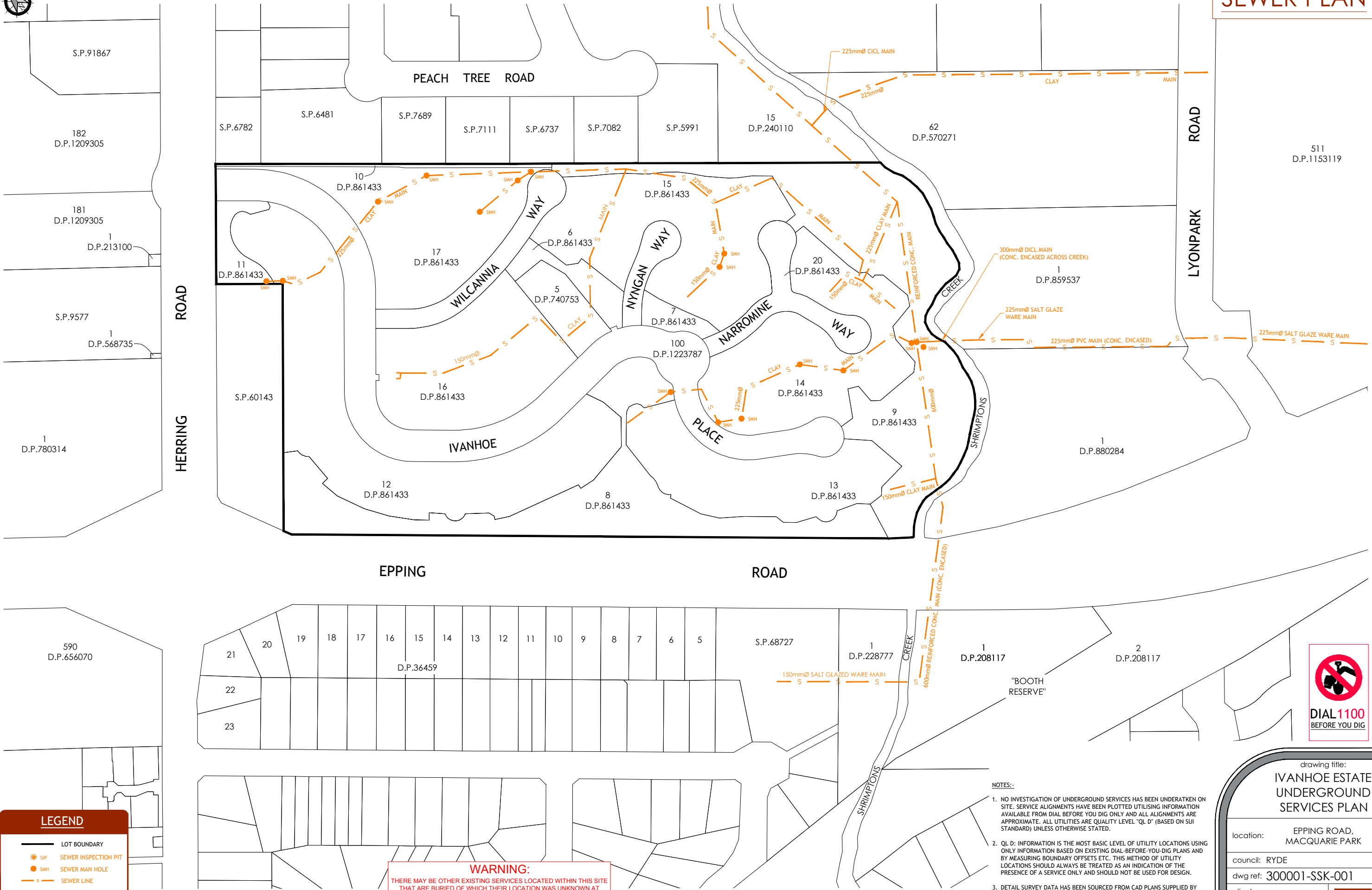
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SEWER PLAN



LEGEND

SIP

SEWER INSPECTION PIT

SMH

SEWER MAN HOLE

S

SEWER LINE

LOT BOUNDARY

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drawing title:  
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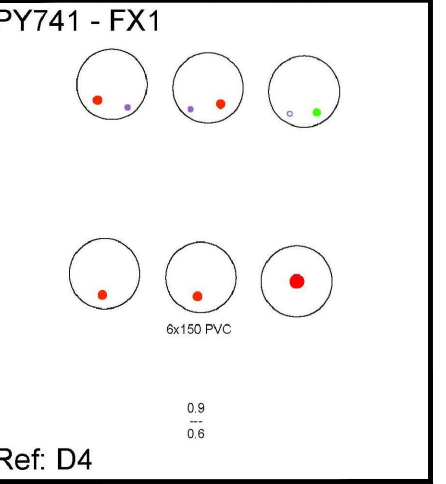
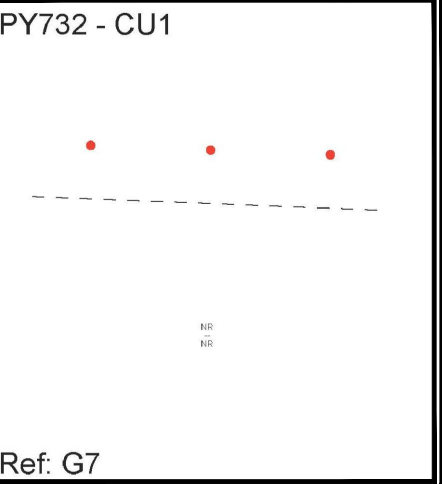
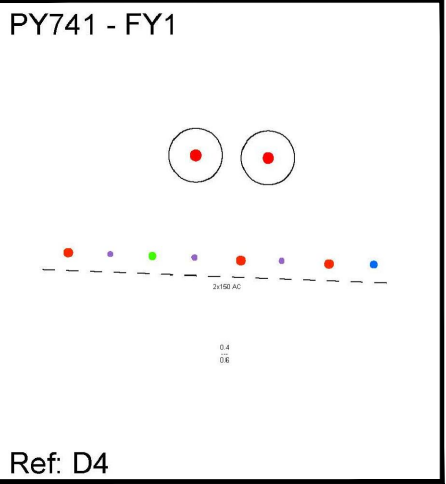
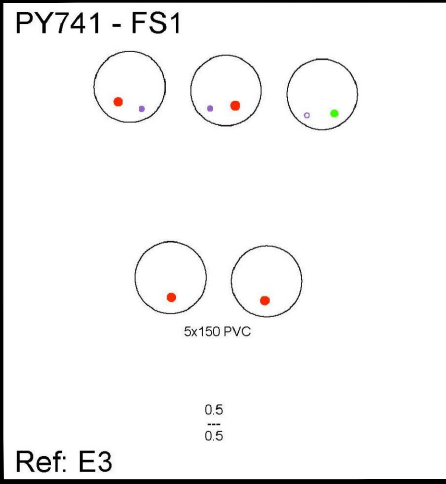
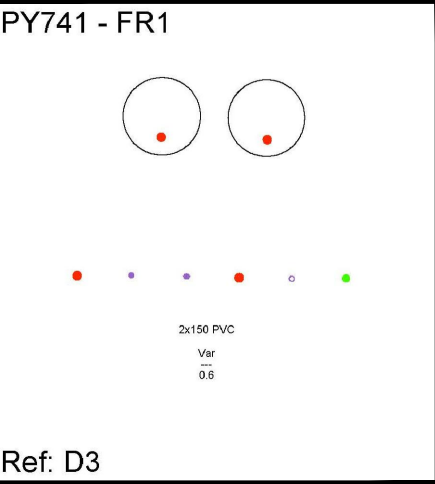
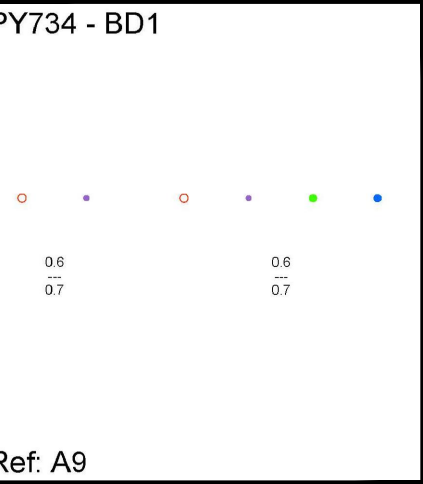
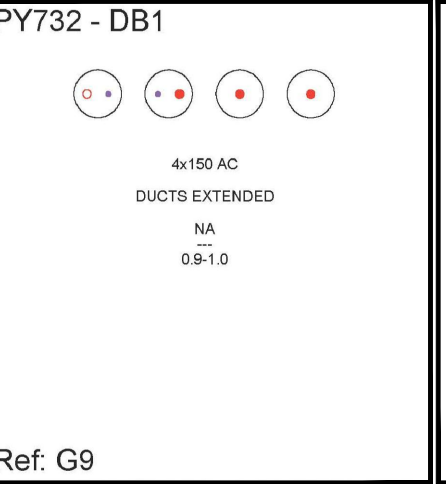
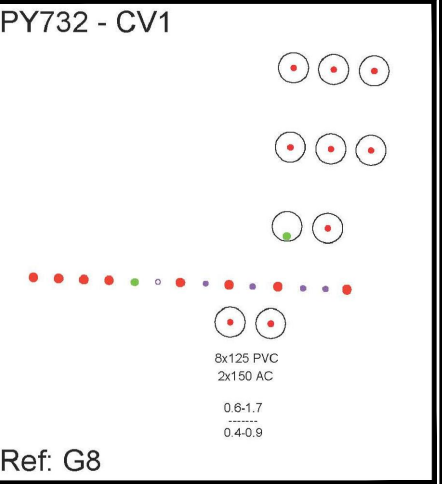
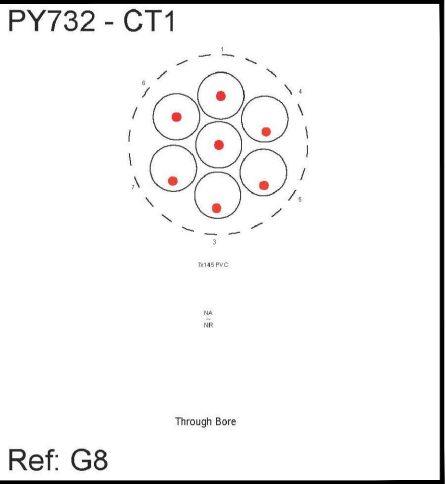
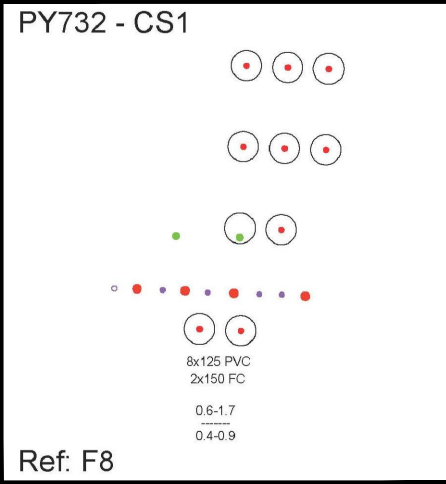
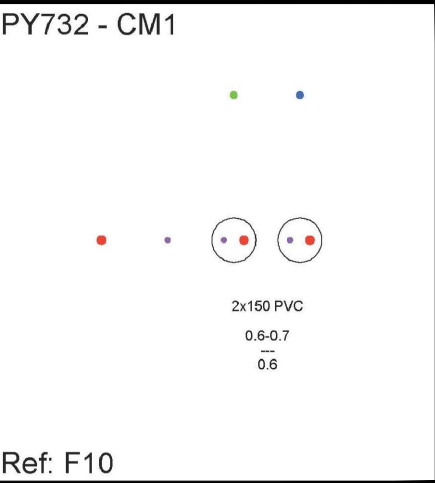
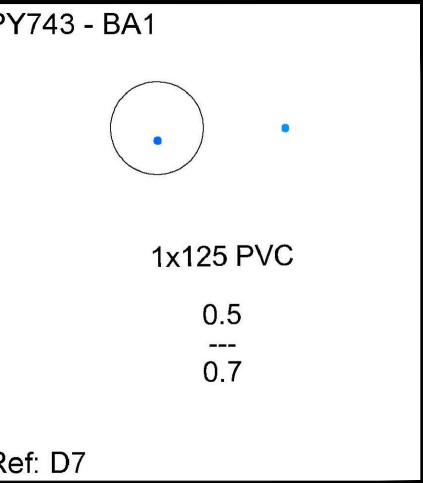
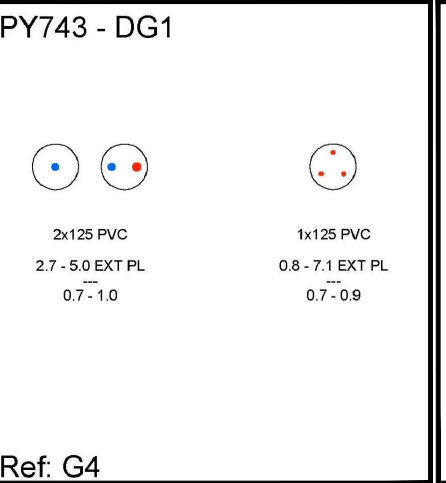
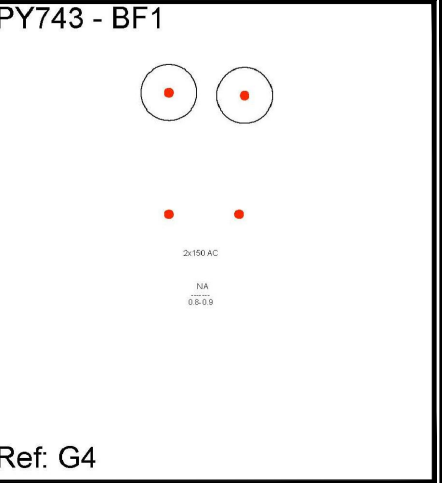
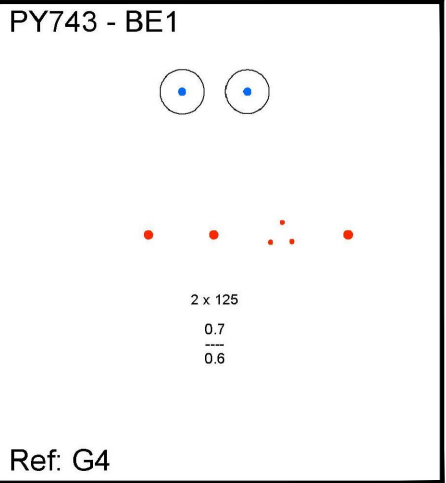
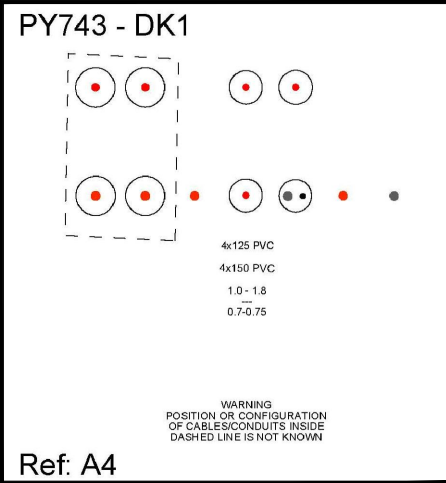
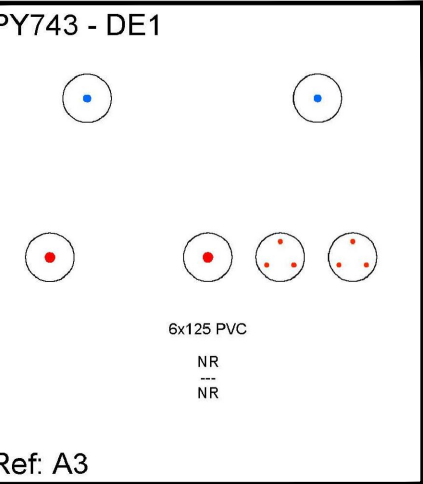
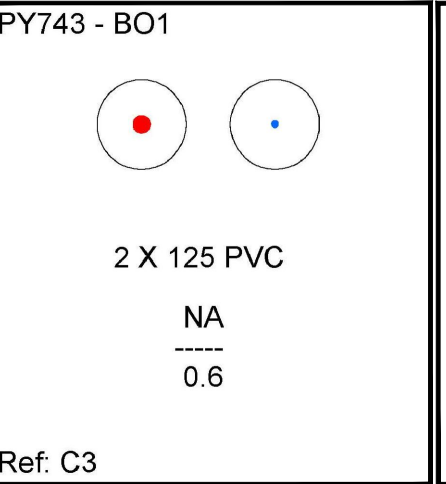
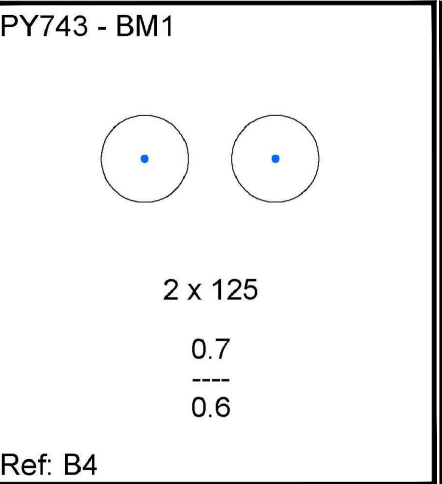
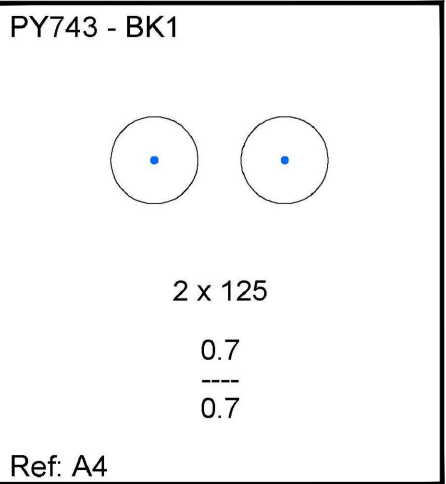
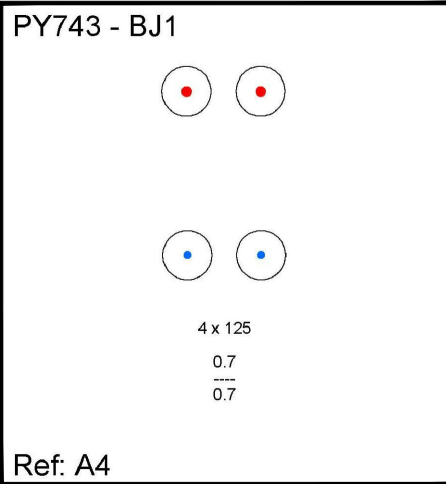
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ELECTRICAL  
DIAGRAMS PLAN



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central coast office ph: (02) 4305 4300  
hunter office ph: (02) 4978 5100  
www.adwjohnson.com.au

FRASERS  
PROPERTY

adw  
johnson



## Appendix D

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### SYDNEY WATER CORPORATION CORRESPONDENCE



Case Number: 163934

3 August 2017

Frasers Property Australia  
c/- Rose Atkins Rimmer

### FEASIBILITY LETTER

**Developer:** Frasers Property Australia  
**Your reference:** 41/24958  
**Development:** Lot 5 DP740753 27 Ivanhoe Pl, Macquarie Park  
**Development Description:** Social and market housing, independent living units, residential aged care facility, school and child care centres are being delivered in stages from Herring Road progressively east towards Shrimpton's Creek.  
**Your application date:** 16 June 2017

Dear Applicant

This Feasibility Letter (Letter) is a guide only. It provides general information about what Sydney Water's requirements could be if you applied to us for a Section 73 Certificate (Certificate) for your proposed subdivision. **The information is accurate at today's date only.**

If you obtain development consent for that subdivision from your consent authority (this is usually your local Council) they will require you to apply to us for a Section 73 Certificate. You will need to submit a new application (and pay another application fee) to us for that Certificate by using your current or another Water Servicing Coordinator (Coordinator).

Sydney Water will then send you either a:

- Notice of Requirements (Notice) and Developer Works Deed (Deed) or
- Certificate.

These documents will be the definitive statement of Sydney Water's requirements.

There may be changes in Sydney Water's requirements between the issue dates of this Letter and the Notice or Certificate. The changes may be:

- if you change your proposed development eg the development description or the plan/site layout, after today, the requirements in this Letter could change when you submit



your new application; and

- if you decide to do your development in stages then you must submit a new application (and pay another application fee) for each stage.

**You have made an application for specific information. Sydney Water's possible requirements are:**

**No warranties or assurances can be given about the suitability of this document or any of its provisions for any specific transaction. It does not constitute an approval from Sydney Water and to the extent that it is able, Sydney Water limits its liability to the reissue of this Letter or the return of your application fee. You should rely on your own independent professional advice.**

## What You Must Do To Get A Section 73 Certificate In The Future.

To get a Section 73 Certificate you must do the following things. You can also find out about this process by visiting [www.sydneywater.com.au](http://www.sydneywater.com.au) > Plumbing, building & developing > Developing > Land development.

1. **Obtain Development Consent from the consent authority for your subdivision proposal.**
2. **Engage a Water Servicing Coordinator (Coordinator).**

**You must engage your current or another authorised Coordinator** to manage the design and construction of works that you must provide, at your cost, to service your subdivision. If you wish to engage another Coordinator (at any point in this process) you must write and tell Sydney Water.

For a list of authorised Coordinators, either visit [www.sydneywater.com.au](http://www.sydneywater.com.au) > Plumbing, building & developing > Developing > Providers > Lists or call **13 20 92**.

The Coordinator will be your point of contact with Sydney Water. They can answer most questions that you might have about the process and developer charges and can give you a quote or information about costs for services/works (including Sydney Water costs).

3. **Developer Works Deed**

It would appear that your feasibility application is served from existing mains and does not require any works to be constructed at this time. Sydney Water will confirm this with you after you have received Development Approval from Council and your Coordinator has submitted a new Development application and Sydney Water has issued you with a formal Notice of Requirements.

4. **Water and Sewer Works**

### 4.1 **Water**

Sydney Water has assessed your application and found that:

The proposed site is in the Marsfield water supply zone boundary. There is an existing DN500 trunk water main along Herring Road which has capacity to service the proposed development. A detailed planning study must be carried out to determine whether augmentation of existing water infrastructure within the Macquarie University growth precinct is required.

### **Sewer**

The proposed development will drain to the existing North Head System via existing infrastructure. There is a DN600 trunk wastewater main adjacent to Shrimptons Creek, which has capacity to service the proposed site.

A detailed planning study must be carried out to determine whether augmentation of existing



wastewater infrastructure within the growth precinct is required.

## 5. Ancillary Matters

### 5.1 Asset adjustments

After Sydney Water issues this Notice (and more detailed designs are available), Sydney Water may require that the water main/sewer main/stormwater located in the footway/your property needs to be adjusted/deviated. If this happens, you will need to do this work as well as the extension we have detailed above at your cost. The work must meet the conditions of this Notice and you will need to complete it **before we can issue the Certificate**. Sydney Water will need to see the completed designs for the work and we will require you to lodge a security. The security will be refunded once the work is completed.

### 5.2 Entry onto neighbouring property

If you need to enter a neighbouring property, you must have the written permission of the relevant property owners and tenants. You must use Sydney Water's **Permission to Enter** form(s) for this. You can get copies of these forms from your Coordinator or the Sydney Water website. Your Coordinator can also negotiate on your behalf. Please make sure that you address all the items on the form(s) including payment of compensation and whether there are other ways of designing and constructing that could avoid or reduce their impacts. You will be responsible for all costs of mediation involved in resolving any disputes. Please allow enough time for entry issues to be resolved.

## OTHER THINGS YOU MAY NEED TO DO

Shown below are other things you need to do that are NOT a requirement for the Certificate. They may well be a requirement of Sydney Water in the future because of the impact of your development on our assets. You must read them before you go any further.

### Approval of your building plans

Please note that your building plans must be approved. This can be done at Sydney Water Tap in<sup>TM</sup>. Visit [www.sydneywater.com.au](http://www.sydneywater.com.au) > Plumbing, building & developing > Building > Sydney Water Tap in<sup>TM</sup> or call 13 20 92.

This is not a requirement of the Certificate but the approval is needed because construction/building works may impact on existing Sydney Water assets (e.g. water and sewer mains). In any case, these works MUST NOT commence until Sydney Water has granted approval.

Your Coordinator can tell you about the approval process including:

- Possible requirements;
- Costs; and
- Timeframes.

**Note: You must obtain our written approval before you do any work on Sydney Water's systems. Sydney Water will take action to have work stopped on the site if you do not**

have that approval. We will apply Section 44 of the *Sydney Water Act 1994*.

### **Backflow Prevention Water supply connections**

A backflow prevention containment device appropriate to the property's hazard rating must be installed at the property boundary. The device is to be installed on all water supplies entering the property, regardless of the supply type or metering arrangements. It is needed to reduce the risk of contamination by backflow from these supplies.

A licensed plumber with backflow accreditation can advise you of the correct requirements for your property. To view a copy of Sydney Water's Backflow Prevention Policy and a list of backflow accredited plumbers visit [www.sydneywater.com.au](http://www.sydneywater.com.au) > Plumbing, building & developing > Plumbing > Backflow prevention.

### **Fire Fighting**

Definition of fire fighting systems is the responsibility of the developer and is not part of the Section 73 process. It is recommended that a consultant should advise the developer regarding the fire fighting flow of the subdivision and the ability of Sydney Water's system to provide that flow in an emergency. Sydney Water's Operating Licence directs that Sydney Water's mains are only required to provide domestic supply at a minimum pressure of 15 m head.

### **Disused Water Service Sealing**

You must pay to disconnect all disused private water services and seal them at the point of connection to a Sydney Water's water main. This work must meet Sydney Water's standards in the Plumbing Code of Australia (the Code) and be done by a licensed plumber. The licensed plumber must arrange for an inspection of the work by a NSW Fair Trading Plumbing Inspection Assurance Services (PIAS) officer. After that officer has looked at the work, the drainer can issue the Certificate of Compliance. The Code requires this.

### **Disused Sewerage Service Sealing**

Please do not forget that you must pay to disconnect all disused private sewerage services and seal them at the point of connection to a Sydney Water sewer main. This work must meet Sydney Water's standards in the Plumbing Code of Australia (the Code) and be done by a licensed drainer. The licensed drainer must arrange for an inspection of the work by a NSW Fair Trading Plumbing Inspection Assurance Services (PIAS) officer. After that officer has looked at the work, the drainer can issue the Certificate of Compliance. The Code requires this.

### **Soffit Requirements**

Please be aware that floor levels must be able to meet Sydney Water's soffit requirements for property connection and drainage.

### **Other fees and requirements**

The requirements in this Notice relate to your Certificate application only. Sydney Water may be involved with other aspects of your development and there may be other fees or requirements.



These include:

- plumbing and drainage inspection costs;
- the installation of backflow prevention devices; and
- council fire fighting requirements. (It will help you to know what the fire fighting requirements are for your subdivision as soon as possible. Your hydraulic consultant can help you here.)

**No warranties or assurances can be given about the suitability of this document or any of its provisions for any specific transaction. It does not constitute an approval from Sydney Water and to the extent that it is able, Sydney Water limits its liability to the reissue of this Letter or the return of your application fee. You should rely on your own independent professional advice.**

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**END**

## Appendix E

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### AUSGRID CORRESPONDENCE



**From:** Amir Mohina [<mailto:AMohina@ausgrid.com.au>]  
**Sent:** Wednesday, 2 August 2017 1:42 PM  
**To:** David Taylor  
**Cc:** Cedric Halferty  
**Subject:** Preliminary Enquiry at: Ivanhoe Place, Macquarie Park\_ B17/2627 (Ausgrid Reference: 700003921)

Hi David,

Please refer to response below relating from our distribution planning group which addresses some of the issues raised in your earlier Preliminary enquiry. If you wish to proceed with one of the options listed below to supply the proposed development, make sure you refer your selection to the response below in your application for connection that way we have something to work off.

Feel free to contact me if you have any questions relating the information below... If the site requirements have changed and you wish to explore a different option proceed with submitting a new preliminary enquiry request to dataNorth as per the standard process

Regards  
**AMIR MOHINA**

ENGINEER- Contestability| **AUSGRID**

Building 3, 59 Bridge Road, Hornsby, NSW, 2077 AUSTRALIA

☎ (02) 9585 5835 (ext.35835) | 📠 (02) 9394 6908 (ext. 36908) | ✉ [amohina@ausgrid.com.au](mailto:amohina@ausgrid.com.au)

----- Forwarded by Amir Mohina/Ausgrid on 02/08/2017 01:21 PM -----

From: Ahmad Chehade/Ausgrid  
To: Amir Mohina/Ausgrid@Ausgrid,  
Cc: Charbel Estephan/Ausgrid@Ausgrid  
Date: 31/07/2017 08:41 AM  
Subject: TRIM: D17/718074 - HVCon2017\_382 Preliminary Enquire for the Ivanhoe Development

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Hi Amir,

I have received a Preliminary Enquiry to investigate the connection of a large residential & commercial development on the corner of Epping Rd & Herring Rd, Macquarie Park.  
The Preliminary Enquire for Ivanhoe Development HVCon2017\_382 indicates the load required will be 447A at 11kV or 8.5MVA of load.

The proposed load will more than likely require 3 HV feeders to support the load in N and N-1. There are several 11kV feeders that run past the site which are connected to either Macquarie Park Zone or Epping Zone but these feeders can not support the requested load without a considerable and uneconomic upgrade of the existing network. Macquarie Park Zone is also heavily loaded and no longer has capacity to support the proposed load.

At present the closest zone with enough capacity to support the proposed load is Epping Zone. Therefore I have made the following assumptions to cost out this project:

1. Three HV feeders are required to support the load for N and N-1.
2. 500mm<sup>2</sup> Al XLPE is required for the bulk of the installation.
3. There are spare conduits available which are not in use.
4. Thermal Stable Backfill(TSB) is not required for the bulk of the installation.
5. Epping Zone or Top Ryde have enough capacity to carry the new load.

Considering the information we have received to date from the customer and Contestability and the available capacity at the surrounding zones, I have investigated two options for the Ivanhoe Development HVCon2017\_382. These are:

### **Option 1 - Install New Conduits - Epping Zone**

Outline: This option is for a complete new cable run and installation of bank of 4x150mm conduits from Epping Zone to the Ivanhoe work site .  
Three new 500mm<sup>2</sup> Al XLPE cables are installed for the entire run. The conduits may require installation in Thermal Stable Backfill in some areas which has not been included as part of the cost. Four existing feeders will require consolidation to allow for connection at the zone.

Benefit: This is the cheapest option available. It provides an absolute cost of the final project.. It also uses an alternate route along non-RMS roads.

Distance: 2.62km



### **Option 2 - Use Existing Conduits where possible - Top Ryde Zone**

Outline: This option looks at running three new 500mm<sup>2</sup> Al XLPE cables from Top Ryde Zone to the Ivanhoe work site .  
The cables will be installed using some existing conduits and some new conduits as shown on the attached PDF.

Benefit: This is a contingency option in the event that Epping Zone does not have capacity available. It provides an absolute cost of the final project.. It also uses an alternate route along non-RMS roads.

Distance: 4.81km



Regards,

**Ahmad Chehade | Distribution Planner | Distribution Planning | AUSGRID**

|



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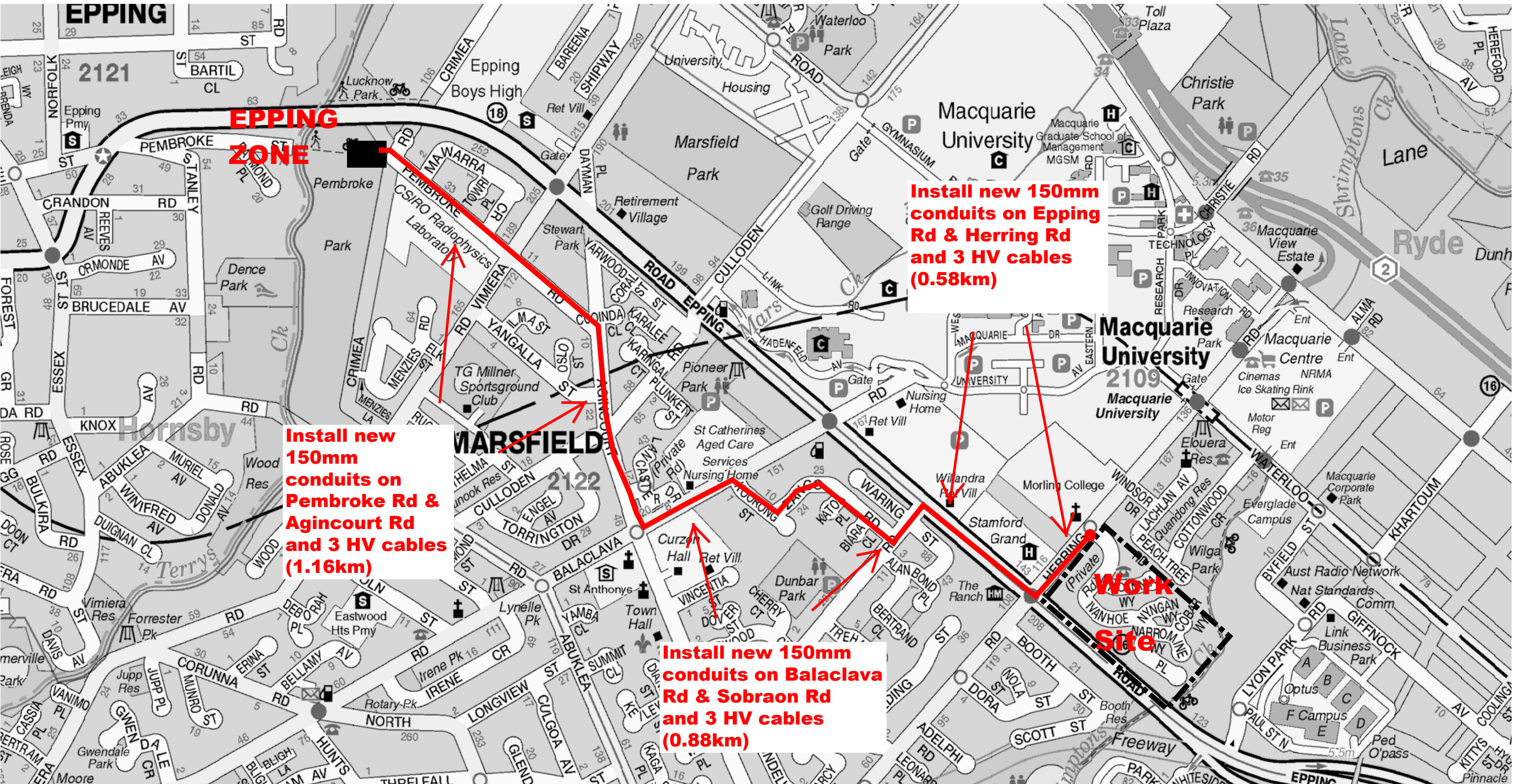
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# OPTION 1 - Install new conduits - Epping Zone

 New Conduits (Install 4x150mm conduits)

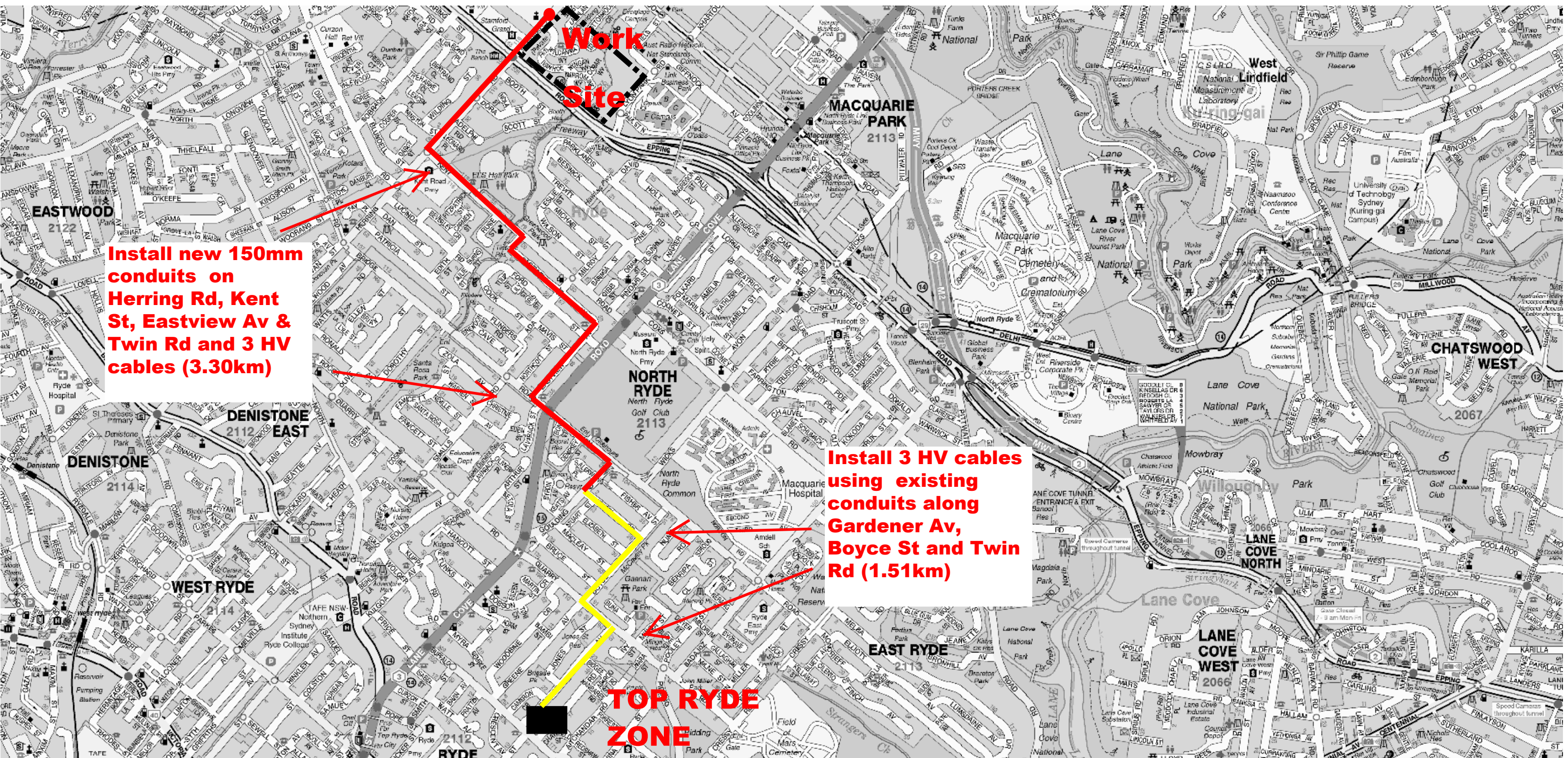




# OPTION 2 - Install new conduits - Top Ryde Zone

**New Conduits (Install 4x150mm conduits)**

**Existing Spare Conduits**





## Appendix F

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### TELECOMMUNICATION CORRESPONDENCE

Date: 17 October 2017

Attn: Matt Owen,  
Senior Project Manager  
ADW Johnson Pty Limited,  
Level 35 One International Towers,  
100 Barangaroo Avenue, Sydney NSW 2000

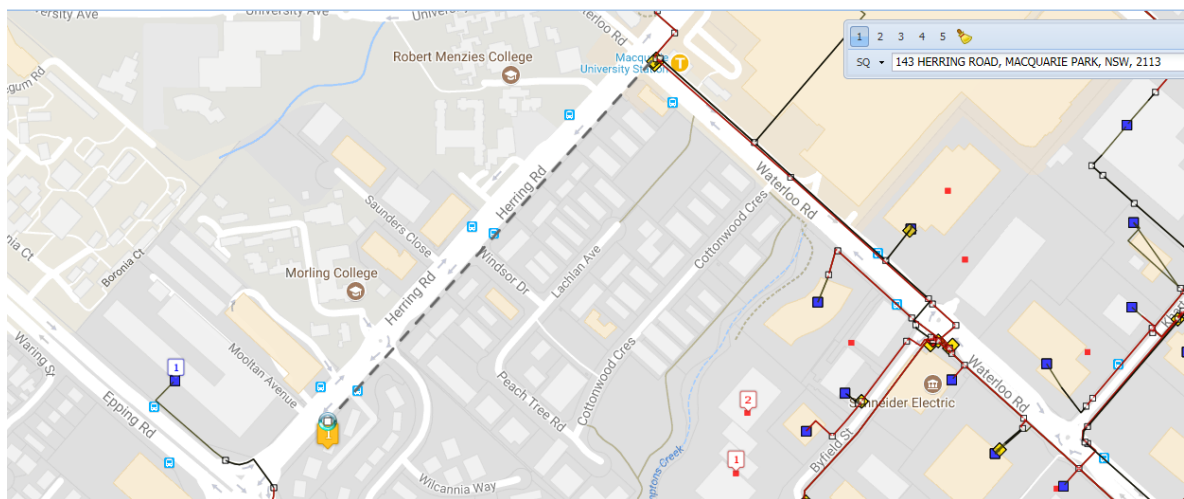
Re: **Telecommunications Infrastructure and Services Feasibility Report,**  
**Ivanhoe Estate**, 137-143 Herring Road, Macquarie Park, NSW 2113

Matt,

OptiComm is an Australian Government policy compliant wholesale Carrier that delivers Telecommunications services over Optical Fibre networks to both Master Planned Communities (MPC) and Multi-Dwelling Unit (MDU) residential and commercial developments. OptiComm networks fully comply with the amendments to Federal Telecommunications Act that were required to facilitate the Government's Telecommunications in New Developments (TIND) regulatory framework.

OptiComm has conducted a desktop study of the site and determined that the site can be serviced with superfast Fibre-optic Telecommunications Infrastructure and Services.

The map below shows Optical Fibre splice points in the vicinity. We can also confirm that although developer contributions apply for the construction of Fibre-to-the-Premises network infrastructure within the site, there is no backhaul construction cost to the developer to connect Telecommunications Infrastructure and Services to the overall site.



*Fig 1: Telecommunications Infrastructure in the vicinity of the Ivanhoe Development*

There are a number of lead-in options available to OptiComm and OptiComm will work with the developer to establish the actual route. It is expected that OptiComm will either construct or lease duct in either Herring Road or Epping Road. Final lead-in locations and route will be determined closer to actual construction commencement.

At the appropriate time, OptiComm is keen to submit a proposal for Fibre-to-the-Premises for the relevant stages.

OptiComm provide National Broadband Fibre in large and small Multi-Dwelling Unit developments.

In addition to the essential Broadband and Telephone, OptiComm offers a range of building services including:

*Lift and FIP phone connectivity | SMATV system (FOXTEL & Free-to-Air TV) | Access Control, CCTV and Security systems connectivity | Public Wi-Fi | OptiComm Audio/Video Intercom | EMS/BMS connectivity | Distributed Antenna System (DAS) for mobile phone in-building coverage.*

OptiComm is now the largest independent provider of broadband infrastructure with over 150 Greenfield developments nationally, 250,000 lots under contract and more than 70,000 lots constructed to date.

Let me know if you require further assistance or information.

Regards,

A handwritten signature in black ink, appearing to read 'Robert Carrick', with a long, sweeping underline.

Robert Carrick  
Sales Manager – NSW and ACT  
OptiComm Co Pty Ltd  
Unit 23, 380 Eastern Valley Way,  
Chatswood, NSW, 2067  
M: 0421 058 734  
P: (02) 8252 3604  
E: rcarrick@opticomm.net.au