



**Servicing Report  
For  
Ramsgate Estate, Wyee Point**

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Prepared by:

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Prepared for:

**Lake Macquarie City Council**

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## TERMS AND ABBREVIATIONS

| Abbreviation | Meaning                              |
|--------------|--------------------------------------|
| AHD          | Australian Height Datum              |
| DSP          | Development Servicing Plan           |
| EA           | Energy Australia                     |
| HWA          | Hunter Water Australia               |
| HWC          | Hunter Water Corporation             |
| LEP          | Local Environmental Plan             |
| LES          | Local Environmental Study            |
| LMCC         | Lake Macquarie City Council          |
| RL           | Reduced Level                        |
| RPS HSO      | RPS Harper Somers O'Sullivan Pty Ltd |



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## **1.0 INTRODUCTION**

RPS Harper Somers O'Sullivan Pty Ltd (RPS HSO) has been commissioned by Lake Macquarie City Council to prepare a Local Environment Study (LES) for Ramsgate Estate, Wyee Point. This report addresses the provision of utility services to proposed development within the area.

The proposed development of these areas would require the construction of major infrastructure to reticulate essential services to the area. Whilst there is adequate capacity available to service the rezone area in existing infrastructure additional security will be provided by proposed infrastructure augmentation in the area.

### **1.1 Location**

The study area comprises all Lots in DP 1596 and Lot 1 in DP 124592, Wyee Point. The site of approximately 37.5 hectares has been divided over 606 lots with this study considering the area as one entity. The study area is bounded by Saddler Way to the south and the truncated High, Railway, Lake, Bay and Short Streets the east. The northern boundary is the shoreline of Lake Macquarie in the north-east and an unnamed creek to the northwest.

The location of the study area can be found at Figure 1-1.

### **1.2 Methodology**

Consultation has been undertaken with the local authorities responsible for providing services to the development area.

Water & Sewer – Hunter Water Corporation (HWC)

Electricity – Energy Australia (EA)

Gas – Jemena

Telecommunications - Telstra

## 2.0 WATER

Reticulated water can be provided to the proposed rezoning area by extension of mains from existing Hunter Water Corporation (HWC) water mains servicing residential areas.

Consultation with and subsequent advice from HWC Sales & Business Development staff indicate that there is adequate capacity available in the existing water system to service the proposed developments. There is capacity available in the existing water system to service approximately 250 lots. Development in excess of that size may require augmentation of the water system.

The developer of the site will be required to have a water servicing strategy prepared. This study will be required to address the issues listed below.

- Water main sizing
- Security of supply
- Connection points to the existing system
- Minimum pressure requirements
- Fire fighting flow requirements

HWC s62 consultation comments are included in Appendix 1.

A plan indicating the existing water infrastructure and proposed points of connection are shown in Appendix 2.

HWC Section 62 Consultation comments state that “Hunter Water has no objection to the development of the site.”

An application for a Section 50 certificate will be required to be submitted to HWC to determine requirements for the provision of water to the proposed developments.

### 3.0 SEWER

Reticulated sewerage services can be provided to the proposed rezoning area by connecting sewer mains into existing HWC systems servicing adjacent residential areas.

Consultation with, and subsequent advice, from HWC Sales & Business Development staff indicate that there is only limited capacity available in the existing sewer system to service the proposed development. Upgrades may be required to existing sewerage infrastructure to provide suitable services to the ultimate development. The scope of augmentation works would be based on anticipated sewer loadings in the area.

The developer of the site will be required to have a sewer servicing strategy prepared. This study will be required to address the issues listed below.

- Accurate loading information
- Pump station detail (both existing and proposed)
- Connection options to the existing sewer system
- Upgrade option for Wyee Point WWPS No.1

The provision of reticulation mains to service individual developments will be funded by the developers of the site.

HWC Section 62 Consultation comments state that “some connections may be allowed prior to upgrade of the existing system.”

An application for a Section 50 certificate will be required to be submitted to HWC to determine requirements for the provision of sewer to the proposed developments.

Existing sewer infrastructure in the vicinity of the proposed developments is attached as Appendix 3.

## **4.0 ELECTRICITY**

Enquiries with Energy Australia (EA) staff indicate there is an existing electrical supply available in the area. This existing infrastructure has adequate capacity to service proposed development in the area.

There are connection points to the existing 11KV mains in both Bath St and Saddlers Way.

The provision of reticulation mains to service individual developments will be funded by the respective developers.

Upon rezoning of the site being approved an application should be submitted to Energy Australia to determine the individual requirements for the provision of electricity to the proposed developments.

A plan indicating the existing electrical infrastructure in the area is attached at Appendix 4.

## 5.0 TELECOMMUNICATIONS

Consultation with Telstra Development Consultants indicates that there is an existing telecommunications network in Saddlers Way. This network does not currently have sufficient capacity to meet the likely demand of the proposed development. Telstra does not have any objection to development proceeding in the area.

The proposed development could be provided with telecommunication services upon the upgrade of the existing network. The technology and services that could be provided to the area would be determined at the time of development commencement.

Funding of the provision of telecommunication services would be dependent upon a negotiated commercial agreement.

Telstra may require the relocation of existing infrastructure in the area to prevent any damage that may occur as a result of construction activities in the area.

Upon commencement of detailed planning of the development further consultation should be undertaken with Telstra regarding details of network expansion.

Appendix 1 contains correspondence received from Telstra regarding the provision of infrastructure to the proposed development site.

## **6.0 GAS**

Jemena Gas Networks (NSW) has advised that there is no provision for the reticulation of natural gas services in the area. It is not envisaged that access to a reticulated natural gas system will become available in the immediate future.

Correspondence received from Jemena Gas Networks (NSW) is contained in Appendix 1.

## 7.0 CONCLUSION

Liaison with the local authorities indicate that utility services can be provided by the augmentation and extension of existing infrastructure servicing the area.

Determination of actual servicing requirements for the site would require application to be made to each authority at the time of development.

Augmentation of existing servicing infrastructure would be undertaken by local authorities.

Reticulation of utility services would be undertaken in conjunction with development of individual sites.

There are no objections, with regard to servicing, to the development of the site.



## APPENDIX 1

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### Authority Correspondence





4<sup>th</sup> August 2009

Ref: 2007-1160

Ian Murphy  
RPS Consulting  
PO Box 428  
HAMILTON NSW 2303

10 AUG 2009

Dear Ian,

**RE SECTION 62 CONSULTATION – Draft Amendment to Lake Macquarie Local Environmental Plan (LMLEP) 2004 in respect of land at RAMSGATE ESTATE WYEE POINT**

Thank you for your request seeking comments regarding the proposed draft amendment to the LMLEP 2004 for land at Ramsgate Estate, Wyee Point. Hunter Water values the opportunity to comment on the draft amendment and accordingly offers the following preliminary assessment with respect to providing water and sewer services to the subject land.

Hunter Water's comment should be considered as part of the Section 62 consultation process or as a submission to the public exhibition of the draft local environment plan. Hunter Water has no objection to the rezoning and offers the following advice.

**Water Supply**

The rezoning development area is located in the Morisset Wyee Water Supply System. It is expected that there will be an additional 250ET from the development. The Morisset-Wyee Servicing Strategy (April 2006) identified the site as a potential residential development; however development was only expected to occur beyond 2028.

Hunter Water has reviewed the water supply system and it appears that there are potential connection points for the rezoning development to the existing 100 CACL water mains in Greer Street, Short Street, Bay Street, Lake Street, Railway Street, High Street and the 375 mm CACL water main in Saddlers Way. The site will be supplied by the Morisset 2 Reservoir in Coorumbung Street, Morisset.

At this stage, the Morisset Wyee water supply system appears to have adequate capacity to service the development. However, this will need to be confirmed upon the submission of the section 50 application. The developer will need to submit a servicing strategy to address:

- Water main sizes
- Investigation of alternative options for integration into HWC's system
- Identification of least community cost option
- Security of supply
- Staging of development
- Connection points and timing
- Minimum pressure requirement
- Fire – fighting flow requirement

It should be noted that upgrades to the water system may be required to cater for the development and this will need to be determined as part of the servicing strategy for the site. Consequently, the developer may be required to fund the upgrade works to meet Hunter Water's design requirements.

## **Wastewater Transportation**

The land proposed for rezoning is located within the Dora Creek Waste Water Treatment Works (WWTW) catchment. (Refer to attached Plan A for details of existing infrastructure).

Hunter Water has reviewed the site and it appears that the majority of flows from the development can gravitate into Wyee Point 1 Waste Water Pump Station (WWPS) catchment. You should note that there is a natural ridge in the area and if any part of the proposed development is planned to be developed on the north western side, it may not be able to drain to Wyee Point 1 WWPS.

There are numerous potential connection points for the development area. Flows could be discharged to the existing wastewater gravity system in Short Street, Bay Street, Lake Street, Railway Street and High Street (see attached plan B).

The proposed development was not identified in the Dora Creek Wastewater Transportation System Servicing Strategy (March 2003) and no upgrades have been included in the forward capital works for this station. In order to connect to Wyee Point 1 WWPS catchment, the developer may be required to upgrade the pumping capacity and emergency storage of Wyee Point No. 1 WWPS. A servicing strategy will need to be undertaken in accordance with Hunter Water's Design Manual and would need to take into account:

- Lot layout
- Staging and accurate loading information
- Pump Station detail (existing or proposed)
- Connection options to existing or proposed WWPS catchment
- Internal servicing
- A preferred option for emergency storage in the Wyee Point 1 WWPS catchment
- Surrounding potential future developments

Hunter Water may allow some connections prior to the completion of the upgrades; however, this will be assessed following application for a Section 50 Certificate of Compliance by the developer. It should be noted that this information is only indicative at this stage and available capacity will be more accurately assessed when the developers submit accurate loading, timing and lot layout information.

## **Wastewater Treatment**

Dora Creek WWTW is currently being upgraded to provide additional liquid stream treatment capacity. The upgrade will be commissioned by end of 2010. An upgrade to the solids handling process will commence in 2013.

As Wyee Point 1 WWPS does not pump directly to the Dora Creek WWTW, there will be minimal impact on the treatment plant in the initial stages of the development. It is likely that there will be available capacity at Dora Creek WWTW to cater for the proposed development once the upgrade has been commissioned.

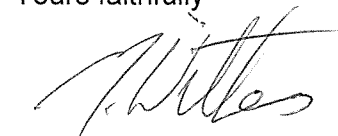
## **General**

It should be noted that this information is only indicative at this stage and available capacity will be more accurately assessed when the developers submit accurate loading, timing and lot layout information.

Hunter Water has no objections to the proposed rezoning application; however the developer should continue to liaise with Hunter Water regarding the development.

Should you require further clarification or assistance please contact the enquiries officer listed below.

Yours faithfully



Brett Lewis  
Manager Development Services

Enquiries: Steve Alexander  
Tel: 1300-657-657  
Fax: (02) 4979-9711



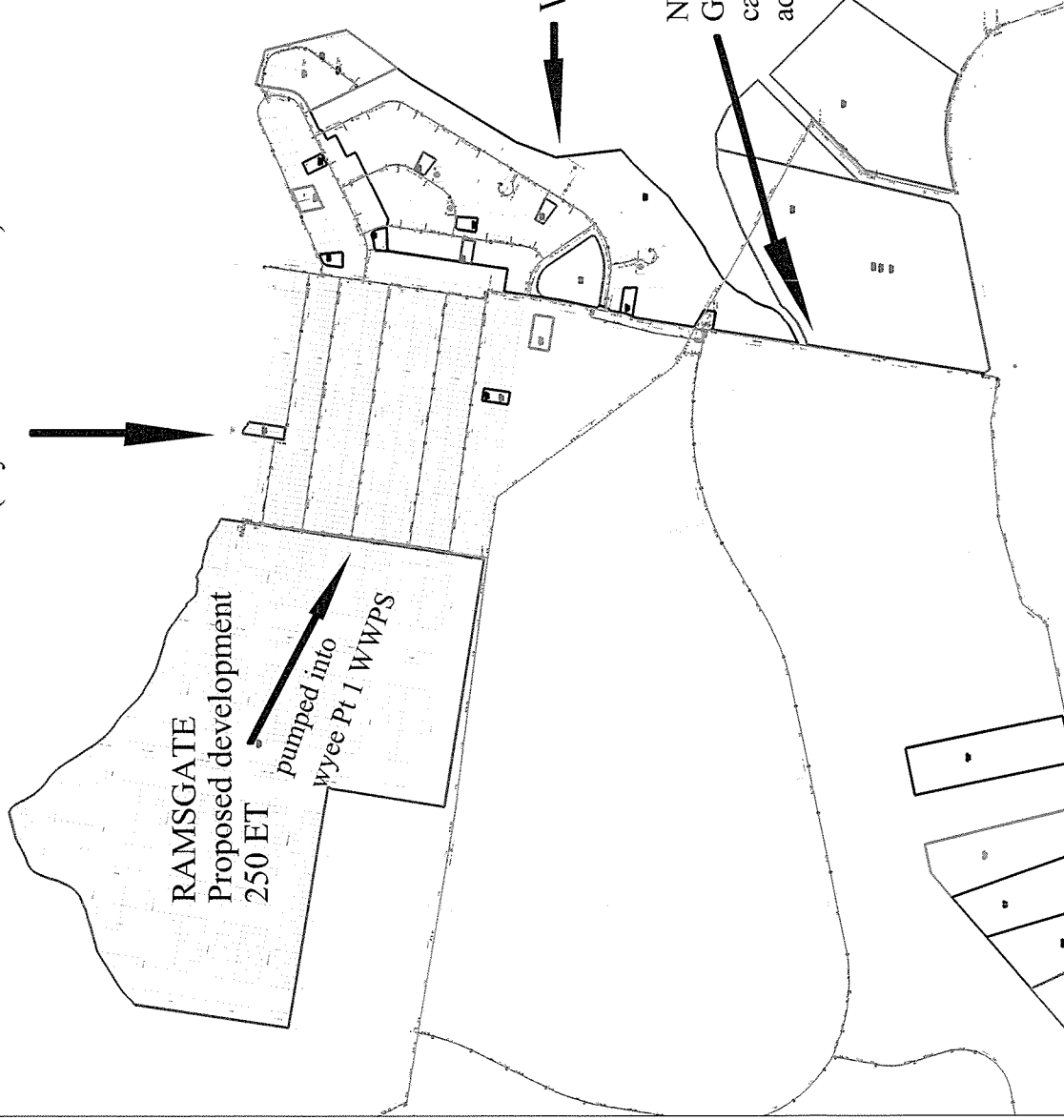
Wyee Point 1 WWPS

Duty : 66 L/s

Existing gravity loading : 240 ET

Inflow pumped : 30 L/s (new Wyee 1 WWPS) +

9.2 L/s (Wyee Point 2 WWPS)



Date: 23/07/2009

User: vanweydeve

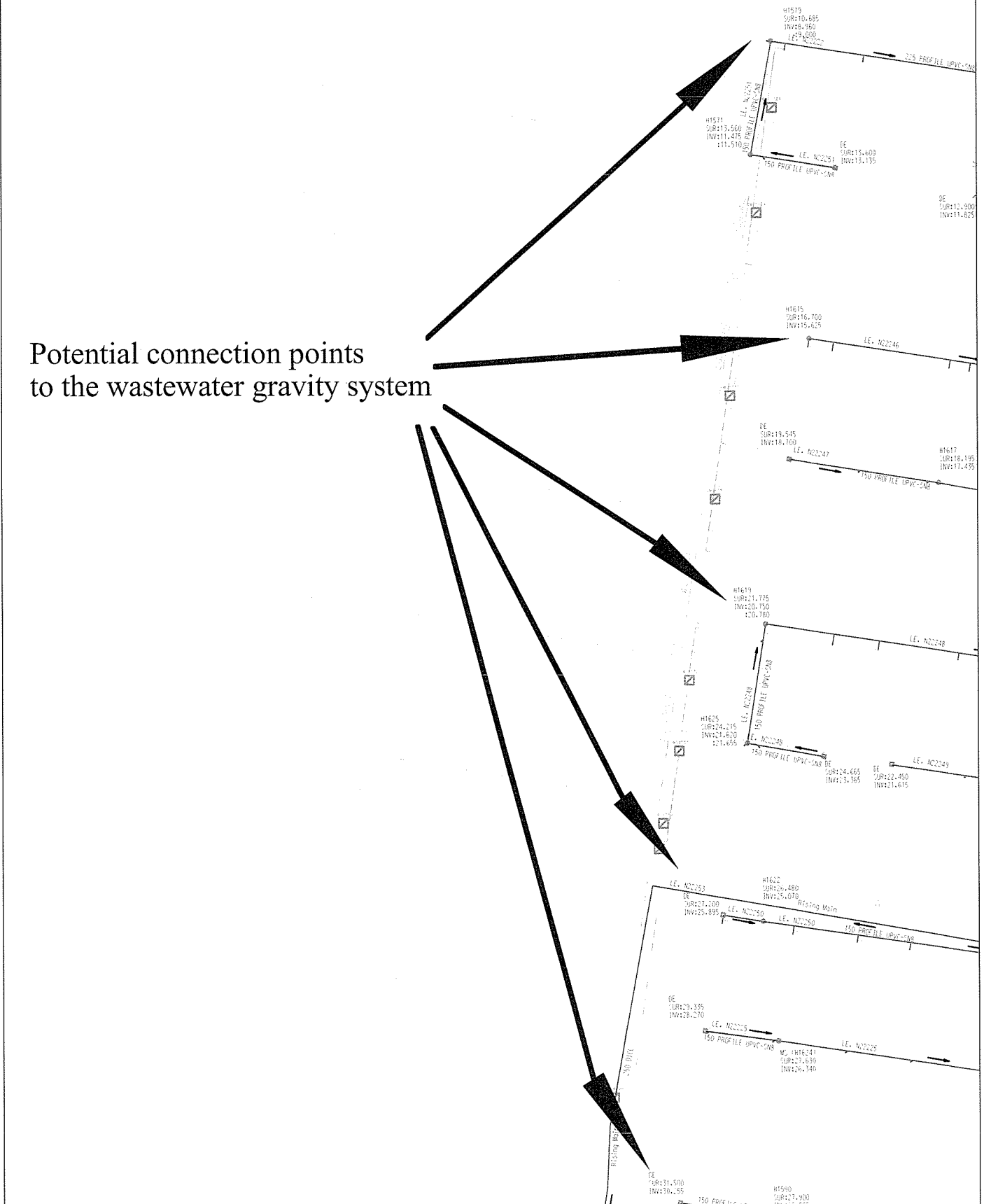
HWC

Time: 3:03 PM

Scale: 1 : 8000

'PLAN B'

Potential connection points  
to the wastewater gravity system



**Ian Murphy**

---

**From:** Tony Daley [tdaley@energy.com.au]  
**Sent:** Tuesday, 11 August 2009 8:09 AM  
**To:** Ian Murphy  
**Subject:** Fw: CAPACITY AVAILABILITY  
**Attachments:** CONCEPT\_P12\_F.pdf; 25757 Figure 1-1 site location 010709.pdf; ES8 CIA 1338.pdf; ES10 December2008.pdf; Contestable Works Information Sheet r002.doc; ATT41384.txt

Ian

The nearest 11kV linkage points are in Saddlers Way and/or Bath St Wyee Point. Depending on the exact site arrangement and staging, one of these would be your linkage point, Please refer to the following document for further information.

Regards,

**TONY DALEY** | CUSTOMER SUPPLY PLANNING & RELIABILITY - NEWCASTLE  
 Distribution Operations & Reliability | EnergyAustralia  
 Wallsend Administration Building, 145 Newcastle Road, Wallsend NSW 2287 AUSTRALIA  
 ☎ (02) 4951 9287 (59287) | 📞 0439 611172  
 📧 (02) 4951 9459 (59459) | ✉ tdaley@energy.com.au

----- Forwarded by Tony Daley/NetNorth/energyAustralia/AU on 11/08/2009 07:50 -----

To Tony Daley/NetNorth/energyAustralia/AU@energyAustralia

cc ianm@rpshso.com.au

Daniel Dafo/energyAustralia/AU

Subject Fw: CAPACITY AVAILABILITY

14/07/2009 09:35

Tony,

Could you take a look at this proposed development enquiry at Wyee and advise Ian on availability of services.

Regards,

**DANIEL DAFO** | ENGINEERING OFFICER  
 CUSTOMER SUPPLY PLANNING & RELIABILITY - LOWER HUNTER  
 Distribution Operations & Reliability | EnergyAustralia  
 Wallsend Administration Building, 145 Newcastle Road, Wallsend NSW 2287 AUSTRALIA  
 ☎ (02) 4951 9532 (59532) | 📞 0419 973 460  
 📧 (02) 4951 9459 (59459) | ✉ ddafo@energy.com.au

----- Forwarded by Daniel Dafo/energyAustralia/AU on 14/07/2009 09:29 -----

To "Daniel Dafo" <ddafo@energy.com.au>

cc

"Ian Murphy" <ianm@rpshso.com.au>

Subject CAPACITY AVAILABILITY

14/07/2009 09:28

17/08/2009

Hi Daniel

As discussed we are looking at a couple of sites with regard to servicing and need some indication as to what capacity Energy Australia has in the areas to service the proposed developments. The developments are in Bolwarra and Wyee Point (locality and conceptual lot layouts attached).

Any preliminary advice you can provide on availability of services in the area would be much appreciated.

If you require any additional info. to assist you in this matter please call.

Cheers

Ian

**Ian Murphy**  
Water & Sewer Strategist

Ph:02 4961 6500  
Fax: 02 4961 6794  
Mob: 0409 301 219



surveying - project management - ecology - planning - archaeology - quantity surveying

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17/08/2009



10 June 2009

RPS HSO  
PO Box 428  
HAMILTON NSW 2303

Attention: Ian Murphy

**Network and Technology**  
Forecasting and Area Planning

6/317 Hunter Street, NEWCASTLE, 2300

LOCKED BAG 16, HAMILTON, DC 2303

**Telephone** (02) 49858420  
**Facsimile** (02) 49249212

Bruce.v.batten@team.telstra.com

**Re: Ramsgate Estate, Saddlers Way, Wyee Point**

Dear Ian,

Based on the provided information relating to the proposed Ramsgate Estate located at Saddlers Way, Wyee Point, a review was undertaken of the area and nearby telecommunications infrastructure.

Telstra maintains existing network in Saddlers Way. This network is currently not sufficient to meet the likely demand of this development.

Telstra has no objection to the change of zoning of this land.

To accommodate the proposed development, the telecommunications network would require upgrade.

The technology and services provided would be determined closer to the time of development commencement, depending on Telstra deployment policy and any negotiations based on a commercial agreement.

Telstra will require the protection of/relocation of its telecommunications infrastructure that may be impacted by activities on this site. To minimise risk of liability due to any damage, the Telstra 1100 Inquiry number should be contacted to obtain location of Telstra plant before commencement of construction work.

Further discussions regarding details for network expansion are strongly encouraged once detailed planning for the development is in progress.

Please note that Telstra reserves the right to change its decision in relation to network deployment within the development without prior notice.

Yours faithfully,

A blue ink signature of Bruce Batten, written in a cursive style.

Bruce Batten  
Area Planner

1/06/09

Your ref:

Harper Somers O'Sullivan Pty Ltd  
P.O.Box 428  
Hamilton, N.S.W  
2303

Att: Mr Ian Murphy

Dear Sir:

**RE: PROPOSED SUBDIVISION OF RAMSGATE ESTATE WYEE POINT**

Natural Gas is currently not available to this subdivision and reticulation is not envisaged in the immediate future.

I confirm that our requirements for this enquiry have been met.

Thank you for your inquiry. If further information or assistance is required, please do not hesitate to contact me on 0402 060 241.

Yours faithfully,

*Greg Knight*

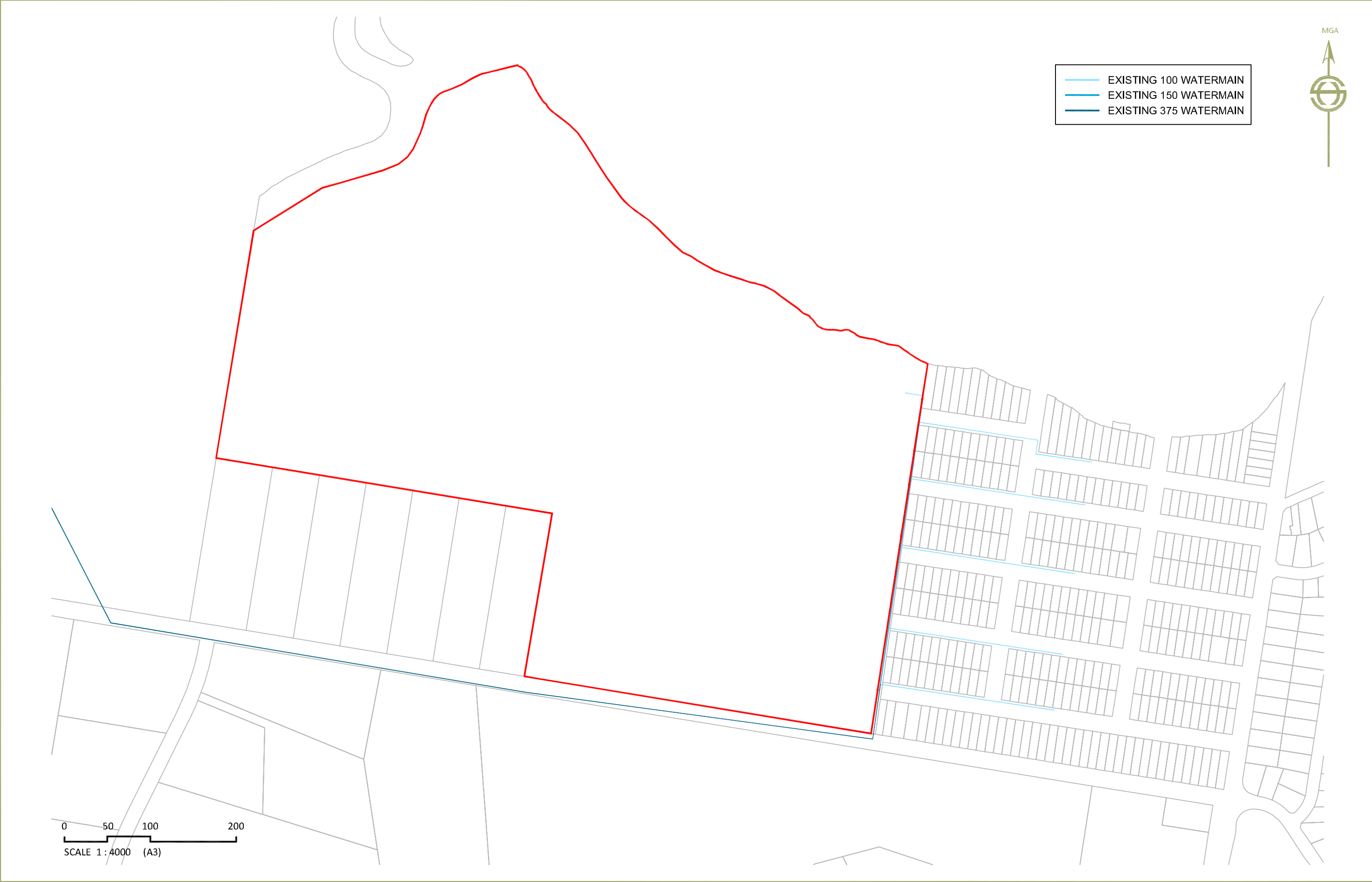
**Greg Knight**  
**Network Development Manager**

## APPENDIX 2

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### Water Infrastructure

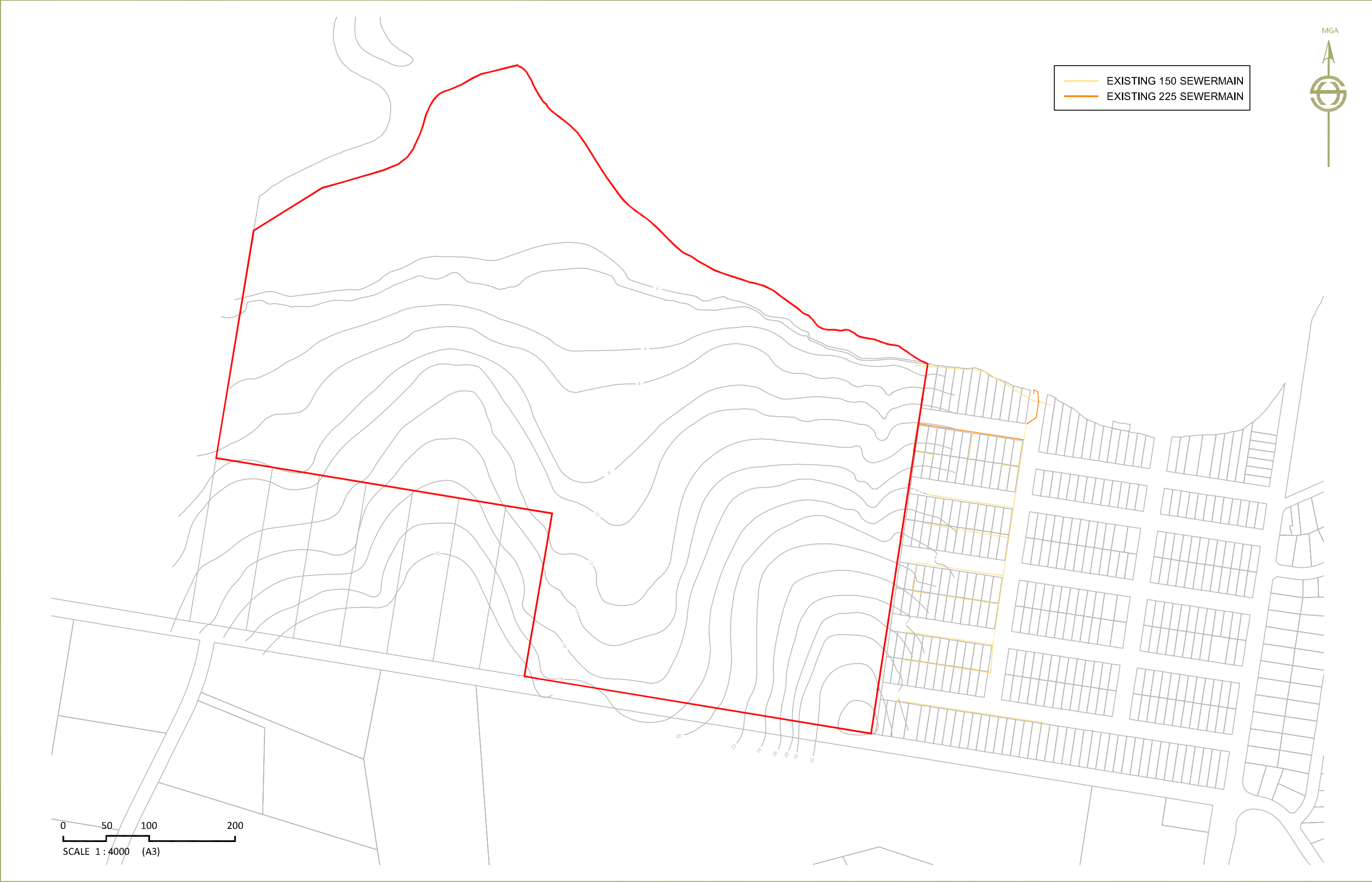




## APPENDIX 3

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### Sewer Infrastructure



## APPENDIX 4

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### Electrical Infrastructure



|        |                          |             |            |        |     |          |                  |                    |                       |                                                                                                                                                                                                                                                                                                                     |  |
|--------|--------------------------|-------------|------------|--------|-----|----------|------------------|--------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| TITLE: | FIGURE<br>EXISTING POWER | LOCATION:   | WYEE POINT | DATUM: | N/A | DATE:    | 13TH AUGUST 2009 | AUTOCAD REF:       | 25757-2A              | "This document and the information shown shall remain the property of RPS Harper Somers O'Sullivan Pty Ltd. The document may only be used for the purpose for which it was supplied and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any way is prohibited." |  |
|        |                          | PROJECTION: | MGA        |        |     | PURPOSE: | EXISTING POWER   | VERSION (PLAN BY): | EXIST POWER I.M / E.C |                                                                                                                                                                                                                                                                                                                     |  |