

**UTILITY SERVICES INVESTIGATION
LOT 442 DP1201831
HENRY PARKES DR, KIAMA DOWNS**

**PREPARED FOR
COASTWIDE CIVIL PTY LTD**

September 2020



WOLLONGONG

Ground Floor
25 Atchison Street
WOLLONGONG NSW 2500

CANBERRA

Level 1, Equinox 4
70 Kent Street
DEAKIN ACT 2600

SYDNEY

Suite 401, Level 4
24 Hunter Street
PARRAMATTA NSW 2150

1. INTRODUCTION

Indesco has been engaged to prepare a Utility Services Investigation to support a planning proposal for rezoning of Lot 442 DP1201831 from E2 'Environmental Conservation' to R2 'Low density Residential', E2 'Environmental Conservation' and E3 'Environmental Management' portions to facilitate a future development application for residential subdivision. This report assesses the known infrastructure in the area and the capacity for connection by future lots.

Figure 1 below, shows the location of the proposed site on Henry Parkes Drive (site highlighted in yellow).



Figure 1: Site Location (SIX Maps)

2. WATER AND SEWER SERVICES

A feasibility application has been lodged with Sydney Water and their formal response can be submitted at DA stage.

2.1 WATER

There are existing 100mm diameter uPVC water mains in Henry Parkes Dr and Newing Cct to the south and east of the site.

It is proposed that the reticulation main in Henry Parkes Dr be extended around the loop road proposed as part of the subdivision. Each lot will have a connection to the water main via a main to meter connection.

2.2 SEWER

There is an existing 150mm sewer running along part of the eastern boundary of the site. There is also a manhole in 41 Newing Circuit from another sewer branch which has a lower invert.

At the time of subdivision new sewer lines will be constructed and connection points provided for all lots. A preliminary assessment has been undertaken considering the construction of 30-40 residential lots following rezoning. A flow assessment has been done and the existing sewer can accommodate the additional 105-140EP (equivalent persons) expected. The level of the existing sewer is such that the future lots would be able to connect to the existing manhole in 41 Newing Circuit with compliant grades.

3. ELECTRICITY SERVICES

There is existing Endeavor Energy underground low-voltage services in Henry Parkes Drive and Newing Circuit. The nearest kiosk is in front of 4 Henry Parkes Drive. A high-voltage line runs along Henry Parkes Dr between that kiosk and the high voltage overhead line through lot 102 DP 1018957 on the other side of Princes Highway.

Endeavour Energy have made a connection offer for the proposed future subdivision (Endeavour reference URS23711) with a design brief (included as appendix) advising that the development will require the construction of a new 315kVA padmount substation to service the site. High voltage connection to the new padmount substation would be by cutting in to the existing HV cable in front of 37 Henry Parkes Dr.

Endeavour Energy have advised that there is capacity in the network to support the proposed subdivision including LV connections for each lot and street lighting.

4. TELECOMMUNICATIONS SERVICES

NBN Co advise that NBN is available for connection at the properties adjacent to the development.

An application was lodged with NBN for technical assessment of the development, NBN development reference DEV-00097642. NBN advised they would be able to service the development with FTTP Type 3 MT-LFN and no backhaul charges would be applicable on top of the developer infrastructure contribution charge of \$600 per lot.

5. GAS

There are no existing gas connections through Jemena in the vicinity of the development. As such, it is not proposed to supply gas to the future lots.

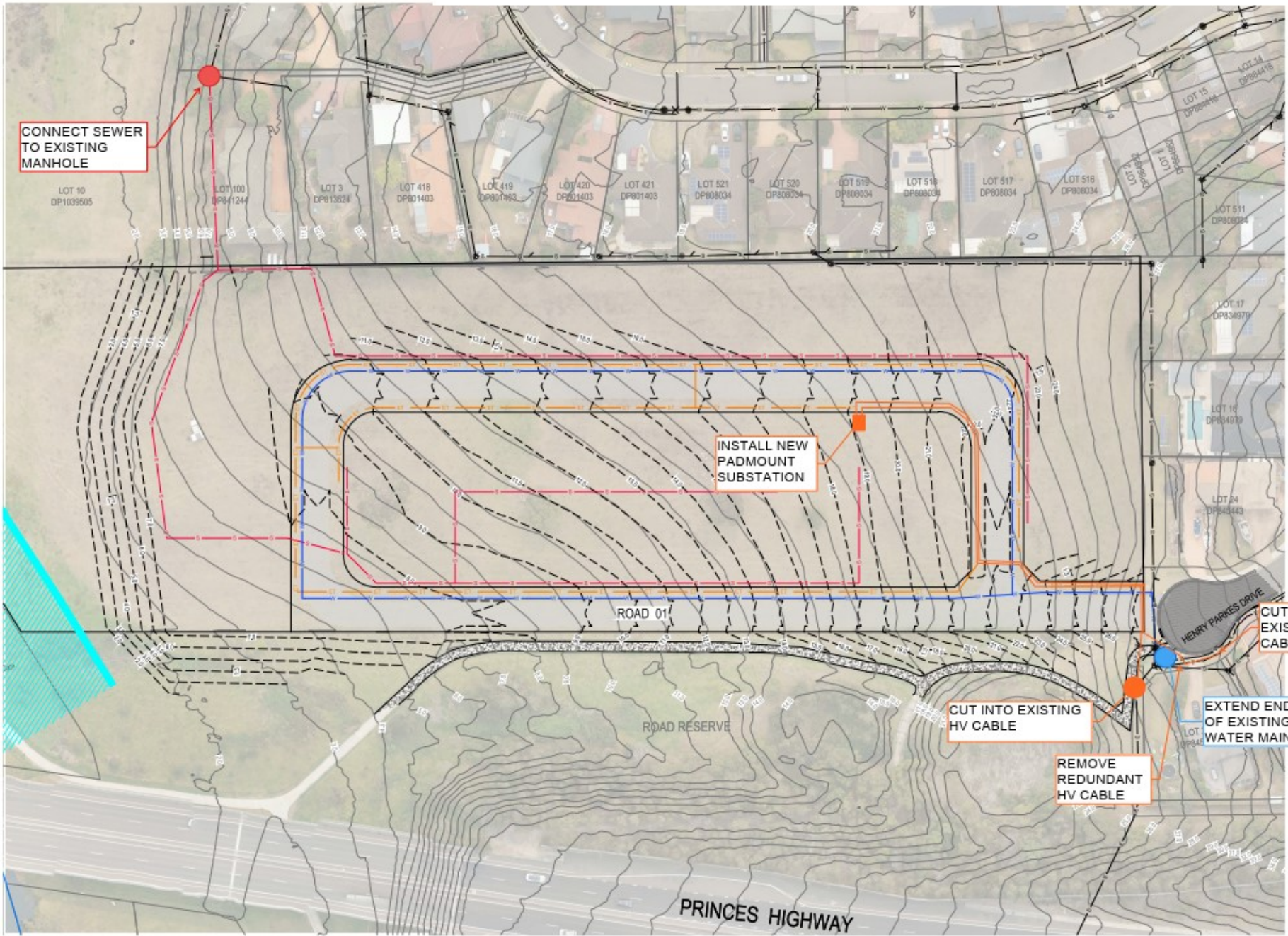
6. CONCLUSION

Water, sewer, electricity and telecommunications can all be provided to service the future lots allowed by low-density residential rezoning of Lot 442 DP1201831 Henry Parkes Drive, Kiama Downs.

Services connections will be provided via connections to existing mains and services adjoining the site.

See attached Utility Services Plan detailing proposed service connection points.

APPENDIX 1: ISC00072-PP-C170 – SCHEMATIC SERVICES ARRANGEMENT



PROPOSED	LEGEND
	GRAVITY SEWER
	WATER
	ET ALLOCATION
	EXISTING SEWER
	EXISTING WATER
	EXISTING UNDERGROUND ELECTRICITY



APPENDIX 2: ENDEAVOUR ENERGY DESIGN BRIEF

7 February 2020



Endeavour Energy Ref: URS23711 – 2019/02271/001

Elekon
Suite 109, 6/197-205 Church Street
PARRAMATTA NSW 2150

Attention: Maram Marashdeh

Dear Sir/Madam

URS23711 – LOT 442, DP 1201831, Land Subdivision Application: 24 Henry Parkes Drive, JAMBEROO

Your Proposed Method of Supply has been assessed, and Endeavour Energy has determined the method of supply requirements as outlined in the enclosed Design Brief. Please use this Design Brief in preparation of the design package which you will submit for certification.

The design must comply with all the conditions specified in this document, the Terms and Conditions of Endeavour Energy's Model Standing Offer for a Standard Connection Service and all relevant Endeavour Energy standards and instructions.

This Design Brief is valid for three (3) months from the date of issue.

A final Determination of Funding and a Payment Advice for Ancillary Network Services Fees applicable to this phase of the project are attached.

Property tenure is required for this project.

The applicable bond for this project is:

Property Tenure Bond \$

A Payment Advice for the total bond required is attached. This Payment Advice along with the agreement to enter (Form FPJ 5013), signed by the owner, must be returned with the evidence of payment of the Property Tenure Bond.

Should you have any enquiries regarding your application please contact the undersigned.

Yours faithfully,

A handwritten signature in black ink that reads "Mala Jayasekara".

Mala Jayasekara
Contestable Works Engineer
Ph: 02 9853 7915
Fax: 9853 7925
Email: cwtech@endeavourenergy.com.au

7 February 2020

Endeavour Energy Ref: URS23711 – 2019/02271/001

Design Brief

Method Of Supply Requirement:

L3 ASP's MOS is as follows:

1. Establish a new 315kVA padmount substation (Sub 1) on lot 23 with HV RTR Siemens switchgear and CAT 1 LV switchgear
2. Cut into existing cable (between sub 43219 HV switch 74917 and pole sub 40919 TEE 21490) at J1 and J2.
3. Replace existing cable joint at J1 and install new joint at J2
4. Install new 240mm² AL3 XLPE cable between new Sub 1 and new joint at J1
5. Install new 240mm² AL3 XLPE cable between new Sub 1 and new joint at J2
6. Remove/abandon redundant cable between J1 and J2
7. Install LV pillars as required to supply new subdivision lots
8. All new LV cables must be 240sqmm Al 4c XLPE
9. Install spare ducts as per MDI0028/Fact Sheet 11
10. Establish public lighting network to comply with Endeavour Energy standards and local council requirements.
11. Establish earthing to comply with Endeavour Energy standards.
12. Easements to comply with MDI0044.

There is capacity in 11kV feeder KME2 Brown St from Kiama ZS to support the proposed subdivision. L3 ASP's MOS is acceptable.

The scope and works is to be undertaken in accordance with the Endeavour Energy's Connection Policy and must comply with all the latest relevant policies, regulations and network standards.

All service works are to comply with the requirements of the NSW service and Installations Rules.

Determination of Funding

Endeavour Energy Supplied Materials:

Nil

Endeavour Energy Funded and Constructed:

Nil

Endeavour Energy Funded and Customer (ASP L1) Constructed – Reimbursement Paid by Endeavour Energy:

Capital contribution

- 315kVA transformer

Reimbursements to be paid to Endeavour Energy by Customer:

Use of spare ducts

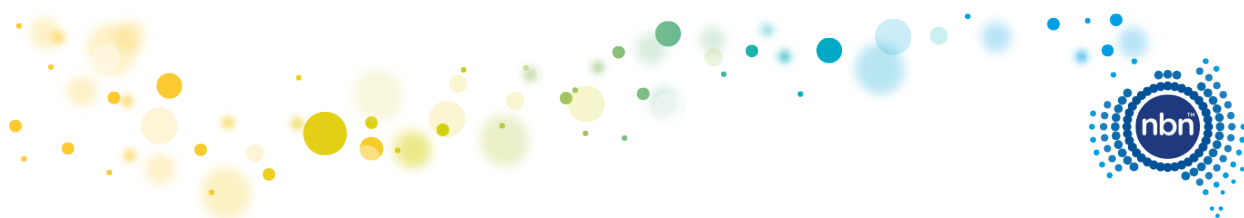
Customer Funded Non-Contestable Works:

Network switching, substation commissioning, contract inspection

Customer Funded Contestable Works:

All other works required.

APPENDIX 3: NBN SUPPLY APPROVAL – MASTER DEVELOPMENT APPROVAL



MASTER DEVELOPER AGREEMENT
(NEW DEVELOPMENTS) - FIXED INFRASTRUCTURE

Part A - Agreement Particulars

Item 1: Contract Number

Development Reference: **DEV-00097642**

The above contract number must be quoted in all correspondence with nbn.

Item 2: nbn

Name: **NBN Co Limited**

ABN: **86 136 533 741**

Contact details: **For notices relating to clauses 27 and 28:**

Chief Legal Counsel

Level 11, 100 Arthur Street

North Sydney

NSW 2060

Contact details: **For all other notices and correspondence:**

New Developments Developer Liaison Coordinator

Level 11, 100 Arthur Street

North Sydney

NSW 2060

Telephone: 1800 687 626

Email: developerliaison@nbnco.com.au

Item 3: Developer

Name: **COASTWIDE CIVIL PTY LIMITED**

ABN: **71073648594**

Contact details: **Craig Rogers/craig@coastwidecivil.com.au**

Item 4: Developer's Representative (clause 2)

Name: **Craig Rogers**

Contact details: **craig@coastwidecivil.com.au**

Item 5: nbn's Representative (clause 3)

Name: **Melissa Lombardo**

Contact details: **melissalombardo@nbnco.com.au**

Item 6: Development (clause 32)

Name: **Lot 442 Henry Parkes Dr, Kiama Downs**

Address: **Lot 442 Henry Parkes Drive Kiama Downs NSW 2533**

Item 7: Site (clause 32)

Real property description: As further described in the Master Plan provided by the developer to nbn in respect of the Development.

Item 8: Estimated Premises to be Serviced (clause 1.3(c))

Premises: 40

Item 9: Developer Build Works (clause 10)

No

Item 10: nbn Charges (clause 32)

Deployment charge within Single Dwelling Unit (SDU) Estates = \$600 per premises (payable by stage)

Deployment charge within Multiple Dwelling Unit (MDU) Developments = \$400 per premises (payable by stage)

Item 11: Backhaul Charge (clause 32)

\$0

Item 12: Upfront Portion (clause 32)

50%

Item 13: Insurance (clause 17)

- (a) public liability insurance – with a limit of indemnity of \$20 million for any one occurrence, covering legal liability for personal injury and property damage in connection with the Developer's Activities. The public liability insurance must be in place from the date of commencement of the first Stage until the expiry of the defects liability period of the last Stage to achieve Practical Completion.
- (b) professional indemnity insurance - with a limit of indemnity for each claim and in the annual aggregate of \$5 million and such professional indemnity cover must provide cover for, or be held for, a period of 3 years after the Date of Practical Completion of the last Stage to achieve Practical Completion.
- (c) workers' compensation insurance – to the extent required by Law.

Item 14: Applicable Invoice Trigger (clauses 12 and 32)

- (a) for the First Backhaul Charge, the first to occur of:
 - (i) the date that is six months after the date of this Agreement; or
 - (ii) the date of issuance of a Certificate of Backhaul Design Completion under clause 15(f)(i).
- (b) for the Second Backhaul Charge, the first to occur of:
 - (i) the date that is 12 months after the date of this Agreement; or
 - (ii) the date of issuance of a Certificate of Backhaul Installation under clause 15(f)(ii).
- (c) where Ready For Service is anticipated to be less than 6 weeks after the date of this Agreement (determined by nbn in its absolute discretion) - for the SDU Charge and MDU Charge, the date of this Agreement;
- (d) subject to paragraph (c), for the SDU Upfront Charge or the MDU Upfront Charge with respect to a Stage:
 - (i) where Ready For Service is anticipated to be less than 12 weeks after the date of this agreement, but greater than 6 weeks after the date of this agreement (determined by nbn in its absolute discretion)- the date of this Agreement; or
 - (ii) subject to subparagraph (i), the date which is anticipated to be 12 weeks prior to Ready For Service (determined by nbn in its absolute discretion); and
- (e) subject to paragraph (c), for the SDU Final Charge or the MDU Final Charge with respect to a Stage, the date which is anticipated to be 6 weeks prior to Ready For Service (determined by nbn in its absolute discretion).

Item 15: Nominated Technology (clause 1.5)

FTTP Type 3 MT-LFN

Date of this Agreement:

Date: The date on which this Agreement is accepted by the Developer's authorised representative, communicated through electronic means.

APPENDIX 4: SYDNEY WATER DBYD PLAN

