The Secretary
NSW Planning, Industry & Environment

19 February 2021

ATTENTION: Ingrid Berzins, Planning Officer, Social and Infrastructure Assessments

I refer to the Department's below email of 13 January May 2021 regarding the public exhibition of the Environmental Impact Statement (EIS) for State Significant Development SSD-10394 for St John of God Hospital Redevelopment at 117 Grose Vale Road, North Richmond (Lot 11 DP 1134453) for 'Construction of upgraded and expanded facilities resulting in an additional 24 beds. In addition, partial demolition of existing buildings, retention of Belmont House and integrated open space and landscaping'. Submissions need to be made to the Department by 19 February 2021.

Please refer to Endeavour Energy's previous submission made to the Department via email 26 November 2019 regarding the Planning Secretary's Environmental Assessment Requirements for SSD-10394. The recommendations and comments provided therein essentially remain valid.

In regard to the exhibition of the EIS, Endeavour Energy has noted the following:

- EIS

3.12 Utilities

The site is currently serviced by electricity, water, sewer and gas. The existing water, sewer and gas connections will be adequate for servicing the proposal, while the electrical infrastructure will need to be upgraded. Specifically, it is proposed to augment overhead electrical infrastructure on Grose Vale Road and upgrade the existing on-site kiosk substation from 500kVA to 1,00kVA. The existing easements will be utilised and modification to these are not anticipated to be required.

As previously advised there appear to be no easements over the site benefitting Endeavour Energy. Given the critical nature and extensive upgrades required to the electrical infrastructure, appropriate easements need to be created to protect the assets and to assist in the ongoing easement management ie. without easements the possibility of encroachments and uncontrolled activities occurring increases and is more difficult to manage and rectify.

- Electrical Services Infrastructure Management Plan

2.2 Proposed Electrical Infrastructure

The current kiosk substation is located within the property boundary, adjacent to the northern side of the Xavier/St Raphael/St Joseph's Unit building. The existing substation location complies with Endeavour Energy network standards with regards to fire and smoke separation to nearby structures.

The existing easements will be utilised and modifications to these are not anticipated to be required.

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T: 133 718

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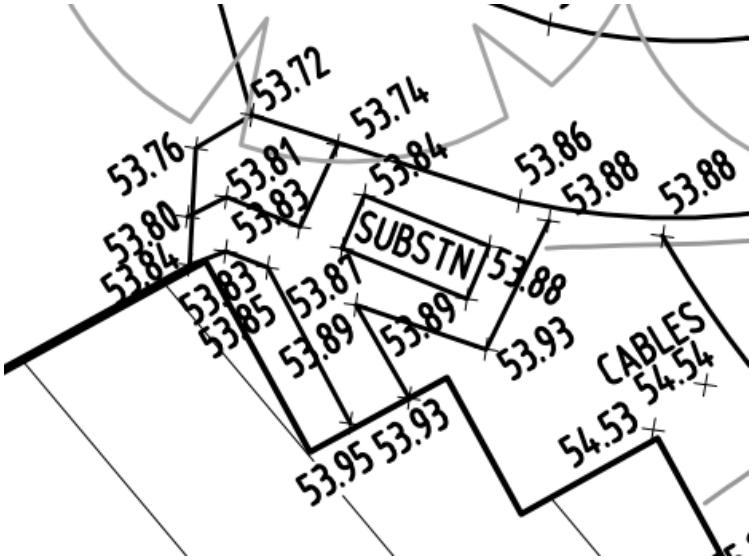
ABN 11 247 365 823

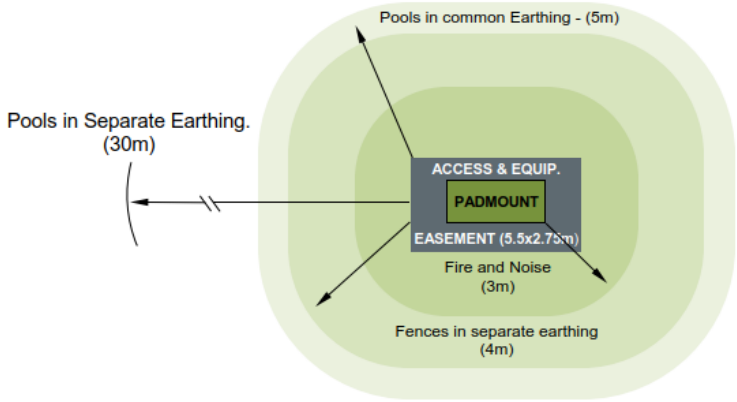
In regard to padmount substation no. 3646, apart from the following extract of the Survey Plan, there appears to be no further detail provided making it difficult to determine the situation.



As shown in the following from Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights', Figure A4.3 'Padmount easements and clearances', padmount substations require:

- Easement with a minimum size of 2.75 x 5.5 metres (single transformer).
- Restriction for fire rating which usually extends 3 metres horizontally from the base of the substation footing and 6 metres vertically from the same point.
- Restriction for swimming pools which extends 5 metres from the easement.

A4.3 - Padmount easements and clearances



These clearances were introduced on a case for case basis from 2003 before becoming standard in 2009. Even if the existing substation location is to be retained, as effectively a new padmount substation is required, the easement and restrictions should be created and registered on title.

Generally it is the Level 3 Accredited Service Provider's (ASP) responsibility (engaged by the developer) to make sure that the substation location and design complies with Endeavour Energy's standards the suitability of access, safety clearances, fire ratings, flooding etc. As a condition of the Development Application consent the Department should request the submission of documentary evidence from Endeavour Energy confirming that satisfactory arrangements have been made for the connection of electricity and the design requirements for the substation, prior to the release of the Construction Certificate / commencement of works.

Appendix A Endeavour Energy Connection Offer is a Connection Offer – Standard Connection Service (Endeavour Energy Ref: NCL1648 – 2019/01791/001) dated 15 October 2019. As indicated in the Supply Offer:

This Supply Offer is part of the Connection Offer for a Standard Connection Service and is valid for three (3) months from the date of issue.

Where this Connection Offer has lapsed, you or your Level 3 ASP must contact Endeavour Energy with the request to extend the Connection Offer. Endeavour Energy will assess your request and will inform you of the outcome. It must be recognised that the network is being constantly extended/augmented as new customers get connected. This means that for your Connection Offer to be extended, your Supply Offer may require alteration. If this is the case, additional fees to cover administrative costs may apply.

The applicant will need to comply with the conditions of the Supply Offer (or may need to lodge a new application for connection of load). Endeavour Energy's Network Connections Branch are responsible for managing the conditions of supply with the proponent and their ASP and can be contacted via Head Office enquiries on business days from 9am - 4:30pm on telephone: 133 718 or (02) 9853 6666).

- Acoustics Report, Assessment of Operational Acoustic Impact

The assessment of mechanical plant does not appear to consider the padmount substation. The report indicates an indicative assessment has been conducted for typical equipment and that once mechanical equipment has been finalised, an assessment will be conducted to deem required treatment. Accordingly the assessment should also take into the consideration the upgraded padmount substation required to facilitate the proposed development.

- Bushfire Assessment Report

Does not appear to provide an assessment of the existing or proposed electricity infrastructure required to facilitate the proposed development.

10. Services – Water, Gas and electrical supplies

The existing facility is connected to mains supplied power and water. No new services will be required. Any gas services are to be installed and maintained in accordance with Australian Standard AS/NZS 1596 'The storage and handling of LP Gas' (Standards Australia 2008). This complies with PBP.

Subject to the satisfactory resolution of the foregoing, Endeavour Energy has no objection to the Development Application.

Please note that Endeavour Energy can only assess the development application based on the information provided by the applicant and the Department. Due to time and resource constraints it is not possible to refer all development application notifications to the relevant internal stakeholders for review and advice or to request additional information from the applicant or the Department. The provision of inadequate detail of the potential impact on the electricity infrastructure / easements on or near the site may result in Endeavour Energy objecting to the Development Application.

Could you please pass on a copy of this submission and the attached resources to the applicant? Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified above or in Endeavour Energy's previous submission in relation to the various matters. Due to the high number of development application / planning proposal notifications submitted to Endeavour Energy, to ensure a response contact by email to property.development@endeavourenergy.com.au is preferred.

With the easing of the current COVID-19 health risk, whilst a significant number of Endeavour Energy staff are returning to the office they are at times still working from home. Although working from home, access to emails and other internal stakeholders can still be somewhat limited and as a result it may take longer than usual to respond to enquiries. Thank you for your ongoing understanding during this time.

Yours faithfully

Cornelis Duba
Development Application Specialist
Network Environment & Assessment
M: 0455 250 981
E: cornelis.duba@endeavourenergy.com.au
51 Huntingwood Drive, Huntingwood NSW 2148
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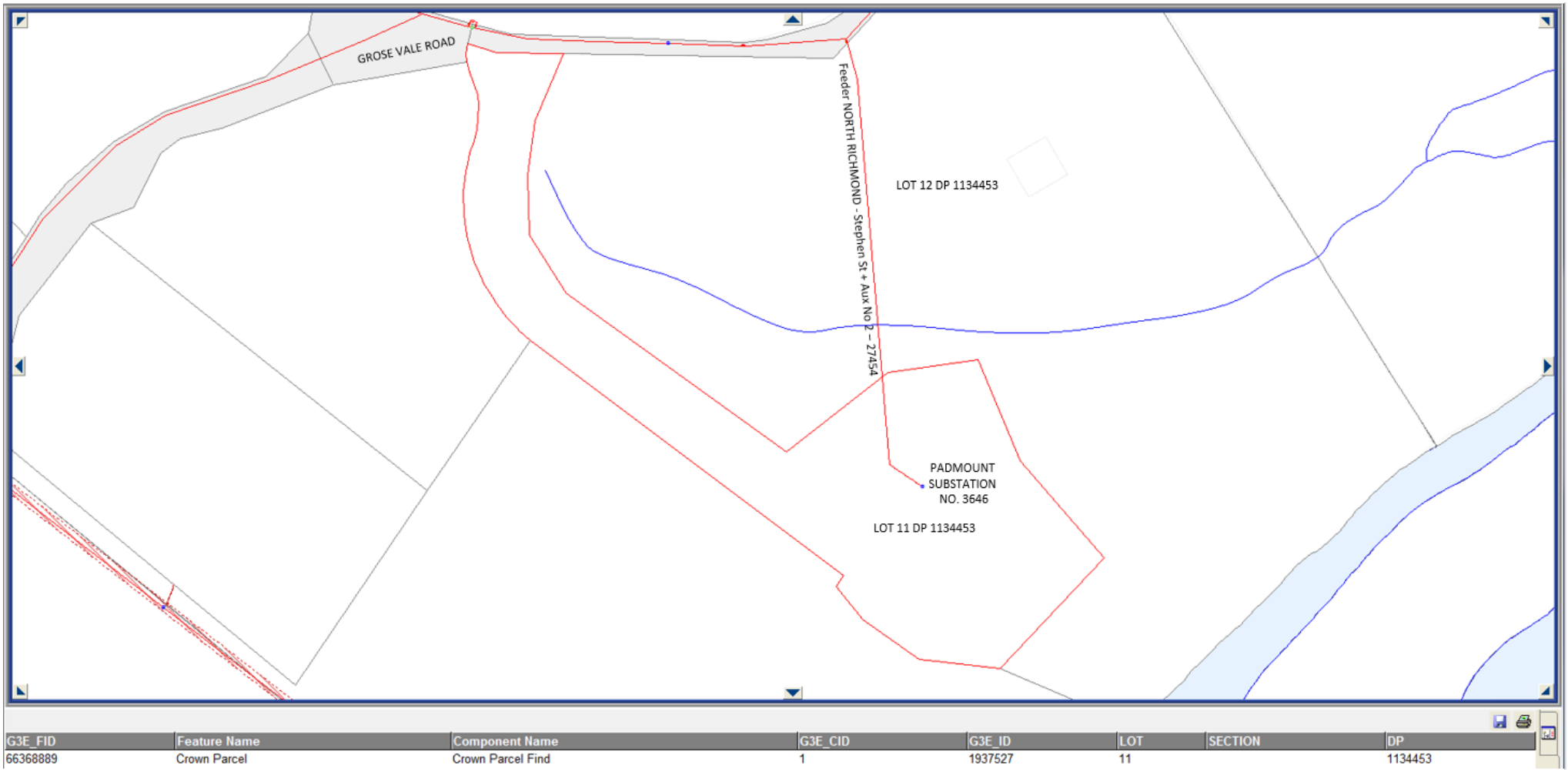


G3E_FID	Feature Name	Component Name	G3E_CID	G3E_ID	LOT	SECTION	DP
66368889	Crown Parcel	Crown Parcel Find	1	1937527	11		1134453

Please note the location, extent and type of any electricity infrastructure, boundaries etc. shown on the plan is indicative only. In addition it must be recognised that the electricity network is constantly extended, augmented and modified and there is a delay from the completion and commissioning of these works until their capture in the model. Generally (depending on the scale and/or features selected), low voltage (normally not exceeding 1,000 volts) is indicated by blue lines and high voltage (normally exceeding 1,000 volts but for Endeavour Energy's network not exceeding 132,000 volts / 132 kV) by red lines (these lines can appear as solid or dashed and where there are multiple lines / cables only the higher voltage may be shown). This plan only shows the Endeavour Energy network and does not show electricity infrastructure belonging to other authorities or customers owned electrical equipment beyond the customer connection point / point of supply to the property. This plan is not a 'Dial Before You Dig' plan under the provisions of Part 5E 'Protection of underground electricity power lines' of the *Electricity Supply Act 1995* (NSW).

Feeder NORTH RICHMOND - Stephen St + Aux No 2 – 27454 from Grose Vale Road traverses Lot 12 DP 1134453 (for which there is no easement) to supply padmount substation no. 3646 located on the site.

From: Cornelis Duba <Cornelis.Duba@endeavourenergy.com.au>
Sent: Tuesday, 26 November 2019 3:33 PM
To: information@planning.nsw.gov.au
Cc: Ingrid Berzins <Ingrid.Berzins@planning.nsw.gov.au>; David Gibson <David.Gibson@planning.nsw.gov.au>; Jeff Smith <Jeffrey.Smith@endeavourenergy.com.au>
Subject: NSW Environment, Industry & Planning Request for SEARs SSD-10394 St John of God Hospital Redevelopment

The Secretary
NSW Planning, Industry & Environment

ATTENTION: Ingrid Berzins, Planning Officer, Social and Infrastructure Assessments

Dear Sir or Madam

I refer to the Department's below email of 12 November 2019 advising of the Planning Secretary's Environmental Assessment Requirements (SEARs) for State Significant Development SSD-10394 St John of God Hospital Redevelopment at 117 Grose Vale Road, North Richmond. (Lot 11 DP 1134453) for the 'Construction of upgraded and expanded facilities resulting in an additional 24 beds. In addition, partial demolition of existing buildings, retention of Belmont House and integrated open space and landscaping'. Submissions need to be made to the Department by 26 November 2019.

As shown in the below site plans from Endeavour Energy's G/Net master facility model (and extract from Google Maps Street View) there are:

- No easements over the site benefitting Endeavour Energy (active easements are indicated by red hatching).
- Low voltage overhead power lines coming from the opposite side of Grose Vale Road going to two customer connection points on the site for a 'gate house' and a streetlight.
- 11,000 volt / 11 kilovolt (kV) high voltage overhead power lines crossing Lot 11 DP 1134453 to an underground to overhead (UGOH) pole on the site with the 11 kV high voltage continuing as underground cables to padmount substation no. 3646 (indicated by the symbol PS) which provides the customer connection point for the existing hospital.

Please note the location, extent and type of any electricity infrastructure, boundaries etc. shown on the plan is indicative only. Generally (depending on the scale and/or features selected), low voltage (normally not exceeding 1,000 volts) is indicated by blue lines and high voltage [normally exceeding 1,000 volts but for Endeavour Energy's network not exceeding 132,000 volts / 132 kilovolts (kV)] by red lines (these lines can appear as solid or dashed and where there are multiple lines / cables only the higher voltage may be shown). This plan only shows the Endeavour Energy network and does not show electricity infrastructure belonging to other authorities or customers owned electrical equipment beyond the customer connection point / point of supply to the property. This plan is not a 'Dial Before You Dig' plan under the provisions of Part 5E 'Protection of underground electricity power lines' of the *Electricity Supply Act 1995* (NSW).

In regard to the electricity infrastructure on the site on the site not held under easement they are protected assets under the *Electricity Supply Act 1995* (NSW) Section 53 'Protection of certain electricity works'. The owner or occupier of the land cannot take any action by reason of the presence or operation of the electricity works in, on or over the land ie. they cannot remove the electricity infrastructure from the property. These protected assets are managed on the same basis as if an easement was in existence – please refer to the below point 'Easement Management / Network Access.

In accordance with Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights', and as shown in the following extract of Table 1 – 'Minimum easement widths':

- The 11 kV high voltage overhead power lines requires a 9 metre minimum easement width ie. 4.5 metres to both sides of the centre line of the poles / conductors.

- The low voltage and 11 kV high voltage underground cables (assumed to have no concrete protection unless proven otherwise) requires a 3 metre minimum easement width ie. 1.5 metres to both sides of the centre line of the cable ducts.
- The padmount substation requires a minimum easement of 2.75 x 5.5 metres.

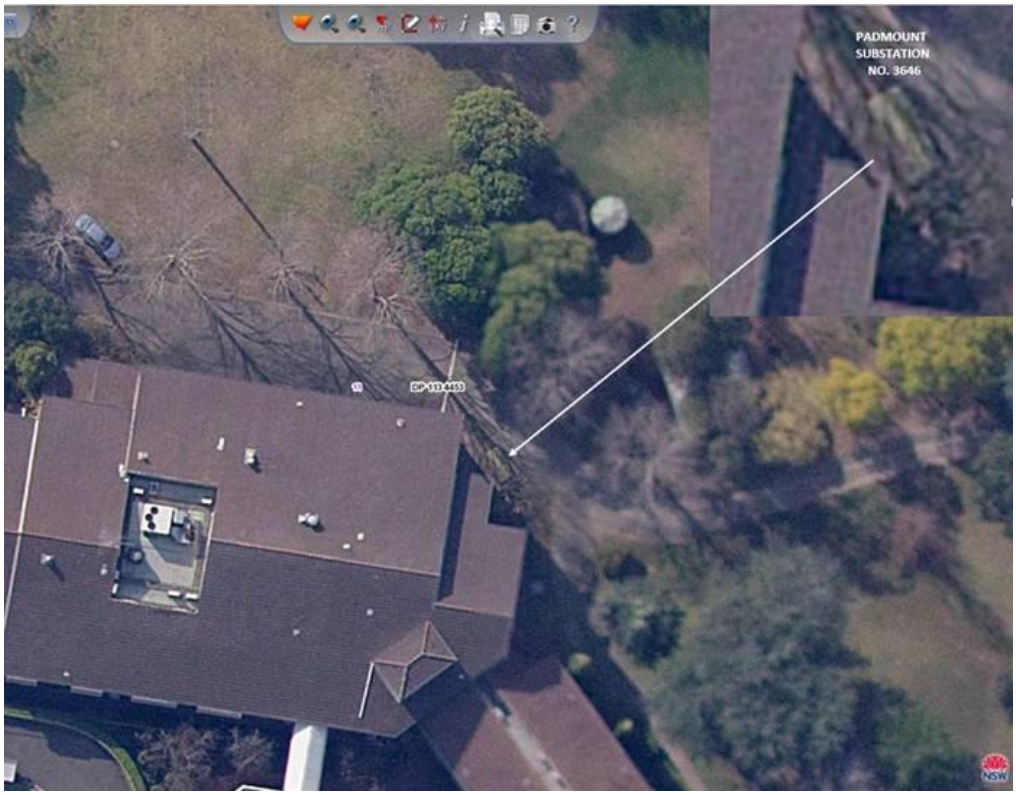
Table 1 - Minimum easement widths

	Voltage	Asset Type	Construction	Minimum Easement (m)
Overhead Assets	400V–22kV	Bare Construction	All	9
		ABC		
		CCT		
Underground Assets	400V - 22kV		Underbore / Ducted / Direct buried	3
		Cables	Ducted < 100m and with concrete protection *(min 50 mm concrete cover at standard burial depth)*	1
Other	-	Padmount Substation		2.75 x 5.5 *(see clause 5.3.6)*

ABC = Aerial Bundled Cables CTT = Covered Conductor Thick

Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights' in addition to the easement for padmount substations now also include additional clearances / restriction for fire rating which usually extends 3 metres horizontally from the base of the substation footing, and 6 metres vertically from the same point. These were introduced on a case for case basis from 2003 before becoming standard in 2009. Whilst there is no easement for padmount substation no. 3646 registered on title, Endeavour Energy strongly recommends that the fire restriction be considered and adopted for any new development – please also refer to the below point 'Network Capacity / Connection'.

Although padmount substation no. 3646 is not shown on the Architectural Plans, as shown in the following extract from SIX Maps, the substation is located to the north eastern side of the Xavier Building which possibly encroaches the notional easement and the fire restriction area for the substation.



From Endeavour Energy's corporate records it appears the existing site was part of Lot 1 DP 569215 which in 2008 was subject of an application for a non-urban residential subdivision (Endeavour Energy reference NRS2166 2008/02167/001). The following are extracts from Endeavour Energy's records which shows padmount substation no. 3646 proposed to be located on Lot 11 DP 1134453. It is not clear why the location of the padmount substation is shown in this location or why no easements were not created over the electricity infrastructure – in particular given the 11 kV high voltage overhead power lines which provide the supply to the substation now traverse another property / title.

INTEGRAL energy

POSTAL ADDRESS
PO BOX 6366
HUNTINGWOOD NSW 2148
integral@integral.com.au

Telephone: 02 9853 5044
Fax: (02) 9853 6461

In reply quote: **NRS2166 , 2008/02167/001**
Your Contact: Jaclyn O'Sullivan

Surveyor's Ref: 25574RH GROSE 2705083

Council's Ref: 0503/07

NOTIFICATION OF ARRANGEMENT FOR THE PROVISION OF DISTRIBUTION OF ELECTRICITY IN A NEW NON URBAN RESIDENTIAL SUBDIVISION

City, Municipality or Shire HAWKESBURY CITY COUNCIL **Locality** NORTH RICHMOND

Street GROSE VALE ROAD

Lot No 1 **Port** **Sect** **D.P.** 569215

Parish KURRAJONG **County** COOK

Subdivision into TWO (2) **Lots Numbered** 11-12 INCLUSIVE

Name of Applicant HARRISON FRIEDMANN & ASSOCIATES PTY LTD

Applicant's Postal Address DX 11360, HURSTVILLE 2226

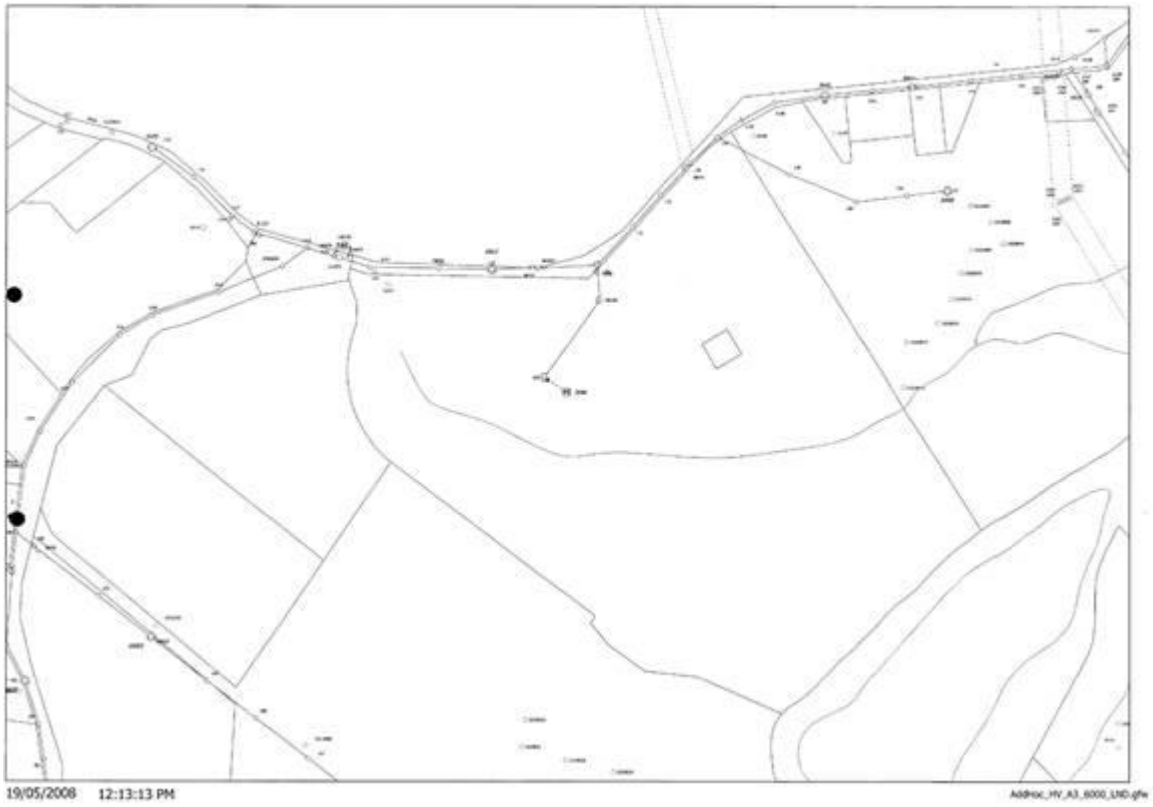
The applicant has made satisfactory arrangements relating to the provision of electricity to the proposed subdivision, a plan of which is annexed. The issue of this notification is subject to:

1. The registration of all necessary easements shown in the plans pursuant to Section 88B of the Conveyancing Act 1919Terms.
2. In the case of community land development, the lodgement of a suitable management statement and corresponding working plan in accordance with the Community Land Development Act 1989.
3. The payment of any additional fees and charges under Integral Energy's General Terms and Conditions.
4. A separate Connection of Load Application will need to be lodged for each lot in this Subdivision prior to connection.

Dated this SEVENTH **day of** AUGUST **2008.**

For and on behalf of
INTEGRAL ENERGY

Jaclyn O'Sullivan
Contestable Works Administrator
NETWORK CONNECTIONS



Accordingly Endeavour Energy's recommendation is that all the required easements over the existing electricity infrastructure be created – including over Lot 11 DP 1134453 if it is still owned or controlled by the same owner or associated parties.

Endeavour Energy's Property Services Section has provided the following advice:

There are currently no easements over the existing overhead power lines, underground cables or padmount substation.

These easements should have been created in the two-lot subdivision (EE Ref: NRS2166) that occurred in 2009. Network Connections Branch (NCB) for whatever reason did not pursue the 'creation of the necessary easements' referred to in the Notification of Arrangement – possibly based on the incorrect location of the electrical assets shown in Endeavour Energy's G/Net master facility model at that time.

An application for additional load for the extensions to the hospital was submitted to NCB on 11 October 2019. The existing substation does NOT have enough capacity for the increase in load and will need to be upgraded.

The developer has been requested to engage a Level 3 ASP (Designer) to design the appropriate upgrade to the existing electrical assets. The upgrade will then need to be constructed before NCB issue a Permission to Connect for the increased load.

Based on the foregoing the following conditions should be included in any consent to the Development Application:

1. *An application for additional electrical load must be made to Endeavour Energy Network Connections Branch prior to construction work commencing. The upgrade to the existing electrical assets owned by Endeavour Energy must meet all current Endeavour Energy electrical design, construction and property standards – including the provision of adequate safety clearances and easements.*

2. *A Permission to Connect letter should be obtained from Endeavour Energy prior to occupation of the new hospital extensions.*

As it appears that existing padmount substation no. 3646 does not Endeavour Energy's current standards and requires an upgraded transformer etc. , the provision of a new padmount substation in an appropriate location rather than the upgrading of the existing substation is recommended. As well as complying with Endeavour Energy's current standards this will reduce the amount of time an outage / provision of alternative electricity supply is required to complete the works to the existing substation and allow the load to be readily switched to the new substation once it is in place.

Subject to the resolution of the foregoing and the following recommendations and comments Endeavour Energy has no objection to the Development Application.

- Network Capacity / Connection

Endeavour Energy has noted the following in the:

  - Draft SEARs

13. Utilities

- Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation and easement requirements of the development for the provision of utilities including staging of infrastructure.
- Prepare an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.

  - SEARs Request.

5.3 Hawkesbury LEP 2012

Hawkesbury Local Environmental Plan (HLEP) 2012 is the principle planning instrument that applies to the site. The following key provisions apply:

Table 2 – Hawkesbury Local Environmental Plan 2012

Control	Provision	Compliance
cl 6.7 Essential services	The consent authority must be satisfied that adequate arrangements have been made for essential infrastructure to service the development.	The proposal relates to redevelopment of an existing hospital facility. Preliminary Power, Water and sewer investigations have identified that the authority supplies contain sufficient capacity to serve the development, further submissions are to finalise details. Infrastructure and servicing requirements to accommodate the redevelopment will be further addressed during preparation of the EIS.

Endeavour Energy's Asset Strategy & Planning Branch whilst not having undertaken a detailed analysis of the Development Application have provided the following advice:

There is a padmount substation no. 3646 on the site which only services the existing St John of God Hospital.

This substation is supplied by 11 kV feeder 27454 from North Richmond Zone Substation located at 92 Pecks Road North Richmond (Lot 7 DP 786671). This feeder is loaded up to its full capacity and will require either upgrading or augmentation.

The substation has a 500 kVA kilovolt amperes (kVA) transformer / capacity which is as per latest data loaded to 388 kVA, but has history of being overloaded.

To facilitate the proposed development the substation is likely to need upgrading, maybe to 1000 kVA.

The existing location of the substation does not appear to comply with Endeavour Energy's current standards / design instructions in regard to the easement, fire restriction or right of access (the substation not being installed within direct access of a public road.

Asset Strategy & Planning Branch support relocation of the substation to a safer and more convenient location on this site.

This Development Application will need to follow the standard connection of load process where Endeavour Energy's Asset Strategy & Planning Branch will undertake a detailed review of the electricity supply arrangements for the proposed redevelopment of the hospital.

In due course the applicant for the proposed development of the site will need to submit an application for connection of load via Endeavour Energy's Network Connections Branch to carry out the final load assessment and the method of supply will be determined (also taking into consideration the potential further development / electricity load of the residue allotments). Depending on the outcome of the assessment, any required padmount substation will need to be located within the property (in a suitable and accessible location) and be protected (including any associated cabling) by an easement and associated restrictions benefiting and gifted to Endeavour Energy. Please refer to Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights'. Further details are available by contacting Endeavour Energy's Network Connections Branch via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 8am - 5:30pm or on Endeavour Energy's website under 'Home > Residential and business > Connecting to our network' via the following link:

http://www.endeavourenergy.com.au/ .

Advice on the electricity infrastructure required to facilitate the proposed development can be obtained by submitting a Technical Review Request to Endeavour Energy's Network Connections Branch, the form for which FPJ6007 is attached and further details (including the applicable charges) are available from Endeavour Energy's website under 'Our connection services'. The response to these enquiries is based upon a desktop review of corporate information systems, and as such does not involve the engagement of various internal stakeholders in order to develop a 'Connection Offer'. It does provide details of preliminary connection requirements which can be considered by the applicant prior to lodging a formal application for connection of load.

Alternatively the applicant should engage a Level 3 Accredited Service Provider (ASP) approved to design distribution network assets, including underground or overhead. The ASP scheme is administered by NSW Energy and details are available on their website via the following link or telephone 13 77 88:

https://energy.nsw.gov.au/government-and-regulation/legislative-and-regulatory-requirements/asp-scheme-and-contestable-works .

- Network Design

Endeavour Energy's Company Policy 9.2.5 'Network Asset Design', includes the following requirements for electricity connections to new non-urban subdivision / development:

5.11 Reticulation policy

5.11.1 Distribution reticulation

In order to improve the reliability performance of and to reduce the operating expenditure on the network over the long term the company has adopted the strategy of requiring new lines to be either underground cables or where overhead is permitted, to be predominantly of covered or insulated construction. Notwithstanding this strategy, bare wire overhead construction is appropriate and permitted in some situations as detailed below.

In areas with the potential for significant overhanging foliage, CCT is used to provide increased reliability as it is less susceptible to outages from wind-blown branches and debris than bare conductors. CCT must only be used in treed[2] areas as the probability of a direct lightning strike is low. In open areas where the line is not shielded from a direct lightning strike, bare conductors must generally be used for 11kV and 22kV reticulation.

Non-metallic Screened High Voltage Aerial Bundled Cable (NMSHVABC) must be used in areas which are heavily treed and where it is not practicable to maintain a tree clearing envelope around the conductors.

[2] A "treed" area is one with a substantial number of trees adjacent to the line, in each span. In these situations CCT is used to provide increased reliability as it is less susceptible to outages from wind-blown

5.11.1.2 Non-urban areas

Extensions to the existing overhead 11kV and 22kV network and conductor replacements / augmentations must be underground. Where underground reticulation is not practical overhead construction can be used. The choice of overhead construction must be bare wire for the following circumstances:

- areas that are not substantial treed;
- long gully crossings;
- SWER lines;
- joint use 132, 66 or 33kV lines; and
- distribution lines with transmission construction and located in an easement.

All other overhead constructions must be CCT or NMSHVABC.

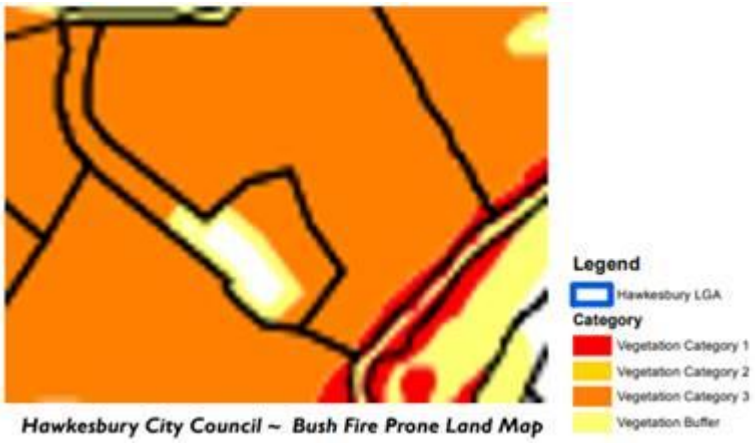
Extensions to the existing overhead LV network and augmentations must either be underground or utilise ABC. Conductor replacements greater than 100m route length must utilise ABC.

5.11.2 Transmission and sub-transmission

Transmission and sub-transmission lines will be must overhead construction unless environment, community and/or planning instrument considerations require an underground solution.

- Bushfire

Endeavour Energy has noted that as shown in the following extract of Hawkesbury City Council Bush Fire Prone Land Map that parts of the site is categorised as being bushfire prone land.



Hawkesbury City Council ~ Bush Fire Prone Land Map

NSW Rural Fire Service 'Planning for Bush Fire Protection 2006' as a general bush fire protection measures requires that electricity should be located so as not to contribute to the risk of fire or impede the fire fighting effort.

The following is an extract of Endeavour Energy's Company Policy 9.1.1 Bushfire Risk Management:

9.1.1 BUSHFIRE RISK MANAGEMENT

1.0 POLICY STATEMENT

The company is committed to the application of prudent asset management strategies to reduce the risk of bushfires caused by network assets and aerial consumer mains to as low as reasonably practicable (ALARP) level. The company is also committed to mitigating, the associated risk to network assets and customer supply reliability during times of bushfire whilst achieving practical safety, reliability, quality of supply, efficient investment and environmental outcomes. The company is committed to compliance with relevant acts, regulations and codes.

Accordingly the network required to service the proposed development must be fit for purpose and meet the technical specifications, design, construction and commissioning standards based on Endeavour Energy's risk assessment associated with the implementation and use of the network connection / infrastructure for a bushfire prone site. In assessing bushfire risk, Endeavour Energy has traditionally focused on the likelihood of its network starting a bushfire, which is a function of the condition of the network. Risk control has focused on reducing the likelihood of fire ignition by implementing good design and maintenance practices. However safety risks associated with the loss of electricity supply are also considered.

- Earthing

The construction of any building or structure (including fencing, signage, flag poles, hoardings etc.) whether temporary or permanent that is connected to or in close proximity to Endeavour Energy's electrical network is required to comply with Australian/New Zealand Standard AS/NZS 3000:2018 'Electrical installations' as updated from time to time. This Standard sets out requirements for the design, construction and verification of electrical installations, including ensuring there is adequate connection to the earth. Inadequate connection to the earth to allow a leaking/fault current to flow into the grounding system and be properly dissipated places persons, equipment connected to the network and the electricity network itself at risk from electric shock, fire and physical injury.

- Easement Management / Network Access

The following is a summary of the usual / main terms of Endeavour Energy's electrical easements requiring that the landowner:

- Not install or permit to be installed any services or structures within the easement site.
- Not alter the surface level of the easement site.
- Not do or permit to be done anything that restricts access to the easement site without the prior written permission of Endeavour Energy and in accordance with such conditions as Endeavour Energy may reasonably impose.

Endeavour Energy's preference is for no activities or encroachments to occur within its easement areas. Most activities are prohibited within the padmount substation easement area. However, if any proposed works (other than those approved / certified by Endeavour Energy's Network Connections Branch as part of an enquiry / application for load or asset relocation project) will encroach / affect Endeavour Energy's easements or protected assets, contact must first be made with the Endeavour Energy's Easements Officer,

Jeffrey Smith, on direct telephone 9853 7139 or alternately email Jeffrey.Smith@endeavourenergy.com.au or Easements@endeavourenergy.com.au .

Please find attached for the applicant's reference copies of Endeavour Energy's:

- Guide to Fencing, Retaining Walls and Maintenance Around Padmount Substations.
- General Restrictions for Overhead Power Lines.
- Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights' which deals with activities / encroachments within easements.

It is imperative that the access to the existing electrical infrastructure on and in proximity of the site be maintained at all times. To ensure that supply electricity is available to the community, access to the electricity infrastructure may be required at any time. Restricted access to electricity infrastructure by maintenance workers causes delays in power restoration and may have severe consequences in the event of an emergency.

- Prudent Avoidance

The electricity industry has adopted a policy of prudent avoidance by doing what can be done without undue inconvenience and at modest expense to avert the possible risk to health from exposure to emissions form electricity infrastructure such as electric and magnetic fields (EMF) and noise which generally increase the higher the voltage ie. Endeavour Energy's network ranges from low voltage (normally not exceeding 1,000 volts) to high voltage (normally exceeding 1,000 volts but not exceeding 132,000 volts / 132 kV).

In practical terms this means that when designing new transmission and distribution facilities, consideration is given to reducing exposure and increasing separation distances to more sensitive uses such as residential or schools, pre-schools, day care centres or where potentially a greater number of people are regularly exposed for extended periods of time.

These emissions are usually not an issue but with Council's permitting or encouraging development with higher density, reduced setbacks and increased building heights, but as the electricity network operates 24/7/365 (all day, every day of the year), the level of exposure can increase.

Endeavour Energy believes that irrespective of the zoning or land use, applicants (and Council) should also adopt a policy of prudent avoidance by the siting of more sensitive uses eg. the office component of an industrial building, away from and less susceptible uses such as garages, non-habitable or rooms not regularly occupied eg. storage areas in a commercial building, towards any electricity infrastructure – including any possible future electricity infrastructure required to facilitate the proposed development.

Where development is proposed in the vicinity of electricity infrastructure, Endeavour Energy is not responsible for any amelioration measures for such emissions that may impact on the nearby proposed development.

Please find attached a copy of Energy Networks Association's 'Electric & Magnetic Fields – What We Know' which can also be accessed via their website at https://www.energynetworks.com.au/electric-and-magnetic-fields and provides the following advice:

> *Electric fields are strongest closest to their source, and their strength diminishes rapidly as we move away from the source.*
>
> *The level of a magnetic field depends on the amount of the current (measured in amps), and decreases rapidly once we move away from the source.*

Typical magnetic field measurements associated with Endeavour Energy's activities and assets given the required easement widths, safety clearances etc. and having a maximum voltage of 132,000 volt / 132 kV, will with the observance of these separation distances not exceed the recommended magnetic field public exposure limits.

- Vegetation Management

The planting of large trees in the vicinity of electricity infrastructure is not supported by Endeavour Energy. Suitable planting needs to be undertaken in proximity of electricity infrastructure (including any new electricity infrastructure required to facilitate the proposed development). Only low growing shrubs not exceeding 3.0 metres in height, ground covers and smaller shrubs, with non-invasive root systems are the best plants to use. Larger trees should be planted well away from electricity infrastructure (at least the same distance from overhead power lines as their potential full grown height) and even with underground cables, be installed with a root barrier around the root ball of the plant.

Landscaping that interferes with electricity infrastructure may become a potential safety risk, cause of bush fire, restrict access, reduce light levels from streetlights or result in the interruption of supply. Such landscaping may be subject to Endeavour Energy's Vegetation Management program and/or the provisions of the *Electricity Supply Act 1995* (NSW) Section 48 'Interference with electricity works by trees' by which under certain circumstances the cost of carrying out such work may be recovered.

- Dial Before You Dig

Before commencing any underground activity the applicant is required to obtain advice from the ***Dial before You Dig* 1100** service in accordance with the requirements of the *Electricity Supply Act 1995* (NSW) and associated Regulations. This should be obtained by the applicant not only to identify the location of any underground electrical and other utility infrastructure across the site, but also to identify them as a hazard and to properly assess the risk.

- Public Safety

Workers involved in work near electricity infrastructure run the risk of receiving an electric shock and causing substantial damage to plant and equipment. I have attached Endeavour Energy's public safety training resources, which were developed to help general public / workers to understand why you may be at risk and what you can do to work safely. The public safety training resources are also available via Endeavour Energy's website via the following link:

http://www.endeavourenergy.com.au/wps/wcm/connect/ee/nsw/nsw+homepage/communitynav/safety/safety+brochures .

If the applicant has any concerns over the proposed works in proximity of the Endeavour Energy's electricity infrastructure to the road verge / roadway, as part of a public safety initiative Endeavour Energy has set up an email account that is accessible by a range of stakeholders across the company in order to provide more effective lines of communication with the general public who may be undertaking construction activities in proximity of electricity infrastructure such as builders, construction industry workers etc. The email address is Construction.Works@endeavourenergy.com.au .

- Emergency Contact

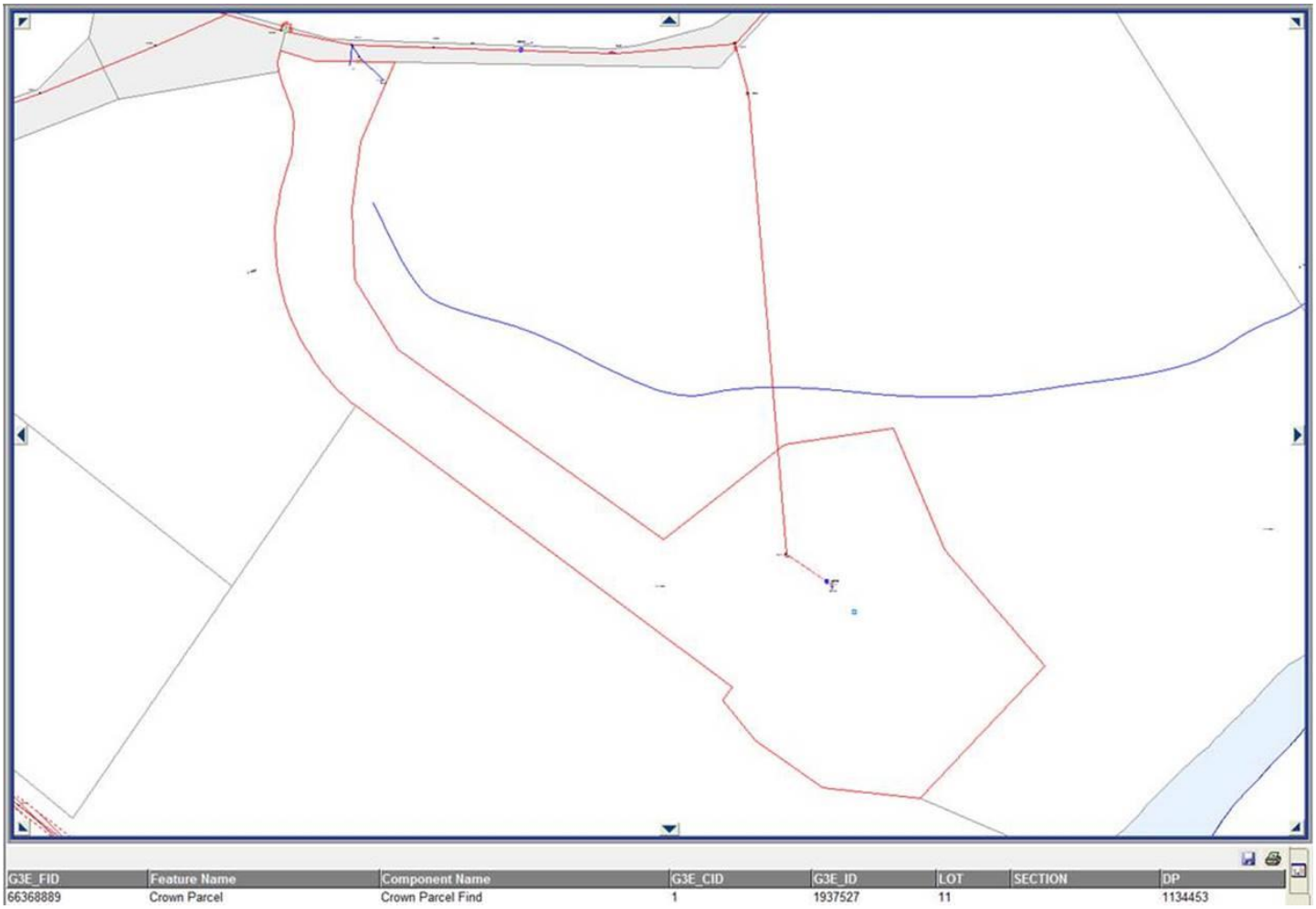
In case of an emergency relating to Endeavour Energy's electrical network, the applicant should note the Emergencies Telephone is 131 003 which can be contacted 24 hours/7 days. Endeavour Energy's contact details should be included in the any risk or safety management plan. Endeavour Energy's contact details should be included in any relevant risk and safety management plan.

I appreciate that not all the foregoing issues may be directly or immediately relevant or significant to the SEARs Request / Development Application. However, Endeavour Energy's preference is to alert proponents / applicants of the potential matters that may arise should development within closer proximity of the existing and/or proposed electricity infrastructure required to facilitate the proposed development on or in the vicinity of the site occur.

Could you please pass on a copy of this submission and the attached resources to the applicant? Should you wish to discuss this matter, or have any questions, please do not hesitate to contact me or the contacts identified above in relation to the various matters. Due to the high number of development application / planning proposal notifications submitted to Endeavour Energy, to ensure a response contact by email to property.development@endeavourenergy.com.au is preferred.

Yours faithfully

Cornelis Duba
Development Application Specialist
Network Environment & Assessment
T: 9853 7896
E: cornelis.duba@endeavourenergy.com.au
51 Huntingwood Drive, Huntingwood NSW 2148
www.endeavourenergy.com.au



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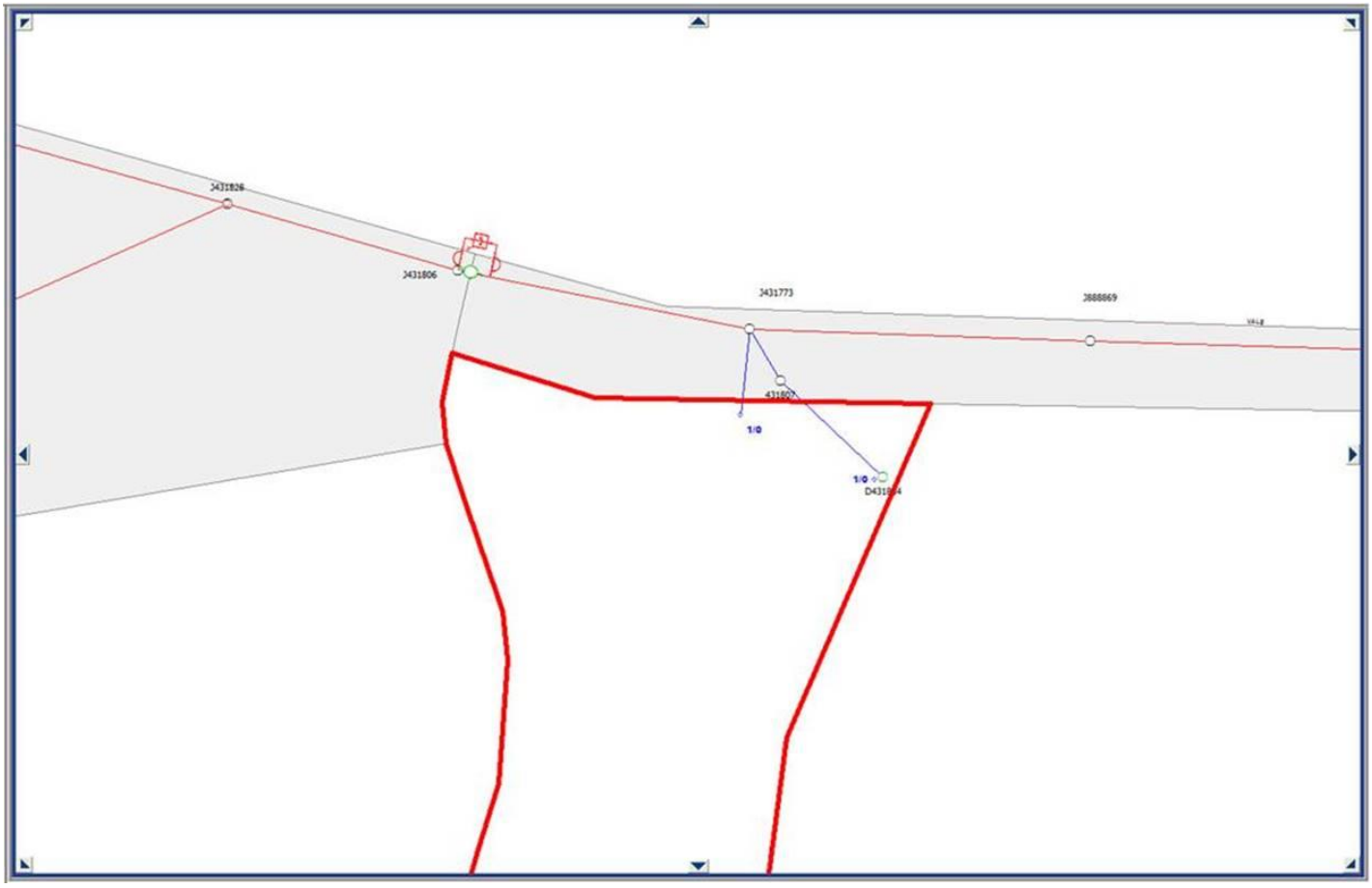
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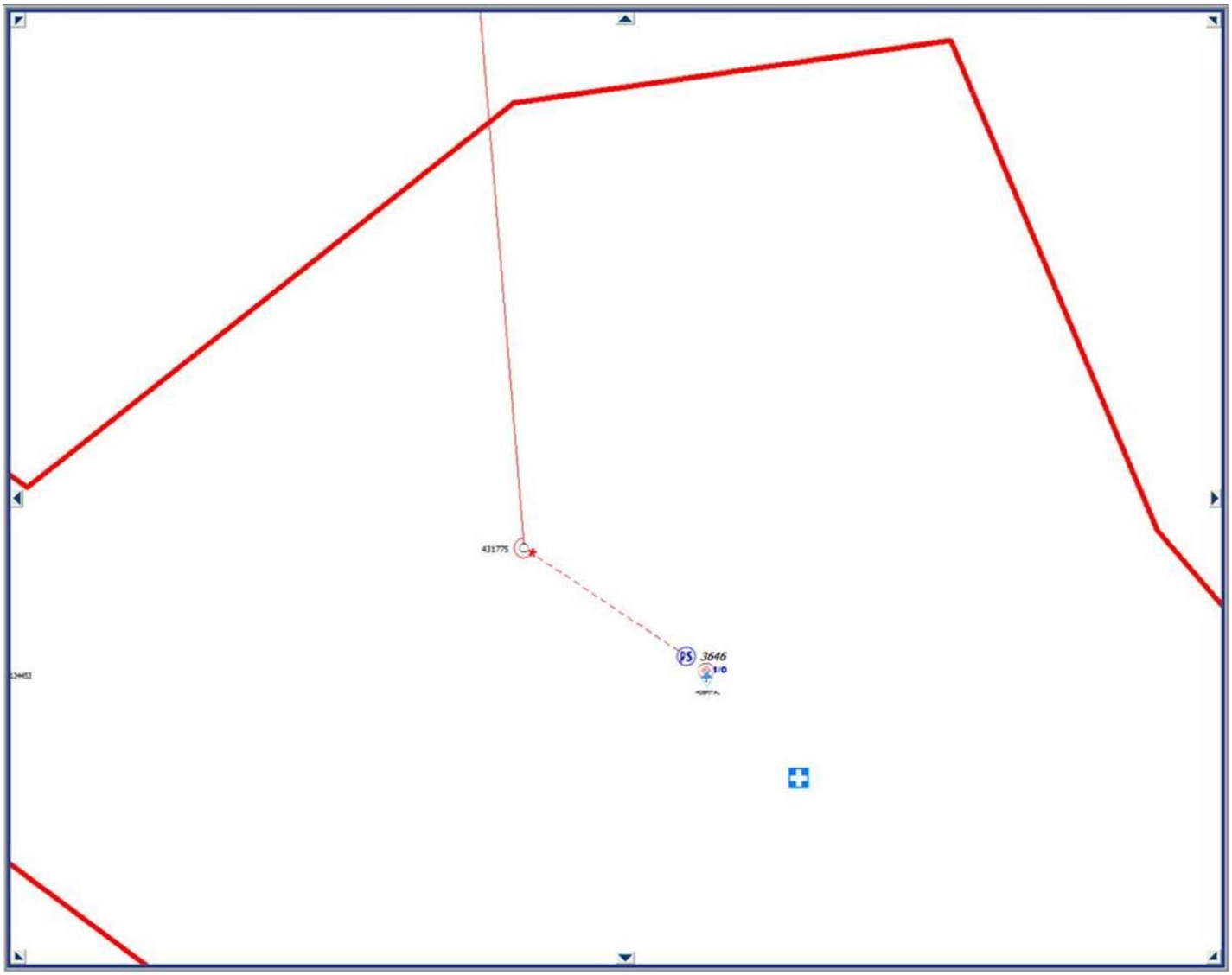
Google
Street View - Sep 2015
Grose Vale Rd
Google


431775
PS 3646

From: Ingrid Berzins <Ingrid.Berzins@planning.nsw.gov.au>
Sent: Wednesday, 13 January 2021 3:30 PM
To: Property Development <Property.Development@endeavourenergy.com.au>; Cornelis Duba <Cornelis.Duba@endeavourenergy.com.au>
Subject: Notice of Exhibition - St John of God Richmond Hospital Redevelopment (SSD-10394) - Endeavour Energy

Attention: Mr Cornelius Duba
Development Application Specialist
Endeavour Energy

-via email-
Property.development@endeavourenergy.com.au
Cornelius.Duba@endeavourenergy.com.au

Dear Mr Duba

The Department of Planning, Industry and Environment has received an Environmental Impact Statement (EIS) for the St John of God Richmond Hospital Redevelopment (SSD-10394).

The EIS will be publicly exhibited from **Friday 15 January 2021** to **Friday 19 February 2021**. All relevant documents may be viewed on the Department's website at: https://www.planningportal.nsw.gov.au/major-projects/projects/on-exhibition.

The Department invites you to advise on the proposal, including advice on recommended conditions by **Friday 19 February 2021**.

If you have any enquiries, please contact Ingrid Berzins on (02) 9373 2885 or via email at Ingrid.Berzins@planning.nsw.gov.au.

Kind regards,

Ingrid Berzins
Planning Officer, Social and Infrastructure Assessments

Infrastructure Assessments | Department of Planning, Industry and Environment
T 02 9373 2885 | **E** Ingrid.Berzins@planning.nsw.gov.au
4 Parramatta Square, Locked Bag 5022, Parramatta NSW 2124
www.dpie.nsw.gov.au

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

https://www.planningportal.nsw.gov.au/major-projects/project/25876