Development Application and Planning Proposal Review

Authority	Authority's Reference	Authority Contact	Authority Notification	Submission Due	Submission Made
NSW Planning, Industry & Environment	SSD-30759158	Nahid Mahmud	22/06/2022	25/07/2022	3/08/2022

Address	Land Title
268-278 Catherine Fields Road, Catherine Field	Lot 11 DP 833983, Lot 12 DP 833784

Scope of Development Application or Planning Proposal

Environmental Impact Statement (EIS) for the Minarah College, Catherine Field. New school for 1,500 students in Kindergarten to Year 12 including an Early Learning Centre and Special Education.

As shown in the below site plan from Endeavour Energy's G/Net master facility model:

There are:

- No easements benefitting Endeavour Energy (active easements are indicated by red hatching).
- Extended low voltage overhead service conductors coming from poles on the opposite side of the road going to customer owned / private poles on the site providing the customer connection points for the existing dwellings.
- Low voltage and 11,000 volt / 11 kilovolt (kV) high voltage overhead power lines to the opposite side of the road.

Relevant / applicable clause numbers from Endeavour Energy's standard conditions for Development Application and Planning Proposal Review indicated by ☒ .

Cond-ition	Advice	Clause No.	Issue	Detail
☐	☐	1	Adjoining Sites	Adjoining or nearby development / use should be compatible with the use of Endeavour Energy's sites.
☐	☐	2	Asbestos	Area identified or suspected of having asbestos or asbestos containing materials (ACM) present in the electricity network.
☐	☒	3	Asset Planning	Applicants should not assume adequate supply is immediately available to facilitate their proposed development.
☐	☐	4	Asset Relocation	Application must be made for an asset relocation / removal to determine possible solutions to the developer's requirements.
☐	☒	5	Bush Fire	Risk needs to be managed to maintain the safety of customers and the communities served by the network.
☐	☐	6	Construction Management	Integrity of electricity infrastructure must be maintained and not impacted by vehicle / plant operation, excessive loads, vibration, dust or moisture penetration.
☐	☒	7	Contamination	Remediation may be required of soils or surfaces impacted by various forms of electricity infrastructure.
☐	☒	8	Demolition	All electricity infrastructure shall be regarded as live and care must be taken to not interfere with any part of the electricity network.
☐	☒	9	Dial Before You Dig	Before commencing any underground activity the applicant must obtain advice from the Dial Before You Dig 1100 service.
☐	☐	10	Dispensation	If a proposal is not compliant with Endeavour Energy's engineering documents or standards, the applicant must request a dispensation.
☐	☐	11	Driveways	For public / road safety and to reduce the risk of vehicle impact, the distance of driveways from electricity infrastructure should be maximised.
☐	☒	12	Earthing	The construction of any building or structure connected to or in close proximity to the electrical network must be properly earthed.
☐	☒	13	Easement Management	Preference is for no activities to occur in easements and they must adhere to minimum safety requirements.
☐	☐	14	Easement Release	No easement is redundant or obsolete until it is released having regard to risks to its network, commercial and community interests.
☐	☐	15	Easement Subdivision	The incorporation of easements into to multiple / privately owned lots is generally not supported.
☐	☒	16	Emergency Contact	Endeavour Energy's emergency contact number 131 003 should be included in any relevant risk and safety management plan.
☐	☐	17	Excavation	The integrity of the nearby electricity infrastructure shall not be placed at risk by the carrying out of excavation work.
☐	☒	18	Flooding	Electricity infrastructure should not be subject to flood inundation or stormwater runoff.

Cond-ition	Advice	Clause No.	Issue	Detail
☐	☐	19	Hazardous Environment	Electricity infrastructure can be susceptible to hazard sources or in some situations be regarded as a hazardous source.
☐	☐	20	Modifications	Amendments can impact on electricity load and the contestable works required to facilitate the proposed development.
☐	☐	21	Network Access	Access to the electricity infrastructure may be required at any time particularly in the event of an emergency.
☐	☒	22	Network Asset Design	Design electricity infrastructure for safety and environmental compliance consistent with safe design lifecycle principles.
☒	☐	23	Network Connection	Applicants will need to submit an appropriate application based on the maximum demand for electricity for connection of load.
☐	☐	24	Protected Works	Electricity infrastructure without an easement is deemed to be lawful for all purposes under Section 53 'Protection of certain electricity works' of the *Electricity Supply Act 1995* (NSW).
☐	☒	25	Prudent Avoidance	Development should avert the possible risk to health from exposure to emissions form electricity infrastructure such as electric and magnetic fields (EMF) and noise.
☐	☒	26	Public Safety	Public safety training resources are available to help general public / workers understand the risk and how to work safely near electricity infrastructure.
☐	☒	27	Removal of Electricity	Permission is required to remove service / metering and must be performed by an Accredited Service Provider.
☐	☒	28	Safety Clearances	Any building or structure must comply with the minimum safe distances / clearances for the applicable voltage/s of the overhead power lines.
☐	☐	29	Security / Climb Points	Minimum buffers appropriate to the electricity infrastructure being protected need to be provided to avoid the creation of climb points.
☐	☐	30	Service Conductors	Low voltage service conductors and customer connection points must comply with the 'Service and Installation Rules of NSW'.
☐	☐	31	Solar / Generation	The performance of the generation system and its effects on the network and other connected customers needs to be assessed.
☐	☒	32	Streetlighting	Streetlighting should be reviewed and if necessary upgraded to suit any increase in both vehicular and pedestrian traffic.
☐	☒	33	Sustainability	Reducing greenhouse gas emissions and helping customers save on their energy consumption and costs through new initiatives and projects to adopt sustainable energy technologies.
☐	☐	34	Swimming Pools	Whenever water and electricity are in close proximity, extra care and awareness is required.
☐	☐	35	Telecommunications	Address the risks associated with poor communications services to support the vital electricity supply network Infrastructure.
☐	☒	36	Vegetation Management	Landscaping that interferes with electricity infrastructure is a potential safety risk and may result in the interruption of supply.

Cond-ition	Advice	Clause No.	Issue	Detail
			Other	

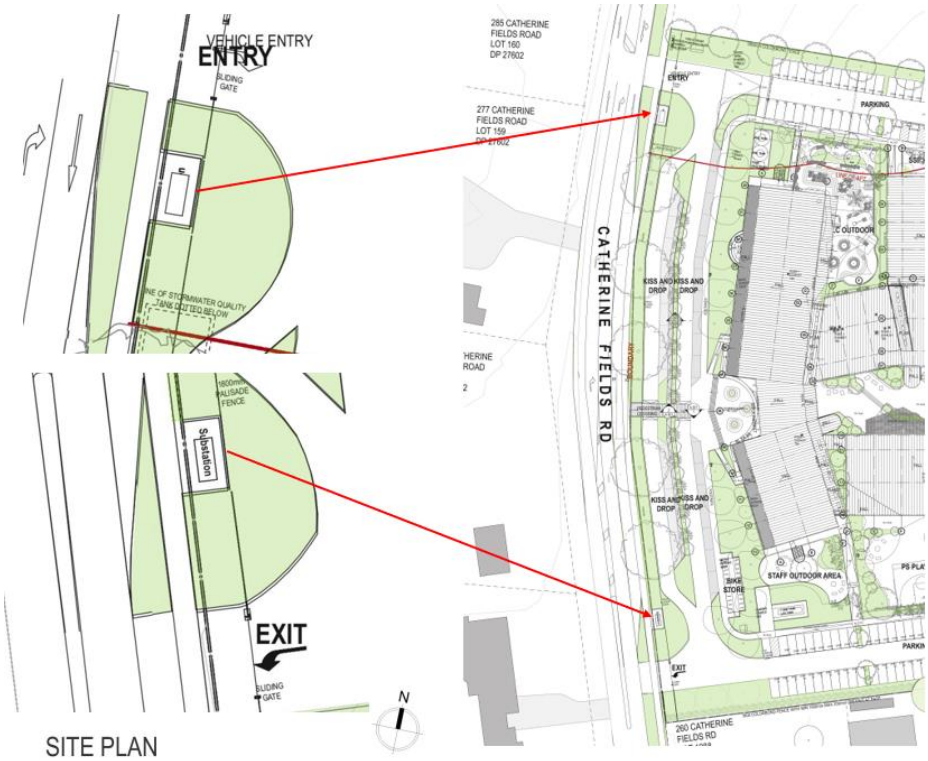
Endeavour Energy	
Completed by:	**Decision**
Cornelis Duba	Approve (with conditions)
Reason(s) for Conditions / Objection (If applicable)	

- The Engagement Summary Table includes the following advice addressing whether the available electricity services are adequate for the proposed development.

Stakeholder	How This Group was Consulted	Issues Discussed	Project Response
Endeavour Energy	JHA submitted an application for a standard connection service to Endeavour Energy for Stage 1 of the development which will include the installation of the early works substation. The offer from endeavour energy was received via email on 5 November 2021.	The proposed Minarah College Catherine Field Campus falls within the Endeavour Energy operational area for power. Two substations are proposed to be installed to accommodate the staging of the development. The application has been registered with endeavour energy and an offer has been made. The offer letter outlines that the next step is for JHA to engage a Level 3 ASP to prepare and provide and electrical design to endeavour energy In the form of a Proposed Method of Supply.	JHA has Accredited Level 3 ASP designers that will be carrying out the design works in co-ordination with Endeavour Energy for this project.

The applicant will need to complete the application for connection of load process with Customer Network Solutions Branch who are responsible for managing the conditions of supply with the proponent and their Accredited Service Provider (ASP) and can be contacted via Head Office enquiries on business days from 9am - 4:30pm on telephone: 133 718 or (02) 9853 6666 or alternatively by email cicadmin@endeavourenergy.com.au .

- The following extract of the Site Plan shows provision for two padmount substations.



SITE PLAN

- Any required padmount substation/s 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'.

- Endeavour Energy's 'Design certification checklist for ASP L3' the design must comply with Endeavour Energy's 'Earthing Design Instruction EDI 001 – Earthing design risk assessment' in which schools, pre-schools, day care centres are regarded as a 'special location'.

- Generally it is the Level 3 Accredited Service Provider's (ASP) responsibility (engaged by the developer) to make sure substation location and design complies with Endeavour Energy's standards the suitability of access, safety clearances, fire ratings, flooding etc.

- As well as the provision / capacity of the padmount substations, other factors such as the size and rating / load on the conductors and voltage drop (which can affect the quality of supply particularly with long conductor runs) etc. need to be assessed. However the extent of any works required will not be determined until the final load assessment is completed.

- The foregoing advice is similarly included in the Services Infrastructure Report.

- Whilst there may be no restrictions in legislation that stop sensitive uses such as schools, pre-schools, day / child care centres being placed next to electricity infrastructure, prudent avoidance measures should however be implemented.

  The proposed locations for the padmount substations in the front building setback / car park areas away from the school buildings is in keeping with the policy of prudent avoidance.

  As a guide please refer to the Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights', Table 1 – 'Minimum easement widths'. With the observance of these separation distances, electric and magnetic fields (EMF) should not exceed the recommended magnetic field public exposure limits.

- The minimum required safety clearances and controls for buildings and structures (whether temporary or permanent) and working near overhead power lines must be maintained at all times. If there is any doubt whatsoever regarding the safety clearances to the overhead power lines, the applicant will need to have the safety clearances assessed by a suitably qualified electrical engineer / Accredited Service Provider (ASP).

  Even if there is no issue with the safety clearances to the building and structures, consideration must be given to WorkCover (now SafeWork NSW) 'Work Near Overhead Power Lines Code of Practice 2006' eg. ordinary persons must maintain a minimum safe approach distance of 3.0 metres to all voltages up to and including 132,000 volts / 132 (kilovolt) kV.

- The planting of large / deep rooted trees to near electricity infrastructure is opposed by Endeavour Energy. Existing trees which are of low ecological significance in proximity of electricity infrastructure should be removed and if necessary replaced by an alternative smaller planting The landscape designer will need to ensure any planting near electricity infrastructure achieves Endeavour Energy's vegetation management requirements.

  Screening vegetation around a padmount substation should be planted a minimum distance of 800mm plus half of the mature canopy width from the substation easement and have shallow / non-invasive roots. This is to avoid trees growing over the easement as falling branches may damage the cubicle and tree roots the underground cables. All vegetation is to be maintained in such a manner that it will allow unrestricted access by electrical workers to the substation easement all times.

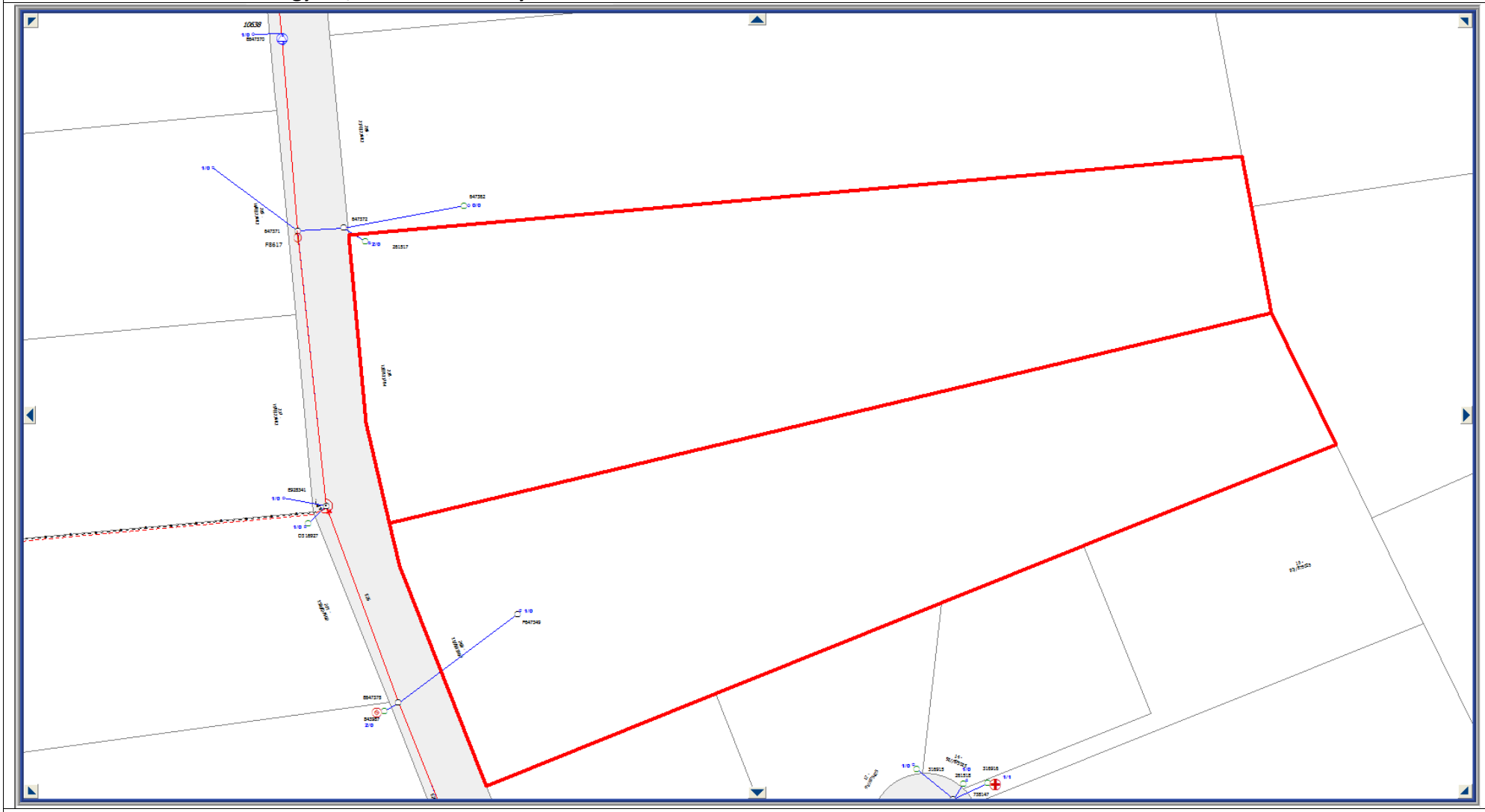
- Not all the conditions / advice marked may be directly or immediately relevant or significant to the Development Application. However, Endeavour Energy's preference is to alert proponents / applicants of the potential matters that may arise should development within closer proximity of the existing and/or required electricity infrastructure needed to facilitate the proposed development on or in the vicinity of the site occur.

Yours faithfully

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

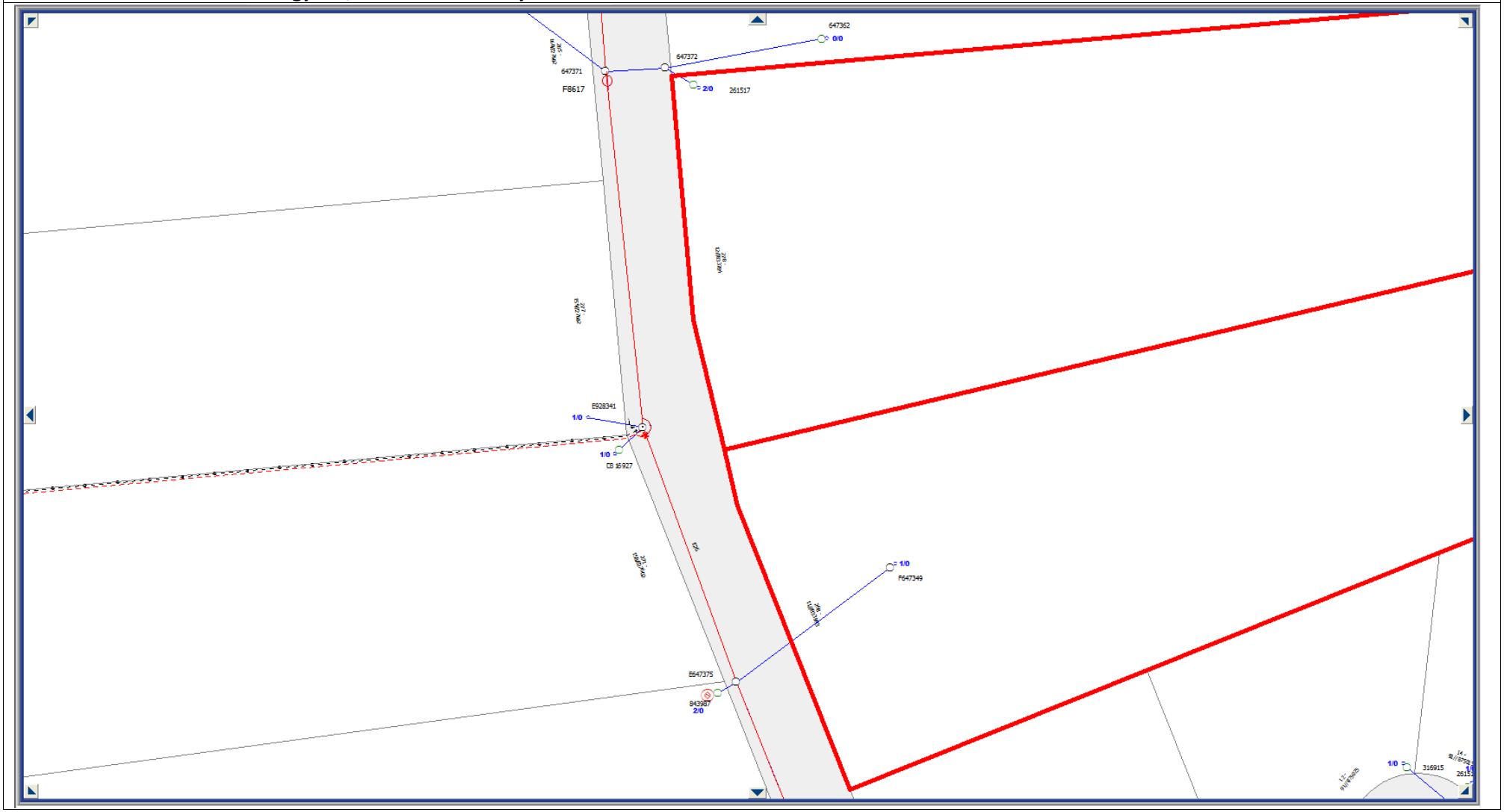
Endeavour Energy

Site Plan from Endeavour Energy's G/Net Master Facility Model



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. Easements benefitting Endeavour Energy are indicated by red hatching. 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 of Part 5E 'Protection of underground electricity power lines' of the *Electricity Supply Act 1995* (NSW).

Site Plan from Endeavour Energy's G/Net Master Facility Model



LEGEND	
PS	Padmount substation
I	Indoor substation
G	Ground substation
K	Kiosk substation
COT	Cottage substation
	Pole mounted substation
HC	High voltage customer substation
MU	Metering unit
SS	Switch station
ISS	Indoor switch station
	Customer connection point
	Low voltage pillar
	Streetlight column
	Life support customer
	Tower
	Pole
	Pole with streetlight
	Customer owned / private pole
	Cable pit
LB	Load break switch
	Proposed removed
	Easement
	Subject site

Google Maps Street View

Google Maps Street View