Development Application and Planning Proposal Review
NSW Planning Portal Concurrence and Referral

Authority	Authority's Reference	Agency Concurrence and Referral	Authority Contact	Authority Notification	Submission Due	Submission Made
Camden Council	DA/2022/742/1	CNR-43544	East DevAdmin	4/08/2022	25/08/2022	5/08/2022

Address	Land Title
28 Wallarah Circuit, Gregory Hills	Lot 3257 DP 1243285

Scope of Development Application or Planning Proposal

Site excavation and preparation; Construction of a temporary school (12 General learning areas; Associated student and staff facilities; Stormwater and drainage); 25 space staff carpark and waste storage area; Vehicular access via Long Reef Circuit; Pedestrian access form Long Reef Circuit and Howard Park; and Road widening along western side of Long Reef Circuit to accommodate short stay parking and shared path.

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

There is:

- An easement and restrictions for fire rating and swimming pool or spa benefitting Endeavour Energy (indicated by red hatching) for padmount substation no. 54328.
- Low voltage and 11,000 volt / 11 kilovolt (kV) high voltage underground cables and underground earth cables to the Long Reef Circuit road verge / roadway.
- 11 kV high voltage underground cables to the Gregory Hills Drive road verge / roadway.
- Restriction for fire rating for padmount substation no. 33597 near the north western corner of the site to the Gregory Hills Drive road frontage in Howard Park.

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	Advice
Reason(s) for Conditions / Objection (If applicable)	

- The Statement of Environmental Effects does not appear to address the easement or restrictions for fire rating and swimming pool or spa affecting the site for the padmount substation.

- The Site Plan shows the temporary school is located to the northern and eastern parts of the site and not encroaching the easement or restriction for fire rating. There is no swimming pool or spa proposed.

- All activities affecting an easement or relevant to the restrictions for padmount substations (even if not part of the Development Application) need to be referred to Endeavour Energy's Easement Officer for assessment and possible approval if they meet the minimum safety requirements and controls. However please note that this does not constitute or imply the granting of approval by Endeavour Energy to any or all of the proposed encroachments and / or activities within the easement or restrictions.

  For further information please refer to the attached copies of Endeavour Energy's:

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

  Please note Endeavour Energy's Easement Officers do not have access to the NSW Planning Portal. To resolve the easement management matters direct contact with the Easement Officer should be made.

- Prudent avoidance measures appropriate to any electricity infrastructure on and near the site should when reasonably possible be implemented.

  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.

  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.

  Nonetheless the applicant may wish to commission an independent review to provide an overall assessment and the consideration and adoption of prudent avoidance principles.

- The applicant should check with their Accredited Service Provider (ASP) responsible for the network connection to the site that for the padmount substation the earthing has been designed to comply with the 'special location' requirements under Endeavour Energy's Earthing Design Instruction EDI 001 – 'Earthing design risk assessment'.

- 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.

- The Statement of Environmental Effects includes the following advice on whether the available electricity services are adequate for the proposed development.

  > Services infrastructure (electricity, water, sewer, and communications) will also be provided to the site, some may require augmentation, however, these will be undertaken via different planning pathway and do form part of this application.

- To ensure an adequate connection, the applicant will need to engage an Accredited Service Provider (ASP) of an appropriate level and class of accreditation to assess the electricity load and the proposed method of supply for the development.

- The low voltage service conductor and customer connection point must comply with the 'Service and Installation Rules of NSW'.

- 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

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Sustainability & Environment
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Endeavour Energy

Site Plan

1 SITE PLAN 1:1000

TEMPORARY SCHOOL AT GREGORY HILLS
DEVELOPMENT APPLICATION

KEY ELEMENTS

- 12 x General Learning Spaces
- Core facilities per SINSW temporary school team recommendation.
- School based on standard modular building units.
- Minimum 3,000m² open play space provided (10m²/per student)
- Staff parking in north-east corner of site.
- Permanent school waste pad constructed as part of temporary school works. Access to staff parking via waste pad.
- Short term parking and new shared path on Long Reef Circuit.
- Secondary entry and shared path connection to Howard Park
- 20 x Bicycle parking spaces

LEGEND

- Site boundary
- Administration
- Staff
- Library
- Communal Hall
  Canteen
  OSHC
- General Learning Spaces
- Student Amenities
- 1200mm high temporary school fencing
- 2150mm high temporary school fencing
- 1200mm high permanent school fencing
- 2150mm high permanent school fencing
- Secure Entry Point
- Temporary School Signage

PROJECT
TEMPORARY SCHOOL AT GREGORY HILLS

CLIENT
SCHOOL INFRASTRUCTURE NSW

PROJECT MANAGER
JACOBS

ARCHITECT
BENNETT AND TRIMBLE

DRAWING
SITE PLAN

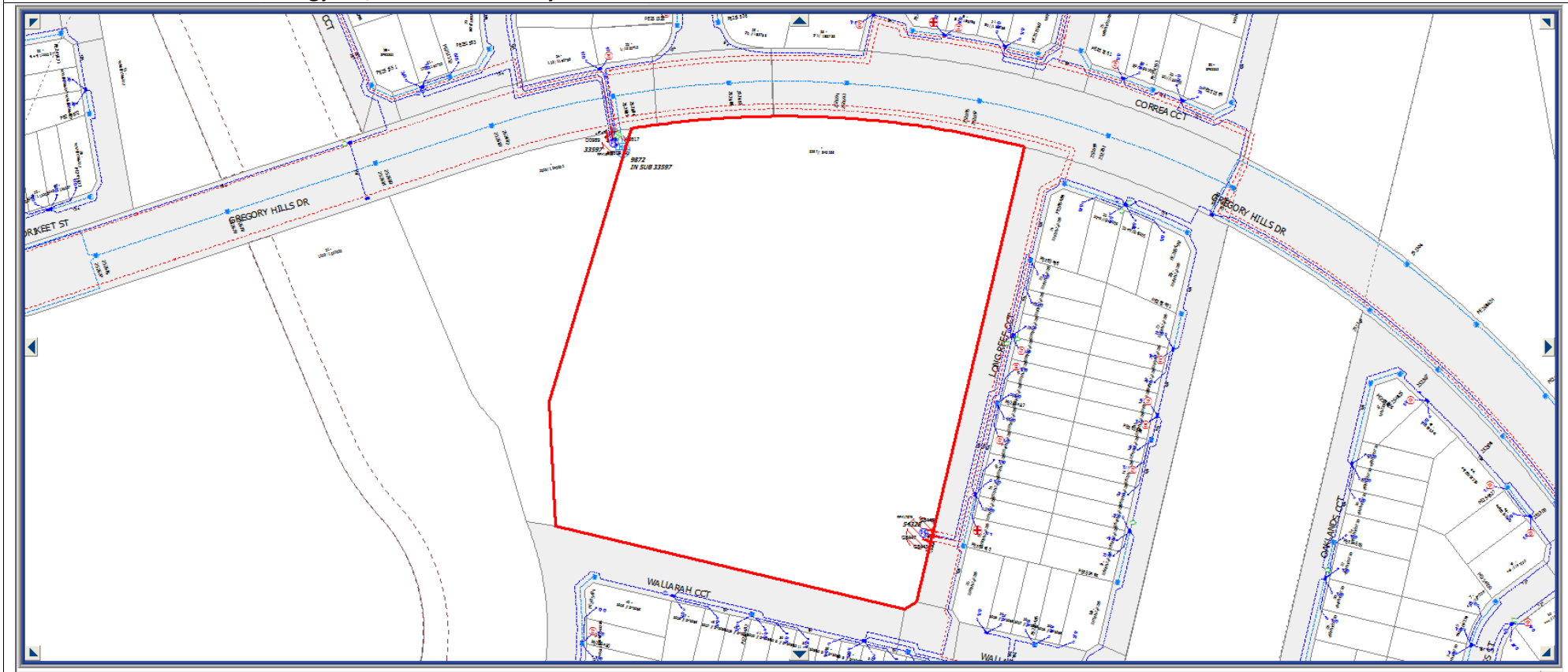
SCALE
1:1000 @ A3

NORTH

DATE
1/8/22

DRAWING NO.
DA.04

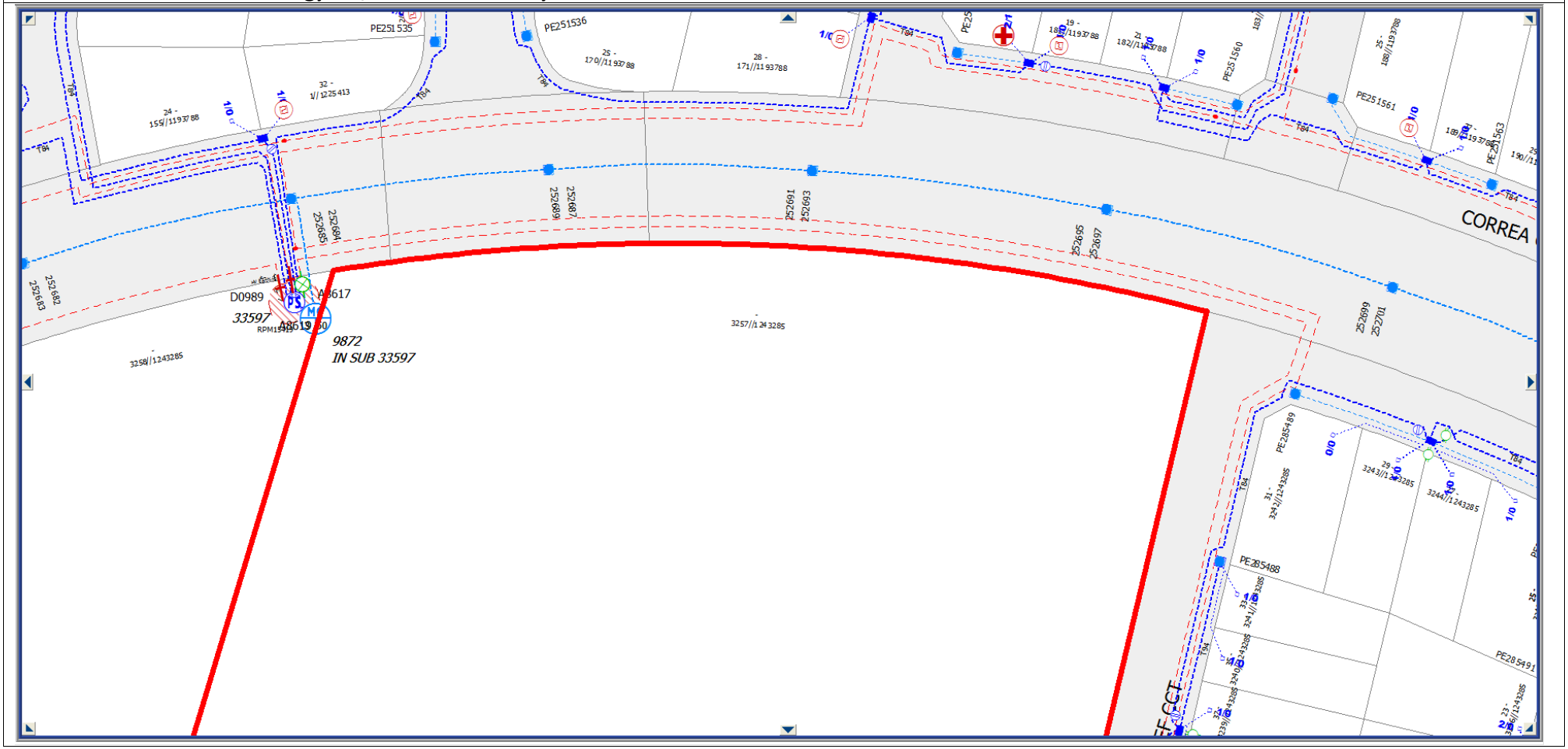
Site Plan from Endeavour Energy's G/Net Master Facility Model



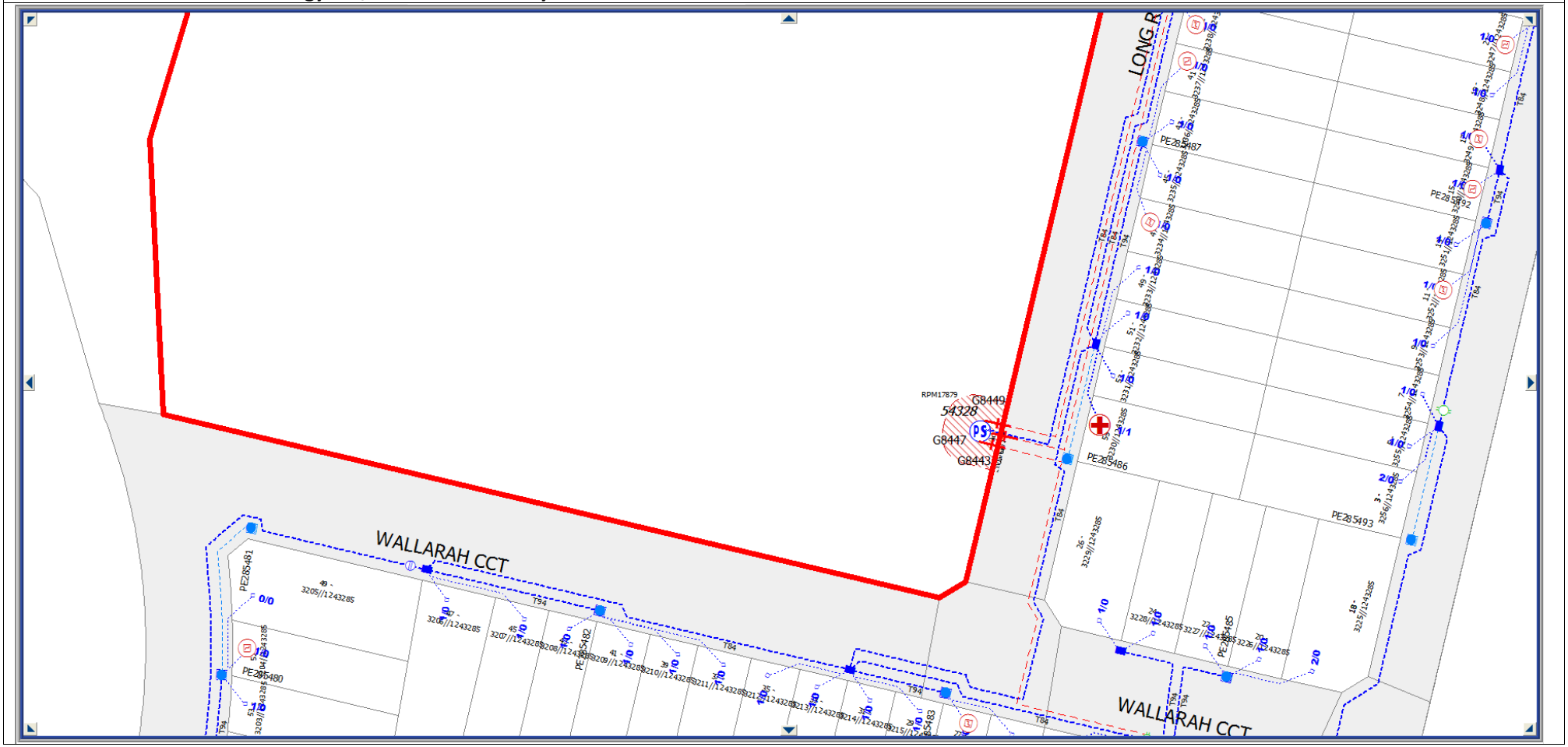
G3E_FID	Feature Name	Component Name	G3E_CID	G3E_ID	LOT	SECTION	DP
83128176	Crown Parcel	Crown Parcel Find	1	2393817	3257		1243285

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



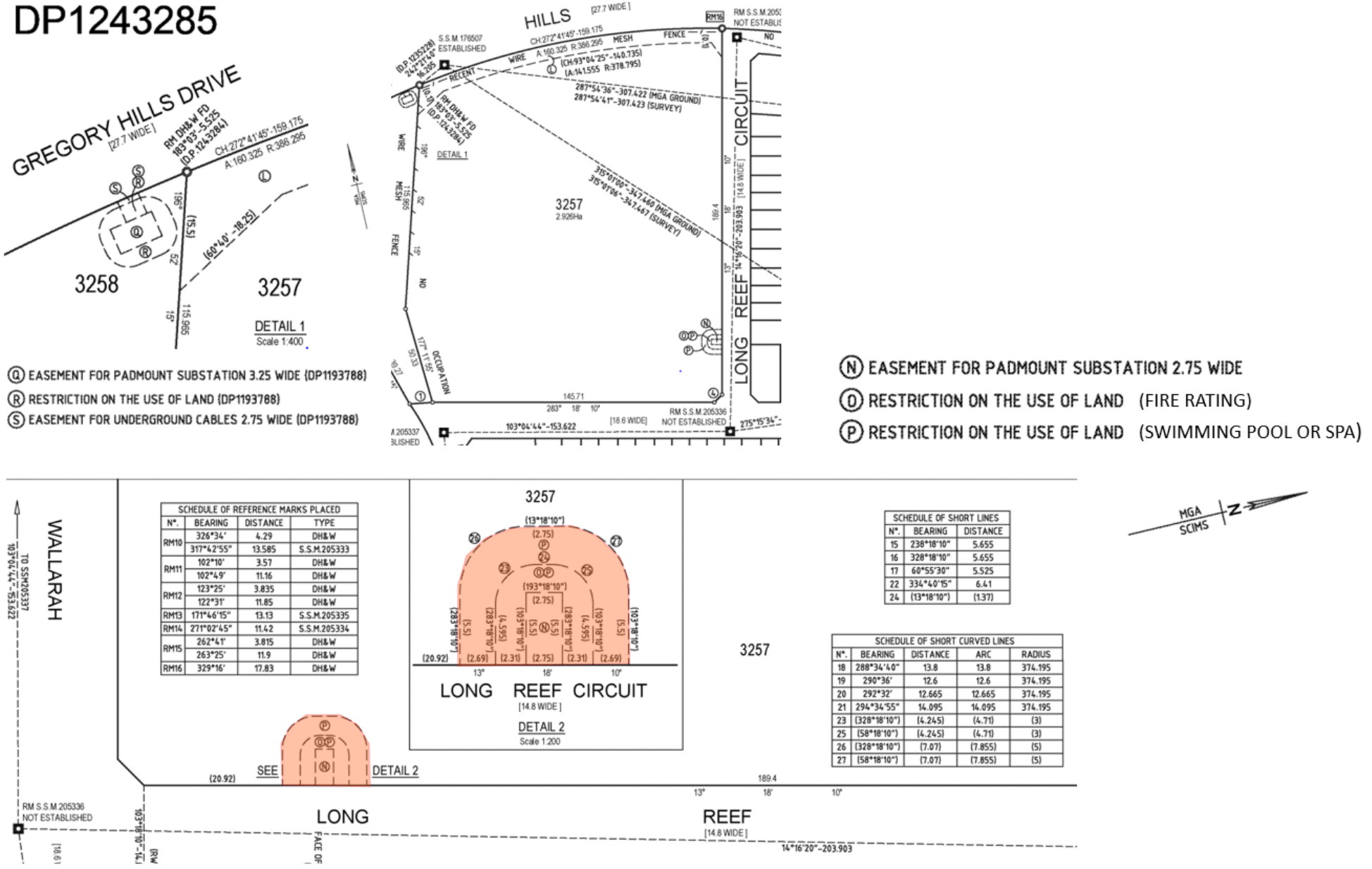
Site Plan from Endeavour Energy's G/Net Master Facility Model



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
	Subject site

Extract of DP 1243285

DP1243285



Ⓠ EASEMENT FOR PADMOUNT SUBSTATION 3.25 WIDE (DP1193788)

Ⓡ RESTRICTION ON THE USE OF LAND (DP1193788)

Ⓢ EASEMENT FOR UNDERGROUND CABLES 2.75 WIDE (DP1193788)

Ⓝ EASEMENT FOR PADMOUNT SUBSTATION 2.75 WIDE

Ⓞ RESTRICTION ON THE USE OF LAND (FIRE RATING)

Ⓟ RESTRICTION ON THE USE OF LAND (SWIMMING POOL OR SPA)

SCHEDULE OF REFERENCE MARKS PLACED			
N°.	BEARING	DISTANCE	TYPE
RM10	326°34'	4.29	DH&W
	317°42'55"	13.585	S.S.M.205333
RM11	102°10'	3.57	DH&W
	102°49'	11.16	DH&W
RM12	123°25'	3.835	DH&W
	122°31'	11.85	DH&W
RM13	171°46'15"	13.13	S.S.M.205335
RM14	271°02'45"	11.42	S.S.M.205334
RM15	262°41'	3.815	DH&W
	263°25'	11.9	DH&W
RM16	329°16'	17.83	DH&W

SCHEDULE OF SHORT LINES		
N°.	BEARING	DISTANCE
15	238°18'10"	5.655
16	328°18'10"	5.655
17	60°55'30"	5.525
22	334°40'15"	6.41
24	(13°18'10")	(1.37)

SCHEDULE OF SHORT CURVED LINES				
N°.	BEARING	DISTANCE	ARC	RADIUS
18	288°34'40"	13.8	13.8	374.195
19	290°36'	12.6	12.6	374.195
20	292°32'	12.665	12.665	374.195
21	294°34'55"	14.095	14.095	374.195
23	(328°18'10")	(4.245)	(4.71)	(3)
25	(58°18'10")	(4.245)	(4.71)	(3)
26	(328°18'10")	(7.07)	(7.855)	(5)
27	(58°18'10")	(7.07)	(7.855)	(5)

MGA
SCIMS

Google Maps Street View

Extract of Statement of Environmental Effects

Figure 8 Electrical substation on south-east corner/ Long Reef Circuit