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
NSW Dept. of Planning, Housing & Infrastructure	SSD-64795219		Tia Mills	22/04/2024	20/05/2024	23/04/2024

Address	Land Title
246-248 Old Prospect Road, Greystanes	Lot 1 DP 201991, Lots 13-26 DP 17546, Lot 2 DP 545201, Lot 20 DP 243734, Lots 28-38 DP 17461, Lot 46 DP 242898

Scope of Development Application or Planning Proposal

Preparing Environmental Impact Statement (EIS) for Cumberland Golf Club Seniors Housing Development. Construction of a new clubhouse and a seniors living village (approx.230 independent living units) and a residential aged-care facility (approx.30-50 beds), with ancillary facilities including café, wellness centre, and health and consulting rooms.

Endeavour Energy's G/Net master facility model indicates:

Within or adjacent to the site the electrical network used in the distribution / supply of electricity are:

Electricity Infrastructure / Apparatus	Statutory allocation (road verge / roadway*)	Easement (or other form of property tenure**)	Protected works***	Freehold (adjoining or nearby)
Overhead Power Lines				
☒ *Low voltage*	☒	☐	☐	☐
☒ *High voltage*	☒	☐	☒	☐
☒ *Transmission voltage*	☒	☐	☐	☐
☒ *Pole / tower*	☒	☐	☐	☐
Underground Cables				
☐ *Low voltage*	☐	☐	☐	☐
☐ *High voltage*	☐	☐	☐	☐
☐ *Transmission voltage*	☐	☐	☐	☐
☐ *Streetlight / pillar*	☐	☐	☐	☐
Substation				
☒ *Pole mounted*	☒	☐	☒	☐
☐ *Padmount*	☐	☐	☐	☐
☐ *Indoor*	☐	☐	☐	☐
☐ *Zone*	☐	☐	☐	☐
☐ *Transmission*	☐	☐	☐	☐
Other: Overhead earth and pilot / communications cables.	☒	☐	☐	☐

Low voltage extra low voltage up to 1,000 volts alternating current (a.c.).
High voltage above 1,000 volts a.c and less than 33,000 volts a.c. [33 kilovolts (kV)].
Transmission voltage 33 kV up to 132,000 volts a.c. (132 kV).
*Rights provided in a public road or reserve. The allocation depends on the classification and date of roadway dedication.
** Other form of property tenure includes but is not limited to restriction, covenant, lease, licence etc.
***Protected works under Section 53 'Protection of certain electricity works' of the *Electricity Supply Act 1995* (NSW).
Other: provide detail of electricity infrastructure / apparatus.

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PO Box 811, Seven Hills NSW 1730
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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	Before You Dig	Before commencing any underground activity the applicant must obtain advice from the Before You Dig service.
☐	☐	6	Bush Fire	Risk needs to be managed to maintain the safety of customers and the communities served by the network.
☐	☐	7	Construction Management	Integrity of electricity infrastructure must be maintained and not impacted by vehicle / plant operation, excessive loads, vibration, dust or moisture penetration.
☐	☒	8	Contamination	Remediation may be required of soils or surfaces impacted by various forms of electricity infrastructure.
☐	☒	9	Demolition	All electricity infrastructure shall be regarded as live and care must be taken to not interfere with any part of the electricity network.
☐	☐	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.
☐	☐	19	Hazardous Environment	Electricity infrastructure can be susceptible to hazard sources or in some situations be regarded as a hazardous source.
☒	☐	20	Look up and Live	Before commencing any activity near overhead power lines the applicant must obtain advice from the Look Up and Live service.
☐	☐	21	Modifications	Amendments can impact on electricity load and the contestable works required to facilitate the proposed development.
☐	☒	22	Network Access	Access to the electricity infrastructure may be required at any time particularly in the event of an emergency.
☒	☐	23	Network Asset Design	Design electricity infrastructure for safety and environmental compliance consistent with safe design lifecycle principles.

Cond-ition	Advice	Clause No.	Issue	Detail
☒	☐	24	Network Connection	Applicants will need to submit an appropriate application based on the maximum demand for electricity for connection of load.
☒	☐	25	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).
☐	☒	26	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.
☐	☒	27	Public Safety	Public safety training resources are available to help general public / workers understand the risk and how to work safely near electricity infrastructure.
☐	☐	28	Removal of Electricity	Permission is required to remove service / metering and must be performed by an Accredited Service Provider.
☐	☒	29	Safety Clearances	Any building or structure must comply with the minimum safe distances / clearances for the applicable voltage/s of the overhead power lines.
☐	☐	30	Security / Climb Points	Minimum buffers appropriate to the electricity infrastructure being protected need to be provided to avoid the creation of climb points.
☐	☐	31	Service Conductors	Low voltage service conductors and customer connection points must comply with the 'Service and Installation Rules of NSW'.
☐	☐	32	Solar / Generation	The performance of the generation system and its effects on the network and other connected customers needs to be assessed.
☐	☒	33	Streetlighting	Streetlighting should be reviewed and if necessary upgraded to suit any increase in both vehicular and pedestrian traffic.
☐	☒	34	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.
☐	☐	35	Swimming Pools	Whenever water and electricity are in close proximity, extra care and awareness is required.
☐	☐	36	Telecommunications	Address the risks associated with poor communications services to support the vital electricity supply network Infrastructure.
☒	☐	37	Vegetation Management	Landscaping that interferes with electricity infrastructure is a potential safety risk and may result in the interruption of supply.
Decision				Approve (with conditions)

Environmental Services Team

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Endeavour Energy | POWER together

Endeavour Energy respectfully acknowledges the Traditional Custodians on whose lands we live, work, and operate and their Elders past and present.

Reason(s) for Conditions or Objection (If applicable)

- The 11 kV high voltage overhead power lines going to pole mounted substation no. 18722 located on the site to the Old Prospect Road frontage are not held under easement but are regarded as protected works under Section 53 'Protection of certain electricity works' of the *Electricity Supply Act 1995* (NSW) and may be managed as if an easement is in place.

  Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure', Table 1 'Minimum easement widths' requires a minimum easement width of 9 metres for low voltage up to 22,000 volt / 22 kilovolt (kV) high voltage overhead power lines ie. 4.5 metres to both sides of the centreline of the poles / conductors.

  Endeavour Energy Mains Design Instruction MDI 0031 'Overhead line design' includes the following clearance zone for pole mounted substations.

9.0 SUBSTATIONS, AUTO-RECLOSERS, SECTIONALISERS, VOLTAGE REGULATORS AND ENCLOSED SWITCHES

9.1.2 Equipment hazard and fire zone

As part of the design, allowance is to be made for a three metre horizontal clearance zone around pole mounted substations, regulators, reclosers, sectionalisers and enclosed switches to minimise the effects of failure of any equipment and manage ongoing noise in accordance with Figure 13.

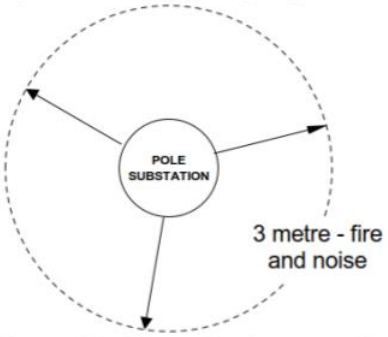


Figure 13 – Fire and noise separation

Pole mounted substations, regulators, reclosers, sectionalisers and enclosed switches may contain hazardous materials. Additional requirements apply to environments containing explosive gas atmospheres. Where applicable these provisions must comply with the requirements of AS/NZS 60079.

- All encroachments, activities and / or works (including subdivision and even if not part of the Development Application) whether temporary or permanent within or affecting an easement, restriction, right of access or protected works (other than those approved / certified by Endeavour Energy's Customer Network Solutions Branch as part of an enquiry / application for load or asset relocation project) need to be referred to Endeavour Energy's Easements Officers 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.

  For further information please refer to the attached copy of Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights' which deals with activities / encroachments within easements.

- 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.

- An extension or augmentation of the existing electricity distribution network will be required. Whilst there are distribution substations in the area which are likely to have some spare capacity, it is not unlimited and will likely not be sufficient to provide for the additional load from the proposed development.

  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.

- 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 not located within a public road / reserve) with an appropriate form of property tenure as detailed in the attached copy of Endeavour Energy's 'Land Interest Guidelines For Network Connection'.

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. If the substation does not comply with Endeavour Energy's standards, the applicant must request a dispensation.

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

- Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights'.
- Guide to Fencing, Retaining Walls and Maintenance Around Padmount Substations.

- Endeavour Energy's network asset design policy is generally to progressively underground all new urban developments. All new cabling / reticulation infrastructure must be of an underground construction type. Where existing overhead construction is present on or in proximity of the site, it may require undergrounding as the development proceeds.

- The Infrastructure Requirements and Utilities Report includes the following advice.

ELECTRICAL INFRASTRUCTURE

EXISTING POWER INFRASTRUCTURE

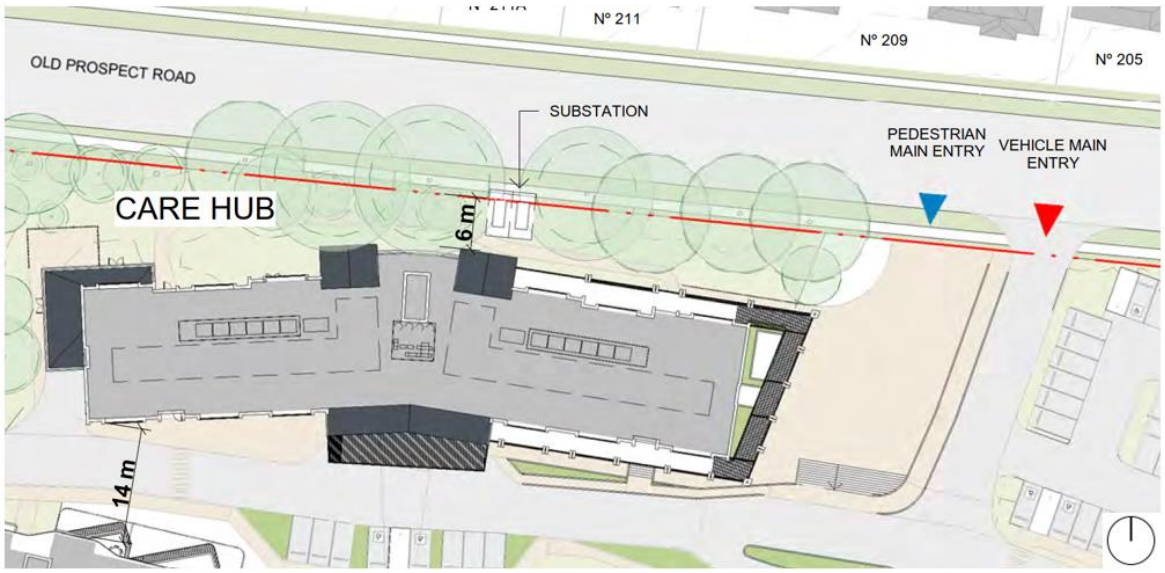
There is an existing pole mount substation located on the development site and will need to be decommissioned.

PROPOSED ELECTRICAL SERVICES

The preliminary maximum demand for this site is 1,773 amps (855 kVA Diversified). The site will require a new 1,000-1,500 kVA padmount kiosk substation.

As part of the next phase of works, an ASP Level 03 will be engaged to begin the detailed design of this substation including consultation with Endeavour Energy.

- The following extract of the Proposed Masterplan shows provision for a two transformer padmount substation site.



PROPOSED MASTERPLAN

- The electricity distribution network relies in part on the retention of appropriate building setbacks to the road frontages to allow for line route / network design options and to provide safety clearances to conductors. Particular regard needs to be had to secondary road frontages or where overhead power lines are located near side or rear boundaries where lesser building setbacks apply. The higher the voltage, the greater the safety clearance required. This is also in keeping with a policy of prudent avoidance.

The encroachment of building setbacks (including by roof structures or projections from external walls constructed with conductive materials) may transfer fault currents to the main building / dwelling. It can also result in construction works being required within the minimum safe approach distance and may require the application to Endeavour Energy for appropriate network outages eg. when erecting and dismantling scaffold, and may also be an issue for the ongoing maintenance of the building or structure.

Endeavour Energy's recommendation is that whenever reasonably possible buildings and structures be located and designed to avoid the need to work within the safe approach distances for ordinary persons eg. not having parts of the building normally accessible to persons in close proximity of the overhead power lines; the use of durable / low maintenance finishes. Alternatively, in some instances the adoption of an underground solution may be warranted ie. particularly for low voltage which can be more readily (in shorter distances) and comparatively economically be undergrounded.

As a guide, Endeavour Energy's Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights', Table 1 – 'Minimum easement widths', requires a minimum easement width of 9 metres for low voltage up to 22,000 volt / 22 kilovolt (kV) high voltage overhead power lines ie. 4.5 metres to both sides of the centreline of the poles / conductors. For higher voltages, the wider the required minimum easement width.

- 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 or structure, 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). It also includes the following requirements for work near low voltage overhead power / service lines.

TABLE 4

Approach distances for work near low voltage overhead service lines

Ordinary Persons (m)				
Hand held tools	Operation of crane or mobile plant	Handling of metal materials (Scaffolding, roofing, guttering, pipes, etc)	Handling of non-conductive materials (Timber, plywood, PVC pipes and guttering, etc)	Driving or operating vehicle
0.5	3.0	4.0	1.5	0.6

- The planting of large / deep rooted trees 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.

  No planting of trees is allowed in the easement for a padmount substation. 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.

Endeavour Energy's G/Net master facility model.

The advice provided regarding the extent of the electricity infrastructure on or near the site is based on a desk top review of Endeavour Energy's G/Net master facility model. This is a computer based geographic information system which holds the data on and is used to map the electricity network. 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. It only shows the Endeavour Energy electricity 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.

Easement (or other form of property tenure).

Title searches will confirm the current owners of a property and shows any registered interests affecting the property such as an easement. Not all interests eg. short term leases and licences are registered on the title. Not all easements for electricity infrastructure will necessarily benefit Endeavour Energy eg. there may be interallotment / easements appurtenant to the land particularly for low voltage service conductors / customer connections. For further advice please refer to Endeavour Energy's:

- Land Interest Guidelines for Network Connection Works.
- Mains Design Instruction MDI 0044 'Easements and Property Tenure Rights'.

Condition or Advice

With Endeavour Energy's Development Application and Planning Proposal Review process / system the intent of the 'Standard Conditions' being indicated as either a 'Condition' or 'Advice' essentially depends on the risk associated with the matter. If the matter is one that is likely or very likely to be an issue / needed to be addressed by the applicant and may require corrective action, then it is marked as a 'Condition'. If the matter is less likely and the consequences of the applicant not addressing it are lower or can be readily rectified, then it is marked as 'Advice'. If the matter is considered to be not applicable / relevant then it is not marked as either.

For example, the obtaining advice from the Before You Dig service in accordance with the requirements of the *Electricity Supply Act 1995* (NSW) and associated Regulations is a standard / regulatory requirement and will be generally indicated as 'Condition'. If the Site Plan from Endeavour Energy's G/Net Master Facility Model indicates there is no underground electricity infrastructure it will be indicated as 'Advice' as a precaution and in regard to any other underground utilities.

Not all of the matters may be directly or immediately relevant or significant to the Development Application or Planning Proposal. 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. Even if a matter is not indicated a 'Condition' or 'Advice', applicants are encouraged to review all of the 'Standard Conditions' as some matters may not have been evident from the information provided with the Development Application and of which the applicant may have additional knowledge.

Decision

In the NSW Planning Portal for the 'Agency response', as Endeavour Energy is not a concurring authority under the provision of the *Environmental Planning and Assessment Act 1979* (NSW), it does not 'Approve' or 'Refuse' a Development Application in the Portal. It will 'Approve (with conditions)' (which may 'Object' in the submission and detail the matters requiring resolution), or if all the matters in the submission are marked are for 'Advice', the outcome of the assessment will also be 'Advice'.

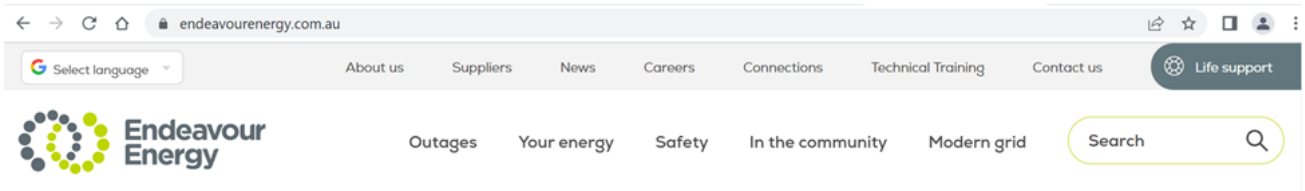
Objection

Endeavour Energy may object to a Development Application if the conditions may substantially impact the proposed development or regarded as a significant risk to the electricity distribution network. Although Council may be able to appropriately condition these matters, Endeavour Energy's recommendation is to address the matters prior to Council granting any consent. This can assist in avoiding the need to later seek modification of an approved Development Application.

Please note Endeavour Energy can only assess the Development Application based on the information provided by the applicant and Council. 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 Council. Applicants should be providing proper detailed plans of the electricity infrastructure / easements on or near the site and address the potential impacts of the proposed development thereon in the Statement of Environmental Effects. The provision of inadequate detail may result in Endeavour Energy objecting to the Development Application.

Further Advice

The 'Standard Conditions' include additional advice and contact details and further information is also available on Endeavour Energy's website at https://www.endeavourenergy.com.au/ .



To resolve any objection or to seek further advice the following are the main contacts and can be reached by calling Endeavour Energy via Head Office enquiries on business days from 9am - 4:30pm on telephone: 133 718. For other matters the contact details are included in Endeavour Energy's standard conditions for Development Application and Planning Proposal Review. Whilst the Environmental Services Team are able to provide general advice, the resolution / approval of any matter/s rests with the relevant contact related to the matter/s.

Branch / Section	Matters	Email
Customer Network Solutions	Electricity supply or asset relocation who are responsible for managing the conditions of supply with the applicant and their Accredited Service Provider (ASP).	CWAdmin@endeavourenergy.com.au
Easements Officers	Easement management or protected works / assets.	Easements@endeavourenergy.com.au
Property	Property tenure eg. the creation or release of easements.	network_property@endeavourenergy.com.au
Field Operations (to the relevant Field Service Centre).	Safety advice for building or working near electrical assets in public areas (including zone and transmission substations).	Construction.Works@endeavourenergy.com.au

Please note Endeavour Energy's above contacts do not have access to the NSW Planning Portal. To resolve any matters direct contact should be made with the responsible contact. This will avoid double handling and possible delays in responding to the applicant / Council.

Accredited Service Providers

The Accredited Service Provider (ASP) scheme accredits organisations to perform contestable work on the NSW electricity distribution network. Contestable works are works that are required for the electricity distribution network provider to supply the load in the power lines where a new or altered connection is being requested.

Endeavour Energy is urging applicants / customers to engage with an ASP prior to finalising plans to in order to assess and incorporate any required electricity infrastructure as well as addressing safety issues such as safety clearances. In so doing the consideration can also be given to its impact on the other aspects of the proposed development. This can assist in avoiding the making of amendments to the plan or possibly the need to later seek modification of an approved development application.

Details of the ASP Scheme which accredits organisations to perform contestable work on the NSW electricity distribution network are available via the following link to the Energy NSW website at https://www.energysaver.nsw.gov.au/get-energy-smart/dealing-energy-providers/installing-or-altering-your-electricity-service .

Duty of Care

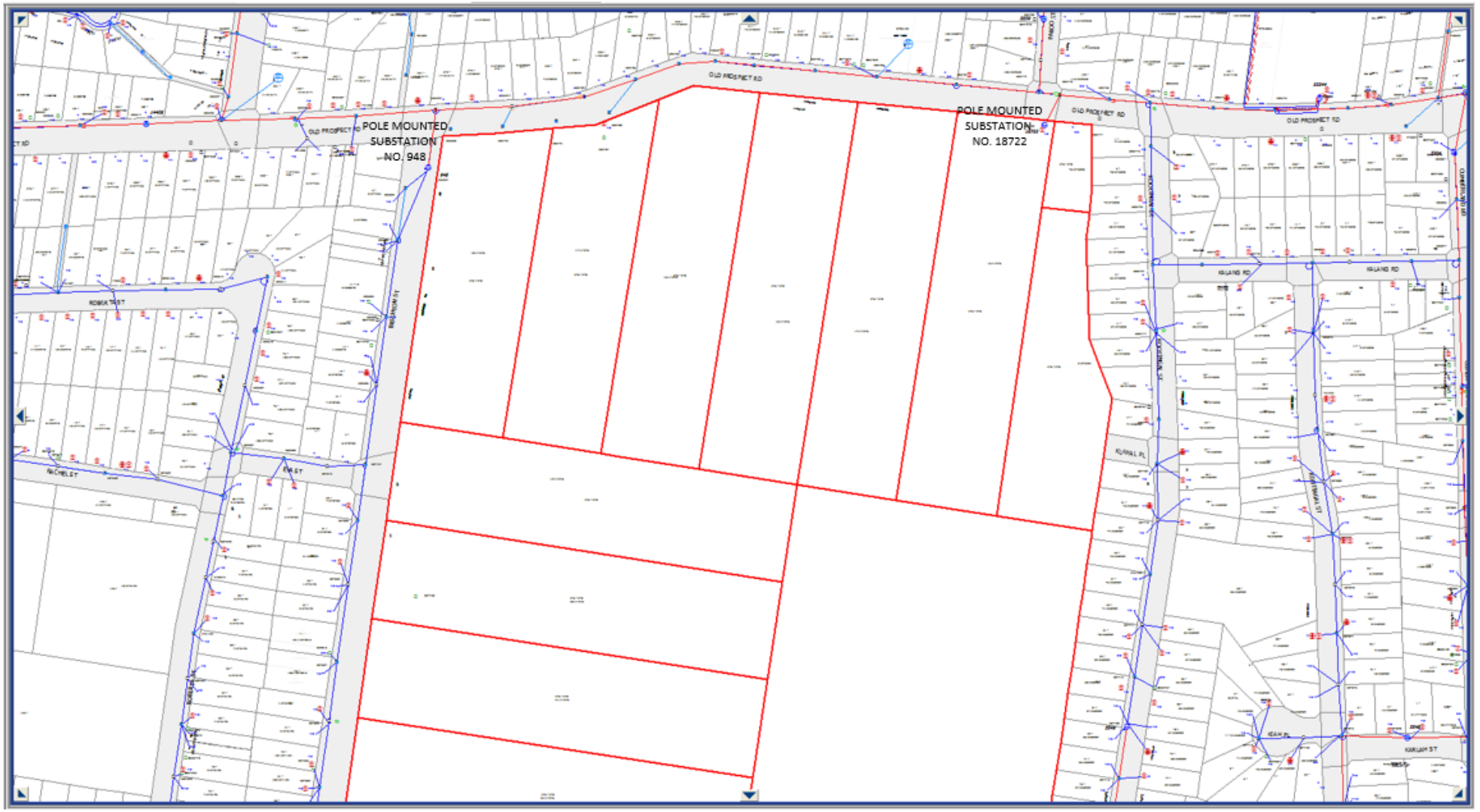
All individuals have a duty of care they must observe when working in the vicinity of electricity infrastructure. Before you do anything:

1) Contact Before You Dig and Look Up and Live to obtain the details of the electricity infrastructure on or near the site noting they are a guide only to what might be in the area and may not be entirely accurate.
2) Comply with the conditions and consider the advice provided above.
3) If needed contact Endeavour Energy on 133 718 or the contacts provided above for assistance.
4) **DO NOT** attempt any work near electricity infrastructure until all required approvals and safety measures are in place.
5) Proceed only if you have satisfied yourself it is safe.
6) Always remember, even the briefest contact with electricity at any voltage can have serious consequences to a person's health and safety and can be fatal.

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 does not constitute the provision of information on underground electricity power lines by network operators under 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



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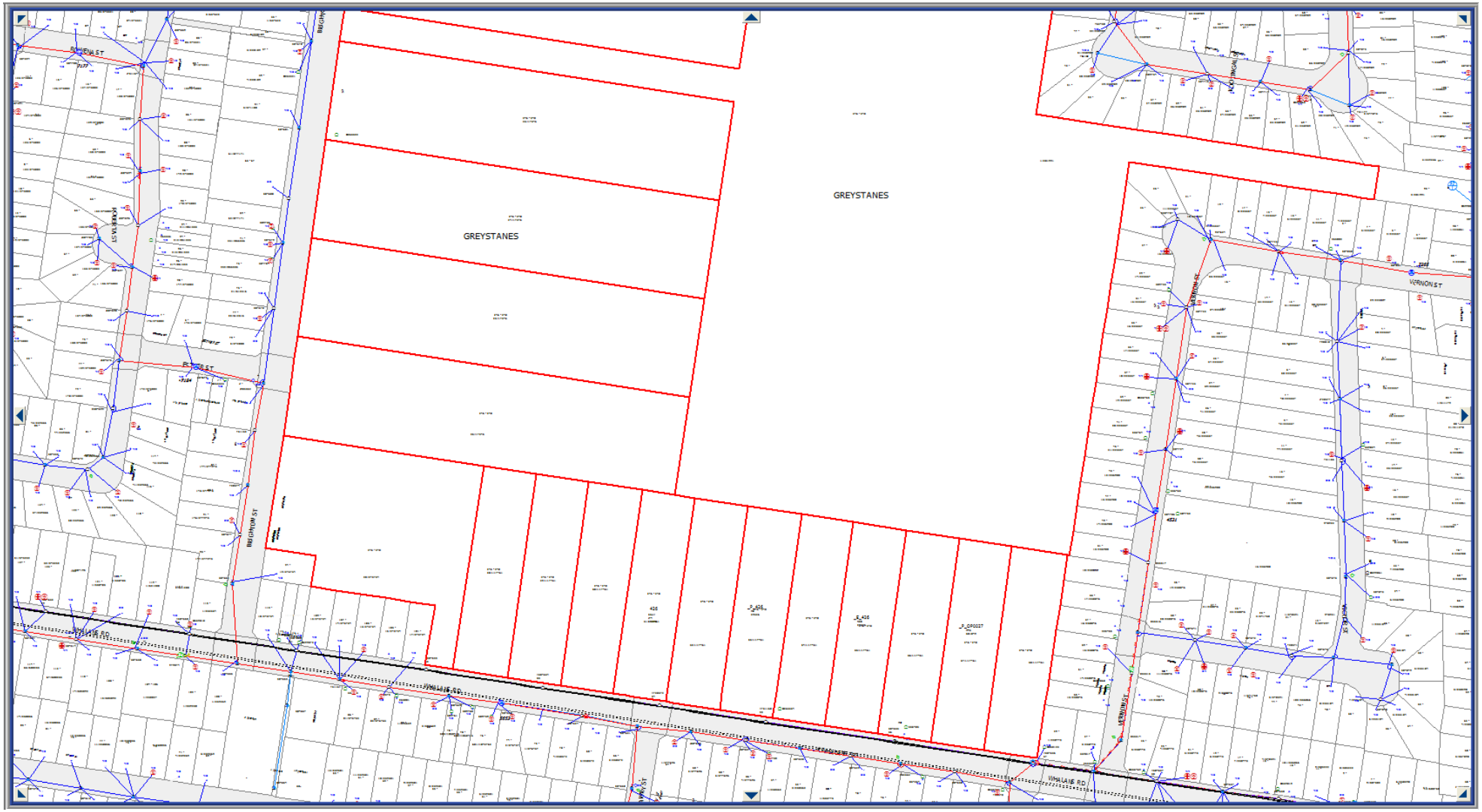
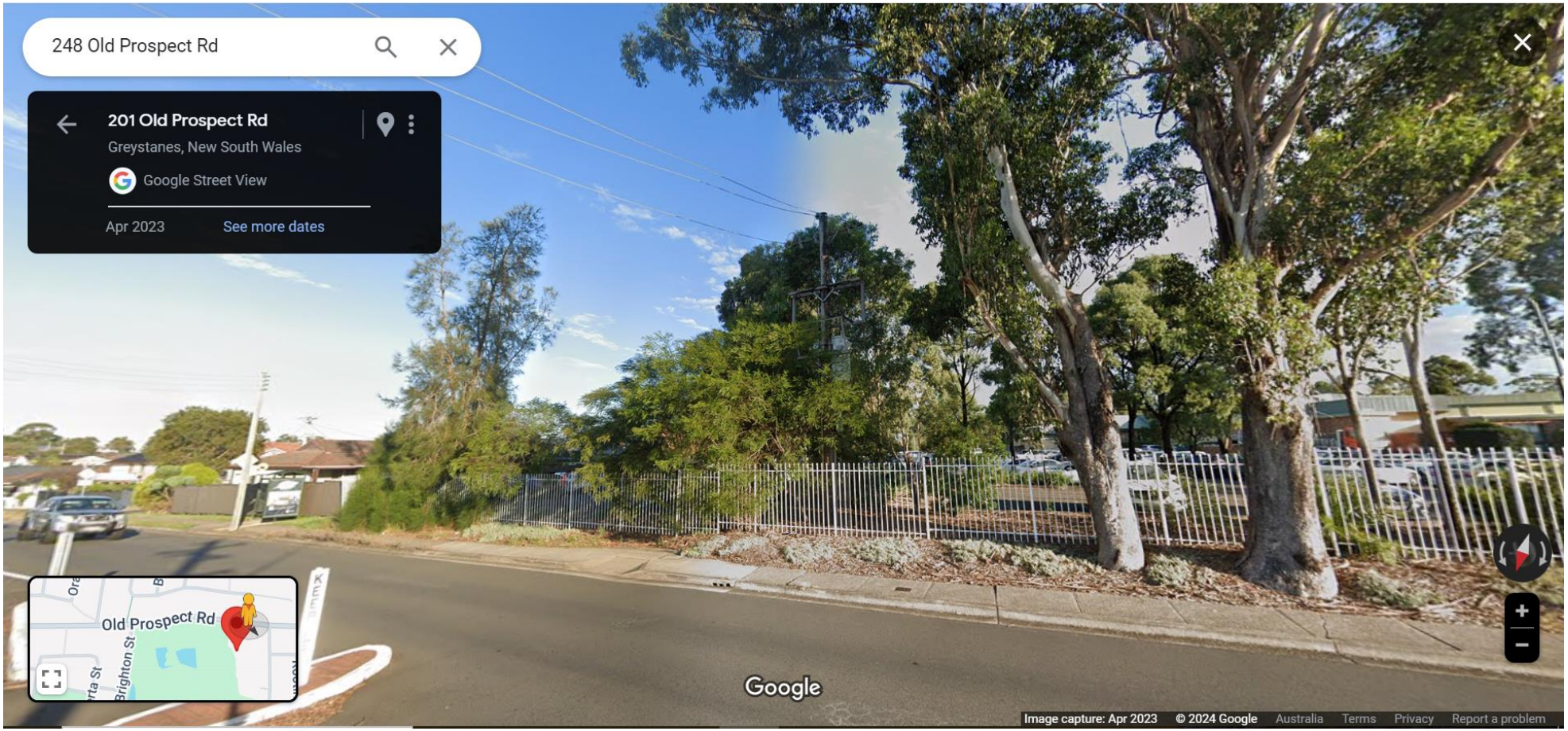
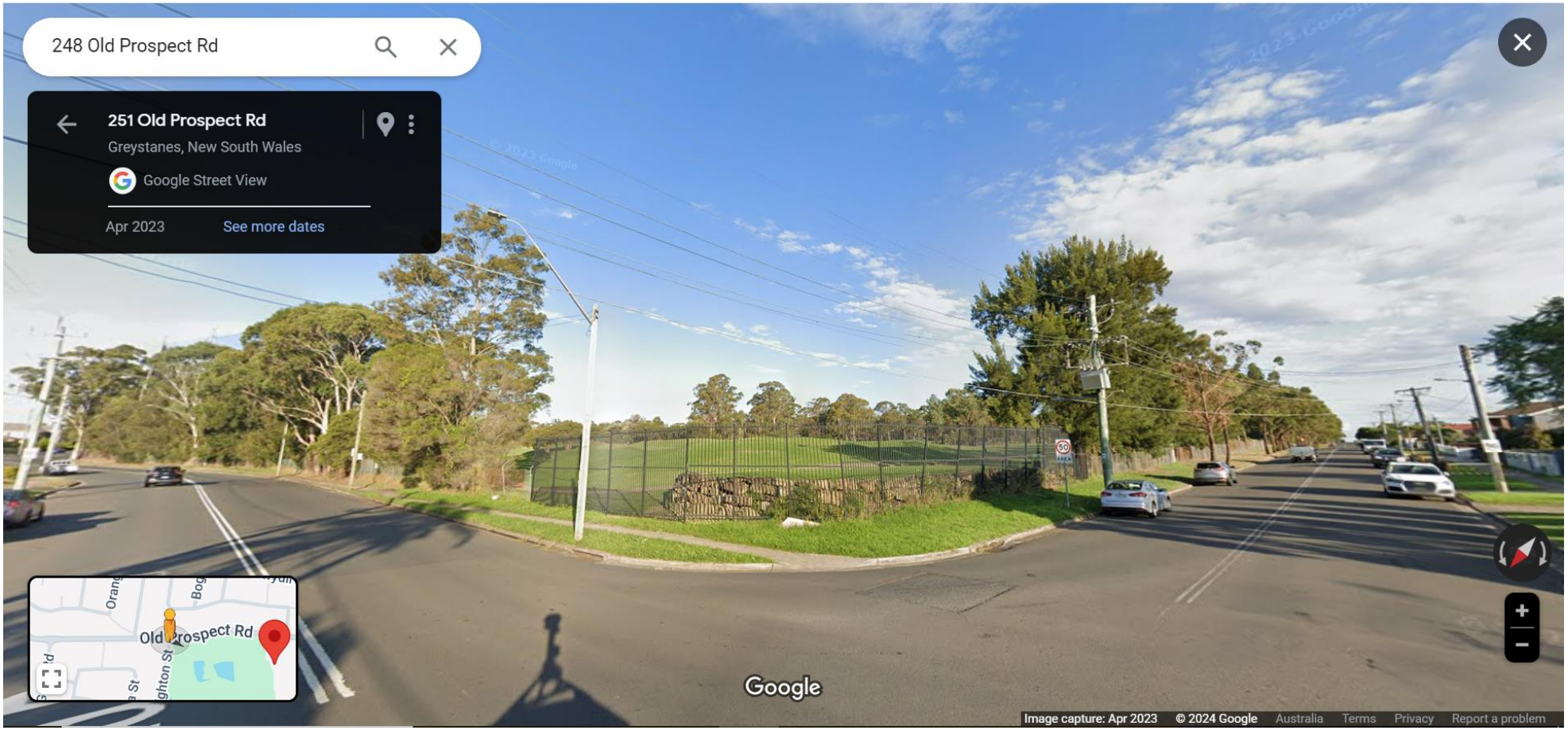


LEGEND	
PS	Padmount substation
I	Indoor substation
G	Ground substation
K	Kiosk substation
COT	Cottage substation
	Pole mounted substation
HC	High voltage customer substation
MU	Metering unit
SS	Switch station
ISS	Indoor switch station
AT	Voltage regulator
	Customer connection point
	Low voltage pillar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

Google Maps Street View. Pole mounted substation no. 18722.



Google Maps Street View. Pole mounted substation no. 948.



Google Maps Street View. 33 kV overhead transmission lines to Whalans Road.