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Our Ref: SY074904.002

Thursday, 29 February 2024

Endeavour Energy
Level 40-42, 8 Parramatta Square
10 Darcy Street
Parramatta NSW 2150

To: Cornelis Duba – Development Application Specialist

RE: Augusta Street Warehouse and Distribution Centre (SSD-36138263)

This letter has been prepared by LandPartners on behalf of Logos Property in response to advice provided by Endeavour Energy in relation to the proposed Warehouse and Distribution Centre Development Application (SSD-36138263) at Augusta Street, Huntingwood.

Please find enclosed a response matrix Appendix A with a response to each of the comments provided.

We trust this information satisfies Endeavour Energy to their submission on SSD-36138263.

Should you have any enquiries or wish to discuss the matter, please do not hesitate to contact our office.

Yours Faithfully,
LANDPARTNERS PTY LIMITED

Gregory K Oxley
Registered Land Surveyor/Project Director

Huntingwood SSD-36138263- Endeavour Energy (Response to Submission)			
Task			**Responses**
	Endeavour Energy		
1		I refer to the referral of 3 July 2020 from NSW Planning, Industry & Environment regarding NSW Government concurrence and referral request CNR-9654 for **Blacktown City Council Development Application DA-20-00804** at AUGUSTA STREET BLACKTOWN 2148	
		Subject to the foregoing and the following recommendations and comments Endeavour Energy has no objection to the Development Application.	
A		**Network Capacity / Connection** Endeavour Energy has noted the following in the Statement of Environmental Effects addressing the suitability of the site for the development in regard to whether electricity services are available and adequate for the development. **5.10 Infrastructure Requirements** The Civil and Infrastructure Report prepared by AT&L (2020) considers the relevant infrastructure requirements to faciality future built form on the Subject Site. **5.10.5 Electricity** As part of the scope of works, the existing 11kV aboveground High Voltage (HV) cables traversing the Site will need relocated to suit the realignment proposed of Augusta Street. The existing HV Cables and surrounding easements will be realigned to suit the proposed development works and to ensure no disruptions to site south of M4 motorway. Accordingly, preliminary analysis for EE has indicated the site will be serviced by the Ardell Park Zone submission 1.7km northeast of the site. It is considered likely, that a minimum of one feeder (11 kV) cable will be required to be brought into the Site. Furthermore, the existing HV transmission lines located within the southern portion of the Site running parallel to the M4 Motorway are proposed to remain and be protected during the construction phase. A Low Voltage will also be provided within Augusta Street, serving in the proposed street lights required as part of the road in structure works. Accordingly the applicant and their Accredited Service Provider (ASP) should continue to contact Endeavour Energy's Network Connections Branch who are responsible for are managing the conditions of supply to the proposed development and can be contacted via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 9am - 4:30pm). Network Asset Design.	**Please Refer to Section 4.0 - Electricity (Service Infrastructure Report Assessment - LandPartners SY074904.002)** a) Development of the site would provide a demand of approximately 4.3MVa (see Service Infrastructure Report Assessment - Appendix B). b) To cater for this level of demand high voltage feeder will need to be laid from the Arndell Park Zone Substation (corner of Walters Road and Holbeche Road – distance approximately 2.3km) to the site. c) Logos Property have engaged Edgewater Connections, a Level 3 ASP, to lodge applications with Endeavour Energy to determine any constraints within the electrical supply/distribution system for the area. d) Edgewater have received a response from Endeavour Energy for the Technical Review Request that was lodged (see Appendix B). e) The result of the review by Endeavour Energy is they have advised that a new 11kv feeder needs to be provided to serve the site. f) The proposed 11kv feeder will be rated to provided 5.5MVa capacity. g) As part of Endeavour Energy asset creation path a connection of load application that will be lodged with Endeavour Energy will outline the requirement for the installation of pad mount substations. Based on the proposed electrical demand for the development four 1,000kVa pad mount substations will be installed within the development. h) Endeavour Energy have 132kv transmission system within the development site within easement. Endeavour Energy outline the restrictions to be placed by development near major assets such as their 132kv transmission system within their publication "Living and Working with Electrical Transmission Lines".
Task			**Responses**
	Endeavour Energy		
2		I refer to the Department's below email of **23 September 2020 regarding the notice of exhibition of the Environmental Impact Statement (EIS) for State Significant Development SSD-10469 for the Environmental Impact Statement (EIS).** The recommendations and comments provided in Endeavour Energy's previous submission to the Department on 17 June 2020 regarding the Request for Secretary's Environmental Assessment Requirements (SEARs) remain valid.	
		Subject to the foregoing and the following recommendations and comments Endeavour Energy has no objection to the Development Application.	
A)		**<u>Network Capacity / Connection</u>** Endeavour Energy has noted that the EIS does not appear to address in detail the suitability of the site for the development in regard to whether electricity services are available and adequate for the development or the impact on the existing easements and electricity infrastructure on an in the vicinity of the site. The application for connection of load to an urban industrial subdivision does not necessarily provide consideration to the electricity load of the subsequent actual use of the lots within the subdivision. However in this instance Endeavour Energy has noted the following in the Statement of Environmental Effects for Blacktown City Council Development Application DA-20-00804 for 'Consolidation and resubdivision into 4 lot Torrens title, bulk earthworks and associated infrastructure'.	**Please Refer to Section 4.0 - Electricity (Service Infrastructure Report Assessment - LandPartners SY074904.002)** a) Development of the site would provide a demand of approximately 4.3MVa (see Appendix B). b) To cater for this level of demand high voltage feeder will need to be laid from the Arndell Park Zone Substation (corner of Walters Road and Holbeche Road – distance approximately 2.3km) to the site. c) Logos Property have engaged Edgewater Connections, a Level 3 ASP, to lodge applications with Endeavour Energy to determine any constraints within the electrical supply/distribution system for the area. d) Edgewater have received a response from Endeavour Energy for the Technical Review Request that was lodged (see Appendix B). e) The result of the review by Endeavour Energy is they have advised that a new 11kv feeder needs to be provided to serve the site. f) The proposed 11kv feeder will be rated to provided 5.5MVa capacity. g) As part of Endeavour Energy asset creation path a connection of load application that will be lodged with Endeavour Energy will outline the requirement for the installation of pad mount substations. Based on the proposed electrical demand for the development four 1,000kVa pad mount substations will be installed within the development. h) Endeavour Energy have 132kv transmission system within the development site within easement. Endeavour Energy outline the restrictions to be placed by development near major assets such as their 132kv transmission system within their publication "Living and Working with Electrical Transmission Lines".

B)		**Infrastructure Requirements** As part of the scope of works, the existing 11kV aboveground High Voltage (HV) cables traversing the Site will need relocated to suit the realignment proposed of Augusta Street. The existing HV Cables and surrounding easements will be realigned to suit the proposed development works and to ensure no disruptions to site south of M4 motorway. Accordingly, preliminary analysis for EE has indicated the site will be serviced by the Ardell Park Zone submission 1.7km northeast of the site. It is considered likely, that a minimum of one feeder (11 kV) cable will be required to be brought into the Site. Furthermore, the existing HV transmission lines located within the southern portion of the Site running parallel to the M4 Motorway are proposed to remain and be protected during the construction phase. A Low Voltage will also be provided within Augusta Street, serving in the proposed street lights required as part of the road in structure works. Accordingly the applicant and their Accredited Service Provider (ASP) should continue to contact Endeavour Energy's Network Connections Branch who are responsible for are managing the conditions of supply to the proposed development and can be contacted via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 9am - 4:30pm). Network Asset Design.	**Please Refer to Section 8.0 - Infrastructure Upgrade Requirements (Service Infrastructure Report Assessment - LandPartners SY074904.002)** The overall masterplan will result in the relocation and removal of existing overhead reticulation systems. New electrical infrastructure to facilitate the proposed development will be located underground. Logos Property have engaged Edgewater Connections, a Level 3 ASP, to lodge applications with Endeavour Energy to determine any constraints within the electrical supply/distribution system for the area. A new 11kv electrical feeder will be provided from the Arndell Park Zone Substation to service the site. All required infrastructure to service the development is developer funded
C)		**Hazardous and/or Offensive Development** Whilst the SEPP 33 - Preliminary Risk Screening concludes that 'The SEPP33 screenings for storage of dangerous goods indicate that the development may not be classified as a hazardous or offensive industry', given that diesel fuel is to be stored on site which is classed as a C1 Combustible Liquid (provided no flammable liquids are stored with the diesel), increasing the separation distances as far as reasonably possible between the diesel storage and any electricity infrastructure on the site is still recommended by Endeavour Energy.	Not applicable to SSD-36138263 with no diesel storage proposed onsite.
Task			**Responses**
		Endeavour Energy	
A)		**Endeavour Energy's Network Connections Branch has provided the following advice:** Network Connections Branch had responded to the proponent's initial supply enquiry for a proposed data centre development at the subject site in April this year (Endeavour Energy Ref: ENL3661 – 2014/02306/001) indicating that to supply the estimated load would require significant 132 kV feeder works to be established from TransGrid Sydney West Bulk Supply Point 200 Old Wallgrove Road, Eastern Creek to the data centre site and to Endeavour Energy's Blacktown Transmission Substation located at 418 Blacktown Road, Prospect. Network Connections Branch had recently received the application for connection of load for a reduced load for this data centre development. With the reduced load it is likely the developer will be required to provide two 132 kV feeders from Blacktown Transmission Substation to the data centre site. As the works is contestable, the feeder route is subject to further feasibility study by developer's Accredited Service Provider (ASP). In addition Asset Planning & Performance Branch have advised that it is also likely that Blacktown Transmission Substation requires the extension of the 132 kV busbar to install two 132 kV feeder bays and circuit breakers for the new feeder connections, as well as relocation of a 132 kV feeder within Substation. The final scope of works is still subject to detailed feasibility study and will be confirmed via Endeavour Energy's normal application process. As such the applicant and their ASP should continue to complete the application process with Endeavour Energy's Network Connections Branch are managing the conditions of supply. However the applicant will need to contact Endeavour Energy's Network Connections Branch (via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 9am - 4:30pm) if this Development Application:	**Please Refer to Section 4.0 - Electricity (Service Infrastructure Report Assessment - LandPartners SY074904.002)** a) Development of the site would provide a demand of approximately 4.3MVa (see Service Infrastructure Report Assessment - Appendix B). b) To cater for this level of demand high voltage feeder will need to be laid from the Arndell Park Zone Substation (corner of Walters Road and Holbeche Road – distance approximately 2.3km) to the site. c) Logos Property have engaged Edgewater Connections, a Level 3 ASP, to lodge applications with Endeavour Energy to determine any constraints within the electrical supply/distribution system for the area. d) Edgewater have received a response from Endeavour Energy for the Technical Review Request that was lodged (see Service Infrastructure Report Assessment - Appendix B). e) The result of the review by Endeavour Energy is they have advised that a new 11kv feeder needs to be provided to serve the site. f) The proposed 11kv feeder will be rated to provided 5.5MVa capacity. g) As part of Endeavour Energy asset creation path a connection of load application that will be lodged with Endeavour Energy will outline the requirement for the installation of pad mount substations. Based on the proposed electrical demand for the development four 1,000kVa pad mount substations will be installed within the development. h) Endeavour Energy have 132kv transmission system within the development site within easement. Endeavour Energy outline the restrictions to be placed by development near major assets such as their 132kv transmission system within their publication "Living and Working with Electrical Transmission Lines".
B)		**Reticulation Policy** In order to improve the reliability performance of and to reduce the operating expenditure on th network over the long term the company has adopted the strategy of reusing news lines to be either underground cables or where overhead is permitted, to be predominately of coveted 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 ton be used in treed areas as the probability of a direct lightning strike is low. In open areas where the line not shield from direct lightening strike, bare conductors must generally be used for 11kV and 22kV reticulation.	**Please Refer to Section 8.0 - Infrastructure Upgrade Requirements (Service Infrastructure Report Assessment - LandPartners SY074904.002)** The overall masterplan will result in the relocation and removal of existing overhead reticulation systems. New electrical infrastructure to facilitate the proposed development will be located underground. Logos Property have engaged Edgewater Connections, a Level 3 ASP, to lodge applications with Endeavour Energy to determine any constraints within the electrical supply/distribution system for the area. A new 11kv electrical feeder will be provided from the Arndell Park Zone Substation to service the site. All required infrastructure to service the development is developer funded

C)		**Urban Areas** Reticulation of new residential subdivisions will be underground. In areas of low bushfire consequence, new lines within existing overhead areas can be overhead, unless underground lines are cost justified or required by either environmental or local council requirements. Where underground reticulation is required on a feeder the supplies a mixture of industrial, commercial and/or residential loads, the standard of underground construction will apply to all types of load within that development. Extensions to the existing overhead 11kV/22kV network bust generally be underground. Bare wire will be used for conductor replacements and augmentations except in treed areas where CCT must be used.	**Please Refer to Section 3.6 - Electricity Services (Bushfire Protection Assessment - Eco Logical 22SYD1308)** To comply with Section 7.4 of PBP, all new and existing electrical infrastructure to be provided to facilitate the proposed development will be located underground.
Task			**Responses**
	Endeavour Energy		
D)		**Streetlighting** The streetlighting for the proposed development should be reviewed and if necessary upgraded to comply with the series of standards applying to the lighting of roads and public spaces set out in with Australian/New Zealand Standard AS/NZS 1158: 2010 'Lighting for roads and public spaces' as updated from time to time. Whilst the determination of the appropriate lighting rests with the road controlling authority, Endeavour Energy as a Public Lighting Service Provider is responsible for operating and maintaining the streetlights on behalf of local councils, Roads and Maritime Services and other utilities in accordance with the NSW Public Lighting Code 2019 (Code) as updated from time to time. Endeavour Energy recognises that well designed, maintained and managed Public Lighting offers a safe, secure and attractive visual environment for pedestrians and drivers during times of inadequate natural light. For any Code implementation and administration / technical matters please contact Endeavour Energy's Substation Mains Assets Section via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 9am - 4:30pm or email mainsenquiry@endeavourenergy.com.au .	The street lighting design for the proposed development will adhere to Australian Standards as part of upgrade works to Flushcombe Road and Augusta Street.
E)		**Bushfire** Although industrial uses are not covered by Chapters 5 to 7 of NSW Rural Fire Service 'Planning for Bush Fire Protection 2019' (PBP), the aim and objectives of PBP still need to be considered and a suitable package of bush fire protection measures should be proposed commensurate with the assessed level of risk to the development. PBP provides the following advice regarding electricity services:	**Please Refer to Section 3.6 - Electricity Services (Bushfire Protection Assessment - Eco Logical 22SYD1308)** To comply with Section 7.4 of PBP, all new and existing electrical infrastructure to be provided to facilitate the proposed development will be located underground.
F)		**Bushfire Risk Management** Accordingly the electricity 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 the potential impact of a bushfire on its electricity infrastructure and the safety risks associated with the loss of electricity supply are also considered.	**Please Refer to Section 3.6 - Electricity Services (Bushfire Protection Assessment - Eco Logical 22SYD1308)** To comply with Section 7.4 of PBP, all new and existing electrical infrastructure to be provided to facilitate the proposed development will be located underground.
G)		**Flooding and Drainage** The electricity network required to service an area / 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 flood prone site. Risk control has focused typically on avoiding the threat, but where this is not possible, reducing the negative effect or probability of flood damage to assets by implementing good design and maintenance practices. Distribution substations should not be subject to flood inundation or stormwater runoff Ie. the pad mount substation cubicles are weatherproof not flood proof and the cable pits whilst designed to be self-draining should not be subject to excessive ingress of water. Section 7 'Substation and switching stations' of Endeavour Energy's Mains Construction Instruction MCI 0006 'Underground distribution construction standards manual' provides the following details of the requirements for flooding and drainage in new distribution substation locations.	**Please Refer to Section 4.0 - Electricity (Service Infrastructure Report Assessment - LandPartners SY074904.002)** Based on the proposed electrical demand for the development four 1,000kVa pad mount substations will be installed within the development. All four substations are to meet Endeavour Energy Standards as part of certified design and are positioned outside flood prone areas, above 1 in 100 year flood zone's.
Task			**Responses**
	Endeavour Energy		
H)		**Subdivision of Easements** Endeavour Energy's preference is to have continuity of its easements over the most direct and practicable route affecting the least number of lots as possible. Therefore, it generally does not support the subdivision of easements (even in part) and their incorporation into to multiple / privately owned lots. The incorporation of electricity easements into privately owned lots is generally problematic for both Endeavour Energy and the landowner and requires additional easement management to ensure no uncontrolled activities / encroachments occur within the easement. **Although in this instance the subdivision will result in the consolidation of lots, the applicant must demonstrate how the subdivision has taken into consideration to minimising the impact on the easement rights. This is particularly important where there are poles or structures and changes in direction to a line route.** In the event of fallen conductors or faults in underground cables, access to the poles or cable pits to restring or pull cables is essential for restoring electricity supply. The number and length of crossings should be kept to a minimum e.g. crossings should be or close to perpendicular to the overhead power lines or underground cables and must be at least half the easement width beyond any pole or structure. However , if the subdivision does result in the incorporation of Endeavour Energy's easement into multiple lots, not only must the easements, rights and restrictions, covenants etc. be retained over the effected lots and in accordance with the requirements of NSW Land Registry Services (LRS), but Endeavour Energy may need to include additional requirements / restrictions to be registered on title/s to the lots encumbered by the easements.	Currently E.E enjoys easement rights over the existing overhead electrical reticulation assets in the Augusta Road corridor. DP1263824 and DP1300050 closed a substantial part of Augusta Street as a public road and easement rights were granted to E.E as part of the road closure process. These sections of the closed road are in the ownership of Blacktown Council who will sell the closed road area to the proponent Logos Property of the Augusta Street development. The masterplan for the proposed development indicates that these easements within the old Augusta Road corridor will need to be released/extinguished when the existing overhead reticulation system is decommissioned and assets are removed. New electrical systems will be installed in the new development such as padmount substations and underground electrical cabling. These assets will have new easements created which will benefit E.E. Substantial high voltage transmission systems exist within an easement corridor along and adjacent to the southern boundary of the site. These easements will NOT be released and the rights that E.E currently enjoy through these easements will continue. It is clear from the current masterplan documents for the proposed development that physical access by E.E maintenance personnel and equipment is available through the proposed access driveways and carparking/vehicle hardstand areas. It would be anticipated that easements creating rights of access over the driveways/hardstand areas will be created to benefit

I)	**Protected Electrical Works** In regard to the low voltage and 11 kV high voltage overhead power lines traversing the site which are not held under easement, these are protected assets and deemed to be lawful for all purposes under Section 53 'Protection of certain electricity works' of the Electricity Supply Act 1995 (NSW). Essentially this means the owner or occupier of the land cannot take any action in relation to the presence in, on or over the land of electricity works i.e.. the electricity infrastructure cannot be removed to rectify the encroachment. These protected assets are managed as if an easement is in place - 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', as shown in the following extracts of Table 1 – 'Minimum easement widths', the low voltage and 11 kV high voltage overhead power lines both require a 9 metre minimum easement width i.e.. 4.5 metres to both sides of the centre line of the poles / conductors. These distances must be maintained at all times to all buildings and structures and regardless of the Council's allowable building setbacks etc. under its development controls. As a guide please find attached a copy of Endeavour Energy Drawing 86232 'Overhead Lines Minimum Clearances Near Structures Even if there is no issue with the safety clearances to the building or structure, ordinary persons must maintain a minimum safe approach distance of 3.0 metres to all voltages up to and including 132,000 volts / 132 kV. Work within the safe approach distances requires an authorised or instructed person with technical knowledge or sufficient experience to perform the work required, a safety observer for operating plant as well as possibly an outage request and/or erection of a protective hoarding.	The current E.E assets that are not contained within easement are overhead reticulation assets located within Lot 4 DP583442 and Lot 4 DP585492. It is recognised that E.E has rights over these assets pursuant to the Electricity Supply Act 1995 including full and free uninterrupted access across the land comprised within the proposed development. However these assets will be decommissioned and removed from the subject site and will be replaced by new underground electrical assets required to serve the proposed development. All assets to be removed and new assets to be created will be undertaken through E.E normal asset creation path.
J)	**Easement Management / Network Access** The following is a summary of the usual / main terms of Endeavour Energy's electrical easements requiring that the landowner: o Not install or permit to be installed any services or structures within the easement site. o Not alter the surface level of the easement site. o 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 easements. 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 electrical works / 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 . 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.	The 132kv transmission lines along the southern boundary have been addressed in the master planning of the site with no development taking place within the electrical easement area. Access to the existing electrical infrastructure will be maintained at all time with access roads provided to all stauchens. Engagement has taken place with Philip Wilson - Easement Officer Property Services (Endeavour Energy) around general restrictions of overhead power lines. It is our understanding a minimum clearance of 3m is required from conductors in all directions, all ways, all times. This will include when there is a load on the network and conductors sag under extreme load & heat and sway in very windy positions. A Centre Line Profile (CLP) survey has been provided to ensure compliance. Engagement with Endeavour Energy's Easement Team will continue through the development.
Task		**Responses**
	Endeavour Energy	
K)	**Hazardous and/or Offensive Development** Endeavour Energy has traditionally focused on the likelihood of its network starting a fire. However conversely Endeavour Energy believes that applicants and determining authorities should consider the safety risks associated with inappropriate development in proximity of electricity infrastructure that may result in damage to the network and the loss of electricity supply. Endeavour Energy is aware that the provisions of State Environmental Planning Policy No 33— Hazardous and Offensive Development (SEPP33) that in the preparation of a preliminary hazard assessment electricity infrastructure is not defined / regarded as sensitive land use. However, in similar situations Endeavour Energy has sought further advice from the consultants preparing the preliminary hazard assessment on the basis that, although not a sensitive land use in the traditional / environmental sense, if the electricity infrastructure on or in proximity of the site is damaged, the resulting outage could leave thousands of properties / customers without power. The consultants have been requested to specifically address the risks associated with the proximity of the electricity infrastructure i.e.. detail design considerations, technical or operational controls etc. to demonstrate as required by SEPP33 that the proposed business / development is suitably located and can be built and operated with an adequate level of safety and pollution control.	Not applicable to proposed Augusta Street State Significant Development (SSD-36138263) with no diesel storage proposed onsite.
L)	**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. It applies to all electrical installations including temporary builder's supply / connections. 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.	**Please refer to Architectural Masterplan - PACE Architects** No building structure is proposed with Endeavour Energy's Electrical easement. Any other structure will be suitable connected to earth where applicable. In addition all contractor's are to comply with all Endeavor Energy easement requirements for works within and adjacent to their easement including but not limed to approvals, appropriate plant and equipment (e.g., height limiting machines, earthing machines, etc.), approved spotters, adequate signage and clearance markers prior to entry into the easement.

M)	**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.	**Please Refer to Landscape Concept Plan - Habit 8 (H8-22032)** Existing electrical easement area to be retained and regenerated. Where additional planting is required, small tree planting to take place to comply with Endeavour Energy height restrictions (less than 3m tall)
Task		**Responses**
	Endeavour Energy	
N)	**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.	Before any works commence, all Contractor's are to carry out their own investigations of all services within and around the site including the contractor obtaining its own "Dial Before You Dig" information.
O)	**Demolition** Demolition work is to be carried out in accordance with Australian Standard AS 2601—2001: 'The demolition of structures' as updated from time to time. All electric cables or apparatus which are liable to be a source of danger, other than a cable or apparatus used for the demolition works shall be disconnected i.e.. the existing customer service lines will need to be isolated and/or removed during demolition. Appropriate care must be taken to not otherwise interfere with any electrical infrastructure on or in the vicinity of the site e.g. streetlight columns, power poles, overhead power lines and underground cables etc.	All services shall be disconnected / made safe prior to commencement of demolition work. A sign off on services will be received by Civil Contractor prior to the commencement of any demolition works Demolition will begin only when the site has been officially handed over and a sign off on services has been received by the appropriate service providers for appropriate areas
P)	**Removal of Electricity Supply** Approval for the permanent disconnection and removal of supply must be obtained from Endeavour Energy's Network Connections Branch (contact via Head Office enquiries on telephone: 133 718 or (02) 9853 6666 from 9am - 4:30pm) by Accredited Service Providers (ASP) with the relevant class of Authorisation for the type of work being carried out. The work could involve: o The disconnection and removal of an underground service cable or overhead service line, o Removal of metering equipment. The written request must be submitted to Endeavour Energy using Form FPJ4603 ' Permission to Remove Service / Metering by Authorised Level 2 Accredited Service Provider' which must be accompanied by Notification of Service Works (NOSW) forms provided as a result of service work activity performed by a Level 2 ASP. The retailer must also provide written agreement for the permanent removal of supply.	**Please Refer to Section 8.0 - Infrastructure Upgrade Requirements (Service Infrastructure Report Assessment - LandPartners SY074904.002)** The overall masterplan will result in the relocation and removal of existing overhead reticulation systems. New electrical infrastructure to facilitate the proposed development will be located underground. Logos Property have engaged Edgewater Connections, a Level 3 ASP, to lodge applications with Endeavour Energy to obtain any approvals for the permanent disconnection and removal of supply if required. All required infrastructure to service the development is developer funded
Q)	**Site Remediation** Endeavour Energy's Environmental Business Partner section have advised that the remediation of soils impacted by various forms of electricity infrastructure is not uncommon e.g. transformer oil associated with leaking substations, pole treatment chemicals at the base of timber poles etc. The method of remediation is generally the removal of the electricity infrastructure, excavation of any contaminated soils and their disposal at a licensed land fill. The decommissioning and removal of the redundant electricity infrastructure will be dealt with by Endeavour Energy's Network Connections Branch as part of the application for the connection of load for the new development.	**Please Refer to Section 8.0 - Infrastructure Upgrade Requirements (Service Infrastructure Report Assessment - LandPartners SY074904.002)** The overall masterplan will result in the relocation and removal of existing overhead reticulation systems. New electrical infrastructure to facilitate the proposed development will be located underground. Logos Property have engaged Edgewater Connections, a Level 3 ASP, to lodge applications with Endeavour Energy to obtain any approvals for the decommissioning and removal of the redundant electricity infrastructure. Remediation will be undertaken by suitably qualified remediation contractor at this time.