

The Secretary
NSW Department of Planning, Industry and Environment

21 November 2021

ATTENTION: Pamela Morales

Dear Sir or Madam

I refer to the Department's below email of 18 November 2021 regarding the Environmental Impact Statement (EIS) for State Significant Development State Significant Development SSD-25452459 First Building Bradfield City Centre for 'Construction, fitout and use of the proposed First Building as an advanced manufacturing research and development facility, including site preparation works, site access and parking, utilities infrastructure and landscaping' at 215 Badgerys Creek Road, Bringelly (Lot 10 DP 1235662) in the Liverpool City Council Local Government Area (LGA). Submissions need to be made to the Department by 16 December 2021.

Please refer to Endeavour Energy's previous submission made to the Department via email on 21 August 2021 for the Secretary's Environmental Assessment Requirements (SEARs) for State Significant Development SSD-25452459 First Building Bradfield City Centre. The recommendations and comments provided therein remain valid.

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

- Network Capacity / Connection

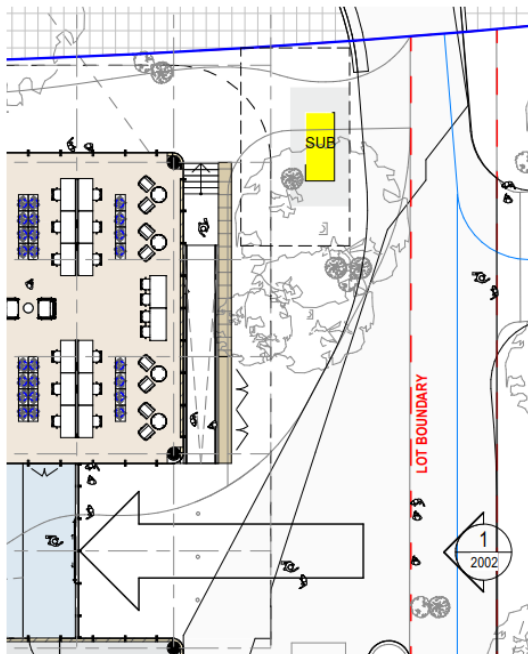
Endeavour Energy's Asset Planning & Performance Branch has provided the following advice.

Asset Planning & Performance Branch have responded to Technical Review Request ENL4081 via Network Customer Solutions Branch proposing initial and permanent supply strategies to meet the indicative load forecast provided by Western Parkland City Authority. (Appendix D (ii) – Civil Design Report refers to the feasibility advice received from Endeavour Energy).

The initial supply for Building No.1 through to Building No.4 will be provided from the existing shared network from Bringelly Zone Substation in Badgerys Creek Road via an underground extension. Future repurposing of the Sydney Metro Station Box construction supply feeder for Bradfield City will also reinforce supply to the first four buildings. By 2026, various other construction supplies for Western Sydney Airport and Sydney Metro will also be disconnecting and this will release additional capacity to bridge the period between providing initial and permanent supply strategies to Bradfield City.

There has been some discussion regarding a possible zone substation site within the Bradfield City Precinct which would provide more certainty into providing additional capacity into the long term future as Bradfield grows and attracts international interest.

The Civil Design Report indicates a new padmount substation at property frontage within the First Building lot which is shown in the following extract of Appendix C (i) – Architectural Plans.



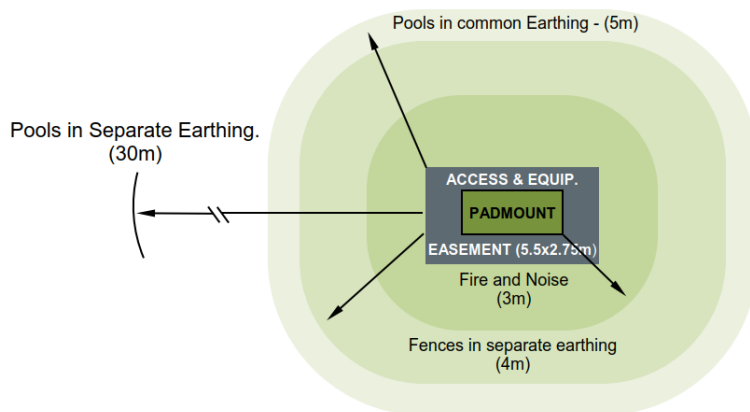
GROUND FLOOR PLAN

From Endeavour Energy's perspective the fact that provision is being made for a padmount substation is a positive. Endeavour Energy's general requirements is for a padmount substation to be at ground level and have direct access from a public street (unless provided with appropriate easements for the associated underground cables and right of access).

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

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

A4.3 - Padmount easements and clearances



The easement should not cross property boundaries but the restriction/s may affect any adjoining property provided they are able to be registered on the title to that property. In addition the following matters also need to be considered in regard to the fire restriction:

- Personnel access doors and fire exit doors to a building are not permitted within the fire restriction area.
- Gas mains/pipes shall not pass through the fire restriction area.
- A 10 metre clearance distance shall be maintained between substation and fire hydrants, booster valves, and the like in accordance with AS2419.1 'Fire hydrant installations System design, installation and commissioning' as updated from time to time.
- Any landscaping that potentially could transfer / provide connectivity for flame or radiant heat from a fire in the substation to a dwelling or building should be avoided.

- The storage of and / or use of flammable, combustible, corrosive or explosive material within the fire restriction should be avoided.

Please find attached for the applicant's information 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.

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

The applicant will need to complete the connection of load process for the provision of electricity supply to the proposed development. Endeavour Energy's Customer Network Solutions Branch 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.

- **Flooding and Drainage**

Endeavour Energy requires the electricity network needed to service an area / development to 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 padmount 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 padmount substation locations.

7.1.6 Flooding and drainage

Substations are to be located such that the risk of flooding or stormwater damage is minimal.

As a minimum the level at the top of the transformer footing, HV and LV switchgear, shall not be lower than the 1:100 year flood level.

All drains within the substation site area or in the vicinity shall be properly maintained to avoid the possibility of water damage to Endeavour Energy's equipment.

In areas where, as determined by the Network Substation Manager, there is a high water table or a heightened risk of flooding, indoor substations will not be permitted.

All materials used in the construction below the substation (ground level) shall be capable of withstanding prolonged immersion in water without swelling or deterioration.



Figure 51 - Example substation raised above 1:100 flood level

- Vegetation Management

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 the electricity infrastructure as do tree roots. 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.

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

With the current easing of the COVID-19 health risk, whilst a significant number of Endeavour Energy staff are returning to the office, it may sometimes take longer than usual to respond to enquiries. Thank you for your ongoing understanding during this time.

Yours faithfully

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From: Jessica Fountain <Jessica.Fountain@planning.nsw.gov.au>
Sent: Thursday, 18 November 2021 3:21 PM
To: Property Development <Property.Development@endeavourenergy.com.au>
Cc: Pamela Morales <pamela.morales@planning.nsw.gov.au>
Subject: Notice of Exhibition – First Building, Bradfield City Centre (SSD-25452459)

Dear Endeavour Energy

The Department of Planning, Industry and Environment (Department) has received an Environmental Impact Statement (EIS) for the First Building Bradfield City Centre (SSD-25452459).

The EIS will be publicly exhibited from Friday 19 November 2021 to Thursday 16 December 2021.

The EIS can be viewed on the Department's Major Projects website at <https://www.planningportal.nsw.gov.au/major-projects/project/42566> from **Friday 19 November 2021**.

The Department invites you to advise on the proposal, including advice on recommended conditions by **Thursday 16 December 2021**.

If you have any enquiries, please contact Pamela Morales on (02) 9274 6386 or via email at pamela.morales@planning.nsw.gov.au.

Regards

Jess Fountain
DA Coordinator

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The Department of Planning, Industry and Environment acknowledges that it stands on Country which always was and always will be Aboriginal land. We acknowledge the Traditional Custodians of the land and waters, and we show our respect for elders past, present and emerging. We are committed to providing places in which Aboriginal people are included socially, culturally and economically through thoughtful and collaborative approaches to our work.

 Please consider the environment before printing this e-mail.