Monday, 19 August 2019

Ref: D19/430414

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By email

Dear Claire,

Development Application DA2019/0645 26 Whistler St Manly

I refer to your email of 15 July addressed to the Manager Property.

The information contained in the online documents and the documents provided by yourself on 6th August 2019 identifies the development adjacent to the Ausgrid Manly Zone substation being the major substation supplying power to surrounding suburbs. This location is critical to ensuring the integrity of the power supply to thousands of customers.

The EMF report provided does not provide references to the time and date of the measurements nor was any contact made with Ausgrid to determine the configuration or the loading on the substation. The report does not sufficiently address the expected EMF exposure by the residents of the development.

In examining the plans there are significant risks posed by the development to the adjoining Ausgrid structure which are not fully documented and eliminated to an acceptable level is not demonstrated.

Further comments regarding the development ;

- The existing building is located on the adjoining boundary to the Ausgrid substation. Demolition of this building is to be programmed in a manner designed to ensure no damage occurs to the Ausgrid structure.

  Demolition works shall not commence until written endorsement of the demolition plan and the engineering calculations demonstrating the safety of the Ausgrid substation.

The Principal Certifying Authority shall not issue the Demolition / Construction Certificate until Ausgrid's written endorsement of the demolition plan has been obtained.

- The pile wall that is located on the adjoining boundary to the Ausgrid substation shall be designed to ensure no damage occurs to the Ausgrid structure.

  Site works shall not commence until written endorsement of the structural drawings and the engineering calculations showing the expected lateral deflections of the piles has been obtained from Ausgrid. A full Geotechnical report is to be submitted with the lateral deflection calculations. The Principal Certifying Authority shall not issue the Construction Certificate until Ausgrid's written endorsement of the structural drawings has been obtained.

- A Dilapidation report shall be completed by a qualified structural engineer on the exterior and interior of the substation along the side of the substation that adjoins the proposed development prior to demolition of the existing structure. Any damage found during or at the completion of works shall be repaired at the cost of the developer.

- If the contractor needs to dewater the site they shall provide a dewatering strategy that shows that the water table below the substation will not be affected or will not affect the soil saturation parameters which may induce short term and long-term settlement beneath the footings of the Ausgrid substation.

- No ground anchors are to be constructed beneath Ausgrid's substation.

- The design shall be modified to ensure no openings are within a 3m fire separation zone, this shall be done in accordance with Ausgrid Network Standard NS113.

  Site works shall not commence until written endorsement of the architectural drawings has been obtained from Ausgrid. The Principal Certifying Authority shall not issue the Construction Certificate until Ausgrid's written endorsement of the architectural drawings has been obtained.

- The design shall be modified so that there is no climbable access from the development onto the roof or other trafficable areas on the site:
    - The design shall include:
        - A wall between the Ausgrid Substation and the proposed development that prevents unauthorised access onto the substation premises. The wall shall be a minimum height of 2.4m from the finished floor level of the adjoining deck and provided a minimum of 4 metres from the top of the wall to either the substation roof or substation roof deck at the location of the wall. A 550mm concertina razor coil will be required to be fixed to the substation side of the wall (300mm from the top of the wall).
        - Remove all proposed openings for the development where they are on boundary with the substation.
        - Securing of the balconies near the substation roof to ensure they do not provide any access to Ausgrid's property.

    Site works shall not commence until written endorsement of the architectural drawings has been obtained from Ausgrid. The Principal Certifying Authority shall not issue the Construction Certificate until Ausgrid's written endorsement of the architectural drawings has been obtained.

- Deflections and vibrations shall be monitored and "live" information shall be provided to Ausgrid. Vibration monitoring to be at the developers cost. A deflection and vibration management plan shall be submitted to Ausgrid for review. The plan shall ensure that vibrations do not exceed 7.2mm/s (peak particle velocity) at the boundary to mitigate tripping of electrical equipment and damage to the structure.

- Separation between ventilation openings. The new development shall not provide any ventilation openings onto Ausgrid's property and shall not enclose any existing ventilation from Ausgrid's property.
    - The substation ventilation openings, including substation duct openings and louvered panels, must be separated from the new developments building air intake and exhaust openings, natural ventilation openings and boundaries of adjacent allotments, by separation distances which meet the requirements of all relevant authorities, building regulations, BCA and Australian Standards

including AS 1668.2: The use of ventilation and air-conditioning in buildings - Mechanical ventilation in buildings.

- In addition to above, Ausgrid requires the substation ventilation openings, including duct openings and louvered panels, to be separated from building ventilation system air intake and exhaust openings, including those on buildings on adjacent allotments, by not less than 6 metres. Note: 6 metres is measured by the shortest string line between substation ventilation openings and building ventilation system air intake and exhaust openings. This separation requirement by Ausgrid applies irrespective of whether the building or substation ventilation is mechanical or natural and irrespective of whether dampers are installed in the building and/or substation ventilation systems. Where the dimensions of the allotment make the 6 metre separation from ventilation system openings on an adjacent allotment impossible to achieve the proposal must be submitted to Ausgrid and approval must be obtained before design proceeds.

Note: For the purposes of this Section, Ausgrid does not regard openable windows, that provide natural ventilation to a sole occupancy unit only, as a building ventilation system opening.

Site works shall not commence until written endorsement of the architectural drawings has been obtained from Ausgrid. The Principal Certifying Authority shall not issue the Construction Certificate until Ausgrid's written endorsement of the architectural drawings has been obtained.

- The following items are to be submitted to Ausgrid for review and endorsement prior to the commencement of any works:
  - Scaffolding plan that includes identifies location of scaffolding parallel to the substation , this scaffolding should be connected to earth via electrode with an earth impedance of 30ohm or less to bleed off any capacitive charge that may otherwise deliver a shock.
  - A work site safety plan that identifies the clearances required from the power line for excavation equipment.
  - Machinery to be used during excavation/construction
  - An electrical safety plan including but not limited to:
    - instrumentation and the monitoring regime
    - testing of the scaffold bleed resistor.

    - Material storage plan identifying storage areas as long metallic materials such as pipes or steel reinforcing should not be stored in close parallel orientation to the feeder as they present an induced voltage shock hazard during handling.

- No works are to commence until written confirmation from Ausgrid that this condition has been complied with has been obtained.

- The applicant is to obtain Ausgrid's endorsement prior to the installation of any hoarding or scaffolding facing the common boundary with the electrical infrastructure / easement.

- As there is a risk that rubble/debris may fall from the construction site onto the substation during demolition/excavation and or construction, a reliable method of prevention of such incidents must be provided to Ausgrid for its endorsement prior to the issue of a construction certificate.

- Prior to the issue of a Construction Certificate a Risk Assessment/Management Plan and detailed Safe Work Method Statements (SWMS) for the proposed works are to be submitted to Ausgrid for review and comment on the impacts on electrical infrastructure / easement / substation. The Principal Certifying Authority is not to issue the Construction Certificate until written confirmation has been received from Ausgrid confirming that this condition has been satisfied.

- Prior to the issuing of the Construction Certificate the Applicant is to submit to Ausgrid a plan showing all the craneage and other aerial operations for the development and must comply with all Ausgrid requirements. Ausgrid does not permit any load to be lifted over the power lines. Nor shall any part of the crane jib/boom be above the transmission power line whilst lifting a load. The Principal Certifying Authority is not to issue the Construction Certificate until written confirmation has been received from the Ausgrid confirming that this condition has been satisfied.

- Given the potential of objects being dropped or thrown onto the electrical infrastructure / easement from balconies, windows and other external features (e.g. roof terraces and external fire escapes) that face and are also within 20m of the electrical infrastructure / easement, the Applicant is required to install measures (e.g. awning windows, louvres, enclosed balconies etc.) which prevent the throwing of objects onto the electrical substation. The Principal Certifying Authority shall not issue the Construction Certificate until written endorsement from Ausgrid has been obtained and

that the Ausgrid endorsed measures have been indicated on the Construction Drawings.

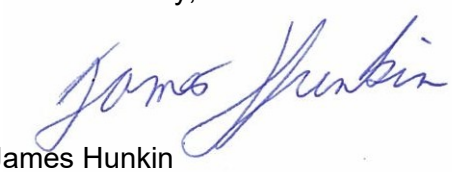
- The Applicant must provide a plan of how future maintenance of the development facing the electrical infrastructure / easement is to be undertaken. The maintenance plan is to be submitted to Ausgrid prior to the issuing of the Occupancy Certificate.

- The Principal Certifying Authority is not to issue an Occupation Certificate until written confirmation has been received from Ausgrid advising that the maintenance plan has been prepared to its satisfaction.

The developer should be advised that Ausgrid fees are applicable to the items listed above and will be billed in accordance with the Ausgrid Ancillary Network Services policy and will be invoiced directly.

Please address correspondence to myself or developmemt@ausgrid.com.au.

Yours sincerely,



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