

16 October 2018

Mr George Youhanna Executive Assessment Planner North Sydney Council 200 Miller Street NORTH SYDNEY, NSW 2060

Dear George,

SSD 6952 (MOD 2) - Response by Council on Tree Removal for Substation

1. Introduction

I refer to Council's correspondence dated 10 September 2018 addressed to the Department of Planning & Environment in relation to an application by Wenona School to modify SSD 6952 to permit the removal of Tree 13 (*Lophostemn confertus*) that is located at the southwest corner of 255 Miller Street, North Sydney to facilitate the installation of a new electricity substation by Ausgrid. I also refer to your email dated 28 September 2018 to me in which you request that we provide "an arborist's report that supports the need to remove the tree or... a compelling reason why the development can't be modified to retain the tree". We advise as follows.

2. Substation Location

The need for a new substation followed a thorough investigation by Wenona. This was subsequently confirmed by Ausgrid (refer to the letter from Ausgrid at **Appendix A**). Ausgrid has advised that it will only support the positioning of a substation if it complies with its requirements including the following:

- Be a minimum of 6.0m from an openable window and door and 10.0m from a fire hydrant.
- That an appropriately engineered, level and unobstructed access to the substation is provided that is a minimum 4.0m wide to enable access by a heavy truck with a vehicle-mounted crane to facilitate installation of the substation.
- That the main cables between the substation and a main switchboard that the substation feds are no longer than 50.0m.
- That the substation ensures the safety of the general public and of the personnel working on or around the substation.
- That there is appropriate separation between the substation and other sources of fire.

However the substation not only needs to satisfy the requirements of Ausgrid but also contend with constraints from existing buildings, infrastructure and the school's operations. Such constraints include existing substructures, foundations supporting adjacent buildings, and existing highly congested services along Miller Street (refer to **Appendix B** that demonstrates the nature and location of these services). All of this presents a significant challenge in identifying a suitable location for the substation and the new main switchboard.

Planning the potential locations of the new substation commenced in mid-2014. This revealed limited schemes that would feasibly satisfy the requirements of Ausgrid as described above and deal with all the other constraints. The schemes that were considered are described in **Appendix C**. These schemes have been reviewed for compliance with each of the requirements stipulated by Ausgrid (refer to Table 1 below).



epm Projects Pty Ltd ACN 107 371 415 Level 2, 146 Arthur Street, PO Box 1034, North Sydney NSW 2059 t 61 2 9452 8300 f 61 2 9452 8388 us@epmprojects.com.au www.epmprojects.com.au

supporting clients nationally

Ausgrid Requirements	255 Miller St, (Scheme 1)	255 Miller St <i>(Scheme 2)</i>	Elliott St (Scheme 3)
6m or more from openable window	Y	Ν	Y
10 m or more from fire hydrant	Y	Y	Y
Accessible path for installation	Y	Y	Y
Within 50 m of Switchboard	Y	Y	N
Safety of general public and of personnel working	Y	Y	Y
Separation between sources of fire	Y	N	Y
Considerate of Streetscape	Y	N	Y
Avoids existing infrastructure	Y	Y	Y

Table 1: Substation Location Schemes

The application relating to SSD 6952 was based on Scheme 1, the only scheme that met all of Ausgrid's requirements and addresses the other constraints. By late 2016, Wenona obtained consent to position the substation north of the subject tree (Scheme 1).

Subsequent to the approval of SSD 6952, Wenona undertook the detailed design of the substation as required by Ausgrid. The design including the location of the substation in accordance with Scheme 1 was subsequently certified by Ausgrid in February 2017. However, following a subsequent site inspection, Ausgrid then raised concern that the substation would be located within the zone of influence of the subject tree advising that its approval was now conditional on removal of the subject tree. Investigations ensued to identify the potential to move the substation to satisfy Ausgrid's concerns whilst retaining the tree. These investigations have revealed that it is simply not possible to position the substation anywhere else and also meet all of Ausgrid's requirements including proximity to the subject tree and other constraints.

3. Conclusion

SSD 6952 (MOD2) identifies a location for a new substation in the only feasible location that meets all the requirements of Ausgrid except one – the proximity of the substation to Tree 13. There is no other location in which the proposed substation can be feasibly positioned and consequently, if the new Development approved under SSD 6952 is to be able to be completed and used, the subject tree must be removed.

I trust the foregoing provides the justification for the removal of the tree to the extent necessary for Council to support removal of Tree 13.

Yours sincerely EPM Projects Pty Ltd

Peter Ibrahim Senior Project Manager

Cc: Andrew Leake