



11 September 2014

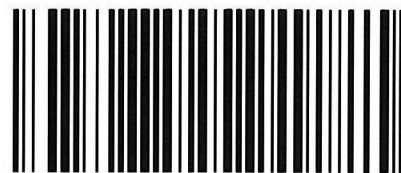
Director, Infrastructure Projects  
Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

Attention: Dominic Crinnion

Dear Madam

**SSI 13\_6136 – NorthConnex**

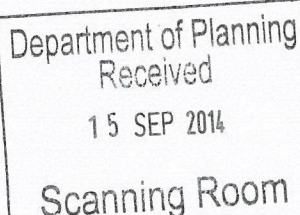
**Submission in Response to the Environmental Impact Statement dated July 2014 (EIS)**



PCU55738

By email:  
[dominic.crinnion@planning.nsw.gov.au](mailto:dominic.crinnion@planning.nsw.gov.au)

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## 1. Introduction

- 1.1 This submission is made by Loreto Normanhurst (**School**) in relation to SSI 13\_6136 lodged by the Roads and Maritime Services (**RMS**) in respect of the NorthConnex Project (**Project**).
- 1.2 The Project, if approved in accordance with the preferred route in the EIS, will include a tunnel under the School's site at 91-93 Pennant Hill's Road, Normanhurst (**Site**) and directly under the School's main building complex which includes class rooms and boarders' residences.
- 1.3 The School has concerns with the Project in relation to:
  - (a) the potential for tunnelling under the Site to interfere with school activities and the education and wellbeing of the School's students;
  - (b) potential impacts on the structural stability of the School's buildings caused by tunnelling under the Site, particularly as the Site is listed as a heritage item in Schedule 5 of *Hornsby Local Environmental Plan 2013 (HLEP 2013)*;
  - (c) noise impacts from night time construction traffic on boarders living at the School; and
  - (d) the tunnel's location and its impacts on the potential future use of geothermal heating for new buildings on the Site.
- 1.4 The School submits that any approval of the Project should:
  - (a) include conditions requiring that:
    - (i) dilapidation surveys be carried out on all buildings on the Site and not just those buildings within 50 metres of the tunnel location;
    - (ii) the surveys be prepared and completed before the commencement of any excavation, demolition or construction works for the Project and after completion of the Project; and
    - (iii) the Proponent is to provide a copy of the dilapidation surveys to the School; and

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- (b) require a minor alteration to the proposed tunnel location under the Site so that it is located either approximately 100 metres to the north or south of the tunnel's current proposed location. This is necessary so that the tunnel does not affect the potential future use by the School of geothermal heating for its buildings.

## **2. About the School**

- 2.1 Loreto Normanhurst is an independent Catholic school under the care of the Institute of Blessed Virgin Mary founded by May Ward in 1609, and is part of a world-wide tradition of over 400 years of educating young women.
- 2.2 The first Loreto School was established in Randwick in July 1892. The current Site was purchased in 1896 and has been operating as a school for girls since 1897. It originally included both primary and secondary education as well as boarding facilities for girls from rural areas.
- 2.3 Currently, it is a day and boarding school for girls from Years 7 to 12. The primary school was closed in the 1980s as part of a proposal for the establishment of a Normanhurst Parish School. This did not eventuate and the Loreto Normanhurst primary school will re-open in 2015.
- 2.4 In the 2014 school year, 918 girls were enrolled at the School in Years 7 to 12 and the School accommodates 181 boarders.
- 2.5 The School's Mission Statement includes encouraging each student to fulfil her academic and personal potential, in an atmosphere of freedom, care and respect for the individual.
- 2.6 Despite being an open- entry school, the School has a strong tradition of academic excellence throughout its history. In 2013, the School ranked as the top achieving Catholic school in the State and in 17<sup>th</sup> position overall (according to the Sydney Morning Herald, 19 December 2013).

## **3. Buildings on the Site**

- 3.1 The Site is approximately 11 hectares and comprises a series of buildings with a total gross floor area in excess of 21,000m<sup>2</sup>. The buildings include classrooms, boarding residences, a gymnasium, an aquatics centre, canteen, a school residence for the Principal, a uniform shop and maintenance sheds. The Site also includes two ovals, numerous multi-purpose games courts and a Sydney Turpentine Ironbark Forest of approximately 4.5 hectares. The bushland is listed as critically endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) and is an endangered ecological community listed under the *Threatened Species Conservation Act 1995* (NSW).
- 3.2 As noted above, the Site, comprising the grounds, gates and cemeteries, is listed as a heritage item in HLEP 2013.

## **4. Vibration Impacts will affect the School and its students**

- 4.1 The School is particularly concerned about any vibration impacts that may occur during the construction of the tunnel. It is concerned about those impacts interfering with school activities (including sporting and extra-curricular activities) and the effects of those impacts on the education, health and well-being of its students.
- 4.2 The School is opposed to 24 hour, 7 days a week construction as any excessive vibration could interfere with the sleep, health and well-being of our boarders.
- 4.3 We are also concerned about any property damage to the School's buildings that may be caused by blasting and tunnelling under the Site. Any damage to our buildings would greatly impact on the School and its students, particularly if property damage caused any of the School's buildings to be unavailable for use.



- 4.4 It is therefore of the utmost importance to the School that stringent, transparent and accountable conditions in relation to vibration and noise impacts on the School be imposed on any approval of the Project.
- 4.5 The School submits that if any approval is granted to the Project then conditions should be imposed requiring that a dilapidation survey be carried out by the Proponent on all of the School's buildings, not just those within the 50 metres of the proposed tunnel, and that they be carried out before the commencement and after completion of the construction of the tunnel so that a clear before and after picture of the School's buildings are available to the School.
- 4.6 We note that in Table 9-1 in Chapter 9 of the EIS, the Proponent agrees to undertake existing condition surveys prior to the commencement of tunnelling. However, as far as the School has been able to ascertain, there is no such commitment to undertake further dilapidation surveys after the completion of construction of the tunnel. This should be required.
- 4.7 The School has reviewed the types of conditions that were imposed on the approval for the North West Rail Link and submits that similar conditions should be imposed on any approval for the Project. We set out in an annexure to this letter the conditions that the School submits should be imposed on any approval of the Project.

#### **5. Noise disturbance to boarders caused by night time construction traffic**

- 5.1 The School understands that construction traffic will be generated 24 hours a day, 7 days a week along Pennant Hills Road
- 5.2 It is concerned that noise from night time heavy construction traffic will interfere with the sleep, health and well-being of the School's boarders.
- 5.3 To minimise such disturbance, the School submits that the Proponent should be required to consult with the School in the preparation of its Construction Traffic Management Plan for the Project.

#### **6. Location of the Proposed Tunnel**

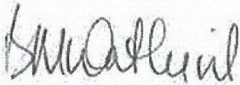
- 6.1 The School has a development programme so that current and future students will enjoy a rich learning experience in carefully planned and maintained buildings with the latest technology.
- 6.2 The School has developed a master plan for the future development of the Site and has in recent years investigated the potential to use geothermal heating for the heating of new buildings on the Site.
- 6.3 As the Department would be aware, geothermal heating is available from power extracted from heat stored in the earth. The proposed location of the tunnel under the School's main building complex is likely to restrict the School's ability to provide geothermal heating to its buildings in the future. This would have an adverse financial impact on the School and ultimately, the parents of students attending the School.
- 6.4 The School requests that the location of the tunnel under the Site be altered in a minor way such that the tunnel is located either:
- (a) approximately 100 metres to the north of the tunnel's current proposed location on the Site, under Pennant Hills Road; or
  - (b) approximately 100 metres to the south of the tunnel's current proposed location, under the Sister Veronica Reid Oval in the southern part of the Site.



- 6.5 In addition to the potential future geothermal heating benefits for the School, the relocation of the tunnel 100 metres to the north or south could reduce the potential for property damage adverse to the School's buildings.
- 6.6 Finally, so that there is no confusion, even if a decision is made to relocate the tunnel further south under the Oval, the School still seeks the imposition of conditions of approval requiring the Proponent to carry out existing condition surveys of all of the School's buildings before the commencement of and after completion of construction of the tunnel. We think that this requirement is not excessive having regard to the use of the Site as a school and the Site's listing as a heritage item under HLEP 2013.

The School thanks you for the opportunity to make a submission in relation to the Project. Please contact me if you require any further information or clarification in relation to the School's submission.

Yours faithfully



**Barbara Watkins**  
**Principal**  
**Loreto Normanhurst Limited**

**Tel: 02 9487 3488**



## ANNEXURE

### Requested Conditions of approval

1. Before the commencement of construction (including demolition and excavation works), the Proponent is to undertake an independent inspection of each building on the School's site in accordance with AS 4349.1 'Inspection of Buildings' or any other applicable Australian Standard.
2. The inspection is to be undertaken by appropriately qualified and experienced geotechnical and construction engineering experts.
3. The Proponent is to advise the School of the scope and methodology for the inspection, and of the process for making a property damage claim.
4. A copy of the property inspection report is to be provided by the Proponent to the School.
5. The Proponent is to determine appropriate property vibration criteria, and management and protection measures to ensure that property damage (including cosmetic damage) to buildings on the School's site be avoided.
6. The Proponent is to consult with the School to ensure that noise and vibration generating construction works in the vicinity of the School are not proposed to be carried out during sensitive periods (included but not limited to examination periods), unless other appropriate arrangements are made with the School.
7. The Proponent should be required to monitor noise and vibration during the construction of the tunnel and if monitoring indicates exceedance of the criteria, then the work should be required to stop immediately and should not recommence until a revised work method has been established that will ensure compliance with the noise and vibration criteria.
8. The Proponent should be required to establish an Independent Property Impact Assessment Panel before commencing the excavation, demolition and construction works. The Panel's members should be independent geotechnical and engineering experts not involved in the Project. The Panel would independently verify the property inspection reports undertaken, the resolution of property damage disputes and the establishment of ongoing monitoring requirements. If there is a dispute between the School and the Proponent about any potential or actual property damage either party could refer the unresolved dispute to the Panel for resolution. The Proponent would be responsible for all costs incurred in establishing and implementing the Panel.
9. Any damage caused to any of the School's buildings or grounds as a result of the Project is to be rectified by the Proponent or the School compensated, within a reasonable timeframe, with the costs borne by the Proponent. A condition of this type should not limit any claims that the School may have against the Proponent.
10. The Construction Environmental Management Plan for the Project should include a Construction Noise and Vibration Management Plan setting out how construction noise and vibration impacts will be minimised and managed, including but not be limited to:
  - (a) identifying construction noise and vibration goals applicable to the Project and prescribed by the approval;
  - (b) details of the proposed construction activities and an indicative schedule for construction;
  - (c) identification of feasible and reasonable procedures and mitigation measures to ensure relevant vibration and blasting criteria are achieved;



## ANNEXURE

- (d) details of tunnelling activities including impacts, management and mitigation measures;
- (e) if blasting is required, an assessment of the potential noise and vibration impacts, and a strategy to minimise and manage those impacts, including preparation of an appropriate community information program;
- (f) a description of how the effectiveness of mitigation and management measures would be monitored during the proposed works, indicating how often the monitoring would be conducted, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any exceedance is detected, how any noncompliance would be rectified; and
- (g) mechanisms for monitoring, reviewing and amending the Construction Noise and Vibration Plan.

11. Construction hours, including activities associated with tunnelling to be limited to:

- (a) Monday to Friday 7am to 6pm;
- (b) Saturday 8 am to 1 pm; and
- (c) no works permissible on Sundays or public holidays.

No permission should be provided for 24 hour construction works, including tunnelling.

12. The Proponent should be required to consult with the School in relation to the preparation of the Construction Traffic Management Plan so as to minimise noise from heavy construction traffic at night time along Pennant Hills Road causing disturbance to the School's boarders.