

Environmental Health Referral Response - industrial use

Application Number:	DA2022/1649
Date:	19/10/2022
To:	Adam Susko
Land to be developed (Address):	Lot 12 DP 1119562 , 10 Namona Street NORTH NARRABEEN NSW 2101 Lot 3 DP 1018621 , 6 Namona Street NORTH NARRABEEN NSW 2101

Reasons for referral

This application seeks consent for large/and or industrial development.

And as such, Council's Environmental Investigations officers are required to consider the likely impacts.

Officer comments

General Comments

As the development involves both the high school and public school this proposal is referred to as the Narrabeen Education Precinct.

As a significant development proposal the following detail is provided for the reader of this referral.

The works the subject of the Development Application (DA) at NNPS comprise:

- Construction of a new two (2) storey building containing administration facilities, multi-purpose hall and out-of-school-hours care (OSHC) facility on the ground floor with staff facilities and amenities on the first floor; and
- New Covered Outdoor Learning Area (COLA).

The works the subject of the DA at NSHS comprise:

- Alterations and additions to Building A (Gymnasium) to create new stage for gymnasium and new two (2) storey addition comprising canteen, boys and girls changing rooms and staff room on the ground floor; and movement studio and two (2) new General Learning Spaces (GLS) on the first floor.

The following noise sensitive receivers surround the existing the project boundaries:

- Residential receivers
 - o Residential dwellings to the north east of the site at the shared border, along Oak Street (considered reasonably most-affected for both school sites)
 - o Residential dwellings to the east of the site, beyond Pittwater Rd
 - o Residential dwellings to the west of the project site, along Garden St
 - o Residential dwellings to the south west of the site
- Commercial Receivers
 - o Businesses to the north of the site at Warriewood Square, across Jacksons Road
 - o Pittwater Sports centre, top the south of the site at 1525 Pittwater Road
 - o Northern Beaches Indoor Sports Centre to the west of the site, at Jacksons Rd.
 - o Ted Blackwood Youth and Community Centre to the North of the site, across Jacksons Road
 - o Businesses to the east of the site, across Pittwater road
- Industrial receivers

- o To the west of the site, along Garden St
- Active Recreation
- o Warriewood Valley Sports Ground, to the north west of the site
- Passive Recreation
- o Progress Park to the west of the site

The main noise issue is construction noise with operational noise effectively managed by the Schools staff.

An extensive Noise and Vibration Impact Assessment for the works and the completed operating development has been submitted.

No increase in student numbers is proposed.

Discussion and recommendations by the Acoustic Assessment are :

A noise and vibration assessment report has been produced to determine the potential noise impacts and considerations for proposed refurbishment and upgrades at Narrabeen Education Precinct.

The existing noise environment has been established based on long-term and short-term monitoring data.

Appropriate criteria for both noise and vibration have been established based on relevant guidelines and standards. A summary of the outcomes and recommendations of this noise and vibration assessment are as follows:

Construction Noise

- Proposed construction hours are as follows:

- o Monday to Friday - 7:00am to 6:00pm

- o Saturday - 8:00am to 1:00pm

- o Sunday and Public Holidays – No works.

- Based on the results from the high-level assessment based on the indicative works, we make the following comments:

- o Construction works noise impacts will be greatest at existing classroom

receivers adjacent to the construction sites. Noise from various plant and equipment operating individually are generally predicted to be above the

NMLs due to the proximity to the nearest affected receivers but generally within the “Highly Noise Affected” noise levels. The worst-case noise impacts are for excavators with hammers with noise levels predicted to be above the NMLs by up to 32 dB.

- Where NMLs are exceeded, mitigation measures to be considered and incorporated where reasonable and feasible would include:

- o Schedule noisy activities to less sensitive times of the day for each nominated receiver (i.e. daytime hours).

- o Hoarding that may already be included as part of the site works can reduce noise levels by 5 to 10 dB.

- o Including Respite Periods where activities are found to exceed the 75 dB(A)

Highly Affected Noise Level at receivers, such as 3 hours on and 1 hour off.

- o The predictions for noise levels above NMLs is not unusual given the heavy plant and equipment that must be used, such as excavators and hammers, and the proximity to on campus sensitive receivers (some of which are within 20m).

- o Implementation of all reasonable and feasible mitigation measures for all works will ensure that any adverse noise impacts to surrounding residential, commercial and recreational receivers are minimised when NMLs cannot be met due to safety or space constraints.

Construction Vibration

- Based on the scope of works and typical equipment required, there is potential for human perception vibration impacts on nearby NNPS and NSHS buildings and

Narrabeen Education Precinct there is requirement to review works processes during detailed works planning to ensure that minor cosmetic impacts to structures are avoided. The significance of these

impacts will need to be determined as part of the CEMP prepared by the Contractor.

- The Contractor determine whether the existence of significant vibration levels justifies a more detailed investigation.

Construction Environmental Management Plan

- A CEMP shall be prepared further to this assessment by the engaged Contractor.

Operational Noise - Mechanical Plant

Mechanical plant and equipment associated with the operation of the development is to be controlled to ensure external noise emissions are not intrusive and do not impact on the amenity of neighbouring receivers in accordance with the relevant criteria established in Section 0 of this report.

Recommendations are provided for noise controls to key plant. During the detailed design stage, the acoustic consultant shall provide detailed design advice to the architect and mechanical engineer to ensure that noise emissions from mechanical plant are effectively controlled to meet the relevant criteria at the nearest receiver boundaries.

Operational Noise - The Use

Noise emissions have been considered from the following areas:

- Noise emissions from new internal spaces including Administration and Classrooms in the new NNPS building
- Noise emissions from the new hall building for NNPS
- Noise emissions from the Covered Outdoor Learning Area (COLA) to be included as part of the new hall/admin building for NNPS.
- Noise emissions from new internal spaces including movement studio and Classrooms in the new NNPS addition Noise from the above areas are not expected to generate any additional impact above the existing noise emissions from the school and therefore is not expected to have adverse noise impact on noise sensitive receivers surrounding the site.

Operational Noise – Outside Hours

Use of the new NNPS school hall will occur during the daytime, and evening periods (6pm to 10pm). Noise emissions from the hall are expected to comply with the relevant criteria at the nearest residential boundary for the daytime and evening periods, assuming that the internal noise level (with windows/louvres open) does not exceed 85dB LAeq, 15-minute.

Environmental Health supports the proposal subject to conditions.

The proposal is therefore supported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Environmental Investigations Conditions:

CONDITIONS THAT MUST BE ADDRESSED PRIOR TO ANY COMMENCEMENT

Construction Noise Management Plan

A construction Noise Management Plan also referred to as a Construction Environmental Management Plan (CEMP) is to be prepared in conjunction with stake holders and comply with recommendations contained within Noise and Vibration Impact Assessment by Acoustic Studio 14 September 2022. A copy of the completed plan is to be sent to Council for its records.

Reason: To minimise construction noise impacts to students, residential and business receivers

CONDITIONS TO BE COMPLIED WITH DURING DEMOLITION AND BUILDING WORK

Construction Noise Management Plan

The construction Noise Management Plan also referred to as a Construction Environmental Management Plan (CEMP) is to be adhered to at all times during construction works. A copy of the plan is to be maintained on site during all works.

Reason: To minimise construction noise impacts to students, residential and business receivers

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Prior to Occupation Certificate - Noise

Prior to an OC being issued a suitably qualified person shall certify that noise emissions from mechanical plant and equipment are effectively controlled to meet the relevant criteria at the nearest receiver boundaries as stated in the Noise and Vibration Impact Assessment by Acoustic Studio 14 September 2022.

Reason: To maintain the amenity for residential receivers.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

Education Precinct Operational Noise

The ongoing use of the Education Precinct shall be in compliance with the recommendations of the Acoustic Assessment by Acoustic Studio 14 September 2022.

Reason: To minimise noise to neighbouring residential and business receivers