



LIPMAN

DESIGNED TO PERFORM • BUILT TO LAST

NOISE AND VIBRATION MANAGEMENT PLAN

**O'CONNELL STREET PUBLIC SCHOOL
PARRAMATTA**

**REVISION 1
18TH MAY 2017**

1.1 - Introduction

In line with DA condition B23 this Management Plan outlines the proposed strategies that will be applied to the O'Connell Street Primary, Old Kings School redevelopment during the Construction phase to manage noise and vibration. The objective of this plan is to ensure that all works are carried out in a highly controlled and predictable manner that will minimise emissions and reduce the overall impact on the surrounding neighbours in particular the operating Church to the north of the site.

Revision 1 to this plan has been prepared to accommodate a proposed amendment to the development consent, in request for an extension to operating hours of the construction site.

1.2 - Project / Site Description

The new O'Connell Street Public School (OSPS), Old Kings School is located at 24A O'Connell Street, Parramatta. These include the refurbishment to 4 existing buildings, outdoor landscaped areas and the construction of a new building and sports court area. The project consists of 4 Milestones. The project has 4 key phases that will be a concern for noise and vibration which are as follows:

1. Milestone 1 – Demolition works, earthworks and construction of a new carpark and OSD tank – 14 weeks
2. Milestone 2 – Demolition works to internals of existing buildings, and construction of floor slabs (Building A & B) – 25 weeks
3. Milestone 3 – Demolition works to existing buildings, and earthworks, construction of a new sports court and external landscaping works (Block C,D and Sports Court) – 39 weeks
4. Milestone 4 – Excavation works, refurbishment works, and construction of a new building (New Hall, Block G and external works – 29 weeks

Development Consent – Considerations to current Conditions

We have reviewed the Development Consent and surrounding streets and note the distance to the boundaries of adjacent properties for the purposes of recording noise and vibration.

We note that proximity of the noise catchments are:

- NC1 – 2 are separated from OSPS by O'Connell Street
- NC 3-4 are separated by Marist Street,
- Buildings in zone NC5 to the north of the site are directly adjacent
- And NC 6 has been identified given its proximity to the site for public amenity.

The Noise Catchments (NC) are noted on the attached site plans.

Sensitive Receiver and Relevant Noise Catchments

Noise Catchment	Name/Address Receiver	Category	Distance to Site Bdy
NC 1	Parramatta Swimming Pool	Construction site	20 m

NC 2	1 Marist Place	Commercial/Residential	6 m
NC 3	2 to 6 Macquarie Ave	Park/Recreation	19 m
NC 4	353 Church Street	Commercial	25 m
NC 5	24 O'Connell Street	Carpark	10 m
NC 6	Riverside Theatre	Commercial	82 m

Each milestone, detailed above, will be undertaken at different times and locations around the school and therefore different receivers will be impacted at various times throughout the project. The construction methods are typical throughout and therefore the methodology for managing noise and vibration can be dealt with the same across all phases.

For each phase background noise levels will be established prior to commencement and the Noisy Works must be monitored during construction

We note, Noise Catchment areas are separated from the OSPS by O'Connell Street or Marist Street and all areas are commercial spaces. It is expected that construction traffic will cause a rise in this criteria by 2dBA. The only area that is adjacent to site that will be effected is NC2 which is a commercial office space.

NOISY WORKS - The following site activities are generally considered as noisy works that may impact on the adjacent commercial building and will need proper planning and supervision to reduce their impact.

- Excavating into rock (unexpected finds)
- Jackhammering of rock
- Demolition

Where possible the best case is to carry out noisy works Monday-Friday between day-time hours of 7am to 5pm. The Sports Court will have the most continual impact due to the proximity to NC2. The program for the Noisy Works relating to the sports court is a total of 4 weeks so there will not be significant impact on the catchment area. In some cases Out of Hours work may be required to minimise the impact on the Church adjacent to the site, however the Churches main operating hours will be on a weekend when the sites operating hours are at the lowest. The impact on the majority of the receivers will remain the same.

Proposal for extended hours

With the proposal to extend construction working hours to Monday – Friday until 10:00pm, Saturday 7.30am – 5pm and Sundays 8am – 5pm, we have considered not only NC4 may be impacted (The Church) but the Riverside Theatre (NC6) also. We acknowledge the Theatre may have evening and weekend performances. We have considered the requirements of these neighbours and considered strategies (noted below) to be implemented to ensure we minimise effects to them.

1.3 - Operating Times and Working Times

The construction works currently will operate between the hours of 7:00am and 6:00pm Monday to Friday and 7:30am to 3:30pm on Saturdays.

The predicted noise levels for the following during construction and demolition will have the following effects:

Generally all noise generating works will have an expected 70+Dba level.

As per the development consent the following works will be conducted between the hours of 9am - 12pm, 2pm-5pm and 9am to 12pm on Saturdays.

- Rock Breaking/hammering
- Pile Driving (if required)
- Jackhammering of rock
- Demolition

As part of this revision to the plan we are proposing a request that we may extend working hours to;

- Monday to Friday - works to 10:00pm
- Saturday – 7.30am – 5.00pm
- Sunday - 8am – 5pm.

Works during these proposed extended hours will be below 70Dba level.

1.4 - Strategy for Managing Noise and Vibration

The following activities will be followed to ensure that noise and vibration are appropriately managed and controlled so as to reduce the impact on neighbours.

- Review risk associated with construction activities in relation to contract requirements and needs of the Church and Riverside Theatre.
- Document and implement controls to minimise impact of noise through a project risk assessment.
- Monitor effectiveness of controls daily through supervision and take corrective actions where issue are identified as per AS 2436 Guide to noise control on construction, maintenance and demolition sites.
- Carry out work within permitted hours as per the contract requirements. Schedule the above listed noisy works between the hours of 9am - 12pm, 2pm-5pm and 9am to 12pm on Saturdays.
- Works carried out Monday to Friday from 5pm – 10:00pm, Saturday 3.30am – 5.00pm and Sundays 8am – 5pm will be predominantly finishes trades with hand and /or battery powered power tools. These trades are unlikely to generate excessive noise and works kept generally within the building envelope.

- Ensure powered plant and equipment is maintained in good working order preventing undue excess noise from exhaust systems. This plant will not be used Monday to Friday after 5pm, Saturday after 3.30 or Sunday after 12pm.
- Little rock is expected during earthworks and should not be a significant problem. Where rock is encountered alternative strategies to remove it will be reviewed to reduce the noise/vibration output during this activity. Note. Where rock is encountered no works will be completed outside the hours of Monday to Friday 7am – 5pm and 9am to 12pm Saturday.
- Implementing respite periods with low noise / vibration producing construction.
- Switch off equipment when not in use.
- Delivery of materials and plant to be only between the hours of 7am – 6pm Monday to Friday and 7:30am to 3:30pm Saturdays to reduce noise emissions on neighbouring roads.
- Regular communication between the Church, Riverside Theatre and the Contractor to ensure expected noisy works are not disrupting activities
- If noise complaints occur, they will be registered, investigated and responded to in a timely manner to ensure issues are not repeated.

The above measures aim to ensure potential impacts from construction noise and vibration are minimised to acceptable levels.

Further reviews would be undertaken through the construction period, as required, in response to revised methods and equipment, as well as in response to the monitoring and evaluation of actual impacts. This management plan outlines the procedures that would be adopted by Lipman during the detailed construction planning and execution phases.