JHCPB Joint Venture

Report – Condition CoA E94

ONVR Condition of Approval E94 Report

Project:	**Rozelle Interchange and WHT Enabling Works – Design and Construct**		
Design Lot No:	NA	Document No:	RIC-JHC-RPT-00-EN-001-019

Document Approval

Rev	Date	Prepared by	Reviewed by
A	14/08/2020	A.Gotch	C.Scarf K.Lloyd B.Perrin J.Hutchinson
1	22/09/2020	A.Gotch	Issued to AA for endorsement in response to AA review
2	9/11/2020	A..Gotch	C.Scarf
3	18/01/2021	A.Gotch / Moriarty	C.Scarf (response to DPIE comments 26/11/2020 and DPIE meeting 18/01/2021)

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1. Introduction

1.1. Background

Transport for NSW (TfNSW) (previously Roads and Maritime Services) completed an Environmental Impact Statement (EIS) of the M4-M5 Link in 2017 in August 2017. The Environmental Impact Statement (EIS) describes construction and operation of the M4-M5 Link in two stages:

• Stage 1 - the M4-M5 Link Tunnels, as described in the EIS, included:

- Construction of the mainline tunnels between the M4 East Motorway at Haberfield and the New M5 Motorway at St Peters, stub tunnels to the Rozelle interchange (at the Inner West subsurface interchange) and ancillary infrastructure at the Darley Road motorway operations complex (MOC1) and Campbell Road motorway operations complex (MOC5)
- These works have commenced in 2018 with the mainline tunnel scheduled to open to traffic in 2022.

• Stage 2 - the M4-M5 Link Rozelle Interchange (the Project), as described in the EIS, included:

- Construction of the Rozelle interchange and Iron Cove Link including connection to the stub tunnels at the Inner West subsurface interchange, connection to the surface road network at Lilyfield and Rozelle, and construction of tunnels, ramps and associated infrastructure as part of the Rozelle interchange to provide connections to the proposed future Western Harbour Tunnel and Beaches Link project. Ancillary infrastructure will be provided at Rozelle West motorway operations complex (MOC2), Rozelle East motorway operations complex (MOC3) and Iron Cove Link motorway operations complex (MOC4)
- Stage 2 works commenced in 2019 with these components of the Project scheduled to open to traffic in 2023.

The EIS identified a range of environmental, social and planning issues associated with the construction and operation of the M4-M5 Link and proposed measures to mitigate and manage those potential impacts. The EIS was publicly exhibited from 18 August to 16 October 2017. Following public exhibition, submissions from stakeholders were received and addressed by Roads and Maritime in the Submissions and Preferred Infrastructure Report (SPIR), which was lodged with the Department of Planning, Industry and Environment (DPIE) (formerly the Department of Planning and Environment) in January 2018. The Minister for Planning approved the M4-M5 Link under Section 5.19 of the Environmental Planning and Assessment Act 1979 (EP&A Act) on 17 April 2018, subject to the Minister's Conditions of Approval (CoA).

Subsequently, a Project Modification report (AECOM 2018) was prepared and placed on public exhibition for 14 days from 12 September 2018. The Project Modification was approved by the Minister for Planning on 25 February 2019 and the Minister's conditions of approval were also modified. Three additional Project Modification reports have been submitted to DPIE for approval. Modification 2 is subject to approval and Modification 3 and 4 have been approved.

For the purposes of this report, the Approval and subsequent approved Modifications is referred to as the Division 5.2 Approval.

1.2. Project Description

The WestConnex M4-M5 Link project will be constructed in two stages:

1. Stage 1 – M4-M5 Link Mainline tunnels
2. Stage 2 – Rozelle Interchange

Stage 2 of the Project (the Rozelle Interchange) is the subject of this report.

The Project is generally located within the Inner West Local Government Area (LGA) and traverses the suburbs of Ashfield, Haberfield, Leichhardt, Lilyfield, Rozelle, Annandale, Stanmore, Camperdown, Newtown and St Peters. In addition to linking to other WestConnex projects, the M4-M5 Link would provide connections to the proposed future Western Harbour Tunnel and Beaches Link, the Sydney Gateway (via the St Peters interchange) and the F6 Extension (via the New M5).

The Project includes the design and construction of:

- A new interchange at Lilyfield and Rozelle (the Rozelle interchange) that would connect the M4-M5 Link mainline tunnels with:

- City West Link;
- Anzac Bridge;
- The Iron Cove Link (see below); and

- The proposed future Western Harbour Tunnel and Beaches Link.

- The Iron Cove Link, twin tunnels that would connect Victoria Road near the eastern abutment of Iron Cove Bridge and Anzac Bridge, with underground entry and exit ramps that would also provide a tunnel connection to the M4-M5 Link.

- Rozelle surface works, including:

- Realigning The Crescent at Annandale, including a new bridge over Whites Creek and modifications to the intersection with City West Link;
- A new intersection on City West Link around 300 metres west of the realigned position of The Crescent, which would provide a connection to the M4-M5 Link mainline tunnels;
- Reconstructing the intersection of The Crescent and Victoria Road at Rozelle;

- The Iron Cove Link surface works, including:

- Dive structures and tunnel portals between the westbound and eastbound Victoria Road carriageways, to connect Victoria Road east of Iron Cove Bridge with the Iron Cove Link;
- Realignment of Victoria Road and intersection modifications between Springside Street and the eastern abutment of Iron Cove Bridge;
- Tunnel ventilation systems, including ventilation supply and exhaust facilities, ventilation tunnels and two ventilation outlets and facilities at Rozelle Rail Yards and Iron Cove Link western portal;
- Three motorway operations complexes (MOCs): Rozelle West (MOC2), Rozelle East (MOC3) and the Iron Cove Link (MOC4);
- Landscaping and pedestrian and cycle infrastructure, including the provision of new open space within the Rozelle Rail Yards;
- Construction of connections to the proposed future Western Harbour Tunnel and Beaches Link project as part of the Rozelle interchange;
- Utility treatments including protection and/or adjustment of existing utilities, removal of redundant utilities and installation of new utilities, and
- Temporary construction facilities and temporary works to facilitate the construction of the project.

The Project has been split into the following construction work areas:

- Rozelle Rail Yard (RRY)
- Tunnels (Site A, B and C)
- City West Link (CWL)
- Iron Cove Link (ICL)
- Victoria Road East (VRE)

These areas are shown in Figure 2 Construction areas for the Rozelle Interchange Project.

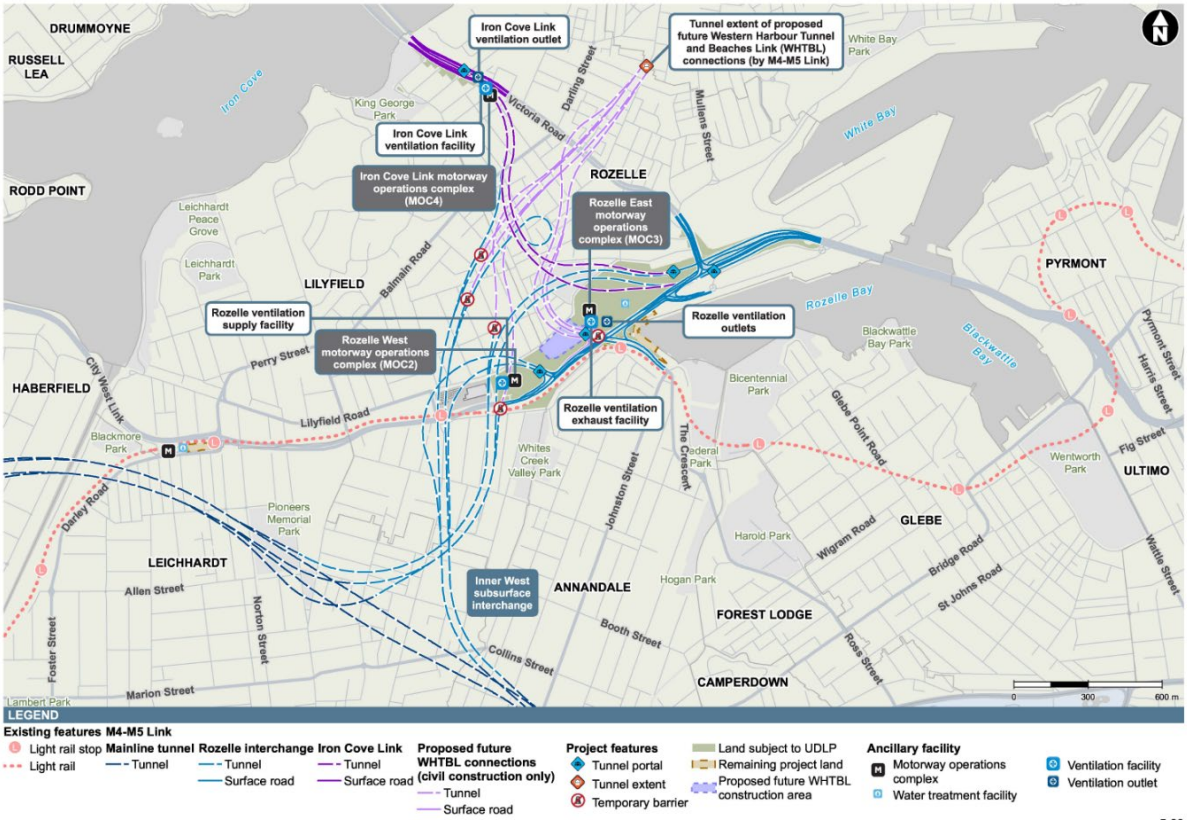

Figure 1 Map of the Project (Note: Stage 2 does not include the Mainline tunnel works) (Source: EIS 2017)

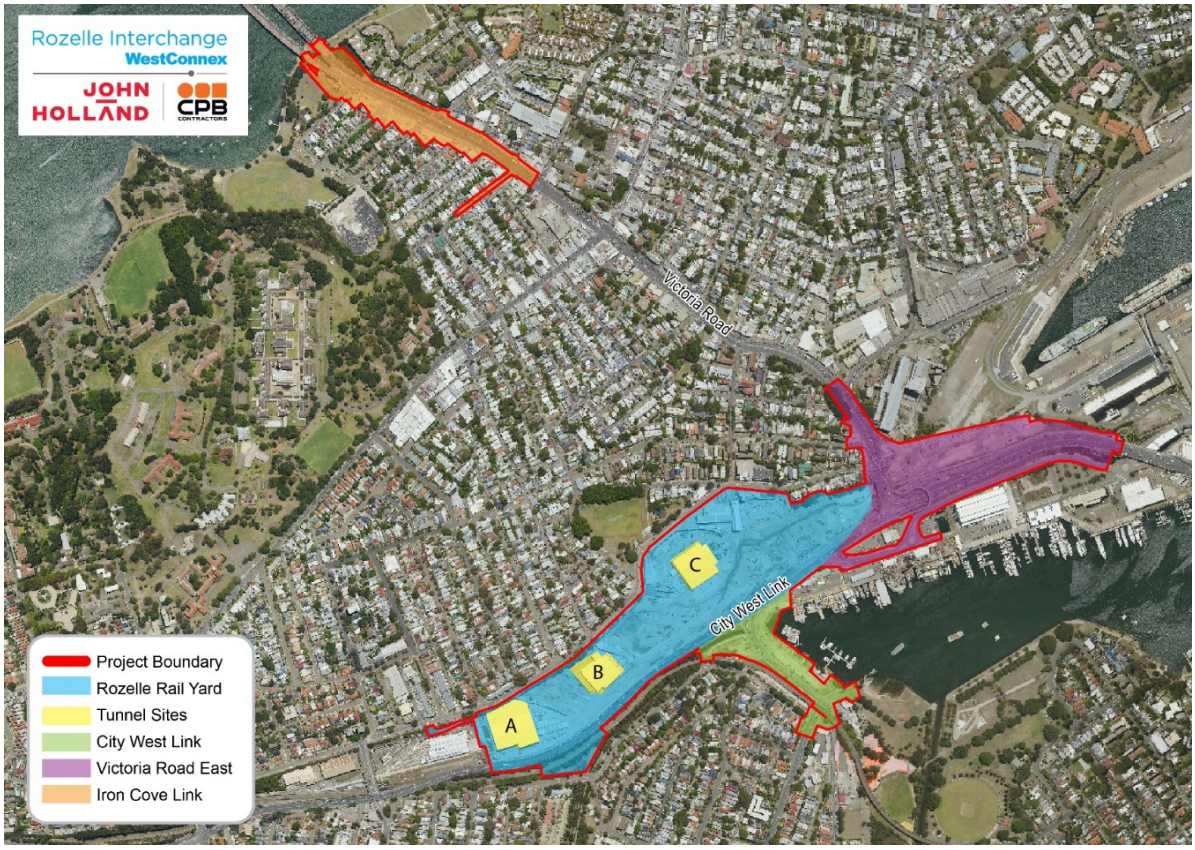

Figure 2 Construction areas for the Rozelle Interchange Project

1.3. Purpose of report

This report has been prepared in accordance with the Ministers Condition of Approval (CoA) E94 of the Division 5.2 Approval.

The Report is required to be submitted to the Secretary for the Secretary's approval and Acoustic Advisor endorsement where operational noise mitigation measures are not proposed early in accordance with CoA E93.

CoA E92 requires an Operational Noise and Vibration Review (ONVR) to confirm noise and vibration control measures that would be implemented for the operation of the CSSI (the 'Project'). The ONVR is required to be submitted to DPIE for approval prior to the implementation of the mitigation measures.

CoA E93 requires noise mitigation measures identified in the ONVR that will not be physically affected by the works, or which have not been implemented in accordance with Conditions E87 and E88 to be implemented within six months of the commencement of construction in the vicinity of the impacted receiver.

CoA E94 of the CSSI 7485 states:

Where implementation of operational noise mitigation measures are not proposed early in accordance with Condition E93, the Proponent must submit to the Secretary a report providing justification as to why, along with details of temporary measures that would be implemented to reduce construction noise impacts, until such time that the operational noise mitigation measures identified in Condition E92 are implemented. The report must be endorsed by the AA and submitted to the Secretary prior to the commencement of construction which would affect the identified sensitive receivers.

In accordance with CoA E94, the below report outlines the justification and temporary measures that would be implemented to reduce construction noise impacts, until such time that the operational noise mitigation measures identified in CoA E92 are implemented.

2. Scope

The EIS identified a number of properties where, noise modelling predicted receivers would have exceedances for operational road traffic noise criteria for the Project and would therefore be considered eligible for consideration of additional noise mitigation. The EIS identified 431 receivers (200 individual buildings) and 48 other sensitive receivers (27 individual buildings) predicted to have exceedances of the operational road traffic noise criteria. The NCAs with the most triggered receivers are located within the Noise Catchment Areas (NCA) of NCA25, NCA33, NCA 35 and NCA36 (catchments at Iron Cove adjacent to Victoria Road). The NCAs with the most triggered other sensitive receivers are NCA25, NCA27, NCA31 and NCA37.

In the consideration of other potential impacts from other major road projects, cumulative operational noise impacts were also evaluated in the EIS. In the cumulative scenario the total number of receivers eligible for consideration of additional noise mitigation was predicted to decrease from 431 to 409 receivers.

The EIS stated during detailed design investigation, if findings for noise barrier analysis during the EIS was confirmed, then at-property treatments for the triggered receivers identified in the EIS would be considered instead of other noise mitigation measures. Maps showing the location of receivers identified for consideration of operational at-property treatment are presented in Annexure Q of Appendix J of the EIS. The receivers eligible for consideration for operational at property treatment identified in the EIS are shown in Figure 3 below.

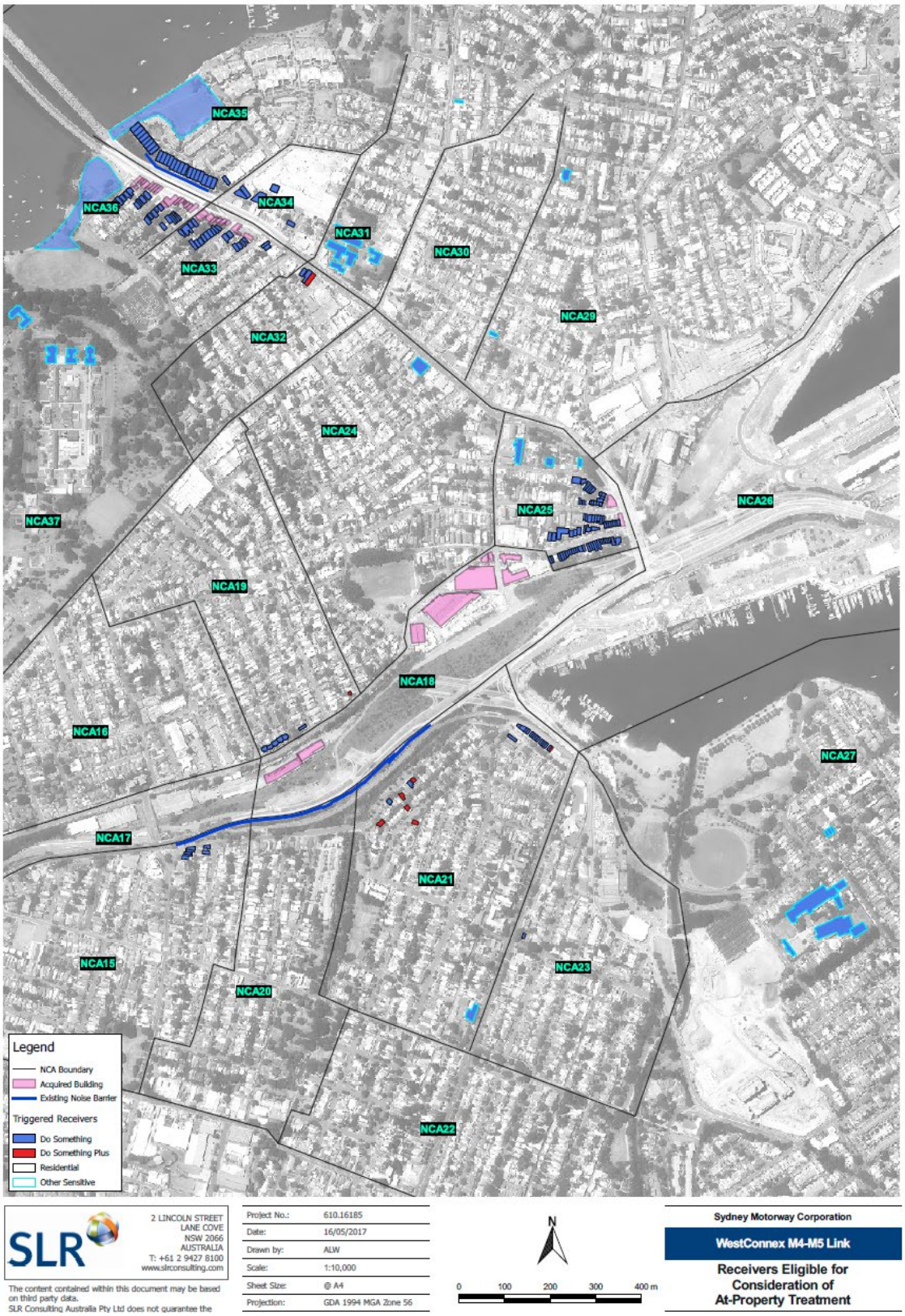

Figure 3 EIS receivers eligible for consideration of at-property treatment (operational) (source Annexure Q located within Appendix J, EIS Volume 2D)

It is important to note that the model used for the EIS was based on a concept design and that the ONVR would be based on final detailed design. The receiver properties identified in the EIS that maybe eligible to receive architectural treatment would be subject to further investigation and evaluation.

Further evaluation for at-property treatment and types is dependent upon finalising the ONVR noise model whose outputs will be the identification of treatment locations and their respective types.

3. CoA E94 requirements

3.1. Justification summary

The ONVR is referenced in the EIS. The EIS states the Proponent is required to undertake an ONVR to confirm the operational noise predictions, impacts on receivers and the suitability of proposed mitigation measures (EIS, 10-139). This review would be based on the final detailed design.

Road geometry substantial detailed design has been completed (July 2020). This is not the final design. Based on the developed road geometry design, modelling of noise levels associated with operational traffic has commenced and mitigation for operational traffic can be identified e.g. pavement specification, noise walls and mounds or at-property treatment. Operational noise modelling is using substantial detailed design instead of final design to accelerate the ONVR. Any changes between substantial detailed design and final design will be checked for ONVR implications and the ONVR updated accordingly.

The ONVR could not be commenced or completed any earlier as the required design input was not available. The required design was commenced as soon as the contract to JHCPB was awarded and could not have been progressed to this stage any sooner.

As referenced in the EIS (10-142), the selected mechanical equipment for each facility, and in particular at Iron Cove, would be reviewed and assessed against the relevant operational noise criteria at the detailed design stage of the project. Specific plant would be selected and designed to achieve compliance with the relevant criteria. The cumulative noise emissions from all fixed facility noise sources would be considered when determining the appropriate mitigation options.

To model operational noise from fixed facilities, a detailed design for the mechanical and electrical aspects of the project is required e.g. jet fans, ventilation fans, water treatment plants and substations. The development of detailed design for fixed facilities will not occur until late 2020, with noise modelling and the development of mitigation measures to follow. Mitigation for fixed facility noise is generally incorporated into the design of the facility building (e.g. wall / roof thickness, door type and seals and attenuators) and generally does not result in a need for at-property treatments at sensitive receivers near the facility.

If JHCPB were to develop an ONVR which addressed mitigation required for noise from both operational road traffic and fixed facilities this document could not be completed until 2021 to meet the requirements of E93.

The EIS states the ONVR would be based on the final detailed design to confirm the operational impacts on receivers. JHCPB considered the implementation of at property treatments prior to finalisation of the ONVR. However, it was determined that developing a process based on incomplete/inaccurate operational noise impacts data would potentially result in a poor experience for residents. The following factors were taken into consideration:

- Reducing unnecessary interruptions/intrusions into residences. In scenarios where NIP installation would occur but further additional operational at property treatment installations would be required.
- Creating uncertainty and a perception of inequity in the community where EIS data potentially could conflict with detailed design ONVR data. This could potentially result in properties being offered treatment that may not be required and properties not receiving treatment when required. The Project's key focus is to prioritise properties highly impacted by construction noise for the installation of at-property treatments.
- Avoiding multiple phases of construction at residents properties, e.g. installing one class of treatment based on a best guess prior to the ONVR being complete and then returning to the property for a second time with a construction team in the event the class of treatment identified in the ONVR is different to the best guess prior to the ONVR.

3.2. Measures to Reduce Construction Noise Impacts

3.2.1. ONVR Strategy

The Project is seeking to spilt the ONVR in two parts to address the implementation timing for operational noise mitigation measures. The design to assess operational road noise has recently progressed enough to commence noise modelling. Whilst the design for fixed facilities will not be substantially complete until late 2020. This presents an opportunity to mitigate construction noise impacts by undertaking the road related operational noise assessment now and then commencing any required at property treatments for construction affected properties that have not been treated under E87, before the operational noise assessment for fixed facilities is undertaken. Mitigation for fixed facility noise is generally incorporated into the design of the facility building (e.g. wall / roof thickness, door type and seals and attenuators) and generally does not result in a need for at-property treatments at sensitive receivers near the facility. The cumulative noise emissions from all fixed facility noise sources would be considered when determining the appropriate mitigation options.

The ONVR is proposed to be spilt into two parts being:

- Part A) operational traffic noise; and
- Part B) noise generated from fixed facilities and permanent structures

Part A would predict noise from operational traffic and identify mitigation measures such as noise walls (noting no noise walls were identified in the EIS) or at-property treatment (refer toFigure 6) . Part B would predict operational noise from fixed facilities and identify at source mitigation measures (refer Figure 4 and Figure 5).

To ensure compliance with CoA E92 and enable the mitigation referenced in CoA E93, the Project proposes to submit Part A of the ONVR to DPIE for approval by the end of 2020/early 2021. Part B would be submitted to DPIE following the detailed mechanical and electrical design being progressed to final detailed design stage.

Table 1 outlines the process to finalise and seek approval for the ONVR.

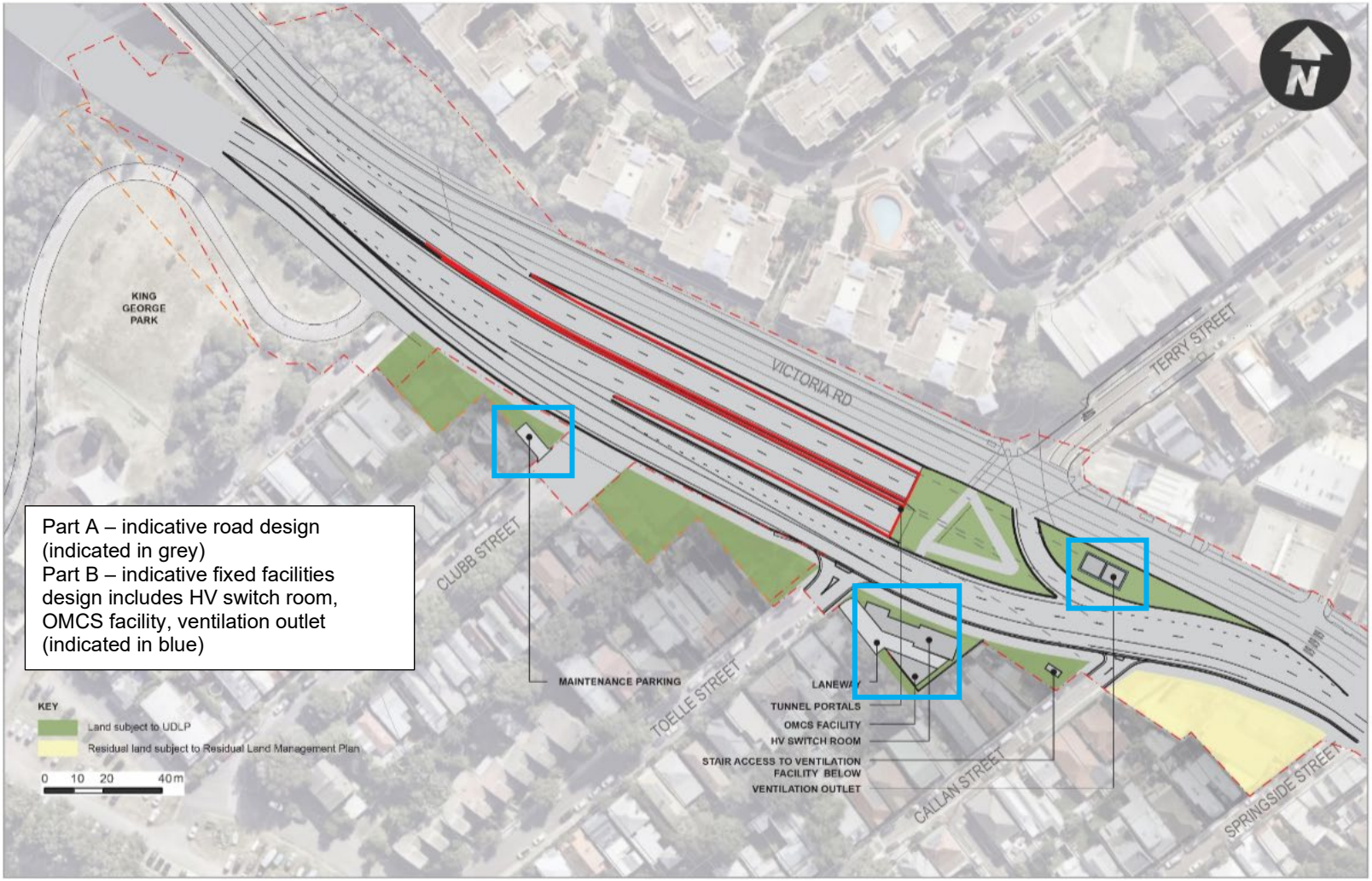

Figure 4 Operational traffic and fixed facilities design, Iron Cove (source Modification 3 report, Figure 5-4, page 24)

Figure 5 Operational traffic and fixed facilities, Rozelle (source, Project GIS)

3.2.2. At source mitigation

The Project is subject to an approved Construction Noise and Vibration Management Plan (NVMP), Construction Noise and Vibration Monitoring Program (CNVMP) and Out of Hours work (OOHW) Protocol. While operational noise and vibration impacts are not within the scope of the NVMP and Monitoring Program, the mitigation measures contained within the plan will continue to be implemented during construction for noise mitigation and management, including;

- Installation of noise walls within and adjacent to the Iron Cove civil site and the main Rozelle Rail Yards civil site. These are identified in the Project CNVIS which are endorsed by the AA and approved by DPIE in the SEMP.
- Strict internal project requirements to cease high impact surface works prior to 12.00am or 2.00 am if the Road Occupancy Licence commences at 10.00 pm or later. This is endorsed by the EPA via our EPL OOHW Trial Reports (Construction Noise Impact Assessment).
- Use of temporary noise attenuating hoarding around high noise generating activities. This involves the use of noise blankets around 'high impact' activities and other activities like non-destructive excavation when safe to do so.
- Change to less noisy methodologies when safety requirements allow. Examples of this include the use of profilers, rock saws or hydraulic pulverisers instead of rock hammers (where practical).
- The offering of alternative accommodation to those 'highly noise affected' (i.e. above 75 dBA) during demolition activities that require extended hammering to be completed safely. This is endorsed by the EPA via our EPL OOHW Trial Reports (Construction Noise Impact Assessment).
- An increased regime of attended noise monitoring for verification and compliance purposes. JHCPB commits to monitoring the first two nights of every new activity on a monthly basis.
- The validation of Sound Power Levels of plant and equipment being used to increase the accuracy of our noise models.
- The use of 3D noise modelling Gatewave, to ensure a high level of accuracy during modelling.
- Limiting the use of multiple pieces of equipment operating concurrently e.g. using a single excavator with hammer instead of multiple to remove the priers and abutments during the removal of the Beatrice Bush Bridge.
- Project wide ban on tonal reversing alarms.
- Programming of works to ensure high impact activities are occurring within the shortest duration as possible. Coordination of this is undertaken at a project level with a weekly coordination review and OOHW program update.
- Toolbox talks on OOHW requirements to ensure site teams adhere to the project requirements.
- Turning off idling plant and equipment. This is monitored via inspection by supervisors and the Environment team.
- Using of quieter models of plant and equipment. The Project often use the JC Excavation 'quiet vac' instead of the regular louder vacuum trucks used during standard construction hours.
- Altering the design or staging of works to remove the requirement to undertake night works. This has been successfully implemented in the staging and design of the Victoria Road East project site to greatly reduce the number of night shifts required (from 15 nights shifts to 2). Another example is through the preparation and approval of Modification 5 for use of Glebe Island for storage and laydown equipment. This required additional program timing and cost to secure the approval. However, the Project recognised the benefit this approval provide to reduce the number of night shifts and noise associated with rigging of equipment required for The Crescent civil site.

- Use of under boring instead of open trenching mythologies for utilities. This was implemented within Victoria Road and the Western distributor. Under boring also permits work to be undertaken during standard hours.
- Removal of bridges (i.e. Beatrice Bush Bridge and Victoria Road Bridge) using crane lifts instead of mechanical demolition (i.e. rock hammers).
- Inspections by the projects independent Acoustics Advisor to ensure our controls are being managed appropriately.

In addition to the NVMP, CNVMP and OOHW Protocol, the Project has considered additional mitigation measures to get the best noise outcome, even where the works are already compliant with the noise targets. Such examples include;

- The design and construction of an air-conditioned acoustic enclosure to house water treatment plant pumps to move them from being compliant with the noise goals to being inaudible
- Installing additional barriers around compressors that are compliant with the noise goals to reduce their noise even further below the targets.

3.2.3. At receiver Mitigation

Mitigations beyond those detailed in Section 3.2.2 have been implemented for construction noise, particularly since COVID-19 restrictions were in effect. These mitigations have been based around residents informing the Project of how they are affected and possible mitigations, rather than the Project telling residents what mitigation they will receive e.g. NIP. Often these mitigations will take the form of Bose noise cancelling headphones or electronic gift vouchers to provide residents an opportunity to acquire respite in a form of their choosing. Such mitigations are assessed on a case by case basis, considering the nature of nearby construction noise and the personal factors of the household. Outside of COVID-19 these custom noise treatment measures have been provided in other scenarios (such as for shift workers, HSC students).

3.2.4. Construction Noise Insulation

As required by CoA E89 a Noise Insulation Program (NIP) is being implemented for the Project. A copy of the approved NIP is provided at Annexure A. The NIP includes details of the residential properties identified within Appendix D of the Project Division 5.2 Approval that will be offered at-property treatment for habitable living spaces in accordance with CoA E87.

Table 2 of the NIP details the addresses of residential properties that require at-property treatment and that have not been previously provided noise mitigation under TfNSW (formerly Roads and Maritime) Noise Abatement Program (NAP).

The NIP does not apply to operational at-property treatment, as these will be identified through the development of the ONVR. However as can be seen in Figure 6 there is very significant crossover between properties identified for at property treatment during construction and those residential properties identified for operational at-property treatment consideration as presented in Annexure Q of Appendix J of the EIS.

Of the limited number of residential properties that are identified in the EIS for operational at-property treatment consideration that are not subject to the NIP program;

- There are five potentially construction affected properties near the Iron Cove Link civil worksite, noting these are the furthest from the works.

- There are five potentially construction affected properties in Lilyfield south of the Inner West Light Rail line.
- There are six properties in Lilyfield north of the Rozelle Rail Yards. Two of these properties are being acoustically treated outside the Noise Insultation Program, along with nine other neighbouring properties that have been assessed as affected by long term construction noise. The remaining four properties have been assessed as not noise affected beyond the relevant noise management levels.
- There are twenty-one potentially construction affected properties in Rozelle near the Victoria Road east works.

While there are properties within the NCA's that are not subject to the NIP but are indicated in Annexure Q of the EIS, at-property treatment outlined in the NIP is considered a suitable temporary mitigation measure for the following reasons:

These properties have not been in the NIP for the following reasons:

- Properties identified in Condition D of the Division 5.2 Approval were subject to noise modelling to predict highly impacted properties. As an outcome of the noise modelling the list in Appendix D was refined. Highly impacted noise properties were identified in the NIP. It is anticipated that the ONVR process will have a similar outcome to the NIP process where properties identified for at property treatment may change.
- Of the limited number of residential properties that are identified in the EIS for operational at-property treatment consideration that are not subject to the NIP program these are assessed as not being highly affected from construction. The properties contained within Annexure Q of the EIS were based on a concept design. Properties requiring at property treatment for operational noise mitigation measure may change pending the results of the noise model for the ONVR.
- The NIP includes properties impacted by construction that are also identified for operational at property treatment. Noise mitigation measures are being actively installed during construction as part of the NIP and at property treatment is being installed at a quality suitable for operational mitigation measures. Properties with at treatment installed as part of the NIP will be assessed under the ONVR to determine if measures installed during construction are suitable for operation.

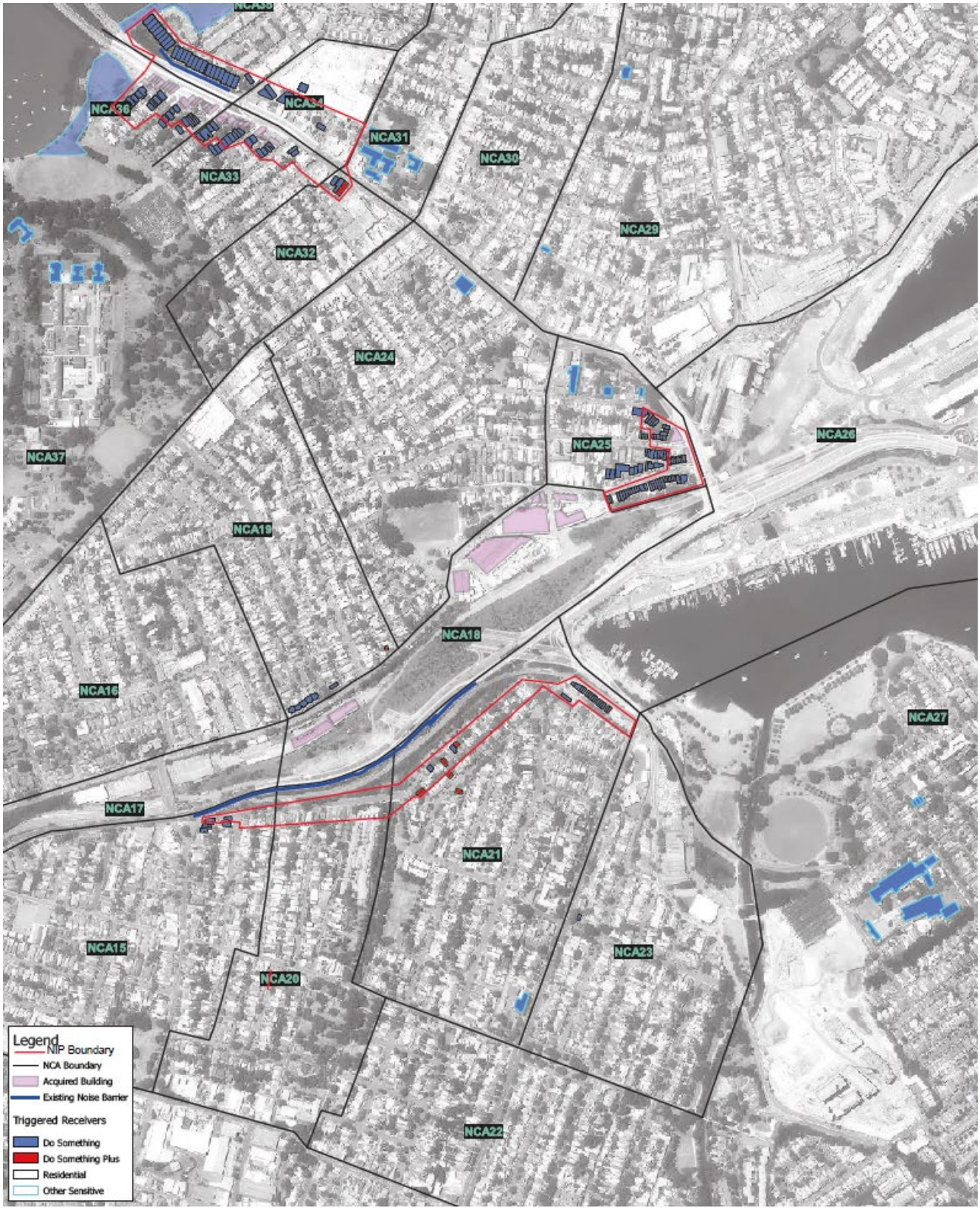

Figure 6 EIS extract Appendix J Annexure Q Properties eligible for at-property treatment consideration. Red boundary overlayed to show properties eligible for Construction Noise Insulation Program.

3.2.5. Construction noise at-property treatment (beyond NIP)

All construction works at ancillary facilities are assessed for noise impacts in construction noise and vibration impact statements. These are reviewed and endorsed by the Acoustic Advisor. Where these assessments indicate construction noise above the noise management level, outside of standard construction hours, that cannot be reasonably or feasibly mitigated then at-property acoustic treatments are offered to the residents.

Condition E94 requires that this report identify temporary measures that would be implemented to reduce construction noise impacts. The CNVIS process identifies all reasonable and feasible measures to reduce construction noise impacts at a site by site and activity by activity level. Where there are residual noise impacts that cannot be mitigated by reasonable and feasible means, at-property treatments are offered to the affected residents (see example in Section 3.2.2 for Lilyfield north of the Rozelle Rail Yards).

4. Conclusion

CoA E94 requires details of temporary measures that would be implemented to reduce construction noise impacts, until such a time that the operational noise mitigation measures would be implemented (as per CoA E92). The installation of operational at property treatments cannot be feasibly and reasonably undertaken prior to or within 6 months of construction commencement and the implications include:

- The dates for the staged process for design and finalisation of the noise model do not align with scheduled construction dates and would result in project delay.
- The EIS is based on a concept design and the properties are subject to the finalised noise model. Installation of measures outlined in the EIS could led to incorrect installation at properties, installation at properties not requiring treatment or missing properties that require treatment.

Section 3.2 details the measures to mitigate construction noise impacts until the ONVR is complete. These include;

- Partitioning the ONVR by commencing the assessment prior to the full design becoming available for assessment, so that an assessment that addresses all factors related to at-property treatment can be complete as early as possible and installations can begin.
- Implementing all reasonable and feasible at source noise mitigations
- Providing at receiver mitigations (excluding property treatment) where warranted by impact and personal factors
- Utilising the Noise Insulation Program treatments for construction noise as these cover most of the EIS identified eligible ONVR properties and provide a level of attenuation greater than or equivalent to most ONVR treatment
- Implementing additional at-property treatments beyond the scope of the Noise Insulation Program where long duration construction noise exceeds the noise goal and all other reasonable and feasible mitigation measures have been implemented.

The process to finalise the model for the ONVR will be implemented in milestones as outlined in Table 1 below.

Table 1 overview summary - noise model and identification for treatment locations – operational traffic

Milestone	Status – complete Y/N	Estimated completion date
Conduct site surveys and inspections where required for input into model	Y	
Finalise detailed design for road alignment	Y	
Input detailed design road alignment into model	Y	
Obtain TfNSW concurrence for model inputs	Y	August 2020
Build & run model results and compare with EIS results	Y	September-November 2020
Based on draft results undertake initial comparison of properties eligible for property treatment under ONVR and those already treated under the NIP.	Y	November 2020
TfNSW review	N	November 2020
Updates to model and ONVR report	N	November 2020
Finalise model in conjunction with TfNSW.	N	December 2020/January 2021

Submit ONVR to AA for endorsement	N	18 December 2021
Submit ONVR to DPIE for approval	N	5 February 2021
In parallel to ONVR submission to DPIE – finalise list of properties already treated during construction for operational treatment. Assess the suitability of the NIP treatment for operational noise mitigation for these properties.	N	January 2021
DPIE approval	N	TBA
Properties still eligible for operational at-property treatment – undertake installation process (e.g. negotiation with property owners, engagement of installation contractors)	N	March 2021

Annexure A Noise Insultation Program – approved Revision 04

WestConnex Rozelle Interchange

JOHN HOLLAND | CPB CONTRACTORS

JHCPB Joint Venture

Noise Insulation Program

RIC-JHC-PRG-00-NV-070-001

Project	Design and Construction of Rozelle Interchange Project
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A	16/05/2019	[redacted]	[redacted]	N/A	Draft for RMS and AA review
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00	12/06/2019	[redacted]	[redacted]	N/A	For submission to DPE
01	12/09/2019	[redacted]	[redacted]	N/A	Internal review
02	2/10/2019	[redacted]	[redacted]	N/A	Update based on DPE comments
03	16/10/2019	[redacted]	[redacted]	N/A	Update based on DPE comments
04	30/10/2019	[redacted]	[redacted]	Approved	Update based on DPE comments

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Glossary / Abbreviations

Abbreviations	Expanded text
AA	Acoustics Advisor
NAC	Noise Assessment Consultant
Approval, the	Conditions of Approval for WestConnex M4-M5 Link SSI 7485
BCA	Building Code of Australia
CEMP	Construction Environmental Management Plan
CoA	Conditions of Approval
CSSI	Critical State Significant Infrastructure
DP	Deposited Plan
DPIE - Planning	NSW Department of Planning, Industry and Environment – Planning
EIS, the	WestConnex M4-M5 Link Environmental Impact Statement
JHCPB	John Holland CPB Contractors Joint Venture
NAP	Noise Abatement Program
NML	Noise Management Level
Program, the	Noise Insulation Program (this document)
Project, the	Design and Construction of Rozelle Interchange Project
Roads and Maritime	Roads and Maritime Services
SP	Strata Plan
SPIR	M4-M5 Link Submissions and Preferred Infrastructure Report
SSI	State Significant Infrastructure

1. Purpose

This Noise Insulation Program is a requirement of Condition E89 of the Conditions of Approval (CoA) for WestConnex M4-M5 Link SSI-7485 (the Approval). The purpose of this Program is to describe the scope for the implementation of construction at-property treatment by John Holland CPB Joint Venture (JHCPB), and the process proposed to implement this treatment at residential receivers during delivery of the Design and Construction of the Rozelle Interchange Project (the Project) in accordance with CoA E87, E89 and E90.

The Program does not apply to operational at-property treatment which will be identified through the development of the Operational Noise and Vibration Review (a requirement of CoA E92).

The Noise Insulation Program (the Program) aims to reduce construction fatigue and improve amenity for residential receivers identified in Appendix D of the Approval, excluding properties which have already been provided treatment via the Roads and Maritime Services (Roads and Maritime) Noise Abatement Program (NAP), through the installation of at-property treatment.

Pending property owner acceptance and provision of access, the Noise Insulation Program will be applied in accordance with CoA E90, which requires treatment be implemented within 6 months following construction that would affect the receiver. The Program will be implemented within 3 months for high priority receivers. Refer to Section 3 for the identification of eligible receivers including high priority receivers, and Section 5.3 which identifies the process by which the Program will be implemented.

2. Environmental requirements

2.1. Minister's Conditions of Approval

The CoA relevant to this Program are listed in Table 1 below. A cross reference is also included to indicate where the condition is addressed in this Program.

Table 1 Minister's Conditions of Approval

CoA	Condition Requirements	Document Reference
E87	For out-of-hours work undertaken in accordance with Condition E75, at-receiver noise mitigation in the form of at-property treatment must be offered to the landowner for habitable living spaces, or other mitigation or management measures as agreed by the occupier, to properties identified in Appendix D. Mitigation must be offered prior to out-of-hours work commencing. This requirement does not apply if the sensitive receiver has been provided with noise mitigation under the RMS Noise Abatement Program or the State Environment Planning Policy (Infrastructure) 2007 (clause 102(3)). The adequacy of at-property treatments will be reviewed where previous treatments have been installed as part of other SSI or CSSI projects. Note: This condition does not preclude the application of other noise and vibration mitigation and management measures.	Section 3
E89	A Noise Insulation Program must be prepared and implemented for the duration of the CSSI works for receivers at/to which the requirements of Conditions E87 and E88 apply. The Program must be incorporated into the Construction Noise and Vibration Management Sub-plan. The Noise Insulation Program must detail the following matters: (a) receivers eligible for the scheme; (b) the scope of the insulation package; (c) responsibility for the noise insulation works; (d) procedure and the terms of the noise insulation works; (e) Program monitoring; and (f) Program review and amendment. The Noise Insulation Program must be endorsed by the AA.	This Program (a) Section 3.1 Table 2 (b) Section 3 (c) Section 6 (d) Section 5 (e) Section 4 (f) Section 8
E90	Receivers which are eligible for receiving treatment under the Noise Insulation Program required under Condition E89 must have treatment implemented within six (6) months following the commencement of construction which would affect the receiver. The implementation of the Noise Insulation Program must be prioritised based on the degree and duration of exceedance with high priority exceedances undertaken within three (3) months of the commencement of construction. Receivers which are eligible for receiving treatment under the Noise Insulation Program required under Condition E89 must have treatment implemented within six (6) months following the commencement of construction which would affect the receiver. The implementation of the Noise Insulation Program must be prioritised based on the degree and duration of exceedance with high priority exceedances undertaken within three (3) months of the commencement of construction.	Section 3

3. Scope of the Noise Insulation Program

3.1. Properties eligible for treatment

Appendix D of the Approval identifies the residential properties that will be offered at-property treatment of habitable living spaces by JHCPB during the delivery of the Project, in accordance with CoA E87, or other mitigation or management measures as agreed by the occupier and JHCPB (refer to Figure 1).

Table 2 details the addresses of residential properties identified to be within the “Mitigation Zone” in Appendix D of the Approval. No residential properties within those identified in Appendix D of the Approval have previously been provided with noise mitigation under the Roads and Maritime NAP. Therefore, JHCPB are required to meet the requirements of CoA E87 for all properties in Appendix D of the Approval.

The implementation of treatment will occur within six months following the commencement of out of hours construction which would affect the receiver, noting that this implementation may be staged according to the start date of construction works in differing areas.

The implementation of the Program for high priority receivers is outlined in Section 3.4 and Section 5.3. If no response is received within the timeframes specified, it will be assumed that the property owner does not wish to accept the treatment, and Project works will progress as programmed. The offer will remain open for the duration of out of hours works that may affect the receiver, and the prioritisation of the implementation of the treatment will apply from the date of acceptance.

Receivers are considered “affected” when out of hours construction noise levels greater than the ‘noise affected’ noise management level (NML) (as defined in the Interim Construction Noise Guidelines) occur as a result of the Project’s out of hours construction activities. High priority receivers as required by CoA E90 are identified in Section 3.4 and Figures 2, 3 and 4.

All timeframes are dependent upon limitations noted in Section 7, in particular the landowner’s timely acceptance of the offer for treatment and reasonable access being provided in order for JHCPB to implement the treatments within the required timeframes.

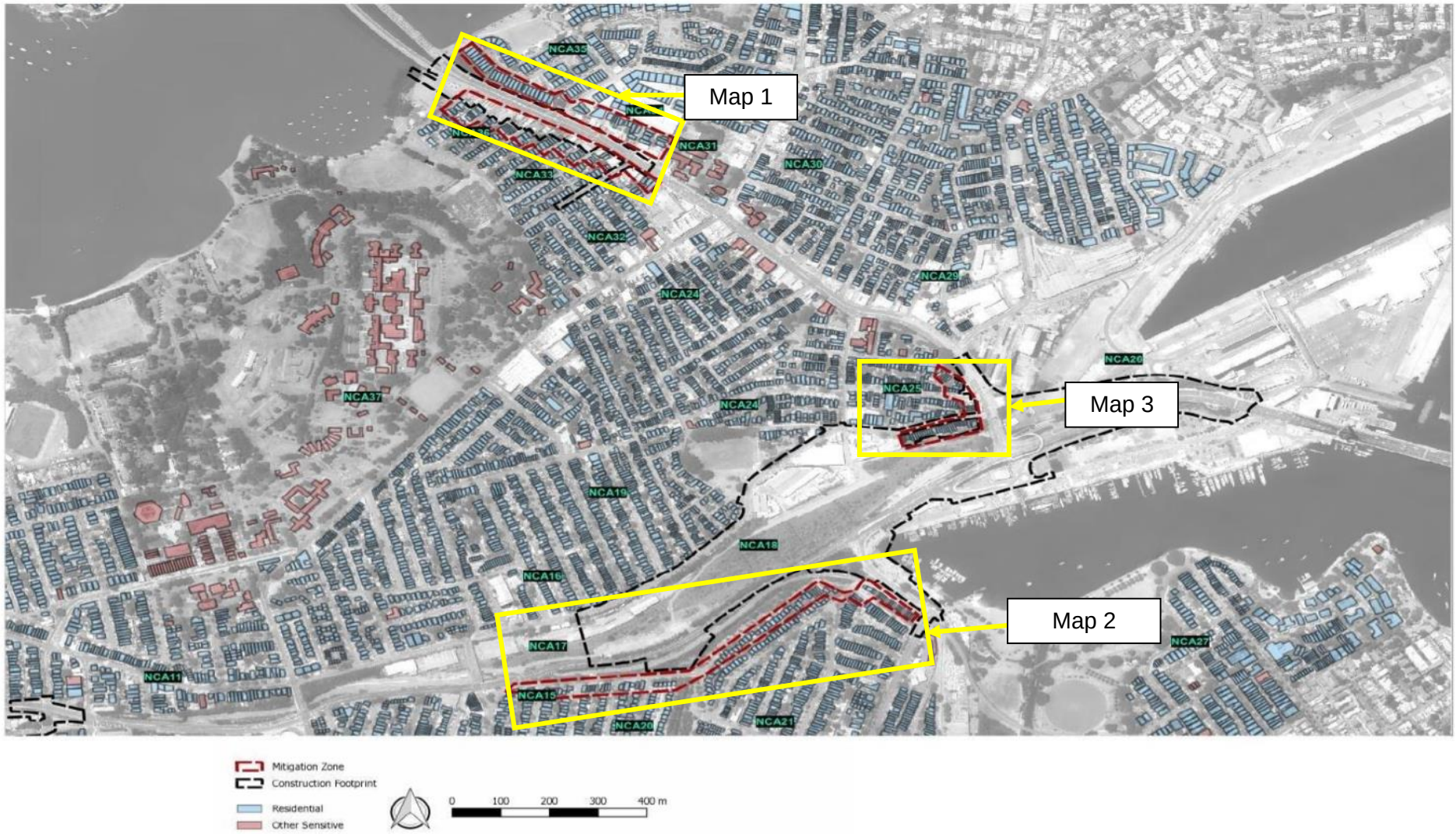

Figure 1 Appendix D, Out of Hours Mitigation, EIS

Figure 2 Map 1 of properties within the mitigation zone (red boundary) identified in Appendix D of the CoA.

The green boundary identifies properties scheduled for demolition. The blue shaded areas are properties identified as high priority. The orange shaded areas show the locations (indicative) of out of hours works scheduled to occur within the first 6 months of construction commencing.

Figure 3 Map 2 of properties within the mitigation zone (red boundary) identified in Appendix D of the CoA.

The blue shaded areas are properties identified as high priority. The orange shaded areas show the locations (indicative) of out of hours works scheduled to occur within the first 6 months of construction commencing.

Figure 4 Map 3 of properties within the mitigation zone (red boundary) identified in Appendix D of the CoA.

The green boundary identifies properties scheduled for demolition. The blue shaded areas are properties identified as high priority. The orange shaded areas show the locations (indicative) of out of hours works scheduled to occur within the first 6 months of construction commencing.

Table 2 Properties to be offered treatment under CoA E87

Street	Street Number
Map 1 (refer to Figure 2)	
Warayama Place	26, 28, 30, 32 (note: these properties are large multi-storey apartment blocks)
Yara Avenue	6, 8 (note: these properties are large multi-storey apartment blocks)
Terry Street	128, 130, 132, 43 Terry Street (units 111, 203, 204, 303, 304)
Crystal Street	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20
Wellington Street	41, 41A, 43, 45, 45A,
Byrnes Street	4, 6, 8, 10
Clubb Street	1, 3, 4, 5, 6, 7, 8, 9, 11, 15, 19
Toelle Street	2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Callan Street	1, 3, 5, 7, 8, 9, 10, 12
Springside Street	2, 3, 4, 5, 6, 9
Victoria Road	168, 170, 172, 174, 198, 200
Moodie Street	1, 1A
Map 2 (refer to Figure 3)	
Quirk Street	4, 6, 8, 10, 10A
Hornsey Street	3 (note: this property is a large multi-storey apartment block)
Lilyfield Road	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66
Map 3 (refer to Figure 4)	
Johnston Street	300
Pritchard Street	4, 6
Bayview Crescent	31, 33
Railway Parade	10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72
Brenan Street	12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 34, 36, 38, 40, 42, 44, 46, 48, 60
Percival Street	58

3.2. Implementation process

The following process will be implemented by JHCPB to advise property owners of their eligibility under the Program, offer at-property treatment, assess the property, and agree to and install the at-property treatment:

1. JHCPB will appoint a suitably qualified Program Implementation Team. To coordinate the installation of the Program. The team will consist of a Project Manager, support staff, community advisors, acoustic assessors and builders.

2. JHCPB will attempt to confirm property ownership information from registers, e.g. CoreLogic, and from contact with tenants where possible. However, where these mechanisms may not result in clear ownership information, JHCPB will continue to work in good faith.

3. JHCPB will send an Offer Letter to property owners, advising the properties in Appendix D of the Approval and Table 2 of this Program that they are eligible for the installation of at-property treatment under this Program. This Offer Letter will meet the requirements of CoA E87, where at-property treatment must be offered to owners prior to out of hours works commencing.

Detailed consultation and appointments with these properties will commence following this letter, with properties prioritised according to section 3.4 and the staging of construction activities.

4. The Program Implementation Team will make contact with property owners/occupiers and strata managers (for unit blocks) eligible for treatment. Refer to Section 5.3 for details of the engagement process and associated timeframes.

5. Where the property owner accepts the offer of at-property treatment during the engagement process outlined in Section 5.3, a member of the Program Implementation Team will conduct a visual inspection of the property.

6. The visual inspection would be carried out during daytime hours from Monday to Saturday at a time convenient to the property owner. The property owner will need to arrange timely access to the property if it is tenanted.

The inspection will focus on the existing features of the property that are relevant to the implementation of at-property treatment, such as:

- Condition of existing and doors,
- The presence and condition of windows, existing door and window seals,
- The presence of existing fresh air ventilation,
- The identification of a suitable location for the potential installation of mechanical ventilation, and
- The location of rooms and living areas in relation to construction works.

Where previous at-property treatments have been installed, their adequacy to meet the criteria of the Program would be reviewed as part of this inspection.

The inspection would also assess the constructability and feasibility of installing the treatment package, including any safety considerations (e.g. working at heights, contamination, etc).

7. The Program Implementation Team will maintain a Noise Insulation Program inspection register. The register will record:

- Property information including street address, lot and Deposited Plan (DP) / Strata Plan (SP) numbers, Project area,
- Property owner details including name, and if available phone number and email,
- Details of tenant if property is leased,
- Preferred dates, times and methods of contact,
- If the owner has refused the offer of an inspection or the treatment and any reasons given,
- Inspection date (proposed or completed),
- Details of the property inspection findings, including:
    - Condition and description of existing windows/doors/seals,
    - List of identified habitable rooms, and
    - Relevant parameters which may prevent implementation of the treatment package,
- Details of the assessment report discussed with the property owner, and
- Date and Program details for the treatment to be carried out as applicable.

8. Where the Program Implementation Team identifies that all or part of the at-property treatment package cannot be installed at the property due to safety or constructability constraints (such as poor condition or unsuitable existing windows and doors or no suitable location for mechanical ventilation), JHCPB will investigate the provision of other treatment options with the owner.

9. Where property owners accept the offer of at-property treatment within the timeframes identified in Section 5.3, and the property inspection confirms that treatments can be implemented, JHCPB will:

- Prioritise the implementation of the Program for high priority receivers within the first 3 months; and
- Implement the Program for all affected receivers within 6 months.

Where property owners accept the offer of at-property treatment outside of the timeframes identified in section 5.3, and the property inspection confirms that treatments can be implemented, JHCPB will arrange a suitable time with the owner to install the treatment, however this may fall outside of the timeframes listed above.

10. Should property owners not accept at-property treatment, JHCPB will consult with the occupier of the property to determine whether other appropriate mitigation measures may be suitable in accordance with the Construction Noise and Vibration Management Plan.

3.3. At-property treatment

During the property inspection, analysis will be undertaken by a suitably qualified acoustician to determine which façades are considered noise affected by construction noise at each property. At-property treatments will be implemented where it is confirmed during the property inspection that there are 'habitable zones', as defined by the Building Code of Australia (BCA), along noise affected façades, depending on the building layout, and the orientation of each residence.

Acoustic treatments will only be offered for rooms deemed habitable (such as bedrooms and living spaces). Rooms that are not habitable (such as wardrobes, hallways, laundries, bathrooms and kitchens that do not adjoin an open plan living area) are not eligible for acoustic treatment.

Following the property inspection, a short report will be provided to the owner outlining the inspection outcomes, and a plan of affected rooms and the mitigation measures available, including the location of at-property treatment.

At-property treatments for habitable rooms available as part of this Program are presented in Table 3. All properties identified within this Program will be eligible for treatments listed in Table 3 and will be subject to an assessment to identify appropriate treatment as noted in Section 3.2. Only property owners are able to accept or decline an offer of at-property treatment.

Table 3 At-property treatments offered by the Noise Insulation Program

At-property treatments
1. Door seals, wall vent seals and windows seals 2. Acoustic curtains 3. Mechanical ventilation (e.g. 240v Aeropac systems), 4. Provision of secondary glazing system (where a second windowpane is installed within an existing window frame, providing additional noise attenuation).

The installation of mechanical ventilation will only be offered to property owners as an at-property treatment where the installation meets BCA standards.

Where at-property treatment packages cannot be installed at the property, JHCPB will investigate the provision of other treatment options or mitigation measures in accordance with the Noise and Vibration Management Plan.

As outlined in the Roads and Maritime Noise Mitigation Guideline (Roads and Maritime 2015), financial compensation will not be offered in lieu of undertaking at-property treatments.

3.4. High priority exceedances

Condition E90 requires the implementation of the Program be prioritised based on the degree and duration of exceedances with the implementation of the Program for high priority exceedances undertaken within three months of the commencement of out of hours construction. As the properties eligible for the Program were selected based on anticipated out of hours impacts (as

referred to in Condition E87), high priority properties have been selected based on the degree and duration of the exceedances associated with anticipated out of hours activities occurring within the first six months of construction.

Degree of exceedance criteria

The Environmental Impact Statement (EIS) (AECOM 2017) considers residential receivers subject to predicted noise levels of 75 dBA of greater as 'highly noise affected'. This Program utilises this definition to apply the degree of exceedance criteria to the detailed noise modelling that has been undertaken. Where the receiver is classified as 'highly noise affected' in the noise modelling and is within the mitigation zone within Appendix D of the Approval, the property has met the degree of exceedance criteria.

JHCPB recognise that this is a technical approach, and therefore where a receiver has properties on either side that are being treated as high priority, the receiver's property will also be treated as such.

Duration of exceedance criteria

Following a review of the initial out of hours construction program, the Project considers residential receivers to have exceeded the duration criteria where they are anticipated to be subject to more than five out of hours shifts within the first three months of the start of out of hours construction. The location of out of hours works anticipated to occur within the first six months of construction is detailed in Figures 2, 3 and 4.

JHCPB note that when considering this criterion, no properties were exempted from the high priority listing that were identified under the degree of exceedance criterion.

High Priority Receivers

For high priority receivers the implementation of the Program (e.g. inspections, agreement of property treatment) will be undertaken within three months of the commencement of out of hours construction that would affect the receiver. High priority properties are detailed in Figure 2, 3 and 4.

In certain circumstances some receivers may not meet either or both criteria, however JHCPB may elect to also classify them as a high priority property (e.g. vulnerability due to age, or a severe medical condition). JHCPB will treat each receiver on a case by case basis.

Noting the practicalities of engaging with strata and associated complex processes, JHCPB will make all reasonable efforts to engage with strata managed properties classified as high priority as detailed in Section 5.3, noting however that this is subject to the limitations outlined in Section 7.

4. Noise Insulation Program monitoring

JHCPB will monitor and report on the implementation of this Program, with updates provided to the Acoustics Advisor (AA) on a monthly basis.

The update to the AA will include the following information relevant to the implementation of the Program:

Progress of offers:

- Numbers responded to and accepted, and
- Numbers declined and no response.

Progress of inspections and reports:

- Number of inspections carried out and number of residents where access has been denied despite a confirmed booking,
- Property reports completed including agreed and not agreed, and
- A summary of differences between what treatment was offered and what has been accepted by the property owner,

Progress of installation:

- Installation of treatments completed, commenced and to be completed, and
- Safety aspects and other challenges faced which may put the preferred delivery timeframe at risk.

Where JHCPB has received a complaint from property owners who have received at-property treatments via the Noise Insulation Program and are unable to resolve the complaint in accordance with the Project Communication Strategy (including the mediation process involving the Environmental Representative who will consult with the AA as necessary), the AA and a relevant member of the Program Implementation Team (e.g. Project or Site Engineer) will investigate the complaint. The investigation will review the implementation of the at-property treatment and identify opportunities for improvement within the scope of the Program. Where the investigation finds that the at-property treatment products are faulty or the installation is not satisfactory, rectification works will be carried out within six weeks, subject to property access.

5. Communication strategy

5.1. Communication aims

The communication aims of the Program are to:

- Raise awareness of the Project and to provide details about the offer of at-receiver treatment to property owners,
- Determine what mitigation (if any) has been previously offered and provided by other projects,
- Explain the process including terms and conditions, obligations and limitations and inspection procedures, and
- Provide stakeholders with a central point of contact with the JHCPB Project Team.

5.2. Key messages

The key messages of the Noise Insulation Program are:

- All eligible residential properties (refer to Table 2) will be offered at-property treatment,
- At-property treatment is being offered to minimise the impact of construction noise impacts, and to improve the amenity of identified residential receivers, during out of hours activities,
- The property inspection is free, and is carried out by suitably qualified person who is experienced in the installation of at-property noise treatments, and
- At-property treatments will be implemented at no cost to the owner and will be installed as soon as practicable at the identified residential properties.

5.3. Communication and engagement timeframes

A range of communication materials will be used to support stakeholder engagement through the implementation of the Noise Insultation Program. Stakeholders will be given information packs – comprising materials developed by JHCPB and pre-existing Project materials – that will target individual information needs.

All communication materials will be available in printed and electronic formats (translations provided as required), with electronic formats uploaded onto the Project website where appropriate. Table 5 and 6 outlines the series of communication and engagement tools to be used.

All engagement will be documented in accordance with the Communication Strategy.

Table 5 Non-strata engagement process table

Engagement	Activity	Timeframe
Offer Letter	▪ Introduce Project ▪ Advise property owners of their eligibility for treatment under the Noise Insulation Program ▪ This “offer letter” will meet the requirements of CoA E87, where at-property treatment must be offered to owners prior to out of hours works commencing ▪ Details of JHCPB points of contact (1800 660 248)	Prior to out of hours works commencing

Engagement	Activity	Timeframe
First attempt: Detailed Letter of Offer #1	▪ Re-introduce Project ▪ Advise property owners of their eligibility for treatment and the offer of visual inspection by the Program's NAC ▪ Noise Treatment Installation Detailed Letter of Offer #1 provided ▪ Details of JHCPB points of contact (1800 660 248) encouraging a response	Initial contact
Second attempt: Noise Treatment Installation Detailed Letter of Offer #2 and Doorknock #1 (high priority only)	▪ Letter sent via Registered Mail ▪ Doorknock ▪ Reminder of the offer and encourage property owner to make contact ▪ Include advice stating that if the offer is not responded to, the offer will remain open for the duration of out of hours works that affect the receiver, however concurrently the Project construction works will progress as programmed.	Two weeks after Detailed Letter of Offer #1
Third attempt: Installation Detailed Letter of Offer #3 and Doorknock #2 (all properties)	▪ Letter sent via Registered Mail Doorknock ▪ Inform property owners this is the last reminder to accept the offer of noise treatment installation ▪ Details of JHCPB points of contact (1800 660 248) encouraging a response	Two weeks after Detailed Letter of Offer #2 is sent.
Inspection: Phone call	▪ Visual inspection by the Program's NAC of properties who have agreed to at-property treatment installation	Within two weeks of accepting Detailed Letter of Offer.
Treatment Package: Letter Offer	▪ Letter sent via Registered Mail / email ▪ Details of JHCPB points of contact (1800 660 248) encouraging a response ▪ Include advice stating that if the offer is not responded to, the offer will remain open for the duration of out of hours works that affect the receiver, however concurrently the Project construction works will progress as programmed.	As soon as practicable and no later than four weeks after the inspection outcomes have been provided to JHCPB.
Measurement Inspection	▪ Measurement Inspection (measuring walls, doors, and/or windows for sizing of treatment package offer) will be carried out by the Program Implementation Team's builder after acceptance of the treatment has been accepted. This inspection is undertaken to create	Within two weeks of accepting treatment offer package

Engagement	Activity	Timeframe
	efficiency when the treatment installation is undertaken by confirming dimensions and quantities.	
Treatment Installation: Letter and phone call	▪ Scheduled installation of at-property treatments at a time agreed between JHCPB and property owner.	Installation of treatment at a time agreed between JHCPB and property owner.

Where owners do not respond within the above timeframes, where the offer is initially declined or only partially accepted, the offer will remain open for the duration of out of hours works that may affect the receiver. In these instances, a high priority property will have the Program implementation prioritised within three months of the acceptance of the treatment package. All properties that accept the offer outside of the timeframes will have their treatment implemented within six months of acceptance of the offer.

Table 6 Strata engagement process table

Engagement	Activity	Timeframe
Offer Letter	▪ Introduce Project ▪ Advise that a number of units in complex are eligible for treatment under the Noise Insulation Program ▪ This "offer letter" will meet the requirements of CoA E87, where at-property treatment must be offered to owners prior to out of hours works commencing	Prior to out of hours works commencing
First attempt: Letter to strata management for units #1 and Offer of Meeting #1	▪ Re-introduce Project ▪ Advise that a number of units in complex are eligible for treatment and visual inspection by the Program's NAC ▪ Details of JHCPB points of contact (1800 660 248), encouraging a response ▪ Offer a meeting, if required	Initial contact
Second attempt: (if no response to Letter #1) Letter to strata management for units #2 and Offer of Meeting #2	▪ Letter sent via Registered Mail ▪ Reminder of the offer and encourage property owner to make contact ▪ Include advice stating that if the offer is not responded to, the offer will remain open for the duration of out of hours works that affect the receiver, however concurrently the Project construction works will progress as programmed ▪ Offer a meeting, if required	Two weeks after Letter #1 if there is no response
Strata/Body Corporate accept/do not accept visual inspection	▪ JHCPB to be advised of Body Corporate / Strata's decision.	-

Engagement	Activity	Timeframe
Inspection	▪ Visual inspection by the Program's NAC of properties who have agreed to at-property treatment installation	At a time agreed between JHCPB and property owner.
Treatment Package: Letter offer	▪ Letter sent via Registered Mail / email ▪ Include advice stating that if the offer is not responded to, the offer will remain open for the duration of out of hours works that affect the receiver, however concurrently the Project construction works will progress as programmed	As soon as practicable and no later than four weeks after the inspection outcomes have been provided to JHCPB.
Measurement Inspection	▪ Measurement Inspection (measuring walls, doors, and/or windows for sizing of treatment package offer) will be carried out by the Program Implementation Team's builder after acceptance of the treatment has been accepted. This inspection is undertaken to create efficiency when the treatment installation is undertaken by confirming dimensions and quantities.	Within two weeks of accepting treatment offer package
Treatment Installation: Letter and phone call	▪ Scheduled installation of at-property treatments at a time agreed between JHCPB and property owner.	Installation of treatment at a time agreed between JHCPB and property owner.

This is noting that where Strata do not respond within the above timeframes, where the offer is initially declined or only partially accepted, the offer will remain open for the duration of out of hours works that may affect the receiver. In these instances, a high priority property will have the Program implementation prioritised within three months of the acceptance of the treatment package. All properties that accept the offer outside of the timeframes will have their treatment implemented within six months of acceptance of the offer.

Noting the practicalities of engaging with strata and associated complex processes, JHCPB will make all reasonable efforts to implement treatment at strata managed properties, however this is subject to the limitations outlined in Section 7.

5.4. Outstanding Offers

JHCPB will continue to attempt to contact property owners, strata or managing agents who have not responded to offers of treatments under the Program whilst out of hours works occurs on the Project. The Program Implementation Team will maintain a register of eligible receivers and will work closely with the Community Team to ensure that information regarding eligibility would be reiterated to the owner where appropriate.

6. Responsibilities for the noise insulation works

JHCPB is responsible for the project management and installation of the noise insulation works. The JHCPB Program Implementation Team's community advisors will co-ordinate access and liaise with property owners and occupiers. The NAC, who is experienced in the installation of at-property noise treatments and the builder will be involved in the coordination of the installation of the at-property treatment.

JHCPB is responsible for ensuring at-property treatments have been installed in accordance with the BCA and have been completed to an acceptable standard via close-out inspection, undertaken by a relevant member(s) of the Program Implementation Team (e.g. Project or Site Engineer).

7. Insulation Program limitations

CoA E90 requires the implementation of treatments as detailed in Section 3.3 for eligible receivers within six months following the commencement of construction which would affect the receiver and within three months for receivers identified as high priority.

JHCPB will continue to make best endeavours to implement the treatments within these timeframes, however JHCPB cannot control the timeframe in which a property owner, strata corporation, strata managers or agent acting on behalf of an eligible property owner responds to offers, agree to offers and provides access to properties, as per the steps detailed in Section 5.3 and Annexure A.

JHCPB will document and track the progress of all installations and will record any delays in the process caused by eligible property owners or the parties detailed above. If eligible receivers or their agents detailed above are unduly delaying the process, then the timeframe within E90 cannot be reasonably met by JHCPB.

Regardless JHCPB will ensure that it or its installation sub-contractor promptly progresses the treatment process detailed in Section 5.3. The AA will also provide progress updates to DPIE-Planning upon request.

Implementation of the Program is dependent on the following limitations:

- Safety of JHCPB personnel is paramount, as such where at-property treatments cannot be installed in a safe manner, the at-treatment offer will be reviewed by JHCPB;
- JHCPB is not responsible for any treatments installed outside of the Program (e.g. NAP); and
- JHCPB is not responsible for electricity costs required to run ventilation systems.

8. Program review and amendment

This Program forms part of the JHCPB Environmental Management System, and as such is subject to the management review process as described in Section 3.12 of the Construction Environmental Management Plan (CEMP). In addition, JHCPB is responsible for updating this Program to reflect lessons learnt and changes required as identified during Program delivery.

Revisions of the Noise Insulation Program will be consulted with the AA and approved by DPE.

Annexure A Noise Insulation Program engagement process

At-property Noise Attenuation