



Transport  
for NSW

# M7M12 Integration Project – consistency assessment - crushing and screening at AF9 (February 2024) and Addendum (February 2025)

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M12/M7

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**FROM:** [REDACTED] Area Manager, M7-M12 Integration project

[REDACTED], Environmental Approvals, M7-M12 Integration project

**DATE:** 08/02/2024

**SUBJECT:** Consistency assessment for proposed change to M7 Widening (Modification 6) and M12 Motorway (M12 East package) being delivered as the M7M12 Integration Project.

Revision	Date	Description
Rev A	12/01/2024	Initial review
Rev B	26/01/2024	Updated in response to comments
Rev C	08/02/2024	Updated in response to comments
Rev D	15/02/2024	Final issued for TfNSW approval. Final approved 23/02/2024
Rev E	25/02/2025	Addendum - Updated to include out of hours works and extend duration of activity

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# 1. Introduction

## 1.1 Background

### M7 Widening

The Western Sydney Orbital was approved under Division 4 (as it applied then), Part 5 of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act) (Department of Planning, House and Infrastructure (DPHI) reference number SSI-663).

The Western Sydney Orbital was assessed as part of an Environmental Impact Statement (EIS) and a Submissions Report and approved 28 February 2002. Construction activities commenced in 2003, and the Western Sydney Orbital opened to traffic in December 2005.

By Order of the Minister for Planning, the original approval for the Western Sydney Orbital (now known as the Westlink M7) was made subject to the current State Significant Infrastructure (SSI) provisions of the EP&A Act (Division 5.2, Part 5) on 26 April 2019. As such, the Westlink M7 is considered to be State Significant Infrastructure under the EP&A Act.

Six modifications to the Westlink M7 (previously referred to as the Western Sydney Orbital) have been approved, as follows:

- Modification 1: Approved 19 June 2003 under the then section 115BAA of the EP&A Act to correct several minor misdescriptions in the Conditions of Approval (CoA) relating to pre-construction requirements, and to clarify the timing of stormwater management requirements
- Modification 2: Approved 4 May 2004 under the then section 115BAA of the EP&A Act to correct several minor errors resulting in inconsistencies between CoA
- Modification 3: Approved 25 August 2004 under the then section 115BAA of the EP&A Act to correct a minor error resulting in an inconsistency between CoA and to correct references to the Minister
- Modification 4: Approved 24 January 2006 under the then section 75W of the EP&A Act to delete condition 115(a), requiring the grade separated pedestrian/bicycle access (shared path) within the road reserve at Mavis Street, Rooty Hill (incorporating Angus Creek crossing and access to Aquilina Reserve), thus removing this access point
- Modification 5: Approved 18 July 2019 under section 5.25 of the EP&A Act to delete condition 66 which prohibits commercial advertising within the road reserve
- Modification 6: Approved 17 February 2023 under section 5.25 of the EP&A Act to construct and operate an additional lane in both directions within the existing Westlink M7 median from Prestons to Oakhurst/Glendenning, excluding at the Westlink M7/M4 Motorway (Light Horse) Interchange.

The approval of Modification 6 incorporated revised conditions of approval (CoA). Modification 6 must be carried out in accordance with the CoA as described in CoA 1A and generally in accordance with the Westlink M7 Widening Modification 6 Report (Modification 6 Report) (August 2022) and Westlink M7 Widening Submissions Report (November 2022).

For the purposes of this consistency assessment, the Approval issued by the NSW Minister for Planning for Modification 6 is referred to as the Division 5.2 Approval. Modification 6 is referred to as the 'approved project'.

For the purposes of this consistency assessment, the Modification Report and the subsequent consistency assessments are considered together to be the relevant M7 Environmental Assessment Documentation (M7 EAD).

The implementation of the modified project would permit the addition of a trafficable lane in both directions of the Westlink M7 between Prestons and Oakhurst/Glendenning, excluding at the Westlink M7/M4 Motorway (Light Horse) Interchange and would include the following key features:

- Widening of the motorway into the existing median for a length of about 26 kilometres along the Westlink M7, from about 140 metres south of the Kurrajong Road overhead bridge at Prestons (southern end) to the Richmond Road interchange in Oakhurst/Glendenning (northern end), excluding at the Westlink M7/M4 Motorway (Light Horse) Interchange
- Widening the exit from the Westlink M7 northbound onto the M4 Motorway westbound from one lane to two lanes
- Widening of 43 existing northbound and southbound bridges on the Westlink M7 at 23 locations within the centre median, and on the outside of the bridges on the approach to the M4 Motorway from Old Wallgrove Road
- Upgrades, additions and modifications to noise walls
- Utility works and upgrades to drainage
- Intelligent Transport System (ITS) installations, adjustments and relocations to cover the new lane configurations.

## M12 Motorway

The M12 Motorway project is subject to an approval under Division 5.2 of the *EP&A Act 1979* as Critical State Significant Infrastructure (CSSI). The project is also a controlled action under Section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), requiring a separate approval from the Australian Minister for the Environment.

The M12 Motorway Project was assessed as part of an Environmental Impact Statement (EIS), Submission Report, Amendment Report, Amendment Report Submissions Report (ARSR) and ARSR Biodiversity Amendment Report, and the subsequent **modification and** consistency assessments detailed in section 4. These documents are collectively referred to as the M12 Environmental Assessment Documentation (M12 EAD).

Approval for the M12 Motorway Project under the EP&A Act was granted by the Minister for Planning on 23 April 2021 (CSSI 9364). Approval for the M12 Motorway Project under the EPBC Act was granted by the Australian Minister for the Environment on 3 June 2021 (EPBC 2018/8286).

The M12 Motorway Project is being constructed in separate stages or work packages:

- M12 West – between The Northern Road, Luddenham and about 250 metres east of Badgerys Creek
- M12 Central – between about 500 metres west of South Creek and the Western Sydney Parklands at Duff Road, Cecil Park
- M12 Central temporary roundabout installation
- M12 East (the subject of this consistency assessment) as part of the M7-M12 Integration project:
  - Elizabeth Drive connections (EDC) – connections between the M12 Motorway and Elizabeth Drive at Cecil Park
  - the M7/M12 interchange – a grade-separated motorway-to-motorway connection between the M7 and M12 Motorways.

Each M12 Motorway package of works is being delivered under separate contracts on behalf of the proponent, Transport for NSW (Transport).

### *M12 East package*

This consistency assessment relates to the M12 East package of works. There are no proposed changes for the M12 West or M12 Central package considered within this consistency assessment. The M12 East package involves two components of work as described below.

Construction of this package will involve connecting Elizabeth Drive to the M12 Motorway and the upgrade of approximately two kilometres of Elizabeth Drive from east of Duff Road to 300 metres east of the M7 Motorway. The package includes:

- M12 Motorway eastbound exit ramp to Elizabeth Drive and M12 westbound entry ramp from Elizabeth Drive
- The realignment of Wallgrove Road through properties to the existing Cecil Road and Elizabeth Drive intersection
- The realignment of Cecil Road to connect it to the new Wallgrove Road
- The realignment of the M7 Motorway northbound entry ramp from Elizabeth Drive and the northbound exit ramp to Elizabeth Drive
- Upgrading of Elizabeth Drive from two to three lanes in both directions from the Elizabeth Drive/M12 Motorway intersection to the Elizabeth Drive/M7 Motorway southbound entry and exit ramp intersection with provisions for three lanes on the remaining sections.
- Tie-ins to Elizabeth Drive



- Five signalised intersections
- Protection, relocation and installation of utilities
- Urban design features including interpretive signage and landscape planting.
- Active transport (pedestrian and cyclist) facilities through the provision of a shared user path, including connections to existing paths.

Wallgrove Road will be realigned as part of the construction of the Elizabeth Drive connection (EDC). This will also require decommissioning a section of the existing Wallgrove Road approximately 500 metres from where it currently intersects with Elizabeth Drive. The new Wallgrove Road will connect to and replace the existing Cecil Road and Elizabeth Drive intersection and Cecil Road will be realigned to connect back into the realigned Wallgrove Road.

The M7/M12 interchange provides a grade separated motorway to motorway connection between the M7 Motorway and M12 Motorway. Located in Cecil Park, this package involves:

- Provision of four connections at the grade separated interchange including:
  - Connection from M7 southbound onto M12 westbound
  - Connection from M7 northbound onto M12 westbound
  - Connection from M12 eastbound onto M7 southbound
  - Connection from M12 eastbound onto M7 northbound.
- Interchange tie-in extending about four kilometres into the M7 Motorway corridor.

For the purposes of this consistency assessment, the Approval issued by the NSW Minister for Planning for the M12 Motorway project is referred to as the M12 Division 5.2 Approval. Approval of the M12 Motorway project is subject to conditions of approval (M12 CoA) and referred to herein as 'approved project'.

### **M7-M12 Integration project**

The M7 Motorway (Modification 6 Widening; SSI-663-Mod-6) (M7 Widening) and the M12 East package of the M12 Motorway project (SSI 9364) will be delivered together under what is referred to as the M7-M12 Integration project by Western Sydney Orbital Company (WSO Co) and John Holland.

This consistency assessment addresses both the M7 Widening and M12 East package projects.

## **1.2 Purpose**

The purpose of this consistency assessment is to:

- Describe the proposed change relative to the M7 Division 5.2 Approval, the M12 Division 5.2 Approval and the M12 Motorway EPBC Act Approval.
- Assess the environmental impacts associated with the proposed change relative to the M7 and M12 Division 5.2 Approvals and the M12 Motorway EPBC Approval.
- Determine if the proposed change is consistent with the M7 and M12 Division 5.2 Approvals or whether further approval is required either for a modification application or a new project.
- Determine if the proposed change is consistent with the M12 Motorway EPBC Approval. Or whether a variation to the conditions of approval / a conditioned action management plan or a new referral is required.

## 2. Proposed change

### 2.1 Description of proposed change

#### Background

Construction ancillary facilities are described in the approval documents for both M7 Widening and M12 Motorway:

- M7 Motorway (Modification 6 Widening; SSI-663-Mod-6): A temporary facility for construction of Modification 6 including an office and amenities compound, construction compound, material crushing and screening plant, materials storage compound, maintenance workshop, testing laboratory, a material stockpile area, access and car parking facilities, and utility connections to the facility.

Note: Where an approved CEMP contains a stockpile management protocol, a material stockpile area located within the construction boundary is not considered to be a construction ancillary facility.

- M12 Motorway (CSSI 9364): A temporary facility for construction of the CSSI including an office and amenities compound, construction compound, material crushing and screening plant, concrete and asphalt batching plant, materials storage compound, maintenance workshop, testing laboratory, material stockpile area, access and car parking facilities and utility connections to the facility.

Note: Where an approved CEMP contains a stockpile management protocol, a material stockpile area located within the construction boundary is not considered to be an ancillary facility.

To facilitate the construction of both the M7 Widening and the M12 East package of works, John Holland proposes to undertake crushing and screening activities within the construction ancillary facility 9 (AF9) (refer Figure 1, Figure 2, Figure 3). Crushing and screening near the work sites allows for a cost-effective strategy to re-use material obtained from the M7-M12 Integration project, and also to allow for re-use of material from nearby projects.

AF9 is a construction ancillary facility which was described in both the M12 Motorway (CSSI-9364) Environmental Assessment Documentation (EAD) and the M7 Widening (SSI-663-Mod-6) EAD. Although crushing and screening activities were not foreseen in the M7 Widening Modification Report (Table 4-12 of the Modification Report states that crushing of rock would take place at the source and not at the construction work zone), Section 4.3 of the Modification Report states that the construction approach presented in the Modification Report is indicative and subject to construction planning. The construction strategy presented and assessed in the Modification Report aims to provide an assessment of probable construction methodologies, while retaining flexibility for the construction contractor(s) to refine the construction methodology.

Section 4.1.2 of the M12 Motorway Amendment Report indicated that the size of AF9 would be increased and that crushing and screening activities would take place within the ancillary facility. The impact of crushing and screening at this location was not, however, assessed within the Amendment Report. Table 4-1 of the Amendment Report includes a summary of all ancillary facilities and identified purposes. In this table, crushing and screening is not identified as a proposed purpose at AF9. Crushing and screening is proposed at other ancillary facilities (AF1 and AF2). Section 4.1.2 of the Amendment Report states that the final type, use, location and number of ancillary facilities would be determined by the construction contractor and identified in a site establishment management plan.

As the establishment and operation of crushing and screening was not explicitly outlined as a proposed purpose to be undertaken at AF9, this is a change that would require an amendment to

both the M7 Widening and M12 Motorway approved projects. This consistency assessment addresses the change proposed to both projects and is hereafter collectively referred to as the Proposed Change.

### Location

AF9 is located at 112-128 Wallgrove Road, Cecil Park on the eastern side of the M7 Motorway, north of Elizabeth Drive (refer Figure 1 and Figure 2). It is located within Fairfield Local Government Area (LGA) and the Western Sydney Parklands in an area considered 'unzoned land' under Chapter 7 of the State Environmental Planning Policy (Precincts – Western Parkland City) 2021.

The Proposed Change would be located fully within the approved AF9 construction ancillary facility. The screening equipment would initially be located at the southern extent of AF9, approximately 315m from the nearest sensitive receiver. The crushing and screening location would be to the eastern extent of AF9 (refer Figure 3), approximately 425m from the nearest sensitive receiver. Both locations are currently identified as laydown and stockpile locations in the approved M7-M12 Site Establishment Management Plan (SEMP).

The location of the crushing and screening equipment within these areas highlighted in Figure 3 would be dependent on the progressive availability of space and amount/type of material stockpiled for crushing and screening. As shown in Figure 3, the initial crushing set up will be to the south of AF9 and will be relocated to the north-east at a later date. This two-stage approach will take advantage of the southern area that has already been established.

### Description

Crushing and screening includes the following plant / equipment (refer to the noise and vibration assessment for more information):

- Front end loader
- 48T jaw crusher at rock crushing compound
- Water cart / portable IBC trailer
- Pug mill
- Screening machine

The crusher has a capacity of approximately 2,000 tonnes/day. Operation of the Proposed Change would be dependent on availability of source material and the capacity to store the source material and crushed product. The Proposed Change is anticipated to operate ~~until for approximately 200 days, split over four periods of time, completing by the end of 2024~~ **until for approximately 200 days, split over four periods of time, completing by the end of 2025**. The total days and extent of the Proposed Change is dependent on availability of source material, capacity to store source material and crushed product, and overall construction progress, and would be determined as detailed construction planning continues.

Crushing activities would not increase the workforce numbers that are approved to use AF9.

The crushing and screening area would generally include:

- Crusher / screener
- Raw feed
- Fines
- Stockpiles.

Material for crushing would be either material won on-site or would be sourced from local Sydney projects under a Resource Recovery Exemption and would not consist of material with any crushing restrictions. Deliveries of between approximately 2,000 and 3,500 tonnes of material per

day (the equivalent of approximately 40 to 70 heavy vehicle movements) may be expected during peak periods.

~~Operation of the crusher will not occur outside of standard construction hours.~~ **Operation of the crusher and deliveries will occur during standard construction hours unless otherwise permitted through an out of hours works (OOHW) approval developed in accordance with the OOHW Protocol or the Project EPL (21829) under Condition L5.3 (low noise impact works). Refer to the Construction Noise and Vibration Management Plan (CEMP Sub-plan Appendix B2) for more details on the approval of out of hours works. Note deliveries are already apart of the approved Project and is not assessed further within this application.**

## Establishment

Establishment of the crushing and screening site at AF9 would generally include (note the order of activities may change):

- Installation of environmental controls
- Delineation of the site, where required, including the installation of temporary fencing, signage and hoarding
- Slashing of grass and stripping of topsoil
- Compaction of subgrade and installation of concrete slabs
- Placement of containers.

Some establishment activities have already occurred within the southern extent of AF9, with hardstand already in place.

All required establishment activities have been assessed and approved as part of the SEMP, prepared in accordance with M7 CoA A9 and NSW M12 CoA A16.

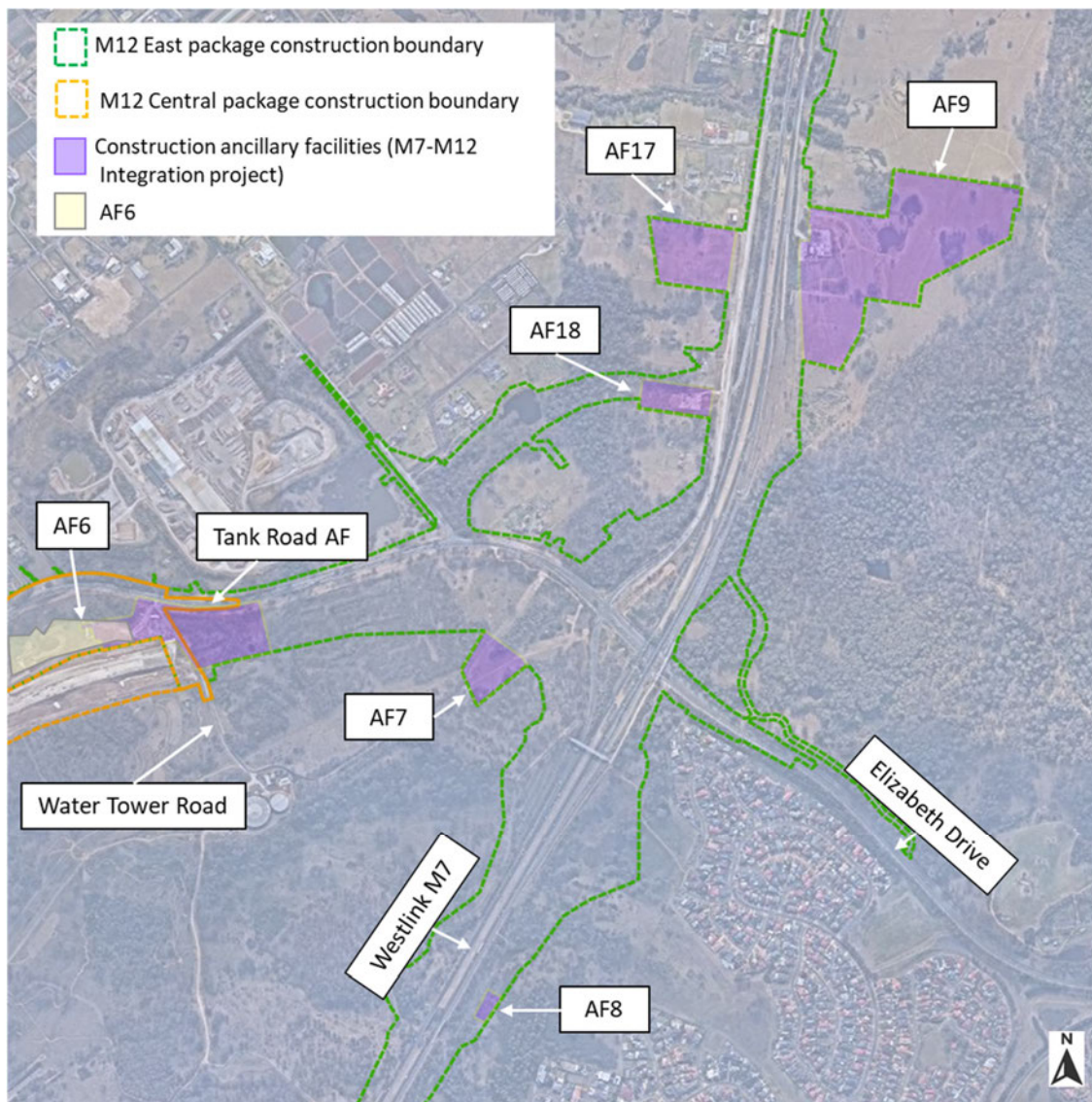


Figure 1: Location of M12 East package construction ancillary facilities near Proposed Change



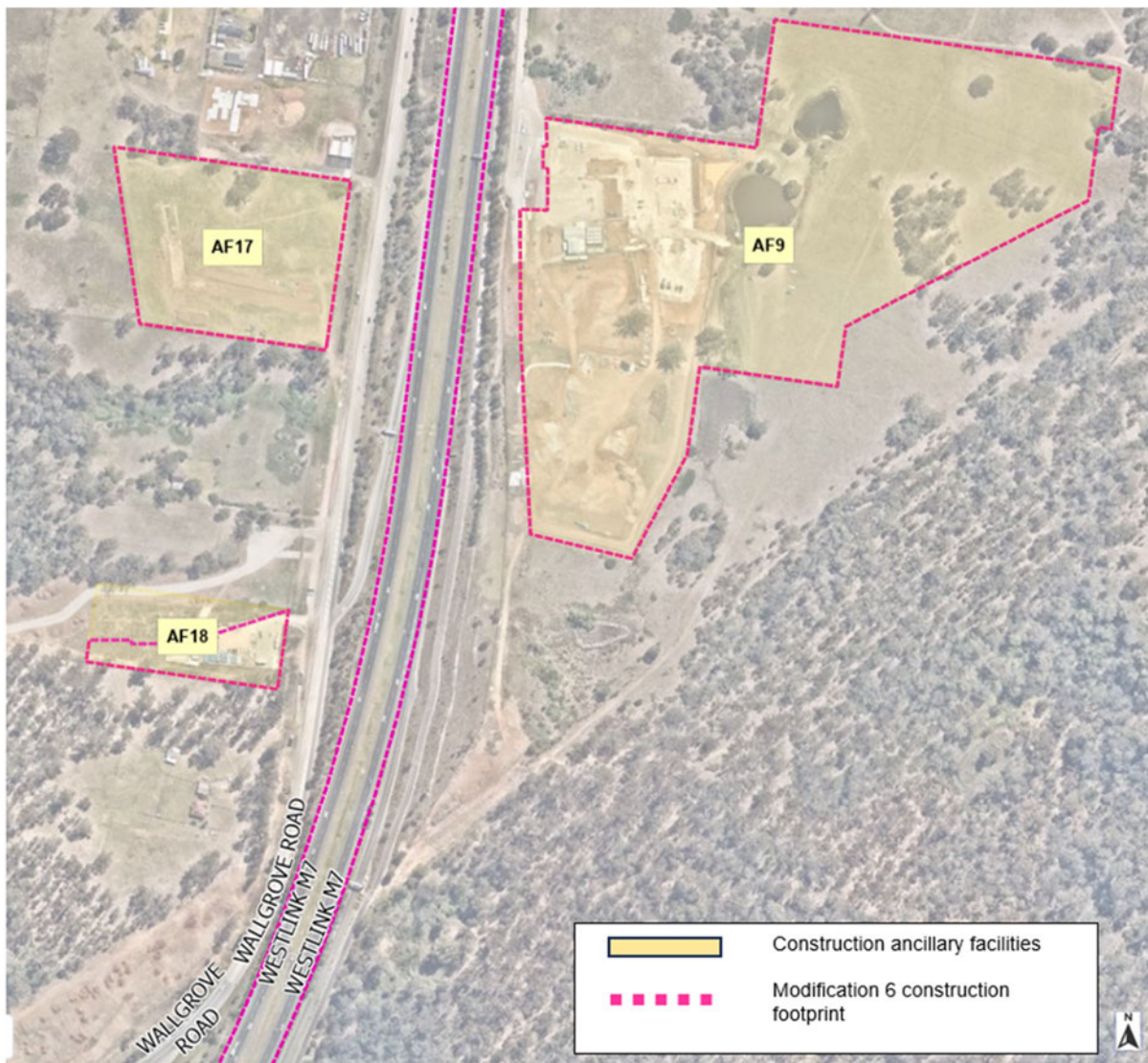


Figure 2: Location of M7 Widening construction ancillary facilities near Proposed Change

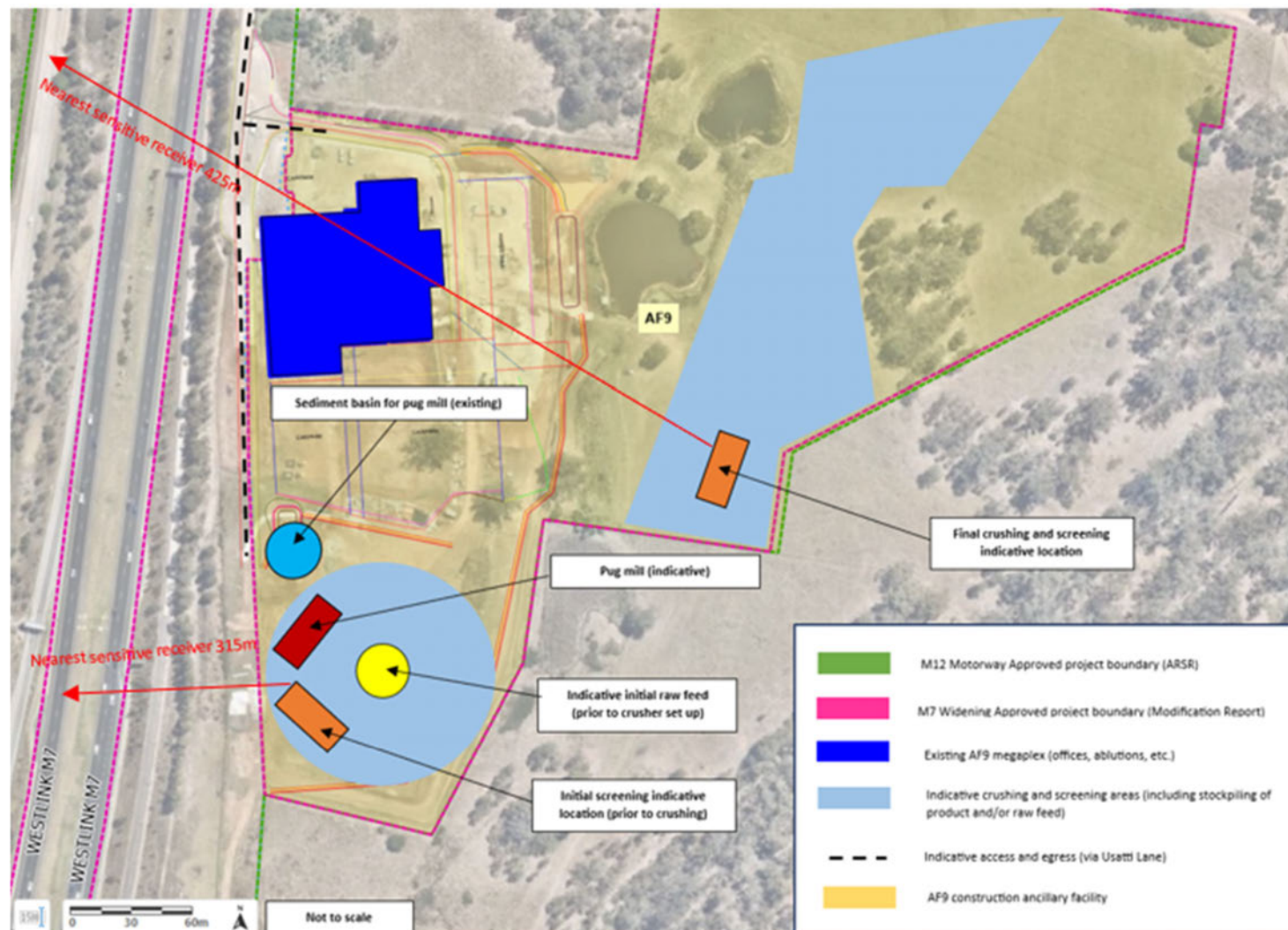


Figure 3: Indicative AF9 crushing layout



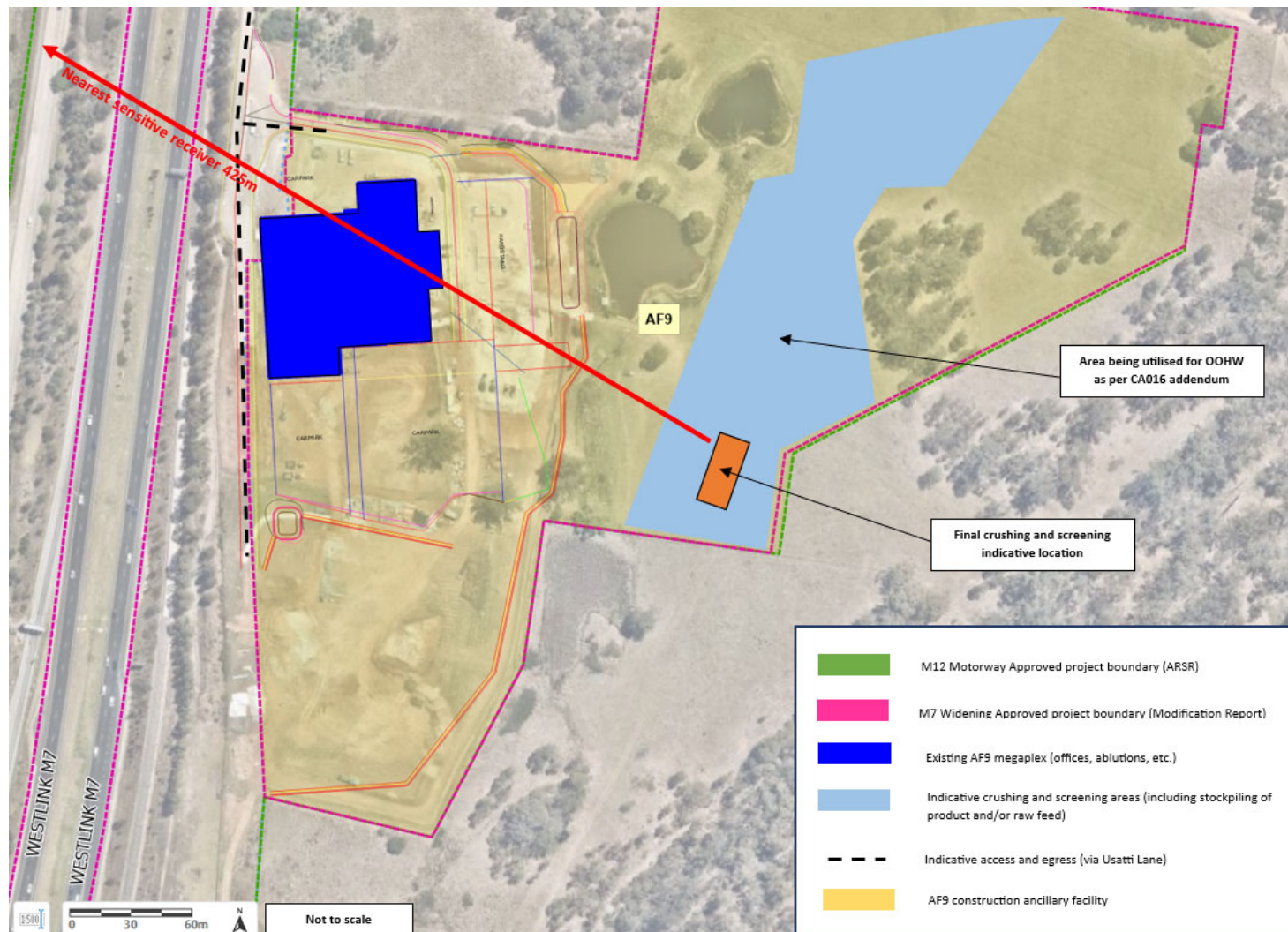


Figure 4: Indicative AF9 crushing layout for OOHW (as per addendum)



## **2.2 Need for the proposed change**

The Proposed Change would enable crushing and screening to be undertaken at AF9. Crushed product is required for temporary works (e.g. crane pads) and for the permanent formation of the road base. The Proposed Change is a cost-effective and sustainable methodology that would allow suitable material won on-site to be crushed and re-used, instead of being removed to landfill or to other locations for re-use.

As there is a shortfall of suitable material on site, the Proposed Change would also enable the crushing and screening of material from other nearby Sydney projects for beneficial re-use instead of potentially going to landfill. By utilising excess material from other Sydney projects, this minimises the amount of virgin material that is required to be extracted or quarried.

The Proposed Change also allows for crushed product to be readily available, minimising potential delays due to supply of material as the M7-M12 Integration project extends for approximately 26km with multiple work fronts.

## **2.3 Options considered**

The main alternate option to the Proposed Change is the purchase of virgin material from a quarry. The Proposed Change represents a more economical and sustainable approach, while enabling some control over the availability of crushed product for use on the M7-M12 Integration project.

It is noted that there are limited alternative locations suitable to host the crushing and screening operation. This is primarily due to proximity of residential receivers, proximity to the work sites and sufficient space / area to both undertake the Proposed Change and allow for stockpiling of source material and crushed product.

### 3. Consultation

Consultation was undertaken throughout the development of the EAD for the M12 Motorway and the M7 Widening Modification Report.

Submissions from the NSW Environment Protection Authority (EPA) on the M12 Motorway Amendment Report queried the need to undertake crushing activities outside of standard construction hours and recommended that all feasible and reasonable mitigation must be implemented, including work-scheduling to minimise out of hours works **noting that conditions of approval are a matter for DPHI**. Transport confirmed in Section 4.6.1 of the ARSR that crushing and screening would not occur outside of standard construction hours, **however the conditions of approval were issued for the M12 project and CoA E48 allows crushing and grinding activities to take place outside of standard construction hours in accordance with an EPL. The Project EPL (21829) provides a pathway for crushing and grinding OOHW to take place where certain criteria for noise and vibration are met (condition L5.3).**

Consultation was undertaken with Fairfield City Council, Western Sydney Parklands Trust (WSPT) and TfNSW (Customer Journey Planning) (CJP) during the development of the SEMP (Rev 4). Rev 4 of the SEMP did not include crushing and screening as part of the layout; however, the Proposed Change is considered to be a minor amendment to the SEMP (no increase to existing impacts), and therefore no further consultation on the SEMP with these stakeholders on the Proposed Change has been deemed necessary.

During consultation on Rev 4 of the SEMP, Fairfield City Council's only comments during the development of the SEMP were regarding potential traffic impacts including local road usage and retained infrastructure. WSPT's comments focused on demolition waste, vegetation re-use, retaining vegetation and site handback. CJP's comments included heavy vehicle numbers, the suitability of some proposed roads and removal of existing bus stops. The Proposed Change would not impact any issues raised by the stakeholders insofar as:

- Access to the Proposed Change would remain as assessed in the M7 and M12 EAD and included within the approved Construction Traffic and Transport Management Plan (CTTMP)
- The vehicles numbers required for the Proposed Change would be within the assessed traffic volumes and the numbers identified in the CTTMP (refer to Section 4)
- The Proposed Change does not result in any additional vegetation clearing or change the project's commitment to re-using and retaining vegetation
- Waste would be managed in accordance with the M7-M12 Integration project Construction Waste and Resource Management Plan (CWRMP).

No consultation has been undertaken with the community on the Proposed Change as it is anticipated that no new impacts will occur as a result of the Proposed Change. The community will be kept up to date with relevant information regarding works occurring around the AF9 area, in accordance with the Communications Management Strategy. This will include regular works notifications and community updates which continually ask the community to contact John Holland's Community Team should they have any questions, complaints or comments, or if they have specific requirements that the project needs to take into consideration. **Community consultation for works outside of standard construction hours will be undertaken in accordance with the Project EPL.**

Consultation on the Proposed Change was undertaken with the project's Acoustics Advisor (AA), with no concerns raised. The AA confirmed that the two locations were appropriate for locating the crusher.

Consultation on the Proposed Change was undertaken with the EPA, with no concerns raised. A variation to the EPL is not required to enable crushing and screening to commence. **Works outside of standard construction hours will be undertaken in accordance with the Project EPL.**

## 4. Environment review

An assessment has been undertaken to compare the environmental impacts of the Proposed Change relative to the environmental impacts of the M7 Widening subject to the M7 Division 5.2 Approval and the M12 Motorway subject to the M12 Division 5.2 Approval and the M12 EPBC Approval. This includes reference to environmental impacts detailed in the EAD including:

### M12 EAD

- Roads and Maritime Services (October, 2019) M12 Motorway, Environmental Impact Statement (EIS)
- Transport for NSW (October, 2020) M12 Motorway, Submissions Report (the Submissions Report)
- Transport for NSW (October, 2020) M12 Motorway, Amendment Report (AR)
- Transport for NSW (December, 2020) M12 Motorway, Amendment Report submissions report (ARSR)
- Transport for NSW (March, 2021) The M12 Motorway Amendment Report Submissions Report – Amendment (ARSR amendment)
- WSP (October, 2021) M12 Motorway – West Package Detailed Design Consistency Assessment
- GHD (October, 2021) M12 Motorway – Central Package Detailed Design Consistency Assessment
- Arcadis (June, 2022) M12 Motorway – Sydney Water Crossings Consistency Assessment
- Arcadis (July, 2022) M12 Motorway – Design Boundary Changes Consistency Assessment
- Arcadis (August, 2022) M12 Motorway – Minor Change Consistency Assessment.
- Arcadis (August, 2023) M12 Motorway – Devonshire Road Temporary Roundabout Consistency Assessment
- WSP (September, 2023) M12 Motorway – Elizabeth Drive Connections Consistency Assessment
- TfNSW (September, 2023) M12 Motorway – Minor Consistency Assessment M12 West demolition of structures as 752 Luddenham Road
- CA-006 TfNSW (October, 2023) M12 Motorway – Minor Consistency Assessment M12 East AF9 Power Supply
- CA-005 TfNSW (October, 2023) M12 Motorway – Minor Consistency Assessment M12 East Cecil Road Laydown Area
- CA-010 TfNSW (October, 2023) M12 Motorway – Minor Consistency Assessment M12 East Temporary Construction Signage
- Arcadis (December, 2023) M12 Motorway – East Site 48, 50 and 51 Boundary Changes Minor Consistency Assessment
- CA-016 John Holland (March, 2024) M7-M12, Crushing and Screening at AF9 Consistency Assessment
- CA-018 John Holland (July 2024) M12 Motorway, Cecil Road Laydown, Sediment Basin and Dam Water Take Consistency Assessment

- CA-022 John Holland (November, 2024) M7-M12, Utilities Project Wide and Light Vehicle Emergency Stopping Bay Consistency Assessment
- CA-011 John Holland (December, 2024) M12 Motorway, Shared user path connection and design refinements Consistency Assessment
- Mod 1 (July 2024) - Modification to Condition A16.

#### **M7 Widening EAD**

- Westlink M7 Widening Modification Report prepared by Transport for NSW and dated August 2022
- Westlink M7 Widening Submissions Report prepared by Transport for NSW and dated November 2022
- CA-009 Transport for NSW (December, 2023) M7 Widening, Incident Response Bays Consistency Assessment
- CA-07A Transport for NSW (December, 2023) M7 Widening, 'Simple' Design Change Consistency Assessment
- CA-016 John Holland (March, 2024) M7-M12, Crushing and Screening at AF9 Consistency Assessment
- CA-07A Transport for NSW (December, 2023) M7 Widening, 'Simple' Design Change Consistency Assessment
- CA-007B Transport for NSW (May, 2024) M7 Widening, 'Complex' Design Change Consistency Assessment
- CA-015 John Holland (June, 2024) M7 Widening, Northern Bridge Access Consistency Assessment
- CA-012 John Holland (June, 2024) M7 Widening, Bernera Road and Cowpasture Road Boundary Adjustment Consistency Assessment
- CA-025 John Holland (June, 2024) M7 Widening, M7 North Great Western Highway Access Consistency Assessment
- CA-023 John Holland (August, 2024) M7 Widening, ITS Tolling Gantry and Drainage Infrastructure Works Consistency Assessment
- CA-031 John Holland (November, 2024) M7 Widening, M4 Northbound Off Ramp Boundary Adjustments Consistency Assessment
- CA-022 John Holland (November, 2024) M7-M12, Utilities Project Wide and Light Vehicle Emergency Stopping Bay Consistency Assessment
- Arcadis (November, 2024) M7 Widening, Proposed changes to the approved construction footprint – Tranche 3 Consistency Assessment
- CA-032 John Holland (January, 2025) M7 Widening, Consistency assessment report M7 North gantry signs.

Environmental aspect	Comparative environmental assessment
Noise and vibration	<p><b><i>Assessment of potential impacts</i></b></p> <p><i>Nearest structures and sensitive receivers</i></p> <p>The nearest sensitive receivers are around 315m to the west of the southern crushing location and around 425m to the north-west of the secondary crushing location (refer Figure 3). The Upper Canal is located around 85m to the south of the southern crushing location, and about 94m to the south-east of the secondary crushing location.</p> <p><i>Hours of operation</i></p> <p>Crushing and screening activities are proposed to be undertaken during <b>and outside of</b> standard construction hours. <b>The works</b> would be undertaken in accordance with the project's Environmental Protection License (EPL) <b>under Condition L5.3 (low noise impact works)</b>.</p> <p><i>Noise and vibration assessment results</i></p> <p>Impacts of construction noise are detailed in the EAD (specifically Section 7.2 of the M7 Modification Report and Section 7.7 of the M12 EIS). AF9 is located in Noise Catchment Area (NCA) 01 (M12 EAD) and NCA18 (M7 EAD). The M7 Modification Noise and Vibration assessment identified that noise management level <b>exceedances</b> would be likely to occur in NCA 18 while the M12 Noise and Vibration Assessment states that for NC01 <i>"the highest impacts at residential receivers are generally in catchments where receivers are located close to the construction footprint. This includes east of the M7 Motorway and north of Elizabeth Drive in NCA01, north of Elizabeth Drive near Salisbury Ave in NCA06 and near Clifton Avenue in the north of the construction footprint in NCA07. Receivers in these catchments are however generally sparsely distributed, meaning the number of receivers with the highest impacts is typically relatively low"</i>.</p> <p>An <b>indicative</b> noise assessment has been completed for the Proposed Change <b>during standard construction hours</b> (refer Appendix B) <b>and outside of standard construction hours (refer Appendix C for indicative OOHW noise model)</b>. <b>Note the plant and equipment list detailed in the nighttime noise model excludes the crusher to ensure compliance with the night period NML.</b> The results found that noise impacts <b>for both standard and out of hours works</b> at the nearest sensitive receivers are predicted to comply with the Noise Management Levels (NML) during the day <b>and evening periods. Any OOHW relating to the crushing activity will be undertaken in accordance with EPL Condition L5.3 (low impact works) and the OOHW protocol including OOHW permits.</b></p> <p>As there is no exceedance of the NMLs predicted, it is considered that the noise impacts are consistent with the M7 and M12 EAD which both assessed that there would be impacts to sensitive receivers above the NML in what is now known as M7_NCA17 (EAD references: M12 NCA_01 and NCA_04, and M7 NCA_09 and M7 NCA_18). The noise assessment (Appendix B <b>and Appendix C</b>) demonstrates that even with site establishment and construction activities occurring within AF9, there will be no greater impact to receivers than what was assessed in the M7 and M12 EAD, as</p>

Environmental aspect	Comparative environmental assessment
	<p>a result of the Proposed Change. There is no predicted impact to receivers in addition to those identified in the M7 and M12 EAD.</p> <p>The plant and equipment required for the Proposed Change are not considered vibration intensive there would be no predicted vibration impacts as a result of adding screening and crushing activities during <b>and outside of</b> standard construction hours. Therefore, there would not be any predicted impacts in regard to structural damage, cosmetic damage or human annoyance as a result of vibration at sensitive receivers or structures. Even at its closest point to the Upper Canal (85m), the extent of Proposed Change is outside of the minimum working distances, even for vibration intensive plant and equipment.</p> <p><b>It is noted that crushing works proposed outside of standard construction hours are required to support construction production rates. Due to the works being permitted through EPL Condition L5.3 (low impact works) a justification in accordance with EPL Condition L5.4 or L5.6 is not required.</b></p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the EAD.</p> <p><b><i>Environmental management measures</i></b></p> <p>Management measures for noise and vibration identified in the EAD are considered appropriate for the proposed change. These include the use of appropriate personal protective equipment for construction workers who may be impacted by the Proposed Change. Occupational hygiene considerations will also be undertaken by the safety team and managed in accordance with the safety management plan.</p>
Air quality	<p><b><i>Assessment of potential impacts</i></b></p> <p>The area surrounding AF9 and the proposed crushing area is characterised by air quality impacts such as exhaust fumes due to the close proximity of the Westlink M7. Dust generated during clearing and demolition, excavation, materials handling, stockpiling and compaction activities are expected to be the primary air quality-related risk during construction (Section 8.2.2, M12 EIS). This is certainly the case for air quality in the vicinity of AF9 would also be impacted by heavy plant and vehicles within surrounding construction work areas and any dust generated due to exposed surfaces within these construction work areas. The EAD identifies that most construction zones were found to have a medium risk of dust exposure to ecological receptors (prior to mitigation) due to the proximity of native vegetation and areas zoned for environmental conservation purposes within 20 metres of the construction footprint (Section 7.3.5 of the M7 Modification report)</p> <p>The crushing, handling and stockpiling of material has the potential to generate dust that may impact surrounding receivers, with the nearest sensitive receiver located about 315 metres west of the AF9 CAF, west of the Westlink M7.</p>



Environmental aspect	Comparative environmental assessment
	<p>The generation of dust as a result of the proposed activity may also have potential impacts to vegetation to the east of AF9, detailed further below (Biodiversity). The generation of dust also has the potential to impact on the watercourse to the north of AF9, however these impacts are consistent with what was assessed in the EAD.</p> <p>Crushing and screening may at times utilise a pug mill to assist with thoroughly mixing the raw material where its consistency, abrasivity or other challenges present themselves. Water would be required to operate the pug mill, which would be drawn from a variety of sources including the nearby sediment basin where possible. Non-potable water would be prioritised. By utilising the pug mill, material can be dampened to reduce dust from stockpiling or loading.</p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the EAD.</p> <p><b><i>Environmental management measures</i></b></p> <p>Management measures for air quality identified in the EAD are considered appropriate for the proposed change. A hard-wired connected water tank / cart would also be integrated as part of the crushing process to further mitigate air quality impacts.</p>
Traffic and transport	<p><b><i>Assessment of potential impacts</i></b></p> <p>It is not anticipated that any additional traffic and transport impacts would occur as a result of the Proposed Change, as the Proposed Change can be accommodated within the extent of the traffic volumes assessed in the EAD. The proposed screening and crushing is a process of changing the composition of spoil material that is already stockpiled on site. The amount of vehicles associated with delivering the spoil and then transporting it to where it will be used on site does not change with the Proposed Change, it is only the composition rather than the amount of material that is changed.</p> <p>Access to the Proposed Change within AF9 would utilise the existing site access arrangements as assessed and approved in the M7-M12 Integration project SEMP and M7-M12 Integration project CTTMP.</p> <p>Delivery of spoil material for stockpiling, that will be used for the Proposed Change, would require around 40 to 70 heavy vehicle movements per day. Distribution of product throughout the project alignment would also require heavy vehicle movements but would vary throughout the construction program depending on specific construction activities and needs.</p> <p>Noting that the approved CTTMP is in keeping with the heavy vehicle numbers assessed in the EAD, the table below identifies the following heavy vehicle movements at AF9, which include truck movements associated with the Proposed Change:</p>

Environmental aspect	Comparative environmental assessment			
	Ancillary facility	Daily heavy vehicle generation	Morning peak heavy vehicle generation	Evening peak heavy vehicle generation
	AF9 – M7	120	50	40
	AF9 – M12	200	150	20
	<p>The heavy vehicle movements required for establishment and operation of the Proposed Change can be accommodated within the identified vehicle numbers as assessed and approved in the EAD and the CTTMP, and no increase in vehicle numbers is proposed.</p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the EAD.</p> <p><b><i>Environmental management measures</i></b></p> <p>Management measures for traffic and transport identified in the EAD are considered appropriate for the proposed change.</p>			
Waste	<p><b><i>Assessment of potential impacts</i></b></p> <p>The areas nominated for crushing and screening activities are predominantly established and therefore minimal additional work would be required to prepare the area for the Proposed Change. Some minor work as described in Section 2.1 would be required for the area in the eastern extent of AF9. This would create some waste, however, this area was assessed and approved for site establishment as part of the EAD and the SEMP, so the waste generated would not change as a result of the Proposed Change.</p> <p>Waste impacts associated with the Proposed Change would predominantly be related to plant maintenance.</p> <p>Using imported material from other projects represents an opportunity to minimise offsite waste disposal in NSW in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i> (NSW), which promotes waste avoidance and resource recovery, and waste disposal as a last resort. Importing material from other projects will be managed in accordance with the EPA's excavated public road resource recovery exemption. Testing of material that would be used from other projects would ensure that the quality of the imported material is suitable for infill.</p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the EAD.</p> <p><b><i>Environmental management measures</i></b></p>			



Environmental aspect	Comparative environmental assessment
	<p>Management measures for waste identified in the EAD are considered appropriate for the proposed change.</p>
<p>Soil, waterways and water quality</p>	<p><b><i>Assessment of potential impacts</i></b></p> <p>The Proposed Change would be located within areas identified for laydown and stockpiles in the Environmental Assessment documentation.</p> <p>The nearest waterway to the Proposed Change is Ropes Creek, located 148m to the north of AF9, as well as two dams within AF9. A natural drainage depression traverses the middle of the site from north to south. Heavy vehicles would cross the depression at the existing culvert location, which may require reinforcement during establishment.</p> <p>The EAD for the M12 Motorway and the M7 Widening projects assessed the need to stockpile within AF9. It is therefore considered that the Proposed Change would not result in increased associated soil and water impacts.</p> <p>Crushing and screening may at times utilise a pug mill to assist with thoroughly mixing the raw material where its consistency, abrasivity or other challenges present themselves. Water would be required to operate the pug mill, which would be drawn from a variety of sources including the nearby sediment basin where possible. Non-potable water would be prioritised.</p> <p>The stockpiling of material would be managed in accordance with the Stockpile Management Procedure (Appendix G of the M7-M12 Integration project Construction Soil and Water Management Sub-plan). The erosion and sediment controls have been designed by the Soil Conservationist and would be implemented during establishment and operation of the Proposed Change.</p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the EAD.</p> <p><b><i>Environmental management measures</i></b></p> <p>Management measures for soil and water identified in the EAD are considered appropriate for the proposed change.</p> <p>A site specific PESCP has been developed for the location by the soil conservationist and would be implemented.</p>
<p>Landscape character and visual amenity</p>	<p><b><i>Assessment of potential impacts</i></b></p> <p>It is not anticipated that any additional landscape character and visual impacts would occur as a result of the Proposed Change.</p> <p>The operation of the crushing facilities, within the AF9 ancillary facility, would be within standard construction hours. As a result, impacts to landscape character and visual amenity, including light spill, is expected to be consistent with the</p>

Environmental aspect	Comparative environmental assessment
	<p>current operation of AF9. Furthermore, the Proposed Change is unlikely to cause substantial visual impacts due to the surrounding construction site and/or presence of existing vegetation around the AF9 site. As such, no receivers (residential or commercial) would be able to see the Proposed Change.</p> <p>AF9 was selected as the location for the Proposed Change due to it being situated well away from sensitive receivers (located a minimum of 315m away (screening only) and 425m (screening and crushing). The site is obscured from the nearest sensitive (residential) receiver by vegetation along the western boundary of AF9, as well as the Westlink M7 which both obstruct potential views. AF9 is also located on a higher Relative Level (RL) than the nearest residents to the west, assisting with further obstructing views.</p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the EAD.</p> <p><b><i>Environmental management measures</i></b></p> <p>Management measures for landscape character and visual amenity identified in the EAD are considered appropriate for the proposed change.</p>
Aboriginal heritage	<p><b><i>Assessment of potential impacts</i></b></p> <p>As detailed in Section 7.7.5 of the M7 Widening Modification Report (August, 2022) and Section 6.5.3.1 of the M12 Motorway Amendment Report (October, 2022) no Aboriginal heritage impacts would occur as a result of establishing and operating AF9. The Proposed Change would not require additional excavation and would occur wholly within the approved boundary of AF9 (establishment is already assessed and approved as part of the M7 and M12 EAD). The works are not considered to be vibration intensive.</p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the M7 and M12 EAD.</p> <p><b><i>Environmental management measures</i></b></p> <p>Management measures for Aboriginal heritage identified in the M7 and M12 EAD are considered appropriate for the proposed change.</p>
Non-Aboriginal heritage	<p><b><i>Assessment of potential impacts</i></b></p> <p>As detailed in Section 7.8.5 of the M7 Widening Modification Report (August, 2022) and Section 6.6.3.1 of the M12 Motorway Amendment Report (October, 2022) no Non-Aboriginal heritage impacts would occur as a result of establishing and operating AF9. The Proposed Change would not require additional excavation and would occur wholly</p>

Environmental aspect	Comparative environmental assessment
	<p>within the approved boundary of AF9 (establishment is already assessed and approved as part of the EAD). The works are not considered to be vibration intensive.</p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the M7 and M12 EAD.</p> <p><b><i>Environmental management measures</i></b></p> <p>Management measures for non-Aboriginal heritage identified in the M7 and M12 EAD are considered appropriate for the proposed change.</p>
Biodiversity	<p><b><i>Assessment of potential impacts</i></b></p> <p>The EAD identifies that most construction zones were found to have a medium risk of dust exposure to ecological receptors (prior to mitigation) due to the proximity of native vegetation and areas zoned for environmental conservation purposes within 20 metres of the construction footprint (Section 7.3.5 of the M7 Modification report).</p> <p>The generation of dust as a result of the proposed activity may also have potential impacts to vegetation to the east of AF9. The generation of dust also has the potential to impact on the watercourse to the north of AF9, however these impacts are consistent with what was assessed in the EAD.</p> <p>As clearing has already been undertaken to establish the AF9 ancillary facility, the removal of trees would not be required to establish and operate the proposed activity. This clearing was approved by both the M7 EAD and the M12 EAD. No further clearing is required for the Proposed Change.</p> <p>As the AF9 ancillary facility has been established, lighting has already been implemented to face down and away from sensitive receivers (i.e. towards the works) including away from local fauna. No additional light spill impacts to biodiversity are required to be assessed in regard to the Proposed Change.</p> <p>Grass slashing and topsoil stripping may be required to establish the eastern crushing area. This grass clearing and topsoil stripping has already been approved. No additional biodiversity impacts are required to be assessed in regard to the Proposed Change.</p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the M7 and M12 EAD.</p> <p><b><i>Environmental management measures</i></b></p> <p>Management measures for biodiversity identified in the M7 and M12 EAD are considered appropriate for the proposed change.</p>

Environmental aspect	Comparative environmental assessment
Socio-economic	<p><b><i>Assessment of potential impacts</i></b></p> <p>Establishment and operation of the Proposed Change would not require additional land as it would be located within the existing AF9. Therefore, no additional land acquisition is required. The works are also not anticipated to impact upon the operation of any local businesses.</p> <p>Access to AF9 would be in accordance with the approved M12 SEMP and the M12-M7 Integration CEMP.</p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the M7 and M12 EAD.</p> <p><b><i>Environmental management measures</i></b></p> <p>Management measures for socio-economic impacts identified in the M7 and M12 EAD are considered appropriate for the proposed change.</p>
Hazard and risk	<p><b><i>Assessment of potential impacts</i></b></p> <p>Construction work place hazards and risks were assessed in the M12 EAD (Section 8.3.4 of the EIS) include slips and trips from walking around site; falls from height; rock falls; fire or explosion; personnel struck by dropped or swinging loads or other objects; manual handling injuries; accidents involving vehicles, equipment and people; accidents involving vehicle to vehicle collisions; asbestos containing material; mobile plant interaction; electrocution or fire hazards; and, working near or over water.</p> <p>It is not expected that the Proposed Change will result in any new or increased impacts compared to what has been assessed and is therefore consistent.</p> <p>Hazards and risks to the workforce assessed in the M7 EAD (Section 17.7.5) were falls, explosions, exposure to contaminants, manual handling injuries, electrocution, accidents with machinery. The Proposed Change would not change these impacts and is therefore consistent. Hazards and risks to the public that were assessed in the M7 EAD were exposure to construction noise and air emissions (including dust) without appropriate mitigation, and interaction with construction vehicles including heavy vehicles on local roads and construction ancillary facility access roads. The Proposed Change has the potential to cause impacts to the public through dust emissions and construction vehicles, if not mitigated.</p> <p>Through the implementation of environmental management measures detailed in the relevant EAD, the proposed change would remain consistent with the M7 and M12 EAD.</p>

Environmental aspect	Comparative environmental assessment
	<p><b><i>Environmental management measures</i></b></p> <p>Management measures for socio-economic impacts identified in the M7 and M12 EAD are considered appropriate for the proposed change.</p>
Cumulative impacts	<p><b><i>Assessment of potential impacts</i></b></p> <p>The concurrent construction of various projects within the vicinity of AF9 gives rise to the potential for cumulative impacts. The magnitude of impact resulting from the Proposed Change compared to the existing impacts arising from construction work at AF9 would be very minor. It is considered that the Proposed Change would not impact upon other projects in the surrounding area.</p> <p>Through the implementation of environmental management measures detailed below, the proposed change would remain consistent with the M7 and M12 EAD.</p> <p><b><i>Environmental management measures</i></b></p> <p>Management measures for cumulative impacts identified in the M7 and M12 EAD are considered appropriate for the proposed change.</p>

## **5. Consistency assessment – the Division 5.2 Approvals**

### **5.1 Minister's Conditions of Approval and Environmental Management Measures – M12 Motorway**

The Proposed Change has been assessed in Appendix A1 in relation to the relevant conditions of approval and revised environmental management measures for the M12 Motorway.

### **5.2 Minister's Conditions of Approval – and Environmental Management Measures M7 Widening**

The Proposed Change has been assessed in Appendix A2 in relation to the relevant conditions of approval and revised environmental management measures for the M7 Widening.

### **5.3 Project Objectives**

#### **M7 Widening**

The M7 Widening project objectives are to:

- Provide additional capacity on the Westlink M7 to meet future traffic growth, reduce congestion and improve connectivity and reliability
- Avoid and minimise impacts on the road network, the community and environment during construction
- Integrate with the new M12 Motorway, minimising disruption during construction and providing safe and efficient connectivity in the operations phase
- Deliver a design that integrates with and respects the existing urban design and landscape features of the Westlink M7
- Provide a cost effective / affordable solution.

The Proposed Change supports the M7 Widening project objectives by enabling the construction of the road that achieves these project objectives. As such the proposed change is consistent with the M7 Widening project objectives.

#### **M12 Motorway**

The M12 Motorway project objectives are to:

- Provide sufficient road capacity to meet traffic demand generated by the planned western Sydney urban development
- Provide a high standard connection to the airport with capacity to meet future freight and passenger needs
- Provide a road which supports and integrates with the broader transport network
- Support the provision of an integrated regional and local public transport system
- Preserve the access function of Elizabeth Drive
- Provide active local transport within the east–west corridor
- Make provision for connection to the future Outer Sydney Orbital.

The Proposed Change supports the M12 Motorway project objectives by enabling the construction of the road that achieves these project objectives. As such the proposed change is consistent with the M12 Motorway project objectives.

### **5.4 Consistency questions – the M7 and M12 Division 5.2 Approval**

The table below presents a set of questions that assist Transport to determine whether the Proposed Change can be considered consistent with the M7 and M12 Division 5.2 Approval.



Consistency question	M7 Discussion	M12 Discussion	Consistent
1 Is the proposed change likely to result in changes to the scope and impacts of the project to an extent that would be considered a radical transformation of the project as a whole, as to be, in reality, an entirely new project	As detailed in Section 2 and assessed in Section 4, the Proposed Change would not result in a significant change to the M7 Widening project. The impacts associated with the Proposed Change are minor in nature and would be managed in accordance with the CEMP and Sub-plans.	As detailed in Section 2 and assessed in Section 4, the Proposed Change would not result in a significant change to the M12 Motorway project. The impacts associated with the Proposed Change are minor in nature and would be managed in accordance with the CEMP and Sub-plans.	Yes
2 Would any conditions of approval need to be amended in light of the change?	The Proposed Change would not require any M7 Widening Conditions of Approval to be amended. A review of relevant M7 CoA against the Proposed Change is detailed in Appendix A2.	The Proposed Change would not require any M12 Widening Conditions of Approval to be amended. A review of relevant M12 CoA against the Proposed Change is detailed in Appendix A1.	Yes
3 Would the statement of commitments or environmental management measures need to change?	The Proposed Change would not require any changes to the M7 Widening revised environmental management measures. A review of relevant M7 REMMs against the Proposed Change is detailed in Appendix A2.	The Proposed Change would not require any changes to the M12 Motorway revised environmental management measures. A review of relevant M12 REMMs against the Proposed Change is detailed in Appendix A1.	Yes
4 Would the proposed change be 'generally in accordance with' the documents incorporated in Standard Condition A1 (or A2)?	As described in Appendix A2, the Proposed Change is considered generally in accordance with the EAD listed in M7 Condition A1.	As described in Appendix A1, the Proposed Change is considered generally in accordance with the EAD listed in M12 Condition A1.	Yes
5 Would the environmental impacts of the project as a whole be altered by the proposed change to the extent that the proposed change would not be consistent with the Approval?	As described in Section 4, the environmental impacts associated with the Proposed Change are consistent with the impacts described in the M7 EAD. Management measures detailed in the M7 EAD would be implemented for the Proposed Change.	As described in Section 4, the environmental impacts associated with the Proposed Change are consistent with the impacts described in the M12 EAD. Management measures detailed in the M12 EAD would be implemented for the Proposed Change.	Yes

Consistency question	M7 Discussion	M12 Discussion	Consistent
6 Considering the project as a whole, would the magnitude of the change be viewed as consistent with the project?	The magnitude of the Proposed Change is minor in comparison to the M7 Widening. The Proposed Change is consistent with the M7 Widening project objectives.	The magnitude of the Proposed Change is minor in comparison to the M12 Motorway. The Proposed Change is consistent with the M12 Motorway project objectives.	Yes



## 6. Consistency assessment – EPBC Approval

### 6.1 Commonwealth Minister's Conditions of Approval – M12 Motorway

Appendix 1 addresses those M12 Motorway conditions of approval relevant to the Proposed Change in the context of the Commonwealth Approved Project (M12 Motorway). The proposed change can be accommodated within the EPBC conditions of approval.

### 6.2 Consistency questions – M12 Motorway EPBC Approval

The table below presents a set of questions that assist Transport to determine whether the proposed change can be considered consistent with the EPBC Approval.

Consistency question	Discussion	Consistent
1 Would any conditions of the EPBC Approval need to be varied in light of the change?	As described in Appendix 1, no conditions of the EPBC Approval need to be varied as a result of the Proposed Change. No impacts to Matters of National Environmental Significance are expected	Yes
2 Would an approved action management plan required by a condition of approval need to be varied as a result of the proposed change?	There is no approved action management plan required by the EPBC Approval.	Yes
3 Would the proposed change constitute a 'new project' under the EPBC Act?	The Proposed Change is described in Section 2 and would not constitute as a 'new project' under the EPBC Act.	Yes

## 7. Conclusion

This memo provides a true and fair consistency review of the scope and potential impacts of the Proposed Change compared with the scope and potential environmental impacts of the approved projects. Based on the consistency assessment in this report, the Proposed Change is considered:

- ☒ Consistent with the Division 5.2 Approvals
- ☒ Consistent with the EPBC Approval
- ~~— Not consistent with the Division 5.2 Approvals.~~
- ~~— A modification to the projects' approvals must be prepared and submitted for approval by the Minister.~~

The CEMP and relevant sub-plans will be updated to incorporate the Proposed Change as relevant.

## **8. Other considerations**

### **8.1 Permits, licenses and other approvals**

The Proposed Change would not require a variation to the M7M12 Integration project's EPL to consider crushing activities. No other additional approval requirements or changes to any permits, licences or other approvals are required as a result of the Proposed Change.

## 9. Certification

### Author

This consistency assessment provides a true and fair review of the proposed change.

Name

[Redacted]

Signature

[Redacted]

Position

Environmental Approvals

Date

15/02/2024

Organisation

John Holland

### Transport for NSW

The proposed change, subject to the implementation of all the environmental requirements of the project, is consistent with the M7 Division 5.2 Approval, the M12 Division 5.2 Approval and the M12 EPBC Approval.

Name

[Redacted]

Signature

[Redacted]

Position

Transport Senior Environment and Sustainability Officer (M12/M7)

Date

14/02/2024

I have examined the proposed changes by reference to the M7 Division 5.2 Approval and M12 Division 5.2 Approval in accordance with Section 5.25(2) of the EP&A Act I consider that the proposal is consistent with the M7 Division 5.2 Approval, the M12 Division 5.2 Approval and the M12 EPBC Approval. I agree with the recommendations of the Transport Environment and Sustainability Manager and approve of the carrying out the proposed change in accordance with those recommendations.

Name

[Redacted]

Signature

[Redacted]

Position

Transport Senior Environment and Sustainability Manager (M12/M7)

Date

22/02/2024



Name	<div></div>
Signature	<div></div>
Position	M12 Project Director
Date	23/02/2024



## Certification of Addendum (Revision D)

Author

This consistency assessment provides a true and fair review of the proposed change.

Name		Signature	
Position	Senior Environmental Advisor	Date	25/02/2025
Organisation	John Holland		


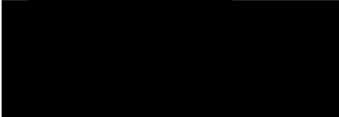
Transport for NSW

The proposed change, subject to the implementation of all the environmental requirements of the project, is consistent with the M7 Division 5.2 Approval, the M12 Division 5.2 Approval and the M12 EPBC Approval.

Name	
Signature	
Position	TfNSW Environment and Sustainability Manager (M12/M7)
Date	27/02/2025

I have examined the proposed changes by reference to the M7 Division 5.2 Approval and M12 Division 5.2 Approval in accordance with Section 5.25(2) of the EP&A Act I consider that the proposal is consistent with the M7 Division 5.2 Approval, the M12 Division 5.2 Approval and the M12 EPBC Approval. I agree with the recommendations of the Transport Environment and Sustainability Manager and approve of the carrying out the proposed change in accordance with those recommendations.

Name	
Signature	
Position	Transport Senior Environment and Sustainability Manager (M12/M7)
Date	27/02/2025

Name	
Signature	
Position	M12 Project Director
	27/02/2025

Date

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# **Appendix A – Assessment of consistency with conditions of approval and revised environmental management measures**

# M12 Motorway and M7 Widening Minor Consistency Assessment

## Appendix A1: M12 Motorway CoA's (NSW and EPBC) and REMM's

Table A1-1: NSW M12 Motorway CoA (applicable to table 5-1)

No.	Condition of Approval	Discussion	Consistent
A1	The Proponent must carry out the CSSI in accordance with the terms of approval and generally in accordance with: <ul style="list-style-type: none"><li>a) M12 Motorway Environmental Impact Statement (dated October 2019);</li><li>b) M12 Motorway Submissions Report (dated October 2020);</li><li>c) M12 Motorway Amendment Report (dated October 2020);</li><li>d) M12 Motorway Amendment Report - Submissions Report (dated December 2020); and</li><li>e) M12 Motorway Amendment Report - Submissions Report - Amendment (dated 8 March 2021).</li></ul>	The Proposed Change, as described in Section 2.1, can be carried out in accordance with the EAD and is generally in accordance with the description of the CSSI provided in Condition A1.	Yes

No.	Condition of Approval	Discussion	Consistent
A2	The CSSI must only be carried out in accordance with all procedures, commitments, preventative actions, performance outcomes and mitigation measures set out in the documents listed in Condition A1 unless otherwise specified in, or required under, this approval.	The Proposed Change can be carried out in accordance with all procedures, commitments, preventative actions, performance outcomes and mitigation measures set out in the EAD described in Condition A1.	Yes
A3	In the event of an inconsistency between:	The Proposed Change will not impact upon compliance with this condition.	Yes
	a) The terms of this approval and any document listed in Condition A1, the terms of this approval will prevail to the extent of the inconsistency; and		
	b) Any document listed in Condition A1, the most recent document will prevail to the extent of the inconsistency.		
	a) Documentation of the engagement with the party identified in the condition of approval that has occurred before submitting the		
	b) A log of the dates of engagement or attempted engagement with the identified party		
	c) Documentation of the follow-up with the identified party where engagement has not occurred to confirm that they do not wish to engage or have not attempted to engage after repeated invitations		

No.	Condition of Approval	Discussion	Consistent
	d) Outline of the issues raised by the identified party and how they have been addressed		
	e) A description of the outstanding issues raised by the identified party and the reasons why they have not been addressed.		
A15	Construction ancillary facilities (excluding minor construction ancillary facilities established under Condition A20) that are not identified by description and location in the documents referred to in Condition A1 can only be established and used in each case if:		
	a) They are located within or immediately adjacent to the construction boundary; and		
	b) They are not located next to a sensitive receiver(s) (including where an access road is between the facility and the receiver(s)), unless the sensitive receiver(s) (both the landowner(s) and occupier(s)2) have given written acceptance to the carrying out of the relevant facility in the proposed location; and		
	c) They have no impacts on heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and		
	d) The establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts.		
		The Proposed Change will not impact upon compliance with this condition.	Yes
A16	Before the establishment of a major construction ancillary facility (i.e. excluding minor construction ancillary facility(s) established under Condition A20), the Proponent must prepare a Site Establishment Management Plan which outlines the environmental management	The Proposed Change will not impact upon compliance with this condition. The SEMP will be updated to reflect this Proposed Change and approval will be sought from the ER.	Yes



No.	Condition of Approval	Discussion	Consistent
	<p>practices and procedures to be implemented for the establishment of the construction ancillary facility(s). The Site Establishment Management Plan must be prepared in consultation with the relevant council(s) and government agencies.</p> <p>The Plan must be endorsed by the ER and then submitted to the Planning Secretary for approval one (1) month before the establishment of the construction ancillary facility(ies).</p> <p>The Site Establishment Management Plan must detail the management of the construction ancillary facility(ies) and include:</p> <p>a) A description of activities to be undertaken during establishment of the construction ancillary facility(ies) (including scheduling and duration of works to be undertaken at the site)</p> <p>b) Figures illustrating the proposed site layout and the closest sensitive receiver(s);</p> <p>c) A program for ongoing analysis of the key environmental risks arising from the site establishment activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of site establishment work;</p> <p>d) Details of how the site establishment activities described in subsection (a) of this condition will be carried out to:</p> <p>i. meet the performance outcomes stated in the documents listed in Condition A1, and</p> <p>ii. manage the risks identified in the risk analysis undertaken in subsection of this condition; and</p>		

No.	Condition of Approval	Discussion	Consistent
	<p>e) A program for monitoring the performance outcomes, including a program for construction noise monitoring consistent with the requirements of Condition C14.</p> <p>The Site Establishment Management Plan must be approved before the establishment of a construction ancillary facility(ies) (excluding minor construction ancillary facilities established under Condition A20).</p> <p>Nothing in this condition prevents the Proponent from preparing individual Site Establishment Management Plans for each construction ancillary facility.</p> <p>Note: Condition A16 does not apply to minor construction ancillary facilities established under Condition A20.</p>		
A18	<p>The use of a construction ancillary facility for construction (excluding minor construction ancillary facilities established under Condition A20 and construction ancillary facilities established for the purposes of early works in accordance with Condition A24) must not commence until the CEMP required by Condition C1, relevant CEMP Sub-plans required by Condition C4 and relevant Construction Monitoring Programs required by Condition C11 have been approved by the Planning Secretary.</p> <p>This condition does not apply to the use of construction ancillary facilities where the ER has determined that the use of the facility will have a minimal impact on the environment and community.</p>	<p>The Proposed Change will not impact upon compliance with this condition. The SEMP has already been approved for use of AF9. The changed use of AF9 will be approved via the SEMP by the ER for the M12 Motorway component of the Proposed Change. The CEMP has been approved for construction.</p>	Yes
A19	<p>Construction ancillary facilities established for the purposes of early works in accordance with Condition A24 cannot be used for construction until the CEMP required by Condition C1, relevant CEMP Sub-plans required by Condition C4 and relevant Construction Monitoring Programs required by Condition C11 have been approved by the Planning Secretary.</p>	<p>The Proposed Change will not impact upon compliance with this condition. The SEMP has already been approved for use of AF9. The changed use of AF9 will be approved via the SEMP by the ER for the M12 Motorway component of the Proposed Change. The CEMP has been approved for construction.</p>	Yes

No.	Condition of Approval	Discussion	Consistent
	This condition does not apply to the use of construction ancillary facilities where the ER has determined that the use of the facility will have a minimal impact on the environment and community.		
A21	Boundary screening must be erected around all construction ancillary facilities that are adjacent to sensitive receivers for the duration of construction of the CSSI unless otherwise agreed with affected residents, business operators and landowners.	The Proposed Change will not impact upon compliance with this condition. Boundary screening is already in place around AF9.	Yes
A22	Boundary screening required under Condition A21 of this approval must minimise, as far as practicable, visual impacts on adjacent sensitive receivers.	The Proposed Change will not impact upon compliance with this condition. Boundary screening is already in place around AF9.	Yes
A23	The CSSI name; application number; telephone number, postal address and email address required under Condition B7 of this approval must be made available on site boundary fencing / hoarding at the entrance of each ancillary facility before the commencement of construction.	The Proposed Change will not impact upon compliance with this condition. The information required by this Condition is already in place on site boundary fencing / hoarding at the entrance of AF9.	Yes

No.	Condition of Approval	Discussion	Consistent
A34	<p>For the duration of Work until the commencement of operation, or as agreed with the Planning Secretary, the approved <b>ER</b> must:</p> <ul style="list-style-type: none"> <li>(a) receive and respond to communication from the Planning Secretary in relation to the environmental performance of the CSSI;</li> <li>(b) consider and inform the Planning Secretary on matters specified in the terms of this approval;</li> <li>(c) consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;</li> <li>(d) review the documents identified in <b>Conditions A9, A13, A16, A24, C1, C4 and C11</b> and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so: <ul style="list-style-type: none"> <li>(i) make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary); or</li> <li>(ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary / Department for information or are not required to be submitted to the Planning Secretary / Department);</li> </ul> </li> <li>(e) regularly monitor the implementation of the documents listed in <b>Conditions A9, A13, A16, A24, C1, C4 and C11</b> to ensure implementation is being carried out in accordance with the documents and the terms of this approval;</li> <li>(f) as may be requested by the Planning Secretary, help plan, attend or undertake audits of the CSSI commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under <b>Conditions A38 and A41</b> of this</li> </ul>	<p>The Proposed Change will not impact upon compliance with this condition. It is noted that minor amendments have been issued to the ER under A34(i).</p>	<p>Yes</p>

No.	Condition of Approval	Discussion	Consistent
	<p>approval;</p> <p>(g) as may be requested by the Planning Secretary, assist the Department in the resolution of community complaints;</p> <p>(h) assess the impacts of minor construction ancillary facilities, as required by <b>Condition A20</b> of this approval;</p> <p>(i) consider any minor amendments to be made to the <b>CEMP, CEMP Sub-plans, Construction Monitoring Programs, Site Establishment Management Plans</b> and <b>Early Works Environmental Management Plan</b> that involve updating or are of an administrative nature and do not increase impacts to nearby sensitive receivers, and ensure they are consistent with the terms of this approval and the documents approved by the Planning Secretary and, if satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval;</p> <p>(j) prepare and submit to the Planning Secretary and relevant regulatory agencies (where requested by those agencies), for information, an <b>Environmental Representative Monthly Report</b> providing the information set out in the Environmental Representative Protocol under the heading "Environmental Representative Monthly Reports." <b>The Environmental Representative Monthly Report</b> must be submitted within seven (7) days following the end of each month for the duration of the ER's engagement for the CSSI.</p>		
A35	<p>The Proponent must provide the <b>ER</b> with all documentation requested by the <b>ER</b> in order for the <b>ER</b> to perform their functions specified in <b>Condition A34</b> (including preparation of the <b>ER</b> monthly report), as well as:</p> <p>(a) the complaints register for any complaints received (on the day they are received); and</p> <p>(b) a copy of any assessment carried out by the Proponent of</p>	<p>The Proposed Change will not impact upon compliance with this condition given that the CA has been provided to the ER in accordance with CoA A35(b).</p>	Yes



No.	Condition of Approval	Discussion	Consistent
	whether proposed Work is consistent with the approval (which must be provided to the <b>ER</b> before the commencement of the subject Work).		
	a) Review and respond to each Independent Audit Report prepared under Condition A38 or Condition A41; b) Submit the response to the Planning Secretary; and c) Make each Independent Audit Report and response to it publicly available 60 days after submission to the Planning Secretary, unless otherwise agreed by the Planning Secretary.		
A49	All heavy vehicles used for construction spoil haulage must be clearly marked on the sides and rear with the CSSI name (or where the CSSI is staged, the name of that stage) to enable immediate identification by a person viewing the heavy vehicle. Details of the CSSI identification markings must be submitted to the Planning Secretary for approval and approved prior to the heavy vehicles being used for construction spoil haulage. There must only be one CSSI form of signage on a heavy vehicle at any one time.	The Proposed Change will not impact upon compliance with this condition. All heavy vehicles used for construction spoil haulage associated with the Proposed Change would meet the requirements of this Condition.	Yes
B1	A Communication Strategy must be prepared to provide mechanisms to facilitate communication about Work, construction and operation of the CSSI with: a) The community (including adjoining affected landowners and businesses, and others directly impacted by the CSSI); and b) The relevant councils and relevant government agencies. The Communication Strategy must address who (the Proponent, Independent Appointments and/or construction contractor) will engage	The Proposed Change will not impact upon compliance with this condition.	Yes



No.	Condition of Approval	Discussion	Consistent
	with the community, relevant councils and agencies, how they will engage and the timing of engagements.		
B5	The Communication Strategy, as approved by the Planning Secretary, must be implemented for the duration of Work and for 12 months following the completion of construction.	The Proposed Change will not impact upon compliance with this condition.	Yes
B6	<p>A Complaints Management System must be prepared and implemented before the commencement of any Work and maintained for the duration of construction and for a minimum for 12 months following completion of construction of the CSSI. The Complaints Management System must require complainants to be advised that:</p> <p>c) The Complaints Register may be forwarded to Government agencies, including the Department, to allow them to undertake their regulatory duties;</p> <p>d) By providing personal information, the complainant authorises the Proponent to provide that information to government agencies;</p> <p>e) The supply of personal information by the complainant is voluntary; and</p> <p>f) The complainant has the right to contact government agencies to access personal information held about them and to correct or amend that information (Collection Statement).</p> <p>The Collection Statement must be included on the Proponent's or project website to make prospective complainants aware of their rights under the Privacy and Personal Information Protection Act 1998. For any complaints made in person, the complainant must be made aware of the Collection Statement.</p>	The Proposed Change will not impact upon compliance with this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
B7	The following information must be available to facilitate community enquiries and manage complaints one (1) month before the commencement of Work and for 12 months following the completion of construction:	The Proposed Change will not impact upon compliance with this condition.	Yes
	g) 24-hour telephone number for the registration of complaints and enquiries about the CSSI		
	h) A postal address to which written complaints and enquires may be sent		
	i) An email address to which electronic complaints and enquiries may be transmitted; and		
	j) A mediation system for complaints unable to be resolved.		
	This information must be accessible to all in the community regardless of age, ethnicity, disability or literacy level and must be provided on the website required under Condition B10.		
B8	A Complaints Register must be maintained recording information on all complaints received about the CSSI during the carrying out of any work and for a minimum of 12 months following the completion of construction. The Complaints Register must record the:	The Proposed Change will not impact upon compliance with this condition.	Yes
	f) Number of complaints received;		
	g) The date and time of the complaint;		
	h) The method by which the complaint was made;		
	i) Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;		
	j) Nature of the complaint;		

No.	Condition of Approval	Discussion	Consistent
	k) Means by which the complaint was addressed and whether resolution was reached, with or without mediation; and		
	l) If no action was taken, the reason(s) why no action was taken.		
C1	A Construction Environmental Management Plan (CEMP) must be prepared having regard to the Environmental Management Plan Guideline for Infrastructure Projects (Department Planning, Industry and Environment, 2020). The CEMP must detail how the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1 will be implemented and achieved during construction.	The Proposed Change will not impact upon compliance with this condition. The approved CEMP and CNVMP will be updated to address the Proposed Change and endorsed by the ER prior to works subject to the Proposed Change commencing.	Yes
C2	<p>The CEMP must provide:</p> <p>(a) a description of activities to be undertaken during construction (including the scheduling of construction);</p> <p>(b) details of environmental policies, guidelines and principles to be followed in the construction of the CSSI;</p> <p>(c) a program for ongoing analysis of the key environmental risks arising from the activities described in subsection (a) of this condition, including an initial risk assessment undertaken before the commencement of construction of the CSSI;</p> <p>(d) details of how the activities described in subsection (a) of this condition will be carried out to:</p> <p style="padding-left: 40px;">(i) meet the performance outcomes stated in the documents listed in Condition A1; and</p> <p style="padding-left: 40px;">(ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition;</p> <p>(e) an inspection program detailing the activities to be inspected and frequency of inspections;</p>	The Proposed Change will not impact upon compliance with this condition. The approved project CEMP currently meets these requirements and a minor amendment to the CEMP and CNVMP will be endorsed by the ER prior to works associated with the Proposed Change commencing.	Yes

No.	Condition of Approval	Discussion	Consistent
	<p>(f) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> <li>(i) incidents; and</li> <li>(ii) non-compliances with this approval or statutory requirements;</li> </ul> <p>(g) procedures for rectifying any non-compliance with this approval identified during compliance auditing, incident management or at any time during construction;</p> <p>(h) a list of all the CEMP Sub-plans required in respect of construction, as set out in Condition C4. Where staged construction of the CSSI is proposed, the CEMP must also identify which CEMP Sub-plan applies to each of the proposed stages of construction;</p> <p>(i) a description of the roles and environmental responsibilities for relevant employees and their relationship with the ER;</p> <p>(j) for training and induction for employees, including contractors and sub-contractors, in relation to environmental and compliance obligations under the terms of this approval; (k) for periodic review and update of the CEMP and all associated plans and programs; and</p> <p>(l) the outcomes of consultation with government agencies in accordance with Condition A5.</p>		
C3	<p>The CEMP must be endorsed by the ER and then submitted to the Planning Secretary for approval no later than one (1) month before the commencement of construction, or where construction is staged no later than one (1) month before the commencement of that stage.</p>	<p>The Proposed Change will not impact upon compliance with this condition. The approved project CEMP currently meets these requirements and a minor amendment to the CEMP and CNVMP will be endorsed by the ER prior to works associated with the Proposed Change commencing.</p>	Yes

No.	Condition of Approval	Discussion	Consistent																		
C4	<p>The following CEMP Sub-plans must be prepared in consultation with the relevant government and other agencies identified for each CEMP Sub-plan. Details of all information requested by an agency during consultation must be provided to the Planning Secretary as part of any submission of the relevant CEMP Sub-plan, including copies of all correspondence from those agencies as required by Condition A5.</p> <table><tr><td></td><td>Required CEMP Sub-plan</td><td>Relevant government and other agencies to be consulted for each CEMP Sub-plan</td></tr><tr><td>(a)</td><td>Traffic and transport</td><td>Relevant council(s)</td></tr><tr><td>(b)</td><td>Noise and vibration</td><td>WaterNSW, Sydney Water and pipeline operators (where vibration generating activities will impact on their assets) and relevant council(s)</td></tr><tr><td>(c)</td><td>Flora and fauna</td><td>DPI Fisheries, EES, DAWES and relevant council(s)</td></tr><tr><td>(d)</td><td>Soils and contamination</td><td>DPIE Water, WaterNSW and relevant council(s)</td></tr><tr><td>(e)</td><td>Surface water and groundwater</td><td>DPIE Water, WaterNSW and Sydney Water (if there are discharges to its assets) and relevant council(s)</td></tr></table>		Required CEMP Sub-plan	Relevant government and other agencies to be consulted for each CEMP Sub-plan	(a)	Traffic and transport	Relevant council(s)	(b)	Noise and vibration	WaterNSW, Sydney Water and pipeline operators (where vibration generating activities will impact on their assets) and relevant council(s)	(c)	Flora and fauna	DPI Fisheries, EES, DAWES and relevant council(s)	(d)	Soils and contamination	DPIE Water, WaterNSW and relevant council(s)	(e)	Surface water and groundwater	DPIE Water, WaterNSW and Sydney Water (if there are discharges to its assets) and relevant council(s)	<p>The Proposed Change will not impact upon compliance with this condition. A minor amendment to the CEMP and the CNVMP will be made for the Proposed Change and the ER's approval sought.</p>	<p>Yes</p>
	Required CEMP Sub-plan	Relevant government and other agencies to be consulted for each CEMP Sub-plan																			
(a)	Traffic and transport	Relevant council(s)																			
(b)	Noise and vibration	WaterNSW, Sydney Water and pipeline operators (where vibration generating activities will impact on their assets) and relevant council(s)																			
(c)	Flora and fauna	DPI Fisheries, EES, DAWES and relevant council(s)																			
(d)	Soils and contamination	DPIE Water, WaterNSW and relevant council(s)																			
(e)	Surface water and groundwater	DPIE Water, WaterNSW and Sydney Water (if there are discharges to its assets) and relevant council(s)																			

No.	Condition of Approval			Discussion	Consistent
	(f)	Heritage (including Aboriginal and non-Aboriginal heritage)	Heritage Council of NSW, Heritage NSW, WaterNSW and relevant council(s)		
	(g)	Air quality	Relevant council(s)		
	Note: Nothing in this condition prevents the Proponent from combining any of the above CEMP Sub-plans.				
C10	Construction must not commence until the CEMP and all CEMP Sub-plans have been approved, unless otherwise agreed by the Planning Secretary. The CEMP and CEMP Sub-plans, as approved by the Planning Secretary, including any minor amendments approved by the ER must be implemented for the duration of construction. Where construction of the CSSI is staged, construction of a stage must not commence until the CEMP and sub-plans for that stage have been endorsed by the ER and approved by the Planning Secretary.			The Proposed Change will not impact upon compliance with this condition. A minor amendment to the CEMP and the CNVMP will be made for the Proposed Change and the ER's approval sought.	Yes
C17	The Construction Monitoring Programs, as approved by the Planning Secretary, including any minor amendments approved by the ER, must be implemented for the duration of construction and for any longer period set out in the monitoring program or specified by the Planning Secretary, whichever is the greater.			The Proposed Change will not impact upon compliance with this condition. A minor amendment to the CEMP and the CNVMP will be made for the Proposed Change and the ER's approval sought. No changes to the monitoring programs are proposed, however, the existing monitoring programs will be implemented for the Proposed Change.	Yes
E1	In addition to the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition A1, all practicable measures must be implemented to minimise and manage the emission of dust and other air pollutants during the construction of the CSSI.			The Proposed Change will not impact upon compliance with this condition.	Yes



No.	Condition of Approval	Discussion	Consistent
E32	The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of Work. Note: Human remains that are found unexpectedly during the carrying out of work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.	The Proposed Change will not impact upon compliance with this condition. An Unexpected Heritage Finds and Human Remains Procedure is included in the CCHMP.	Yes
E34	Work must only be undertaken during the following hours:	The Proposed Change will not impact upon compliance with this condition. Crushing will be undertaken during standard construction hours <b>and outside of standard construction hours as permitted through the Project EPL.</b>	Yes
	a) 7:00 am to 6:00 pm Mondays to Fridays, inclusive;		
	b) 8:00 am to 6:00 pm Saturdays; and		
	c) At no time on Sundays or public holidays.		
E35	<p>Except as permitted by an EPL, highly noise intensive works that result in an exceedance of the applicable noise management level (NML) at the same receiver must only be undertaken:</p> <ul style="list-style-type: none"> <li>(a) between the hours of 8:00 am to 6:00 pm Monday to Friday;</li> <li>(b) between the hours of 8:00 am to 1:00 pm Saturday; and</li> <li>(c) if continuously, then not exceeding three hours, with a minimum cessation of work of not less than one hour.</li> </ul> <p>For the purposes of this condition, 'continuously' includes any period during which there is less than one hour between ceasing and recommencing any of the Work.</p>	The Proposed Change will not impact upon compliance with this condition. <b>Works outside of standard construction hours will be permitted under the Project EPL.</b>	Yes

No.	Condition of Approval	Discussion	Consistent
E36	<p>Notwithstanding Condition E34 and E35, Work may be undertaken outside the hours specified in any of the following circumstances:</p> <p>(a) <b>Safety and Emergencies</b>, including:</p> <ul style="list-style-type: none"> <li>(i) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or</li> <li>(ii) where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm.</li> </ul> <p>On becoming aware of the need for emergency work in accordance with Condition E36(a), the Proponent must notify the ER, the Planning Secretary and the EPA of the reasons for such emergency work. The Proponent must use best endeavours to notify all noise and/or vibration affected sensitive land user(s) of the likely impact and duration of the emergency work.</p> <p>(b) <b>Work that causes:</b></p> <ul style="list-style-type: none"> <li>(i) LAeq(15 minute) noise levels: <ul style="list-style-type: none"> <li>• no more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG, and</li> <li>• no more than the 'Noise affected' NMLs specified in Table 3 of the ICNG at other sensitive land user(s); and</li> </ul> </li> <li>(ii) LAFmax(15 minute) noise levels no more than 15 dB(A) above the rating background level at any residence during the night time period; and</li> <li>(iii) continuous or impulsive vibration values, measured at the most affected residence, that are no more than the preferred values for human exposure to vibration, specified in Table 2.2 of Assessing Vibration: a technical guideline (DEC, 2006); and</li> </ul>	<p>The Proposed Change will not impact upon compliance with this condition.</p>	<p>Yes</p>

No.	Condition of Approval	Discussion	Consistent
	<p>(iv) intermittent vibration values measured at the most affected residence that are no more than the preferred values for human exposure to vibration, specified in Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006).</p> <p>(c) <b>By Approval</b>, including:</p> <p>(i) where different construction hours are permitted or required under an EPL in force in respect of the CSSI; or</p> <p>(ii) works which are not subject to an EPL that are approved under an Out-of-Hours Work Protocol as required by Condition E37; or</p> <p>(iii) negotiated agreements with directly affected residents and sensitive land user(s).</p>		
E38	<p>Mitigation measures must be implemented with the aim of achieving the following construction noise management levels and vibration objectives:</p> <p>(a) construction 'Noise affected' NML established using the Interim Construction Noise Guideline (DECC, 2009);</p> <p>(b) vibration criteria established using the Assessing vibration: a technical guideline (DEC, 2006) (for human exposure);</p> <p>(c) BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"; and</p> <p>(d) the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage).</p> <p>Any construction or early works identified as exceeding the noise management levels and/or vibration criteria must be managed in accordance with the respective Noise and Vibration CEMP Sub-plan or Early Works Environmental Management Plan.</p>	The Proposed Change will not impact upon compliance with this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
	Note: The ICNG identifies 'particularly annoying' activities that require the addition of 5 dB(A) to the predicted level before comparing to the construction NML.		
E39	Noise generating work in the vicinity of potentially-affected community, religious, educational institutions, noise and vibration-sensitive businesses and critical working areas (such as theatres, laboratories and operating theatres) resulting in noise levels above the NMLs must not be timetabled within sensitive periods, unless offers of other reasonable arrangements have been made to the affected institutions and are implemented at no cost to the affected institution.	The Proposed Change will not impact upon compliance with this condition.	Yes
E40	Noise and Vibration Impact Statements (NVIS) must be prepared for any Work that may exceed the noise management levels and vibration criteria specified in Condition E38 at any residence outside the construction hours identified in Condition E34, or where receivers will be highly noise affected. The NVIS must include specific mitigation measures identified through consultation with affected sensitive land user(s) and the mitigation measures must be implemented for the duration of the Work. A copy of the NVIS must be provided to the ER prior to the commencement of the associated Work. The Planning Secretary may request a copy/ies of the NVIS.	The noise impacts from the Proposed Change would not trigger this condition as it is not expected to exceed the noise management levels and vibration criteria specified in Condition E34. A NVIS has been completed as part of the assessment (Appendix B of the CA main document). No exceedances were identified.	Yes
E42	The Proponent must conduct vibration testing during vibration generating activities that have the potential to impact on heritage items to identify minimum working distances to prevent cosmetic damage. In addition, vibration monitoring must be undertaken during construction for relevant remaining Fleurs Radio Telescope structures, the Upper Canal (in consultation with WaterNSW) and McMaster Farm and McGarvie-Smith Farm group of remaining buildings. In the event that the vibration testing and attended monitoring shows that the preferred values for vibration are likely to be exceeded, the Proponent must	N/A – the Proposed Change would not involve vibration generating activities that have the potential to impact on heritage items. The Upper Canal is located more than 80m away at the closest point and it outside of the minimum working distances.	N/A

No.	Condition of Approval	Discussion	Consistent
	review the construction methodology and, if necessary, implement additional mitigation measures.		
E48	Crushing and grinding works must only be undertaken during the hours specified in Condition E34 unless otherwise approved by the Planning Secretary or through an EPL or it meets the requirements of Condition E36(a).	The Proposed Change will not impact upon compliance with this condition. <b>Crushing associated with the Proposed Change will occur outside of standard construction hours as permitted under the project EPL Condition L5.3.</b>	Yes
E76	The Proponent must offer pre-construction surveys to the owners of surface and sub-surface structures and other relevant assets identified at risk from vibration, including all listed heritage items and buildings/structures of heritage significance as identified in the documents listed in Condition A1. Where the offer is accepted, the survey must be undertaken by a suitably qualified and experienced engineer and/or building surveyor prior to the commencement of vibration- generating works that could impact on the structure/asset. The results of each survey must be documented in a Pre-construction Condition Survey Report and the report must be provided to the owner of the item(s) surveyed no later than one (1) month before the commencement of all other potentially impacting works.	N/A - The Proposed Change would not cause any vibratory works. Pre-construction condition surveys for works around AF9 (particularly on Westlink M7 and Wallgrove Road) have already been offered to properties and have been completed at the Upper Canal.	N/A
E81	The Proponent must have regard to the Upper Canal Pheasants Nest to Prospect Reservoir Conservation Management Plan (NSW Public Works Governments Architect's Office, 2016) and Guidelines for development adjacent to the Upper Canal and Warragamba Pipelines (WaterNSW, 2020) when constructing the CSSI.	N/A - The Proposed Change would not cause any vibratory works that could damage the Upper Canal. The asset is located more than 80m away at its closest point and is outside of the minimum working distances.	N/A
E82	Construction and operation of the CSSI must not destroy, modify or otherwise cause direct or indirect damage to the Upper Canal System, including the Cecil Hills Tunnel, and Tunnel Shafts 3 and 4.	N/A - The Proposed Change would not cause any vibratory works that could damage the Upper Canal. The asset is located more than 80m away at its closest point and is outside of the minimum working distances.	N/A



No.	Condition of Approval	Discussion	Consistent
E84	All reasonably practicable erosion and sediment controls must be installed and appropriately maintained to minimise water pollution. When implementing such controls, any relevant guidance in the Managing Urban Stormwater, Soils and Construction Vol.1 (Landcom, 2004) and Vol. 2D Main Road Construction (DECC, 2008) must be considered.	The Proposed Change will not impact upon compliance with this condition.	Yes
E90	The Unexpected Contaminated Land and Asbestos Finds Procedure must be implemented throughout the duration of Work.	The Proposed Change will not impact upon compliance with this condition.	Yes
E100	Waste generated during Work and operation must be dealt with in accordance with the following priorities: (a) waste generation must be avoided and where avoidance is not reasonably practicable, waste generation must be reduced; (b) where avoiding or reducing waste is not possible, waste must be re-used, recycled, or recovered; and (c) where re-using, recycling or recovering waste is not possible, waste must be treated or disposed of.	The Proposed Change will not impact upon compliance with this condition.	Yes
E101	The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the conditions of an EPL for the CSSI, or be done in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, as the case may be.	The Proposed Change will not impact upon compliance with this condition.	Yes
E102	Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to any other place that can lawfully accept such waste, except in accordance with Condition E15.	The Proposed Change will not impact upon compliance with this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
E10 3	All waste generated by Works must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.	The Proposed Change will not impact upon compliance with this condition.	Yes
E10 4	<p>The Proponent must develop and implement a waste tracking register prior to waste generated by Work that details:</p> <ul style="list-style-type: none"> <li>(a) the quantity of each type of waste generated, its classification and source location (recorded using latitude and longitude coordinates);</li> <li>(b) the destination location(s) for all wastes generated during Work;</li> <li>(c) the quantities of any waste types imported onto the CSSI site, including their classification and emplacement location (recorded using latitude and longitude coordinates);</li> <li>(d) the quantities and types of wastes that are subject to a Resource Recovery Order and/or Exemption; and</li> <li>(e) disposal records demonstrating that receiving facilities have lawfully accepted the waste type.</li> </ul> <p>The waste tracking register must be made available to the Planning Secretary and EPA on request, within the timeframe stated in the request.</p>	The Proposed Change will not impact upon compliance with this condition.	Yes



Table A1-2: Commonwealth CoA (applicable to table 6-1)

No.	Condition of Approval	Discussion	Consistent
1.	The approval holder must not clear in the locations identified in condition E8 of the State Infrastructure approval, until it has completed the additional surveys and provided the results to the Department as required by condition E8 of the State Infrastructure approval.	The Proposed Change will not impact upon compliance of this condition.	Yes
2.	The approval holder must submit to the Department a map(s) of the final construction footprint within six months of the final construction footprint being determined, and where the action is staged, a map of the final construction footprint for each stage, within six months of the final construction footprint for that stage being determined	The Proposed Change will not impact upon compliance of this condition.	Yes
3.	The approval holder must not clear protected matters outside the final construction footprint.	The Proposed Change will not impact upon compliance of this	Yes

No.	Condition of Approval	Discussion	Consistent
4.	<p>To minimise the impacts of the action on protected matters the approval holder must not clear more than the following specified amounts, or another specified amount determined in consultation with the Department in accordance with condition E4 of the State Infrastructure approval within the final construction footprint:</p> <ul style="list-style-type: none"> <li>a. 42.89 hectares of known Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest threatened ecological community;</li> <li>b. 0.44 hectares of known Western Sydney Dry Rainforest and Moist Woodland on Shale threatened ecological community;</li> <li>c. 100 known <i>Pultenaea parviflora</i> individuals;</li> <li>d. The number of <i>Pimelea spicata</i> individuals identified in the additional surveys required by condition E8 of the State Infrastructure approval;</li> <li>e. 62.71 hectares of known foraging habitat for Grey-headed Flying Fox (<i>Pteropus poliocephalus</i>);</li> <li>f. 80.21 hectares of known foraging habitat for Swift Parrot (<i>Lathamus discolor</i>).</li> </ul>	The Proposed Change will not impact upon compliance of this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
5.	<p>For the protection of protected matters the approval holder must:</p> <p>a. Implement conditions A24 of Part A, Schedule 2 and C4, CS, C8, C9 and C10 of Part C, Schedule 2 of the State Infrastructure approval, where they relate to monitoring, managing, avoiding, mitigating, recording, or reporting on, impacts to protected matters.</p> <p>b. Implement biodiversity conditions E2 to E10 of Part E, Schedule 2 of the State Infrastructure approval where they relate to monitoring, managing, avoiding, mitigating, offsetting, recording, or reporting on, impacts to protected matters.</p> <p>c. Notify the Department in writing within 2 business days of formally proposing any change to the conditions of the State Infrastructure approval for which conditions 5a or 5b apply, and within 5 business days of becoming aware of the NSW Government proposing a change.</p> <p>d. Notify the Department in writing of any change to the State Infrastructure approval for which conditions 5a and 5b apply, within 5 business days of a change to the State Infrastructure approval being finalised.</p>	The Proposed Change will not impact upon compliance of this condition.	Yes
6.	The approval holder must notify the Department in writing of the date of commencement of the action within 10 business days after the date of commencement of the action.	The Proposed Change will not impact upon compliance of this condition.	Yes
7.	If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister	The Proposed Change will not impact upon compliance of this condition.	Yes
8.	The approval holder must maintain accurate and complete compliance records.	The Proposed Change will not impact upon compliance of this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
9.	<p>If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request.</p> <p>Note: Compliance records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the Department's website or through the general media.</p>	The Proposed Change will not impact upon compliance of this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
10.	<p>The approval holder must prepare a compliance report for each 12 month period following the date of commencement of the action, or otherwise in accordance with an annual date that has been agreed to in writing by the Minister. The approval holder must:</p> <ul style="list-style-type: none"> <li>a. publish each compliance report on the website within 60 business days following the relevant 12 month period;</li> <li>b. notify the Department by email that a compliance report has been published on the website and provide the weblink for the compliance report within 5 business days of the date of publication;</li> <li>c. keep all compliance reports publicly available on the website until this approval expires or as otherwise agreed by the Department in writing;</li> <li>d. exclude or redact sensitive ecological data from compliance reports published on the website; and</li> <li>e. where any sensitive ecological data has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication.</li> </ul> <p>Note: Compliance reports may be published on the Department's website</p>	The Proposed Change will not impact upon compliance of this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
11.	<p>The approval holder must notify the Department in writing of any: incident affecting protected matters; non-compliance with the conditions; or non-compliance with the commitments made in plans required in accordance with conditions 5a or 5b. The notification must be given as soon as practicable, and no later than 2 business days after becoming aware of the incident affecting protected matters or non-compliance. The notification must specify:</p> <ul style="list-style-type: none"> <li>a. any condition which is or may be in breach</li> <li>b. a short description of the incident affecting protected matters and/or non-compliance</li> <li>c. the location (including co-ordinates), date, and time of the incident affecting protected matters and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.</li> </ul>	The Proposed Change will not impact upon compliance of this condition.	Yes
12.	<p>The approval holder must provide to the Department the details of any incident affecting protected matters or non-compliance with the conditions or commitments made in plans required in accordance with conditions 5a or 5b as soon as practicable and no later than 10 business days after becoming aware of the incident affecting protected matters or non-compliance, specifying:</p> <ul style="list-style-type: none"> <li>a. any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;</li> <li>b. the potential impacts of the incident affecting protected matters or non-compliance; and</li> <li>c. the method and timing of any remedial action that will be undertaken by the approval holder.</li> </ul>	The Proposed Change will not impact upon compliance of this condition.	Yes
13.	The approval holder must ensure that independent audits of compliance with the conditions are conducted as requested in writing by the Minister.	The Proposed Change will not impact upon compliance of this condition.	Yes



No.	Condition of Approval	Discussion	Consistent
14.	<p>For each independent audit requested by the Minister under condition 13, the approval holder must:</p> <ul style="list-style-type: none"> <li>a. provide the name and qualifications of the independent auditor and the draft audit criteria to the Department</li> <li>b. only commence the independent audit once the audit criteria have been approved in writing by the Department</li> <li>c. submit an audit report to the Department within the timeframe specified in the approved audit criteria.</li> </ul>	The Proposed Change will not impact upon compliance of this condition.	Yes
15.	The approval holder must publish the audit report on the website within 10 business days of receiving the Department's approval of the audit report and keep the audit report published on the website until the end date of this approval, or as otherwise agreed by the Department in writing.	The Proposed Change will not impact upon compliance of this condition.	Yes
16.	<p>The approval holder must:</p> <ul style="list-style-type: none"> <li>a. submit plans electronically to the Department for information;</li> <li>b. unless otherwise agreed to in writing by the Minister, publish each plan on the website within 20 business days of the date: i. that the plan was approved under the State Infrastructure approval, if the plan requires approval under the State Infrastructure approval; or ii. that the plan was finalised and provided to the NSW Planning Secretary, if the plan is required for information under the State Infrastructure approval.</li> <li>c. exclude or redact sensitive ecological data from plans that are to be published on the website or provided to a member of the public; and</li> <li>d. keep plans published on the website for the period for which this approval has effect, or as otherwise agreed by the Department in writing.</li> </ul>	The Proposed Change will not impact upon compliance of this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
17.	Within 20 days after the completion of the action, the approval holder must notify the Department in writing and provide completion data.	The Proposed Change will not impact upon compliance of this condition.	Yes

Table A1-3: REMMs (applicable to Table 5-2)

No.	Revised Environmental Management Measure	Discussion	Consistent
G01	<p>A Community Communication Strategy will be prepared for the project to facilitate communication with the local community including relevant Government agencies, Councils, adjoining affected landowners and businesses, and other relevant stakeholders that may be affected by the project. The strategy will: Identify people or organisations to be consulted during the delivery of the project</p> <ul style="list-style-type: none"> <li>• Set out procedures and mechanisms for the regular distribution of information about the project</li> <li>• Outline mechanisms to keep relevant stakeholders updated on site construction activities, schedules and milestones</li> <li>• Outline avenues for the community to provide feedback (including a 24-hour, toll free project information and complaints line) or to register complaints and through which TfNSW will respond to community feedback</li> <li>• Outline a process to resolve complaints and issues raised.</li> </ul> <p>The Community Communication Strategy will include a Construction Fatigue Protocol to minimise impacts associated with construction fatigue. The Protocol will include consideration of noise attenuation and restriction of out-of-hours work or use of noise intensive equipment where reasonable and feasible.</p>	The Proposed Change will not impact upon compliance of this measure.	Yes

No.	Revised Environmental Management Measure	Discussion	Consistent
G02	A CEMP will be prepared and implemented for the project in accordance with the Department of Infrastructure, Planning and Natural Resources Guideline for the Preparation of Environmental Management Plans (DIPNR 2004), for the ongoing management of environmental issues during construction of the project.	The Proposed Change will not impact upon compliance of this measure. The CEMP will be updated to reflect the Proposed Change as relevant.	Yes
B22	Changes to existing surface water flows will be minimised through detailed design.	The Proposed Change will not impact upon compliance of this measure.	Yes
TT03	Movements of haulage vehicles will be planned to minimise movements on the road network during the AM and PM peak periods where practicable.	The Proposed Change will not impact upon compliance of this measure.	Yes
LVIA07	Temporary and permanent lighting will be designed and implemented with consideration of: <ul style="list-style-type: none"> <li>• The need to orientate lighting to minimise light spill and glare impacts on nearby receivers</li> <li>• The need to minimise vandalism and maintenance requirements</li> <li>• Requirements of the National Airports Safeguarding Framework (NASF) (National Airports Safeguarding Advisory Group, n.d.) for operational lighting</li> <li>• Opportunities to implement sustainability initiatives in design such as energy efficient or solar lighting.</li> </ul>	The Proposed Change will not impact upon compliance of this measure.	Yes

No.	Revised Environmental Management Measure	Discussion	Consistent
AH08	Exclusion zones will be set up in the form of an appropriate barrier / fencing along the portion of AHIMS site 45-5-2721 (PAD-OS-7) that extends into the refined construction footprint, with visible signage notifying construction personnel to avoid ground impacts.	The Proposed Change will not impact upon compliance of this measure.	Yes

NV01	<p>A construction noise and vibration management plan (CNVMP) will be prepared for the project to mitigate and manage noise and vibration impacts during construction. The CNVMP will be implemented for the duration of construction of the project and will:</p> <ul style="list-style-type: none"> <li>• Identify nearby sensitive receivers</li> <li>• Include a description of the construction activities equipment and working hours</li> <li>• Identify relevant noise and vibration performance criteria for the project and license and approval conditions.</li> <li>• Include modelling results showing construction noise impacts based on detailed design information</li> <li>• Outline standard and additional mitigation measures from the Construction Noise and Vibration Guideline (CNVG) (Roads and Maritime 2016) and information about when each will be applied</li> <li>• Outline requirements for the development and implementation of an Out-of-hours Work Protocol</li> <li>• Outline requirements for noise and vibration monitoring that will be carried out to monitor project performance associated with the noise and vibration criteria</li> <li>• Describe community consultation and complaints handling procedures in accordance with the Community Communication Strategy to be developed for the project</li> <li>• Outline measures to manage noise impacts associated with heavy vehicle movements both on and offsite</li> <li>• Outline measures to minimise cumulative construction impacts and the likelihood for 'construction fatigue' from concurrent and consecutive projects in the area</li> <li>• Outline requirements to minimise and manage construction fatigue, in consultation with the community.</li> </ul>	The Proposed Change will not impact upon compliance with this measure. A CNVMP has been developed and approved and a minor update will be endorsed by the ER.	Yes
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No.	Revised Environmental Management Measure	Discussion	Consistent
NV02	Measures to minimise and manage construction fatigue are to be investigated through the planning of construction staging.	N/A - A detailed noise assessment has been carried out (refer Appendix B) and the works are not predicted to exceed the NML.	N/A
NV03	<p>Detailed noise assessments will be carried out for ancillary facilities with the potential to involve high noise generating activities (including batching plant operations). The assessments will consider the proposed site layouts and noise generating activities that will occur at the facilities and assess predicted noise levels against the relevant noise management criteria.</p> <p>The assessments will also consider the requirement for appropriate noise mitigation within ancillary facilities and adjacent to construction works, depending on the predicted noise levels. Any mitigation measures required will be implemented before the start of activities that generate noise and vibration impacts.</p>	<p>The Proposed Change will not impact upon compliance of this measure.</p> <p>A detailed noise assessment has been carried out (refer Appendix B) and no mitigation measures have been identified as the impacts are predicted to be below the NML.</p>	Yes
NV04	<p>Monitoring will be carried out at the start of high noise and vibration activities to confirm that actual noise and vibration levels are consistent with the noise and vibration impact predictions. Where mitigation measures were included, measurements will be carried out to confirm the effectiveness.</p> <p>Where the monitoring identifies higher levels of noise and vibration compared to predicted levels, or where mitigation is shown to be ineffective against measured noise and vibration levels, additional mitigation measures will be identified and implemented to appropriately manage impacts where feasible and reasonable.</p>	The Proposed Change will not impact upon compliance of this measure.	Yes

No.	Revised Environmental Management Measure	Discussion	Consistent
NV11	<p>The following structures have the potential to be within the safe working distances for sensitive structures (Group 3 from DIN 4150):</p> <ul style="list-style-type: none"> <li>• Item 1: McGarvie Smith Farm</li> <li>• Item 2: Fleurs Radio Telescope Site</li> <li>• Item 4: Upper Canal System</li> <li>• Item 6: McMaster Field Station</li> <li>• Item 7: Fleurs Aerodrome.</li> </ul> <p>A detailed survey will be completed to determine the potential for vibration impacts and to define appropriate criteria for each heritage item. Vibration monitoring will be carried out when vibration intensive tasks are occurring within the minimum working distances to heritage structures. Where the monitoring identifies exceedances in the relevant criteria, or where impacts are identified, additional mitigation measures will be identified and implemented to appropriately manage impacts.</p>	N/A – The Upper Canal system is not within the minimum working distances for the Proposed Change.	N/A

No.	Revised Environmental Management Measure	Discussion	Consistent
NV12	<p>Construction vehicle movements (both on and offsite) will be managed to minimise noise impacts. Where feasible, this will include (but not be limited to):</p> <ul style="list-style-type: none"> <li>• Establishment and use of internal haul routes, or existing major roads where this is not feasible</li> <li>• Restriction of heavy vehicle movements to standard construction hours</li> <li>• Locating traffic marshalling areas away from residences to minimise noise impacts from idling vehicles</li> <li>• Instructing workers on the operation of heavy vehicles entering and exiting the site to minimise noise.</li> </ul>	The Proposed Change will not impact upon compliance of this measure.	Yes
SWH02	A soil conservation specialist will be engaged by both TfNSW and the Contractor for the duration of construction of the project to provide advice on the planning and implementation of erosion and sediment control including review of ESCPs.	The Proposed Change will not impact upon compliance of this measure. Erosion and sediment controls as described by an update to the existing AF9 ESCP have been designed by the Soil Conservationist and would be implemented during establishment and operation of the Proposed Change once approved by the relevant parties.	Yes

No.	Revised Environmental Management Measure	Discussion	Consistent
SWH04	<p>Stockpiles will be managed to minimise the potential for mobilisation and transport of dust and sediment in runoff in accordance with TfNSW Stockpile Sites Management Guideline (Roads and Maritime, 2015). This will include:</p> <ul style="list-style-type: none"> <li>• Minimising the number of stockpiles, area used for stockpiles, and time that they are left exposed</li> <li>• Locating stockpiles away from drainage lines, waterways and areas where they may be susceptible to wind erosion</li> <li>• Stabilising stockpiles, establishing appropriate sediment controls and suppressing dust as required.</li> </ul>	The Proposed Change will not impact upon compliance of this measure.	Yes

No.	Revised Environmental Management Measure	Discussion	Consistent
AQ02	<p>Dust generation will be minimised during construction where possible. Where practicable, specific measures will include (but not be limited to):</p> <ul style="list-style-type: none"> <li>• Regularly watering exposed and disturbed areas including stockpiles, especially during inclement weather conditions</li> <li>• Adjusting the intensity of activities based on measured and observed dust levels, weather forecasts and the proximity of and direction of the works in relation to the nearest surrounding receivers</li> <li>• Ensuring loads are covered, and any loose materials/debris are removed before vehicles exit the site</li> <li>• Minimising the number of stockpiles and amount of material stockpiled where practicable</li> <li>• Positioning stockpiling areas as far as possible from surrounding receivers, including potentially ecologically sensitive receivers</li> <li>• Limiting stockpiling activities during conditions where winds are blowing strongly in the direction(s) from the stockpiling location to nearby receivers</li> <li>• Consultation with nearby developers to co-ordinate and plan activities where practicable to minimise the potential for cumulative dust-related impacts</li> <li>• The planning and undertaking of demolition activities, including the removal of hazardous building materials in a manner that minimises dust generation. This will also include the removal of hazardous building materials before the start of general demolition works.</li> </ul>	The Proposed Change will not impact upon compliance of this measure.	Yes

No.	Revised Environmental Management Measure	Discussion	Consistent
W02	<p>A spoil management plan will be prepared for the project as part of the CWRMP and in line with the CSWMP. The spoil management plan will outline appropriate management procedures for the generation and importation of spoil. It will include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• Procedures for classification of spoil</li> <li>• Identification of spoil reuse measures</li> <li>• Spoil stockpile management procedures</li> <li>• Spoil haulage routes</li> <li>• Spoil disposal and reuse locations</li> <li>• Imported spoil sources and volumes.</li> </ul>	The Proposed Change will not impact upon compliance of this measure. A Spoil Management Plan has been prepared as part of the CWRMP.	Yes
GG04	<p>The procurement of goods and services will consider goods and services that:</p> <ul style="list-style-type: none"> <li>• Are from local suppliers</li> <li>• Make use of recycled materials or materials with a low embodied energy content.</li> <li>• Are energy efficient or have low embodied energy</li> <li>• Minimise the generation of waste</li> </ul>	The Proposed Change will not impact upon compliance of this measure.	Yes
GG05	Construction plant and equipment will be well maintained to maximise fuel efficiency.	The Proposed Change will not impact upon compliance of this measure.	Yes



# Appendix A2: M7 Widening Consistency assessment – the Division 5.2 Approval

Table A2-1: Consistency against relevant Minister's conditions of approval for the modified project (Schedule 1)

No.	Condition of Approval	Discussion	Consistent
1A	<p>The Proponent must carry out Modification 6 in accordance with the terms of this approval (the conditions listed in Condition 1B of Schedule 1, and all Conditions listed in Schedule 2) and generally in accordance with the:</p> <p>a) Westlink M7 Widening Modification Report prepared by Transport for NSW and dated August 2022; and</p> <p>b) Westlink M7 Widening Submissions Report prepared by Transport for NSW and dated November 2022</p>	The Proposed Change, as described in Section 2.1, can be carried out in accordance with the EAD and is generally in accordance with the description of Modification 6 provided in Condition 1A.	Yes
1C	<p>In the event of an inconsistency between:</p> <p>a) the terms of this approval and any document listed in Condition 1 and 1A of Schedule 1 inclusive, the terms of this approval will prevail to the extent of the inconsistency; and</p> <p>b) any document listed in Condition 1 and 1A of Schedule 1 inclusive, the most recent document will prevail to the extent of the inconsistency.</p> <p><b>Note:</b> For the purpose of this condition, there will be an inconsistency between a term of this approval and any document if it is not possible to comply with both the term and the document</p>	The Proposed Change will not impact upon compliance with this condition	Yes
1E	Modification 6 must be carried out in accordance with all procedures, commitments, preventative actions, performance outcomes and mitigation measures set out in the documents listed in Condition 1A unless otherwise specified in, or required under, this approval.	The Proposed Change can be carried out in accordance with all procedures, commitments, preventative actions, performance outcomes and mitigation measures set out in the EAD described in Condition A1.	Yes
1F	The Modification 6 approval lapses five years after the date on which it is granted, unless work has physically commenced on or before that date.	N/A	N/A

No.	Condition of Approval	Discussion	Consistent
67	Modification 6 must be constructed and operated with the objective of minimising light spillage to surrounding properties. All lighting associated with the construction and operation of Modification 6 must be consistent with the requirements of AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting and relevant Australian Standards in the series AS/NZ 1158 – Lighting for Roads and Public Spaces. Additionally, mitigation measures must be provided to manage any residual night lighting impacts to protect properties adjoining or adjacent to the modified project, in consultation with affected landowners.	<p>The operation of the crushing facilities, within the AF9 ancillary facility, would predominantly be within daylight hours. The proposed crushing activities and use are unlikely to cause substantial visual or light spill impacts due to the surrounding construction site and/or presence of existing vegetation around the AF9 site.</p> <p>The Proposed Change will not impact upon compliance with this condition</p>	Yes
A8	<p>Construction ancillary facilities (excluding minor ancillary facilities established under Condition A11) that are not identified by description and location in the documents listed in Condition 1A of Schedule 1 can only be established and used in each case if:</p> <p>(a) they are located within or immediately adjacent to the construction boundary; and</p> <p>(b) they are not located next to sensitive land use(s) (including where an access road is between the facility and the land use), unless the landowner and occupier have given written acceptance to the carrying out of the relevant facility in the proposed location; and</p> <p>(c) they have no impacts on heritage items (including areas of archaeological sensitivity), threatened species, populations or ecological communities beyond the impacts approved under the terms of this approval; and</p> <p>(d) the establishment and use of the facility can be carried out and managed within the outcomes set out in the terms of this approval, including in relation to environmental, social and economic impacts</p>	<p>The Proposed Change will not impact upon compliance with this condition.</p>	Yes

No.	Condition of Approval	Discussion	Consistent
A9	<p>Before the establishment of a construction ancillary facility that is required prior to the approval of a CEMP (excluding minor ancillary facilities determined by the ER to have minimal environmental impact and those established under Condition A11), the Proponent must prepare an Construction Ancillary Facility Site Establishment Management Plan which outlines the environmental management practices and procedures to be implemented for the establishment of the construction ancillary facilities. The Construction Ancillary Facility Site Establishment Management Plan must be prepared in consultation with the relevant council and government agencies.</p> <p>The Plan must be submitted to the Planning Secretary for approval one month before the establishment of any construction ancillary facilities. The Construction Ancillary Facility Site Establishment Management Plan must detail the management of the construction ancillary facilities and include:</p> <p>(a) a description of activities to be undertaken during establishment of the construction ancillary facility (including scheduling and duration of work to be undertaken at the site);</p> <p>(b) figures illustrating the proposed site layout and the location of the closest sensitive land use(s);</p> <p>(c) a program for ongoing analysis of the key environmental risks arising from the site establishment activities described in subsection (a) of this condition, including an initial risk assessment undertaken prior to the commencement of site establishment work;</p> <p>(d) details of how the site establishment activities described in subsection (a) of this condition will be carried out to:</p> <p>(i) meet the performance outcomes stated in the documents listed in Condition 1A of Schedule 1, and</p> <p>(ii) manage the risks identified in the risk analysis undertaken in subsection (c) of this condition; and</p> <p>(e) a program for monitoring the performance outcomes, including a program for construction noise monitoring.</p>	The Proposed Change will not impact upon compliance with this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
	<p>Nothing in this condition prevents the Proponent from preparing individual Construction Ancillary Facility Site Establishment Management Plans for each construction ancillary facility.</p> <p>Note: This plan is only needed before a CEMP is approved. Once a CEMP is approved a Construction Ancillary Facility Site Establishment Management Plan(s) is not required.</p>		
A10	<p>A construction ancillary facility established under Condition A9 must not be used for Construction until the CEMP required by Condition C1, relevant CEMP Sub-plans required by Condition C4 and relevant Construction Monitoring Programs required by Condition C9 have been approved.</p>	<p>The Proposed Change will not impact upon compliance with this condition. The M7-M12 Integration project CEMP, Sub-plans and Construction Monitoring Programs have been approved. The CEMP and relevant sub-plans will be updated to incorporate the Proposed Change as relevant.</p>	Yes
A12	<p>Boundary screening must be erected between construction ancillary facilities (excluding minor ancillary facilities) and adjacent to sensitive land use(s) for the duration of the time that the construction ancillary facility is in use, unless otherwise agreed with the owner and occupier of the adjacent sensitive land use(s).</p> <p>Boundary screening must aim to minimise visual impacts on adjacent sensitive land use(s).</p>	<p>The Proposed Change will not impact upon compliance with this condition. Boundary screening is already in place around AF9.</p>	Yes



A20	<p>For the duration of Work until the completion of construction, or as agreed with the Planning Secretary, the approved ER must:</p> <ul style="list-style-type: none"> <li>(a) receive and respond to communication from the Planning Secretary in relation to the environmental performance of Modification 6;</li> <li>(b) consider and inform the Planning Secretary on matters specified in the terms of this approval;</li> <li>(c) consider and recommend to the Proponent any improvements that may be made to work practices to avoid or minimise adverse impact to the environment and to the community;</li> <li>(d) review documents identified in Conditions A2, A6, A9, C1, C4 and C9 and any other documents that are identified by the Planning Secretary, to ensure they are consistent with requirements in or under this approval and if so: <ul style="list-style-type: none"> <li>(i) make a written statement to this effect before submission of such documents to the Planning Secretary (if those documents are required to be approved by the Planning Secretary); or</li> <li>(ii) make a written statement to this effect before the implementation of such documents (if those documents are required to be submitted to the Planning Secretary / Department for information or are not required to be submitted to the Planning Secretary/Department);</li> </ul> <p>Note: The written statement must be made via the Major Projects Portal.</p> </li> <li>(e) regularly monitor the implementation of the documents listed in Conditions A2, A6, A9, C1, C4 and C9 to ensure implementation is being carried out in accordance with the document and the terms of this approval;</li> <li>(f) as may be requested by the Planning Secretary, help plan or attend audits of the development commissioned by the Department including scoping audits, programming audits, briefings and site visits, but not independent environmental audits required under Condition A27 of this approval;</li> <li>(g) as may be requested by the Planning Secretary, assist in the resolution of community complaints;</li> <li>(h) review the appropriateness of any activities reliant on the definition of Low Impact Work;</li> <li>(i) consider or assess the impacts of minor ancillary facilities as required by Condition A11;</li> <li>(j) consider any minor amendments to be made to the Construction Ancillary Facility Site Establishment Management Plan, CEMP, CEMP Sub-plans and monitoring programs without increasing impacts to nearby sensitive land uses or that comprise updating or are of an administrative nature, and are consistent with the terms of this approval and the CEMP, CEMP Sub-plans and monitoring programs approved by the Planning Secretary and, if</li> </ul>	<p>The Proposed Change will not impact upon compliance with this condition. The CEMP and relevant Sub-plans will be updated to incorporate the Proposed Change as relevant and will be approved by the ER.</p>	<p>Yes</p>
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No.	Condition of Approval	Discussion	Consistent
	<p>satisfied such amendment is necessary, approve the amendment. This does not include any modifications to the terms of this approval; and</p> <p>(k) prepare and submit to the Planning Secretary and other relevant regulatory agencies, for information, an Environmental Representative Monthly Report providing the information set out in the Environmental Representative Protocol under the heading "Environmental Representative Monthly Reports." The Environmental Representative Monthly Report must be submitted within seven days following the end of each month for the duration of the ER's engagement for Modification 6, or as otherwise agreed by the Planning Secretary.</p>		
A21	<p>The Proponent must provide the ER with documentation requested in order for the ER to perform their functions specified in Condition A20 (including preparation of the ER monthly report), as well as:</p> <p>(a) the complaints register (to be provided on a weekly basis where complaints have been received or as requested); and</p> <p>(b) a copy of any assessment carried out by the Proponent of whether proposed work is consistent with the approval (which must be provided to the ER before the commencement of the subject work).</p>	The Proposed Change will not impact upon compliance with this condition. A copy of the approved Consistency Assessment will be provided to the ER for information.	Yes
A24	<p>The Proponent must cooperate with the AA by:</p> <p>(a) providing access to noise and vibration monitoring activities as they take place;</p> <p>(b) providing for review of noise and vibration plans, assessments, monitoring reports, data and analyses undertaken;</p> <p>(c) and considering any recommendations to improve practices and demonstrating, to the satisfaction of the AA, why any recommendation is not adopted.</p>	The Proposed Change will not impact upon compliance with this condition. Access to noise and vibration monitoring activities will be provided to the AA as they take place in accordance with the requirements of the M7-M12 Integration project CNVMP.	Yes



A25	<p>The approved AA must:</p> <ul style="list-style-type: none"> <li>(a) receive and respond to communication from the Planning Secretary in relation to the performance of Modification 6 in relation to noise and vibration;</li> <li>(b) consider and inform the Planning Secretary on matters specified in the terms of this approval relating to noise and vibration;</li> <li>(c) consider and recommend to the Proponent, improvements that may be made to avoid or minimise adverse noise and vibration impacts;</li> <li>(d) review proposed night-time works to determine if sleep disturbance would occur and recommend measures to avoid sleep disturbance or appropriate additional alternative mitigation measures;</li> <li>(e) review noise and vibration documents required to be prepared under the terms of this approval, and should they be consistent with the terms of this approval, endorse them before submission to the Planning Secretary (if required to be submitted to the Planning Secretary) or before implementation (if not required to be submitted to the Planning Secretary);</li> <li>(f) regularly monitor the implementation of all noise and vibration documents required to be prepared under the terms of this approval to ensure implementation is in accordance with what is stated in the document(s) and the terms of this approval;</li> <li>(g) notify the Planning Secretary of noise and vibration incidents in accordance with Conditions A33 and A35 of this approval;</li> <li>(h) in conjunction with the ER, the AA must: <ul style="list-style-type: none"> <li>(i) as may be requested by the Planning Secretary help plan, attend or undertake audits of noise and vibration management of the CSSI including briefings, and site visits,</li> <li>(ii) in the event that conflict arises between the Proponent and the community in relation to the noise and vibration performance of Modification 6, follow the procedure in the Community Communication Strategy approved under Condition B2 to attempt to resolve the conflict, and if it cannot be resolved, notify the Planning Secretary,</li> <li>(iii) consider relevant minor amendments made to the Construction Ancillary Facility Site Establishment Management Plan, CEMP, relevant sub-plans and noise and vibration monitoring programs that require updating or are of an administrative nature, and are consistent with the terms of this approval and the management plans and monitoring programs approved by the Planning Secretary and, if satisfied such amendment is necessary, endorse the amendment, (this does not include any modifications to the terms of this approval),</li> <li>(iv) review the noise impacts of minor construction ancillary facilities, and</li> <li>(v) prepare and submit to the Planning Secretary and other relevant regulatory agencies,</li> </ul> </li> </ul>	<p>The Proposed Change will not impact upon compliance with this condition. Consultation on the Proposed Change was undertaken with the project's Acoustics Advisor (AA), with no concerns raised.</p>	Yes
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No.	Condition of Approval	Discussion	Consistent
	for information, a Monthly Noise and Vibration Report detailing the AA's actions and decisions on matters for which the AA was responsible in the preceding month. The Monthly Noise and Vibration Report must be submitted within seven days following the end of each month for the duration of the AA's engagement for Modification 6, or as otherwise agreed by the Planning Secretary.		

Table A2-2: Consistency against relevant Minister's conditions of approval for the modified project (Schedule 2)

No.	Condition of Approval	Discussion	Consistent
B1	A Communication Strategy must be prepared to provide mechanisms to facilitate communication about construction and operation of Modification 6 with: (a) the community (including adjoining affected landowners and businesses, and others directly impacted by Modification 6); and (b) the relevant councils and relevant agencies.	The Proposed Change will not impact upon compliance with this condition.	Yes
B2	The Communication Strategy must: (a) identify people, organisations, councils and agencies to be consulted during the design and work phases of Modification 6; (b) identify details of the community and its demographics; (c) identify timing of consultation; (d) set out procedures and mechanisms for the regular distribution of accessible information including to LOTE and CALD and vulnerable communities about or relevant to Modification 6; (e) detail the measures for advising the community in advance of upcoming construction including upcoming out-of-hours work as required by Condition D54; (f) provide for the formation of issue or location-based community forums that focus on key environmental	The Proposed Change will not impact upon compliance with this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
	<p>management issues of concern to the relevant community(ies) for Modification 6;</p> <p>(g) set out procedures and mechanisms:</p> <ul style="list-style-type: none"> <li>(i) through which the community can discuss or provide feedback to the Proponent;</li> <li>(ii) through which the Proponent will respond to enquiries or feedback from the community;</li> <li>(iii) to resolve any issues and mediate any disputes that may arise in relation to the environmental management and delivery of Modification 6, including disputes regarding rectification or compensation;</li> </ul> <p>(h) address who will engage with the community, relevant councils and agencies</p>		
B3	The Communication Strategy must be submitted to the Planning Secretary for approval no later than one (1) month before the commencement of any Work.	The Proposed Change will not impact upon compliance with this condition.	Yes
B4	Work for the purposes of Modification 6 must not commence until the Communication Strategy has been approved by the Planning Secretary.	The Proposed Change will not impact upon compliance with this condition.	Yes
B5	The Communication Strategy, as approved by the Planning Secretary, must be implemented for the duration of Work and for 12 months following the completion of construction	The Proposed Change will not impact upon compliance with this condition.	Yes
B6	<p>A Complaints Management System must be prepared and implemented before the commencement of any Work and maintained for the duration of Work and for a minimum for 12 months following completion of construction of Modification 6.</p> <p><i>Note: In the situation where there are different entities constructing and operating Modification 6, continuity of</i></p>	The Proposed Change will not impact upon compliance with this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
	<i>access to the Complaints Management System must be maintained.</i>		
C1	A Construction Environmental Management Plan (CEMP) must be prepared having regard to the Environmental Management Plan Guideline for Infrastructure Projects (Department of Planning, Industry and Environment, 2020).	The Proposed Change will not impact upon compliance with this condition. The CEMP and Sub-plans (specifically the CNVMP) would be updated as required to consider the proposed change.	Yes
C7	The CEMP(s) and CEMP Sub-plans as approved, including any minor amendments approved by the ER, must be implemented for the duration of construction.	The Proposed Change will not impact upon compliance with this condition. The CEMP and CNVMP would be updated as required to consider the proposed change and endorsed by the ER. Where required following CEMP/Sub-plan updates, the relevant ESCPs and CNVISs will be also be updated to support screening and crushing.	Yes
C13	The CMP(s), as approved, including any minor amendments approved by the ER, must be implemented for the duration of construction and for any longer period set out in the monitoring program or specified by the Planning Secretary, whichever is the greater.	The Proposed Change will not impact upon compliance with this condition. The CEMP and the CNVMP would be updated as required to consider the proposed change and endorsed by the ER. No changes to the monitoring programs are required.	Yes
D1	In addition to the performance outcomes, commitments and mitigation measures specified in the documents listed in Condition 1A of Schedule 1, all practicable measures must be implemented to minimise and manage the emission of dust and other air pollutants (including odours) during the construction of Modification 6.	The Proposed Change will not impact upon compliance with this condition.	Yes
D13	Modification 6 must be constructed in a manner that minimises visual impacts of construction ancillary facilities, including providing screening of ancillary facilities, minimising light spill, and incorporating finishes within key elements of temporary structures that reflect the context	The Proposed Change will not impact upon compliance with this condition. Boundary screening is already in place around AF9.	Yes



No.	Condition of Approval	Discussion	Consistent
	within which the construction sites are located, including recognition of Country.		
D32	All reasonable steps must be taken so as not to harm, modify or otherwise impact Aboriginal objects.	The Proposed Change will not impact upon compliance with this condition. The Proposed Change would be located fully within the approved AF9 construction ancillary facility.	Yes
D36	The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of Work. Where archaeological investigations have been undertaken as a result of Unexpected Finds notifications then a Final Archaeological Report must be provided in accordance with Heritage Council guidance and standard requirements for final reporting under Excavation Permits. Note: Human remains that are found unexpectedly during the carrying out of work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately.	The Proposed Change will not impact upon compliance with this condition. An Unexpected Heritage Finds and Human Remains Procedure is included in the CCHMP.	Yes
D38	Work must be undertaken during the following hours: (a) 7:00 am to 6:00 pm Mondays to Fridays, inclusive; (b) 8:00 am to 6:00 pm Saturdays; and (c) at no time on Sundays or public holidays.	The Proposed Change will not impact upon compliance with this condition.	Yes
D39	Except as permitted by an EPL, highly noise intensive works that result in an exceedance of the applicable NML at the same receiver must only be undertaken: (a) between the hours of 8:00 am to 6:00 pm Monday to Friday; (b) between the hours of 8:00 am to 1:00 pm Saturday; and (c) if continuously, then not exceeding three (3) hours, with a minimum cessation of work of not less than one hour.	The Proposed Change will not impact upon compliance with this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
	For the purposes of this condition, 'continuously' includes any period during which there is less than one hour between ceasing and recommencing any of the work.		
D40	<p>Notwithstanding Conditions D38 and D39 work may be undertaken outside the hours specified in the following circumstances (a, b or c):</p> <p>(a) Safety and Emergencies, including:</p> <ul style="list-style-type: none"> <li>(iv) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or</li> <li>(v) where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm.</li> </ul> <p>On becoming aware of the need for emergency work in accordance with Condition D40(a), the AA, the ER, the Planning Secretary and the EPA must be notified of the reasons for such work. Best endeavours must be used to notify all noise and/or vibration affected residents and owners/occupiers of properties identified sensitive land use(s) of the likely impact and duration of those work.</p> <p>(b) Work that meets any of the following criteria:</p> <ul style="list-style-type: none"> <li>(i) Work that causes LAeq(15 minute) noise levels: <ul style="list-style-type: none"> <li>• no more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG, and</li> <li>• no more than the 'Noise affected' NMLs specified in Table 3 of the ICNG at other sensitive land use(s); or</li> </ul> </li> <li>(ii) LAFmax(15 minute) noise levels no more than 15 dB(A) above the rating background level at any residence during the night time period; and;</li> <li>(iii) Work that causes:</li> </ul>	The Proposed Change will not impact upon compliance with this condition.	Yes



No.	Condition of Approval	Discussion	Consistent
	<ul style="list-style-type: none"> <li>continuous or impulsive vibration values, measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.2 of Assessing Vibration: a technical guideline (DEC, 2006), or</li> <li>intermittent vibration values measured at the most affected residence are no more than the preferred values for human exposure to vibration, specified in Table 2.4 of Assessing Vibration: a technical guideline (DEC, 2006).</li> </ul> <p>(c) By Approval, including:</p> <ul style="list-style-type: none"> <li>(i) where different construction hours are permitted or required under an EPL in force in respect of Modification 6; or</li> <li>(ii) works which are not subject to an EPL that are approved under an Out-of-Hours Work Protocol as required by Condition D41; or</li> <li>(iii) negotiated agreements with directly affected residents and sensitive land use(s).</li> </ul>		
D42	<p>Mitigation measures must be implemented with the aim of achieving the following construction noise and vibration outcomes:</p> <ul style="list-style-type: none"> <li>(a) Construction 'Noise affected' NMLs established using the Interim Construction Noise Guideline (DECC, 2009)</li> <li>(b) Vibration criteria established using the Assessing vibration: a technical guideline (DEC, 2006) (for human exposure)</li> <li>(c) Australian Standard AS 2187.2 - 2006 "Explosives - Storage and Use - Use of Explosives"</li> <li>(d) BS 7385 Part 2-1993 "Evaluation and measurement for vibration in buildings Part 2" as they are "applicable to Australian conditions"; and This version</li> </ul>	The Proposed Change will not impact upon compliance with this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
	<p>includes: Modification 1 approved on 19 June 2003 Modification 4 approved on 24 January 2006 Modification 2 approved on 4 May 2004 Modification 5 approved on 18 July 2019 Modification 3 approved on 25 August 2004 Modification 6 approved on 17 February 2023 Page 86</p> <p>(e) The vibration limits set out in the German Standard DIN 4150-3: Structural Vibration effects of vibration on structures (for structural damage).</p> <p>Work that exceeds the noise management levels and/or vibration criteria must be managed in accordance with the Noise and Vibration CEMP Sub-plan</p>		
D46	<p>At no time can noise generated by construction exceed the National Standard for exposure to noise in the occupational environment of an eight-hour (8hr) equivalent continuous A-weighted sound pressure level of LAeq,8h of 85 dB(A) for any employee working at a location near Modification 6.</p>	<p>The Proposed Change will not impact upon compliance with this condition.</p>	Yes
D47	<p>Construction Noise and Vibration Impact Statements (CNVIS) must be prepared for work that may exceed the noise management levels, vibration criteria and/or ground-borne noise levels specified in Condition D42 and Condition D44 at any residence outside construction hours identified in Condition D38, or where receivers will be highly noise affected. The CNVIS must include specific mitigation measures identified through consultation with affected sensitive land use(s) and the mitigation measures must be implemented for the duration of the works. A copy of the CNVIS must be provided to the AA and ER prior to the commencement of the associated works. The Planning Secretary may request a copy/ies of CNVIS.</p>	<p>N/A - The Proposed Change will not impact upon compliance with this condition. A CNVIS is not required for the Proposed Change as it would not exceed the noise management levels, vibration criteria and/or ground-borne noise levels specified in Condition D42 and Condition D44 at any residence outside construction hours identified in Condition D38, or where receivers will be highly noise affected.</p>	N/A

No.	Condition of Approval	Discussion	Consistent
D49	<p>Industry best practice construction methods must be implemented where reasonably practicable to ensure that noise levels are minimised. Practices must include, but are not limited to:</p> <ul style="list-style-type: none"> <li>(a) use of regularly serviced low sound power equipment;</li> <li>(b) early occupation and later release of road carriageways and construction sites;</li> <li>(c) scheduling of noisiest works before 11.00 pm Sunday to Thursday and before 12 midnight Friday and Saturday;</li> <li>(d) temporary noise barriers (including the arrangement of plant and equipment) around noisy equipment and activities such as rock hammering and concrete cutting; and (e) use of alternative construction and demolition techniques.</li> </ul>	The Proposed Change will not impact upon compliance with this condition.	Yes
D63	<p>Access to construction compounds or works must not occur on National Parks and Wildlife Service (NPWS) estate as part of this modification unless authorisation is granted by NPWS under the National Parks and Wildlife Act 1974 (NPW Act) or the National Parks and Wildlife Regulation 2019. The Western Sydney Regional Park must not be used to gain access to the construction footprint, ancillary facilities, or for the storage of materials, equipment, workers' vehicles or machinery at any time, unless authorisation is granted by NPWS under the National Parks and Wildlife Act 1974 (NPW Act) or the National Parks and Wildlife Regulation 2019.</p>	The Proposed Change will not impact upon compliance with this condition. The Proposed Change would be located fully within the approved AF9 construction ancillary facility.	Yes
D64	<p>Prior to any works adjacent to the Western Sydney Regional Park, demarcation of the construction boundary must be undertaken to reduce the risk of accidental encroachments or damage to the park.</p>	The Proposed Change will not impact upon compliance with this condition. The construction boundary will be delineated in accordance with the Flagging protocol described in the Construction Flora and Fauna Management Plan (CFFMP).	Yes

No.	Condition of Approval	Discussion	Consistent
D65	Prior to the commencement of any Work that results in the disturbance of land in any particular area, erosion and sediment controls must be installed and maintained, as a minimum, in accordance with the publication Managing Urban Stormwater: Soils & Construction (4th edition, Landcom 2004) commonly referred to as the 'Blue Book'.	The Proposed Change will not impact upon compliance with this condition. Erosion and sediment controls have been designed by the Soil Conservationist and would be implemented during establishment and operation of the Proposed Change.	Yes
D75	An Unexpected Finds Procedure for Contamination must be prepared before the commencement of Work. The procedure must: (a) Be followed should unexpected contamination or asbestos (or suspected contamination) be excavated or otherwise discovered (b) Include details of who will be responsible for implementing the unexpected finds procedure and the roles and responsibilities of all parties involved (c) Be prepared, (or reviewed and approved), by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme.	The Proposed Change will not impact upon compliance with this condition.	Yes
D76	The Unexpected Finds Procedure for Contamination must be implemented during work.	The Proposed Change will not impact upon compliance with this condition. An Unexpected Contaminated Land Finds Procedure is included in the Construction Soil and Water Management Plan (CSWMP).	Yes
D80	Access to all utilities and properties must be maintained during construction, where practicable, unless otherwise agreed with the relevant utility owner, landowner or occupier.	The Proposed Change will not impact upon compliance with this condition.	Yes



No.	Condition of Approval	Discussion	Consistent
D83	Local roads proposed to be used by heavy vehicles to directly access the construction boundary and ancillary facilities that are not listed in Table 6-6 of Appendix D of the Modification Report (as listed in Condition 1A(a) of Schedule 1) must be approved by the Planning Secretary and included in the Traffic, Transport and Access Management CEMP Sub-plan.	N/A – no change to local road use as a result of the Proposed Change.	N/A
D101	Waste generated during construction and operation must be dealt with in accordance with the following priorities: (a) Waste generation must be avoided and where avoidance is not reasonably practicable, waste generation must be reduced (b) Where avoiding or reducing waste is not possible, waste must be re-used, recycled, or recovered (c) Where re-using, recycling or recovering waste is not possible, waste must be treated or disposed of.	The Proposed Change will not impact upon compliance with this condition.	Yes
D102	The importation of waste and the storage, treatment, processing, reprocessing or disposal of such waste must comply with the conditions of the EPL for Modification 6, or be done in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, as the case may be.	The Proposed Change will not impact upon compliance with this condition.	Yes
D103	Waste must only be exported to a site licensed by the EPA for the storage, treatment, processing, reprocessing or disposal of the subject waste, or in accordance with a Resource Recovery Exemption or Order issued under the Protection of the Environment Operations (Waste) Regulation 2014, or to any other place that can lawfully accept such waste, except in accordance with Condition D10.	The Proposed Change will not impact upon compliance with this condition.	Yes

No.	Condition of Approval	Discussion	Consistent
D104	All waste must be classified in accordance with the EPA's Waste Classification Guidelines, with appropriate records and disposal dockets retained for audit purposes.	The Proposed Change will not impact upon compliance with this condition.	Yes

Table A2-3: Consistency against relevant Statement of Commitments / environmental management measures

No.	Statement of Commitment / mitigation measure	Discussion	Consistent
T3	Movements of haulage vehicles will be planned to minimise movements on the road network during the AM and PM peak periods where practicable.	The Proposed Change will not impact upon compliance of this measure.	Yes
HR1	A work health safety management plan (WHSMP) will be prepared for the proposed modification in accordance with requirements of the Workplace Health and Safety Act 2011 (NSW) and the Work Health and Safety Regulation 2017 (NSW). The WHSMP will include: <ul style="list-style-type: none"> <li>• Details of the hazards and risks associated with construction activities</li> <li>• Risk management measures</li> <li>• Procedures to comply with legislative and industry standard requirements</li> <li>• Use of appropriate personal protective equipment</li> <li>• Contingency plans, as required</li> <li>• An incident response management plan</li> <li>• Training for all personnel (including subcontractors) including site inductions, the recognition and awareness of site hazards and the locations of relevant equipment to protect themselves and manage any spills. All staff will have the relevant training and certificates.</li> </ul>	The Proposed Change will not impact upon compliance of this measure.	Yes
AH5	Aboriginal sites located outside of the construction footprint, but directly adjacent to it, will be actively protected during construction via temporary fencing. Fencing is to be installed along relevant sections of the construction footprint and remain in place for the duration of construction works in the vicinity. Where fencing is to be installed along the construction footprint, individual fencing lengths will be determined by a qualified archaeologist on the basis of both a visual inspection of the registered AHIMS site location and critical review of relevant existing data sources (e.g. associated site cards and assessment reports). All relevant staff and contractors are to be made aware of the nature and locations of these sites as part of standard site inductions. All sites will be identified on relevant site plans.	The Proposed Change will not impact upon compliance of this measure. The Proposed Change is approximately 150m away at its closest point from the Potential Archaeological Deposit (PAD) to the north of AF9. This PAD has already been physically separated from AF9.	

No.	Statement of Commitment / mitigation measure	Discussion	Consistent
NV3	Induction and training will be provided to relevant staff and sub-contractors outlining their responsibilities with regards to noise and vibration.	The Proposed Change will not impact upon compliance of this measure.	Yes
NV7	<ul style="list-style-type: none"> <li>• Truck drivers will be advised of designated vehicle routes, parking locations, acceptable delivery hours or other relevant practices (i.e. minimising the use of engine brakes, and no extended periods of engine idling). Vehicle routes should be reviewed, and final selections should consider noise impacts on noise sensitive receivers</li> <li>• Site access and egress points will be located away from residences and other sensitive land uses, where feasible and reasonable</li> <li>• Deliveries and spoil removal will be planned to avoid queuing of trucks on or around the construction ancillary facilities</li> <li>• Construction sites will be arranged to limit the need for reversing associated with regular / repeatable movements (e.g. trucks transporting spoil) to minimise the use of reversing alarms</li> <li>• Where feasible and reasonable, non-tonal reversing alarms will be used, taking into account the requirements of the Workplace Health and Safety legislation.</li> <li>• Spoil will be moved during the day where practical, and feasible and reasonable management strategies will be investigated in consultation with the NSW EPA to minimise the volume of heavy vehicle movements at night. Mitigation measures for vehicle movements outside of standard construction hours will be included in the CNVMP.</li> </ul>	The Proposed Change will not impact upon compliance of this measure.	Yes
NV8	The noise associated with the operation of construction ancillary facilities will primarily result from the operation of fixed and mobile plant and truck movements. Consideration will be given to the layout of the site to maximise distance and shielding to nearby receivers.	The Proposed Change will not impact upon compliance of this measure. The layout of AF9 was consulted on with the AA as part of Rev 4 of the SEMP and changes made accordingly. Consultation on the Proposed Change was undertaken with the AA and no suggested changes to the layout were made. The layout was considered to be suitable for mitigation of potential noise impacts.	Yes



No.	Statement of Commitment / mitigation measure	Discussion	Consistent
NV9	The selection of plant and equipment can have a significant impact on construction noise levels. Appropriate plant will be selected for each task to minimise the noise contributions. Alternative works methods such as use of hydraulic or electric-controlled units in place of diesel units will be considered and implemented where feasible and reasonable. The use of alternative machines that perform the same function (such as rubber wheeled plant) will be considered in place of steel tracked plant. Equipment will be regularly inspected and maintained to ensure it is in good working order. Plant should be located on site with as much distance as possible between the plant and noise sensitive receivers. Noisy equipment will be orientated away from residential receivers where feasible and reasonable.	The Proposed Change will not impact upon compliance of this measure.	Yes
NV10	Detailed noise assessments will be carried out for all ancillary facilities required for construction of the proposed modification. The requirement for temporary noise walls within ancillary facilities and adjacent to construction works, and the requirement for other appropriate noise management measures, is to be assessed and implemented prior to the commencement of activities which have the potential to cause noise or vibration impacts.	The Proposed Change will not impact upon compliance of this measure. Appendix B assesses the cumulative impact of establishment and ancillary facility operations at AF9, with no receivers expected to exceed the NML.	Yes
AQ1	A communications plan will be displayed at each construction zone, including a duty phone number so stakeholders and community members can get in contact regarding the construction activities. All complaints will be recorded and investigated, and measures taken in response.	The Proposed Change will not impact upon compliance of this measure.	Yes
AQ5	During periods of high potential for increased air quality impacts and/or prolonged dry or windy conditions the frequency of site inspections will be increased by the person accountable for air quality and dust issues.	The Proposed Change will not impact upon compliance of this measure.	Yes
AQ6	At each construction zone, the site arrangement will be planned so that dust generating activities are undertaken to minimise dust at nearby receptors. Measures may include stockpiles located as far away from receptors as possible; dust barriers being erected around dusty activities/ site boundary, or similar.	The Proposed Change will not impact upon compliance of this measure.	Yes
AQ8	Adequate water supply will be provided on the site for effective dust/ particulate matter suppression/mitigation, using non-potable water where possible and appropriate.	The Proposed Change will not impact upon compliance of this measure.	Yes

No.	Statement of Commitment / mitigation measure	Discussion	Consistent
FL4	Spoil stockpiles are to be located in areas not subject to frequent inundation by floodwater, and outside the 10% AEP flood extent. The exact level of flood risk accepted at stockpile sites will depend on the duration of stockpiling operations, the type of material stored, the nature of the receiving drainage lines and also the extent to which it would impact flooding conditions in adjacent development.	The Proposed Change will not impact upon compliance of this measure.	Yes
SW3	A soil conservation specialist will be engaged for the duration of construction of the proposed modification to provide advice on the planning and implementation of erosion and sediment control measures, including review of Erosion and Sediment Control Plans ESCPs.	The Proposed Change will not impact upon compliance of this measure. Erosion and sediment controls as described by an update to the existing AF9 ESCP have been designed by the Soil Conservationist and would be implemented during establishment and operation of the Proposed Change once approved by the relevant parties.	Yes
SW4	Stockpiles will be managed to minimise the potential for mobilisation and transport of dust and sediment in runoff in accordance with Stockpile Site Management Guideline (Roads and Maritime Services, 2015d). This will include: <ul style="list-style-type: none"> <li>• Minimising the number of stockpiles, the area used for stockpiles and the time that they are left exposed</li> <li>• Locating stockpiles away from drainage lines, waterways, and areas where they may be susceptible to wind erosion</li> <li>• Stabilising stockpiles, establishing appropriate sediment controls, and suppressing dust as required.</li> </ul>	The Proposed Change will not impact upon compliance of this measure.	Yes
W2	Wherever feasible and reasonable, construction materials will be sourced locally from within the Sydney region	The Proposed Change will not impact upon compliance of this measure.	Yes

# Appendix B: Noise and Vibration Assessment Report

Noise model completed as per Figure 3.

14 February 2024

2024-02-14\_TN188-04 AF9 Crushing Operation - Day - ID TN188\_442.docx

John Holland



From: Renzo Tonin and Associates via Gatewave

Calculation scenario: **AF9 Crushing Operation - Day** (Gatewave ID TN188\_442)

## M7-M12 Integration Project – Noise and Vibration Assessment Report

### 1 Introduction

The Renzo Tonin and Associates web-based construction assessment tool (Gatewave) has been used to prepare this noise and vibration assessment report for John Holland and the M7-M12 Integration Project (the Project).

The overall noise and vibration impacts from the Project works and associated mitigation measures (e.g. hoardings) have already been addressed in the Project's Construction Noise and Vibration Impact Statements (CNVIS). This tool allows specific work areas and activities to be assessed as construction works progress. It also allows cumulative noise impact from other aspects of the Project or, where relevant noise from other construction projects, to be assessed and managed in accordance with the Project's Construction Noise and Vibration Management Plan (CNVMP, reference M712UDC-JOHN HOLLANDRP-M7A-EN-PLN-00000\_M12East\_CNVMP).

## 2 Assessment methodology

### 2.1 Construction noise

Results for the assessment of airborne noise were determined using a CadnaA computer noise model developed for the Project. The CadnaA noise model incorporates ground elevation contours, building heights, the built environment and atmospheric conditions to predict construction noise in accordance with the International Standard ISO 9613-2:1996 implementing quality standard ISO 17534-1:2015.

Results from the CadnaA noise model are exported and stored into the Gatewave database which allows for the prediction of the total cumulative noise from all construction activities.

A summary of the noise calculation parameters is detailed in Table 1.

**Table 1: Summary of noise modelling parameters**

Parameters	Inputs
Calculation method	ISO 9613-2:1996 implementing quality standard ISO 17534-1:2015
Location of noise sources above the local ground	1.5m
Height of receivers	1.5m above ground level to represent 1.5m above ground floor level Additional 3m height for every additional floor assessed (i.e. 4.5m above ground for first floor, 7.5m for second floor etc.)
Sound Power Levels ( $L_w$ ) of plant and equipment	All $L_w$ data obtained from Renzo Tonin & Associates database Detailed in Section 3
Construction activities	Detailed in Section 3
Ground absorption	Varying from 1 for absorptive surfaces (e.g. park land), 0.5 (e.g. residential areas) to 0 for reflective surfaces (e.g. water, concrete, paving);
Noise barriers and screening	As detailed in Project CNVIS

### 2.2 Construction vibration

The plant and equipment considered in this scenario are not considered vibration intensive. As a result, minimum working distances (MWDs) for cosmetic damage or human annoyance have not been nominated.

## 3 Construction activities, work areas and NCAs

### 3.1 Construction activities

#### 3.1.1 Plant and equipment use

A summary of the plant and equipment operating during each assessment time period is presented in Table 2. Note that Table 2 identifies if a plant/equipment item is used for part or all of the assessment

period on a given day, and does not necessarily denote if the plant/equipment are operating concurrently (refer APPENDIX A for details on which plant/equipment are operating together).

**Table 2: Proposed construction activities and associated sound power levels**

Activity/plant/equipment	Number in use				Sound power level, dB(A)		High impact item	Noise reduction from mitigation measures, dB(A)
	Day	Day (OOH)	Evening	Night	Leq	Lmax		
Haulage								
Truck and Dog	2	-	-	-	99	111	-	-
Street sweeper	1	-	1	-	104	111	-	-
Staff Access								
Light vehicles	10	-	-	-	86	100	-	-
Street sweeper	1	-	-	-	104	111	-	-
Crushing Area 1								
Front end loader	1	-	-	-	110	115	-	-
Excavator w bucket (25t)	1	-	-	-	103	108	-	-
Water cart	1	-	-	-	104	107	-	-
Screening machine	1	-	-	-	104	110	-	-
Rock crushing compound	1	-	-	-	123	124	Yes	-
Precision screen – Pugmill Scorpion	1	-	-	-	107	112	-	-
Dump truck	1	-	1	-	106	111	-	-
Light vehicles	2	-	2	-	92	100	-	-
Vacuum truck	1	-	1	-	107	111	-	-
Delivery truck	1	-	1	-	106	111	-	-
Hand tools	1	-	1	-	107	111	-	-
Telehandler / Franna crane (20t)	1	-	1	-	99	103	-	-
Truck and Dog	2	-	2	-	109	111	-	-
Crushing Area 2								
Screening machine	1	-	-	-	104	110	-	-
Rock crushing compound	1	-	-	-	123	124	Yes	-
Front end loader	1	-	-	-	110	115	-	-
Excavator w bucket (25t)	1	-	-	-	103	108	-	-
Water cart	1	-	-	-	104	107	-	-
Precision screen – Pugmill Scorpion	1	-	-	-	107	112	-	-
Dump truck	1	-	-	-	106	111	-	-
Light vehicles	2	-	-	-	92	100	-	-
Vacuum truck	1	-	-	-	107	111	-	-



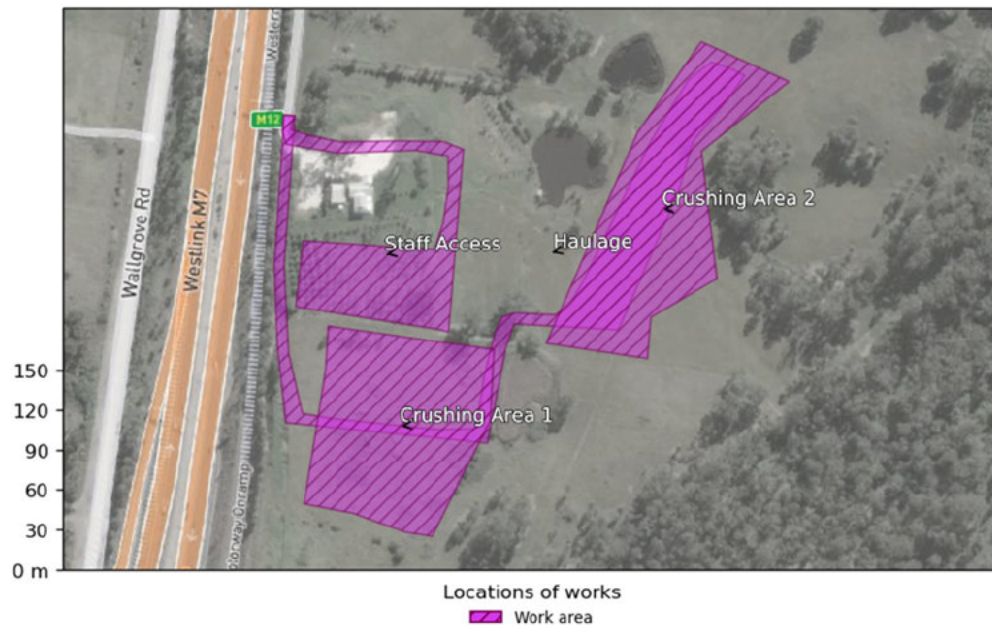
Activity/plant/equipment	Number in use				Sound power level, dB(A)		High impact item	Noise reduction from mitigation measures, dB(A)
	Day	Day (OOH)	Evening	Night	Leq	Lmax		
Delivery truck	1	-	-	-	106	111	-	-
Hand tools	1	-	-	-	107	111	-	-
Telehandler / Franna crane (20t)	1	-	-	-	99	103	-	-
Truck and Dog	2	-	2	-	109	111	-	-

Notes:

- 1) Refer APPENDIX A for plant/equipment timings and to identify which items operate concurrently.
- 2) Equipment marked in **orange** are not verified by Renzo Tonin and Associates

The locations of the construction activities are presented in Figure 1.

Figure 1: Construction work areas



## 4 Construction noise and vibration impacts

### 4.1 Predicted noise levels

#### 4.1.1 Construction $L_{Aeq,15min}$ assessment

Noise levels were determined by modelling the noise sources, receiver locations, and operating activities, based on the information presented in Table 2.

The noise predictions presented in this report represent a realistic worst-case scenario when construction occurs at the closest location within a specific work area. At each receiver, noise levels will vary during the construction period based on the position of equipment within the work area, the distance to the receiver, the construction activities being undertaken and the noise levels of particular plant items and equipment. Actual noise levels will often be less than the predicted levels presented.

A summary of the results is presented in Table 3. NMLs and predictions for the three worst-affected receivers for each works area are provided in Table 4. Detailed noise results including additional mitigation measures are provided in APPENDIX B and presented visually in noise maps in APPENDIX C.

**Table 3: Summary of receivers above relevant NMLs**

NCA	Day		Day (OOH)		Evening		Night	
	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties
M7_NCA18	0 to 10	0	0 to 5		0 to 5	0	0 to 5	
	> 10	0	5 to 15		5 to 15	0	5 to 15	
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	
			> 25		> 25	0	> 25	
M7_NCA17	0 to 10	0	0 to 5		0 to 5	0	0 to 5	
	> 10	0	5 to 15		5 to 15	0	5 to 15	
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	
			> 25		> 25	0	> 25	
TfNSW_NCA35	0 to 10	0	0 to 5		0 to 5	0	0 to 5	
	> 10	0	5 to 15		5 to 15	0	5 to 15	
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	
			> 25		> 25	0	> 25	
M12_NCA01	0 to 10	0	0 to 5		0 to 5	0	0 to 5	
	> 10	0	5 to 15		5 to 15	0	5 to 15	
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	
			> 25		> 25	0	> 25	
TfNSW_NCA16 b	0 to 10	0	0 to 5		0 to 5	0	0 to 5	
	> 10	0	5 to 15		5 to 15	0	5 to 15	
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	
			> 25		> 25	0	> 25	
Place of Worship	0 to 10	0	0 to 5		0 to 5	0	0 to 5	
	> 10	0	5 to 15		5 to 15	0	5 to 15	

NCA	Day		Day (OOH)		Evening		Night	
	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	
			> 25		> 25	0	> 25	
	0 to 10	0	0 to 5		0 to 5	0	0 to 5	
	> 10	0	5 to 15		5 to 15	0	5 to 15	
Industrial	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	
			> 25		> 25	0	> 25	
	0 to 10	0	0 to 5		0 to 5	0	0 to 5	
	> 10	0	5 to 15		5 to 15	0	5 to 15	
Horse Stable	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	
			> 25		> 25	0	> 25	
	0 to 10	0	0 to 5		0 to 5	0	0 to 5	
	> 10	0	5 to 15		5 to 15	0	5 to 15	
Recreational - Passive	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	
			> 25		> 25	0	> 25	
	0 to 10	0	0 to 5		0 to 5	0	0 to 5	
	> 10	0	5 to 15		5 to 15	0	5 to 15	

## 4.2 Predicted vibration levels

The plant and equipment described in Table 2 are not considered vibration intensive and, as a result, do not have MWDs for cosmetic damage or human annoyance.

## 4.3 Mitigation measures

### 4.3.1 Specific reasonable and feasible mitigation measures

JHG will adopt the following noise mitigation measure to minimise the impact of noise of nearby residents, these include:

- Toolbox talks, inductions, worker behaviour;
- Avoid shouting, slamming doors, dropping materials from height;
- Non-tonal squawkers only;
- All vehicles to switch off engines when not in use;
- Community notification; and
- Noise blankets must be installed around generators where required.
- Lighting to be angled away from residential receivers.

### 4.3.2 Additional noise mitigation measures

In accordance with the CNVG, where, after application of all reasonable and feasible mitigation measures, the  $L_{Aeq(15\text{minute})}$  airborne construction noise levels are still predicted to exceed the NMLs, additional airborne noise mitigation measures can be applied to further limit the risk of annoyance from construction noise.

Figure 2 presents a summary of the additional noise mitigation measures applicable for construction activities where, after application of all reasonable and feasible mitigation options, construction noise levels still exceed the NMLs.

Figure 2: Additional airborne noise mitigation measures

When is the work being undertaken?	How much does the predicted noise level exceed the ANML by?	Identify additional management measures to be implemented	Additional mitigation measure code
All Hours	75 dB(A) or greater	V, N, PC, RO	AM2
Standard Hours M-F 7am to 6pm Sat 8am to 6pm	0 dB(A)	-	-
	≤ 10 dB(A)	-	-
	10 to 20 dB(A)	V, N	AM1
	> 20 dB(A)	V, N	AM1
OOHW Period 1 M-F 6pm to 10pm Sat 6pm to 10pm Sun/ PH 8am to 10pm	< 5 dB(A)	-	-
	5 to 15 dB(A)	N, R1, DR	AM3
	15 to 25 dB(A)	V, N, R1, DR	AM4
	> 25 dB(A)	V, N, SN, IB, PC, R1, DR	AM5
OOHW Period 2* M-F 10pm to 7am Sat 10pm to 8am Sun/ PH 6pm to 8am	< 5 dB(A)	N	AM6
	5 to 15 dB(A)	V, N, R2, DR	AM7
	15 to 25 dB(A)	V, N, SN, IB, PC, R2, DR	AM8
	> 25 dB(A)	AA, V, N, SN, IB, PC, R2, DR	AM9

Notes: Use the abbreviation codes in the table above to confirm management measures required

\* Where OOHW occur in the evening/night shoulder period (10pm to 12am) or the night/morning shoulder period (5am to 7am) apply additional airborne mitigation measures from the OOHW Period 2, excluding AA.

N = Notification (should be issued a minimum of five working days prior to the start of works)

SN = Specific notifications (issued no later than seven calendar days ahead of construction activities)

IB = Individual briefing      PC = Phone Call

AA = Alternative accommodation\*\*      RQ = Project specific respite offer      R1 = Respite period 1

V = Verification of predicted noise      DR = Duration respite      R2 = Respite period 2

\*\* Where construction activity impacts receiver for more than two consecutive nights. AA is not applicable to shoulder periods.

### 4.3.3 Noise monitoring plan

Attended noise monitoring is to be undertaken to verify that noise levels resulting from works are in accordance with the levels predicted in this noise and vibration assessment report, subject to obtaining the property owner/occupier's consent to access the property (where required). Noise monitoring should be carried out on or near the property boundary at a location representative of the worst affected location (i.e. in publicly accessible areas on or near the nominated receivers, typically at ground level).

Table 4 identifies potential monitoring locations in each NCA, which are the three worst noise-affected receivers for each NCA from the works.

Note: Gatewave tries to find the most affected receivers in each NCA (up to 3 locations) purely based on the numerical results. These locations will be reviewed for suitability based on safety, accessibility, will provide valid data, etc. If not suitable, alternative suitable locations will be selected for verification monitoring.

If monitoring levels exceed predicted levels, continual improvement and corrective action measures will be implemented, (e.g. investigate cause, review work or activity, scheduling, etc).



**Table 4: Nominated verification monitoring locations**

Receiver			Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax
NCA	Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night
M7_NCA18	28, 32, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	57	-	44	-	-
M7_NCA18	23, 27, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	57	-	43	-	-
M7_NCA18	33, 34, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	56	-	43	-	-
M7_NCA17	97, 123, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	63	-	50	-	-
M7_NCA17	2, 10, KOSOVICH PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	62	-	50	-	-
M7_NCA17	225, 231, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	62	-	49	-	-
TfNSW_NCA35	24-26 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	57	-	44	-	-
TfNSW_NCA35	56 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	57	-	44	-	-

Receiver			Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax
NCA	Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night
TfNSW_NCA35	56, CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	56	-	43	-	-
M12_NCA01	13, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	47	-	33	-	-
M12_NCA01	27, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	47	-	33	-	-
M12_NCA01	30 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	46	-	33	-	-
TfNSW_NCA16b	22 ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	49	-	36	-	-
TfNSW_NCA16b	26 ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	48	-	35	-	-
TfNSW_NCA16b	24 ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	48	-	35	-	-

#### **4.3.4 Vibration monitoring**

As the plant and equipment in this scenario are not considered to be vibration intensive, further vibration monitoring is not required.

If attended vibration monitoring is required (for example, in response to vibration-related complaints), monitoring will be undertaken according to the process described in the NVMP.

Vibration monitoring should follow the procedures outlined in the Construction Noise and Vibration Monitoring Program (Appendix B of the CNVMP).

## Important disclaimer

- \* This document has been partly automatically generated by Gatewave™, software for prediction, assessment and management of noise and vibration, developed by Renzo Tonin and Associates.
- \* This document is uncontrolled. Please contact Renzo Tonin and Associates if you suspect there are any errors in this report.
- \* Results in this report are based on the assumptions described in Section 0 and inputs presented in Section 3. Noise and vibration monitoring data will be collected to ensure Gatewave is verified and adjusted, if required.
- \* Renzo Tonin and Associates cannot be held liable for the misuse of the software Gatewave™, including any errors that may be contained within the software.

## APPENDIX A      Summary of works

### A.1      Plant and equipment

**Table 5:    Plant and equipment schedule for work area: **Haulage****

Equipment	Penalty, dB(A)	Quantity	Intensity	Reduction, dB	Sound power level, dB(A)		Start time	End time
					L <sub>eq,15min</sub>	L <sub>max</sub>		
New activity								
Truck and Dog	-	2	10%	0	99	111	2023-12-12 07:00:00	2023-12-12 18:00:00
Street sweeper	-	1	50%	0	104	111	2023-12-12 07:00:00	2023-12-12 19:00:00

**Table 6:    Plant and equipment schedule for work area: **Staff Access****

Equipment	Penalty, dB(A)	Quantity	Intensity	Reduction, dB	Sound power level, dB(A)		Start time	End time
					Leq,15min	Lmax		
Light vehicles	-	10	5%	0	86	100	2024-01-23 07:00:00	2024-01-23 18:00:00
Street sweeper	-	1	50%	0	104	111	2024-01-23 07:00:00	2024-01-23 18:00:00

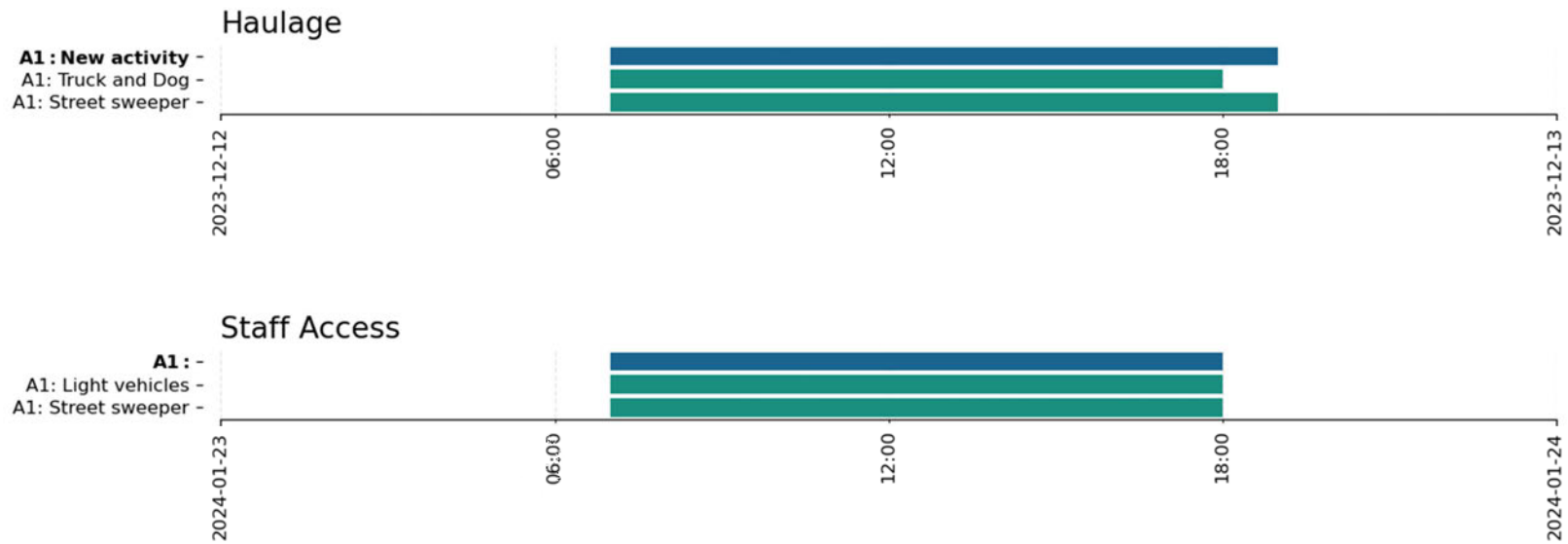
**Table 7: Plant and equipment schedule for work area: Crushing Area 1**

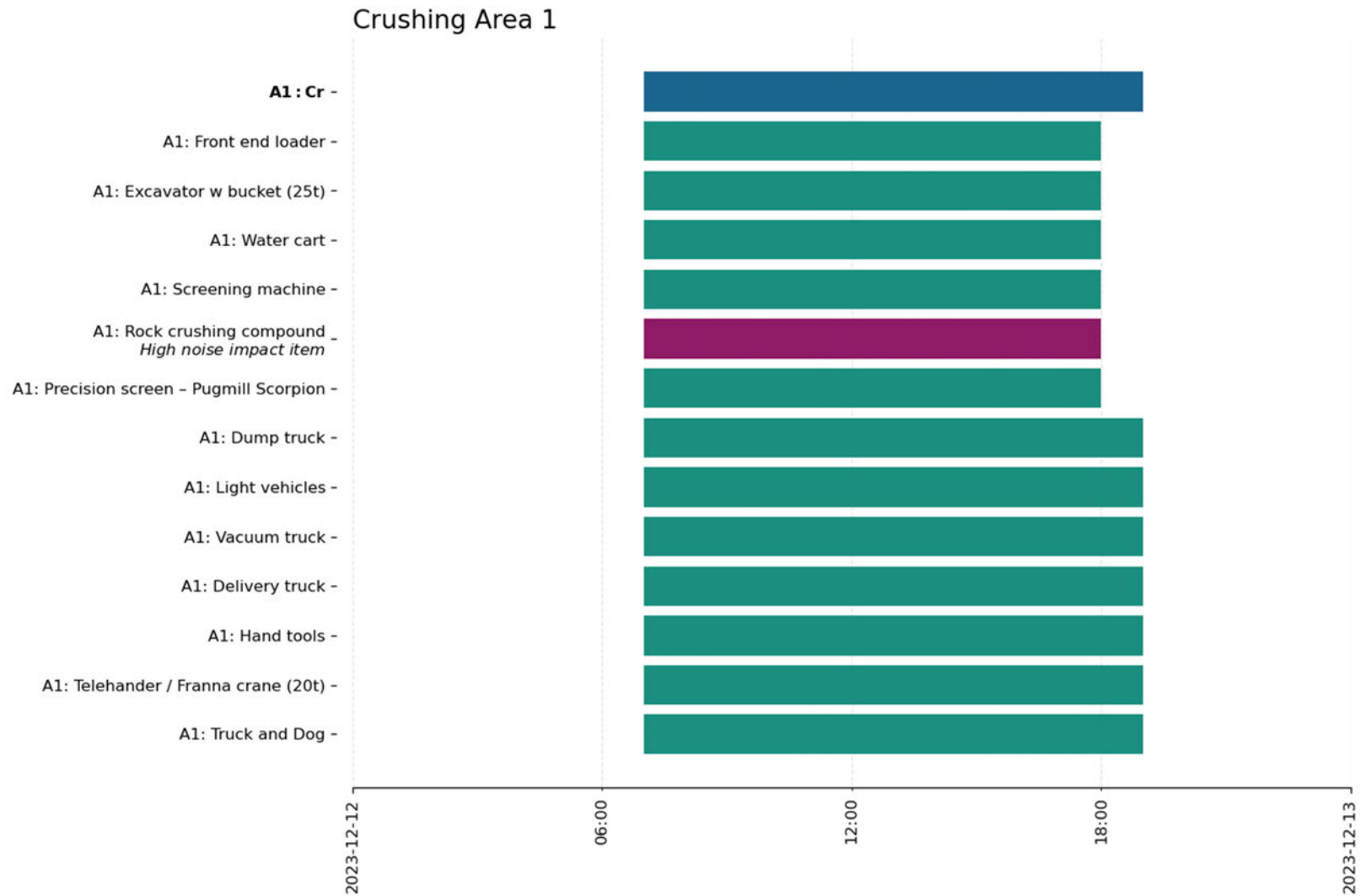
Equipment	Penalty, dB(A)	Quantity	Intensity	Reduction, dB	Sound power level, dB(A)		Start time	End time
					Leq,15min	Lmax		
Cr								
Front end loader	-	1	100%	0	110	115	2023-12-12 07:00:00	2023-12-12 18:00:00
Excavator w bucket (25t)	-	1	100%	0	103	108	2023-12-12 07:00:00	2023-12-12 18:00:00
Water cart	-	1	100%	0	104	107	2023-12-12 07:00:00	2023-12-12 18:00:00
Screening machine	-	1	100%	0	104	110	2023-12-12 07:00:00	2023-12-12 18:00:00
Rock crushing compound	5	1	100%	0	123	124	2023-12-12 07:00:00	2023-12-12 18:00:00
Precision screen – Pugmill Scorpion	-	1	100%	0	107	112	2023-12-12 07:00:00	2023-12-12 18:00:00
Dump truck	-	1	100%	0	106	111	2023-12-12 07:00:00	2023-12-12 19:00:00
Light vehicles	-	2	100%	0	92	100	2023-12-12 07:00:00	2023-12-12 19:00:00
Vacuum truck	-	1	100%	0	107	111	2023-12-12 07:00:00	2023-12-12 19:00:00
Delivery truck	-	1	100%	0	106	111	2023-12-12 07:00:00	2023-12-12 19:00:00
Hand tools	-	1	100%	0	107	111	2023-12-12 07:00:00	2023-12-12 19:00:00
Telehandler / Franna crane (20t)	-	1	100%	0	99	103	2023-12-12 07:00:00	2023-12-12 19:00:00
Truck and Dog	-	2	100%	0	109	111	2023-12-12 07:00:00	2023-12-12 19:00:00

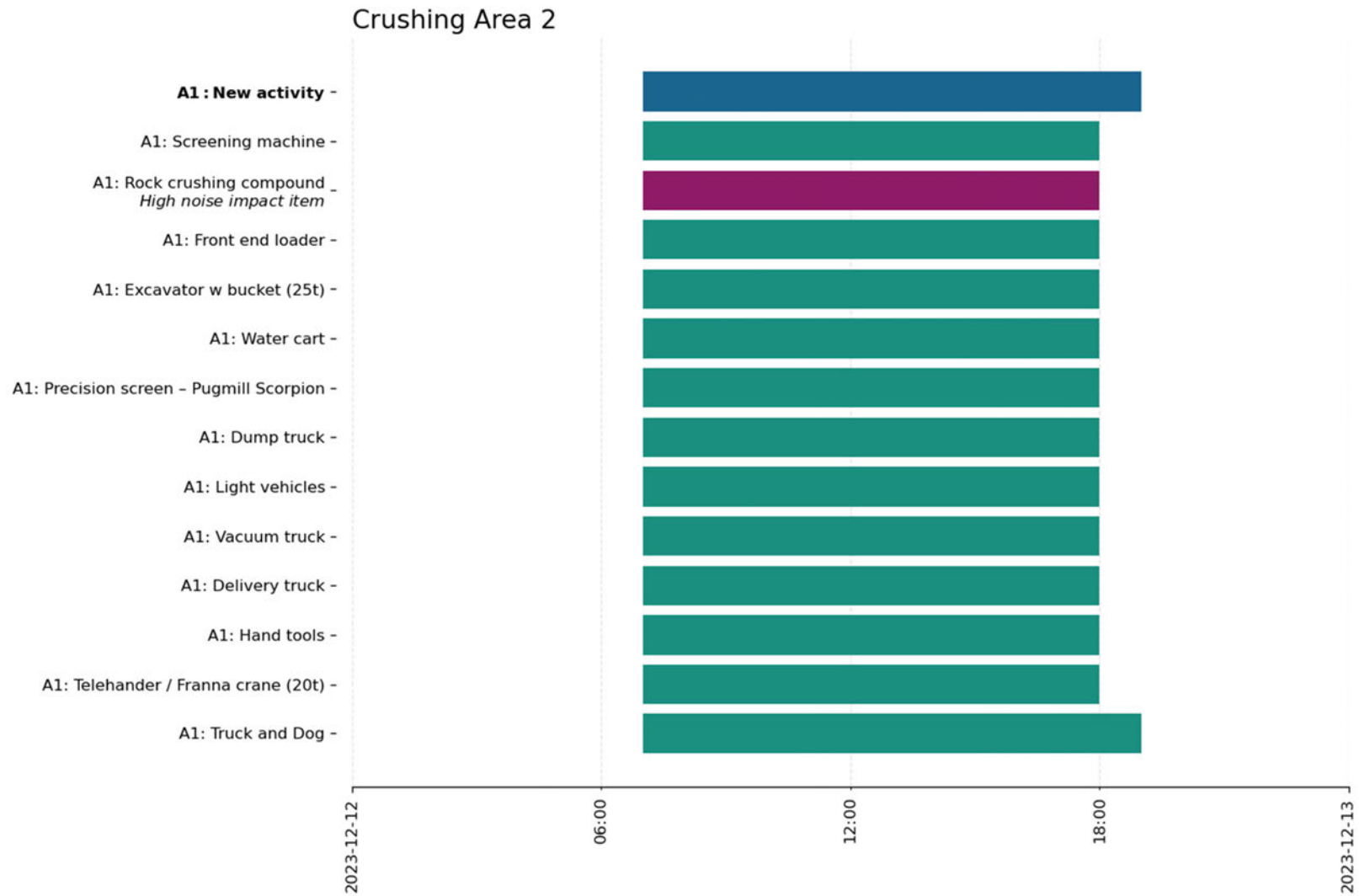


**Table 8: Plant and equipment schedule for work area: Crushing Area 2**

Equipment	Penalty, dB(A)	Quantity	Intensity	Reduction, dB	Sound power level, dB(A)		Start time	End time
					Leq,15min	Lmax		
New activity								
Screening machine	-	1	100%	0	104	110	2023-12-12 07:00:00	2023-12-12 18:00:00
Rock crushing compound	5	1	100%	0	123	124	2023-12-12 07:00:00	2023-12-12 18:00:00
Front end loader	-	1	100%	0	110	115	2023-12-12 07:00:00	2023-12-12 18:00:00
Excavator w bucket (25t)	-	1	100%	0	103	108	2023-12-12 07:00:00	2023-12-12 18:00:00
Water cart	-	1	100%	0	104	107	2023-12-12 07:00:00	2023-12-12 18:00:00
Precision screen – Pugmill Scorpion	-	1	100%	0	107	112	2023-12-12 07:00:00	2023-12-12 18:00:00
Dump truck	-	1	100%	0	106	111	2023-12-12 07:00:00	2023-12-12 18:00:00
Light vehicles	-	2	100%	0	92	100	2023-12-12 07:00:00	2023-12-12 18:00:00
Vacuum truck	-	1	100%	0	107	111	2023-12-12 07:00:00	2023-12-12 18:00:00
Delivery truck	-	1	100%	0	106	111	2023-12-12 07:00:00	2023-12-12 18:00:00
Hand tools	-	1	100%	0	107	111	2023-12-12 07:00:00	2023-12-12 18:00:00
Telehandler / Franna crane (20t)	-	1	100%	0	99	103	2023-12-12 07:00:00	2023-12-12 18:00:00
Truck and Dog	-	2	100%	0	109	111	2023-12-12 07:00:00	2023-12-12 19:00:00









## **APPENDIX B**      Detailed construction noise results



**Table 9: Construction noise results**

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax		Additional mitigation		
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day	Day (OOH)	Evening	Night
87, 95, WALLGROVE ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	65	-	52	-	-	-	-	-	-
97, 123, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	63	-	50	-	-	-	-	-	-
2, 10, KOSOVICH PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	62	-	50	-	-	-	-	-	-
225, 231, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	62	-	49	-	-	-	-	-	-
225, 231, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	62	-	49	-	-	-	-	-	-
233, 243, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	62	-	49	-	-	-	-	-	-
1, KOSOVICH PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	62	-	49	-	-	-	-	-	-
205, WALLGROVE ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	61	-	48	-	-	-	-	-	-
205, WALLGROVE ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	60	-	47	-	-	-	-	-	-
205, WALLGROVE ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	60	-	47	-	-	-	-	-	-
13, KOSOVICH PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	60	-	47	-	-	-	-	-	-
52, 56, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	59	-	46	-	-	-	-	-	-
22, 30, KOSOVICH PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	59	-	46	-	-	-	-	-	-
265, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Residential	75	70	62	50	60	65	59	-	46	-	-	-	-	-	-
18, 22, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	58	-	45	-	-	-	-	-	-
18, 22, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	58	-	44	-	-	-	-	-	-
47, 51, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	58	-	45	-	-	-	-	-	-
28, 32, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	57	-	44	-	-	-	-	-	-
24-26 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	57	-	44	-	-	-	-	-	-
37, 46, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	57	-	44	-	-	-	-	-	-
37-73 WALLGROVE ROAD, CECIL PARK 2178	Residential	75	70	62	50	60	65	57	-	44	-	-	-	-	-	-
265, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Residential	75	70	62	50	60	65	57	-	44	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	57	-	44	-	-	-	-	-	-
23, 27, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	57	-	43	-	-	-	-	-	-
13, 17, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	57	-	44	-	-	-	-	-	-
1111-1141 ELIZABETH DRIVE, CECIL PARK 2178	Non-receiver	999	999	999	999	999	999	56	-	43	-	-	-	-	-	-
33, 34, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	56	-	43	-	-	-	-	-	-
56, CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	56	-	43	-	-	-	-	-	-
47, 51, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	56	-	43	-	-	-	-	-	-
18 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	56	-	43	-	-	-	-	-	-
52, 56, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	60	65	56	-	43	-	-	-	-	-	-
66, 74, BORDER ROAD, HORSLEY PARK NSW 2175	Recreational - Passive	60	60	60	60	None	None	55	-	42	-	-	-	-	-	-
18 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	55	-	42	-	-	-	-	-	-
32, 40, KOSOVICH PLACE, CECIL PARK NSW 2178	Place of Worship	55	55	55	55	None	None	55	-	42	-	-	-	-	-	-
35, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	55	-	42	-	-	-	-	-	-
19 KOSOVICH PLACE, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	54	-	42	-	-	-	-	-	-
38-42 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	54	-	41	-	-	-	-	-	-
33, 34, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	54	-	41	-	-	-	-	-	-

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax		Additional mitigation		
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day	Day (OOH)	Evening	Night
28 Cecil Road Cecil Park	Residential	68	63	59	47	57	65	54	-	41	-	-	-	-	-	-
77, 89, BORDER ROAD, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	54	-	41	-	-	-	-	-	-
77, 89, BORDER ROAD, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	54	-	40	-	-	-	-	-	-
285, 293, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Residential	75	70	62	50	60	65	53	-	41	-	-	-	-	-	-
30-36 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	53	-	40	-	-	-	-	-	-
58-62 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	53	-	40	-	-	-	-	-	-
KOALA WAY, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	53	-	40	-	-	-	-	-	-
80, 82, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	53	-	40	-	-	-	-	-	-
84, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	53	-	40	-	-	-	-	-	-
5 A, WASHINGTON WAY, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	53	-	40	-	-	-	-	-	-
58-62 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	52	-	40	-	-	-	-	-	-
69, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	52	-	39	-	-	-	-	-	-
52-54 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	52	-	39	-	-	-	-	-	-
58-62 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	52	-	39	-	-	-	-	-	-
KOALA WAY, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	52	-	40	-	-	-	-	-	-
KOALA WAY, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	52	-	40	-	-	-	-	-	-
275, 283, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Residential	75	70	62	50	60	65	52	-	40	-	-	-	-	-	-
KOALA WAY, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	52	-	39	-	-	-	-	-	-
52-54 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	52	-	39	-	-	-	-	-	-
5 WASHINGTON WAY, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	52	-	39	-	-	-	-	-	-
6 WASHINGTON WAY, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	52	-	39	-	-	-	-	-	-
KOALA WAY, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	52	-	39	-	-	-	-	-	-
68, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	52	-	39	-	-	-	-	-	-
72-102 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	51	-	38	-	-	-	-	-	-
75, 79, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	51	-	38	-	-	-	-	-	-
48-50 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	51	-	38	-	-	-	-	-	-
5 WASHINGTON WAY, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	51	-	38	-	-	-	-	-	-
53 BORDER ROAD, HORSLEY PARK NSW 2175	Recreational - Passive	60	60	60	60	None	None	51	-	38	-	-	-	-	-	-
48-50 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	51	-	38	-	-	-	-	-	-
113, 118, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	51	-	38	-	-	-	-	-	-
44-46 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	51	-	38	-	-	-	-	-	-
85, 88, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	51	-	39	-	-	-	-	-	-
48-50 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	51	-	38	-	-	-	-	-	-
113, 118, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	51	-	38	-	-	-	-	-	-
44-46 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	50	-	37	-	-	-	-	-	-
89, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	50	-	38	-	-	-	-	-	-
48-50 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	50	-	37	-	-	-	-	-	-
30-36 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	50	-	37	-	-	-	-	-	-
113, 118, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	57	65	50	-	37	-	-	-	-	-	-

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax		Additional mitigation		
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day	Day (OOH)	Evening	Night
72-102 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	50	-	37	-	-	-	-	-	-
44-46 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	50	-	37	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	49	-	36	-	-	-	-	-	-
22 ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	49	-	36	-	-	-	-	-	-
58-62 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	49	-	36	-	-	-	-	-	-
44-46 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	49	-	36	-	-	-	-	-	-
58-62 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	49	-	36	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	49	-	35	-	-	-	-	-	-
68, GOODRICH ROAD, CECIL PARK NSW 2178	Residential	57	52	52	52	62	65	48	-	35	-	-	-	-	-	-
26 ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	48	-	35	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	48	-	35	-	-	-	-	-	-
24 ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	48	-	35	-	-	-	-	-	-
1 RENE PLACE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	48	-	35	-	-	-	-	-	-
52-54 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	48	-	35	-	-	-	-	-	-
72-102 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	48	-	35	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	47	-	34	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	47	-	34	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	47	-	34	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	47	-	34	-	-	-	-	-	-
13, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	47	-	33	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	47	-	33	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	47	-	33	-	-	-	-	-	-
72-102 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	47	-	34	-	-	-	-	-	-
27, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	47	-	33	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	47	-	33	-	-	-	-	-	-
6, RENE PLACE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	46	-	33	-	-	-	-	-	-
30 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	46	-	33	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	46	-	33	-	-	-	-	-	-
25, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	33	-	-	-	-	-	-
29, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	33	-	-	-	-	-	-
4, BURGUNDY CLOSE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	46	-	33	-	-	-	-	-	-
22 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	46	-	33	-	-	-	-	-	-
8, ALBEMARLE PLACE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	46	-	32	-	-	-	-	-	-
4, LEWERS CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	33	-	-	-	-	-	-
23, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	46	-	33	-	-	-	-	-	-
17, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	33	-	-	-	-	-	-
20 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	46	-	33	-	-	-	-	-	-
23, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	33	-	-	-	-	-	-
14, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax		Additional mitigation		
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day	Day (OOH)	Evening	Night
21, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
19, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	46	-	32	-	-	-	-	-	-
46, 50, BORDER ROAD, HORSLEY PARK NSW 2175	Recreational - Passive	60	60	60	60	None	None	46	-	32	-	-	-	-	-	-
24 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
72-102 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	46	-	33	-	-	-	-	-	-
5, LEWERS CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
33, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
4, RENE PLACE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	46	-	32	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	46	-	32	-	-	-	-	-	-
6, LEWERS CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
9, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
29, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
4, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
3, BURGUNDY CLOSE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	46	-	32	-	-	-	-	-	-
15, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
21, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	46	-	32	-	-	-	-	-	-
17, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	45	-	32	-	-	-	-	-	-
7, BURGUNDY CLOSE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	45	-	32	-	-	-	-	-	-
7, LEWERS CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
15, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
5, BURGUNDY CLOSE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	45	-	32	-	-	-	-	-	-
3, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
35, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
10, ALBEMARLE PLACE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	45	-	32	-	-	-	-	-	-
7, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
2, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
10 WHITLEY PLACE, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
12 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
4 A, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
12, ALBEMARLE PLACE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	45	-	32	-	-	-	-	-	-
14 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	45	-	31	-	-	-	-	-	-
5, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
14, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
9, BURGUNDY CLOSE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	45	-	32	-	-	-	-	-	-
11, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-
13, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-



Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax		Additional mitigation			
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day	Day (OOH)	Evening	Night	
6, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	45	-	31	-	-	-	-	-	-	
5, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-	
8, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-	
7, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-	
12, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	32	-	-	-	-	-	-	
11 WHITLEY PLACE, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	45	-	31	-	-	-	-	-	-	
16, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	31	-	-	-	-	-	-	
11, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	31	-	-	-	-	-	-	
10, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	31	-	-	-	-	-	-	
8 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	45	-	31	-	-	-	-	-	-	
31, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	45	-	31	-	-	-	-	-	-	
3, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	31	-	-	-	-	-	-	
9, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	45	-	31	-	-	-	-	-	-	
6, ALBEMARLE PLACE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	45	-	31	-	-	-	-	-	-	
6A DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	45	-	31	-	-	-	-	-	-	
10 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	44	-	31	-	-	-	-	-	-	
4, ALBEMARLE PLACE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	44	-	31	-	-	-	-	-	-	
9, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	44	-	31	-	-	-	-	-	-	
8, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	44	-	31	-	-	-	-	-	-	
75, KOALA WAY, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	44	-	31	-	-	-	-	-	-	
18, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	44	-	31	-	-	-	-	-	-	
16, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	44	-	31	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	44	-	31	-	-	-	-	-	-	
9, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	44	-	31	-	-	-	-	-	-	
KOALA WAY, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	44	-	31	-	-	-	-	-	-	
1, BURGUNDY CLOSE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	44	-	31	-	-	-	-	-	-	
14, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	44	-	30	-	-	-	-	-	-	
47, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	44	-	30	-	-	-	-	-	-	
7, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	43	-	30	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	43	-	30	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	43	-	30	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	43	-	30	-	-	-	-	-	-	
45, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	43	-	30	-	-	-	-	-	-	
16 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	43	-	29	-	-	-	-	-	-	
33, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	43	-	30	-	-	-	-	-	-	
41, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	42	-	29	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	42	-	29	-	-	-	-	-	-	
7 DALBERTIS STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	42	-	28	-	-	-	-	-	-	

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax		Additional mitigation			
		NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day	Day (OOH)	Evening	Night	
15, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	42	-	28	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	42	-	29	-	-	-	-	-	-	
43, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	42	-	29	-	-	-	-	-	-	
41, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	42	-	29	-	-	-	-	-	-	
37, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	42	-	28	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	41	-	28	-	-	-	-	-	-	
29, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	41	-	29	-	-	-	-	-	-	
27, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	41	-	29	-	-	-	-	-	-	
39, DARLING STREET, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	41	-	28	-	-	-	-	-	-	
19, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	41	-	27	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	40	-	28	-	-	-	-	-	-	
4 USHER CLOSE, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	40	-	27	-	-	-	-	-	-	
8, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	40	-	28	-	-	-	-	-	-	
6 USHER CLOSE, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	40	-	28	-	-	-	-	-	-	
18 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	40	-	27	-	-	-	-	-	-	
5 USHER CLOSE, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	40	-	27	-	-	-	-	-	-	
21, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	40	-	27	-	-	-	-	-	-	
3 USHER CLOSE, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	40	-	27	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	39	-	26	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	39	-	25	-	-	-	-	-	-	
9, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	38	-	25	-	-	-	-	-	-	
25, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	38	-	25	-	-	-	-	-	-	
10, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	38	-	25	-	-	-	-	-	-	
28 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	38	-	25	-	-	-	-	-	-	
KOALA WAY, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	38	-	25	-	-	-	-	-	-	
17, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	38	-	25	-	-	-	-	-	-	
12, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	38	-	25	-	-	-	-	-	-	
26 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	38	-	25	-	-	-	-	-	-	
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	37	-	24	-	-	-	-	-	-	
13, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	37	-	23	-	-	-	-	-	-	
11, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	37	-	23	-	-	-	-	-	-	
3, ALBEMARLE PLACE, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	36	-	23	-	-	-	-	-	-	
1 USHER CLOSE, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	36	-	23	-	-	-	-	-	-	
5, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	36	-	23	-	-	-	-	-	-	
2 USHER CLOSE, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	36	-	23	-	-	-	-	-	-	
52 PROVINCE STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	36	-	23	-	-	-	-	-	-	
7, ISABEL STREET, CECIL HILLS NSW 2171	Residential	58	53	50	43	55	65	35	-	22	-	-	-	-	-	-	
2, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	55	50	49	45	55	65	34	-	21	-	-	-	-	-	-	
3 DARLING STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	34	-	21	-	-	-	-	-	-	

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min								Predicted noise levels, dB(A) Lmax	Additional mitigation			
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day	Day (OOH)	Evening	Night	Day	Day (OOH)	Evening	Night
50 PROVINCE STREET, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	34	-	20	-	-	-	-	-	-	-	-	-	-
1 USHER CLOSE, ABBOTSBURY, NSW	Residential	55	50	49	45	55	65	34	-	20	-	-	-	-	-	-	-	-	-	-

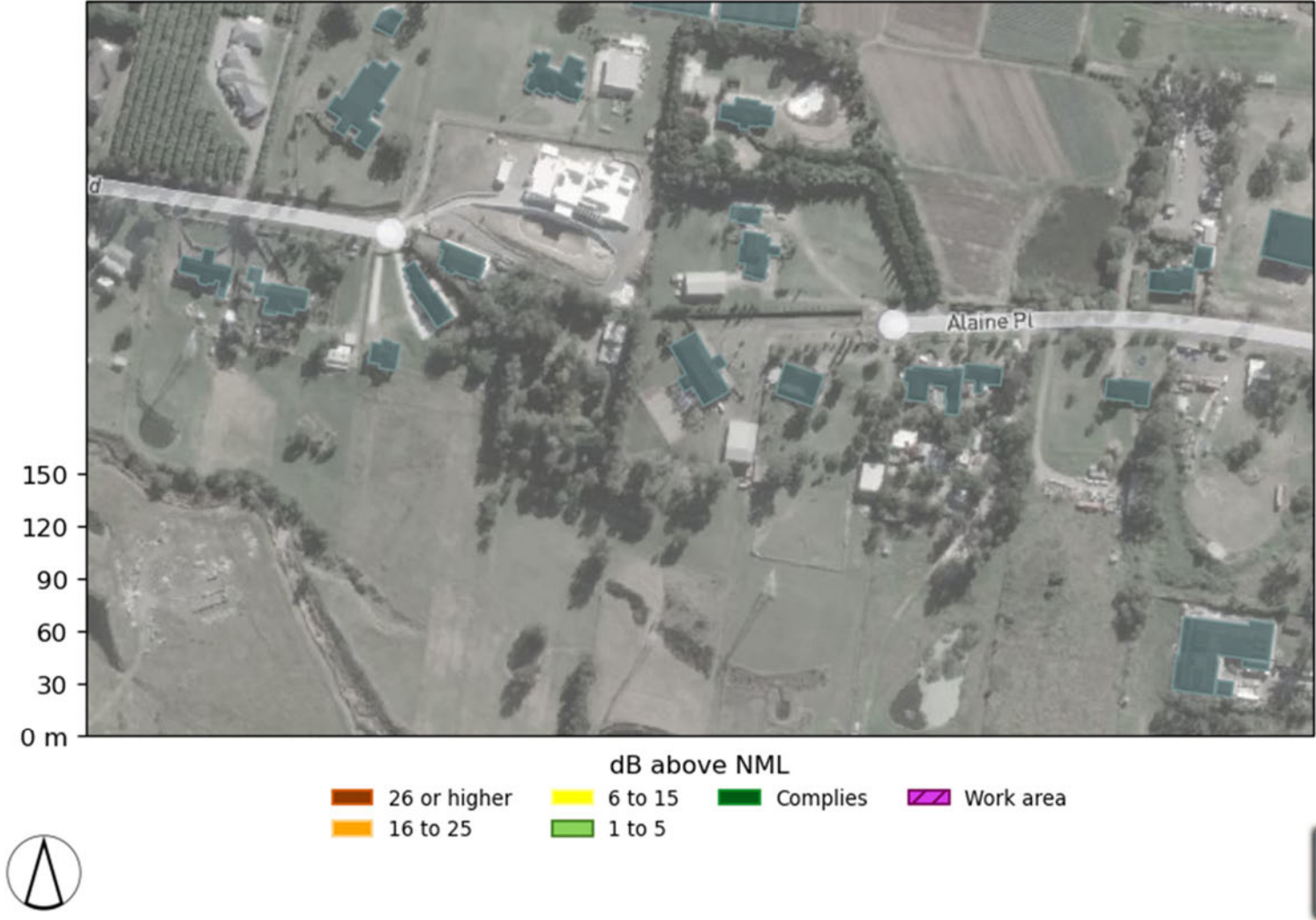


## **APPENDIX C**    Noise level above nominated target

Noise level above NML Day (area 1 of 1)



Noise level above NML Day (OOH) (area 1 of 1)

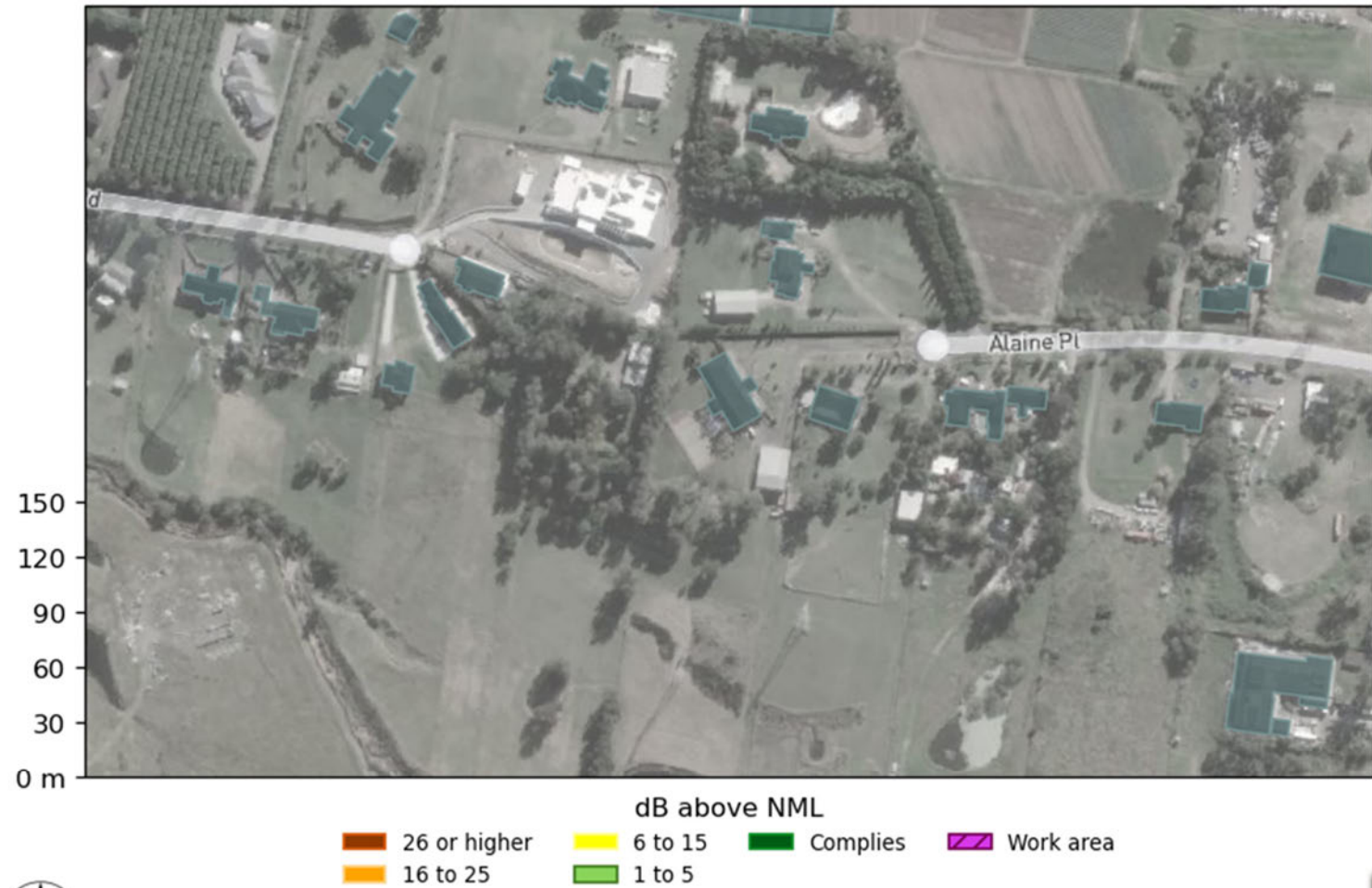


Noise level above NML Evening (area 1 of 1)





Noise level above NML Night (area 1 of 1)



# **Appendix C: Addendum - Indicative Outside of Standard Construction Hours Noise and Vibration Assessment Report**

Noise model completed as per Figure 4.



24 February 2025

2025-02-24\_TN188-04\_TN188\_2231\_964798810.docx

John Holland

[REDACTED]

[REDACTED]

From: Renzo Tonin and Associates via Gatewave

Calculation scenario: **AF9 Crushing Operation - Standard Hours + Night Operation** (Gatewave ID TN188\_2231)

## M7-M12 Integration Project – Noise and Vibration Assessment Report

### 1 Introduction

The Renzo Tonin and Associates web-based construction assessment tool (Gatewave) has been used to prepare this noise and vibration assessment report for John Holland and the M7-M12 Integration Project (the Project).

The overall noise and vibration impacts from the Project works and associated mitigation measures (e.g. hoardings) have already been addressed in the Project's Construction Noise and Vibration Impact Statements (CNVIS). This tool allows specific work areas and activities to be assessed as construction works progress. It also allows cumulative noise impact from other aspects of the Project or, where relevant noise from other construction projects, to be assessed and managed in accordance with the Project's Construction Noise and Vibration Management Plan (CNVMP, reference M712UDC-JOHN HOLLANDRP-M7A-EN-PLN-00000\_M12East\_CNVMP).

## 2 Assessment methodology

### 2.1 Construction noise

Results for the assessment of airborne noise were determined using a CadnaA computer noise model developed for the Project. The CadnaA noise model incorporates ground elevation contours, building heights, the built environment and atmospheric conditions to predict construction noise in accordance with the International Standard ISO 9613-2:1996 implementing quality standard ISO 17534-1:2015.

Results from the CadnaA noise model are exported and stored into the Gatewave database which allows for the prediction of the total cumulative noise from all construction activities.

A summary of the noise calculation parameters is detailed in Table 1.

**Table 1: Summary of noise modelling parameters**

Parameters	Inputs
Calculation method	ISO 9613-2:1996 implementing quality standard ISO 17534-1:2015
Location of noise sources above the local ground	1.5m
Height of receivers	1.5m above ground level to represent 1.5m above ground floor level Additional 3m height for every additional floor assessed (i.e. 4.5m above ground for first floor, 7.5m for second floor etc.)
Sound Power Levels ( $L_w$ ) of plant and equipment	All $L_w$ data obtained from Renzo Tonin & Associates database Detailed in Section 3
Construction activities	Detailed in Section 3
Ground absorption	Varying from 1 for absorptive surfaces (e.g. park land), 0.5 (e.g. residential areas) to 0 for reflective surfaces (e.g. water, concrete, paving);
Noise barriers and screening	As detailed in Project CNVIS

### 2.2 Construction vibration

If there are any vibration intensive plant and equipment, the recommended minimum working distances (MWD) are presented in Table 4.

## 3 Construction activities, work areas and NCAs

### 3.1 Justification to complete the works OOH

Works and activities may be carried on outside of standard construction hours specified in condition L5.1 and in accordance with L5.3 for the scope assessed in this consistency assessment report, if the works and activities do not cause, when assessed at the boundary of the most affected Noise Sensitive Receiver:

- a) LAeq(15 minute) noise levels greater than 5dB above the day, evening and night Rating Background Level (RBL) as applicable;

b) L<sub>Amax</sub> noise levels greater than 15dB above the night RBL for night works;

c) the preferred continuous or impulsive vibration values greater than those for human exposure to vibration, set out for residences in Table 2.2 in Assessing Vibration: a technical guideline (DEC, 2006); and

d) the preferred intermittent vibration values greater than those for human exposure to vibration, set out for residences in Table 2.4 in Assessing Vibration: a technical guideline (DEC, 2006).

## 3.2 Construction activities

### 3.2.1 Plant and equipment use

A summary of the plant and equipment operating during each assessment time period is presented in Table 2. Note that Table 2 identifies if a plant/equipment item is used for part or all of the assessment period on a given day, and does not necessarily denote if the plant/equipment are operating concurrently (refer APPENDIX A for details on which plant/equipment are operating together).

**Table 2: Proposed construction activities and associated sound power levels**

Activity/plant/equipment	Number in use				Sound power level, dB(A)		High impact item	Noise reduction from mitigation measures, dB(A)
	Day	Day (OOH)	Evening	Night	Leq	Lmax		
AF9 Crushing Facility								
Mobile Crusher	1	-	1	-	117	124	-	-
Precision screen – Pugmill Scorpion	1	-	1	1	107	112	-	-
Screening machine	3	-	3	3	109	110	-	-
Excavator w bucket (50T)	2	-	2	-	116	117	-	-
Bulldozer (D8)	1	-	1	1	113	117	-	-
Front end loader	1	-	1	1	110	115	-	-
Water cart	1	-	1	1	104	107	-	-
Truck and Dog	5	-	5	5	113	111	-	-
Light vehicles	3	-	3	3	94	100	-	-
Lighting tower	4	-	4	4	105	102	-	-
Excavator w bucket (50T)	-	-	-	1	113	117	-	-

Notes:

- 1) Refer APPENDIX A for plant/equipment timings and to identify which items operate concurrently.
- 2) Equipment marked in **orange** are not verified by Renzo Tonin and Associates

The locations of the construction activities are presented in Figure 1.

Figure 1: Construction work areas



## 4 Construction noise and vibration impacts

### 4.1 Predicted noise levels

#### 4.1.1 Construction $L_{Aeq,15min}$ assessment

Noise levels were determined by modelling the noise sources, receiver locations, and operating activities, based on the information presented in Table 2.

The noise predictions presented in this report represent a realistic worst-case scenario when construction occurs at the closest location within a specific work area. At each receiver, noise levels will vary during the construction period based on the position of equipment within the work area, the distance to the receiver, the construction activities being undertaken and the noise levels of particular plant items and equipment. Actual noise levels will often be less than the predicted levels presented.

A summary of the results is presented in Table 3. NMLs and predictions for the three worst-affected receivers for each works area are provided in Table 5. Detailed noise results including additional mitigation measures are provided in APPENDIX B and presented visually in noise maps in APPENDIX C.

**Table 3: Summary of receivers above relevant NMLs**

NCA	Day		Day (OOH)		Evening		Night	
	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties
NCA18	0 to 10	0	0 to 5		0 to 5	0	0 to 5	0
	> 10	0	5 to 15		5 to 15	0	5 to 15	0
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	0
			> 25		> 25	0	> 25	0
NCA19	0 to 10	0	0 to 5		0 to 5	0	0 to 5	0
	> 10	0	5 to 15		5 to 15	0	5 to 15	0
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	0
			> 25		> 25	0	> 25	0
NCA17	0 to 10	0	0 to 5		0 to 5	0	0 to 5	0
	> 10	0	5 to 15		5 to 15	0	5 to 15	0
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	0
			> 25		> 25	0	> 25	0
NCA35	0 to 10	0	0 to 5		0 to 5	0	0 to 5	0
	> 10	0	5 to 15		5 to 15	0	5 to 15	0
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	0
			> 25		> 25	0	> 25	0
Recreational - Passive	0 to 10	0	0 to 5		0 to 5	0	0 to 5	0
	> 10	0	5 to 15		5 to 15	0	5 to 15	0
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	0
			> 25		> 25	0	> 25	0
Industrial	0 to 10	0	0 to 5		0 to 5	0	0 to 5	0
	> 10	0	5 to 15		5 to 15	0	5 to 15	0



NCA	Day		Day (OOH)		Evening		Night	
	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties	dB(A) above NML	No. of properties
Horse Stable	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	0
			> 25		> 25	0	> 25	0
	0 to 10	0	0 to 5		0 to 5	0	0 to 5	0
	> 10	0	5 to 15		5 to 15	0	5 to 15	0
	Over 75 dB(A)	0	15 to 25		15 to 25	0	15 to 25	0
			> 25		> 25	0	> 25	0

## 4.2 Predicted vibration levels

The recommended MWDs for cosmetic damage and human annoyance are presented in Table 4.

**Table 4: Generic minimum working distances for cosmetic damage and human annoyance**

Plant item	Reference	Minimum working distance, m			
		Cosmetic damage (screening criteria)		Human comfort (screening limit)	
		Heritage buildings	Non-heritage	Residential <sup>1</sup>	Non-residential <sup>2</sup>
Bulldozer (D8)	CAT D8(T) Specs sheet	5	5	10	5

Notes:

1. Screening limit for residences, night time
2. Screening limit for offices, schools, educational institutions and places of worship (day or night)

## 4.3 Mitigation measures

### 4.3.1 Additional noise mitigation measures

In accordance with the CNVG, where, after application of all reasonable and feasible mitigation measures, the  $L_{Aeq(15\text{minute})}$  airborne construction noise levels are still predicted to exceed the NMLs, additional airborne noise mitigation measures can be applied to further limit the risk of annoyance from construction noise.

Figure 2 presents a summary of the additional noise mitigation measures applicable for construction activities where, after application of all reasonable and feasible mitigation options, construction noise levels still exceed the NMLs.

Figure 2: Additional airborne noise mitigation measures

When is the work being undertaken?	How much does the predicted noise level exceed the ANML by?	Identify additional management measures to be implemented	Additional mitigation measure code
All Hours	75 dB(A) or greater	V, N, PC, RO	AM2
Standard Hours M-F 7am to 6pm Sat 8am to 6pm	0 dB(A)	-	-
	≤ 10 dB(A)	-	-
	10 to 20 dB(A)	V, N	AM1
	> 20 dB(A)	V, N	AM1
OOHW Period 1 M-F 6pm to 10pm Sat 6pm to 10pm Sun/ PH 8am to 10pm	< 5 dB(A)	-	-
	5 to 15 dB(A)	N, R1, DR	AM3
	15 to 25 dB(A)	V, N, R1, DR	AM4
	> 25 dB(A)	V, N, SN, IB, PC, R1, DR	AM5
OOHW Period 2* M-F 10pm to 7am Sat 10pm to 8am Sun/ PH 6pm to 8am	< 5 dB(A)	N	AM6
	5 to 15 dB(A)	V, N, R2, DR	AM7
	15 to 25 dB(A)	V, N, SN, IB, PC, R2, DR	AM8
	> 25 dB(A)	AA, V, N, SN, IB, PC, R2, DR	AM9

Notes: Use the abbreviation codes in the table above to confirm management measures required

\* Where OOHV occur in the evening/night shoulder period (10pm to 12am) or the night/morning shoulder period (5am to 7am) apply additional airborne mitigation measures from the OOHV Period 2, excluding AA.

N = Notification (should be issued a minimum of five working days prior to the start of works)

SN = Specific notifications (issued no later than seven calendar days ahead of construction activities)

IB = Individual briefing

PC = Phone Call

AA = Alternative accommodation\*\*

RO = Project specific respite offer

R1 = Respite period 1

V = Verification of predicted noise

DR = Duration respite

R2 = Respite period 2

\*\* Where construction activity impacts receiver for more than two consecutive nights. AA is not applicable to shoulder periods.

### 4.3.2 Noise monitoring plan

Attended noise monitoring is to be undertaken to verify that noise levels resulting from works are in accordance with the levels predicted in this noise and vibration assessment report, subject to obtaining the property owner/occupier's consent to access the property (where required). Noise monitoring should be carried out on or near the property boundary at a location representative of the worst affected location (i.e. in publicly accessible areas on or near the nominated receivers, typically at ground level).

Table 5 identifies potential monitoring locations in each NCA, which are the three worst noise-affected receivers for each NCA from the works.

Note: Gatewave tries to find the most affected receivers in each NCA (up to 3 locations) purely based on the numerical results. These locations will be reviewed for suitability based on safety, accessibility, will provide valid data, etc. If not suitable, alternative suitable locations will be selected for verification monitoring.

If monitoring levels exceed predicted levels, continual improvement and corrective action measures will be implemented, (e.g. investigate cause, review work or activity, scheduling, etc).

**Table 5: Nominated verification monitoring locations**

Receiver			Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax
NCA	Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night
NCA18	23, 27, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	55	65	49	-	49	45	-
NCA18	28, 32, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	55	65	49	-	49	45	-
NCA18	33, 34, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	55	65	47	-	47	43	-
NCA19	13, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	38	-	38	34	-
NCA19	27, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	37	-	37	33	-
NCA19	33, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	37	-	37	33	-
NCA17	225, 231, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	54	-	54	50	-

Receiver			Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax
NCA	Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night
NCA17	225, 231, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	53	-	53	49	-
NCA17	233, 243, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	52	-	52	48	-
NCA35	56 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	43	-	43	39	-
NCA35	24-26 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	43	-	43	39	-
NCA35	58-62 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	43	-	43	39	-

### 4.3.3 Vibration monitoring

It is noted that the generic MWDs in Table 4 are taken from a database of vibration levels measured at various sites or obtained from other sources (e.g. BS5228-2:2009). They are not specific to these works as final vibration levels are dependent on many factors including the actual plant used, its operation and the intervening geology between the activity and the receiver.

Site specific MWDs for vibration significant plant items must be measured on site where plant and equipment are likely to operate close to or within the generic MWDs for both cosmetic damage and human annoyance. These site specific MWDs will then be included in Gatewave.

If works are likely to be within the generic or site specific MWDs, attended vibration monitoring is to be undertaken to verify that vibration levels comply with the vibration objectives described in the NVMP.

Additional monitoring for human annoyance from vibration would be carried out proactively and in response to vibration complaints.

Vibration monitoring should follow the procedures outlined in the Construction Noise and Vibration Monitoring Program (Appendix B of the CNVMP).



## Important disclaimer

- \* This document has been partly automatically generated by Gatewave™, software for prediction, assessment and management of noise and vibration, developed by Renzo Tonin and Associates.
- \* This document is uncontrolled. Please contact Renzo Tonin and Associates if you suspect there are any errors in this report.
- \* Results in this report are based on the assumptions described in Section 0 and inputs presented in Section 3. Noise and vibration monitoring data will be collected to ensure Gatewave is verified and adjusted, if required.
- \* Renzo Tonin and Associates cannot be held liable for the misuse of the software Gatewave™, including any errors that may be contained within the software.

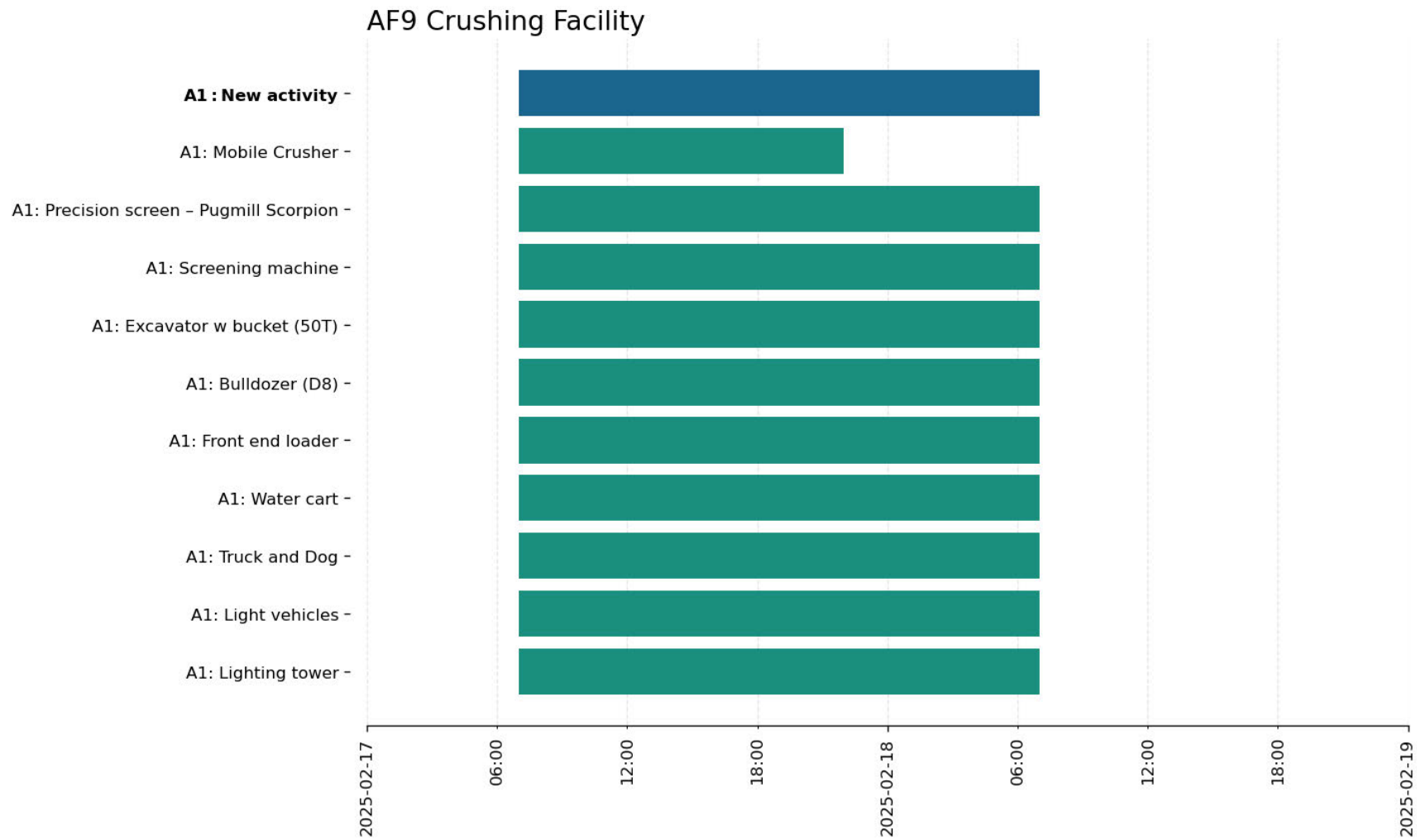
## APPENDIX A      Summary of works

### A.1      Plant and equipment

Table 6:    Plant and equipment schedule for work area: AF9 Crushing Facility

Equipment	Penalty, dB(A)	Quantity	Intensity	Reduction, dB	Sound power level, dB(A)		Start time	End time
					Leq,15min	L <sub>max</sub>		
New activity								
Mobile Crusher	-	1	100%	0	117	124	2025-02-17 07:00:00	2025-02-17 22:00:00
Precision screen – Pugmill Scorpion	-	1	100%	0	107	112	2025-02-17 07:00:00	2025-02-17 22:00:00
							2025-02-17 22:00:00	2025-02-18 07:00:00
Screening machine	-	3	100%	0	109	110	2025-02-17 07:00:00	2025-02-17 22:00:00
							2025-02-17 22:00:00	2025-02-18 07:00:00
Excavator w bucket (50T)	-	2	100%	0	116	117	2025-02-17 07:00:00	2025-02-17 22:00:00
Bulldozer (D8)	-	1	100%	0	113	117	2025-02-17 07:00:00	2025-02-17 22:00:00
							2025-02-17 22:00:00	2025-02-18 07:00:00
Front end loader	-	1	100%	0	110	115	2025-02-17 07:00:00	2025-02-17 22:00:00
							2025-02-17 22:00:00	2025-02-18 07:00:00
Water cart	-	1	100%	0	104	107	2025-02-17 07:00:00	2025-02-17 22:00:00
							2025-02-17 22:00:00	2025-02-18 07:00:00
Truck and Dog	-	5	100%	0	113	111	2025-02-17 07:00:00	2025-02-17 22:00:00
							2025-02-17 22:00:00	2025-02-18 07:00:00
Light vehicles	-	3	100%	0	94	100	2025-02-17 07:00:00	2025-02-17 22:00:00
							2025-02-17 22:00:00	2025-02-18 07:00:00
Lighting tower	-	4	100%	0	105	102	2025-02-17 07:00:00	2025-02-17 22:00:00

Equipment	Penalty, dB(A)	Quantity	Intensity	Reduction, dB	Sound power level, dB(A)		Start time	End time
					L <sub>eq,15min</sub>	L <sub>max</sub>		
Excavator w bucket (50T) -		1	100%	0	113	117	2025-02-17 22:00:00	2025-02-18 07:00:00
							2025-02-17 22:00:00	2025-02-18 07:00:00



## **APPENDIX B**      Detailed construction noise results

Table 7: Construction noise results

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min								Predicted noise levels, dB(A) Lmax		Additional mitigation	
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day (OOH)	Evening	Night				
225, 231, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	54	-	54	50	-	-	-	-				
225, 231, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	53	-	53	49	-	-	-	-				
233, 243, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	52	-	52	48	-	-	-	-				
205, WALLGROVE ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	52	-	52	48	-	-	-	-				
205, WALLGROVE ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	52	-	52	48	-	-	-	-				
205, WALLGROVE ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	52	-	52	48	-	-	-	-				
205, WALLGROVE ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	51	-	51	47	-	-	-	-				
1, KOSOVICH PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	50	-	50	46	-	-	-	-				
1, KOSOVICH PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	50	-	50	46	-	-	-	-				
205, WALLGROVE ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	50	-	50	46	-	-	-	-				
265, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Residential	75	70	62	50	55	65	50	-	50	46	-	-	-	-				
18, 22, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	49	-	49	45	-	-	-	-				
23, 27, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	55	65	49	-	49	45	-	-	-	-				
2-10, KOSOVICH PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	49	-	49	45	-	-	-	-				
52, 56, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	49	-	49	45	-	-	-	-				
66-74 BORDER ROAD, HORSLEY PARK NSW 2175	Non-receiver	999	999	999	999	None	None	49	-	49	45	-	-	-	-				
13, KOSOVICH PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	49	-	49	45	-	-	-	-				
13, KOSOVICH PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	49	-	49	45	-	-	-	-				
18, 22, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	49	-	49	45	-	-	-	-				
28, 32, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	55	65	49	-	49	45	-	-	-	-				
13, KOSOVICH PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	49	-	49	45	-	-	-	-				
22, 30, KOSOVICH PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	49	-	49	45	-	-	-	-				
87, 95, WALLGROVE ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	49	-	49	45	-	-	-	-				
18, 22, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	48	-	48	44	-	-	-	-				
13, KOSOVICH PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	48	-	48	44	-	-	-	-				
37, 46, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	48	-	48	44	-	-	-	-				
265, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Residential	75	70	62	50	55	65	48	-	48	44	-	-	-	-				
47, 51, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	48	-	48	44	-	-	-	-				
28, 32, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	48	-	48	44	-	-	-	-				
52, 56, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	48	-	48	44	-	-	-	-				
13, 17, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	48	-	48	44	-	-	-	-				
18, 22, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	48	-	48	44	-	-	-	-				
47, 51, ALAINE PLACE, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	48	-	48	44	-	-	-	-				
66, 74, BORDER ROAD, HORSLEY PARK NSW 2175	Recreational - Passive	60	60	60	60	None	None	48	-	48	44	-	-	-	-				
233, 243, WALLGROVE ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	48	-	48	44	-	-	-	-				
66-74 BORDER ROAD, HORSLEY PARK NSW 2175	Non-receiver	999	999	999	999	None	None	47	-	47	43	-	-	-	-				
33, 34, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	55	65	47	-	47	43	-	-	-	-				
23, 27, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	47	-	47	43	-	-	-	-				

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min							Predicted noise levels, dB(A) Lmax		Additional mitigation		
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day		Day (OOH)		Evening	Night	Night	Day	Day (OOH)	Evening	Night	
37, 46, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	47		-		47	43	-	-	-	-	-	
265, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Non-receiver	999	999	999	999	None	None	46		-		46	42	-	-	-	-	-	
75-90 Wallgrove Road, Cecil Park	Residential	75	70	62	50	55	65	46		-		46	42	-	-	-	-	-	
35, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	55	65	46		-		46	42	-	-	-	-	-	
60, 64, BORDER ROAD, HORSLEY PARK NSW 2175	Non-receiver	999	999	999	999	None	None	46		-		46	42	-	-	-	-	-	
33, 34, ALAINE PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	55	65	46		-		46	42	-	-	-	-	-	
18, 22, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	46		-		46	42	-	-	-	-	-	
18, 22, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	46		-		46	42	-	-	-	-	-	
77, 89, BORDER ROAD, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	46		-		46	42	-	-	-	-	-	
18, 22, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	46		-		46	42	-	-	-	-	-	
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	46		-		46	42	-	-	-	-	-	
33, 34, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	46		-		46	42	-	-	-	-	-	
18, 22, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	45		-		45	41	-	-	-	-	-	
97, 123, WALLGROVE ROAD, CECIL PARK NSW 2178	Residential	75	70	62	50	55	65	45		-		45	41	-	-	-	-	-	
275, 283, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Non-receiver	999	999	999	999	None	None	45		-		45	41	-	-	-	-	-	
233, 243, WALLGROVE ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	45		-		45	41	-	-	-	-	-	
32, 40, KOSOVICH PLACE, CECIL PARK NSW 2178	Residential	57	52	52	52	55	65	45		-		45	41	-	-	-	-	-	
37, 46, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	45		-		45	41	-	-	-	-	-	
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	44		-		44	40	-	-	-	-	-	
285, 293, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Residential	75	70	62	50	55	65	44		-		44	40	-	-	-	-	-	
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	44		-		44	40	-	-	-	-	-	
13, 17, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	44		-		44	40	-	-	-	-	-	
22, 30, KOSOVICH PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	44		-		44	40	-	-	-	-	-	
305, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Non-receiver	999	999	999	999	None	None	44		-		44	40	-	-	-	-	-	
75, 79, GOODRICH ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	44		-		44	40	-	-	-	-	-	
285, 293, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Non-receiver	999	999	999	999	None	None	44		-		44	40	-	-	-	-	-	
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	44		-		44	40	-	-	-	-	-	
13, 17, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	44		-		44	40	-	-	-	-	-	
56 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	43		-		43	39	-	-	-	-	-	
265, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Non-receiver	999	999	999	999	None	None	43		-		43	39	-	-	-	-	-	
24-26 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	43		-		43	39	-	-	-	-	-	
275, 283, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Non-receiver	999	999	999	999	None	None	43		-		43	39	-	-	-	-	-	
58-62 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	43		-		43	39	-	-	-	-	-	
53 BORDER ROAD, HORSLEY PARK NSW 2175	Recreational - Passive	60	60	60	60	None	None	42		-		42	38	-	-	-	-	-	
1111-1141 ELIZABETH DRIVE, CECIL PARK 2178	Residential	68	63	59	47	55	65	42		-		42	38	-	-	-	-	-	
18 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	42		-		42	38	-	-	-	-	-	
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42		-		42	38	-	-	-	-	-	
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42		-		42	38	-	-	-	-	-	
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42		-		42	38	-	-	-	-	-	



Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min							Predicted noise levels, dB(A) Lmax		Additional mitigation			
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day	Day (OOH)	Evening	Night	Day	Day (OOH)	Evening	Night
56, CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	42	-	42	38	-	-	-	-	-	-	-	-	-
37, 46, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
32, 40, KOSOVICH PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
20-22 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
20-22 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
37-73 WALLGROVE ROAD, CECIL PARK 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
37-73 WALLGROVE ROAD, CECIL PARK 2178	Residential	75	70	62	50	55	65	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
58-62 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	42	-	42	38	-	-	-	-	-	-	-	-	-
58-62 CECIL ROAD, CECIL PARK NSW 2178	Industrial	75	75	75	75	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
275, 283, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Residential	75	70	62	50	55	65	42	-	42	38	-	-	-	-	-	-	-	-	-
77, 89, BORDER ROAD, HORSLEY PARK NSW 2175	Industrial	75	75	75	75	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	42	-	42	38	-	-	-	-	-	-	-	-	-
24-26 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	41	-	41	37	-	-	-	-	-	-	-	-	-
275, 283, WALLGROVE ROAD, HORSLEY PARK NSW 2175	Non-receiver	999	999	999	999	None	None	41	-	41	37	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	41	-	41	37	-	-	-	-	-	-	-	-	-
19 KOSOVICH PLACE, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	41	-	41	37	-	-	-	-	-	-	-	-	-
1111-1141 ELIZABETH DRIVE, CECIL PARK 2178	Non-receiver	999	999	999	999	None	None	41	-	41	37	-	-	-	-	-	-	-	-	-
18 CECIL ROAD, CECIL PARK NSW 2178	Residential	68	63	59	47	55	65	41	-	41	37	-	-	-	-	-	-	-	-	-
24-26 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	41	-	41	37	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40	-	40	36	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40	-	40	36	-	-	-	-	-	-	-	-	-
1111-1141 ELIZABETH DRIVE, CECIL PARK 2178	Non-receiver	999	999	999	999	None	None	40	-	40	36	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40	-	40	36	-	-	-	-	-	-	-	-	-
32, 40, KOSOVICH PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40	-	40	36	-	-	-	-	-	-	-	-	-
5 A, WASHINGTON WAY, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40	-	40	36	-	-	-	-	-	-	-	-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40	-	40	36	-	-	-	-	-	-	-	-	-
NULL1111-1141 ELIZABETH DRIVE, CECIL PARK 2178	Non-receiver	999	999	999	999	None	None	40	-	40	36	-	-	-	-	-	-	-	-	-

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min								Predicted noise levels, dB(A) Lmax		Additional mitigation	
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day		Day (OOH)		Evening		Night	Night	Day	Day (OOH)	Evening	Night
53 BORDER ROAD, HORSLEY PARK NSW 2175	Recreational - Passive	60	60	60	60	None	None	40		-		40		36	-	-		-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40		-		40		36	-	-		-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40		-		40		36	-	-		-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40		-		40		36	-	-		-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40		-		40		36	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	40		-		40		36	-	-		-	-
5 A, WASHINGTON WAY, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	40		-		40		36	-	-		-	-
56 CECIL ROAD, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	39		-		39		35	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	39		-		39		35	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	38		-		38		34	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	38		-		38		34	-	-		-	-
13, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	38		-		38		34	-	-		-	-
23, 27, ALAINE PLACE, CECIL PARK NSW 2178	Non-receiver	999	999	999	999	None	None	38		-		38		34	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	38		-		38		34	-	-		-	-
46, 50, BORDER ROAD, HORSLEY PARK NSW 2175	Recreational - Passive	60	60	60	60	None	None	37		-		37		33	-	-		-	-
27, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	37		-		37		33	-	-		-	-
33, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	37		-		37		33	-	-		-	-
30 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	37		-		37		33	-	-		-	-
22 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	37		-		37		33	-	-		-	-
25, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	37		-		37		33	-	-		-	-
14, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	37		-		37		33	-	-		-	-
29, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	37		-		37		33	-	-		-	-
21, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	37		-		37		33	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	37		-		37		33	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	37		-		37		33	-	-		-	-
24 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	37		-		37		33	-	-		-	-
19, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	37		-		37		33	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	37		-		37		33	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	36		-		36		32	-	-		-	-
9, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36		-		36		32	-	-		-	-
23, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36		-		36		32	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	36		-		36		32	-	-		-	-
17, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36		-		36		32	-	-		-	-
20 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	36		-		36		32	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	36		-		36		32	-	-		-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	36		-		36		32	-	-		-	-
15, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36		-		36		32	-	-		-	-
4, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36		-		36		32	-	-		-	-
5, LEWERS CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36		-		36		32	-	-		-	-

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min							Predicted noise levels, dB(A) Lmax		Additional mitigation			
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day	Day (OOH)	Evening	Night	Day	Day (OOH)	Evening	Night
15, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
29, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	36	-	36	32	-	-	-	-	-	-	-	-	-
4, LEWERS CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
14, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
17, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
21, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	36	-	36	32	-	-	-	-	-	-	-	-	-
10 WHITLEY PLACE, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
7, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
13, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
14 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
2, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
35, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	36	-	36	32	-	-	-	-	-	-	-	-	-
11, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	35	-	35	31	-	-	-	-	-	-	-	-	-
3, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	35	-	35	31	-	-	-	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	35	-	35	31	-	-	-	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	35	-	35	31	-	-	-	-	-	-	-	-	-
11, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	35	-	35	31	-	-	-	-	-	-	-	-	-
12 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	35	-	35	31	-	-	-	-	-	-	-	-	-
6, LEWERS CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	35	-	35	31	-	-	-	-	-	-	-	-	-
6A DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	35	-	35	31	-	-	-	-	-	-	-	-	-
11 WHITLEY PLACE, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	35	-	35	31	-	-	-	-	-	-	-	-	-
12, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	35	-	35	31	-	-	-	-	-	-	-	-	-
16, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	35	-	35	31	-	-	-	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	35	-	35	31	-	-	-	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	35	-	35	31	-	-	-	-	-	-	-	-	-
7, LEWERS CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	35	-	35	31	-	-	-	-	-	-	-	-	-
18 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	34	-	34	30	-	-	-	-	-	-	-	-	-
9, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34	-	34	30	-	-	-	-	-	-	-	-	-
10 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	34	-	34	30	-	-	-	-	-	-	-	-	-
10, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34	-	34	30	-	-	-	-	-	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	34	-	34	30	-	-	-	-	-	-	-	-	-
8 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	34	-	34	30	-	-	-	-	-	-	-	-	-
4 A, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34	-	34	30	-	-	-	-	-	-	-	-	-
5, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34	-	34	30	-	-	-	-	-	-	-	-	-
8, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34	-	34	30	-	-	-	-	-	-	-	-	-
9, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34	-	34	30	-	-	-	-	-	-	-	-	-
5, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34	-	34	30	-	-	-	-	-	-	-	-	-



Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax		Additional mitigation			
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day		Day (OOH)		Evening	Night	Night	Day (OOH)	Evening	Night
6, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34		-		34	30	-	-	-	-
7, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34		-		34	30	-	-	-	-
8, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34		-		34	30	-	-	-	-
3, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34		-		34	30	-	-	-	-
47, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34		-		34	30	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	34		-		34	30	-	-	-	-
5, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	34		-		34	30	-	-	-	-
4 USHER CLOSE, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	33		-		33	29	-	-	-	-
7, USHER CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	33		-		33	29	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	33		-		33	29	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	33		-		33	29	-	-	-	-
45, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	33		-		33	29	-	-	-	-
6 USHER CLOSE, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	33		-		33	29	-	-	-	-
45, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	33		-		33	29	-	-	-	-
8, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	33		-		33	29	-	-	-	-
41, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	33		-		33	29	-	-	-	-
2 USHER CLOSE, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	33		-		33	29	-	-	-	-
3 USHER CLOSE, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	33		-		33	29	-	-	-	-
5 USHER CLOSE, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	33		-		33	29	-	-	-	-
1 USHER CLOSE, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	32		-		32	28	-	-	-	-
43, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	32		-		32	28	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	32		-		32	28	-	-	-	-
9, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	32		-		32	28	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	32		-		32	28	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	32		-		32	28	-	-	-	-
41, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	32		-		32	28	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	31		-		31	27	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	30		-		30	26	-	-	-	-
37, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	30		-		30	26	-	-	-	-
39, DARLING STREET, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	30		-		30	26	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	29		-		29	25	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Recreational - Passive	60	60	60	60	None	None	29		-		29	25	-	-	-	-
31 Darling St, Abbotsbury NSW 2176	Horse Stable	60	60	60	60	None	None	28		-		28	24	-	-	-	-
28 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	27		-		27	23	-	-	-	-
16 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	27		-		27	23	-	-	-	-
26 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	27		-		27	23	-	-	-	-
2, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	27		-		27	23	-	-	-	-
7, LEWERS CLOSE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	27		-		27	23	-	-	-	-
1, WHITLEY PLACE, ABBOTSBURY NSW 2176	Residential	57	52	52	52	55	65	26		-		26	22	-	-	-	-

Receiver		Noise management levels (NMLs), dB(A)				Sleep disturbance goals, dB(A)		Predicted noise levels, dB(A) Leq,15min				Predicted noise levels, dB(A) Lmax		Additional mitigation	
Address	Land use	NML Day	NML Day (OOH)	NML Evening	NML Night	Lmax (screening)	Lmax (limit)	Day	Day (OOH)	Evening	Night	Night	Day (OOH)	Evening	Night
1 USHER CLOSE, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	26	-	26	22	-	-	-	-
52 PROVINCE STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	26	-	26	22	-	-	-	-
5 USHER CLOSE, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	26	-	26	22	-	-	-	-
50 PROVINCE STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	26	-	26	22	-	-	-	-
3 DARLING STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	26	-	26	22	-	-	-	-
7 DALBERTIS STREET, ABBOTSBURY, NSW	Residential	57	52	52	52	55	65	26	-	26	22	-	-	-	-

## **APPENDIX C**      Noise level above nominated target

Noise level above NML Day (area 1 of 1)





Noise level above NML Day (OOH) (area 1 of 1)



Noise level above NML Evening (area 1 of 1)



Noise level above NML Night (area 1 of 1)

