



# **M12 Motorway Works**

## **Overarching Out-of-Hours Work Protocol**

M12 Motorway

August 2022



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## Document control

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## Approval and authorisation

Protocol reviewed by:	Protocol reviewed by:
Suzette Graham M12 Manager Environment and Sustainability - TfNSW	Ibrahim El-Jamal M12 Interface Manager - TfNSW
Date: 11/08/2022	Date: 11/08/2022
Signature: 	Signature: 

## Revision history

Revision	Date	Description
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B	19/10/2021	Issued for approval
C	30/10/2021	Updated to address DPE comments
D	01/11/2021	Updated following ER review
E	11/04/2022	Edits to address corrective action following environmental events on site
F	16/05/2022	Edits following internal review and ER feedback
G	23/05/2022	Edits to facilitate main civil contractors utilising this protocol
H	06/07/2022	Address DPE comments
I	10/08/2022	Minor amendments to Section 2 and Attachment 2

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## Glossary/ Abbreviations

Abbreviations	Expanded Text
ABL	Assessment Background Level
Ambient noise	The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far
ARSR	Amendment Report to the Submissions Report
Attenuation	The reduction in the level of sound or vibration
AVTG	Assessing Vibration – a technical guideline (DEC 2006)
CEMP	Main civil contractors Construction Environmental Management Plan
CMS	Complaints Management System
CNVG	Construction Noise and Vibration Guideline (Roads and Maritime 2016)
CoA	Condition of Approval
Construction	Includes all activities required to construct the CSSI as described in the documents listed in Condition A1, including commissioning trials of equipment and temporary use of any part of the CSSI, but excluding Low Impact Work which is carried out to complete prior to the approval of the CEMP, works approved under a Site Establishment Management Plan, demolition of acquired residential houses, structures and sheds, and works specified in Appendix B and approved under an environmental management plan(s) in accordance with Condition A24.
CSSI	Critical State Significant Infrastructure
DAWE	Commonwealth Department of the Water, Agriculture and Environment
dBA	Decibels using the A-weighted scale measured according to the frequency of the human ear
DEC	Department of Environment and Conservation (now EPA)
DECC	Department of Environment and Climate Change (now EPA)
DECCW	Department of Environment, Climate Change and Water (now EPA)
DPE	NSW Department of Planning and Environment (former Department of Planning, Industry and Environment)
DR	Duration Respites
Contractors	Contractors engaged by TfNSW or utility authorities to undertake works for the M12 Motorway project as approved through Environmental Management Plans under NSW CoA A24,C1, and C4 . This also includes Contractors' sub-contractors.

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Abbreviations	Expanded Text
EHG	Environment and Heritage Group (former Environmental, Energy and Science)
EIS	Environmental Impact Statement
Emergency works	Work required to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm.
EMM	Environmental Management Measure
EMS	Environmental Management System
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPA	NSW Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence
ER	Environmental Representative
EWMS	Environmental Work Method Statements
EWEMP	Early Works Environmental Management Plan
Feasible and reasonable	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account mitigation benefits and cost of mitigation versus benefits provided, community views and nature and extent of potential improvements
Highly Noise Affected	Where noise affected management level represents the level above which there may be strong community reaction to noise, determined as the exceedance of NMLs.
Highly Noise Intensive Works	<p>Works which are defined as annoying under the Interim Construction Noise Guideline (DECC, 2009) including:</p> <ul style="list-style-type: none"> <li>• Use of power saws, such as used for cutting timber, rail lines, masonry, road pavement or steel work</li> <li>• Grinding metal, concrete or masonry</li> <li>• Rock drilling</li> <li>• Line drilling</li> <li>• Vibratory rolling</li> <li>• Bitumen milling or profiling</li> <li>• Jackhammering, rock hammering or rock breaking</li> <li>• Impact piling.</li> </ul>

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Abbreviations	Expanded Text
IB	Individual briefing
ICNG	Interim Construction Noise Guideline (DECC 2009)
Infrastructure Approval	Approval (SSI 9364) for carrying out of the M12 Project under Section 5.19 of the <i>Environmental Planning and Assessment Act 1979</i> subject to specific CoA as detailed in Schedule 2 of the approval.
km	Kilometres
LAeq (15min)	The A-weighted equivalent continuous (energy average) A-weighted sound pressure level of the construction works under consideration over a 15-minute period and excludes other noise sources such as from industry, road, rail and the community
LA (max)	The A-weighted maximum noise level only from the construction works under consideration, measured using the fast time weighting on a sound level meter
LGA	Local Government Area
NCA	Noise catchment areas
NML	Noise management level
Noise affected	The noise affected level represents the point above which there may be some community reaction to noise.
NPfI	Noise Policy for Industry
NSW CoA	NSW Conditions of Approval
NVIS	Noise and Vibration Impact Statement
OCS	Overarching Communication Strategy
OEH	Office of Environment and Heritage, now EHG
OOH	Out-of-Hours
OOHW	Out-of-Hours Works – work completed outside of standard construction hours
Planning Secretary	Secretary of the NSW Department of Infrastructure, Planning and Environment, or delegate
PLO	Public Liaison Officer
Primary CoA/REMM	CoA/REMM that are specific to the development of this Plan
Project, the	M12 Motorway Project
QA	Quality Assurance
R1	Respite Period 1

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Abbreviations	Expanded Text
R2	Respite Period 2
RBL	The Rating Background Level for each period is the medium value of the ABL values for the period over all of the days measured. There is therefore an RBL value for each period (day, evening and night)
REMMs	Revised Environmental Management Measures
RNP	NSW Road Noise Policy (DECCW 2011)
Roads and Maritime	Former NSW Roads and Maritime Services (now Transport for New South Wales)
SAP	Sensitive Area Plan
SEAR's	Secretary's Environmental Assessment Requirements
Secondary CoA/REMM	CoA/REMM that are related to, but not specific to, the development of this Plan
SEMP	Site Establishment Management Plan(s)
SEO	Senior Environment Officer
Standard construction hours	Hours during which construction work is permitted by the CoA
SN	Specific notifications
SWL	Sound Power Level
SPL	Sound Pressure Level
TfNSW	Transport for New South Wales
VDVs	Vibration dose values
Work	Any physical work to build or facilitate the building of the CSSI, including low impact work, environmental management measures and utility works. However, it does not include activities that inform or enable detailed design of the CSSI and generate noise that is no more than 5 dB(A) above the rating background level at any sensitive receiver.
WSIA	Western Sydney International Airport

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# 1 Introduction

This Out-Of-Hours Work (OOHW) Protocol has been developed to assist with any work associated with the M12 Motorway that will be carried out outside the standard hours of work, as defined with the NSW Conditions of Approval (CoA) E34 and that are not subject to an Environment Protection Licence (EPL). This OOHW Protocol also satisfies NSW CoA E36(c)(ii), where works can be approved outside the standard hours through an approval of an OOHW Protocol.

This OOHW Protocol forms part of the environmental documentation prepared for the M12 Early Works including the Early Works Environmental Management Plans prepared in accordance with NSW CoA A24. This Overarching OOHW Protocol also forms part of the main civil Contractors Construction Environmental Management Plan (CEMP). The protocol will also be used by the main civil Contractors for any works not subject to an EPL, which are expected to be minimal. The use of the Overarching OOHW protocol for any works not subject to an EPL will be included in the Contractors stage-specific Construction Noise and Vibration Management Plan, which forms part of their CEMP. This OOHW Protocol has been prepared in consultation with the Environmental Representative (ER) (Attachment 1).

## 1.1 NSW Conditions of Approval

The primary NSW CoA relevant to this Plan are listed Table 1-1 below. A cross reference is also included to indicate where the condition is addressed in this document.

Table 1.1 – Out-of-Hours Work Protocol NSW CoA 37

CoA No.	Condition Requirements	Document Reference
E37	An Out-of-Hours Work Protocol must be prepared to identify a process for the consideration, management and approval of Work which is outside the hours defined in Condition E34, and that are not subject to an EPL. The Protocol must be approved by the Planning Secretary before commencement of the out-of-hours Work. The Protocol must be prepared in consultation with the ER. The Protocol must provide:	This OOHW Protocol Section 1 Section 1.4 Attachment 1
	(a) identification of low and high-risk activities and an approval process that considers the risk of activities, proposed mitigation, management, and coordination, including where: <ul style="list-style-type: none"> <li>(i) the ER reviews all proposed out-of-hours activities and confirm their risk levels,</li> <li>(ii) low risk activities can be approved by the ER, and</li> <li>(iii) high risk activities that are approved by the Planning Secretary;</li> </ul>	Section 2 Section 4.3 Attachment 3
	(b) a process for the consideration of out-of-hours work against the relevant NML and vibration criteria;	Section 2.1 Section 2.2

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	(c) a process for selecting and implementing mitigation measures for residual impacts in consultation with the community at each affected location, including respite periods consistent with the requirements of Condition E47. The measures must take into account the predicted noise levels and the likely frequency and duration of the out-of-hours works that sensitive land user(s) would be exposed to, including the number of noise awakening events;	Section 3 Section 5
	(d) procedures to facilitate the coordination of out-of-hours Work including those approved by an EPL or undertaken by a third party, to ensure appropriate respite is provided; and	Section 2.3
	(e) notification arrangements for affected receivers for all approved out-of-hours Work and notification to the Planning Secretary of approved low risk out-of-hours Work. This condition does not apply to Work where the requirements of Condition E36(a) or (b) are met.	Section 4.3 Section 5

## 1.2 Justification for OOHW

In accordance with NSW CoA E34, the Contractors will conduct activities within the approved standard construction hours outlined in the NSW CoA E34:

- Monday to Friday: 7:00 am to 6:00 pm
- Saturday: 8:00 am to 6:00 pm
- Sundays and public holidays: no work

In accordance with NSW CoA E35, highly noise intensive activities that result in the exceedance of an applicable noise management level (NML) at the same receiver must only be undertaken

- Monday to Friday: 8:00 am to 6:00 pm
- Saturday: 8:00 am to 1:00 pm
- If continuously, then not exceeding three hours, with a minimum cessation of work of not less than one hour

Certain activities may need to be carried out outside of standard hours. There are two periods of OOHW including:

- 1) OOHW Period 1
  - a. Monday to Friday: 6pm to 10pm
  - b. Saturday: 7am to 8am and 6pm to 10pm; and
  - c. Sunday and Public Holidays: 8am to 6pm.
- 2) OOHW Period 2:
  - a. Monday to Friday: 10pm to 7am
  - b. Saturday: 10pm to 8am; and

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- c. Sunday and Public Holidays: 6pm to 7am the following day (unless that day is Saturday then to 8:00am).

Where requirements of the CoA are satisfied the Contractors may carry out OOHW.

The Contractors will provide justification of the need for OOHW in accordance with the Interim Construction Noise Guideline or where OOHW is required:

- For technical considerations (such as the need to meet particular quality specifications)
- To maintain the safety of road users or site personnel
- Where a road occupancy license will not be provided during standard times
- Where a utility service operator has advised that the works undertaken during standard hours will result in a high risk to the operation or integrity of the network.

Work activities that may require scheduled OOHW include, but are not limited to:

- Traffic management for work required close to live traffic including vegetation clearing and setting up safety barriers
- Traffic Switches or road-tie in work
- Utility outages / cutovers
- Utility and service relocations
- Paving works
- Asphaltting
- Concrete pours
- Ancillary facility operation

Work activities that may be required or proposed to be undertaken outside of standard working hours will be assessed in accordance with the process outlined in this OOWH Protocol.

### 1.3 Exclusions

Works outside of the standard construction hours (as identified in Section 1.1) may be undertaken in the following circumstances as permitted by NSW CoA E36:

- Safety and Emergencies, including:
  - For the delivery of materials required by the NSW Police Force or other authority for safety reasons or
  - 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.
- Work that causes:
  - LAeq(15 min) noise levels:
    - No more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG, and
    - No more than the 'Noise affected' NMLs specified in Table 3 of the ICNG at other sensitive land user(s); and

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- LAFmax(15 min) noise levels no more than 15 dB(A) above the rating background level at any residence during the night time period; and
- Continuous or impulsive vibration values, measured at the most affected residence, that are no more than those for human exposure to vibration, specified for residences in Table 2.2 of *Assessing Vibration: a technical guideline* (DEC, 2006) and
- Intermittent vibration values, measured at the most affected residence, that are no more than those for human exposure to vibration, specified for residences in Table 2.4 of *Assessing Vibration: a technical guideline* (DEC, 2006).
- By approval, including:
  - Where different construction hours are permitted or required under an EPL in force in respect of the CSSI; or
  - Works which are not subject to an EPL that are approved under an Out-of-Hours Work Protocol as required by NSW CoA E37; or
  - Where negotiated agreements with directly affected residents and sensitive land uses have been reached.

On becoming aware of the need for emergency works, Contractors will notify TfNSW, ER, the Planning Secretary and the EPA of the need for the emergency works. The Contractors will use best endeavours to notify all affected sensitive receivers of the likely impact and duration of the emergency works.

Emergency work is defined as work that is required to:

- Avoid injury or the loss of life;
- To avoid damage or loss of property; or
- To prevent environmental harm.

Work carried out outside standard construction hours without prior approval or where the definition of emergency work isn't met is considered an environmental incident and non-compliance and will be managed in accordance with processes set out in the relevant Early Works Environmental Management Plan or CEMP.

OOHW that is approved but not carried out in accordance with the approval or required management measures would also be considered a non-conformance with the OOHW Approval Request Form and managed in accordance with processes outlined in the approved Early Works Environmental Management Plan or CEMP.

## 1.4 Review, approval and modification of this Protocol

This OOHW Protocol must be approved by the Planning Secretary prior to the commencement of the OOHW.

Amendments to this OOHW Protocol will be sent to the ER for consultation and then forwarded to the Planning Secretary for approval.

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## 2 OOHW noise and vibration assessment

Prior to undertaking any OOHW, the Contractors will undertake a noise and (if applicable) vibration assessment to assess the noise and vibration impacts for any low and high risk activities proposed outside standard hours. The assessment will include details of the work to be undertaken, plant and equipment required, scheduling and duration of the work, predicted impacts on sensitive receivers, their location and proposed mitigation measures.

The inputs into the noise and vibration assessment are to be as accurate as possible and checked by relevant construction personnel. Where uncertainty exists about specific details, a worst-case scenario must be assessed.

Where changes to the scope of the OOHW occur following approval of the OOHW Approval Request Form, the Contractor must follow the change management process outlined in Section 6.5. The proposed OOHW is classified low risk (in accordance with E37(a) if it meets the following criteria:

- Works that generate noise (equal to or less than 15dB(A)) up to and including the “Clearly Audible” OOHW classification as outlined Attachment 2, and meets the following durations (as experienced by the receiver):
  - Three evenings and night periods in a calendar week with only two consecutive evenings and night periods permitted
  - A maximum of 10 evenings and nights periods in a calendar month.

The effect of the above facilitates two evening and night periods in a row and at least one period off before the third period that week. In accordance with CoA E37(a)(ii), the Environmental Representative (ER) has the authority to approve low risk OOHW activities.

If the duration limitations outlined above cannot be achieved, the proposed OOHW is classified as high risk. In this instance, the assessment of the proposed OOHW and the OOHW Approval Request Form will be issued to the Planning Secretary for review and approval.

### 2.1 Noise

The noise assessment is to be prepared by the Contractor in accordance with the CoA and this OOHW Protocol and will determine the extent of noise impact the Works activities will have on sensitive receivers by undertaking a quantitative assessment. The assessment will identify the exceedances of activity scenarios against the NMLs adopted for each Noise Catchment Area (NCA) or other sensitive land uses.

The noise assessment will document predicted noise levels, frequency and duration of OOHW, awakening events/sleep disturbance and determine the appropriate standard and additional mitigation measures. The noise assessment will also consider if feasible and reasonable work practices have been identified to minimise the noise.

Where a noise assessment has been prepared for an approved Early Works Environmental Management Plan or CEMP and considers OOHW for the type of activity to be undertaken, this assessment can be relied upon to fulfil this requirement.

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Noise and Vibration Impact Statements (NVIS) will be prepared for any work that may exceed the NMLs and vibration criteria specified in NSW CoA E38 at any residence outside the standard work hours identified in NSW CoA E34, or where receivers will be highly noise affected. The NVIS must include specific mitigation measures identified through consultation with affected sensitive receivers and the mitigation measures must be implemented for the duration of the work. Feedback on mitigation measures will be sought from affected sensitive receivers through notifications or via phone calls. A copy of the NVIS must be provided to the ER prior to the commencement of the associated work. The Planning Secretary may request copies of the NVIS.

## 2.2 Vibration

An assessment will be required for vibration intensive OOHW within the safe working distances for human comfort for the nominated plant and equipment. Prior to undertaking an assessment, all other feasible and reasonable options to use less vibration intensive equipment will be investigated and exhausted.

## 2.3 Co-ordination of OOHW with third parties

All OOHW, including works undertaken by a third party, will be co-ordinated with other CSSI, SSI and SSD projects that are being constructed nearby, to implement the appropriate management measures and respite periods as specified in NSW CoA E45.

Works will be scheduled with the aim of minimising concurrent works near sensitive receivers in consultation with managers of other nearby projects that are likely to result in a cumulative impact. This will include:

- Coordination between project teams
- Rescheduling of work to provide respite to impacted noise sensitive land user(s) so that respite is achieved during OOHW
- Consideration to the provision of alternative respite or mitigation to impacted noise sensitive land users where OOHW respite as per NSW CoA E47 cannot be provided.

Consultation will be undertaken in accordance with the Overarching Communication Strategy (OCS) to ensure works can be coordinated with third parties under NSW CoA E37(d).

## 3 OOHW noise and vibration management measures

Following the noise and vibration assessment, the Contractors will identify any additional mitigation measures, consistent with the TfNSW Construction Noise and Vibration Guideline (CNVG) (2016), that are proposed to manage OOHW noise and vibration impacts from the Project. The most appropriate reasonable and feasible management measures will be determined in accordance with the ICNG. Additional mitigation measures will be implemented and will relate directly to the risk factor (Table 2-1) of the proposed OOHW.

The Contractors will identify the OOHW period, the predicted airborne LAeq(15mins) noise level at receiver, and dB(A) above the RBL and NML. This will determine the appropriate management measures to mitigate the noise and vibration impacts. Attachment 2 outlines the approach for the application of standard and additional mitigation measures to minimise impacts from OOHW.

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Where additional mitigation measures are proposed, the Contractors Public Liaison Officer (PLO) in conjunction with TfNSW will consult with affected sensitive receivers to ensure that their personal circumstances have been taken into account to identify the most appropriate mitigation measures. This must be done prior to seeking approval of an OOHW request form.

The standard mitigation measures include the environmental management measures as described in the relevant approved Early Works Environmental Management Plan or CEMP and cover measures such as:

- Behavioural practices on site
- Equipment selection / Maintaining and monitoring plant
- Use and siting of plant and hoardings
- Site inductions
- Use of non-tonal reversing alarms
- Notification
- Planning noisier work to be carried out earlier in the period.

Details on the additional mitigation measures are provided below. These mitigation measures are aligned with TfNSW CNVG (2016) and are to be applied during OOHW as outlined in Attachment 2.

### **Stakeholder notifications**

Stakeholder notifications will detail work activities, dates and hours, impacts and mitigation measures, indication of work schedule over the night time period, any operational noise benefits from the works (where applicable) and a contact telephone number. Notifications will be issued a minimum of seven calendar days prior to the start of works in accordance with the Overarching Communication Strategy for the project.

### **Specific notifications (SN)**

Specific notifications will be letterbox dropped (or equivalent) to identified stakeholders no later than seven calendar days ahead of activities that are likely to exceed the noise objectives. The specific notification provides additional information to more highly affected receivers than covered in general letterbox drops.

### **Phone calls (PC)**

Phone calls detailing relevant information will be made to identified/affected stakeholders within seven calendar days of proposed work. Phone calls provide affected stakeholders with personalised contact and tailored advice, with the opportunity to provide comments on the proposed work and specific needs. Where the resident cannot be telephoned then an alternative form of engagement will be used.

### **Individual briefings (IB)**

Individual briefings will be used to inform affected sensitive receivers about the impacts of work that is assessed to be moderately intrusive (OOHW period 2) or highly noise intrusive (OOHW period 1 and 2) as outlined in Attachment 2 and the mitigation measures that will be implemented for the work. The Contractor's PLO will identify the relevant sensitive receivers through the noise and vibration impact assessment visit identified stakeholders as part of the planning for the OOHW and prior to submitting an OOHW request for approval. Individual briefings provide affected

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stakeholders with personalised contact and tailored advice, with the opportunity to comment on the project. Where the resident cannot be met with individually then an alternative form of engagement will be used.

### **Respite offers (RO)**

Respite offers will be considered where there are high noise and vibration generating activities near sensitive receivers. The offers will provide residents with respite from an ongoing impact. Respite consultation with affected sensitive receivers must be carried out in accordance with Section 5.1.

### **Respite periods (R1 and R2)**

All work will be included to ensure respite periods. The Contractor will:

- Reschedule any work to provide respite to impacted noise sensitive land user(s) so that the respite is achieved, or
- Where respite cannot be achieved, the provision of alternative respite or mitigation to impacted noise sensitive land user(s) will be considered, and
- Provide documentary evidence to the ER in support of any decision made.

OOHW noise in Period 1 (defined in Attachment 2) will be limited to no more than three consecutive evenings per week except where there is a duration respite. For night work, these periods of work should be separated by not less than one week and no more than six evenings per month.

OOHW night time noise in Period 2 (defined in Attachment 2) will be limited to two consecutive nights except for where there is a Duration Respite. For night work these periods of work will be separated by not less than one week and six nights per month.

### **Duration respite (DR)**

Respite offers and Respite Periods 1 and 2 may be counterproductive in reducing the impact on the community for longer duration projects. In this instance, and where it can be strongly justified, it may be beneficial to increase the work duration, number of evenings or nights worked through duration respite so that the Project can be completed more quickly.

Where the work exceeds the noise and vibration criteria outlined in E36(b) the Contractor's PLO in conjunction with TfNSW will negotiate agreements with the directly affected sensitive receivers as outlined in Section 5.2. If the Contractor and TfNSW cannot reach agreements with 100% of directly affected sensitive receivers, then the work is considered a high risk activity and approval is required from the Planning Secretary to carry out duration respite.

### **Alternative accommodation (AA) or other agreed mitigation measures**

Temporary alternative accommodation or other agreed mitigation measures will be offered / made available to residents affected by out-of-hours work as specified in NSW CoA E46. This will include where the construction noise levels during OOHW Period, ie between:

- 10:00 pm and 7:00 am, Monday to Friday;
- 10:00 pm Saturday and 8:00 am Sunday; and
- 6:00 pm Sunday and public holidays to 7:00 am (the following day unless that day is Saturday then to 8:00 am)

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are predicted to exceed the NML by 25 dB(A) or are greater than 75 dBA (LAeq(15 min)), whichever is the lesser and the impact is planned to occur for more than two (2) nights over a seven (7) day rolling period.

The NML must be reduced by 5dB where the noise contains annoying characteristics and may be increased by 10dB if the property has received at-property noise treatment.

The noise and vibration assessment outlined in Section 2.1 would identify receivers that are eligible for alternative accommodation. Initial discussion about offers to affected residents should be made during the planning phase of OOHW and prior to seeking approval for the work.

## Verification (V)

Attended measurements will be carried out by an appropriately trained person in the measurement and assessment of noise and vibration. The attended measurements will include evaluation of both work noise and background noise levels compared with the predicted and estimated levels used in the assessment. The attended measurements may include:

- **Noise levels for plant and equipment:** attended measurements will be undertaken within a period of 14 days of equipment arriving on site to confirm that the operating noise levels of all plant items comply with the maximum levels in the CNVG (TfNSW 2016). The attended measurements are to be repeated on a three-monthly basis to ensure that noise from individual plant items are still within the acceptable noise range.
- **Noise and vibration verification in the community:** attended measurements are to be undertaken within a period of 14 days from the commencement of activities. The attended measurements will need to be repeated on a three-monthly basis as part of the audit cycle to ensure that noise and vibration levels in the adjacent community remain consistent with the predicted levels in the noise assessment, approval and/or licence conditions.

The results of the attended noise measurements will be used to update the Early Works Environmental Management Plan or CEMP and other relevant environmental management documents as required.

## 4 Compliance management

### 4.1 Roles and responsibilities

Subject to the approval pathway, an OOHW approval request will be developed. The Contractors will be required to complete an OOHW approvals request form (refer to Attachment 3).

The Contractor's PLO in conjunction with TfNSW will be responsible for ensuring that notification and consultation has occurred with community stakeholders, in accordance with the conditions of approval and the Overarching Communication Strategy, on the likely impacts of OOHW activities.

The Contractor's ESR (or delegate) will implement and oversee the noise monitoring program for OOHW to assess compliance with the CoA, the EPL and the OOHW Protocol. The Contractor's ESR is also responsible for notifying the ER and Planning Secretary of any noise exceedances or complaints during OOHW.

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Prior to the start of OOHW, the works supervisor will be responsible for completing a pre-start check to ensure compliance with the OOHW permit Approval Request Form.

## 4.2 Induction / training

All site personnel (including sub-contractors) will be inducted on the control measures to be implemented to minimise impacts of OOHW on the community and environment and this OOHW Protocol. Training will include inductions, toolbox talks, pre-starts and targeted training as required.

## 4.3 OOHW process and approval

For proposed OOHW, the following process will be followed:

- 1) The OOHW approval request (Attachment 3) will be prepared by the Contractors and include information on:
  - Activities
  - Required plant and equipment
  - Location
  - Duration
  - Justification for the work
  - Details of the completed quantitative noise assessment (in accordance with Section 2.1) including predicted impacts and appropriate management measures as per Section 3 and Attachment 2 of this protocol
  - Details of consultation with the community regarding respite periods and scheduling as outlined in Section 5 of this protocol
- 2) The Contractor will submit the OOHW request to TfNSW for review. The TfNSW Project Manager and Senior Environment and Sustainability Manager (or delegate) will determine if the justification for the OOHW is satisfactory.
- 3) TfNSW will provide the OOHW request to the ER for review and confirmation of the risk level, in accordance with NSW CoA E37(a) and Section 2 of this protocol.
- 4) The identification of the OOHW as a low or high-risk activity will determine who can then approve the OOHW:
  - **Low Risk Activities:** approved by the ER. The ER will consider the criteria outlined in Section 2 as well as ongoing and cumulative impacts, construction fatigue and complaints in reviewing the determined risk level. If required, the ER may consult with DPE Representatives at times to discuss the assessed risk level. The ER will have 10 days to review the OOHW approval request. The Planning Secretary will also be notified of all approved low risk OOHW.
  - **High risk activities:** must be approved by the Planning Secretary. The Planning Secretary will have one month to review the OOHW approval request.

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- 5) Following approval of each OOHW request, the Contractors in conjunction with TfNSW will undertake community consultation and notification in accordance with Section 5 of this protocol.
- 6) Noise monitoring and reporting will be carried out in accordance with Section 6 of this protocol.

## 5 Communication and notification

Prior to undertaking approved OOHW, the Contractors in conjunction with TfNSW will consult with the potentially affected sensitive receivers, where applicable. The Contractor's PLO in conjunction with TfNSW will notify the potentially affected receivers of upcoming OOHW 5-10 working days before commencing the work in accordance with the OCS.

Letterbox notification letters will be used to inform directly affected residents and businesses about any changes that may impact on properties, such as access arrangements, construction of temporary work and permanent changes and work outside normal working hours. Notification of OOHW will be delivered to the relevant stakeholders at least seven calendar days prior to work starting. Contractors will provide the notification letters for TfNSW approval at least 15 business days before work commences.

### 5.1 Respite consultation

To undertake OOHW outside the hours specified under NSW CoA E34, Contractors must identify appropriate respite periods for the OOHW in consultation with the community at each affected location on a regular basis. The Contractors will consult with the community at affected locations, in accordance with the consultation requirements prescribed by NSW CoA E47. The outcomes of the community consultation, the identified respite periods and the scheduling of the likely OOHW will be provided to the EPA, ER and Planning Secretary for information within one week of undertaking the community consultation.

The consultation must include (but not be limited to) providing the community with:

- Progressive schedule for periods no less than three months, of likely OOHW
- Description of the potential work, location and duration of the OOHW
- Noise characteristics and likely noise levels of the work
- Mitigation and management measures which aim to achieve the relevant noise management levels and vibration criteria under NSW CoA E38(a) and (b).

Contractors will provide the TfNSW Project Manager and TfNSW ESM (or delegate) evidence of the consultation undertaken for the OOHW.

### 5.2 Negotiated agreements

Works outside of standard hours that do not meet the circumstances listed in NSW CoA E36(a), E36(b), E36(c)(i) or E36(c)(ii) may be undertaken if agreement between Contractors and the directly affected noise sensitive receivers has been reached in accordance with NSW CoA

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E36(c)(iii). The community agreements between TfNSW and the directly affected residents and sensitive land users will be:

- Prepared in writing and a copy of the agreement(s) kept on the premises for the duration of the OOHW
- Made available for the duration of the agreement (personal details of noise sensitive receivers will be omitted).

Where a community agreement has been attained by phone, the following may apply:

- Phone script used to describe the proposed agreement is to be provided to TfNSW with the community agreement for approval
- Phone script to include a description of the proposed works, the likely impacts and benefits for the community and a clear question requesting receiver agreement to the proposal
- Detailed records are to be maintained for the duration of the community agreement
- Any noise sensitive receiver, who requests a copy of the phone agreement will be supplied with one.

It is noted that where negotiated agreements are used to undertake OOHW not subject to an EPL under E36(c)(iii), then agreements must be reached with 100% of the directly affected residents and sensitive land users.

In accordance with NSW CoA 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 will not be scheduled within sensitive periods, unless TfNSW and the potentially affected institution or business have made other arrangements. These arrangements will be implemented at no cost to the affected institution.

## 6 Monitoring and reporting

### 6.1 Monitoring for OOHW

The Contractor's ESR will ensure the following noise and vibration monitoring is undertaken for all OOHW:

- Attended noise monitoring at representative sensitive receivers
- Attended vibration monitoring at representative sensitive receivers
- Additional noise and vibration monitoring and review if complaints about the activity are received.

All OOHW monitoring will be carried out by an appropriately trained person in the measurement and assessment of construction noise and vibration.

Validation monitoring will be undertaken for any works that are the subject of a community agreement and will be performed by a suitably qualified and experienced person on at least the first two nights where OOHW will be undertaken. If validation monitoring shows that noise levels are higher than those predicted by any noise modelling undertaken as part of the community

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agreement, work practices will be modified so that measured noise levels do not exceed predicted levels.

## 6.2 Complaints management

Complaints received as a result of the OOHW will be managed in accordance with the Complaints Management Strategy and OCS.

## 6.3 Reporting on non-conformances and exceedances

Where monitoring identifies any exceedances of the levels predicted in the OOHW assessments, a review of OOHW activities will be carried out to determine where noise or vibration levels can be further reduced. Where monitored noise or vibration levels are found to exceed the relevant criteria, the exceedance will be managed in accordance with the procedures outlined in the Early Works Environmental Management Plan or CEMP.

Where the processes and systems outlined in this protocol are not followed or where work isn't in accordance with the approved OOHW permit Approval Request Form, this will be deemed a non-conformance with this protocol. The non-conformance will be managed in accordance with the procedures outlined in the Early Works Environmental Management Plan or CEMP, including reporting via the TfNSW Environmental Event Form.

## 6.4 Records

The Contractors will maintain accurate records of all OOHW applications and noise and vibration monitoring undertaken during OOHW for the duration of the Project.

## 6.5 Change Management

Where changes to the scope of the OOHW (including to plant and equipment) occur following approval of the OOHW request, the Environmental Site Representative must complete a consistency review of the noise and vibration assessment to assess the impacts of the changes (see Attachment 4).

The use of recognised plant and equipment noise values (TfNSW Noise Calculator or similar plant noise lists), noise calculation assumptions and established guidance on the effect of barriers to noise must be used appropriately and duly documented in the Noise Assessment Consistency Review (Attachment 4).

Where the impact is the same or less than the impacts predicted in the original noise and vibration assessment, no additional sensitive receivers are impacted, community notifications do not need amending and cumulative impacts have been considered to facilitate the works, then no further approval is required. Where the impact is greater than the impacts predicted in the original noise and vibration assessment, the Contractor must re-submit the OOHW request for approval to TfNSW and the ER. Additional management measures will need to be considered and implemented where relevant. The Contractor Project Manager (or delegate) is responsible for approving commencement of the updated scope of work (see Attachment 3).



# Attachment 1 – Consultation with ER

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## Attachment 2 – Application of OOHW mitigation measures

Predicted airborne Laeq (15mins) noise level at receiver				Mitigation measures		
OOHW period 1	Perception	dB(A) above RBL	dB(A) above NML <sup>1</sup>	Standard mitigation measures	Additional mitigation measures	
					Type	Mitigation level
Monday – Friday: 6 pm – 10 pm  Saturday: 7 am – 8 am and 6 pm – 10pm  Sunday and Public Holidays: 8 am – 6 pm	Noticeable	5-10	<5	<ul style="list-style-type: none"> <li>Behavioural practices on site</li> <li>Equipment selection / Maintaining and monitoring plant</li> <li>Use and siting of plant and hoardings</li> <li>Site inductions</li> <li>Use of non-tonal reversing alarms</li> <li>Notification</li> <li>Planning noisier work to be carried out earlier in the period</li> </ul>	N/A	NML
	Clearly Audible	10-20	5-15	<ul style="list-style-type: none"> <li>Standard measures as above</li> </ul>	<ul style="list-style-type: none"> <li>Notification</li> <li>Respite period 1</li> <li>Duration respite</li> </ul>	NML + 5
	Moderately intrusive	20-30	15-25	<ul style="list-style-type: none"> <li>Standard measures as above</li> </ul>	<ul style="list-style-type: none"> <li>Notification</li> <li>Verification</li> <li>Respite period 1</li> <li>Duration respite</li> </ul>	NML + 15

	Highly intrusive	>30	>25	<ul style="list-style-type: none"> <li>Standard measures as above</li> </ul>	<ul style="list-style-type: none"> <li>Notification</li> <li>Verification</li> <li>Individual briefing</li> <li>Respite period 1</li> <li>Duration respite</li> <li>Phone calls</li> <li>Specific notifications</li> </ul>	NML + 25
OOHW period 2	Perception	dB(A) above RBL	dB(A) above NML <sup>1</sup>	Standard mitigation measures	Additional mitigation measures	
					Type	Mitigation level
Monday– Friday: 10 pm – 7 am  Saturday: 10 pm – 8 am  Sunday and Public Holidays: 6 pm – 7 am the following day (unless that day is Saturday then to 8:00am)	Noticeable	5-10	<5	<ul style="list-style-type: none"> <li>Behavioural practices on site</li> <li>Equipment selection / maintaining and monitoring plant</li> <li>Use and siting of plant and hoardings</li> <li>Site inductions</li> <li>Use of non-tonal reversing alarms</li> <li>Notification</li> <li>Planning noisier work to be carried out earlier in the period</li> </ul>	N/A	NML
	Clearly Audible	10-20	5-15	<ul style="list-style-type: none"> <li>Standard measures as above</li> </ul>	<ul style="list-style-type: none"> <li>Notification</li> <li>Verification</li> <li>Respite period 2</li> <li>Duration respite</li> </ul>	NML + 5
	Moderately intrusive	20-30	15-25	<ul style="list-style-type: none"> <li>Standard measures as above</li> </ul>	<ul style="list-style-type: none"> <li>Notification</li> <li>Verification</li> <li>Individual briefing</li> <li>Respite period 2</li> <li>Duration respite</li> <li>Phone calls</li> <li>Specific notifications</li> </ul>	NML + 15



	Highly intrusive	>30	>25	<ul style="list-style-type: none"> <li>• Standard measures as above.</li> </ul>	<ul style="list-style-type: none"> <li>• Notification</li> <li>• Verification</li> <li>• Individual briefing</li> <li>• Respite period 2</li> <li>• Duration respite</li> <li>• Phone calls</li> <li>• Specific notifications</li> <li>• Temporary alternative accommodation</li> </ul>	NML + 25
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<sup>1</sup> If the calculated predicted noise levels are at the top of the range i.e. 15dB(A) for the specific 'perception' then it is considered 'Clearly Audible' for the purposes of interpreting this table.

# Attachment 3 – OOHW Approval Request Form

Out of hours Work Approval Request form– M12 Motorway Works			
<b>Application Reference and Revision No:</b>	<b>Notification date:</b>	<b>Approval date:</b>	<b>Project:</b>
<b>A. Contact details</b>	<b>Name</b>	<b>Mobile number</b>	<b>Email</b>
Contractor ESR			
Contractor Construction Manager			
Contractor Foreman / Site Supervisor			
Contractor Project Engineer			
<b>B. Details of work:</b> Include a map showing location of work extent and nearest sensitive receivers	Location (Chainage):		
	NCA/s:		
	Description of activities to be carried out:		
	Typical plant and equipment to be used. <i>Guidance (delete on final document): This plant and equipment list will form the basis of the noise assessment for the work. Include reference to “stand-by” equipment that may be present on site but would only be used in the event of a breakdown. If plant and equipment is changed or substituted following approval of the OOHW Approval Request Form <del>permit</del> the Environmental Site Representative must undertake a consistency review as per Attachment 4. Where noise impacts are predicted to be greater than those outlined in the initial noise assessment, appropriateness of environmental management measures are to be considered and an updated OOHW <del>permit</del> Approval Request Form approval must be sought.</i>		
	Plant and equipment list checked by construction personnel ordering plant/equipment.	Name: Signature:  Date checked:	

Out of hours Work Approval Request form– M12 Motorway Works			
<b>Application Reference and Revision No:</b>	<b>Notification date:</b>	<b>Approval date:</b>	<b>Project:</b>
	Traffic control measures required:		
	Lighting required:		
	Proposed mitigation measures:		
	Proposed dates:		
	Proposed timings:		
	Justification (Why does work need to occur outside of standard construction hours?):		
<b>C. Risk factor category (low, high) and evidence of risk confirmation from the ER:</b>	Low	High	Comments
<b>D. Details of noise or vibration assessment completed:</b>	<p>Provide details of quantitative assessments for all proposed works, including predicted noise levels, potential noise exceedances against relevant NMLs, potentially affected sensitive receivers and proposed management measures in accordance with ICNG and CNVG. Where alternative accommodation or other agreed mitigation is triggered, include details of and offers made to qualifying residents.</p> <p><i>Guidance for assessment (delete on final document): Assessment inputs are to be as accurate as possible and checked by relevant construction personnel. Assume a worst-case scenario assessment where uncertainty exists.</i></p> <p><i>Guidance for management measures: include the requirement for the OOHW supervisor to complete a pre-start checklist to ensure compliance with the OOHW approval.</i></p>		
<b>E. Review/ Endorsements</b>			
<b>TfNSW Environment and Sustainability Manager (or delegate) and Project Manager notified</b>	TfNSW notified? Yes / No		
	Comments:		
<b>Environmental Representative</b>	ER notified? Yes / No		
	Comments:		
	Community notified? Yes / No		Date:

**Out of hours Work Approval Request form– M12 Motorway Works**

<b>Application Reference and Revision No:</b>	<b>Notification date:</b>	<b>Approval date:</b>	<b>Project:</b>
<b>Contractor Community Relations Manager</b>	Provide details of consultation with affected receivers, in accordance with Community Communication Strategy		
	Have the works been reviewed and endorsed? <span style="float: right;">Yes / No</span>		
	Name:	Signature:	Date:
	Comments:		
<b>F. Approvals (if required)</b>	<b>Low Risk Activities</b>		
	ER approval required	Yes / No	
	ER approval letter attached? <b>Or</b> Signature obtained:	Yes / No	
	<b>High Risk Activities</b>		
	Planning Secretary approval required?	Yes / No	
	Planning Secretary approval letter attached?	Yes / No	
<b>Contractor Project Manager (or delegate)</b>	Are the works approved for commencement? <span style="float: right;">Yes / No</span>		
	Name:	Signature:	Date:
	Comments:		
<b>Contractor Project Manager (or delegate).</b>  <i>Complete in the event of scope changes (including plant and equipment changes).</i>	Has the scope of work changed? (Including change or substitution of plant and equipment).	Yes / No	
	Has a consistency review been completed of the changes and is the impact due to the scope change the same or less than the original predicted impacts?	Yes / No If yes, go to signature panel. If no, answer next question	
	Has an updated OOHW request been submitted and approved by the ER?	Yes / No	
	Is the updated scope of works approved for commencement?	Yes / No	
	Name:	Signature:	Date:
	Comments:		

# Attachment 4 – Noise assessment consistency review

*Guidance (delete from final version): This consistency review is only to be used where the OOHW approval requires a scope change (including change or substitution in plant or equipment).*

Questions	Yes / No
Has the noise assessment been updated to include new or substituted plant and equipment?	Yes / No
Detail changes made to the noise assessment including the changes to plant / equipment and relevant assumptions.	
Is the impact less than or equal to the impact assessed in the approved OOHW permit Approval Request Form?	Yes / No
<p><i>Guidance (delete from final version): if you have answered yes to the above questions, the work is considered to be consistent and can be carried out without further approval under this protocol.</i></p> <p><i>If you have answered no to the above questions, the work is not considered consistent and additional assessment and OOHW approval under this protocol is required.</i></p> <p><del>Strikethrough text below that is not relevant:</del></p> <p><b>The work is considered to be consistent with the approved OOHW permit Approval Request Form. OR</b></p> <p><b>The work is not consistent with the approved OOHW permit Approval Request Form and further assessment and approval is required</b></p>	
Name of Environmental Site Representative:	
Signature:	
Date:	