

M7-M12 Integration project
Environment Protection Licence –
Environmental Monitoring Data Report

January 2024



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1 Project summary

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 (the project) (refer to Figure 1-1) by John Holland.

The M12 Motorway extends between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham, over a distance of about 16 km. It will be delivered in multiple packages including the M12 West package, M12 Central package and M12 East package (this package is part of the M7-M12 Integration project). The M12 East package involves two components of work:

- 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
- Providing a grade separated motorway to motorway connection between the M7 Motorway and M12 Motorway.

The M7 Widening project will enable the construction and operation of an additional lane in both directions within the existing median of the Westlink M7 for approximately 26 kilometres (km). Works will occur from about 140 metres (m) south of the Kurrajong Road overhead bridge at Prestons (southern end) to the Richmond Road interchange at Oakhurst/Glendenning (northern end), excluding widening through the Westlink M7/M4 Motorway (Light Horse) Interchange.

2 Environmental Protection Licence and Reporting Requirements

John Holland Pty Ltd obtained the Environment Protection Licence (EPL No. 21829) from the NSW Environment Protection Authority for the project. The licence is for road construction as defined under Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act).

The licence describes monitoring and reporting requirements for the Works. The following report details environmental monitoring undertaken during the January 2024 monitoring period conducted in accordance with the EPL.

The EPL can be found by following the link below to the EPA's website: epa.nsw.gov.au

3 Noise and vibration monitoring

3.1 Noise monitoring

Noise monitoring was undertaken during the reporting period in accordance with the requirements of the M7M12 Construction Noise and Vibration Monitoring Program (M712UDC-JHGRP-M7A-EN-PLN-000074).

All works were deemed compliant as they complied with applicable criteria, monitoring was predominantly dominated by background noise sources such as local traffic and are detailed in .

Table 3-1 Noise monitoring data

Location Description	Monitoring date	Standard/ OOH Works	Attended or Continuous	Parameter	Measured value dB(A)	Goals and targets dB(A)	Project OOHW Compliance	Comments/Field Observations
233-243 Wallgrove Road (NCA17)	18/01/2024	OOHW	Attended	LAeq (15 min)	61.1	68	Compliant	The dominant noise sources were the M7 construction works. The results recorded were below the predicted noise levels and were compliant.
489-499, Wallgrove Road (NCA20)	18/01/2024	OOHW	Attended	LAeq (15 min)	56.4	70	Compliant	The dominant noise source was traffic. Construction works were audible during the monitoring period. The results recorded were below the predicted noise levels and were compliant.
54 Hemsworth Avenue, Middleton Grange (NCA11)	19/01/2024	OOHW	Attended	LAeq (15 min)	56.4	68	Compliant	The dominant noise sources were the traffic from the M7. Construction works were inaudible. The results recorded were below the predicted noise levels and were compliant.
98A Dobroyd Drive, Elizabeth Hills (NCA14)	19/01/2024	OOHW	Attended	LAeq (15 min)	53.2	70	Compliant	The dominant noise sources were the traffic from the M7. Construction noise was audible during the monitoring period. The results recorded were below the predicted noise levels and were compliant.
289-293 Chandos Road, Horsely Park (NCA21)	18/01/2024	OOHW	Attended	LAeq(15min)	54.3	71	Compliant	The dominant noise sources were the traffic from M7 and Wallgrove Road. Construction works were inaudible. The results recorded were below the predicted noise levels and were compliant.
37A Government road, Hinchinbrook (NCA08)	19/01/2024	OOHW	Attended	LAeq(15min)	44.7	56	Compliant	The dominant noise sources were the traffic from the M7. Construction works were inaudible. The results recorded were below the predicted noise levels and were compliant.
17 Toulouse Street, Cecil Hills (NCA16)	19/01/2024	OOHW	Attended	LAeq(15min)	43.2	60	Compliant	The dominant noise sources were the traffic from the M7. Construction noise was audible during the monitoring period. The results recorded were below the predicted noise levels and were compliant.
12 Kensington Close, Cecil Hills (NCA16)	19/01/2024	OOHW	Attended	LAeq(15min)	46.9	54	Compliant	The dominant noise sources were the traffic from the M7. Construction noise was audible during the monitoring period. The results recorded were below the predicted noise levels and were compliant.
13 Rossini Drive, Hinchinbrook (NCA09)	23/01/2024	OOHW	Attended	LAeq (15 min)	58.2	61	Compliant	The dominant noise source was the traffic from the M7 and wildlife. Construction noise was audible during the monitoring period. The results recorded were below the predicted noise levels and were compliant.
9 Pavesi Place Hinchinbrook (NCA09)	24/01/2024	OOHW	Attended	LAeq (15 min)	52.2	51	Compliant	The dominant noise source was the traffic from the M7 and wildlife. Construction noise was audible during the monitoring period. The results recorded were below the predicted noise levels and were compliant.

Location Description	Monitoring date	Standard/ OOH Works	Attended or Continuous	Parameter	Measured value dB(A)	Goals and targets dB(A)	Project OOHW Compliance	Comments/Field Observations
33 Isabel St, Cecil Hills (NCA02)	31/01/2024	Standard	Attended	LAeq(15min)	54.9	58	Compliant	The dominant noise sources were the traffic from Elizabeth Drive. Construction works inaudible. The results recorded were below the predicted noise levels and were compliant.
22 Kosovich Place, Cecil Park (NCA17)	31/01/2024	Standard	Attended	LAeq(15min)	52.8	80	Compliant	The dominant noise sources were the traffic from Wallgrove Road and the M7. Construction works inaudible. The results recorded were below the predicted noise levels and were compliant.

Note:

1. LAeq (15min) - The A-weighted equivalent continuous (energy average) A-weighted sound pressure level over a 15-minute period.
2. dBA - Decibels using the A-weighted scale measured according to the frequency of the human ear.

3.2 Vibration monitoring

Continuous vibration real-time monitoring (EDC Fill 3) was conducted to monitor the vibration levels from construction activities being undertaken near the Air Shaft 3 heritage item.

Construction activities remained compliant with the specified 25 mm/s Peak Particle Velocity (PPV) structural threshold for Air Shaft 3.

All works were deemed compliant as they complied with applicable criteria and are detailed in .

Table 3-2 Vibration monitoring data

Monitoring Location	Monitoring Date/Period	Attended or Continuous Monitoring	Measured VDV (m/s ^{1.75})	VDV Target (m/s ^{1.75})	VDV Compliant	Measured PPV (mm/s)	PPV Target (mm/s)	PPV Compliant	Comments/ Field Observations
Shaft 3 EDC Area	22/01/2024 - 29/01/2024	Continuous	N/A	N/A	N/A	2.4	25	Compliant	Works were monitored and found to be compliant with associated criteria.
33 Isabel St	31/01/2024	Attended	N/A	N/A	N/A	0.11	25	Compliant	Works were monitored and found to be compliant with associated criteria.
22 Kosovich Place	31/01/2024	Attended	N/A	N/A	N/A	0.11	25	Compliant	Works were monitored and found to be compliant with associated criteria.

Note:

1. VDV – Vibration Dose Value
2. PPV – Peak Particle Velocity

4 Discharge Water Quality Monitoring

Offsite discharge occurred during January 2024 from Sediment Basin 01 (AF9) and Sediment Basin 02 (Tank Road).

All discharges were compliant with the requirements of the project EPL (#21829) and are outlined in Table 4-1.

Table 4-1 Sediment basin discharge monitoring data for January 2024

Location	Date	Analyte	Units	Limit	Result	Comments
Sediment Basin SB-01 (AF9)	08/01/2024	pH	pH	6.5-8.5	7.65	Compliant with discharge criteria.
		Turbidity	TSS (mg/L)	50	7	
		Oil and grease	Visible	Not visible	Not visible	
Sediment Basin SB-01 (AF9)	19/01/2024	pH	pH	6.5-8.5	7.88	Compliant with discharge criteria.
		Turbidity	TSS (mg/L)	50	14	
		Oil and grease	Visible	Not visible	Not visible	
Sediment Basin SB-02 (Tank Road)	23/01/2024	pH	pH	6.5-8.5	8.38	Compliant with discharge criteria.
		Turbidity	TSS (mg/L)	50	10	
		Oil and grease	Visible	Not visible	Not visible	