

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

December 2023



Document Control

Date	09 January 2024	
Document No.	M7M12PW-JH-EN-RPT-000005	
Title	Environment Protection Licence – Environmental Monitoring Data Report	

Document History and Status

Rev	Rev Date	Description	Author	Checked	Reviewed	Approved
1	09/01/24	For publication	A. Aloy	J. Paul	R. Muir	For publication

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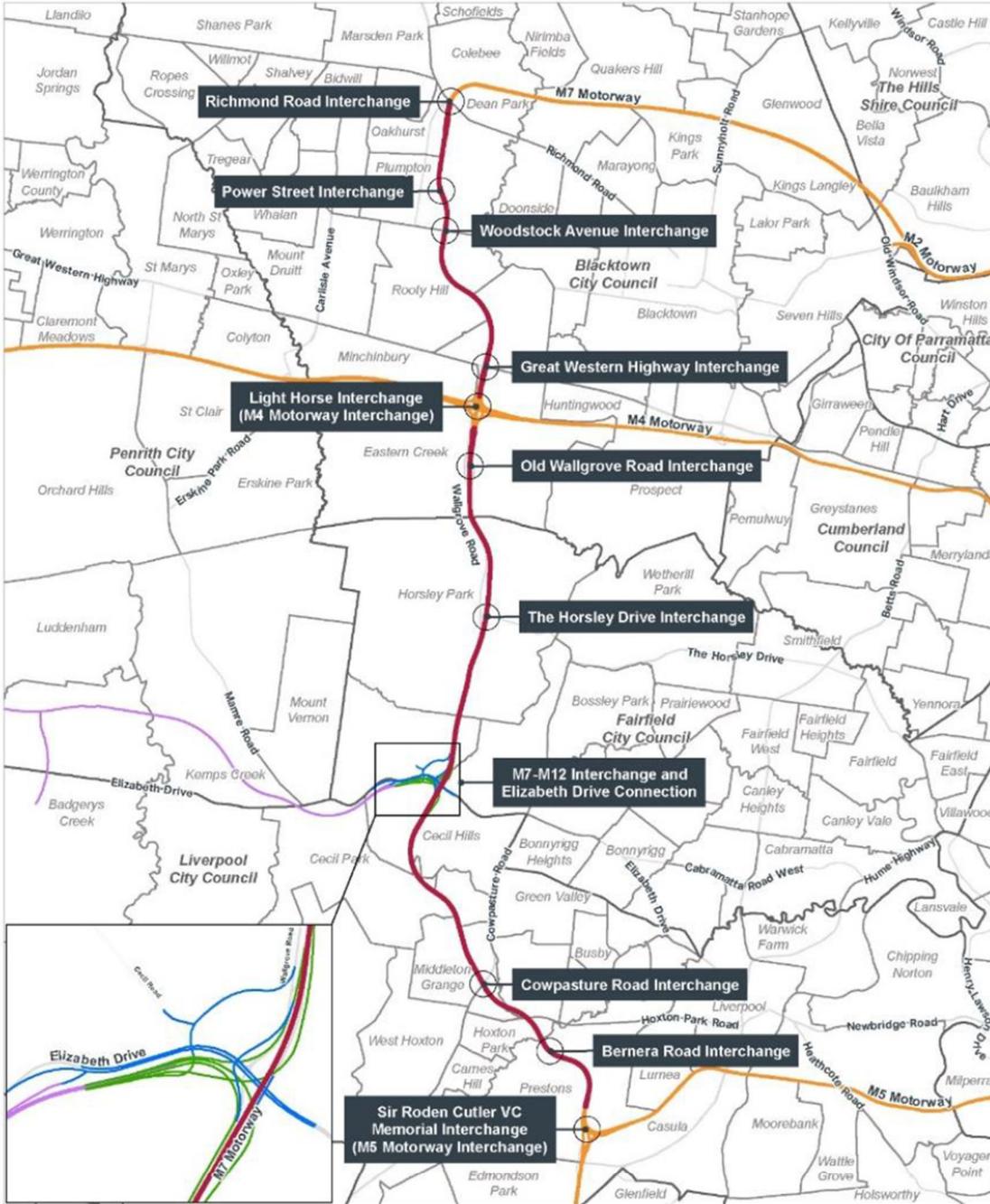
1 Project summary

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.



M7-M12 INTEGRATION PROJECT
LOCATION OVERVIEW



- Legend**
- M7 Widening
 - M7-M12 Interchange
 - Elizabeth Drive Connection
 - M12 Motorway
 - Existing motorway
 - Interchange
 - LGA boundary
 - Suburb boundary

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Figure 1-1 M7-M12 Integration project

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 December 2023 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 M12 East Construction Noise and Vibration Monitoring Program (M7M12UDC-JHGRP-M7A-EN-PRG-000002).

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 4-1.

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.

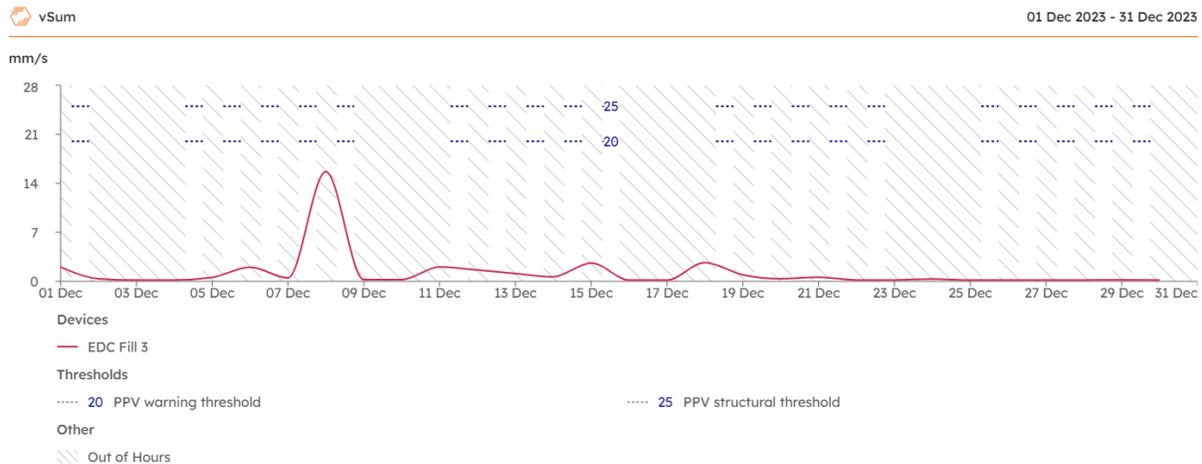


Figure 3-1 EDC Fill 3 vibration monitoring graph

4 Discharge Water Quality Monitoring

Offsite discharge occurred during December 2023 from Sediment Basin 01 (AF9).

All discharges were compliant with the requirements of the project EPL (#21829) and are outlined in Table 4-3.

Table 4-1 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
609-615 Wallgrove Road, Horsley Park	13/12/2023	OOHW	Attended	LAeq (15min)	69.3	47	Compliant	M7-M12 works which comprised of EDP contamination sampling, were inaudible throughout the monitoring period. The dominant noise sources were from the M7 and Wallgrove Road traffic. M7-M12 construction works were compliant.
289-293 Chandos Road, Horsley Park	13/12/2023	OOHW	Attended	LAeq (15min)	66.3	52	Compliant	M7-M12 works which comprised of EDP contamination sampling, were inaudible throughout the monitoring period. The dominant noise sources were from the M7 and Wallgrove Road traffic. M7-M12 construction works were compliant.
18-20 Felton St, Horsley Park	13/12/2023	OOHW	Attended	LAeq (15min)	52.3	38	Compliant	M7-M12 works which comprised of EDP contamination sampling, were inaudible throughout the monitoring period. The dominant noise sources were from the M7 and Wallgrove Road traffic. M7-M12 construction works 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.

Table 4-2 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
EDC Fill 3	01/12/2023 to 31/12/2023	Continuous	N/A	N/A	N/A	15.6	25	Compliant	Works were monitored and found to be compliant with associated criteria.

Note:

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

Table 4-3 Sediment basin discharge monitoring data for December 2023

Location	Date	Analyte	Units	Limit	Result	Comments
Sediment Basin SB-01 (AF9)	13/12/2023	pH	pH	6.5-8.5	7.94	Compliant with discharge criteria.
		Turbidity	TSS (mg/L)	50	13.0	
		Oil and grease	Visible	Not visible	Not visible	