

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

May 2024



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Contents

- 1 Project summary..... 2
- 2 Environmental Protection Licence and Reporting Requirements 4
- 3 Noise and vibration monitoring..... 5
 - 3.1 Noise monitoring 5
 - 3.2 Vibration monitoring 9
- 4 Discharge Water Quality Monitoring..... 11

Tables

- Figure 1-1 M7-M12 Integration Project..... 3
- Table 3-1 Noise monitoring data 6
- Table 3-2 Vibration monitoring data..... 10
- Table 4-1 Sediment basin discharge monitoring data for April 2024..... 12

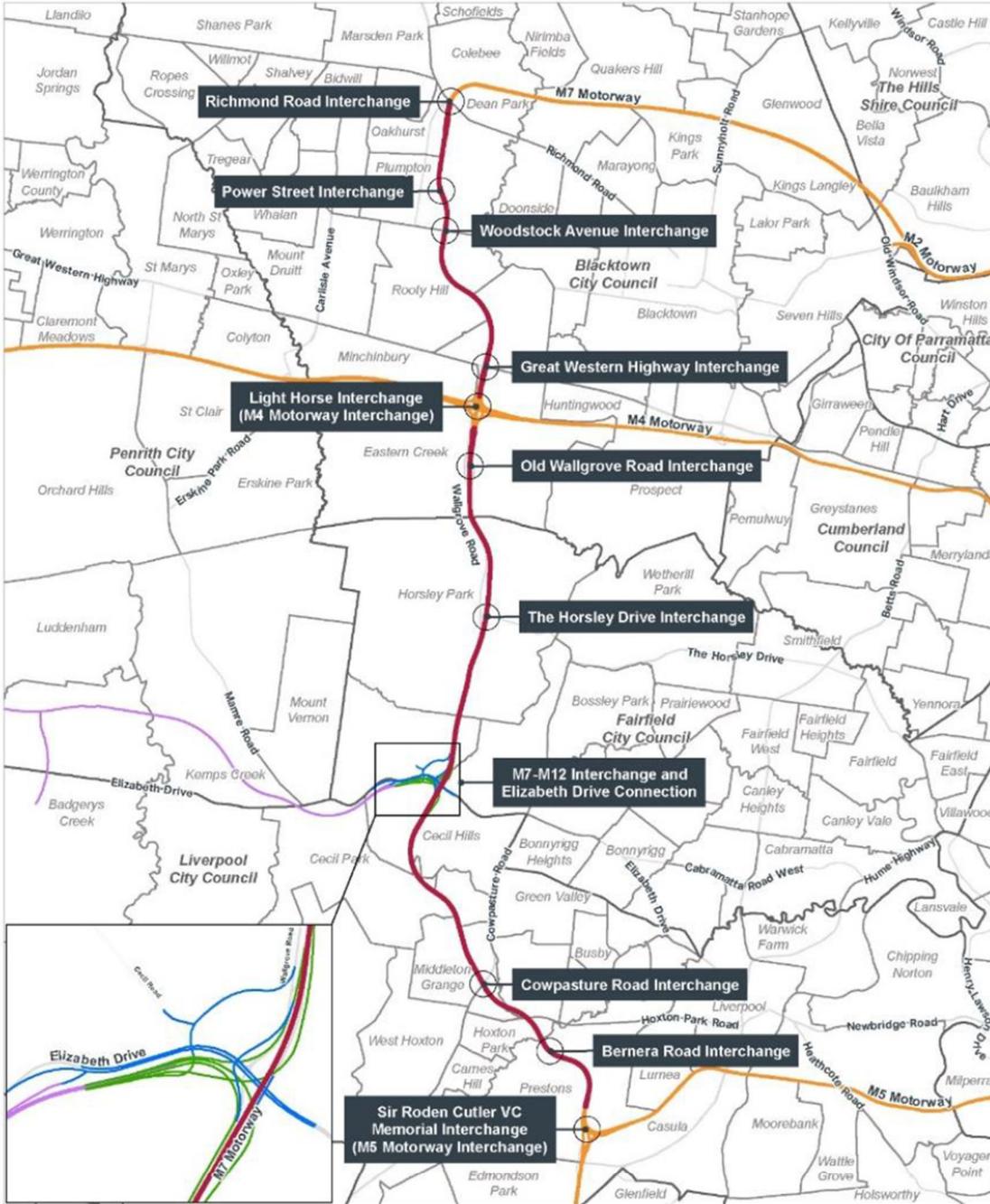
1 Project summary

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 May 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.

Table 3-1 Noise monitoring data

Location Description	Monitoring date	NCA	Attended or Continuous	Parameter	Measured value dB(A)	Goals and targets dB(A)	Project OOHW Compliance	Comments/Field Observations
30 Bangalow Pl, Hoxton Park	1/05/2024	M7 NCA 8	Attended	LAeq (15 min)	46.7	47	Compliant	The dominant noise source was the traffic on M7 and Woodstock Ave. The works were compliant with the PNL. JHG works compliant.
20 Mavis St, Rooty Hill	2/05/2024	M7 NCA 22	Attended	LAeq (15 min)	44.4	62	Compliant	The dominant noise source was the traffic on M7 and train arrival on Rooty Hills station. The works were compliant with the PNL. JHG works compliant.
132 Station St, Rooty Hill	2/05/2024	M7 NCA 26	Attended	LAeq (15 min)	50.5	59	Compliant	The dominant noise source was the traffic on M7 and Woodstock Ave. The works were compliant with the PNL. JHG works compliant.
33 Isabel St, Cecil Hills	8/05/2024	37-73 Wallgrove Road, Cecil Park	Attended	LAeq (15 min)	50.0	55	Compliant	The dominant noise source was the traffic on M7 and Wallgrove Road. The works were compliant with the PNL. JHG works compliant.
37-73 Wallgrove Rd, Cecil Park	8/05/2024	33 Isabel St, Cecil Hills	Attended	LAeq (15 min)	43.0	54	Compliant	The dominant noise source was the traffic on M7 and Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
30 Bangalow Road, Hoxton Park	11/05/2024	M7_NCA08	Attended	LAeq (15 min)	55.4	45	Compliant	The dominant noise source was the traffic on Hoxton Park Rd. The works were compliant with the PNL. JHG works compliant.
9 Whitford Road, Hinchinbrook	11/05/2024	M7_NCA09	Attended	LAeq (15 min)	65.2	42	Compliant	The dominant noise source was the traffic on Hoxton Park Rd and Whitford Rd. The works were compliant with the PNL. JHG works compliant.
1 Duff Road, cecil park	11/05/2024	M12_NCA04	Attended	LAeq (15 min)	56.3	54	Compliant	The dominant noise source was the traffic on Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
2073-2081 Elizabeth Drive, Cecil Park	11/05/2024	M7_NCA35	Attended	LAeq (15 min)	62.3	63	Compliant	The dominant noise source was the traffic on Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
741-474 Wallgrove Road, Horsley Park	14/05/2024	M7_NCA21	Attended	LAeq (15 min)	70.8	48	Compliant	The dominant noise source was the traffic on M7 and Wallgrove Road. The works were inaudible. JHG works compliant.
24 Lightning Ridge Rd, Hinchinbrook	14/05/2024	M7_NCA07	Attended	LAeq (15 min)	50.4	59	Compliant	The dominant noise source was the traffic on M7. The works were compliant with the PNL. JHG works compliant.
17 Toulouse Street, Cecil Hills	14/05/2024	M7_NCA16	Attended	LAeq (15 min)	43.6	55	Compliant	The dominant noise source was the traffic on M7. The works were inaudible. JHG works compliant.

Location Description	Monitoring date	NCA	Attended or Continuous	Parameter	Measured value dB(A)	Goals and targets dB(A)	Project OOHW Compliance	Comments/Field Observations
185 Middleton Dive, Middleton Grange	15/05/2024	M7_NCA10	Attended	LAeq (15 min)	63	71	Compliant	The dominant noise source was the traffic on M7. The works were compliant with the PNL. JHG works compliant.
23 Isabel Street, Cecil Hills	15/05/2024	TfNSW_16b	Attended	LAeq (15 min)	42	58	Compliant	The dominant noise source was the traffic on M7 and Elizabeth Drive. The works were compliant with the PNL. JHG works compliant.
185 Middleton Drive, Middleton Grange	15/05/2024	M7_NCA10	Attended	LAeq (15 min)	54.3	54	Compliant	The dominant noise source was the traffic on M7. The works were compliant with the PNL. JHG works compliant.
113 Dobroyd Drive Elizabeth hills NSW	15/05/2024	M7_NCA13	Attended	LAeq (15 min)	52.1	58	Compliant	The dominant noise source was the traffic on M7. The works were compliant with the PNL. JHG works compliant.
37-73 Wallgrove Road, Cecil Park	15/05/2024	M7_NCA17	Attended	LAeq (15 min)	66.9	61	Compliant	The dominant noise source was the traffic on M7 and Wallgrove Road. The works were inaudible. JHG works compliant.
1111-1114 Elizabeth Drive, Cecil Park	15/05/2024	TfNSW_NCA35	Attended	LAeq (15 min)	61.2	60	Compliant	The dominant noise source was the traffic on M7 and Wallgrove Road. The works were compliant with the PNL. JHG works compliant.
13 Kosovich Place, Cecil Park	15/05/2024	M7_NCA17	Attended	LAeq (15 min)	58.7	26	Compliant	The dominant noise source was the traffic on M7 and Wallgrove Road. The works were inaudible. JHG works compliant.
32 Lighting Ridge Road, Hinchinbrook	16/05/2024	M7_NCA07	Attended	LAeq (15 min)	45.9	67	Compliant	The dominant noise source was the traffic on M7 and Cowpasture Road. The works were compliant with the PNL. JHG works compliant.
3 Linne Place, Hinchinbrook	16/05/2024	M7_NCA09	Attended	LAeq (15 min)	47.9	57	Compliant	The dominant noise source was the traffic on M7 and Cowpasture Road. The works were compliant with the PNL. JHG works compliant.
33 Isabel Place, Cecil Hills	16/05/2024	M7_NCA16b	Attended	LAeq (15 min)	46.8	46	Compliant	The dominant noise source was the traffic on M7 and Elizabeth Drive. The works were inaudible. JHG works compliant.
17 Toulouse Street, Cecil Hills	16/05/2024	M7_NCA16	Attended	LAeq (15 min)	43	46	Compliant	The dominant noise source was the traffic on M7 and Wallgrove Road. The works were compliant with the PNL. JHG works compliant
233 -234 Wallgrove Road, Cecil Park	16/05/2024	M7_NCA17	Attended	LAeq (15 min)	62.1	54	Compliant	The dominant noise source was the traffic on M7 and Wallgrove Road. The works were inaudible. JHG works compliant.
1111-1114 Elizabeth Drive	22/05/2024	TfNSW_NCA35	Attended	LAeq (15 min)	61.7	47	Compliant	The dominant noise source was the traffic on Elizabeth Drive. The works were inaudible. JHG works compliant.

Location Description	Monitoring date	NCA	Attended or Continuous	Parameter	Measured value dB(A)	Goals and targets dB(A)	Project OOHW Compliance	Comments/Field Observations
22,38 Redmayne Road, Horsley Park	29/05/2024	M7_NCA21	Attended	LAeq (15 min)	63.1	55	Compliant	The dominant noise source was the traffic on M7 and Redmayne Road. The works were inaudible. JHG works 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

Vibration 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 and are detailed in Table 3-2.

Table 3-2 Vibration monitoring data

Monitoring Location	Monitoring Date	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
185 Middleton Drive, Middleton Grange	15/05/2024	Attended	0.10	0.4	Compliant	0.15	20	Compliant	Works were monitored and found to be compliant with associated criteria.
28 Rene Place, Cecil Hills	15/05/2024	Attended	0.12	0.4	Compliant	0.18	20	Compliant	Works were monitored and found to be compliant with associated criteria.
22,38 Redmayne Road, Horsley Park	29/05/2024	Attended	0.17	0.4	Compliant	0.26	20	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 May 2024 from sediment basins across the Project.

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 May 2024

Location	Date	Analyte	Units	Limit	Result	Comments
SB-02	07/05/2024	pH	pH	6.5-8.5	8.23	Compliant with discharge criteria.
		Turbidity	NTU	50	36	
		Oil and grease	Visible	Not visible	Not visible	
SB-08	09/05/2024	pH	pH	6.5-8.5	8.44	Compliant with discharge criteria.
		Turbidity	NTU	50	17	
		Oil and grease	Visible	Not visible	Not visible	
SB-01	13/05/2024	pH	pH	6.5-8.5	8.3	Compliant with discharge criteria.
		Turbidity	NTU	50	47	
		Oil and grease	Visible	Not visible	Not visible	
SB-02	13/05/2024	pH	pH	6.5-8.5	7.87	Compliant with discharge criteria.
		Turbidity	NTU	50	50	
		Oil and grease	Visible	Not visible	Not visible	
SB-08	14/05/2024	pH	pH	6.5-8.5	8.1	Compliant with discharge criteria.
		Turbidity	NTU	50	15	
		Oil and grease	Visible	Not visible	Not visible	
SB-08	16/05/2024	pH	pH	6.5-8.5	8.1	Compliant with discharge criteria.
		Turbidity	NTU	50	15	
		Oil and grease	Visible	Not visible	Not visible	
SB-02	17/05/2024	pH	pH	6.5-8.5	8.05	Compliant with discharge criteria.
		Turbidity	NTU	50	29	
		Oil and grease	Visible	Not visible	Not visible	
SB-02	20/05/2024	pH	pH	6.5-8.5	7.6	Compliant with discharge criteria.
		Turbidity	NTU	50	25	

Environment Protection Licence Environment Monitoring Data

		Oil and grease	Visible	Not visible	Not visible	
SB-08	2 24/05/2024	pH	pH	6.5-8.5	8.17	Compliant with discharge criteria.
		Turbidity	NTU	50	26	
		Oil and grease	Visible	Not visible	Not visible	
SB-03	27/05/2024	pH	pH	6.5-8.5	7.73	Compliant with discharge criteria.
		Turbidity	NTU	50	48	
		Oil and grease	Visible	Not visible	Not visible	