

John Holland Gamuda Joint Venture  
EPL Monthly Monitoring Report

Reporting Period: December 2023

Project	M1 Motorway Extension to Raymond Terrace – Black Hill to Tomago
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## 1. Introduction

M12RT will extend the M1 Pacific Motorway from Black Hill to the Pacific Highway at Raymond Terrace,

about 15 kilometres, bypassing Beresfield, Hexham, and Heatherbrae (refer Figure 2-1). M12RT traverses the City of Newcastle and Port Stephens Council local government areas (LGAs). The suburbs of Beresfield, Tarro, Heatherbrae, and Raymond Terrace are located to the north of the Project, with Black Hill, Hexham and Tomago located to the south of the Project.

M12RT will provide a critical link in the National Land Transport Network, particularly for the coastal Sydney to Brisbane corridor. M12RT includes the following key features:

- Black Hill: connection to the M1 Pacific Motorway
- Tarro: connection and upgrade (six lanes) to the New England Highway between John Renshaw Drive and the existing Tarro interchange at Anderson Drive
- Tomago: connection to the Pacific Highway and Old Punt Road
- Raymond Terrace: connection to the Pacific Highway.
- A 2.6-kilometre viaduct over the Hunter River floodplain including new bridge crossings over the Hunter River, the Main North Rail Line, and the New England Highway
- Bridge structures over local waterways at Tarro and Raymond Terrace, and an overpass for Masonite Road in Heatherbrae
- Connections and modifications to the adjoining local road network
- Traffic management facilities and features
- Roadside furniture including safety barriers, signage, fauna fencing and crossings, and street lighting
- Adjustment of waterways, including at Purgatory Creek at Tarro and a tributary of Viney Creek
- Environmental management measures, including surface water quality control measures
- Adjustment, protection and/or relocation of existing utilities
- Walking and cycling considerations, allowing for existing and proposed cycleway route access
- Permanent and temporary property adjustments and property access refinements
- Construction activities, including establishment and use of temporary ancillary facilities, temporary access tracks, haul roads, batching plants, temporary wharves, soil treatment and environmental controls.

The M12RT delivery strategy includes construction via two collaborative Design and Construct (D&C)

contracts:

- A southern D&C contract (known as Black Hill to Tomago) to deliver the southern 10 kilometres of M12RT, with an interface located at Tomago
- A northern D&C contract (known as Heatherbrae Bypass) to deliver the northern 5 kilometres of M12RT.

The JHGA JV will deliver the southern contract.

package works.

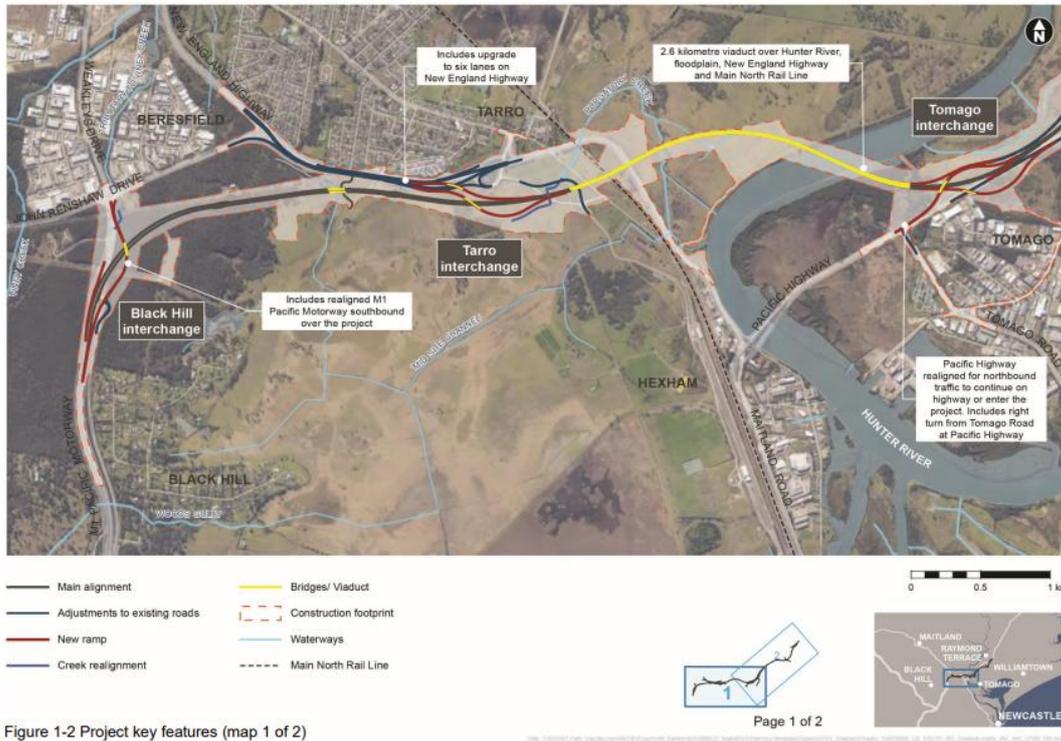


Figure 1-2 Project key features (map 1 of 2)

Figure 1 M12RT Project Overview – Southern Section (Source: M1 Pacific Motorway to Raymond Terrace EIS)

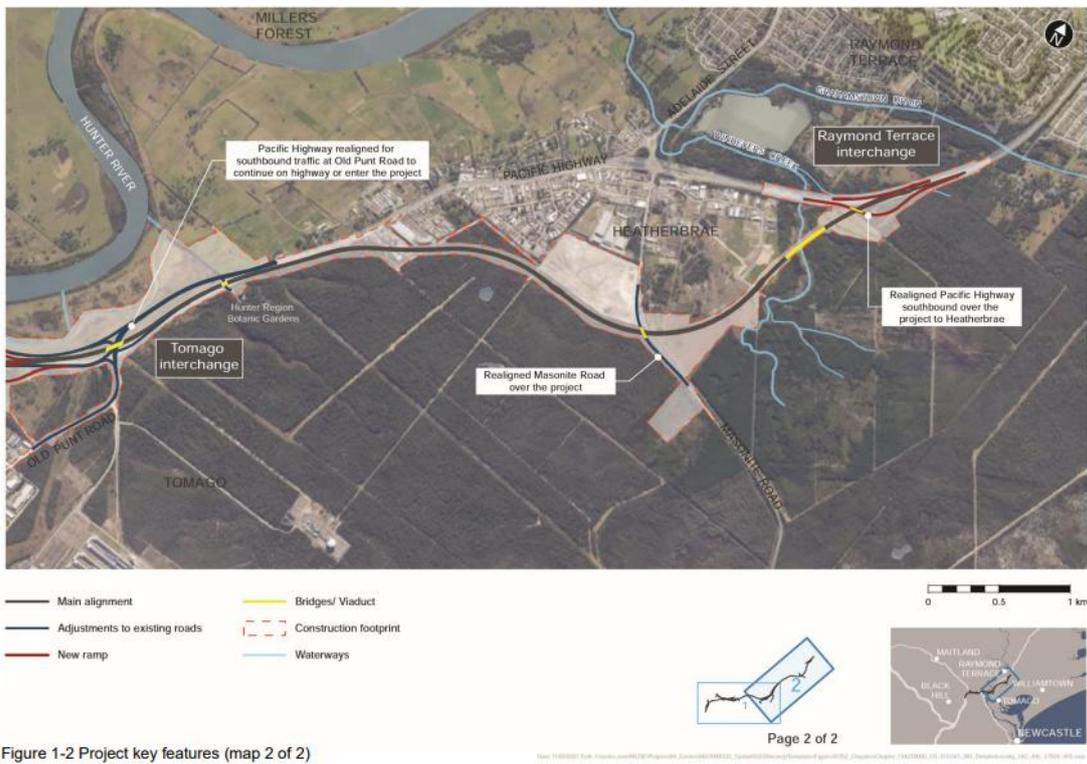


Figure 1-2 Project key features (map 2 of 2)

Figure 2 M12RT Project Overview – Northern Section (Source: M1 Pacific Motorway to Raymond Terrace EIS)

## 2. Environmental Protection Licence and Reporting Requirements

John Holland Gamuda JV obtained the Environment Protection Licence (EPL No. 21808) from the NSW Environment Protection Authority for the M1 Motorway Extension to Raymond Terrace – Black Hill to Tomago in September 2023. The licence is for construction works relating to 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 construction works, and specifically as they relate to:

- Water discharge limits
- Noise limits

The following report details environmental monitoring undertaken during this reporting month conducted in accordance with the EPL.

The EPL can be found by following the link below to the EPA's website:

[ViewPOEOLicence.aspx \(nsw.gov.au\)](http://ViewPOEOLicence.aspx (nsw.gov.au))

### 3. Water Monitoring

The following results were collected as part of monitoring for Point 1 as per EPL condition M2.2:

Table 1. Water Quality monitoring results

Pollutant	Date Sampled	Result (mg/L)
2,4,6-trichlorophenol	14/12/23	<1.0
2,4 Dichlorophenol	14/12/23	<1.0
2-Chlorophenol	14/12/23	<0.1
Benzene	14/12/23	<1.0
Cadmium	14/12/23	<0.0001
Chromium (trivalent)	14/12/23	<0.001
Chromium (IV) compounds	14/12/23	<0.001
Copper	14/12/23	0.001
Lead	14/12/23	<0.001
Napthalene	14/12/23	<5.0
Nickel	14/12/23	<0.001
o-Xylene	14/12/23	<2
Pentachlorophenol	14/12/23	<2
Phenol	14/12/23	<1.0
TPH>C10-C40 (sum) Fraction	14/12/23	<100
TRH>C10-C36 (sum) Fraction	14/12/23	<100
Zinc	14/12/23	<0.005
pH	14/12/23	7.78

## 4. Noise Monitoring

Noise monitoring was undertaken during the December 2024 reporting period. Construction noise monitoring results were above NML in some cases however due to background noise levels (heavy continuous traffic M1/New England Hwy/Pacific Hwy/Tomago Road) and inaudibility of construction noise at sensitive receivers were generally compliant during this period. Where the predicted noise level was exceeded, this was result of extraneous activities (traffic passing). Construction noise was audible and in line with the predicted levels. Table 3 contains detailed noise monitoring results.

Table 2. Noise monitoring results

Monitoring Location (Noise Catchment Area, Street, Suburb)	Date	Time	Attended or Continuous Monitoring	Parameter	Goal/Target dB(A)	Actual dB(A)	Comments
NCA 01A Lenaghans Dve Black Hill	18/12/24	12:14	Attended	Laeq 15 minute	61	63.5	Non-compliant - Heavy traffic noise M1. No audible noise from site construction works.
NCA04B Quarter Sessions Rd Tarro	18/12/24	14:21	Attended	Laeq 15 minute	55	64.0	Non-compliant - Heavy traffic noise New England Highway between receiver and Project site. No audible noise from site construction works.
NCA04A Anderson Rd Tarro	18/12/24	12:59	Attended	Laeq 15 minute	61	65.4	Non-compliant - Heavy traffic noise New England Highway between receiver and Project site. No audible noise from site construction works.
NCA 05B Anderson Rd Tarro	18/12/24	15:05	Attended	Laeq 15 minute	51	60.3	Non-compliant - Heavy traffic noise New England. No audible noise from site construction works.
NCA09 Tomago Rd Tomago	18/12/24	16:10	Attended	Laeq 15 minute	62	70.7	Non-compliant - Heavy traffic noise Pacific Highway and Tomago Road. No audible noise from site construction works.