Cross River Rail Project

Monthly Environmental Report

April 2022

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Executive Summary

This Monthly Environmental Report (MER) has been produced for Project Works undertaken on site for April 2022 for the Rail, Integration and Systems (RIS), and Tunnel, Stations and Development (TSD) packages. The report addresses the obligations outlined in the Coordinator-General's change report – *Coordinator-General's change report – no. 13 (March 2022)*. Plus, the individual contractor's Construction Environmental Management Plans (CEMPs), which have been developed generally in accordance with the Project's Outline Environmental Management Plan (OEMP). The Cross River Rail Delivery Authority (Delivery Authority), as the Proponent of the Cross River Rail Project, is required to submit a monthly report to the Coordinator-General to demonstrate compliance with the imposed conditions.

Section 1 of this report provides a background to the project and the Coordinator-General's conditions. Section 2 provides a review of the contractor's reports contained in **Appendix A** (RIS Monthly Report) and **Appendix B** (TSD Monthly Report).

The Environmental Monitor (EM) has reviewed and endorsed this MER. This endorsement follows ongoing and new document reviews, and surveillance across the relevant project worksites.

The CEMPs prepared by both Unity Alliance (RIS Contractor) and CBGU JV on behalf of Pulse (TSD Contractor) for their Relevant Project Works were endorsed by the EM and submitted to the Coordinator-General in accordance with Condition 4(a) and 4(b) respectively.

The table below presents a summary of compliance status against each condition with a short comment for each:

Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
1.	**General conditions** – compliance with the Project Changes relevant to the contractor's scope	Yes	The CEMP and site management plans are in accordance with the Project Changes.
2.	**Outline Environmental Management Plan** – timely submission to the Coordinator-General including required sub-plans	Yes	OEMP dated June 2020 is effective for the reporting period.
3.	**Design** – achievement of the Environmental Design Requirements	NA	Ongoing progress with design packages.
4.	**Construction Environmental Management Plan** – all relating to Relevant Project Works.	Yes	RIS – CEMP Revision 13 covering full scope of RIS works is effective from 14 March 2022. TSD – CEMP Revision 8 covering full scope of TSD works is effective from 9 June 2021.
5.	**Compliance and Incident management** – Non-compliance events, notifications and reporting.	Yes	There were no non-compliance events (NCEs) in April 2022. Refer to Section 2.5 of this report.

Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
6.	**Reporting** – Monthly and Annual reporting.	Yes	This MER, including RIS and TSD Monthly Reports, has been submitted in accordance with the conditioned requirements. Refer to **Appendix A** and **Appendix B**.
7.	**Environmental Monitor (EM)** – engaged and functions resumed.	Yes	Ongoing weekly site inspections and document reviews continue to take place.
8.	**Community Relations Monitor (CRM)** – engaged and functions resumed	Yes	Ongoing.
9.	**Community Engagement Plan** – developed and endorsed by Environmental Monitor.	Yes	CEMPs endorsed with Community Engagement Plan.
10.	**Hours of work** – Project Works undertaken during approved hours.	Yes	Project Works have been undertaken in accordance with project requirements. This has been achieved through Standard Working Hours, Extended work hours and Managed Work.
11.	**Noise** – Project Works must aim to achieve internal noise goals for human health and well-being.	Yes	Noise monitoring met project noise requirements at Sensitive Places. RIS – Noise monitoring was undertaken to validate predictive noise modelling and for stakeholder complaints. Noise monitoring confirmed that project requirements were met. Refer to **Appendix A** (Table 4 and Section 3.1.2). TSD – Noise monitoring was undertaken to validate predicted noise modelling and for stakeholder enquiries. Noise monitoring confirmed project requirements were met. Refer to **Appendix B** (Table 3 and Section 3.2).
	Vibration – Project Works must aim to achieve vibration goals for cosmetic damage, human comfort and sensitive building contents.	Yes	Vibration monitoring met project vibration requirements at Sensitive Places. RIS –Vibration monitoring was undertaken to validate predicted vibration modelling and confirmed that project requirements were met. Refer to **Appendix A** (Table 5 and Section 3.1.4). TSD – Vibration monitoring was undertaken to validate predicted vibration modelling. The TSD contractor confirmed the monitoring results met project goals. Refer to **Appendix B** (Table 2 and Section 3.1).

Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
12.	**Property damage** – relating to ground movement.	Yes	RIS – Vibration modelling has been undertaken for Relevant Project Works and Property Damage Sub-plans have been developed and implemented. Pre-condition surveys have been completed at heritage, commercial and residential buildings at RNA, Northern Corridor and Fairfield to Salisbury stations. TSD – Vibration modelling has been prepared and is ongoing. Where required, building condition survey reports are completed for heritage and residential buildings. No enquiries relating to property damage were received during January.
13.	**Air quality** – Works must aim to achieve air quality goals for human health and nuisance.	Yes	Air quality monitoring met Project air quality goals. RIS – Refer to **Appendix A** (Tables 7, 8 and 9 and Sections 3.2.1 and 3.2.2, plus Figures 1, 2 and 3). TSD – Refer to **Appendix B** (Tables 4 and 5 plus Section 3.3).
14.	**Traffic and transport** – Works must minimise adverse impacts on road safety and traffic flow.	Yes	Traffic Management Plans are covered in the CEMPs. Sub-plans for all active worksites have been reviewed by the EM.
15.	**Water quality** – Works must not discharge groundwater from the construction site above the relevant environmental values and water quality objectives. Monitor and report on water quality in accordance with CEMP and Sub-plans.	Yes	Monitoring and reporting on groundwater and surface water quality was undertaken in accordance with RIS and TSD Water Quality Management Plans. RIS – No groundwater discharges or dewartering activities occurred during April. Post-rainfall monitoring was not triggered site wide. TSD – Active discharge of groundwater occurred from Roma Street, Albert, Woolloongabba and Boggo Road worksites. Monitoring results of groundwater quality prior to discharge is consistent with the pre-construction water quality levels except for Albert Street which recorded total nitrogen levels above baseline monitoring pre-construction data. Active discharge of surface water occurred at the Northern Portal and Southern Portal. Results met water quality discharge criteria. Post-rainfall monitoring was not triggered In April. Post-rainfall monitoring results from

Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
			March have been included in this report as they had not yet been received from the laboratoy during the preparation of the March Report. Routine in stream monthly monitoring met project water quality requirements. Refer to **Appendix B** (Table 6) for ground water monitoring results and refer to **Appendix B** (Tables 7 and 8) for surface water monitoring results.
16.	**Water resources** – Evaluate potential impact, plan works, implement controls and monitor inflow of groundwater associated with drawdown.	Yes	RIS – There is no sustained groundwater extraction involved in the RIS scope of works so predictive modelling of groundwater drawdown is not required. Collection of hydrological data to model potential inflow rates into excavations during construction has been undertaken. TSD – Inflow of groundwater into the worksites is being continously monitored to validate the predictive modelling.
17.	**Surface water** – Must be designed to avoid inundation from stormwater due to a 2-year (6hr) ARI rainfall event and flood waters due to a 5-year ARI rainfall event and constructed to avoid afflux or cause the redirection of uncontrolled surface water flows, including stormwater flows, outside of worksites.	Yes	Contractors continue to consider this condition in their site planning and design.
18.	**Erosion and sediment control** – Provisions for erosion and sediment control must be consistent with the Guidelines for Best Practice Erosion and Sediment Control (International Erosion Control Association, 2008) and the Department of Transport and Main Roads' Technical Standard MRTS52.	Yes	Site specific ESC plans for all active work sites have been reviewed by the EM and implemented on site.
19.	**Acid sulfate soils** – managed as per the Queensland Acid Sulfate Soil Technical Manual.	Yes	Acid Sulfate Soil Management Plans have been prepared and implemented for all active worksites.
20.	**Landscape and open space** – general requirement to minimise impacts on landscapes and open space values and specific requirements around Victoria Park.	Yes	The construction of a temporary access road through Victoria Park was undertaken under a Heritage Exemption Certificate approved by the Department of Environment and Science (DES) on 24

Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
			June 2021. Consideration has been taken to minimise loss of trees and the area of park impacted during these temporary works.
21.	**Worksite rehabilitation** – worksites rehabilitated as soon as practicable upon completion of works or commissioning, and in consultation with Brisbane City Council.	NA	N/A

Non-Compliance Events

There were no NCEs raised in April 2022.

Definitions

Acronym	Definition
ARI	Average Recurrence Interval - The average or expected value of the periods between exceedances of a given rainfall total accumulated over a given duration.
CEMP	Construction Environmental Management Plan
CGCR	Coordinator-General's Change Report
CRM	The Community Relations Monitor engaged in accordance with Imposed Condition 8
Contractor	The contractors appointed to design, construct, and commission the Project
Coordinator-General	The corporation sole preserved, continued, and constituted under section 8 of the SDPWO Act.
CRR	Cross River Rail
DES	Department of Environment and Science
EIS	Environmental Impact Statement
EM	The Environmental Monitor engaged in accordance with Imposed Condition 7
ESC	Erosion and sediment control
IECA	International Erosion Control Association
Imposed condition/s	A condition/s imposed by the Coordinator-General under section 54B of the SDPWO Act for the Project
MER	Monthly Environment Report
MRTS52	Transport and Main Roads Specifications MRTS52 Erosion and Sediment Control
NCE	Non-Compliance Event
OEMP	Outline Environmental Management Plan
Project	The Cross River Rail Project
Project Works	As defined in the Imposed Conditions
Proponent	The Cross River Rail Delivery Authority
RfPC	Request for Project Change
RIS	Rail, Integration and Systems
SDPWO Act	*State Development and Public Works Organisation Act 1971*
Sub-plan	Any sub-plan of the CEMP
The Delivery Authority	The Cross River Rail Delivery Authority
TSD	Tunnel, Stations and Development

1. Introduction

1.1. Background

The Cross River Rail Project (the Project) is a declared coordinated project under the *State Development and Public Works Organisation Act 1971* (SDPWO Act). The CRR Environmental Impact Statement (EIS) was evaluated by the Coordinator-General who recommended the Project proceed, subject to Imposed Conditions and recommendations. Since the evaluation of the EIS, several Requests for Project Change (RfPC) submissions have been evaluated by the Coordinator-General. RfPC 12 was endorsed in January 2022 by the Coordinator-General.

The Coordinator-General has imposed conditions on the Project that apply throughout the design, construction, and commissioning phases. These are referred to as the Imposed Conditions. In addition, the Coordinator-General has approved the Project's OEMP which outlines the environmental management framework for the Project. The OEMP includes environmental outcomes and performance criteria which must be achieved for the Project.

Imposed Conditions 5 and 6 nominate the compliance and reporting requirements for the Project. This monthly report addresses these requirements.

1.2. Project Delivery

The Delivery Authority is responsible for planning and delivering the Project. The Project established environmental management plans and secured some of the secondary environmental approvals in addition to enabling works.

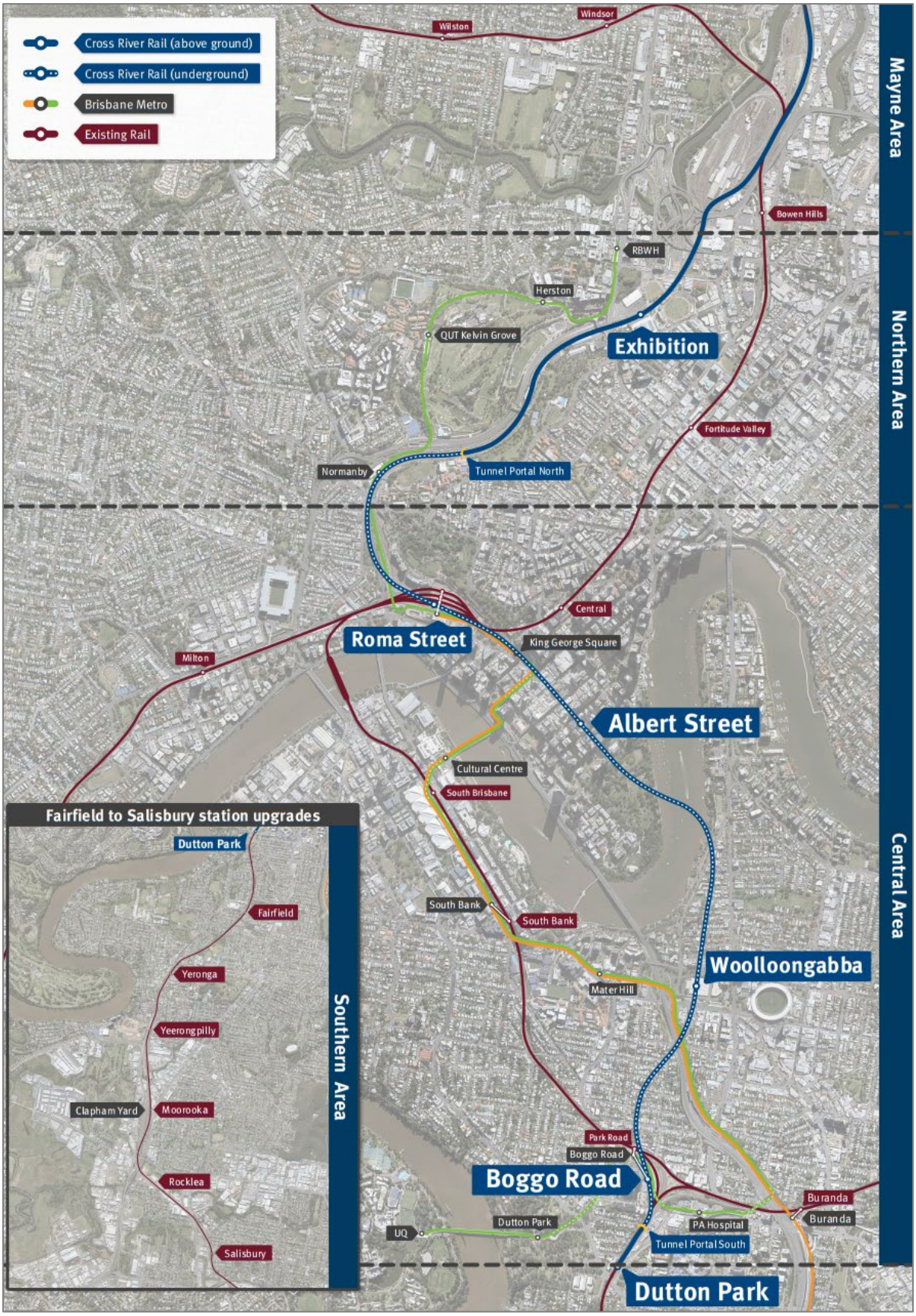
The two main delivery packages which require reporting under the Coordinator-General's imposed conditions are:

- Tunnel, Stations and Development (TSD) being delivered by CBGU JV; and
- Rail, Integration and Systems (RIS) being delivered by Unity Alliance.

The Project is geographically divided into four areas:

- Mayne Area;
- Northern Area;
- Central Area; and
- Southern Area.

These are shown in the figure over.


Cross River Rail (above ground)
Cross River Rail (underground)
Brisbane Metro
Existing Rail
Mayne Area
Northern Area
Central Area
Southern Area
Wilston
Windsor
Bowen Hills
RBWH
Herston
QUT Kelvin Grove
Exhibition
Fortitude Valley
Normanby
Tunnel Portal North
Central
Roma Street
King George Square
Milton
Albert Street
Cultural Centre
South Brisbane
South Bank
South Bank
Woolloongabba
Mater Hill
Park Road
Boggo Road
Boggo Road
Buranda
Buranda
PA Hospital
Tunnel Portal South
Dutton Park
UQ
Dutton Park
Fairfield to Salisbury station upgrades
Dutton Park
Fairfield
Yeronga
Yeerongpilly
Clapham Yard
Moorooka
Rocklea
Salisbury

1.3. Reporting Framework

This MER has been prepared to comply with Imposed Conditions 6 and 7 of the Coordinator-General Change Report (CGCR) and includes:

- monitoring data and associated interpretation of the results required by the imposed conditions and Construction Environmental Management Plan (CEMP);
- details of any NCE's, including incidents, corrective actions, and preventative actions; and
- details of any complaints, including description, responses, and corrective actions.

Reporting on environmental elements captured in each monthly environmental report, including the annual environmental report, will be reviewed, and endorsed by the EM.

1.4. Monthly Environment Report Endorsement

This MER has been endorsed by the EM and the endorsement provided to the Coordinator-General.

2. Compliance Review

This MER has been reviewed and endorsed by the EM as per Imposed Condition 7 of the CGCR.

2.1. Relevant Project Works

The following Project Works were undertaken in April 2022:

Area	Project Works
Mayne Area	**Mayne Yard North –** • Graffiti Removal Facility (GRF) – nearing completion with internal service installation continuing. The flood damaged cladding and roofing will be replaced in July; • Crew Change Building - nearing completion with internal fit-out; • Crew Change Car Park and Stabling Yard Access Roads – inground service installation, pavements, kerbing all completed with seal and asphalt works being finalised; • Yard Driver's footpaths and sanding pads nearing completion; • Yard Stabling Yard Fencing nearing completion; • Decanting scope nearing completion with sewer connection at Abbotsford Road currently being finalised; • Tripod Bridge (BR11/13) – Blade walls FRP completed; • RSS Walls for tripod bridge have all commenced and RW125 (South) almost complete; • Breakfast Ck Bridge (BR08) permanent piling on Southern bank underway, with Pier 2 and 3 completed; • CRR Lines – embankment construction including Stage 1 preload placement nearing completion; • RW130 under ICB continues; • BR12 – new QR pedestrian bridge from Bowen Hills, has commenced with preparation works; • Yard – All ballasted track and sleepers installed; and, • Yard – OHLE wire being installed currently.
Northern Area	**RNA/ Northern Corridor –** • CSR scope for EXT #14 SCAS commenced; • Grated Channels installation nearing completion;

Area	Project Works
	• RNA Substation energisation; • Victoria Park Feeder Station civil scope commenced; • RC22/23 pier protection completed; • Permanent boundary fencing to Energex Control Centre installed; • BR43 (Ekka Station Western viaduct) Structural Steel Structure installed; • Relieving slabs have been constructed; • RW210 Retaining wall (western alignment) completed; and • Drainage on Western side of viaduct has commenced. **Northern Portal –** • TBM gantry crane removal complete; • Base slab under the precast deck complete; • Base slab in the TBM extraction box ongoing; • Blinding layer installation in open trough section ongoing; and • First batch of rail delivered in April.
Central Area	**Roma Street** – • Services building Level B3 steel fixing works for slab pours; • Station building wall W102 pour complete and load out of spoil from overrun pits; • Passenger adits RA7 and RA2 invert treatment ongoing; • Station cavern vent/sump shotcrete top up complete; • Station cavern invert slab, kickers and waterproofing ongoing; and • Inner Northern Busway (INB) underpinning works 9 of 9 columns complete and jacking campaign completed.
	Albert Street – • Lot 1 – station box excavation and blinding to B10 level complete; • Lot 2 – excavation and retention of bench and invert layers continues, invert blinding and waterproofing ongoing in southern end of cavern and completed excavation to invert at northern headwall; and • Lot 3 – excavation including controlled blasting continuing (~84% complete), ongoing ground retention.
	Woolloongabba – • Station jump form system lift 16 reinforcement fixing; • Level 0 deck falsework substantially complete; • B1 final slab pour complete; • Southern cavern back of house internal structure FRP works and 22 precast planks installed; and, • Northern cavern 8 arch pour sections complete and steel fixing for arch pour section 9.
	Boggo Road – • Northern cavern Back of House internal structures ongoing; • Perimeter walls continuing with some locations now completed to full height; • Wall 21, 6 and 20 concrete pours; and • Wall 32, 1, 2, and 3 steel fixing continuing.
	Southern Portal – • Detailed excavation and shotcrete within cut and cover trough ongoing; • Sewer and stormwater micro tunnelling completed and manhole construction has commenced; • Completed dual Gauge track and overhead lines reinstated, with track re-opened to rail traffic during SCAS; • Freight Flyover Underpinning structure load transfer during SCAS; and

Area	Project Works
	• Zone E roof slab works ongoing.

Southern Area	**Dutton Park** –
	• Major SCAS scope completed during the 10-day Easter SCAS on the Gold Coast line between 15 and 25 of April:
	  ○ Dual Gauge UP / Down suburban lines: Replaced subgrade, replaced formation, reinstated straight track for approximate total length of 550 lineal meters completed;
	  ○ OHLE Foundations throughout Southern area; and
	  ○ Signaling support and investigations
	Fairfield Station –
	• Non-SCAS scope was predominately focused on preparatory work leading up to the 10-Day SCAS.
	• Major SCAS scope completed during the 10-Day Easter SCAS on the Gold Coast line between 15 and 25 of April:
	  ○ Demolish existing station buildings;
	  ○ Relocate Heritage Shelter;
	  ○ Bulk excavation of platforms 1; 2 and 3;
	  ○ Demolish existing PL1 and PL3 stairs;
	  ○ Propping of the existing pedestrian overpass;
	  ○ Install new scaffold construction stair to central platform;
	  ○ Install remaining Platform 3 precast elements;
	  ○ Commence stormwater drainage scope on Platform 1 and Central Platform;
	  ○ Commence sewerage drainage scope on Platform 1 and Central Platform;
	  ○ Excavate for overpass foundations – PL1, PL2/3, Mildmay St; and
	  ○ Install temp construction fences to PL1 / PL2 / PL3.
	Yeronga Station –
	• Major SCAS scope completed during the 10-day Easter SCAS on the Gold Coast line between 15th and 25th of April:
	  ○ Structural Steel;
	  ○ PL 1/2/3 Overpass Stair;
	  ○ Bike Shelter;
	  ○ Precast Concrete;
	  ○ Lift Shaft PL1;
	  ○ PL 1/2/3 Stair Treads & Landings;
	  ○ Roofing & facia;
	  ○ Ceilings & partitions; and
	  ○ Services rough-in;
	• Non-SCAS scope includes:
	  ○ Continuation of building trades fit-out & rough-in throughout the platform facilities;
	  ○ Continuation of Lake St entrance slab; and
	  ○ Continuation of Fairfield Rd West overpass foundations and piling scope.
	Clapham Yard –
	• Moolabin Creek temporary works creek crossing installed;
	• Temporary works sheet piling installed during Easter SCAS;
	• HV Energex Overhead services removed during Easter SCAS;
	• RW635 (along Mauri Western Mill property) completed;
	• RW620 (along Fair field Road) FRP commenced;
	• Drainage scope (early works) nearing completion; and
	• BR93 (Moolabin Ck) and BR94 (Chale St) piling commenced.

2.2. Key Environmental Elements

2.2.1. Noise

The Coordinator-General's conditions establish a framework for managing the impacts of noise. The Imposed Conditions do not establish noise limits. Compliance with the Imposed Conditions noise requirements involves demonstrating the implementation of the endorsed CEMP and associated Noise and Vibration Management Plan. This establishes the management measures to be applied which aims to achieve the identified noise goals as far as reasonably practicable. The CEMP also includes requirements for the provision of the required community notifications of upcoming work, potential impacts, and how the project team can be contacted in relation to any potential impacts.

For Project Works where potential noise impacts are modelled to be above the noise goal but below the noise goal plus 20dBA, this work is authorised where the endorsed CEMP and associated Noise and Vibration Management Plan is being implemented, including communicating construction activities to potential and actual Directly Affected Persons (DAPs). For Project Works where potential noise impacts are predicted to be more than 20dBA above the relevant noise goal, specific engagement is required with DAPs for these works.

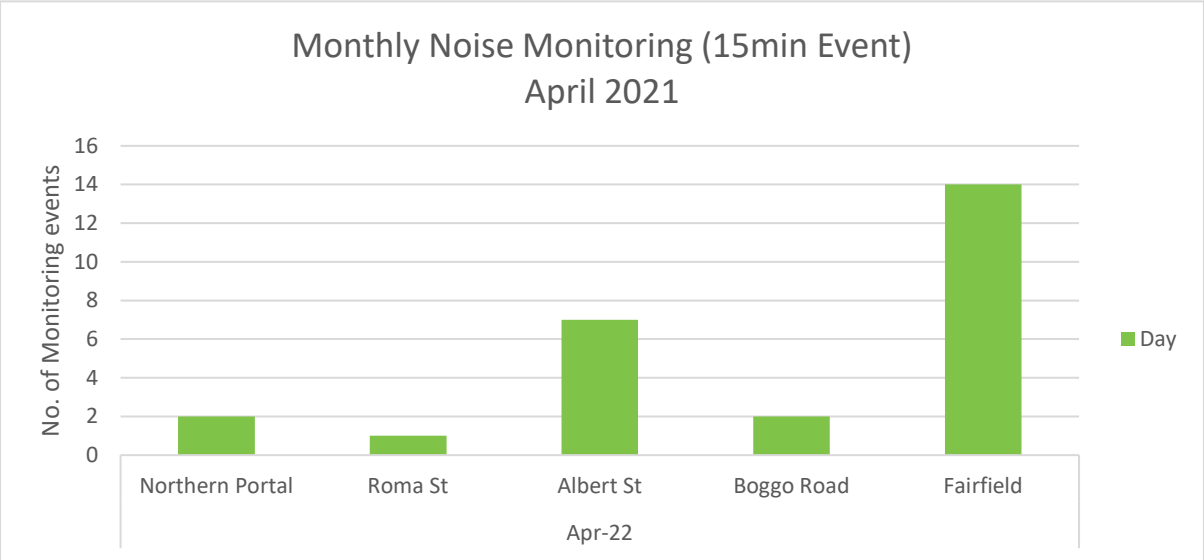
Where internal monitoring was not possible, contractors have undertaken external monitoring at nominated locations. To determine compliance with the project's noise requirements and to calibrate modelled predictions the project applies recommended façade attenuation corrections, which consider receiver property type.

In the Northern Area, noise monitoring was undertaken to validate predictive modelling for rail fit out works at the Northern Portal. Monitoring results for the Northern Area are detailed in **Appendix B** (Table 3). The TSD contractors reported that the project noise requirements have been met.

In the Central Area, noise monitoring was undertaken to validate predictive modelling at Sensitive Places close to the project worksites and in response to noise complaints. The TSD contractors reported that the project noise requirements have been met during this reporting month. Monitoring results for the Central Area are detailed in **Appendix B** (Table 3).

In the Southern Area, three rounds of noise monitoring were undertaken to validate predictive modelling at Sensitive Places surrounding the noise intensive activities associated with the Easter possession works. Noise monitoring was also undertaken in response to a noise complaint concerning rock breaking activities occurring in the early hours of the morning. Predictive modelling identified the complainant as a DAP and prior engagement had occurred prior to the commencement of the works. At the time of the attended monitoring, the 2.5T hammer was no longer in use, however, based on previous monitoring of the 2.5T hammer, the predictive model could be relied upon to predict noise emissions. The dominant noise source at the time of the monitoring session was metal being loaded into a truck for removal. Monitoring results are detailed in **Appendix A** (Table 4). A

summary of noise monitoring events for the month is provided in the chart below.



2.2.2. Vibration

Vibration monitoring in the Southern Area took place to validate predictive modelling for construction activities that occurred during the Easter SCAS at works between Dutton Park and Fairfield Station. The reported results met project goals and are detailed in **Appendix A** (Table 5).

In the Northern Area, vibration monitoring took place at RNA to validate predictive modelling for construction activities for CSR works under a rail possession. The reported results met project goals and are detailed in **Appendix A** (Table 5). In the Central Area, vibration monitoring took place to validate predictive modelling for controlled blasting works at Roma Street and Albert Street. Monitoring results met the project goals. Vibration monitoring results for the Central Area are detailed in **Appendix B** (Table 2).

2.2.3. Air Quality

2.2.3.1. Dust Deposition

Dust deposition monitoring was conducted at Mayne, Northern, Central and Southern Areas. Results met the project air quality goal[1] for all active worksites.

The Mayne Yard depositional dust gauge was left for an extended period of 41 days from the 11 March to 21 April 2022. The Mayne Yard Depositional Dust Gauge is located within the active rail corridor and requires a Protection Officer for collection and replacement. Due to a staffing issue with Protection Officers the gauge was inaccessible until 21 April 2022. This exceeds the 30±2 days as per AS/NZS 3580.10.1, section 7.3, for routine monitoring programs. Although the Mayne Yard results are not considered a representative sample according to the Australian Standard, per the advice of the Project Certified Air Quality Professional (CAQP), the sample have still be recorded as indicative.

Dust deposition results are detailed in **Appendix A** (Table 7) and **Appendix B** (Table 4).

[1] CG air quality goal for dust deposition - 120µg/m^2 (over an averaging period of 30 days).

A summary of dust deposition monitoring is provided in the table below.

Air Quality – Dust Deposition Monitoring			
Area	**Worksite**	**Monitoring Location**	**Comments**
Mayne Area	Mayne Yard	Mayne Yard	- Results met air quality goal
Northern Area	RNA / Exhibition	RNA Showgrounds	- Results met air quality goal
	Northern Portal	Northern Portal (near Brisbane Girls Grammar School)	- Results met air quality goal
Central Area	Albert Street	Mary Street	- Results met air quality goal
		Elizabeth Street	- Results met air quality goal
	Boggo Road	Quarry Street (north of the site)	- Results met air quality goal
		Peter Doherty Street/Leukemia Foundation	- Results met air quality goal
	Southern Portal	Dutton Park Station	- Results met air quality goal
		PA Hospital - Central Energy Unit along Kent Street	- Results met air quality goal
	Roma Street	Roma Street Station	- Results met air quality goal
	Woolloongabba	Russian Orthodox Cathedral	- Results met air quality goal
		Woolloongabba Busway	- Results met air quality goal
Southern Area	Clapham Yard	Clapham Yard	- Results met air quality goal

2.2.3.2. Particulate Matter and Total Suspended Particulates

Monitoring for particulate matter (PM_{10}) and total suspended particulates (TSP) was conducted at Mayne, Northern, Central and Southern Area worksites. Results met the project goals at all active worksites.

The Boggo Road air quality unit experienced technical difficulties and stopped function on 1, 12, 16-18 and 22-28 April 2022. The review of a nearby DES air quality monitoring station (Woolloongabba) demonstrated PM_{10} levels on the days when the Boggo Road air quality unit was down, were compliant with project air quality goals.

The Mayne Yard air quality monitor experienced a series of malfunctions resulting in abnormal readings between 21 and 26 April 2022. The air quality monitor has since been taken off site for factory calibration. Upon inspection by the equipment manufacturer, it had been identified that the unit had suffered significant water damage which would impact its operation and results obtained. Therefore, the results for April are to be taken as indicative and not relied upon for compliance purposes. The Clapham Yard air quality monitor also experienced a malfunction preventing data between 11 and 19 April 2022. The malfunction was rectified once access was arranged into the rail corridor.

Particulates results are detailed in **Appendix A** (Figure 2 and Figure 3) and **Appendix B** (Table 5)

A summary of particulate monitoring is provided in the table below.

Air Quality – PM_{10} / TSP Monitoring			
Area	**Worksite**	**Monitoring Location**	**Comments**
Mayne Area	Mayne Yard	Mayne Yard North	- Results met air quality goals, but are indicative only - Monitoring unit experienced a technical fault with abnormal results between 21 and 26 April 2022
Northern Area	RNA / Exhibition	RNA showgrounds	- Results met air quality goals
	Northern Portal	Brisbane Girls Grammar School	- Results met air quality goals
Central Area	Albert St	iStay River City and Capri (Corner of Mary Street and Albert Street)	- Results met air quality goals
	Boggo Rd / Southern Portal	North-east of Boggo Road worksite	- Results met air quality goals - Monitoring unit experienced a technical fault with no results on 1, 12, 16-18, and 22-28 April 2022.
	Woolloongabba	Place Park, Woolloongabba	- Results met air quality goals.
Southern Area	Clapham Yard	Clapham Yard	- Results met air quality goals - Monitoring unit experienced a technical fault with no results 11-19 April 2022.

2.2.4. Water Quality

Water quality monitoring and reporting was undertaken in accordance with the contractors CEMP and Water Quality Management Plans.

2.2.4.1. Surface Water

Active surface water discharges occurred from the Northern Portal and Southern Portal worksites during dewatering activities. Active or post-rainfall water quality monitoring was not triggered for the RIS worksites.

In the Northern Area at the Northern Portal worksite water quality monitoring was triggered on 27 occasions as water used for washing down the TBM components and stormwater run-off was treated and actively discharged to the stormwater network. Water quality met project water quality discharge criteria. See **Appendix B** (Table 7) for further details.

Post-rainfall monitoring in receiving waters of the TSD worksites was not triggered in April, however, the late-March post-rainfall monitoring results that had not yet been received from the laboratory at the time of the March Report have been included into this Monthly Environmental Report. Downstream locations did not exhibit an increase of more than 10% turbidity therefore there was no exceedance of the water quality investigation criteria. See **Appendix B** (See Table 8).

Routine surface water quality monitoring was undertaken in the receiving waters of all TSD worksites in accordance with the Contractor's Water Quality Management Plan. The monitoring results reflect the condition of a broader catchment upstream from the worksites. See **Appendix B** (Table 9) for further details.

Surface water quality monitoring is summarised in the table below:

Surface Water Quality Monitoring					
Area	**Worksite**	**Discharge**	**Post-Rain Monitoring**	**Routine Monitoring**	**Comments**
Mayne Area	Mayne Yard North	No	No	No	- ESC was implemented in accordance with site specific ESC Plan.
Northern Area	Northern Portal	Yes	No	Yes	- Active surface water discharge met water quality investigation criteria. - Post-rainfall monitoring undertaken in late March captured in this Report - Routine in-stream monitoring undertaken in accordance with WQMP.
	Northern Corridor	No	No	No	- ESC was implemented in accordance with site specific ESC Plan.
	RNA/Exhibition	No	No	N/A	- ESC was implemented in accordance with site specific ESC Plan.
Central Area	Albert Street	No	No	Yes	- Post-rainfall monitoring undertaken in late March has been captured in this Report - Routine in-stream monitoring undertaken in accordance with WQMP.
	Boggo Road	No	No	Yes	- Post-rainfall monitoring undertaken in late March has been captured in this Report - Routine in-stream monitoring undertaken in accordance with WQMP.
	Roma Street	No	No	Yes	- Post-rainfall monitoring undertaken in late March has been captured in this Report. - Routine in-stream monitoring undertaken in accordance with WQMP.
	Woolloongabba	No	No	Yes	- Post-rainfall monitoring undertaken in late March has been captured in this Report. - Routine in-stream monitoring undertaken in accordance with WQMP.
	Southern Portal	Yes	No	Yes	- Active surface water discharge met water quality investigation criteria. - Post-rainfall monitoring undertaken in late March has been captured in this Report.

Surface Water Quality Monitoring					
Area	**Worksite**	**Discharge**	**Post-Rain Monitoring**	**Routine Monitoring**	**Comments**
					- Routine in-stream monitoring undertaken in accordance with WQMP.
Southern Area	Clapham Yard	No	No	No	- ESC was implemented in accordance with site specific ESC Plan.

2.2.4.2. Groundwater

There were no groundwater discharges at Mayne, Northern or Southern Area worksites.

Groundwater discharge occurred in the Central Area at Roma Street, Albert Street, Woolloongabba, and Boggo Road worksites. Groundwater discharge results exceeded relevant water quality objectives (WQO's)[2] for total nitrogen, ammonia nitrogen, oxidised nitrogen, organic nitrogen and dissolved oxygen. However, these results are consistent with the receiving environment baseline monitoring pre-construction data, except for Albert Street which recorded nitrogen levels above the baseline monitoring pre-construction data. It is not uncommon for high levels of these water quality parameters to be identified in groundwater monitoring. Given the sites are located in highly urbanised inner-city settings, there are many influences on groundwater external to the project. The contractor confirmed no changes have occurred onsite to the construction methodologies that would have affected the groundwater results.

Groundwater Quality Monitoring			
Area	**Worksite**	**Discharge**	**Comments**
Mayne Area	Mayne Yard North	No	- No groundwater discharges.
Northern Area	RNA/Exhibition	No	- No groundwater discharges.
	Northern Portal	No	- No groundwater discharges.
Central Area	Albert Street	Yes	- Discharge of groundwater did not meet Project WQO's but was generally consistent with pre-construction conditions except for nitrogen parameters. Given the sites are located in highly urbanised inner-city settings, non-project related infrastructure issues (i.e., sewer leaks) can influence the groundwater quality. The contractor confirmed no changes have occurred onsite to the construction methodologies that would have affected the groundwater results.
	Boggo Road / Southern Portal	Yes	- Groundwater discharge (dewatering). - Discharge of groundwater did not meet Project WQO's but was generally consistent with pre-construction conditions.
	Roma Street	Yes	- Groundwater discharge (dewatering).

[2] The Brisbane River Estuary environmental values and water quality objectives (Basin no 143 – mid-estuary) in the Environmental Protection (Water) Policy 2009.

Groundwater Quality Monitoring			
Area	**Worksite**	**Discharge**	**Comments**
			- Discharge of groundwater did not meet Project WQO's but was generally consistent with pre-construction conditions.
	Woolloongabba	Yes	- Groundwater discharge (dewatering). - Discharge of groundwater did not meet Project WQO's but was generally consistent with pre-construction conditions - Groundwater monitoring undertaken in late March has been captured in this Report and although the results did not meet Project WQO's, it was generally consistent with pre-construction conditions.
Southern Area	Clapham Yard	No	- No groundwater discharges.

2.2.5. Erosion and Sediment Control

Site specific Erosion and Sediment Control (ESC) Plans have been prepared, updated, and implemented at Mayne Yard, Northern Portal, RNA Showgrounds, Roma Street, Albert Street, Woolloongabba, Boggo Road, Southern Portal, Yeronga, Fairfield, and Clapham Yard worksites.

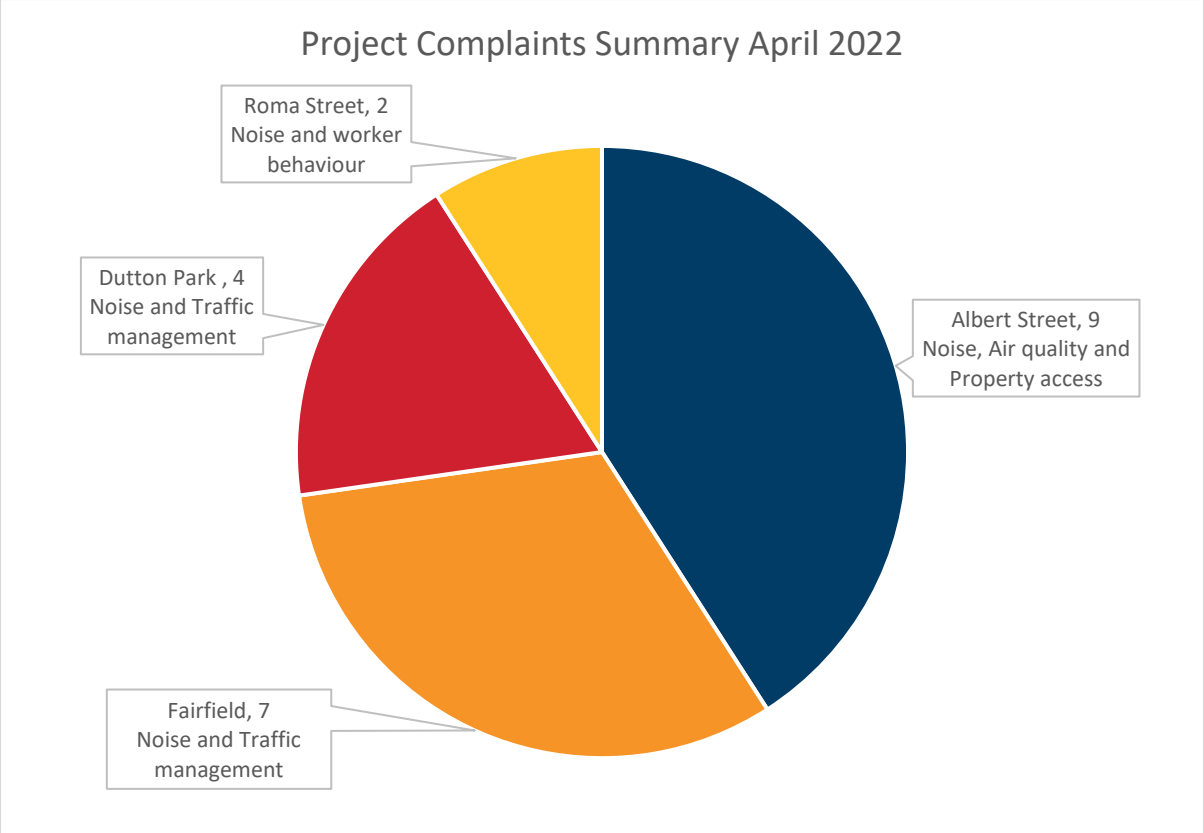
2.3. Complaints Management

A total of 25 complaints were received during the month of which 3 were non project related.

RIS works received 11 complaints this month related to Easter SCAS works near Dutton Park and Fairfield Stations. For further details refer to **Appendix A** (Table 3).

TSD activities received 11 complaints related to Project Works at Roma Street and Albert Street worksites. Of these, 9 complaints were related to noise from works occurring from the Albert Street site, mostly during non-standard hours. For further details refer to **Appendix B** (Table 10).

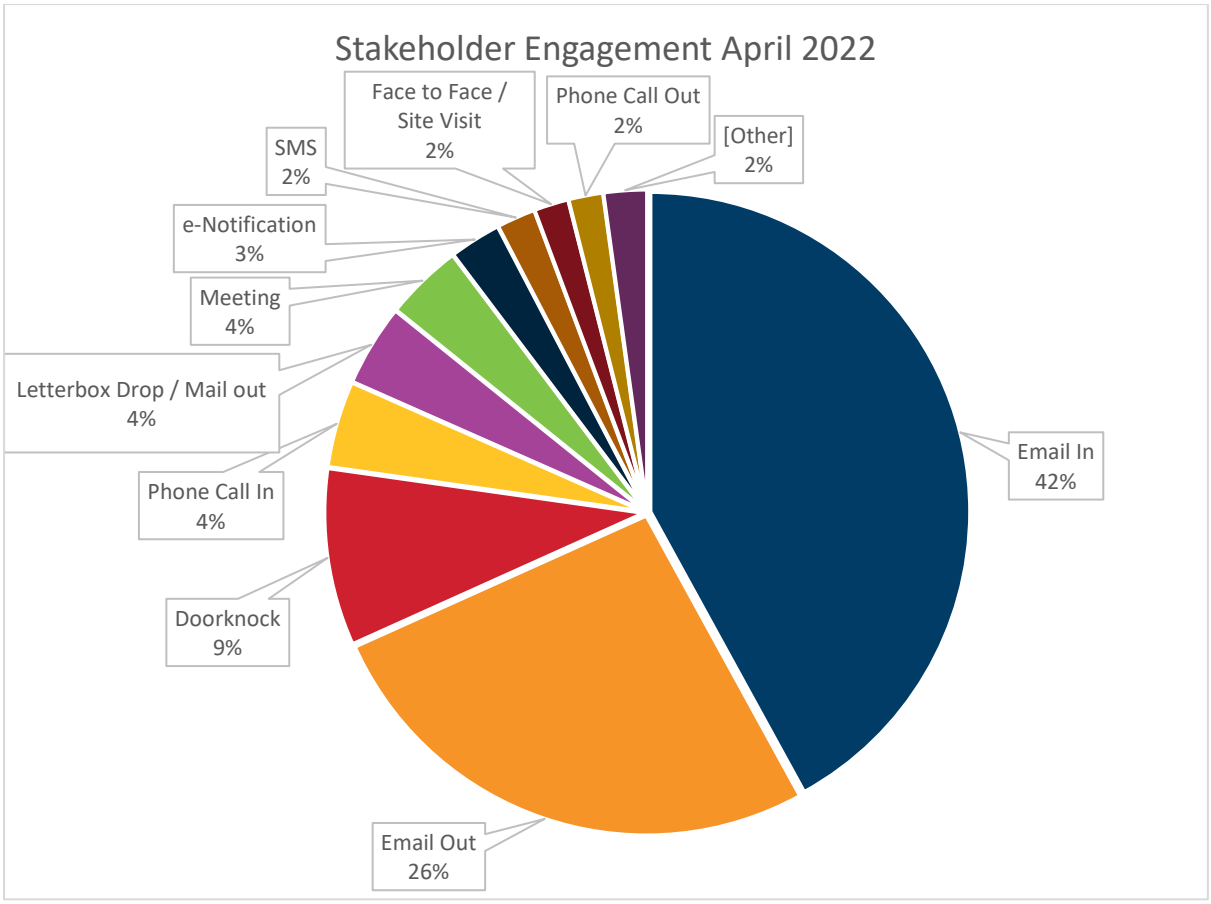
The Project Works complaints summary for the month is provided in the following chart.



Where attended noise monitoring was undertaken in response to a complaint, the contractor confirmed on all occasions that works undertaken at the time of the complaint adhered to project requirements. In some instances, previous attended noise monitoring data, representative of the relevant construction activities was used to confirm the works adhered to the project noise requirements.

To close out a complaint, the monitoring data is reviewed (where applicable) against compliance with the CEMP, site environmental management plans and permits, and checks that required community notification has taken place. Contractors have also confirmed that planned mitigation to reduce the impact was implemented. This is reviewed together to verify if project requirements have been met.

For scheduled out of hours works, community notification was provided, as well as regular project updates. Stakeholder engagement undertaken on the project during the month is summarised in the chart below.



2.4. New Upcoming Project Works

The key new planned Project Works for the coming months include:

Area	New planned works in the coming months
Mayne Area	**Mayne Yard North** – • Testing and Commissioning for nearing Mayne Yard Handover; • Graffiti Removal Facility completion; • Crew Change Building completion including landscaping; • RSS walls FRP and barrier scope (RW110 / 125); • BR08 (Breakfast Ck Bridge) FRP scope; • BR12 (QR pedestrian bridge) preparation earthworks; • Yard – Signal Testing and Commissioning; and • Yard – GRF Road 1 installation.
Northern Area	**RNA/ Northern Corridor** – • Sewer and water underbore at Bowen Bridge Road; • Victoria Park Feeder Station piling and FRP scope; • RW260 completion of backfill and edge protection; • Commence OHLE foundations through corridor; • CSR scope through RNA section and Western viaduct; and • Continuing Stage 1 drainage. **Northern Portal** – • Gantry crane removal; • Installation of remaining deck units in July; and • Rail deliveries in May.

Area	New planned works in the coming months
Central Area	**Roma Street** – • Station cavern permanent lining in May; • Passenger adit waterproofing, steel fixing and concrete pouring; • Station building remaining cavidrain installation and invert slab works and perimeter wall pours; • Services building pre-cast panel installation and concrete pours; and • Infill around INB underpinning columns. **Albert Street** – • Lot 1 – Excavation of sump in May followed by the commencement of drainage, waterproofing and services in preparation for station structure FRP works; • Lot 2 – micro-blasting of service adit and completion of excavation and retention works in June; and • Lot 3 – Excavation completion in May. **Woolloongabba** – • Jump form system lift 16 and 17 in May; • Mezzanine loader arrival and erection in May; • Mezzanine unit first delivery in June; and • Back of house steel works to commence in May. **Boggo Road** – • Concrete wall pours ongoing; • Boggo Road Bridge early works to commence in May; • tree pruning works in May; and • Mezzanine unit arrival in June. **Southern Portal** – • Portal dive structure base slab installation to occur in June; • Shaft 3 and 4 manhole construction works to commence in June; and • Upcoming SCAS works in June and July.
Southern Area	**Dutton Park** – • Following the Easter SCAS, the teams focus will now focus on the clearing and demolition of the Cope St properties from late May 22. **Yeronga Station** – • Fairfield Rd West – Foundation, structural column, overpass installation, footpath reinstatement works; • Fairfield Overpass – Fit out, lift installation, cladding, finishing, stairs; • Station buildings – Fit out, painting, joinery, flooring; and • Station entrances – Completion of FRP, landscaping and general tidy up scope. **Fairfield Station –** • The focus will be to continue with the inground services installation (water, stormwater, sewer, electrical, communications, security) and commencement of structural foundations for the overpass and platform structures. **Clapham Yard** – • Complete Retaining Walls, remediation outside the LCA and backfill; • Complete underbore under Fairfield Road and complete Early Works drainage as a whole; • Complete piling of Moolabin Bridge (BR93, Stage 1) and Chale St Bridge (BR94); and • Commence Retaining Wall RW650 in front of Aurizon facility

2.5 Non-Compliance Events

No new NCEs have been raised this month. The summary of NCEs to date is shown in the table below.

Status	Date of event	Category	Area as on the Report	Conditions affected	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
⊞ **Open**									
⊟ **Closed**									
CRRDA-001-RIS-001	11/09/19	Noise	Yeronga Station	4, 10, 11	11/10/19	14/11/19	26/11/19	18/12/19	01/10/20
CRRDA-002-TSD-001	27/03/20	ESC	Woolloongabba	4, 15, 18	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20
CRRDA-003-TSD-002	27/03/20	ESC	Boggo Rd	4, 15, 18	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20
CRRDA-005-TSD-004	27/03/20	Reporting	Albert St, Boggo Rd, Roma St, Woolloongabba	4, 6, 11, 13	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20
CRRDA-006-TSD-005	27/03/20	Air Quality	Albert St, Boggo Rd, Roma St, Woolloongabba	13	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20
CRRDA-004-TSD-003	28/03/20	Traffic	Boggo Rd	4, 10, 14	30/03/20	31/03/20	22/04/20	06/11/20	31/05/20
⊟ **Withdrawn**									
CRRDA-007-RIS-002	04/01/20	Air Quality	Mayne Yard, Victoria Park, Yeronga, Fairfield	13	28/04/20	30/04/20	Withdrawn		
CRRDA-008-TSD-006	04/08/20	Working Hours	Roma Street	4,10	28/04/20	30/04/20	Withdrawn		

Gate 1 - EM notification to contractor. NCE confirmed
Gate 2 - 48 hour NCE notification submitted to CG
Gate 3 - 14 day report submitted
Gate 4 - 14 day report uploaded to CRR website
Gate 5 - Records of mitigation / preventative measures submitted to the CG — Complete

Throughout construction activities, events and incidents are routinely investigated to verify compliance with the Imposed Conditions and to verify that management and mitigation measures are implemented in accordance with CEMP and sub-plans.

Appendix A RIS Monthly Report

Monthly CGCR Report April 2022

Cross River Rail – Rail, Integration and Systems Alliance

Assured Integration for a New Era

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1 Progress Summary - Relevant Project Works

The following Project Works were undertaken during the reporting period:

Table 1: Summary of Project Works completed during the reporting period

Area	Project Works
Mayne Area	**Mayne Yard North** • Graffiti Removal Facility (GRF) – nearing completion with internal service installation continuing. The flood damaged cladding and roofing will be replaced in July requiring an isolation of the GRF building • Crew Change Building - nearing completion with internal fit-out, flooring, tiling ongoing. • Crew Change Car Park and Stabling Yard Access Roads – inground service installation, pavements, kerbing all completed with seal and asphalt works being finalised • Yard Driver's footpaths and sanding pads nearing completion • Yard Stabling Yard Fencing nearing completion with razor wire fit-out being completed • Decanting scope nearing completion with sewer connection at Abbotsford Road currently being finalised • Tripod Bridge (BR11/13) – Blade walls FRP completed • RSS Walls for tripod bridge have all commenced and RW125 (South) almost complete • Breakfast Ck Bridge (BR08) permanent piling on Southern bank underway, with Pier 2 and 3 completed • CRR Lines – embankment construction including Stage 1 preload placement nearing completion • RW130 under ICB continues. • BR12 – new QR pedestrian bridge from Bowen Hills, has commenced with preparation works • Yard – All ballasted track and sleepers installed • Yard – OHLE wire being installed currently
Northern Area	**RNA / Northern Corridor** • CSR scope for EXT #14 SCAS commenced • Grated Channels installation nearing completion • RNA Substation energisation • Victoria Park Feeder Station civil scope commenced • RC22/23 pier protection completed • permanent boundary fencing to Energex Control Centre installed • BR43 (Ekka Station Western viaduct) Structural Steel Structure installed • Relieving slabs have been constructed • RW210 Retaining wall (western alignment) completed • Drainage on Western side of viaduct has commenced

Area	Project Works

Southern Area	**Yeronga Station**
	• Major SCAS scope completed during the 10-day Easter SCAS on the Gold Coast line between 15th and 25th of April:
	  ○ Structural Steel
	  ○ PL 1/2/3 Overpass Stair
	  ○ Bike Shelter
	  ○ Precast Concrete
	  ○ Lift Shaft PL1
	  ○ PL 1/2/3 Stair Treads & Landings
	  ○ Building Trades
	  ○ Roofing & facia
	  ○ Ceilings & partitions
	  ○ Services rough-in
	• Non-SCAS scope includes:
	  ○ Continuation of building trades fit-out & rough-in throughout the platform facilities
	  ○ Continuation of Lake St entrance slab
	  ○ Continuation of Fairfield Rd West overpass foundations and piling scope
	
	Fairfield Station
	• Non-SCAS scope was predominately focused on preparatory work leading up to the 10-Day SCAS
	• Major SCAS scope completed during the 10-Day Easter SCAS on the Gold Coast line between 15 and 25 of April:
	  ○ Demolish existing station buildings
	  ○ Relocate Heritage Shelter
	  ○ Bulk excavation of platforms 1; 2 and 3
	  ○ Demolish existing PL1 and PL3 stairs
	  ○ Propping of the existing pedestrian overpass
	  ○ Install new scaffold construction stair to central platform
	  ○ Install remaining Platform 3 precast elements
	  ○ Commence stormwater drainage scope on Platform 1 and Central Platform
	  ○ Commence sewerage drainage scope on Platform 1 and Central Platform
	  ○ Excavate for overpass foundations – PL1, PL2/3, Mildmay St
	  ○ Install temp construction fences to PL1 / PL2 / PL3.
	
	Southern Portal / Dutton Park
	• Major SCAS scope completed during the 10-day Easter SCAS on the Gold Coast line between 15 and 25 of April:
	  ○ Dual Gauge UP / Down suburban lines: Replaced subgrade, replaced formation, reinstated straight track for approximate total length of 550 lineal metres completed
	  ○ OHLE Foundations throughout Southern area
	  ○ Signalling support and investigations
	
	Clapham Yard
	• Moolabin Creek temporary works creek crossing installed
	• Temporary works sheet piling installed during Easter SCAS
	• HV Energex Overhead services removed during Easter SCAS
	• RW635 (along Mauri Western Mill property) completed
	• RW620 (along Fair field Road) FRP commenced
	• Drainage scope (early works) nearing completion
	• BR93 (Moolabin Ck) and BR94 (Chale St) piling commenced

Acronyms:

CIP – Cast in Situ Piles
CSR – Combined Services Route
DL – Drainage Line
FRP – Form Reo Pour
HV – High Voltage
OHLE – Overhead Line Equipment
OTV – On Track Vehicle
PUP – Public Utility Plant
RNA - Royal National Agricultural and Industrial Association of Queensland
R&R – Remove and Replace
RSS – Reinforced Soil Slopes
RW – Retaining Wall
SCAS – Scheduled Corridor Access Schedule
UTX – Under Track Crossing

The following table summarises the upcoming Project Works:

Table 2: Summary of upcoming Project Works

Area	Project Works
Mayne Area	**Mayne Yard North** • Testing and Commissioning for nearing Mayne Yard Handover • Graffiti Removal Facility completion • Crew Change Building completion including landscaping • RSS walls FRP and barrier scope (RW110 / 125) • BR08 (Breakfast Ck Bridge) FRP scope • BR12 (QR pedestrian bridge) preparation earthworks • Yard – Signal Testing and Commissioning • Yard – GRF Road 1 installation
Northern Area	**RNA / Northern Corridor** • Sewer and water underbore at Bowen Bridge Road • Victoria Park Feeder Station piling and FRP scope • RW260 completion of backfill and edge protection • Commence OHLE foundations through corridor • CSR scope through RNA section and Western viaduct • Continuing Stage 1 drainage
Southern Area	**Yeronga Station** • Fairfield Rd West – Foundation, structural column, overpass installation, footpath reinstatement works • Fairfield Overpass – Fit out, lift installation, cladding, finishing, stairs • Station buildings – Fit out, painting, joinery, flooring • Station entrances – Completion of FRP, landscaping and general tidy up scope **Fairfield Station** • The focus will be to continue with the inground services installation (water, stormwater, sewer, electrical, communications, security) and commencement of structural foundations for the overpass and platform structures **Southern Portal / Dutton Park** • Following the Easter SCAS, the teams focus will now focus on the clearing and demolition of the Cope St properties from late May 22 **Clapham Yard** • Complete Retaining Walls, remediation outside the LCA and backfill • Complete underbore under Fairfield Road and complete Early Works drainage as a whole • Complete piling of Moolabin Bridge (BR93, Stage 1) and Chale St Bridge (BR94) • Commence Retaining Wall RW650 in front of Aurizon facility

2 Complaints

The below section summarises the complaints relating to the Project Works to be reported in accordance with condition 6(b)(iii) of the CGCR.

Table 3: Summary of Complaints

Date Received	Location	Issue	Project Works / Activity source of the concern	Reporting Period	Complaint Detail	Unity Response	Status
7/04/2022 20:02	Dutton Park	Traffic management	Lead up to Easter SCAS	April 2022	The stakeholder identified that a VMS board (mobile traffic sign)impeded the view / line of sight for local traffic when coming up to the street intersection.	The Traffic Control Subcontractor was made aware of the situation. They relocated the VMS sign. The stakeholder was advised of the change. The Stakeholder advised that the relocation no longer impeded the line of sight and thanked the team for their help.	Closed
11/04/2022 14:19	Fairfield	Traffic Management	Not identifiable	April 2022	The stakeholder stated that vehicles and trucks were parking on their street and using the residents' on-street parking spaces. No identification details could be provided by the stakeholder to confirm whether the vehicles were related to Project Works.	The team investigated the complaint with the nearby site teams but could not confirm whether RIS related vehicles and trucks were indeed parking on the street. When the team attempted to contact the stakeholder back, the number provided reached another person.	Closed
15/04/2022 13:53	Fairfield	Traffic Management	Easter SCAS	April 2022	The stakeholder advised that Traffic Controllers were not allowing them to use the closed local road to access their property which was located outside of the road closures limits. The stakeholder was in possession of the road closure notice which had been distributed to the broader catchment.	The team advised that as per the content of the notice, access through closed roads was only facilitated for residents living on the closed road. The team provided additional guidance on the available detours in place. The team also adjusted future works notification to further clarify traffic management impacts on local traffic as an outcome of the feedback from residents.	Closed
15/04/2022 18:15	Fairfield	Traffic Management	Easter SCAS	April 2022	The stakeholder advised that Traffic Controllers were not allowing them to use the closed local road to access their property. The stakeholder did not provide their specific address.	The team advised that as per the content of the notice, access through closed roads was only facilitated for residents living on the closed road. The team advised that without a specific address they could not determine the whether the stakeholder was located within or outside the road closure limits. No further contact was made by the stakeholder.	Closed

Date Received	Location	Issue	Project Works / Activity source of the concern	Reporting Period	Complaint Detail	Unity Response	Status
15/04/2022 21:08	Dutton Park	Traffic Management / Noise	Easter SCAS	April 2022	The stakeholder complained about the construction traffic travelling past their house and requested trucks be diverted to a different street at night to manage noise emissions.	The team contacted the stakeholder the following day and advised them their street was part of the approved heavy vehicle route for the duration of the SCAS. The team discussed numerous noise mitigation options the project could implement to support the stakeholder and their family. The stakeholder accepted one of the mitigation measures and the team implemented the mitigation on 16 April.	Closed
17/04/2022 14:24	Fairfield	Noise	Easter SCAS	April 2022	The stakeholder complained about noise during night-time work	The team contacted the stakeholder and provided them with a program and works update. The team discussed noise mitigation options the project could implement to support the stakeholder. The stakeholder accepted one of the mitigation measures and the team implemented the mitigation.	Closed
18/04/2022 15:56	Fairfield	Noise / Air Quality	Easter SCAS	April 2022	The stakeholder complained about noise during night-time work and dust generation	The team contacted the stakeholder and provided them with a program and works update. The team discussed noise mitigation options the project could implement to support the stakeholder. The stakeholder accepted one of the mitigation measures and the team implemented the mitigation on 19 April 2022.	Closed
19/04/2022 8:34	Dutton Park / Annerley	Traffic Management	Easter SCAS	April 2022	The stakeholder contacted the team by email stating that he observed inadequate traffic management measures when access his property near the RIS project works	The team attempted on numerous occasions to contact the stakeholder to discuss their concerns. All attempts were unsuccessful	Closed
19/04/2022 11:56	Dutton Park / Annerley	Noise / Air Quality	Easter SCAS	April 2022	The stakeholder complained about noise and dust generation	The team contacted the site supervisor and additional dust mitigation was implemented. The team contacted the stakeholder to advise them of the corrective actions.	Closed
19/04/2022 19:28	Fairfield	Noise	Easter SCAS	April 2022	Stakeholder complained about noise (reverse alarms) and construction traffic relating to Fairfield station works.	Team responded advising that concerns had been raised with the site team and that works were included in the the notice. The team also clarified of work hours.	Closed

Date Received	Location	Issue	Project Works / Activity source of the concern	Reporting Period	Complaint Detail	Unity Response	Status
21/04/2022 6:45	Fairfield	Noise	Easter SCAS	April 2022	The stakeholder complained about noise (construction noise and rail noise) during night-time works	The team contacted the stakeholder and provided them with a program and works update. This included an update that noise intensive activities would significantly reduce within the upcoming 24 hours	Closed

3 Environmental Monitoring Results

The below section summarises the monitoring results to be reported in accordance with condition 6(b)(i) of the CGCR.

3.1 Acoustics

Condition 11(b) of the CGCR requires that during construction, monitoring and reporting on noise and vibration in accordance with the Noise and Vibration Management Plan, a sub-plan of the Construction Environmental Management Plan (C-EMP) occurs.

3.1.1 Noise Monitoring

Attended noise monitoring was triggered based on the predictive noise assessments for the Relevant Project Works during the reporting period for:

- The Easter SCAS between Dutton Park and Fairfield Station

Complaint-based noise monitoring because of Project Works was triggered during one occasion during the reporting period.

3.1.2 Noise monitoring Results

Table 4: Summary of Noise Monitoring Data

Location	Receiver Type Details	Type of Monitoring	Work Hours	Monitoring date and time	Noise Type	Purpose of Monitoring	Predictive model (dBA)	Performance Goal 1 (dBA) (Condition 11(a), Table 2, $LA_{10/eq}$ noise goals)	Performance Goal 2 (dBA) – (Condition 11(c), Table 2 LA_{10} noise goal + 20dBA))	Measured LA_{10} (dBA)	Measured LA_{eq} (dBA)	DAP engagement prior to works	Is performance Goal exceeded?	Comments For interpretation, please refer to 3.1.5.1
Fenton Street Annerley	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours **Monitoring**	Extended hours Friday 15/4/22 9.30AM	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	75	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	73	71	Yes Case by case	Yes Goal 1 & Goal 2	site set up Fenton bobcat placing gravel 8 to 15m away from the monitor and operating within 20m of closest resident limited attenuation equipment consistent proposed equipment to be used for site set up equipment and location of use consistent with model and OOH permit
Ensign Avenue Annerley	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Friday 15/4/22 9:00AM	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	75	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	72	69	Yes Case by case	Yes Goal 1 & Goal 2	rail cutting dual Gauge 45mAwy from monitor (ca. 50m away from resident) loader, trucks, small grinder, excavator 10-15m away from monitor rail saw dominating the noise sessions equipment and location of use consistent with model and OOH permit"
Mildmay street Annerley	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Friday 15/4/22 8:35AM	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	70	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	74	70	Yes Case by case	Yes Goal 1 & Goal 2	site set up at Mildmay Gate with bobcat 2 loaders in corridor ferrying equipment back and forth rail clips being thrown in steel drums hand tools dominant source loaders especially their reverse alarms bobcat -->77dBA predicted loader -->70 dBA predicted loader was dominant --> reverse alarm dominating the sessions"
Ensign Ave Annerley	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Friday 15/4/22 8:15AM	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	71	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	75	71	Yes Case by case	Yes Goal 1 & Goal 2	site set up at OTV pad - loaders were the dominant noise sources - some loaders with reverse alarms dominating the sessions no extraneous noise sources monitor 7 m away from façade and 10-15m away from the works "
Cottenham St, Fairfield	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Saturday 16/4/22 08:31	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	80	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	71	67	Yes Case by case	Yes Goal 1 Only	Material excavation on Dual Gauge and load out down Cottenham St. Body trucks idling on Fenton St. Sweeper did three runs across both streets and was dominant noise source (Sound power level 109dBA). Extraneous noise sources primarily construction workers talking nearby (1m 10secs total). Monitor 7m from facade and 12m from works

Location	Receiver Type Details	Type of Monitoring	Work Hours	Monitoring date and time	Noise Type	Purpose of Monitoring	Predictive model (dBA)	Performance Goal 1 (dBA) (Condition 11(a), Table 2, $LA_{10/eq}$ noise goals)	Performance Goal 2 (dBA) – (Condition 11(c), Table 2 LA_{10} noise goal + 20dBA))	Measured LA_{10} (dBA)	Measured LA_{eq} (dBA)	DAP engagement prior to works	Is performance Goal exceeded?	Comments For interpretation, please refer to 3.1.5.1
Cottenham St, Fairfield	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Saturday 16/4/22 08:55	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	83	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	79	76	Yes Case by case	Yes Goal 1 & Goal 2	Material excavation on Dual Gauge and load out down Cottenham St. Body trucks idling on Fenton St. Sweeper did 1 run across Fenton St and was dominant noise source (Sound power level 109dBA). Extraneous noise sources primarily construction workers talking nearby, dog barking and plane heard overhead (4m 40secs total). Monitor 6m from facade and 9m from works.
Ensign Avenue, Annerley	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Saturday 16/4/22 09:40	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	84	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	72	67	Yes Case by case	Yes Goal 1 Only	Materials deliveries (bedding sand etc.) and plant movement in/out of rail corridor. Hammer w/ small attachment highest predicted noise (Sound power level 116 dBA), however the hammer was not in line of sight and was on Dual Gauge side, therefore the loader was the dominant noise source (Sound power level 102 dBA). Extraneous noise sources incl. planes, dog barking and people talking (5m 30secs total). Monitor 5m from facade and 11m from works.
Mildmay Street Annerley	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Saturday 16/4/22 10:15	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	85	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	71	70	Yes Case by case	Yes Goal 1 Only	Material stockpiling and load out. Hammer with small attachment highest predicted noise (Sound power level 116 dBA), however the hammer was not in line of sight, therefore the excavator was the dominant noise source (sound power level 102 dBA). Extraneous noise sources incl. people talking and plane overhead (3m 30 secs total). Monitor 5m away from facade and 10m from works.
Mildmay Street, Fairfield	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Saturday 16/4/22 07:39	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	85	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	77	74	Yes Case by case	Yes Goal 1 & Goal 2	Concrete foundation hammering of the old station building. Dominant noise source was the 2.5T hammer on the 20T excavator (sound power level 121 dBA). Extraneous noise source was people talking (2m 40secs total). Monitor 9.5m from facade and 9m from road plant and 27m from hammer.
Dudley Street, Fairfield	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Saturday 16/4/22 11:25	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	73	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	71	69	Yes Case by case	Yes Goal 1 Only	Material load out from PL1. Dominant noise source was the 13T excavator (sound power level102 dBA). Extraneous noise sources included people talking and birds (4m 30secs total). Monitor 8m from facade and 14m from works.

Location	Receiver Type Details	Type of Monitoring	Work Hours	Monitoring date and time	Noise Type	Purpose of Monitoring	Predictive model (dBA)	Performance Goal 1 (dBA) (Condition 11(a), Table 2, $LA_{10/eq}$ noise goals)	Performance Goal 2 (dBA) – (Condition 11(c), Table 2 LA_{10} noise goal + 20dBA))	Measured LA_{10} (dBA)	Measured LA_{eq} (dBA)	DAP engagement prior to works	Is performance Goal exceeded?	Comments For interpretation, please refer to 3.1.5.1
Mildmay street Annerley	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Sunday 17/4/22 08:58	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	80	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	68	68	Yes Case by case	Yes Goal 1 Only	Formation rebuild. Dominant noise source was grader (Sound power level 114 dBA). Extraneous noise was primarily construction workers talking (6m 20secs total). Monitor was 6m from façade and 26m from works.
Mildmay Street, Fairfield	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended hours Monday 18/4/22 07:40	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	74	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	76	72	Yes Case by case	Yes Goal 1 & Goal 2	Concrete foundation hammering on PL2 near pedestrian overpass. Dominant noise source was the 2.5T hammer on the 20T excavator (SWL 121 dBA). Extraneous noise source was people talking. Monitor approximately 5m from facade and 27m from hammer.
Dudley Street (monitor located on Equity Street)	Residential	Complaint Response	Extended & Standard Hours	Extended hours Monday 18/4/22 08:18	Intermittent	Complaint Response	N/A	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	77	76	Yes Case by case	Yes Goal 1 & Goal 2	Complaint received from 2 Dudley St concerning rock breaking activities occurring in the early hours of the morning. attended outdoor monitoring completed in response. activities same as above- although by the time monitoring occurred, the 2.5t hammer was no longer in use. Dudley Street Property facade is ~40m from where rock breaking activities were occurring. The predictive model tool predicted that the internal noise levels would be 70 dBA (exceeding the Noise gals + 20dBA). Based on previous monitoring of the 2.5T hammer, the predictive model can be relied upon to predict noise emissions Dominant noise source from activities occurring at the time of the monitoring was from scrap metal being loaded into a Body Truck for removal Monitoring undertaken on Equity Street side of property. Monitor located ~8m from the facade and 15m from the body truck. A Predictive Model was not able to present an accurate representation of noise levels, as the plant itself was not causing the highest noise levels. Unable to model the sound of metal being dropped into the truck

Location	Receiver Type Details	Type of Monitoring	Work Hours	Monitoring date and time	Noise Type	Purpose of Monitoring	Predictive model (dBA)	Performance Goal 1 (dBA) (Condition 11(a), Table 2, $LA_{10/eq}$ noise goals)	Performance Goal 2 (dBA) – (Condition 11(c), Table 2 LA_{10} noise goal + 20dBA))	Measured LA_{10} (dBA)	Measured LA_{eq} (dBA)	DAP engagement prior to works	Is performance Goal exceeded?	Comments For interpretation, please refer to 3.1.5.1
Mildmay street Annerley	Residential	Buffer Distance Test - Model Verification	Extended & Standard Hours	Extended Hours Monday 18/4/22 11:49	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	82	**Extended Hours Work** 52 (Outdoors) (42dBA + 10dBA façade reduction)[2]	**Extended Hours Work** 72 (Outdoors) (52 + 20dBA)	72	69	Yes Case by case	Yes Goal 1 Only	Grader usedwithin the rail corridor was the dominant noise source (SWL 114 dBA). The wheeled loader dumping gravel/ballast was a close second (SWL 113 dBA). Monitor was located approximately 5m from the Façade, and (minimum) 20m from the Grader. Due to the nature of the Grading activities, noise level was variable depending on where the Grader was located in relation to the monitor. Extraneous noise sources were people talking for brief periods

- Note 2 of Imposed Condition 11 Table 2 states *Where internal noise levels are unable to be measured or monitored, the typical noise reductions presented in Guideline Planning for Noise Control, Ecoaccess, DEHP, January 2017 (PFNC) apply*.
- The monitoring was undertaken to validate the model therefore external noise measurements are appropriate to determine the impact of construction noise.

- Note (2) – Façade Attenuation
  - Note 2 of Imposed Condition 11 Table 2 states *Where internal noise levels are unable to be measured or monitored, the typical noise reductions presented in Guideline Planning for Noise Control, Ecoaccess, DEHP, January 2017 (PFNC) apply*.
  - The PFNC guideline can no longer be accessed. The Department of Environment and Science (DES) website still states this guideline is under review and is yet to release an alternative guideline
  - Former revisions of the PFNC table 7 stated the following regarding typical noise reductions through the building façade:
    - 5 dB – Window wide open
    - 10 dB – Partially closed
    - 20 dB – Single glazed, closed
    - 25 dB – Thermal double glazing, closed
  - The RfPC-4 Technical Report considered that all receptors had closed external single glazing for the assessment of construction noise impacts.
  - The Queensland Ombudsman assessed this assumption for the Airport Link Project and recommended that 10dB be adopted for major infrastructure projects in Queensland[1].
  - Additionally, several acoustic studies have shown that 10 dB is a suitable assumption for open windows. Most importantly this requirement only applies to temporary rail works within the project footprint and does not apply to long-term operational rail noise exposure.
  - Accordingly, it is considered appropriate to consider a 10 dB reduction on this basis. This assumption can be used for predictive modelling and for noise measurements, where indoor noise measurements are not practicable.

[2] All free field measurements are undertaken in accordance with the latest revision of the Noise Measurement Manual from the Department of Environment and Science (DES) reference ESR/2016/2195

3.1.3 Vibration Monitoring

Vibration Monitoring to validate the predictive model was triggered for:

- The Easter SCAS works between Dutton Park and Fairfield Station and the associated use of a 14T roller
- CSR works under a rail possession withing the Rail corridor at RNA and the associate use of a 430 kg hammer

The results are presented in the below Table.

Complaint-based vibration monitoring was not triggered. No complaints related to vibration occurred during the reporting period.

Vibration monitoring to address property damage was not triggered by the predictive assessment.

3.1.4 Vibration Monitoring Results

Table 5 Summary of Vibration Data

Location	Date (Start and Finish)	Time of day	Closest DAP / Sensitive Place	Receiver Type (table 3 – Imposed Condition 11(e))	Purpose of Monitoring	Vibration intensive equipment	Maximum predicted vibration Level (mm/s)	Shortest distance between Equipment and Sensitive Place (m) @Time of Monitoring"	Maximum recorded vibration Level (mm/s)	Vibration goal for receiver (mm/s)	Exceedance of vibration limit?	Comments
Cottenham Street Annerley / Fairfield	14/04/2022-29/04/2022	Surface Works Standard Hours and extended Hours	Residential receiver Human Comfort	Residential	Construction Monitoring at Sensitive Places – Model Verification	14 T roller	5.9mm/s - 15m setback	15m (at minimum)	1.5	Transient Vibration 11(e) – 1mm/s (daytime human comfort – vibration goal) 11(e) – 0.5mm/s (night-time human comfort [sleep] – vibration goal) 11(g) – 10mm/s (daytime human comfort – vibration goal) - respite or case by case consultation trigger	No See section 3.1.5.2 for details	The monitoring validated that the predictive modelling is presenting a worst-case scenario.
Tamar Street Annerley / Fairfield	13/04/2022-28/04/2022	Surface Works Standard Hours and extended Hours	Residential receiver Human Comfort	Residential	Construction Monitoring at Sensitive Places – Model Verification	14 T roller	9.8mm/s - 9m setback	9m (at minimum)	3.3	Transient Vibration 11(e) – 1mm/s (daytime human comfort – vibration goal) 11(e) – 0.5mm/s (night-time human comfort [sleep] – vibration goal) 11(g) – 10mm/s (daytime human comfort – vibration goal) - respite or case by case consultation trigger	Yes See section 3.1.5.2 for details	The monitoring validated that the predictive modelling is presenting a worst-case scenario.
Campbell Street Herston / Albion	29/04/2022-04/05/2022	Surface Works Standard Hours	Commercial receiver Human Comfort	Commercial	Construction Monitoring at Sensitive Places – Model Verification	430 kg hammer	0.8mm/s - 25m setback	25m	0.05	Transient Vibration 11(e) – 2mm/s (daytime human comfort – vibration goal) 11(g) – 10mm/s (daytime human comfort – vibration goal) - respite or case by case consultation trigger	No See section 3.1.5.2 for details	The monitoring validated that the predictive modelling is presenting a worst-case scenario.

3.1.5 Interpretation

3.1.5.1 Noise Monitoring[2]

3.1.5.1.1 Model Verification

Three rounds of noise monitoring of noise intensive activities associated with the Easter SCAS Project works were carried out externally during Standard Work Hours to validate the predictive noise modelling outputs.

These activities were also authorised to occur during Extended Hours Work (under approved road possession and/or rail possession).

The monitoring activities were undertaken at two residential and one commercial sensitive place closest to the works.

The measured LA10 readings did not exceed the noise goal + 20dBA for works during Standard Work Hours.

However, in two of the three monitoring instances, the measured LA10 readings exceeded the noise goal + 20dBA for works during Extended Hours Work.

The noise monitoring confirmed that the actual noise emissions are generally consistent with the predicted noise emissions, providing assurance to the Project Team that the predictive noise modelling can be used as a reliable tool to guide community engagement prior to and during the Project Works.

Since:

- the works were authorised to proceed under Imposed Condition 10 as they were carried out during Surface works Standard Hours and Extended Hours Work (approved road possession and/or rail possession), and
- DAP engagement had also occurred with the level of consultation as per the requirements of Imposed Condition 11 (c).

The RIS scope of works continues to achieve the outcomes set out by the CGCR and OEMP.

3.1.5.1.2 Complaint's Response

One round of noise monitoring of concrete pour activities during an approved rail possession and road closure was undertaken externally. Monitoring was carried out in the immediate vicinity of the complainant's residence which is a timber house.

Monitoring was undertaken during extended work hours.

The measured LA10 readings exceeded the noise goal + 20dBA by 1dBA for works during extended working hours.

The works were authorised to proceed under Imposed Condition 10 as they were carried out during Extended Hours Work (under approved road possession and/or rail possession). DAP engagement had also occurred with the level of consultation as per the requirements of Imposed Condition 11 (c).

Therefore, the RIS scope of works achieved the outcomes set out by the CGCR and OEMP.

3.1.5.2 Vibration Monitoring

3.1.5.2.1 Model Verification

3.1.5.2.1.1 Cottenham Street Results

The vibration monitor was placed in the garden of residential property.

[2] All free field measurements are undertaken in accordance with the latest revision of the Noise Measurement Manual from the Department of Environment and Science (DES) reference ESR/2016/2195

Review of video footage confirmed that the peak reading of 1.5mm/s occurred on Sunday 24 April and is not associated with the use of the roller, or any other project works (at they were no project works at the time the peak was recorded).

Therefore, the peak reading is not associated with the Project Works.

The RIS scope of works achieved the outcomes set out by the CGCR and OEMP.

3.1.5.2.1.2 Tamar Street Results

The vibration monitor was placed in backyard of residential property.

Review of footage confirmed that the peak reading of 3.3mm/s was associated with the use of one smooth drum roller as per the predictive model.

The peak reading was three times lower than the predicted peak reading.

Case by case consultation had occurred with the resident and no vibration complaints were received from the resident.

The RIS scope of works achieved the outcomes set out by the CGCR and OEMP.

3.1.5.2.2 Complaint's Response

The Monitor was placed approximately 10m away from the building in a garden bed. The garden was located approximately 10m from the railway (track) and 25m from vibration intensive activity location.

The peak occurred on Sunday 01 May 2022. Rock breaking only occurred on the Saturday 30 April 2022, daytime.

The highest recorded peak on Saturday was 0.02mm/s and occurred at 1:09am and therefore neither the Saturday nor the Sunday peaks are associated with the Project Works.

These results are likely reflective of ambient conditions and the freight traffic travelling along the boundary of the commercial property.

The RIS scope of works therefore achieved the outcomes set out by the CGCR and OEMP.

3.2 Air Quality

Imposed Condition 13(b) of the CGCR requires that during construction, monitoring, and reporting on air quality in accordance with the Air Quality Management Plan, a sub-plan of the C-EMP occurs.

Visual monitoring was undertaken during routine environmental inspections. A total of 22 inspections were undertaken by the Environment Team across Mayne Yard, RNA Showgrounds, Southern Area, Fairfield Station, Yeronga Station, Clapham Yard, and the Northern Corridor.

UNITY has installed the following air quality monitoring devices, therefore data collected from these devices, when active, is reported on in the monthly report regardless of the Project Works occurring.

Table 6: Summary of Air Quality monitoring devices

Monitoring Device Installed by UNITY	Area	Name	Date Installed	Status for the Reporting Period
Dust Deposition Gauge	RNA Showgrounds	AQ-01	13 December 2019	Active
Dust Deposition Gauge	Mayne Yard (Eastern Air Shed)	AQ-04	13 February 2020	Active
Dust Deposition Gauge	Clapham Yard (Eastern Air Shed)	AQ-06	1 February 2021	Active

Monitoring Device Installed by UNITY	Area	Name	Date Installed	Status for the Reporting Period
Dust Deposition Gauge	Yeronga Station	AQ-07	12 August 2021	Inactive DDG was decommissioned on 10 December 2021 following the completion of earthworks
TSP / PM_{10} Monitor	Mayne Yard (Eastern Air Shed)	Mayne Yard	23 April 2020	Active
TSP / PM_{10} Monitor	Clapham Yard (Eastern Air Shed)	Clapham Yard	9 August 2021	Active
TSP / PM_{10} Monitor	RNA (Western Air Shed)	RNA	25 August 2020	Active

3.2.1 Dust results

As passive dust deposition gauges (DDG) are analysed monthly, results span 11 March 2022 to 12 April 2022.

This is excluding Mayne Yard, which spans from 11 March to 21 April 2022.

The Mayne Yard DDG is located within the active rail corridor and requires a Protection Officer for collection and replacement. Due to a staffing issue with Protection Officer the gauge was inaccessible until 21 April 2022.

The DDG was therefore left for an extended period of 41 days. As per AS/NZS 3580.10.1, section 7.3, for routine monitoring programs, the period of exposure is 30±2 days.

Although the Mayne Yard results are not considered a representative sample according to the Australian Standard, per the advice of the Project Certified Air Quality Professional (CAQP), the sample can still be recorded as indicative.

This is possible due to the gauge being active for a longer period than 30±2 days. As the gauge was in place for an additional 11 days and still did not record an exceedance, it is highly unlikely that an exceedance would have occurred over a 30-day period.

The results are detailed below and complied with Imposed Condition 13(b) of the CGCR.

Table 7 Dust deposition gauge results for the reporting period

CGCR Goal ($mg/m^2/day$)	AQ-01 - RNA Showgrounds ($mg/m^2/day$)	AQ-04 Abbotsford Rd (E Mayne) ($mg/m^2/day$)	AQ-06– Clapham Yard ($mg/m^2/day$)
120	17	30*	17
Total Rainfall during Period (mm)	78	74	132

* *Results are indicative only*

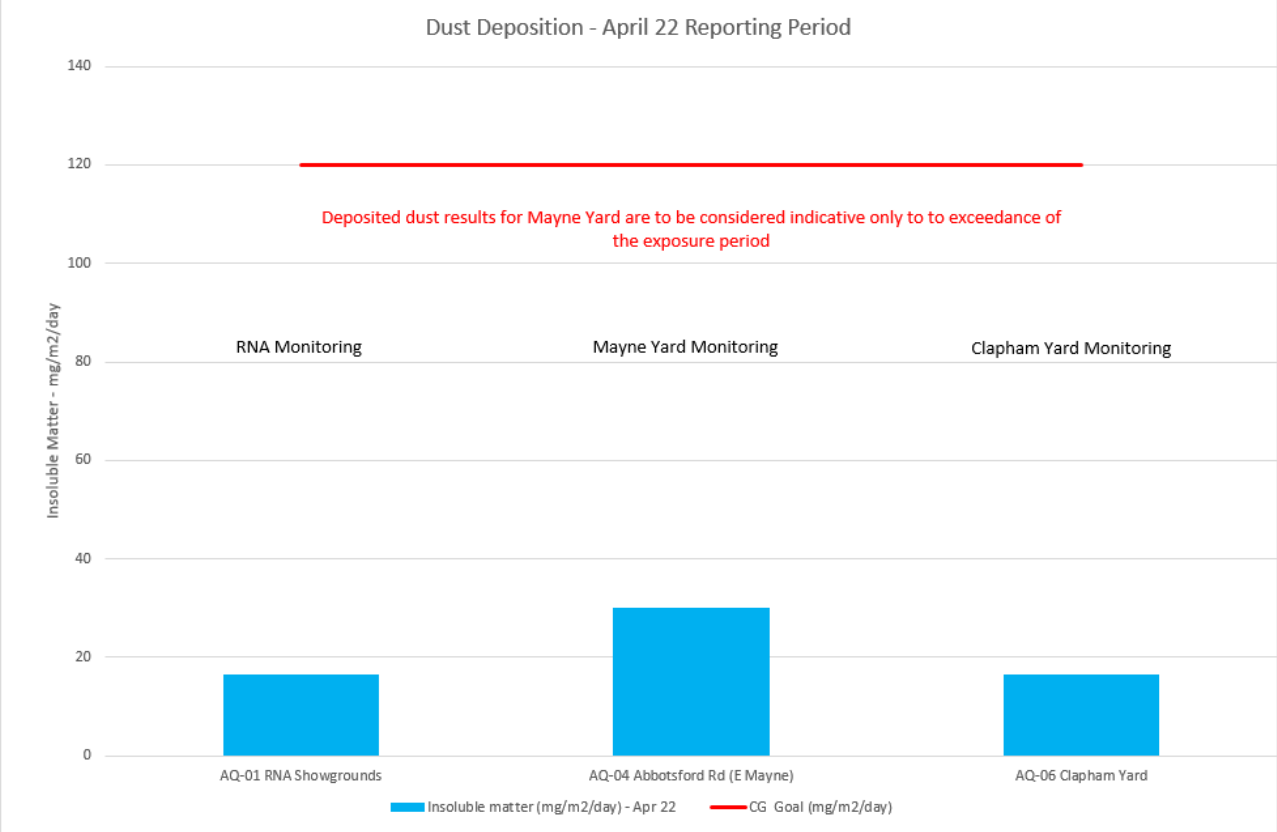


Figure 1 Air Quality Monitoring (Deposited Dust) Results

3.2.2 Particulates results

3.2.2.1 Air Quality Monitoring Stations

Unity had three (3) active air quality monitoring stations in place for the reporting period as detailed in Table 6.

It is however noted that the Mayne Yard results should not be relied upon for the purpose of compliance assessment, as:

- The DMP experience a series of malfunction resulting in abnormal readings between 21 and 26 April 2022 considering the scale of the works and weather conditions at the time of the readings
- the DMP has since been taken off-site for factory calibration. Upon inspection the equipment manufacturer has identified the Mayne Yard DMP has suffered significant water damage which has affected the heater and associate heated inlet (likely as a result of the extensive wet weather since late February).
- The DMP is currently being repaired.

The Clapham Yard DMP experienced a malfunction preventing recording and logging of data between 11 and 19 April 2022. The malfunction was rectified once access to the rail corridor where the DMP is located could be arranged.

3.2.2.2 Monitoring results – Reporting Period

External ambient air quality data was collected for total suspended particles (TSP), and particulate matter less than 10 µm (PM_{10}).

TSP is one of the indicators for which the Coordinator-General has imposed a goal of 80 µg/m^3 (over an averaging period of 24 hours) the project must aim to achieve under Imposed Condition 13(a).

PM_{10} is one of the indicators for which the Coordinator-General has imposed a goal of 50 µg/m^3 (over an averaging period of 24 hours) the project must aim to achieve under Imposed Condition 13(a).

These stations have been installed on-site as per AS/NZS 3850 1.1 following consultation with UNITY air quality professionals.

The results are represented in the below figures.

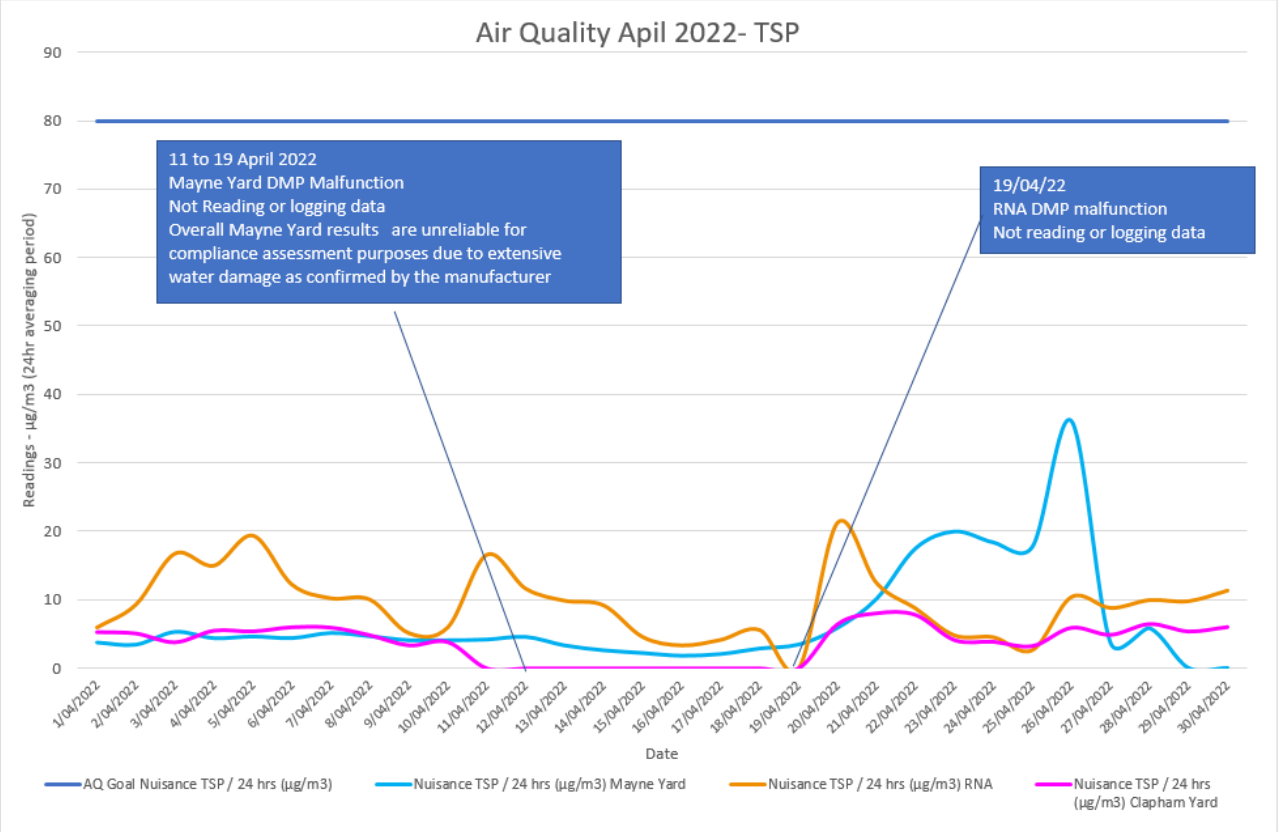


Figure 2 Air Quality Monitoring (TSP) Results

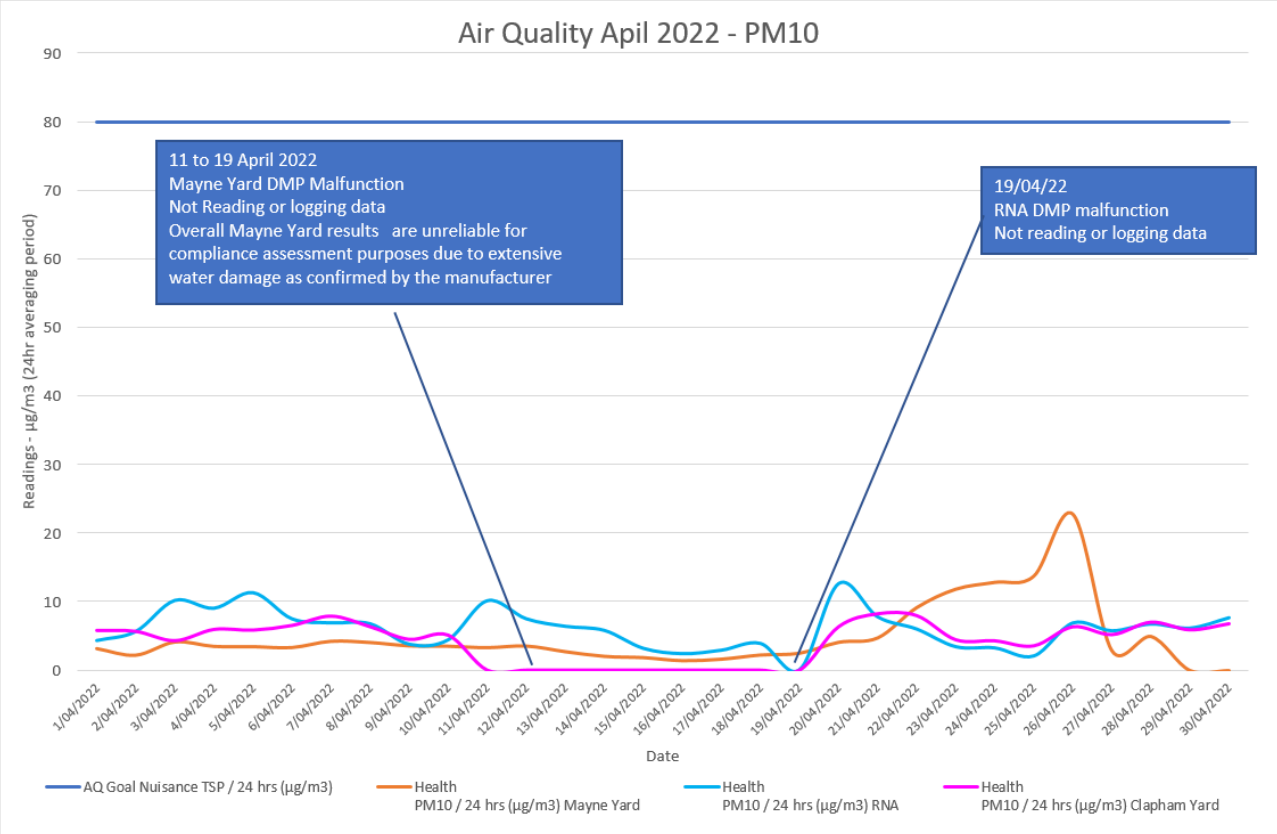


Figure 3 Air Quality Monitoring (PM_{10}) Results

3.2.2.3 Monitoring results – Annual averaging

Imposed Condition 13 (a) sets annual average air quality goals for TSP (Human health) and PM_{10} (Human health).

The below table summarises where TSP and PM_{10} monitoring have been carried out over the last 12 months.

The National Environment Protection (Ambient Air Quality) measure Technical paper No.5 provides guidance and procedures for uniform data recording and handling. (https://www.nepc.gov.au/system/files/resources/9947318f-af8c-0b24-d92804e4d3a4b25c/files/aaqprctp05datacollection200105final.pdf).

For air quality data to be officially reported, as per section 4.5 of Technical Paper No. 5, the minimum data capture would be 75% of the year or 274 days.

"It is essential that data loss is kept to an absolute minimum. For representative monitoring data and for credible compliance assessment it is desirable to have data capture rates higher than 95%. 75% data availability is specified as an absolute minimum requirement for data completeness".

In some instances, Relevant Project Works, which triggered TSP and PM_{10} monitoring was carried out for less than 274 days (e.g., at the Northern Corridor). In such instances the annual averages are still reported but are indicative only as data capture did not meet the 75% data capture requirements of *National Environment Protection (Ambient Air Quality) Measure Technical Paper No. 5 – Data Collection and Handling.*

Table 8: Summary of Air Quality monitoring devices over 12 months

Monitoring Device Installed by UNITY	Area	Date Installed	Date Decommissioned	Number of days data was captured over 365 days period	Data capture over an annual period	Annual performance reporting
TSP / PM_{10} Monitor	Northern Corridor (Eastern Air Shed)	23 April 2020	13 January 2021	260 over 365 days	71% over 365 days	*Indicative only* Data capture did not meet the minimum data capture requirements
TSP / PM_{10} Monitor	Mayne Yard (Eastern Air Shed)	23 April 2020	Not yet decommissioned	**Period 1** (to 23 April 2021) 358 over 365 days **Period 2** (Starting 24 April 2021) 364 over 365 days	**Period 1** 98% over 365 days **Period 2** 99% Over 365 days	**Applicable for Period 1** Data capture met minimum data capture requirements **Applicable for Period 2** Data capture has met minimum data capture requirements
TSP / PM_{10} Monitor	RNA (Western Air Shed)	11 June 2020	Not yet decommissioned	**Period 1** (to 11 June 2021) 314 over 365 days **Period 2** (starting 12 June 2021) 311 over 323 days	**Period 1** 86% over 365 days **Period 2** 96% Over 323 days	**Applicable for Period 1** Data capture met minimum data capture requirements **Applicable for Period 2** Data capture met minimum data capture requirements
TSP / PM_{10} Monitor	Clapham Yard (Eastern Air Shed)	1 February 2021	Not yet decommissioned	**Period 1** (to 31 January 2022) 326 (over 364 days) **Period 2** (starting 01 February 2022) 79 over 89 days	**Period 1** 90% over 364 days **Period 2** 87% Over 89 days	**Applicable for Period 1** Data capture met minimum data capture requirements **Not Applicable for Period 2** Data capture has not yet met the minimum data capture requirements

The below table summarises the applicable and indicative annual data results for TSP and PM_{10} against the performance goals imposed under Condition 13(a). Results in italic are indicative only.

Table 9 Annual Performance Results

Air Quality Indicator	Goal	Period	Northern Corridor	Mayne Yard	RNA	Clapham Yard
TSP	90 µg/m^3	Period 1	*8 µg/m^3*	11 µg/m^3	18 µg/m^3	8 µg/m^3
		Period 2	-	10 µg/m^3	15 µg/m^3	Not applicable

Air Quality Indicator	Goal	Period	Northern Corridor	Mayne Yard	RNA	Clapham Yard
PM_{10}	25 µg/m^3	Period 1	*5 µg/m^3*	7 µg/m^3	11 µg/m^3	5 µg/m^3
		Period 2	-	7 µg/m^3	10 µg/m^3	Not applicable

3.2.3 Interpretation

During the reporting period:

- None of the particulate results (when data can be relied upon) exceeded their relevant goals for PM_{10} and TSP
- There was no evidence of dust being generated and leaving the site boundaries; and,
- There was no complaint received associated with air quality concerns during the reporting period for the sites of Mayne Yard, Clapham Yard and RNA.

A total of two dust complaints were received during the reporting period, comprising of One (1) complaint at Fairfield Station and one (1) complaint at the southern area associated with the Easter SCAS works. Both complaints were addressed with additional dust mitigation measures implemented upon receipt of the complaints.

The RIS scope of works has met the project outcomes set out by the CGCR and OEMP.

The air quality monitoring stations located at Mayne Yard and RNA were removed from site and sent for factory calibration in May 2022. This factory calibration which must be carried off-site at the manufacturer's facility located in New South Wales.

3.3 Water Quality

Condition 15(b) of the CGCR requires that during construction, monitoring, and reporting on water quality in accordance with the Water Quality Management Plan, a sub-plan of the C-EMP, occurs.

Condition 15(a) requires that discharges of groundwater from Project Works within the Breakfast Creek catchment must comply with the Brisbane River Estuary environmental values and water quality objectives (Basin no.143 – mid-estuary) in the *Environment Protection (Water) Policy 2009*.

Condition 15(a) requires that discharges of groundwater from Project Works within Moolabin Creek, Yeerongpilly – Oxley Creek catchment must comply with the Oxley Creek - Lowland freshwater environmental values and water quality objectives (Basin no.143 (part) – including all tributaries of the Creek) in the *Environment Protection (Water) Policy 2009*.

Water quality monitoring to demonstrate compliance with Condition 15(a) was not triggered during the reporting period.

Water quality monitoring to demonstrate compliance with Condition 15(b) and Condition 18 was not triggered during the reporting period.

There were no exceedances of the default post rainfall monitoring trigger nor rainfall events resulting in run off and associated off site passive discharges.

There were no active surface water discharges (e.g., dewatering through pumping, sediment basin release) to receiving waters.

3.3.1 Rainfall Records

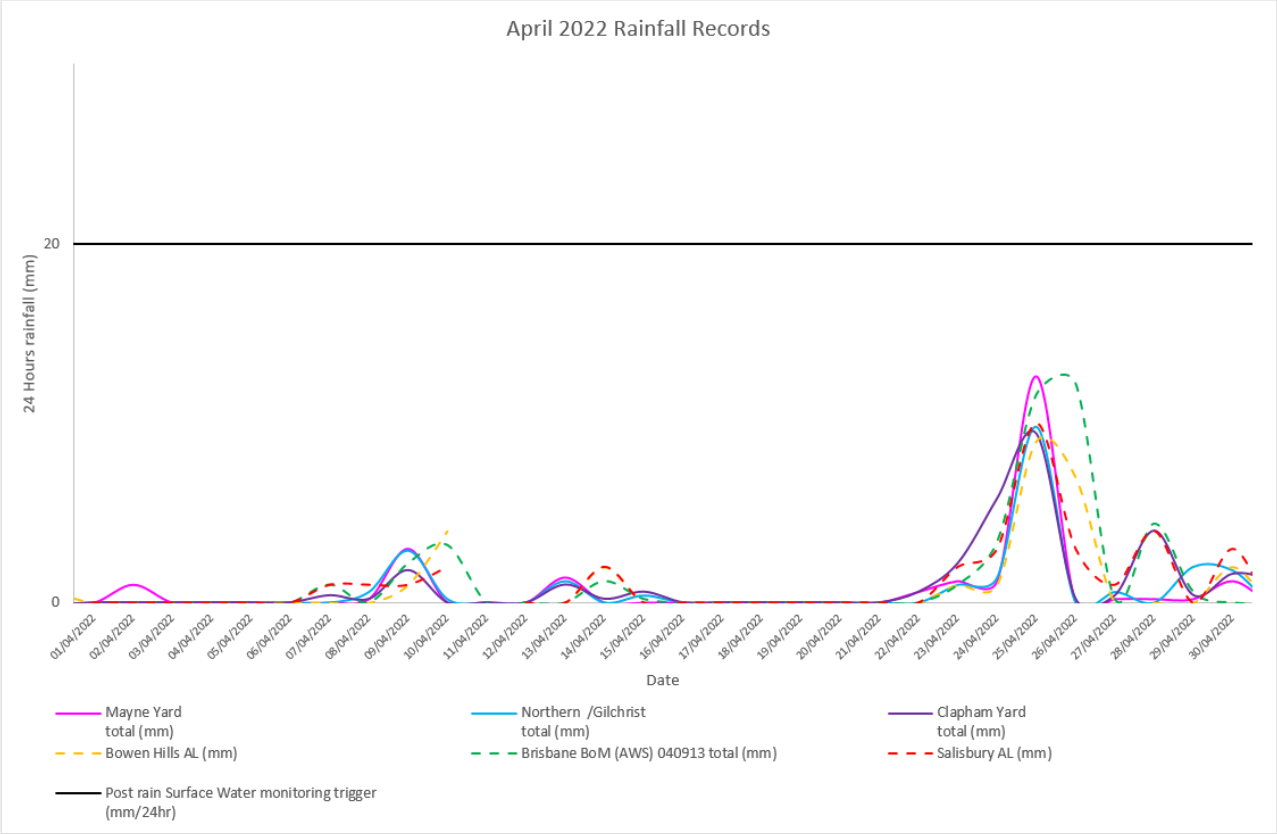


Figure 4: April 2022 Rainfall Records

3.3.2 Post Rainfall Monitoring Results

Post rainfall monitoring is triggered typically following any rainfall event exceeding 20 to 25 mm over 24 hours, however, storm events during the high-risk period of the year (November to March) of lesser amounts but of a higher intensity may cause run-off which would also trigger post-rain monitoring consistent with the C-EMP.

Post rainfall monitoring initially consists of visual monitoring to determine if in-situ water quality monitoring is necessary. If contaminants are observed (e.g., hydrocarbon sheen) or if there is a visible difference in water quality when comparing upstream and downstream monitoring points, water quality sampling will then be undertaken. The visual assessment will assess gross increases in turbidity, litter, hydrocarbons, or the movement of any coarse sediment into the waterway. The assessment will also note any potential offsite impacts that may be adversely affecting water quality within the construction area.

For the reporting period, there was not requirement for post rainfall monitoring either as visual monitoring or in-situ monitoring.

3.3.2.1 Qualitative Monitoring

Nil for the reporting period.

3.3.2.2 Quantitative Monitoring

Nil for the reporting period.

Table 10: Surface Water Discharge Monitoring Results

Date	Location	Waterway	Tide	Discharge Criteria[3]				TSS Delta
				Turbidity (NTU) Nil until Turbidity / TSS correlation achieved[4]	TSS (mg/L) <50	DO (%) Nil	pH (pH Unit) Stable pH reading; and General sites: 6.5 – 8.5, or Wallum/Acidic Ecosystems: 5.0 – 7.0	change of 5mg/L or 10% increase (whichever is the greatest)
Nil for the reporting period								

3.3.3 Groundwater Discharge Monitoring Results

Groundwater discharge monitoring was not triggered during the reporting period.

3.3.4 Routine Surface Water Monitoring Results

During the reporting period, UNITY did not undertake routine surface water monthly monitoring. A review of the data sample has identified that over 12 months of continuous data collection has occurred with a total of over 18 monitoring events. The frequency of background monitoring has therefore been reduced to bi-annually, with the next sampling round to be undertaken during the dry season (April to September).

Considering the unseasonal precipitation experience at the start of the dry season, dry season monitoring will likely occur in June or July 2022.

This reduction of monitoring frequency is acceptable to continue informing the Dis-1 Credit for the ISC 'Excellent Rating' the Project is pursuing.

3.3.5 Post Rainfall Monitoring Results Interpretation

Compliance with Imposed Conditions 15 and 18 was met.

[3] Refer to the waterways and water quality management plan, a C-EMP sub-plan for details of derivation of the discharge criteria

[4] Correlations are typically run on the source water (i.e., basins) not the receiving system where there is a dilution component of potentially diffuse sources of sediments from non-Project related areas. Due to the very limited amount of discharges the RIS Scope of Works has experienced, there is no correlation available. Typically, a minimum of 20 data points is used to determine TSS / in field turbidity correlation for site waters.

4 Compliance Review

4.1 Non-Compliance Events

The below section summarises the events to be reported in accordance with Condition 5 and Condition 6(b)(ii) of the CGCR. A non-compliance event (NCE) is defined as Project Works that do not comply with the Imposed Conditions.

4.1.1 Non - Compliance Events Summary

Table 11 Summary of Non-Compliance Events

Event Title	Location, Date, and time of event	Date the Event was Formally Notified to CG/IEM	Conditions Affected	Date the Event Report Formally Sent to CG/IEM	Status of Event
None for this reporting period					

4.2 C-EMP Compliance

The below table summarises compliance status with the C-EMP and monitoring requirements of relevant sub-plans for the reporting period.

Table 12 C-EMP and relevant Subplans monitoring requirements – Compliance Status for the reporting period

Aspect	Monitoring requirement	Activities risk profile	Monitoring undertaken	Compliance status with C-EMP / Subplan	Effect of the non-compliance
Air Quality	Visual monitoring program + Additional particulate monitoring as required based on the outcomes of the predictive assessment/risk profile	Moderate to High	Yes – visual monitoring is undertaken as part of routine inspections. Monitoring for TSP, PM_{10}, and deposited dust was also undertaken	Compliant	Not Applicable
Air Quality	Complaint's response	Moderate to High	Two complaints received associated with the Easter SCAS Particulate monitoring was not required based on the CAQP assessments and the complaints were addressed by increasing dust suppression	Compliant	Not Applicable
Noise	Buffer distance tests based on the outcomes of the predictive assessment based / risk profile of activities	Moderate to High	Yes	Compliant	Not Applicable
Noise	Plant noise audits for noisy plant to validate models input as required	Moderate to High	No	N/A	Not Applicable
Noise	Complaint's response	Moderate to High	Triggered	Compliant	Not Applicable
Vibration	Construction Monitoring at Sensitive Places / DAPs - Model verification based on the outcomes of the predictive assessment based / risk profile of activities	Moderate to High	Yes	Compliant	Not Applicable
Vibration	Complaint's response	Moderate to High	Not triggered no complaints	Compliant	Not Applicable

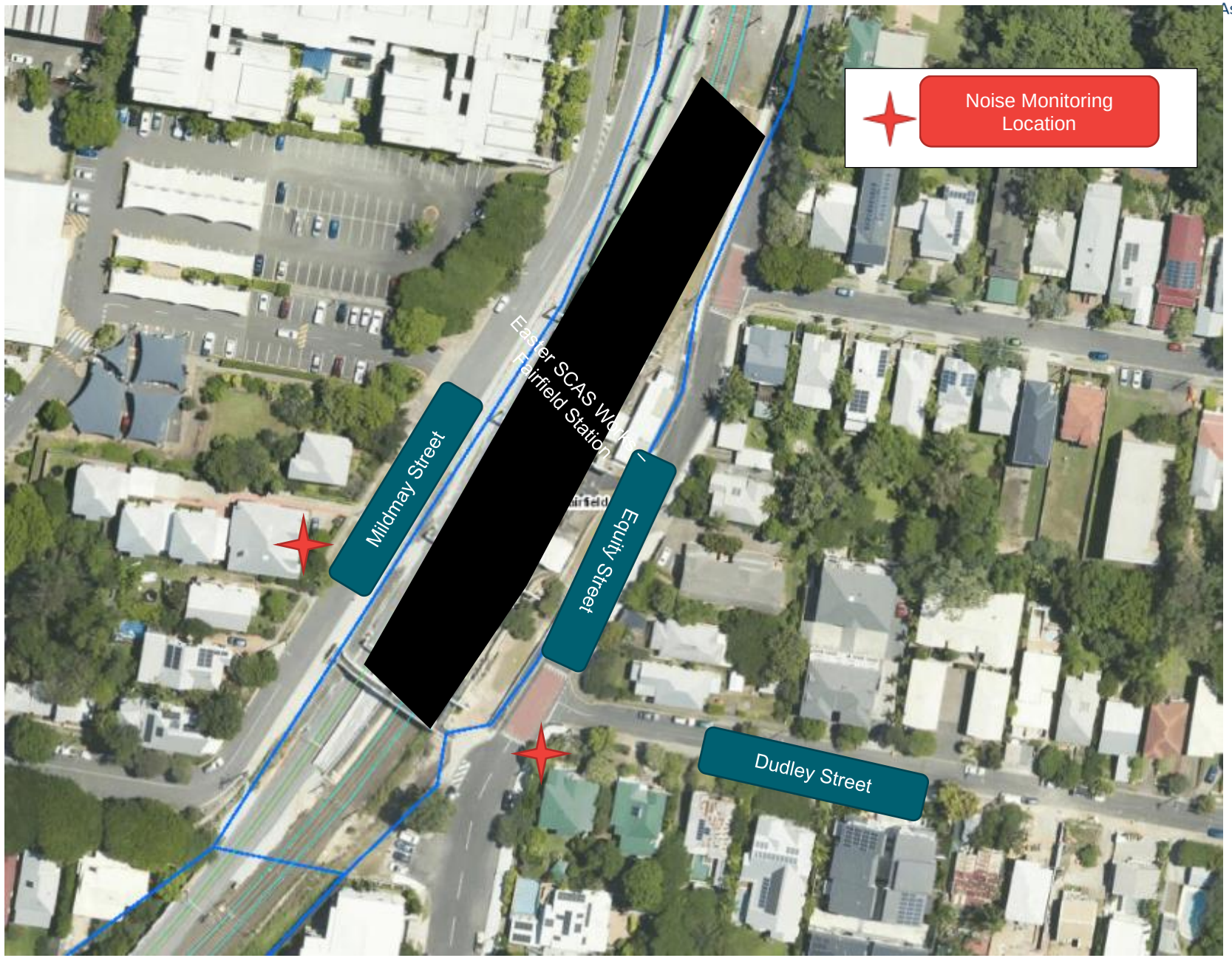
Aspect	Monitoring requirement	Activities risk profile	Monitoring undertaken	Compliance status with C-EMP / Subplan	Effect of the non-compliance
Water Quality	Bi-Annual monitoring	N/A	Wet season monitoring completed in January 2022 Dry Season monitoring likely to be schedule in June or July 2022	Compliant	Not Applicable
Water Quality	Post Rainfall	Moderate to High	Not Triggered	Compliant	Not Applicable
Water Quality	Dewatering	Moderate to High	Not Triggered	N/A	Not Applicable

Attachment 1 CGCR Non-Compliance Event Report (if required)

None for this reporting period.

Attachment 2 Monitoring Locations – Noise and Vibration

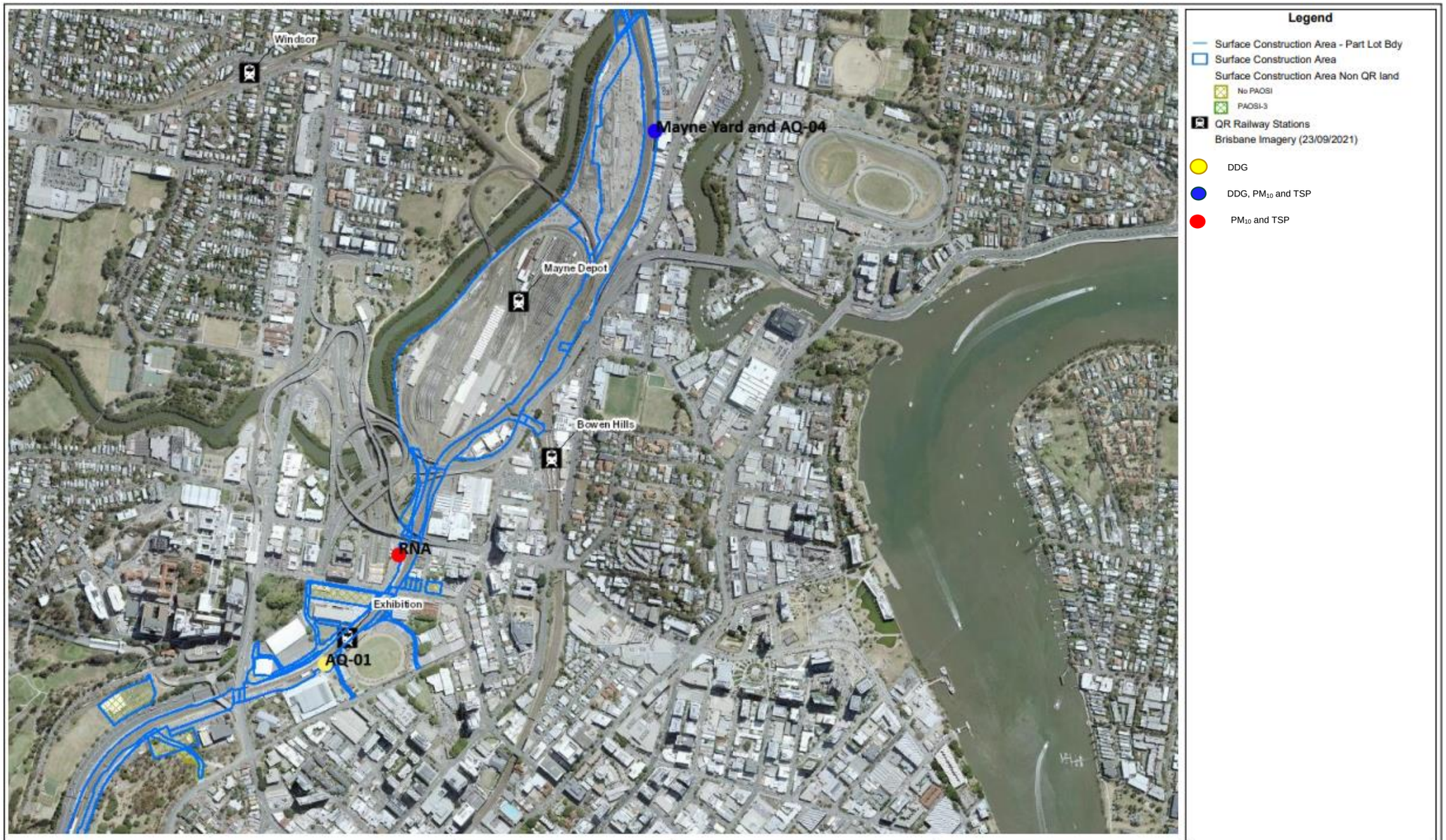

Noise Monitoring Location
Fenton Street
Cottenham Street
Easter SCAS Works – Southern Area
Mildmay Street
Ensign Avenue


Noise Monitoring Location
Mildmay Street
Equity Street
Dudley Street


Vibration Monitoring Location
Cottenham Street
Easter SCAS Works – Southern Area
Tamar Street


Vibration Monitoring Location
Area of works
Campbell Street

Attachment 3 Monitoring Locations – Air Quality



A FOR INFORMATION

Issue	Description	Date	Approved

Scale 1: 10,000

508 0 254.0 508 Meters

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Status	GIS OUTPUT NOT USED FOR CONSTRUCTION		
Original Size	A3	Drawn	
Coordinate System	GDA MGA94-56	Designed	
Height Datum	AHD	Date Printed	9-Feb-2022

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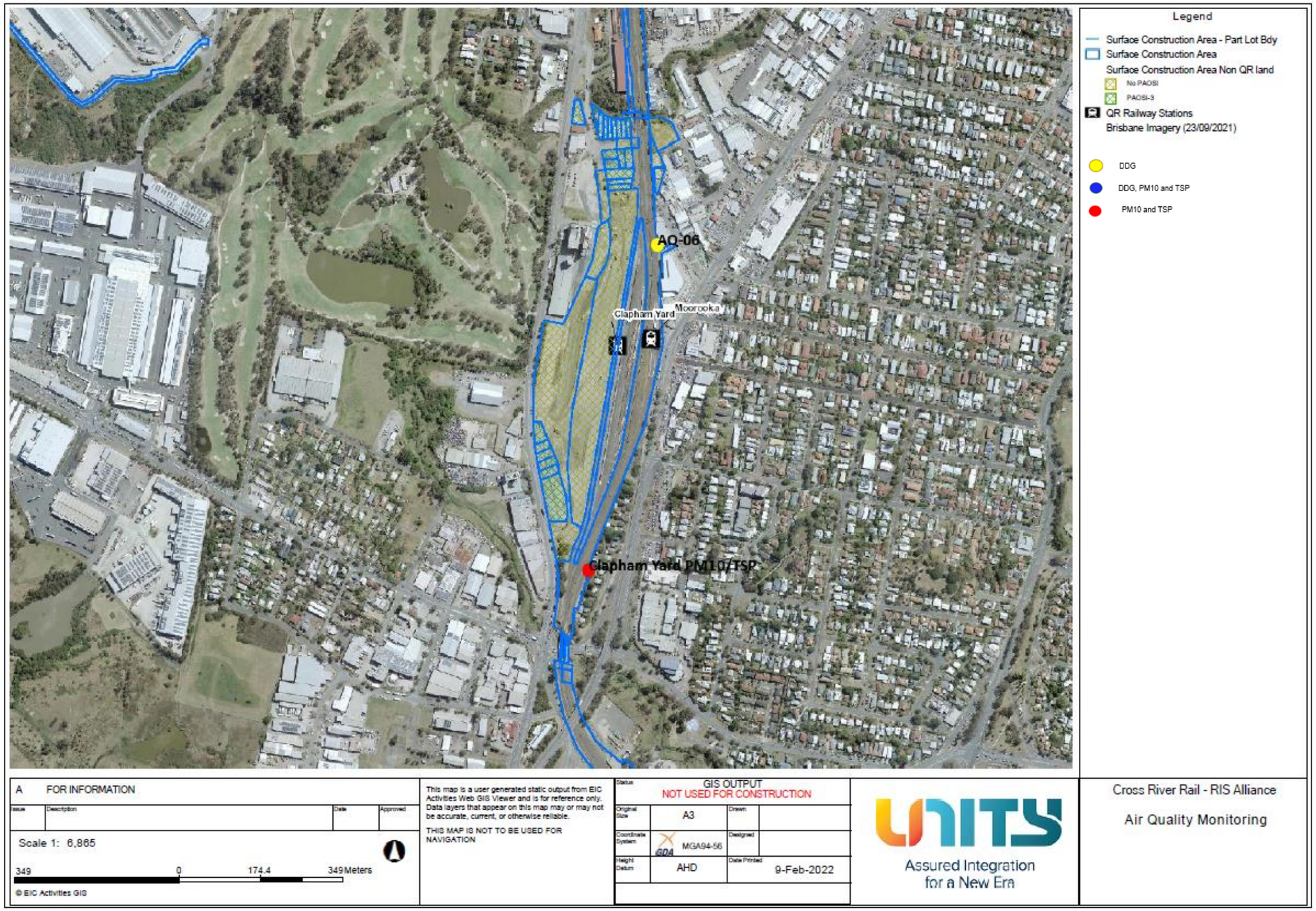
Air Quality Monitoring



A	FOR INFORMATION		
Issue	Description	Date	Approved

Scale 1: 6,865

349 0 174.4 349 Meters

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Status	GIS OUTPUT NOT USED FOR CONSTRUCTION		
Original Size	A3	Drawn	
Coordinate System	GDA MGA94-56	Designed	
Height Datum	AHD	Date Printed	9-Feb-2022

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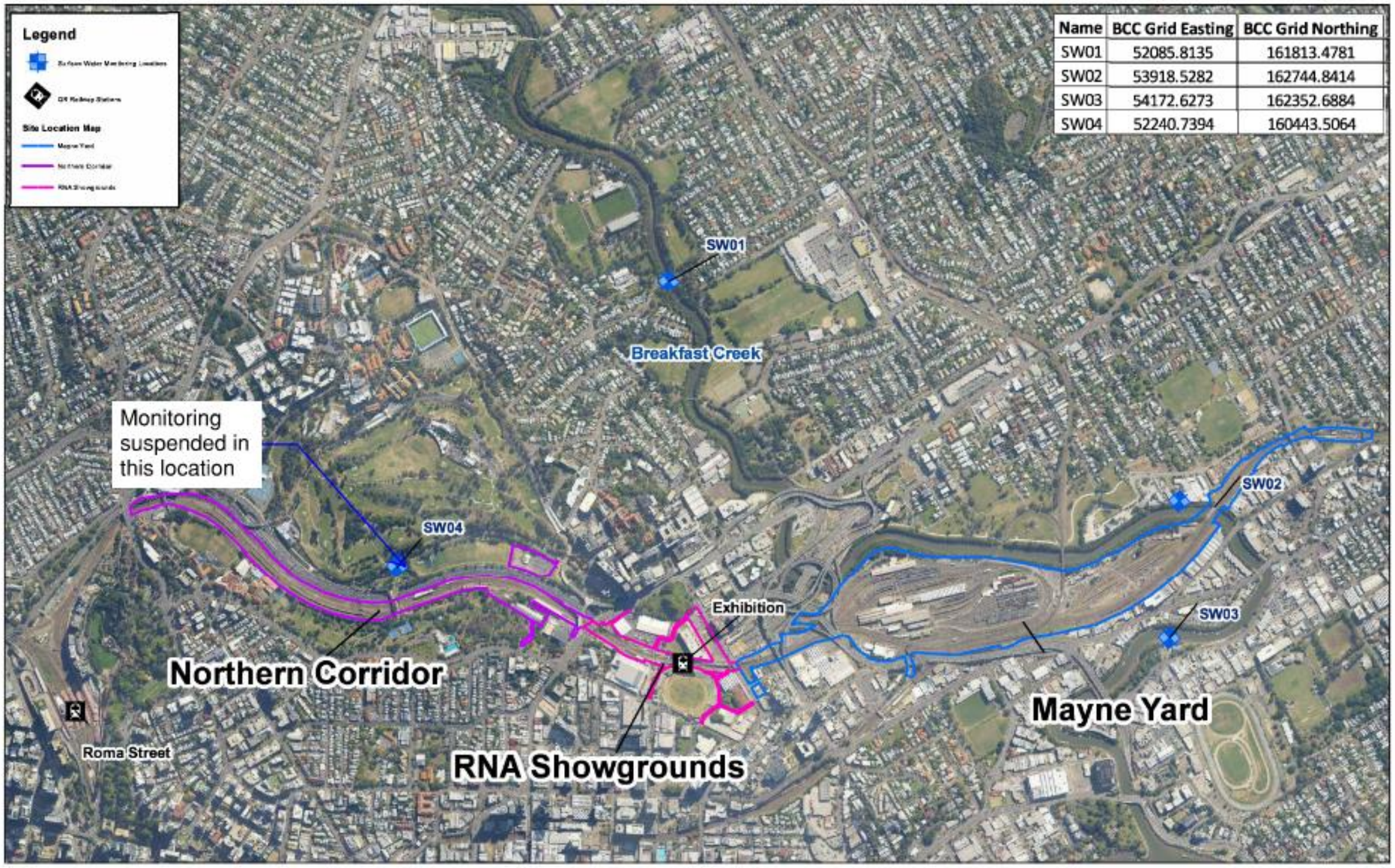
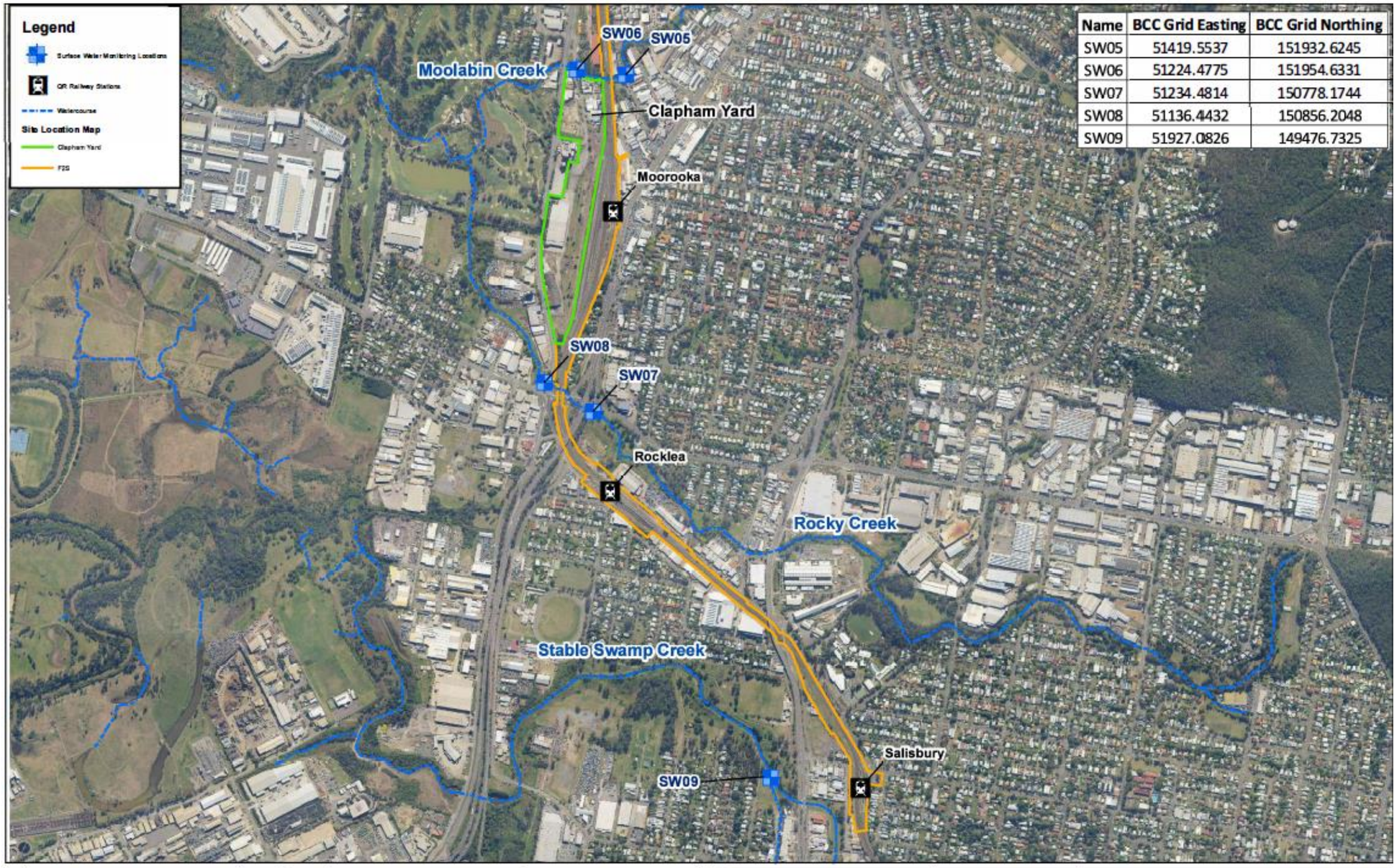
Air Quality Monitoring

Attachment 4 Monitoring Locations – Surface Water


Legend
Surface Water Monitoring Locations
QR Railway Stations
Site Location Map
Mayne Yard
Northern Corridor
RNA Showgrounds
Name | BCC Grid Easting | BCC Grid Northing
SW01 | 52085.8135 | 161813.4781
SW02 | 53918.5282 | 162744.8414
SW03 | 54172.6273 | 162352.6884
SW04 | 52240.7394 | 160443.5064
SW01
Breakfast Creek
Monitoring suspended in this location
SW04
SW02
Exhibition
SW03
Northern Corridor
Mayne Yard
Roma Street
RNA Showgrounds
0 100 200 400 600 m
Scale 1 : 12,000 cm
Status
Issued for Information
Original Size A3
Drawn GIS
Coordinate System GDA 1994 BCSC07
Designed UNITY
Height Datum AHD
Date Printed 2/13/2020
Filename: Surface_Water_Northern_Area_Map.mxd
Project Wide Surface Water Investigation
Figure 1 - Surface Water Monitoring Locations
Project Number
Discipline ENV
Document PL
Document Number 002
Rev 1
1 Overview Map 1/08/2019 UNITY
Rev Description Date Approved


Legend
Surface Water Monitoring Locations
QR Railway Stations
Watercourse
Site Location Map
Clapham Yard
FZS
Moolabin Creek
SW06
SW05
Clapham Yard
Moorooka
SW08
SW07
Rocklea
Rocky Creek
Stable Swamp Creek
SW09
Salisbury
Name | BCC Grid Easting | BCC Grid Northing
SW05 | 51419.5537 | 151932.6245
SW06 | 51224.4775 | 151954.6331
SW07 | 51234.4814 | 150778.1744
SW08 | 51136.4432 | 150856.2048
SW09 | 51927.0826 | 149476.7325
0 100 200 400 600 m
Scale 1 : 12,000 cm
1 | Southern Overview Map | 17/09/2019 | Unity
Rev | Description | Date | Approved
Status
Issued for Information
Original Size | A3 | Drawn | GIS
Coordinate System | GDA 1994 BCSG02 | Designed | Unity
Height Datum | AHD | Date Printed | 2/13/2020
Filename: | Surface_Water_Southern_Area_Map.mxd
N
Project Wide Surface Water Investigation
Figure 2 - Surface Water Monitoring Locations
Project Number | Discipline | Document | Document Number | Rev
ENV | PL | 002 | 1

Appendix B TSD Monthly Report

COORDINATOR-GENERAL'S MONTHLY REPORT: April 2022

Prepared in accordance with Coordinator-General Imposed Condition 6 - Reporting.

1. Monthly Monitoring Summary

It is CBGU Joint Venture's intent to aim for the Goals and Objectives relevant to vibration, noise, air quality and water monitoring within the practical extent of delivering the Project.

Vibration monitoring was conducted on five (5) occasions, and noise monitoring was conducted on twelve (12) occasions during April 2022 and includes data not reported during the March 2022 report. Each vibration and noise monitoring event confirmed works adhered to project requirements.

Ambient air quality monitoring was conducted at Roma Street, Albert Street, Woolloongabba, Boggo Road, Southern Portal and Northern Portal precinct sites during April 2022. Air quality monitoring confirmed works adhered to project requirements.

Water quality monitoring was conducted before the release of water from the site on twenty-eight (28) occasions. Each monitoring event confirmed project requirements were adhered to. Two (2) rounds of surface water quality monitoring were conducted; the monitoring events confirmed no impacts were generated by the Project and include data not reported during the March 2022 report.

2. CG Monthly Report – Compliance Assessment Against Imposed Conditions

Whilst not a requirement of Imposed Condition 6, CBGU offers the below Compliance Status Table as a good-will gesture to demonstrate the Project's ongoing environmental performance.

Table 1: Compliance Status – CG Imposed Conditions

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
1.	**General conditions** – compliance with the Project Changes relevant to the Contractor's scope.	Yes	CBGU project works have been conducted in compliance with the Imposed Conditions.
2.	**Outline Environmental Management Plan** – timely submission to the Coordinator-General, including required sub plans.	N/A	The OEMP is not an obligation of the CBGU Joint Venture.
3.	**Design** – the achievement of the Environmental Design Requirements.	Yes	Design and implementation proceeded in accordance with the Environmental Design Requirements.
4.	**Construction Environmental Management Plan** – all relating to Relevant Project Works.	Yes	All CBGU works were conducted in accordance with the Construction Environmental Management Plan (CEMP) (Rev 8).
5.	**Compliance and Incident management** – Non-compliance events, notifications, and reporting.	Yes	Nil non-compliances occurred during the monitoring period (refer to Section 4).
6.	**Reporting** – Monthly and Annual reporting.	Yes	All reporting requirements are completed in accordance with Imposed Condition 6.
7.	**Environmental Monitor** – engaged and functions resumed.	Yes	An Environmental Monitor (EM) is appointed to the Project, and CBGU is committed to working collaboratively to aid the EM's functions under Imposed Condition 7.
8.	**Community Relations Monitor** – engaged and functions resumed.	Yes	A Community Relations Monitor (CRM) is appointed to the Project, and CBGU is committed to working collaboratively to aid the CRM's functions under Imposed Condition 8.
9.	**Community engagement plan** – developed and endorsed by Environmental Monitor.	Yes	A Community Engagement Plan (CEP) has been developed and implemented in accordance with Imposed Condition 9. The CEMP has been endorsed with the CEP.
10.	**Hours of work** – works undertaken during approved hours.	Yes	CBGU project works have been conducted in accordance with the approved hours of work.

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
11.	**Noise** – Work must aim to achieve internal noise goals for human health and well-being.	Yes	CBGU project work has aimed to achieve internal noise goals for human health and well-being. Where internal noise levels have been unable to be measured, suitable noise reductions have been applied in accordance with Imposed Condition 11. Noise monitoring data is provided within Section 3.2.
	Vibration – Works must aim to achieve vibration goals for cosmetic damage, human comfort and sensitive building contents.	Yes	CBGU project work has aimed to achieve vibration goals for cosmetic damage, human comfort and sensitive buildings. Vibration monitoring data is provided within Section 3.1.
12.	**Property damage** relating to ground movement	Yes	The management of potential impacts relating to property damage has been completed in accordance with Imposed Condition 12.
13.	**Air quality** – Works must aim to achieve air quality goals for human health and nuisance.	Yes	CBGU project works have aimed to achieve air quality goals. Air quality monitoring data is provided within Section 3.3.
14.	**Traffic and transport** – Works must minimise adverse impacts on road safety and traffic flow.	Yes	CBGU project works have been conducted in a manner that has minimised adverse impacts on road safety and traffic flow.
15.	**Water quality** – Works must not discharge surface water and groundwater from the construction site above the relevant environmental values and water quality objectives.	Yes	CBGU has prepared and manages processes to ensure water quality is managed in accordance with Imposed Condition 15.
16.	**Water resources** – evaluate potential impact, plan works, implement controls and monitor the inflow of groundwater associated with drawdown.	Yes	CBGU project works are managed in accordance with Imposed Condition 16.
17.	**Surface water** – Must be designed to avoid inundation from stormwater due to a 2-year (6hr) ARI rainfall event and flood waters due to a 5-year ARI rainfall event and constructed to avoid afflux or cause the redirection of uncontrolled surface water flows, including stormwater flows, outside of worksites.	Yes	Design of the CBGU project works considers the requirements of Imposed Condition 17.
18.	**Erosion and sediment control** – Provisions for erosion and sediment control must be consistent with the Guidelines for Best Practice Erosion and Sediment Control (International Erosion Control Association, 2008) and the Department of Transport and Main Roads' Technical Standard MRTS52.	Yes	CBGU has prepared and manages processes to ensure erosion & sediment control is managed in accordance with Imposed Condition 18.
19.	**Acid Sulfate Soils** managed as per the *Queensland Acid Sulfate Soil Technical Manual.*	Yes	CBGU has prepared and manages processes to ensure acid sulphate soils are managed in accordance with Imposed Condition 19.

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
20.	**Landscape and open space** – general requirement to minimise impacts on landscapes and open space values and specific requirements around Victoria park	Yes	CBGU project works are designed and implemented in accordance with Condition 20.
21.	**Worksite rehabilitation** – worksites rehabilitated as soon as practicable upon completion of works or commissioning, and in consultation with Brisbane City Council.	Yes	CBGU project works are designed and implemented in accordance with Condition 21.
22.	**Flood Water –** Temporary emission to allow the release of Flood Waters to high flow receiving waters.	Yes	CBGU project works have been conducted in accordance with the provisions available to manage floodwaters.

3. Environmental Monitoring Results

Monitoring data is provided below in accordance with Imposed Condition 6(b)(i).

3.1 Vibration

Vibration requirements (levels) are defined as goals within Imposed Condition 11. The goals are to be aimed for.

The Coordinator-General Change Report acknowledges instances that exist that these goals may not be achieved.

Three (3) vibration monitoring sessions from March 2022 have been included in this month's report, as the results had not been received before the completion of last month's report. Two (2) vibration monitoring sessions were conducted during April 2022. All vibration monitoring adhered to project requirements and is detailed in the table below.

Table 2: Vibration Monitoring Data

No.	Start Date	Time (AM/PM)	Finish Date	Location	Average Vibration level (mm/s)	Max Vibration Level (mm/s)	Vibration Goal (mm/s)	Receiver / Goal Type	Adhered to Project Requirements (Yes / No)
1.	22/03/2022	10:35:00 AM	22/03/2022	Mary Street (Albert Street Precinct)	-	0.8	10	Heritage Structure (Controlled Blast)	Yes
2.	22/03/2022	14:49:00 PM	22/03/2022	Mary Street (Albert Street Precinct)	-	0.4	10	Heritage Structure (Controlled Blast)	Yes
3.	30/03/2022	16:00:00 PM	30/03/2022	Mary Street (Albert Street Precinct)	-	2.25	10	Heritage Structure (Controlled Blast)	Yes
4.	05/04/2022	10:00:00 AM	05/04/2022	Roma Street (Roma Street Precinct)	-	2.80	10	Heritage Structure (Controlled Blast)	Yes
5.	21/04/2022	14:00:00 PM	21/04/2022	Albert Street (Albert Street Precinct)	-	1.85	10	Residential Heritage Structure (Controlled Blast)	Yes

3.2 Noise

Noise requirements (levels) are defined as goals within Imposed Condition 11. The goals are to be aimed for.

The Coordinator-General Change Reports acknowledge instances exist that these goals may not be achieved.

Three (3) noise monitoring sessions from Mach 2022 have been included in this month's report, as the results had not been received before the completion of last month's report. Noise monitoring was conducted on nine (9) occasions during April 2022. All noise monitoring data adhered to project requirements and is provided in the table below.

Table 3: Noise Monitoring Data

No.	Date	Time (AM / PM)	Location (Street Name) (Construction Precinct)	Purpose of Monitoring	Internal or External [3] Monitoring	Activity	Dominant Noise Source	Noise Goal LA10[1]	Noise level LA10	Noise Goal LAeq[2]	Noise level LAeq	Adhered to Project Requirements (Yes / No)
1.	22/03/2022	10:35:00 AM	Albert Street (Albert Street Precinct)	Construction Monitoring	External	Controlled Blast	Construction	-	-	130[3]	127.4[3]	Yes
2.	22/03/2022	14:49:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring	External	Controlled Blast	Construction	-	-	130[3]	129.0[3]	Yes
3.	30/03/2022	16:00:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring	External	Controlled Blast	Construction	-	-	130[3]	122.3[3]	Yes
4.	5/04/2022	10:00:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Controlled Blast	Construction	-	-	130[3]	126[3]	Yes
5.	11/04/2022	3:06:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Ground Support	Construction	72	74.8	62	73.3	Yes
6.	11/04/2022	3:29:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Excavation	Construction	72	84.2	62	81.5	Yes

No.	Date	Time (AM / PM)	Location (Street Name) (Construction Precinct)	Purpose of Monitoring	Internal or External [3] Monitoring	Activity	Dominant Noise Source	Noise Goal LA10[1]	Noise level LA10	Noise Goal LAeq[2]	Noise level LAeq	Adhered to Project Requirements (Yes / No)
7.	14/04/2022	1:50:00 PM	Mary Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	Internal	Spoil Haulage	Road Traffic	45	45.8	35	45.2	Yes
8.	20/04/2022	12:34:00 PM	Rawnsley Street (Boggo Road Precinct)	Construction Monitoring at Sensitive Places	External	Railway works	Construction	57	57.6	47	57.6	Yes
9.	20/04/2022	12:52:00 PM	Peter Doherty Street (Boggo Road Precinct)	Construction Monitoring at Sensitive Places	External	Railway works	Construction	67	66.3	57	62.9	Yes
10.	21/04/2022	2:00:00 PM	Albert Street (Albert Street Precinct)	Controlled Blasting	External	Controlled Blast	Construction	-	-	130[3]	117.7[3]	Yes
11.	26/04/2022	8:13:00 AM	Gregory Terrace (Northern Portal)	Construction Monitoring at Sensitive Places	External	Rail Fit-out	Construction And Road Traffic	62	74.8	52	73.0	Yes
12.	26/04/2022	8:33:00 AM	Gregory Terrace (Northern Portal)	Construction Monitoring at Sensitive Places	External	Rail Fit-out	Construction And Road Traffic	62	74.9	52	71.5	Yes

- *[1] Intermittent noise goal (LA10)*
- *[2] Continuous noise goal (LAeq)*
- *[3] Blasting is measured in dB Linear Peak.*
- *Note: In accordance with Imposed Condition 11, where internal noise levels were unable to be measured, external noise goals were developed by an acoustic specialist using the following standards: ISO 140-5:1998 Acoustics – Measurement of Sound Insulation in Buildings and of Building Elements, Part 5: Field measurements of airborne sound insulation of façade elements and facades and ISO 354:1985 Acoustics – Measurement of sound absorption in a reverberation room.*

3.3 Air Quality

3.3.1 Deposited Dust Results

Air quality requirements (levels) are defined as goals within Imposed Condition 13. The goals are to be aimed for. The Coordinator-General Change Report acknowledges instances that exist that these goals may not be achieved. Dust deposition monitoring was performed in April 2022. The dust deposition gauges result for the reporting period are detailed below, and all monitoring data adhered to project requirements.

- *Table 4.2: April Air Quality Monitoring – Deposited Dust Data*

Location	Project Wide Air Quality Goals[1]			Monitoring results (mg/m2/day)	Comments
	Criterion	Air Quality Indicator	Goal (mg/m2/day)		
Northern Portal	Nuisance	Deposited dust	120	45.16	*Air quality monitoring was performed during the reporting period. All results adhered to project requirements.*
Roma Street Precinct				10.00	
Albert Street Precinct (North)				51.52	
Albert Street Precinct (South)				69.70	
Woolloongabba Precinct (North)				22.58	
Woolloongabba Precinct (South)				16.13	
Boggo Road Precinct (North)				6.90	
Boggo Road Precinct (South)				44.83	
Southern Portal (South)				6.90	
Southern Portal (East)				13.79	

3.3.2 Particulates and Ambient Air Quality Results

Total Suspended Particules (TSP) and particulate matter less than 10µm (PM10) monitoring was conducted during April 2022.

TSP and PM10 are monitored using portable air quality units and nearby Government air quality stations. Targeted monitoring of potential dust-generating activities is conducted by the mobile air quality units and was completed at Albert Street, Woolloongabba, Boggo Road and Northern Portal Precincts during April 2022. Three (3) Government air quality stations near the Construction Precincts are also utilised.

Table 5: Targeted Air Quality Monitoring – Total Suspended Particles and PM10 Data

Date	TSP Project Goal[1]	PM10 Project Goal	Woolloongabba		Albert		Boggo Road[2]		Northern Portal	
			TSP	PM 10	TSP	PM 10	TSP	PM 10	TSP	PM 10
	(µg/m3/24 hr)									
01-Apr-22	80	50	5.25	5.25	25.83	25.50	-	-	6.77	6.68
02-Apr-22	80	50	6.22	6.21	14.58	14.43	5.36	5.35	7.75	7.71
03-Apr-22	80	50	6.46	6.46	13.59	13.43	6.50	6.47	8.89	8.85
04-Apr-22	80	50	6.54	6.54	17.59	17.34	7.12	7.11	9.37	9.28
05-Apr-22	80	50	10.64	10.64	27.73	27.47	10.17	10.15	13.87	13.80
06-Apr-22	80	50	6.59	6.58	23.29	23.07	9.29	9.28	9.18	9.13
07-Apr-22	80	50	7.63	7.62	25.30	25.06	9.30	9.29	10.87	10.81
08-Apr-22	80	50	5.13	5.13	21.98	21.70	6.32	6.32	7.51	7.46
09-Apr-22	80	50	6.06	6.05	19.20	18.97	5.16	5.16	8.31	8.26
10-Apr-22	80	50	5.28	5.27	13.00	12.87	4.65	4.64	7.84	7.82
11-Apr-22	80	50	5.45	5.44	19.53	19.34	4.70	4.68	10.06	10.00
12-Apr-22	80	50	7.04	7.04	21.88	21.68	-	-	11.83	11.75
13-Apr-22	80	50	5.46	5.44	16.16	16.00	5.58	5.54	7.82	7.75
14-Apr-22	80	50	4.44	4.42	17.98	17.76	3.08	3.07	5.33	5.27
15-Apr-22	80	50	2.78	2.77	21.41	21.16	2.93	2.90	7.30	7.26
16-Apr-22	80	50	2.59	2.58	21.86	21.61	-	-	5.85	5.82
17-Apr-22	80	50	3.62	3.62	20.54	20.25	-	-	6.60	6.53
18-Apr-22	80	50	4.43	4.42	22.33	22.04	-	-	8.83	8.79

Date	TSP Project Goal[1]	PM10 Project Goal	Woolloongabba		Albert		Boggo Road[2]		Northern Portal	
			TSP	PM 10	TSP	PM 10	TSP	PM 10	TSP	PM 10
	(µg/m3/24 hr)									
19-Apr-22	80	50	5.17	5.16	15.71	15.54	3.80	3.78	8.14	8.08
20-Apr-22	80	50	6.23	6.21	32.87	32.52	7.27	7.23	9.77	9.67
21-Apr-22	80	50	6.90	6.88	29.31	28.98	7.79	7.78	10.00	9.90
22-Apr-22	80	50	11.66	11.64	22.75	22.53	-	-	8.27	8.21
23-Apr-22	80	50	11.45	11.45	27.08	26.87	-	-	6.64	6.59
24-Apr-22	80	50	22.85	22.85	21.88	21.68	-	-	5.78	5.69
25-Apr-22	80	50	18.34	18.33	25.43	25.19	-	-	5.16	5.14
26-Apr-22	80	50	14.40	14.39	18.98	18.77	-	-	8.68	8.61
27-Apr-22	80	50	4.93	4.92	16.69	16.54	-	-	7.46	7.41
28-Apr-22	80	50	7.23	7.23	18.85	18.69	-	-	10.59	10.54
29-Apr-22	80	50	6.93	6.93	16.43	16.23	6.56	6.52	13.26	10.45
30-Apr-22	80	50	6.72	6.71	22.11	21.86	7.92	7.88	11.88	11.83

- [1] Project works must aim to achieve construction air quality goals. The Coordinator-General Change Report – Whole of Project Refinements 2019 acknowledges instances exist that these goals may not be achieved.
- [2] The Boggo Road air quality unit experienced technical difficulties during the month of April 2022. As soon as practicable the unit was inspected, and the problem was resolved. A nearby (Woolloongabba) DES Air Quality Station demonstrated compliant air quality during this outage period, these results are provided below. Low levels were also consistently monitored throughout the month when the unit was operating. The monitoring unit is being reviewed to reduce the likelihood of future intermittent lapses.

CBGU also utilises three (3) Government air quality monitoring stations to monitor PM10 near the project sites. The results during this reporting period were as follows:

- Brisbane CBD: PM10 daily Maximum average: **17.8µg/m3/24 hr** (https://apps.des.qld.gov.au/air-quality/chart/?station=cbd&parameter=18&date=1/04/2022&timeframe=month)
- South Brisbane: PM10 daily Maximum average: **26.4 µg/m3/24 hr** (https://apps.des.qld.gov.au/air-quality/chart/?station=sbr&parameter=18&date=1/04/2022&timeframe=month)
- Woolloongabba: PM10 daily Maximum average: **31.7µg/m3/24 hr** (https://apps.des.qld.gov.au/air-quality/chart/?station=woo&parameter=18&date=1/04/2022&timeframe=month)

The graphical representation of the Government air quality data is presented in the below charts (refer to Figures 1-3).

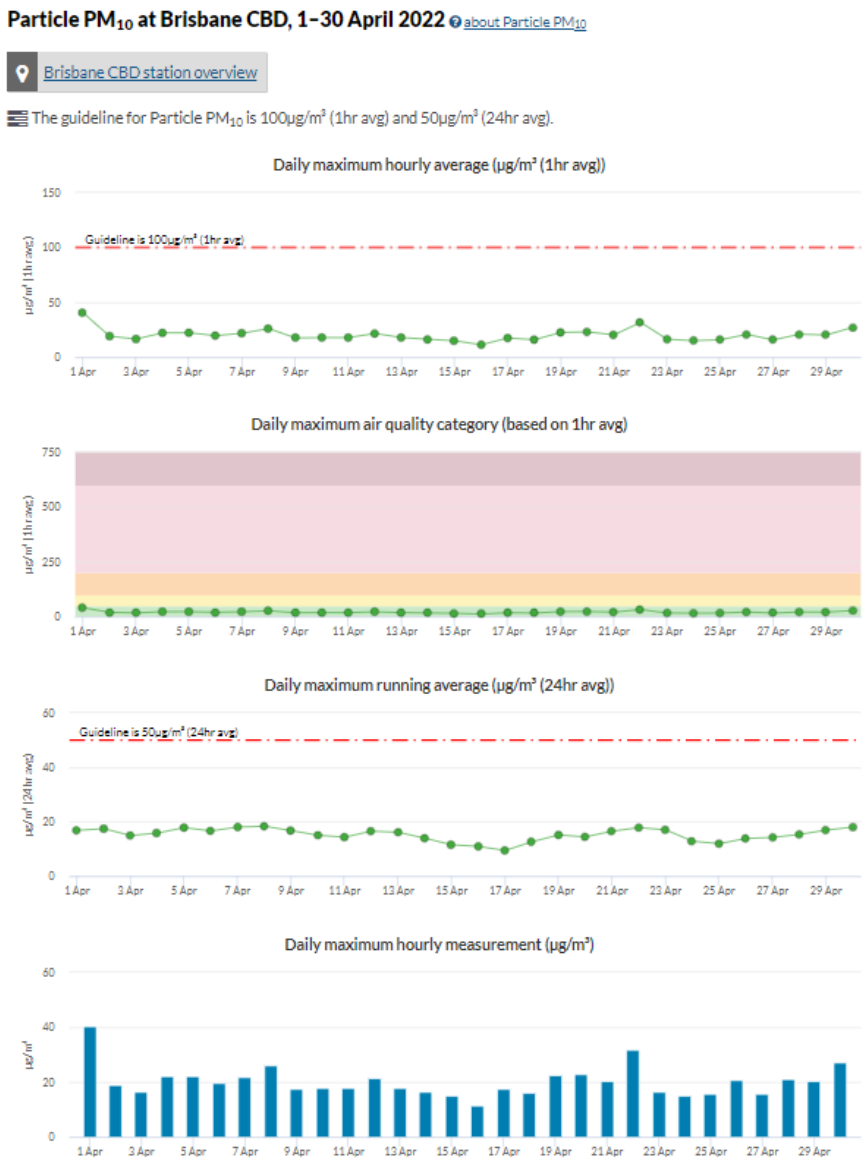


Figure 1: Brisbane CBD – DES Station - PM10 graph for April 2022 (reproduction from the DES website).

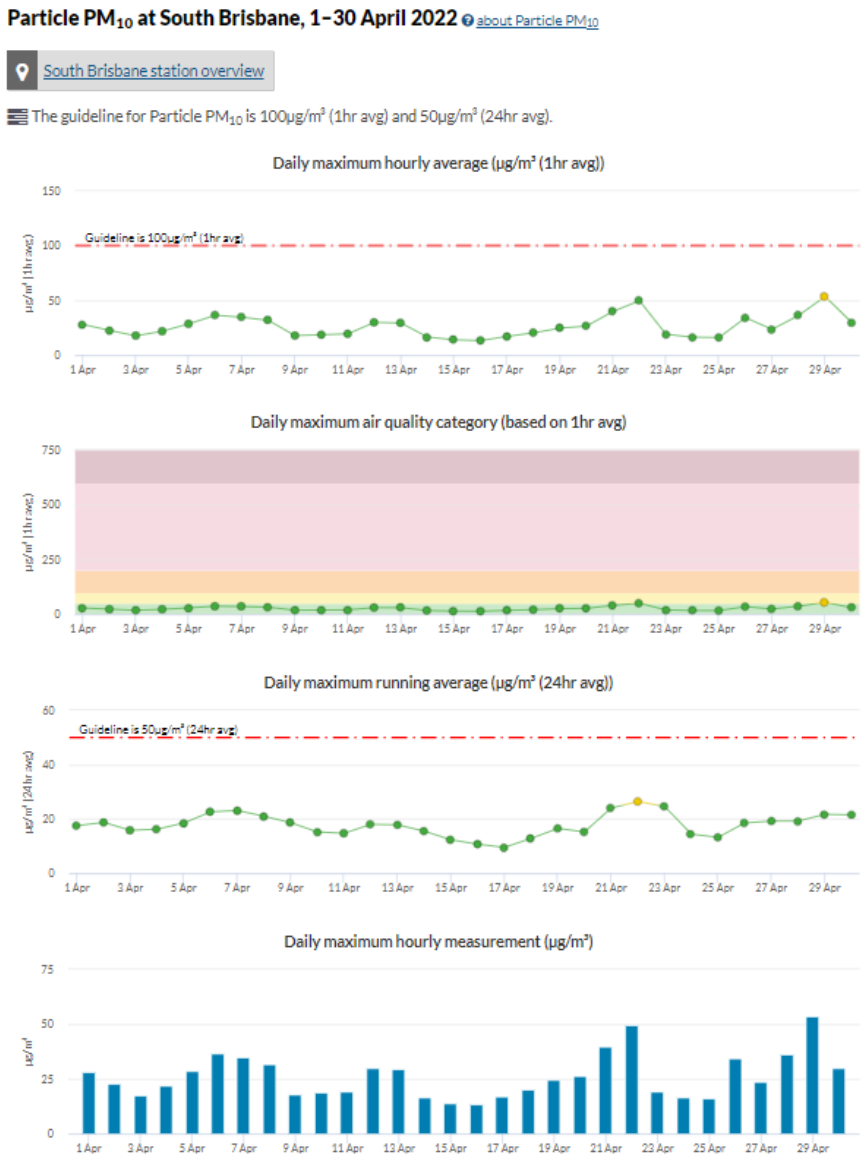


Figure 2: South Brisbane – DES Station - PM10 graph for April 2022 (reproduction from the DES website).

Figure 3: Woolloongabba – DES Station - PM10 graph for April 2022 (reproduction from the DES website).

3.4 Water Quality – Discharge

CBGU undertook five (5) water quality monitoring events prior to the release (groundwater and surface water) from the site.

3.4.1 Groundwater Discharge

Water quality monitoring data is provided in the table below. The Woolloongabba's March 2022 results have been included in this month's report as the results were received in April 2022.

Table 6: Groundwater Discharge – Water Quality Monitoring Data

Location	Date	Testing of Water Quality Objectives [1]											Adhered to Project Requirements (Yes / No)
		pH	Suspended solids (mg/L)	Turbidity (NTU)	Ammonia N (µg/L) [3]	Oxidised N (µg/L) [3]	Organic N (µg/L) [3]	Total nitrogen (µg/L) [4]	Total phosphorus (µg/L)	Filterable Reactive phosphorus (FRP) (µg/L)	Chlorophyll a (µg/L)	Dissolved oxygen (%) [2]	
Woolloongabba	9/03/2022	7.20	6	0.30	1,050	410	2,600	4,100	50	<10	<1	47.20	Yes
Albert Street	12/04/2022	7.36	<5	0.88	26,800	43,300	4,600	74,700	<10	<10	<1	87.14	Yes
Roma Street	13/04/2022	7.60	<5	0.10	690	1,180	3,200	5,100	40	<10	<1	81.09	Yes
Boggo Road	16/04/2022	8.4	<5	0.70	50	300	200	500	20	<10	3	105.30	Yes
Woolloongabba	12/04/22	7.40	<5	0.10	460	760	1,500	2,800	60	<10	<1	67.78	Yes

- [1] The Project's discharge procedure is designed to minimise environmental impact and aim to achieve the water quality objectives. Water quality objectives are defined as goals within the Brisbane River estuary environmental values and water quality objectives document.
- [2] All results adhere to project requirements in that site practices are designed to aim to achieve the water quality objectives. The dissolved oxygen samples were acquired prior to discharge from the site. Pumping of the water will have inadvertently aerated the water, thus influencing the dissolved oxygen level.
- [3] All results adhere to project requirements in that site practices aim to achieve the water quality objectives. These samples identified results generally consistent with pre-construction conditions, and no external influences were introduced by construction activity.
- [4] Total nitrogen levels adhered to project requirements in that site practices are designed to aim to achieve the water quality objectives. The results are mostly below that of the receiving environment. They are also considered abnormal compared to results from previous months, and are influenced by external factors (e.g., high rainfall events, overloaded sewage systems, fertilising natural areas, etc) rather than related to construction activities.
- Note: Testing of EPP (Water) Quality Objectives are analysed at a NATA accredited laboratory each month (results provided above). Field testing (turbidity, pH) is done regularly during ongoing discharge.

3.4.2 Ponded/Surface Water Discharge

Discharged ponded/Surface water quality monitoring data is provided in the table below.

Table 7: Surface Water Discharge - Water Quality Monitoring Data

No.	Location	Date	Testing of Water Quality Objectives [1]		Adhered to Project Requirements (Yes / No)
			pH	Turbidity (NTU)	
1.	Northern Portal	1/04/2022	8.24	6.82	Yes
2.	Northern Portal	2/04/2022	8.24	0.18	Yes
3.	Northern Portal	4/04/2022	8.07	1.58	Yes
4.	Northern Portal	5/04/2022	8.24	8.84	Yes
5.	Northern Portal	6/04/2022	8.35	1.87	Yes
6.	Northern Portal	7/04/2022	8.35	1.87	Yes
7.	Northern Portal	8/04/2022	8.31	2.76	Yes
8.	Northern Portal	9/04/2022	8.28	20.70	Yes
9.	Northern Portal	11/04/2022	8.23	22.70	Yes
10.	Northern Portal	12/04/2022	8.10	16.79	Yes
11.	Northern Portal	13/04/2022	8.22	15.40	Yes
12.	Northern Portal	14/04/2022	8.31	24.30	Yes
13.	Northern Portal	15/04/2022	8.24	6.16	Yes
14.	Northern Portal	16/04/2022	8.32	21.30	Yes
15.	Northern Portal	17/04/2022	8.20	6.73	Yes

16.	Northern Portal	18/04/2022	8.32	9.72	Yes
17.	Northern Portal	19/04/2022	8.31	19.14	Yes
18.	Northern Portal	20/04/2022	8.24	30.80	Yes
19.	Northern Portal	21/04/2022	8.31	11.39	Yes
20.	Northern Portal	22/04/2022	8.29	20.60	Yes
21.	Northern Portal	24/04/2022	8.32	0.08	Yes
22.	Northern Portal	25/04/2022	8.21	22.30	Yes
23.	Southern Portal	26/04/2022	7.91	25.60	Yes
24.	Northern Portal	26/04/2022	8.18	25.10	Yes
25.	Northern Portal	27/04/2022	8.34	39.30	Yes
26.	Northern Portal	28/04/2022	8.27	27.90	Yes
27.	Northern Portal	29/04/2022	8.09	23.90	Yes
28.	Northern Portal	30/04/2022	8.40	0.50	Yes

- [1] The Project's discharge procedure is designed to minimise environmental impact and aim to achieve the water quality objectives. All discharges were compliant with *Guidelines for Best Practice Erosion and Sediment Control (IECA, 2008) and* the *Department of Transport and Main Roads' Technical Standard MRTS 52 – Erosion and Sediment Control.*

3.5 Water Quality – Surface Water

During April 2022, CBGU JV undertook one (1) round of surface water sampling at five (5) site locations (upstream and downstream).

Post rainfall monitoring data performed at the end of March 2022 has been included in the below table, as the results had not yet been received from the laboratory at the completion of last month's report.

Results from the below-monitoring locations reflect the condition of the broader catchment (not just the influence of the Project). Water quality generally appears good, and water discharge from the Project would not have had an impact on the catchment considering the results also provided within section 3.4 above.

Table 8: Offsite Upstream & Downstream Water Quality Data

Location	Upstream / Downstream	Date	Purpose of Monitoring	Turbidity (NTU)	EC (µS/cm)	Dissolved oxygen (%)	pH
Albert Street	Upstream	30/03/2022	Post Rainfall	24.5	12500	53.25	7.38
Albert Street	Downstream	30/03/2022	Post Rainfall	19.7	12200	58.09	7.40
Roma Street	Upstream	30/03/2022	Post Rainfall	24	10300	58.09	7.41
Roma Street	Downstream	30/03/2022	Post Rainfall	20.1	10600	52.4	7.39
Northern Portal	Upstream	30/03/2022	Post Rainfall	48.8	448	78.67	7.75
Northern Portal	Downstream	30/03/2022	Post Rainfall	44.9	445	82.3	7.70
Woolloongabba	Upstream	31/03/2022	Post Rainfall	32.6	10300	66.57	7.51
Woolloongabba	Downstream	31/03/2022	Post Rainfall	34.2	10400	60.52	7.51
Boggo Road [1]	Downstream	31/03/2022	Post Rainfall	20.1	765	75.04	7.34
Roma Street	Upstream	12/04/2022	Monthly	10.62	28200	76.25	7.75
Roma Street	Downstream	12/04/2022	Monthly	8.85	27700	73.83	7.76

Location	Upstream / Downstream	Date	Purpose of Monitoring	Turbidity (NTU)	EC (µS/cm)	Dissolved oxygen (%)	pH
Northern Portal	Upstream	12/04/2022	Monthly	1.39	965	96.82	7.95
Northern Portal	Downstream	12/04/2022	Monthly	0.76	957	100.46	7.97
Albert Street	Upstream	12/04/2022	Monthly	13.25	25400	70.2	7.57
Albert Street	Downstream	12/04/2022	Monthly	20.2	25200	72.62	7.66
Woolloongabba	Upstream	12/04/2022	Monthly	33.1	21600	73.83	7.47
Woolloongabba	Downstream	12/04/2022	Monthly	32.6	21200	75.04	7.48
Boggo Road [1]	Downstream	12/04/2022	Monthly	6.49	4460	47.2	7.48

- [1] Monitoring at the Boggo Rd site occurs at a pipe outlet at the beginning of the surface catchment. There is no upstream/downstream monitoring point as such. The pipe outlet receives water released from the site, as well as a broader stormwater catchment.

4 Non-Compliances

Details of non-compliances are provided in accordance with Imposed Condition 6(b)(ii).

A Non-Compliance Event is defined as project works that do not comply with the Imposed Conditions. Nil non-compliances occurred during the monitoring period.

Table 9: Non-Compliance Events this Month

Event Title	Location, Date, and time of the event	Date the Event was Formally Notified to CG/IEM	Conditions Affected	Date the Event Report Formally Sent to CG/IEM	Status of Event
Nil					

5 Complaints

Reporting of complaints is provided below in accordance with Imposed Condition 6(b)(iii).

During April 2022, eleven (11) complaints relating to the Project were received, as detailed in Table 10 below.

Table 10: Summary of Complaints

No.	Date	Location	Description of Issue	Responses	Status of Event
1.	4 Apr 22	Mary Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street Precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed
2.	7 Apr 22	Mary Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street Precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed

No.	Date	Location	Description of Issue	Responses	Status of Event
3.	7 Apr 22	Albert Street (Albert Street Precinct)	Several items	A stakeholder contacted the Project regarding noise, air quality, access, and vibration generated from the Albert Street Precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to project requirements, and the works undertaken were consistent with the community notification.	Closed
4.	8 Apr 22	Mary Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street Precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed
5.	12 Apr 22	Albert Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street Precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed
6.	14 Apr 22	Roma Street (Roma Street Precinct)	Workforce Behaviour	A stakeholder contacted the Project regarding worker behaviour. CBGU investigated the event and reminded the workforce of employee expectations.	Closed
7.	17 Apr 22	Albert Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street Precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed
8.	17 Apr 22	Albert Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street Precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed

No.	Date	Location	Description of Issue	Responses	Status of Event
9.	17 Apr 22	Albert Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street Precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed
10.	22 Apr 22	Albert Street (Albert Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Albert Street Precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed
11.	27 Apr 22	Tank Street (Roma Street Precinct)	Noise	A stakeholder contacted the Project regarding noise generated from the Roma Street Precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration. CBGU also outlined the mitigation measures used to alleviate potential impacts and ensure compliance. CBGU reviewed the circumstances and monitoring confirmed works adhered to the Project's noise requirements, and the works undertaken were consistent with the community notification.	Closed