

Cross River Rail Project

Monthly Environmental Report

November 2020



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Executive Summary

This Monthly Environmental Report (MER) has been produced for Project Works undertaken on site for November 2020 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 – design refinements and condition changes 2020 (July 2020)* and 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 CBUG 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 against each condition:

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. OEMP has been updated as part of the RfPC9 submission and submitted to the Coordinator-General on 20 November 2020.
3.	Design – achievement of the Environmental Design Requirements	NA	<p>RIS – Detailed flood modelling is in progress to ensure design will not cause property damage from flood impacts to third parties for events up to and including the 1 in 100 Annual Exceedance Probability flood event.</p> <p>Documents continue to be reviewed related to compliance with the environmental design standards.</p> <p>TSD – ongoing progress with design packages relating to tunnel and station work.</p>

Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
4.	Construction Environmental Management Plan – all relating to Relevant Project Works.	Yes	<p>RIS – CEMP has been updated to include new Relevant Project Works - Fairfield Station, Yeronga Station & Northern Corridor (Stage 2). This CEMP (Revision 6) has been endorsed by the EM and submitted to the Coordinator-General on 24 November 2020.</p> <p>TSD – CEMP Revision 7 for tunnelling and ongoing activities in the Central area was endorsed by the EM, submitted to the Coordinator-General in June and became effective on 5 July 2020.</p>
5.	Compliance and Incident management – Non-compliance events, notifications and reporting.	Yes	<p>There were no non-compliance events (NCEs) recorded in November 2020.</p> <p>Refer to Section 2.5 of this report.</p>
6.	Reporting – Monthly and Annual reporting.	Yes	<p>Reports have been submitted in accordance with the conditioned requirements.</p> <p>RIS – Refer to Appendix A (RIS Monthly Report).</p> <p>TSD – Refer to Appendix B (TSD Monthly Report).</p>
7.	Environmental Monitor (EM) – engaged and functions resumed.	Yes	Ongoing
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.

Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
11.	Noise – Project Works must aim to achieve internal noise goals for human health and well-being.	Yes	<p>Project Works met project noise requirements at Sensitive Places.</p> <p>RIS – Refer to Appendix A (Table 2 and Section 3.1.4).</p> <p>TSD – Exceedance of the noise goal at Albert Street was recorded on 23 November during noise monitoring for demolition activity as part of the complaint response. Noise modelling for demolition did not predict noise levels to be greater than 20 dBA (LA₁₀) above the noise goal for sensitive places on Albert Street. Mitigation measures as per the CEMP including consultation with the affected DAPs was undertaken and respite period was applied between 12-2pm.</p> <p>Refer to Appendix B (Table 3).</p>
	Vibration – Project Works must aim to achieve vibration goals for cosmetic damage, human comfort and sensitive building contents.	Yes	<p>RIS – Vibration monitoring as a result of the predictive vibration assessments and complaints was not triggered.</p> <p>TSD – Vibration monitoring continues across the sites and results are compliant with conditioned requirements. Refer to Appendix B (Table 2).</p>
12.	Property damage – relating to ground movement.	Yes	<p>RIS – Pre-condition surveys have been completed at heritage listed, commercial and residential buildings at RNA, Northern Corridor and Fairfield to Salisbury stations, and Property Damage Sub-plans developed and implemented.</p> <p>TSD – Vibration modelling has been prepared and is ongoing and where required, building condition survey reports (for heritage and residential buildings), and Property Damage Sub-plans developed and implemented.</p>
13.	Air quality – Works must aim to achieve air quality goals for human health and nuisance.	Yes	<p>RIS – Project Works did not achieve air quality goals for dust deposition at monitoring station AQ-03 due to the commencement of the sewer (PUP) works resulting in AQ-03 being located in the immediate vicinity (within 5m) of these works. Being very close to the works, the deposited dust result at AQ-03 is not deemed reliable to ascertain whether there is an exceedance of the air quality goal at the nearby sensitive place. Review of the nearest Transurban Centenary Pool air</p>

Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
			<p>quality station for the reporting period revealed PM₁₀ below 50µg/m³ goal indicating that there was not any localised particulate or dust impacts at the Centenary Pool. Refer to Appendix A (Table 4, Section 4.1.2 and Figures 1, 2 and 3).</p> <p>TSD – Project Works achieved air quality goals. Refer to Appendix B (Table 4 and Table 5).</p>
14.	Traffic and transport – Works must minimise adverse impacts on road safety and traffic flow.	Yes	Traffic Management Plans covered in the CEMPs and Sub-plans for all active worksites have been reviewed by the EM.
15.	<p>Water quality – Works must not discharge groundwater from the construction site above the relevant environmental values and water quality objectives.</p> <p>Monitor and report on water quality in accordance with CEMP and Sub-plans.</p>	Yes	<p>Monitoring and reporting on groundwater and surface water quality was undertaken in accordance with RIS and TSD Water Quality Management Plans.</p> <p>RIS – No surface water or groundwater discharges occurred for the month. Refer to Appendix A (Table 5) for routine surface water monitoring results.</p> <p>TSD – Two groundwater discharges at Albert Street and Roma Street did not meet the Water Quality Objectives, however recorded levels are consistent with pre-construction conditions. No external influences were introduced by the construction activities.</p>
16.	Water resources – Evaluate potential impact, plan works, implement controls and monitor inflow of groundwater associated with drawdown.	Yes	<p>RIS – There will be 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.</p> <p>TSD – Inflow of groundwater into the worksites is being continuously monitored to validate the predictive modelling.</p>
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.

Imposed Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
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	Compliance with site specific ESC Plans and water quality discharge investigation criteria has been met. Site specific ESC plans for all active work sites have been certified and 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 for all active worksites are in place.
20.	Landscape and open space – general requirement to minimise impacts on landscapes and open space values and specific requirements around Victoria Park.	Yes	Stormwater bund works and sewer relocation works in Victoria Park continue under the Site Environmental Plan and the Department of Environment and Science (DES) approved Heritage Exemption Certificates (202008-10615 EC and 202004-10189 EC).
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 Non-Compliance Events (NCEs) raised in November 2020.

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	<i>State Development and Public Works Organisation Act 1971</i>
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, a number of Requests for Project Change (RfPC) submissions have been evaluated by the Coordinator-General. RfPC 8 is applicable for the works that took place in November 2020.

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.

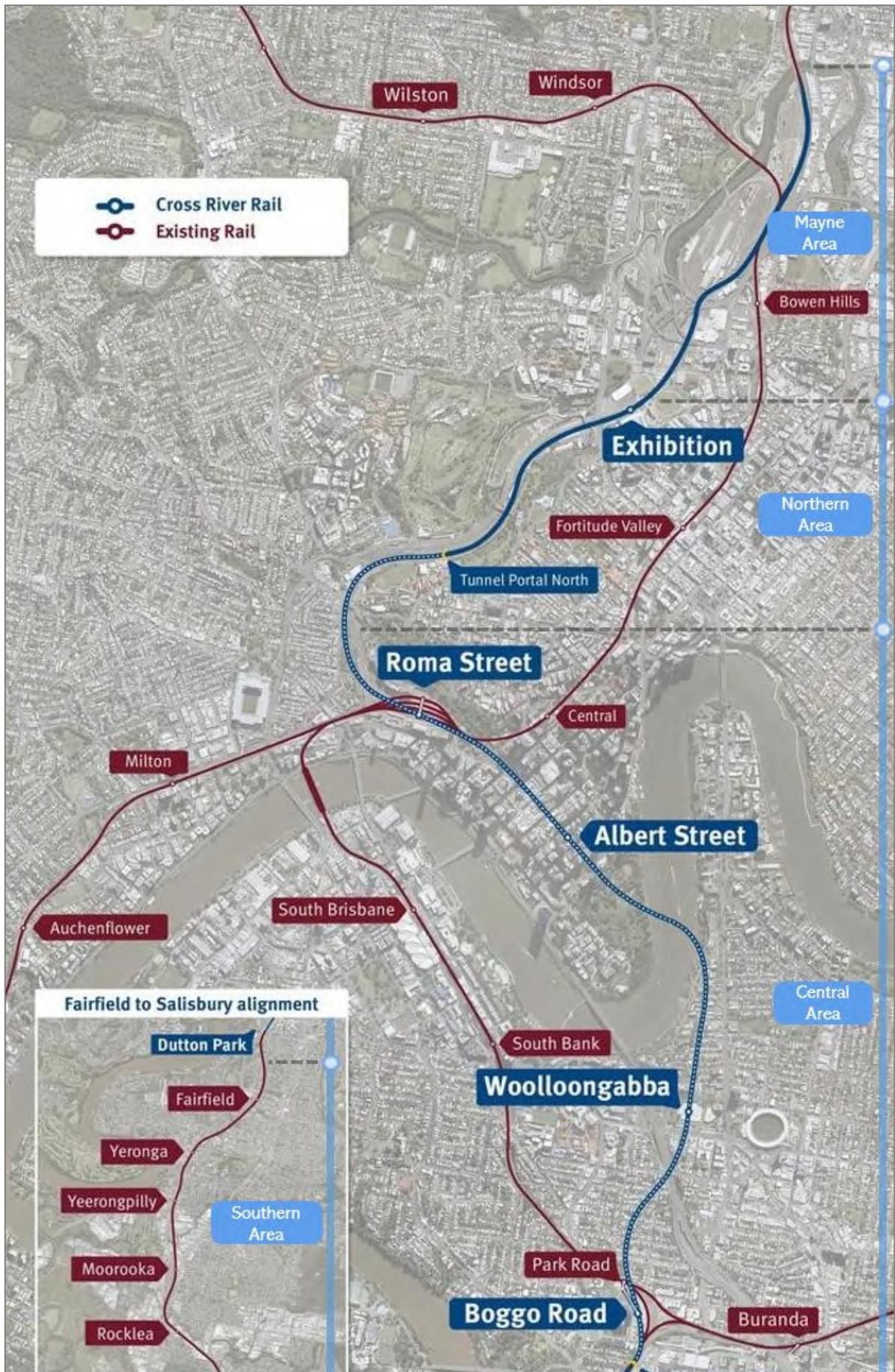
The two main delivery packages which require reporting under the Coordinator-General's imposed conditions are:

- 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 figures below.



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 Monthly Environment Report 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 November 2020:

Area	Project Works
Mayne Area	<ul style="list-style-type: none">• Stormwater drainage works;• Re-decking of existing Breakfast Creek Bridge;• Grafton Street access works;• Temporary cable route diversions to facilitate Ferny Grove Flyover pier protection work;• Mayne Yard suburban line earthworks for new combined services route alignment;• Ground improvement piling for reinforced soil structure walls;• Stabling yard security fence installation; and• Main trunk outlet into Breakfast Creek.
Northern Area	<ul style="list-style-type: none">• Line drilling and rock excavation to widen the rail corridor adjacent to O'Connell Terrace;• Soil nail installation adjacent to O'Connell Terrace;• Demountable toilet block relocations;• Public Utility Plant (PUP) relocations (sewer, water, electrical);• Pier protection of Land Bridge completed;• Combined services route installation;• Traffic signalisation works on Gregory Terrace completed;• Capping placement;• Stone pitching works;• Sewer relocation in Victoria Park;• Concrete line drain installation; and• Boundary fence installation.
Central Area	<ul style="list-style-type: none">• Roma Street – continued demolition of the Brisbane Transit Centre; adit excavation and main cavern excavation; Services Building capping beam construction; and opening of Stage 3A access to the station from Roma Street.

Area	Project Works
	<ul style="list-style-type: none"> Albert Street – station box excavation and continued installation of first row of props on Lot 1; tunnel and adit excavation and ground stabilisation works on Lot 2; and ongoing hard demolition on Lot 3. Woolloongabba – excavation and retention within the station box, decline ramp, northern and southern caverns; acoustic shed conveyor installation in and around the shed; ongoing haulage of excavated material; and production blasting of northern box area. Boggo Road – excavation and retention work in the station box; commenced installation of canopy tubes under busway and Park Road station; and crane pad preparations at the northern end of the station box. Dutton Park – site establishment and demolition of existing structures on Kent Street is ongoing.
Southern Area	<ul style="list-style-type: none"> Yeronga site establishment; Yeronga water main relocation; Overhead line equipment (OHLE) works at Yeronga; and Geotechnical, contaminated land and acid sulphate soil investigations at Clapham Yard.

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 are being implemented. For project works where potential noise impacts are predicted to be more than 20dBA above the relevant noise goal, specific engagement is required with Directly Affected Persons (DAPs) for these works.

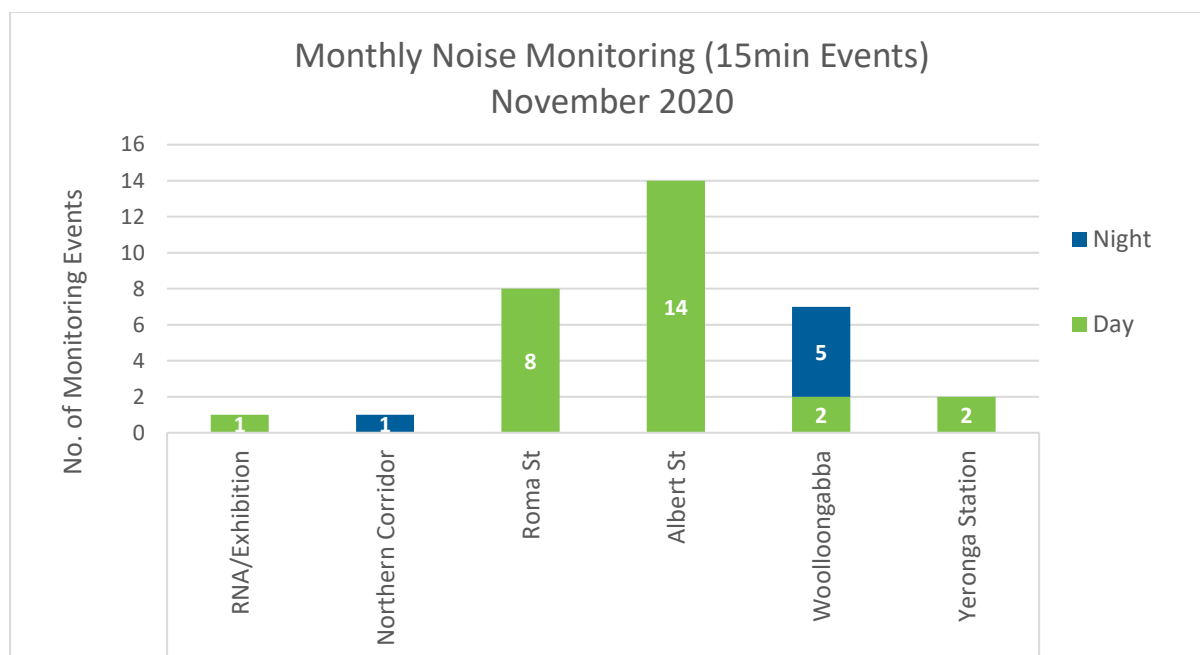
In the Northern Area, attended noise monitoring was undertaken in accordance with DTMR approval for Gregory Terrace line marking works that were predicted to exceed the noise goals during non-standard hours. DAPs on Gregory Terrace were consulted prior to commencement of works. Noise levels were consistent with the predictive noise assessment and no complaints were received during these works.

Noise monitoring in response to complaints was undertaken in the Northern Area at Tufton Street during rock breaking activities in the rail corridor. Noise levels complied with project requirements. Monitoring results are detailed in Table 2, **Appendix A**.

In the Southern Area noise monitoring was undertaken to validate predictive modelling during overhead line foundation works, overhead line mast installation and combined service route installation works at Yeronga Station. Activities were undertaken during standard and non-standard hours and measured noise levels complied with project requirements.

In the Central Area, noise monitoring was undertaken in response to complaints and to validate predictive modelling at sensitive places close to the project worksites. The monitoring results are detailed in **Appendix B** (Table 3). Where internal monitoring was not possible, contractors have undertaken external monitoring at nominated locations. The contractors used recommended façade attenuation corrections, considering receiver property type, to determine compliance with the project's

noise requirements and to provide calibration of the completed modelled predictions. The TSD contractors reported that the project noise requirements have been met during this reporting month. The increased monitoring at Albert Street reflects the onset of new activities at Lot 3.



2.2.2. Vibration

Vibration monitoring was not required to validate predictive modelling or in response to complaints in the Mayne, Northern and Southern Areas.

In the Central Area vibration monitoring took place to validate predictive modelling at Roma Street, Albert Street and Boggo Road worksites (and nearby receivers) where major construction, demolition and controlled blasting activities were being undertaken. Three complaints were received regarding vibration from the Albert Street worksite during the month. The contractor reported all results were within the project's nominated goals for all receiver types. Vibration monitoring results 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 Yard, Northern Area and Central Area worksites from mid-October to mid-November.

In the Northern Area, a dust deposition gauge (AQ-03) located near the Northern Corridor works exceeded the air quality goal for dust deposition (120 mg/m²/day) recording 273 mg/m²/day over the monitoring period. An initial investigation was undertaken by Unity and identified the commencement of sewer works in early November resulted in the dust deposition gauge being located in the immediate vicinity (within 5m) of these works. The public aquatic facility on Gregory Terrace is the closest relevant sensitive receptor and is located 109m away from the AQ-03 and therefore the results are not considered representative of deposited dust levels at the nearest sensitive receivers. See Section 4.1.2 in **Appendix A** for further details. Review of the nearest Transurban Centenary Pool air quality station for the reporting period revealed PM₁₀ below 50µg/m³ goal indicating that there was not any localised particulate or dust impacts at the Centenary Pool Complex. Transurban monitoring data does not have dust deposition result that can be directly comparable with AQ-03, however PM₁₀ data as a subset of a dust deposition precursor (Total Suspended Particulates) was used to determine if significant

particulate emissions were experienced at the sensitive place. No air quality related complaints were received during the monitoring period.

In the Central Area, one of the dust deposition gauges at the Boggo Road site was damaged, compromising the sample for the month. This was replaced immediately.

A summary of air quality monitoring undertaken is shown in the table below.

Air Quality – Dust Deposition Monitoring			
Area	Active Site*	Monitoring Location	Comments
Mayne Yard	Mayne Yard	Mayne Yard East	- Results met air quality goal.
Northern Area	Northern Corridor	Near Northern Portal	- Results met air quality goal.
		Near Centenary Pool	- Results did not meet air quality goal Siting of dust gauge not representative of nearest sensitive receiver. See Appendix A - Section 4.1.2.
	RNA / Exhibition	RNA Showgrounds	- Results met air quality goal.
Central Area	Albert Street	Mary Street	- Results met air quality goal.
	Boggo Road / Southern Portal	Outlook Park	- Results met air quality goal.
		Peter Doherty 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 (Fairfield to Salisbury) had no active high-risk worksites

2.2.3.2. Particulate Matter and Total Suspended Particulates

Monitoring for particulate matter (PM₁₀) and total suspended particulates (TSP) was conducted at Mayne Yard, Northern Area and Central Area worksites during the reporting period. All worksites met air quality goals. The Albert Street monitoring unit stopped functioning between the 21 to 23 November due to a technical fault. The fault occurred over the weekend and was rectified as soon as practicable. The nearby DES Air Quality Station (Brisbane CBD) demonstrated levels in the area were below the air quality goals for the reporting period.

A summary of particulates monitoring is shown below.

Air Quality – PM ₁₀ / TSP Monitoring			
Area	Active Site*	Monitoring Location	Comments
Mayne Area	Mayne Yard	Mayne Yard North - Eastern Air Shed (Burrows St, Bowen Hills)	- Results met air quality goals.
Northern Area	Northern Corridor	Brisbane Girls Grammar School	- Results met air quality goals.
	RNA / Exhibition	RNA - Western Air Shed (Lanham Street, Bowen Hills)	- 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. - Monitoring unit had a technical fault between 21 to 23 November.
	Boggo Rd / Southern Portal	North-east of Boggo Road worksite	- Results met air quality goals.
	Roma St	Roma Street Station	- Results met air quality goals.

Air Quality – PM ₁₀ / TSP Monitoring			
Area	Active Site*	Monitoring Location	Comments
	Woolloongabba	Place Park, Woolloongabba	- Results met air quality goals.

*Southern Area (Fairfield to Salisbury) had no active high-risk worksites

2.2.4. Water Quality

Monitoring and reporting on water quality was undertaken in accordance with the Project's Water Quality Management Plans.

2.2.4.1 Surface Water

There were no surface water discharges from Mayne Yard or Northern Area worksites during the reporting period.

Active surface water discharge (dewatering by pumping) was undertaken in the Central Area at the Boggo Road, Roma Street and Woolloongabba worksites. Surface water discharge results were compliant with the relevant requirements detailed in Imposed Condition 18¹.

Post-Rain monitoring was not triggered for any project worksites.

Surface water quality monitoring is summarised in the table below:

Surface Water Quality Monitoring				
Area	Site	Discharge	Post-Rain	Comments
Mayne Area	Mayne Yard North	No	No	- No surface water discharges
Northern Area	Northern Corridor	No	No	- No surface water discharges
Central Area	Albert Street	No	No	- No surface water discharges
	Boggo Road / Southern Portal	Yes	No	- Active surface water discharges. - Results met water quality discharge criteria.
	Roma Street	Yes	No	- Active surface water discharges. - Results met water quality discharge criteria.
	Woolloongabba	Yes	No	- Active surface water discharges. - Results met water quality discharge criteria.
Southern Area	Fairfield to Salisbury Stations	No	No	- No surface water discharges

2.2.4.1. Groundwater

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

Groundwater discharges occurred in the Central Area at Roma Street and Albert Street worksites. Both groundwater discharges exceeded the Water Quality Objectives (WQO's) for Total Nitrogen, Oxidised Nitrogen, Ammonia Nitrogen and Organic Nitrogen, however were consistent with baseline monitoring

¹ Guidelines for Best Practice Erosion and Sediment Control (IECA, 2008) and the Department of Transport and Main Roads' Technical Standard MRTS52 – Erosion and Sediment Control

pre-construction commencement and therefore an NCE was not required. Compliance assessment for short-term increases of pollutants does not necessarily cause significant impacts on the ecosystem and will require ongoing monitoring and assessment.

Groundwater Quality Monitoring			
Area	Site	Discharge	Comments
Mayne Area	Mayne Yard North	No	- No groundwater discharges.
Northern Area	Northern Corridor	No	- No groundwater discharges.
Central Area	Albert Street	Yes	- Groundwater discharge (dewatering) - Discharge of groundwater did not meet WQO's but was generally consistent with pre-construction conditions and no external influences were introduced by construction activity.
	Boggo Road / Southern Portal	No	- No groundwater discharges.
	Roma Street	Yes	- Groundwater discharge (dewatering) - Discharge of groundwater did not meet WQO's but was generally consistent with pre-construction conditions and no external influences were introduced by construction activity.
	Woolloongabba	No	- No groundwater discharges.
Southern Area	Fairfield to Salisbury Stations	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 Corridor, RNA Showgrounds, Roma Street, Albert Street, Woolloongabba and Boggo Road.

2.3. Complaints Management

The Project received 21 complaints during the month. There were four noise complaints related to RIS works at RNA/Exhibition worksites. Sixteen complaints were related to TSD works at the Woolloongabba, Roma Street, Albert Street and Boggo Road worksites, and were in relation to noise, vibration, working hours, pedestrian and cyclist access, and alleged property damage claims. One complaint received on 9 November for Boggo Road worksite was not related to the Project works. All complaints were responded to within the required timeframes.

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 concerned construction activities was used to confirm the works adhered to the project noise requirements. One internal monitoring event showed noise levels over 20dBA above the noise goal at Albert Street. The affected DAPs in this location were consulted, a respite period was applied between 12-2 pm and project requirements met as per the CEMP.

To close out a complaint the project reviews the monitoring data (where applicable), compliance with the CEMP, site environmental management plans and permits, and that required community notification has taken place and any actions taken to reduce/mitigate the impact – this will then demonstrate that project requirements have been met.

For scheduled out of hours works, community notification was provided, as well as regular project updates.

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	<ul style="list-style-type: none"> Ground improvement for Graffiti Wash Facility and Crew Change Building; Ground improvement works for track sectioning cabin and slab; Ground improvement piling for reinforced soil structures wall; Signaling and commissioning works in Mayne Yard north; and Ferny Grove flyover pier protection works.
Northern Area	<ul style="list-style-type: none"> Piling preparation for Bowen bridge and Inner-City Bypass (ICB) pier protection; Overhead line installations and wire transfers to facilitate demolition of Western Platform at Exhibition Station; and Commissioning Normanby holding road.
Central Area	<ul style="list-style-type: none"> Roma Street – enabling works for Services Building, installing and opening Stage 3B station access pathway, continued cavern excavation and controlled blasting. Albert Street – excavation of station box to continue to mid-2021 on Lot 1, 24-hour tunnelling will continue within the acoustic enclosure on Lot 2, and completion of hard demolition followed by piling on lot 3. Woolloongabba – controlled blasting in station box to continue, cavern excavation and spoil shed construction to continue, 24-hour work for shaft excavation, and TBM assembly in station box to commence in December. Boggo Road – ongoing excavation with an increase in spoil removal from site; and ongoing northern canopy tubes installation; and Southern Portal – site establishment and demolition of existing structures, utility relocation and Scheduled Corridor Access System (SCAS) works.
Southern Area	<ul style="list-style-type: none"> No new works proposed.

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 – November 2020

Cross River Rail – Rail, Integration and Systems Alliance

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1 Progress Summary

1.1 Summary of Project Works

The following *Project Works* continued in November 2020

- Mayne Yard North
 - Stormwater drainage works
 - Re-decking of existing Breakfast Creek siding bridge to facilitate alternative construction access across Breakfast Creek completed
 - Temporary cable route diversions to facilitate Ferny Grove Flyover pier protection work
 - Mayne Yard Suburban Line Earthworks for new Combined Services Route alignment
- Northern Corridor
 - Pier protection of Land Bridge completed
 - Traffic signal installation on Gregory Terrace completed
 - Combined services route installation
 - Holding road installation
 - Capping placement
 - Sewer relocation in Victoria Park
- RNA
 - Line drilling and rock excavations to widen the Northern corridor adjacent O'Connell Terrace
 - Soil nail installation adjacent to O'Connell Terrace
 - Demountable toilet block relocations
- F2S
 - No project works continued in November 2020

The following *Project Works* started in November 2020

- Mayne Yard North
 - Ground improvement piling for Reinforced Soil Structures (RSS) walls
 - Stabling yard security fence installation
 - Main Trunk outlet into Breakfast Creek
- Northern Corridor
 - Concrete lined drain installation
 - Boundary fence installation
- RNA
 - Public Utility Plant (PUP) relocations (Sewer, Water, Electrical)
- F2S
 - Yeronga site establishment
 - Yeronga water main relocation
 - Overhead Line Equipment (OHLE) works at Yeronga
- Clapham yard
 - Geotechnical and CLASS (Contaminated land and acid sulphate soil) investigations

The following *Project Works* are proposed in December 2020

- Mayne Yard North
 - Commence Ground Improvement of Graffiti Wash Facility and Crew Change Building
 - Commence Ground Improvement works for track sectioning cabin and slab
 - Commence continuous flight auger ground improvement piling for Reinforced Soil Structures wall RW110
 - Preparation works for RC14 cast in place (CIP) piling of Ferny Grove Flyover pier protection
- Northern Corridor
 - Piling preparations for Bowen Bridge and ICB pier protection (RC22/RC23)
- RNA
 - Overhead line installations and wire transfers to facilitate the demolition of Western Platform
- F2S
 - No new works are proposed in December 2020
- Clapham yard
 - No new works are proposed in December 2020

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 1: Summary of Complaints

Date	Location	Issue	Activity source of the concern	Period	Unity Response	Status
2/11/2020	Gregory Terrace – Educational Facility	Noise	Track works	Standard working hours	The Unity team was informed of the complaint once the activities were completed. The Team however previously undertook attended external monitoring at the Proponent's request on 29 October 2020 which is representative of the activity subject to the Complaint. The monitoring data confirmed compliance with the Project's noise goals (Imposed Condition 11a).	Closed
5/11/2020	Tufton Street - Residential	Noise	O'Connell Terrace rock breaking	Standard working hours	The Unity team previously undertook attended indoors monitoring on 29 October 2020 which is representative of the activity subject to the Complaint. The monitoring undertaken confirmed compliance with the Project's noise goals (Imposed Condition 11a).	Closed
25/11/2020	Tufton Street - Residential	Noise	O'Connell Terrace rock breaking	Standard working hours	The Unity team undertook external noise monitoring on 25 November 2020. The monitoring undertaken confirmed compliance with the Project's noise goals (Imposed Condition 11a).	Closed
25/11/2020	Tufton Street - Residential	Noise	O'Connell Terrace rock breaking	Standard working hours	The Unity team undertook external noise monitoring on 25 November 2020. The monitoring undertaken confirmed compliance with the Project's noise goals (Imposed Condition 11a).	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 (CEMP) occurs.

3.1.1 Noise Monitoring

Attended noise monitoring was triggered based on the predictive noise assessments for

- Overhead line foundation works (Yeronga Station – Standard and non-standard hours)
- Overhead line mast installation and Combined services route installation (Yeronga Station – Standard and non-standard hours)

In accordance with the CEMP, attended outdoors monitoring was undertaken to validate the predictive assessments.

Monitoring was undertaken in order to confirm that works could continue to proceed as planned.

Attended Noise Monitoring was triggered based on the commitments in the construction noise assessment for:

- Stage 4 Gregory Terrace Line Marking Works (Northern – non-standard hours)

The predictive noise assessment identified that the proposed works were likely to result in exceedances with the noise goals as imposed under Condition 11(c). As elements of the works could not be undertaken during the extended work hours (road within a road reserve that required to be undertaken on Sunday and after 10:00 pm Monday to Friday), consistent with Imposed Condition 11(e), UNITY obtained written confirmation from the entity with jurisdiction (DTMR) prior to the commencement of these works. Attended noise monitoring was identified within the approval package as a requirement for these works to proceed.

Attended noise monitoring was undertaken based on the complaints presented in Section 2 for:

- Tufton Street during rock breaking activities (25th November 2020)

3.1.2 Noise monitoring Results

The below table summarises the noise monitoring results for reporting period.

Table 2 Summary of Noise Monitoring Data

Location and Receiver Type Details	Type of Monitoring	Working Hours	Noise Type	Purpose of Monitoring	Predictive model LA10 (dBA)	Performance Goal (dBA) (Condition 11(a), Table 2, LA10 noise goals)	Performance Goal (dBA) – (Condition 11(c), Table 2 LA10 noise goal + 20dBA)	Measured LA10 (dBA)	Measured LAeq (dBA)	Is performance Goal exceeded?	Comments
Gregory Terrace, Spring Hill Residential	Attended – Outdoors ¹	Out of Standard Hours 12/11/20 20:20	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	79	52 (Outdoors) (42dBA default goal + 10dBA façade reduction) ²	72 (Outdoors) (52+ 20dBA)	77	73	Exceedance	Line Marking works For interpretation, please refer to section 3.1.4.1.2
Christensen Street, Yeronga Residential	Attended – Outdoors ¹	Standard Hours 14/11/20 09:13	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	71	52 (Outdoors) (42dBA default goal + 10dBA façade reduction) ²	72 (Outdoors) (52+ 20dBA)	71	67	No exceedance	Overhead Line Foundation works Monitoring undertaken during standard hours Works also took place during non-standard hours For interpretation, please refer to section 3.1.4.1.1
Dublin Street, Yeronga Residential	Attended – Outdoors ¹	Standard Hours 21/11/20 07:51	Intermittent	Construction Monitoring at Sensitive Places - Model Verification	58	52 (Outdoors) (42dBA default goal + 10dBA façade reduction) ²	72 (Outdoors) (52+ 20dBA)	60	58	No exceedance	Overhead Line Mast Installation Combined Services Route Works Monitoring undertaken during standard hours Works also took place during non-standard hours For interpretation, please refer to section 3.1.4.1.3
Tufton Street, Bowen Hills Residential	Attended - Outdoors	Standard Hours 25/11/20 12:30	Intermittent	Complaint Response	80-85	65 (Outdoors) (AS2107 maximum design level [45dBA] + 10dBA + 10dBA façade reduction) ²	85 (Outdoors) (65+20dBA)	79	76	No exceedance	Rock breaking works For interpretation, please refer to section 3.1.4.1.4

- Note (1) - Monitoring Method
 - 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, in particular 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 Queensland¹.
 - Additionally, a number of 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.

¹ https://www.ombudsman.qld.gov.au/ArticleDocuments/218/Airport_Link_Ombudsman_Statement.pdf.aspx, pages 208-210, Section 9.8.6

3.1.3 Vibration Monitoring

Vibration Monitoring was not triggered during the reporting period based on the predictive vibration assessments for all activities.

Vibration monitoring because of complaints was not triggered. No complaints related to vibration occurred during the reporting period.

3.1.4 Interpretation

3.1.4.1 Noise Monitoring²

3.1.4.1.1 Overhead Line Foundation Works – Yeronga

Monitoring of OHLE works at Yeronga Station was undertaken externally at the nearest DAP (Christensen Street, Yeronga, multi-level unit building), approximately 5m from the façade of the building. Monitoring was undertaken during standard construction hours with the activity captured deemed representative for the entire duration of the activity. The measured LA₁₀ readings were compliant with the Imposed Conditions for works during and outside of standard working hours. No additional monitoring was triggered for this activity.

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

3.1.4.1.2 Line Marking Works – Northern Corridor

Written confirmation was obtained prior to the commencement of these works through the entity with jurisdiction (DTMR). This approval was required to undertake works outside of the authorised construction hours as set out by imposed Condition 10. An approvals package was submitted to DTMR to provide the required information to assess the proposed works. As part of the approval package, a construction noise and vibration assessment was prepared which identified modelled exceedances of the noise goal as Imposed under Condition 11(c).

Monitoring of Stage 4 Gregory Terrace intersection works was undertaken approximately 10m from the façade of the sensitive place along Gregory Terrace (2-storey residential stone heritage building).

The measured LA₁₀ readings were consistent with the prediction of the construction noise and vibration assessment. There were no noise complaints during the execution of the works.

Therefore, the RIS scope of works was executed consistent with the DTMR approval and achieved the outcomes set out by the CGCR and OEMP.

3.1.4.1.3 Overhead Line Mast Installation and Combined Services Route Works – Yeronga Station

Monitoring of OHLE works at Yeronga Station was undertaken externally at the nearest DAP (Lake Street, Yeronga, two-storey residential building), approximately 10m from the façade of the building. Monitoring was undertaken during standard construction hours with the activity captured deemed representative for the entire duration of the activity. The measured LA₁₀ readings were compliant with the Imposed Conditions for works during and outside of standard working hours. No additional monitoring was triggered for this activity.

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

3.1.4.1.4 Rock Breaking Works – Lanham Street

Monitoring of rock breaking works was undertaken to verify the complaints received from stakeholders. This monitoring was undertaken externally at the sensitive place (Multi-level unit building), approximately 7m from the façade of the building. The measured LA₁₀ readings were compliant with the Imposed Conditions for works during standard working hours.

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

3.1.4.2 Vibration Monitoring

Not triggered during this reporting period.

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

3.2 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 CEMP occurs.

Visual monitoring was undertaken during routine environmental inspections. A total of fifteen (15) inspections were undertaken by the environment team across Mayne Yard, RNA showgrounds 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 3 Summary of Air Quality devices

Monitoring Device Installed by UNITY	Area	Name	Date Installed	Status for the Month of November
Dust Deposition Gauge	RNA Showgrounds	AQ-01	13 December 2019	Active
Dust Deposition Gauge	Northern Corridor (near BGS)	AQ-02	13 December 2019	Active
Dust Deposition Gauge	Northern Corridor (near Centenary Pool)	AQ-03	13 January 2020	Active
Dust Deposition Gauge	Mayne Yard (Eastern Air Shed)	AQ-04	13 February 2020	Active
TSP / PM ₁₀ Monitor	Mayne Yard (Eastern Air Shed)	UNI324	23 April 2020	Active
TSP / PM ₁₀ Monitor	Northern Corridor (Eastern Air Shed)	UNI327	23 April 2020	Active
TSP / PM ₁₀ Monitor	RNA (Western Air Shed)	UNI319	25 August 2020	Active

3.2.1 Dust results

Since passive dust deposition gauges are analysed on a monthly basis, results span from 13 October to 13 November 2020.

The dust deposition gauges result for the reporting period are detailed below and complied with Imposed Condition 13(b) of the CGCR.

Table 4 Dust deposition gauge results for period 13 October 2020 to 13 November 2020.

CGCR Goal (mg/m ² /day)	AQ-01 Results - RNA Showgrounds (mg/m ² /day)	AQ-02 Results - BGS (mg/m ² /day)	AQ-03 Centenary Pool (mg/m ² /day)	AQ-04 Abbotsford Rd (E Mayne) (mg/m ² /day)
120	17	87	273	103
Total Rainfall during Period	87.6mm	87.6mm	87.6mm	77.8 mm

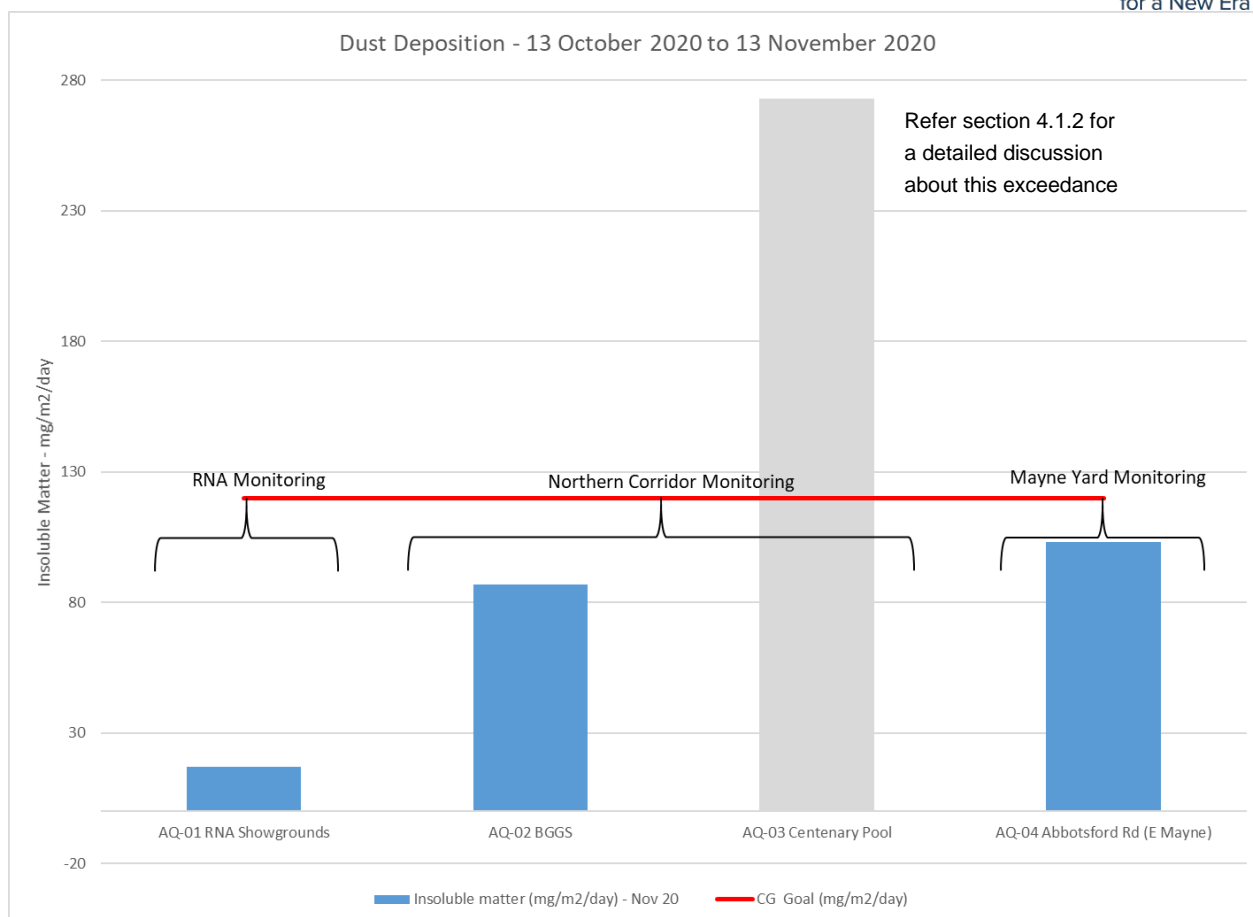


Figure 1: Air Quality Monitoring (Deposited Dust) 13 October – 13 November 2020 Results

3.2.2 Interpretation

Please refer to section 4.1.2 for a detailed discussion on the exceedance of the deposited dust air quality goal at AQ-03.

3.2.3 Particulates results

3.2.3.1 UNITY Air Quality Monitoring Stations

Unity had three operational air quality monitoring stations set up for the reporting period.

3.2.3.2 Monitoring results

External ambient air quality data was collected for total suspended particles (TSP), and particulate matter less than 10 μm (PM₁₀).

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

PM₁₀ is one of the indicators for which the Coordinator-General has imposed a goal of 50 $\mu\text{g}/\text{m}^3$ (over an averaging period of 24 hours) the project must aim to achieve under Imposed Condition 13(a).

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

The results are represented in the below figures.

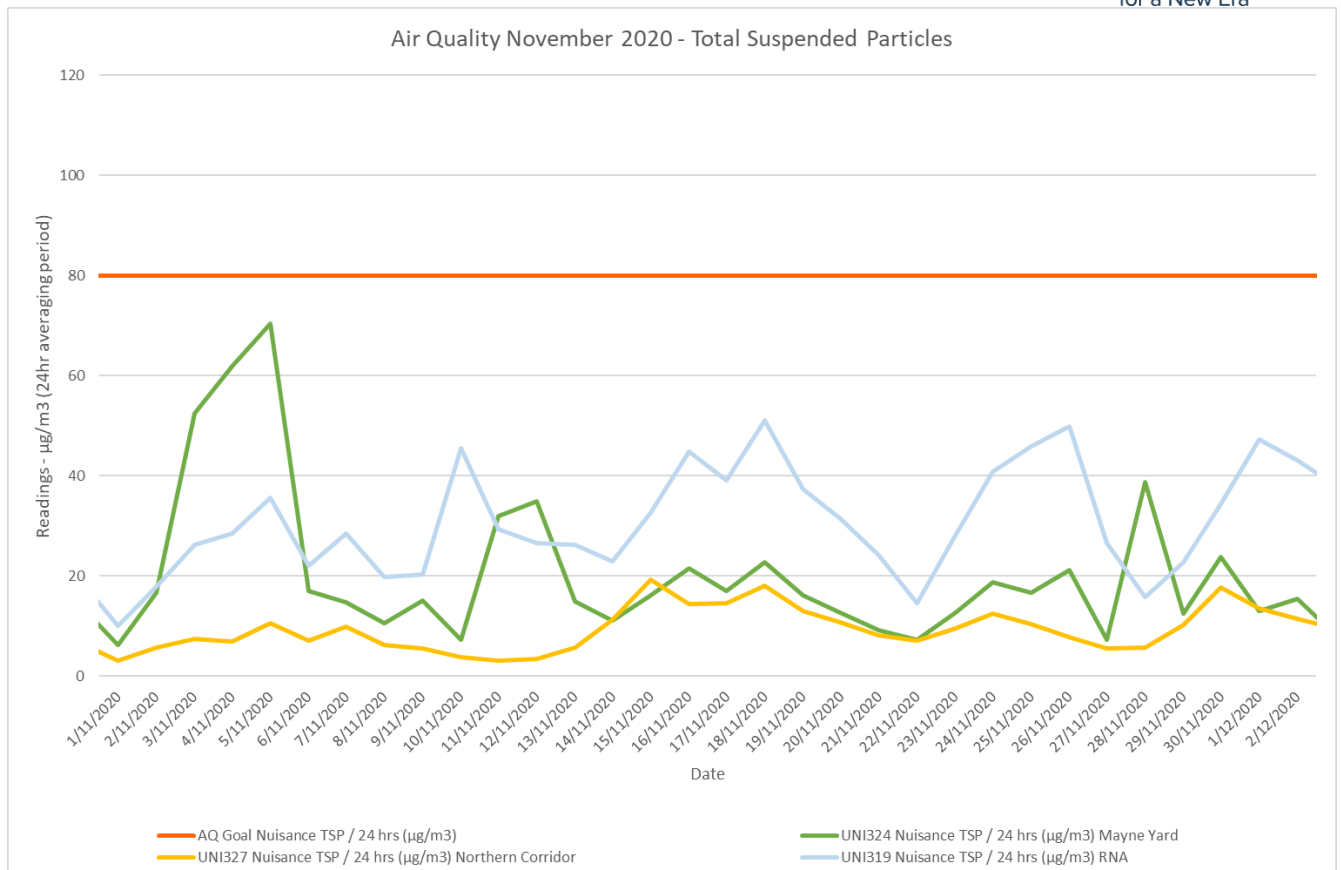


Figure 2: Air Quality Monitoring (TSP) - November 2020 Results

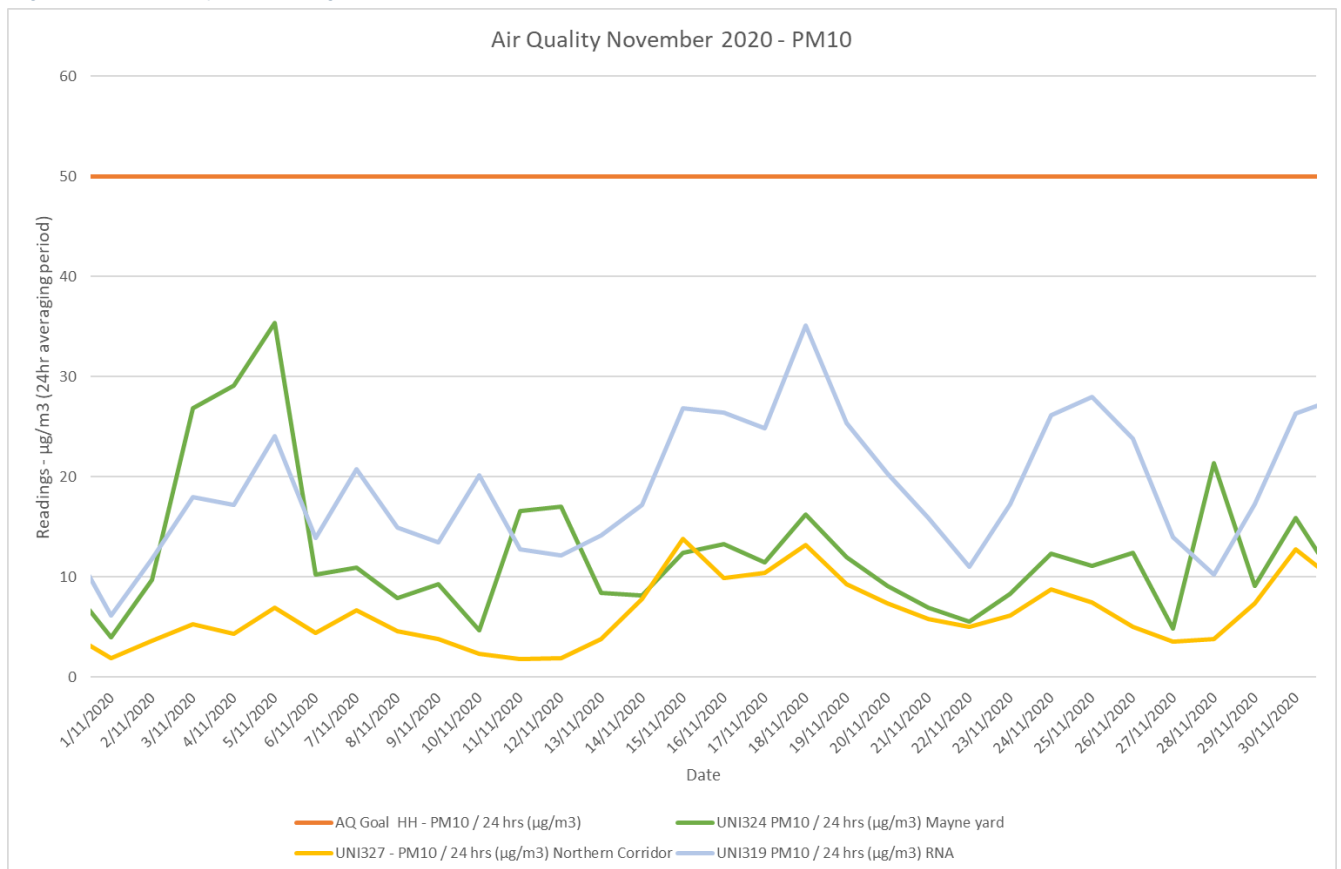


Figure 3: Air Quality Monitoring (PM10) - November 2020 Results

3.2.4 Interpretation

Particulate monitoring results did not exceed the relevant air quality goals specified by Imposed Condition 13 (Refer section 4.1.2 for interpretation related to dust deposition).

The CEMP and the AQMP recognise that particulate matter monitoring can be a lag indicator. Therefore, the monitoring regime detailed in the CEMP consists of a combination of surveillance regimes through inspections at the time the works are occurring and particulate matter monitoring to validate the surveillance regime findings and potential complaints.

Site inspections at Mayne Yard, RNA Showgrounds and the Northern Corridor by the environment team confirmed that:

- There was no visible dust leaving the site boundaries.
- Waters carts were on site and used for dust suppression / fill conditioning.
- During rock breaking activities at RNA, continuous dust suppression with hoses has been undertaken.
- Stabilised egress was in place and in functioning order at each access point.

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

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 CEMP 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. There were no groundwater discharges.

Water quality monitoring to demonstrate compliance with Condition 18 was not triggered:

- There were no active surface water discharges during November (e.g. dewatering through pumping, sediment basin release).
- There were no passive discharges during November associated with rain events.
- A maximum monthly rain recording of 10 mm over a 24-hour period in close proximity to an active worksite was recorded at the Brisbane City BoM weather station on the 6th November, which did not exceed the default trigger for post rainfall monitoring.

In-situ physico-chemical parameters results for all monitoring undertaken during the reporting period are presented below.

3.3.1 Rainfall Records

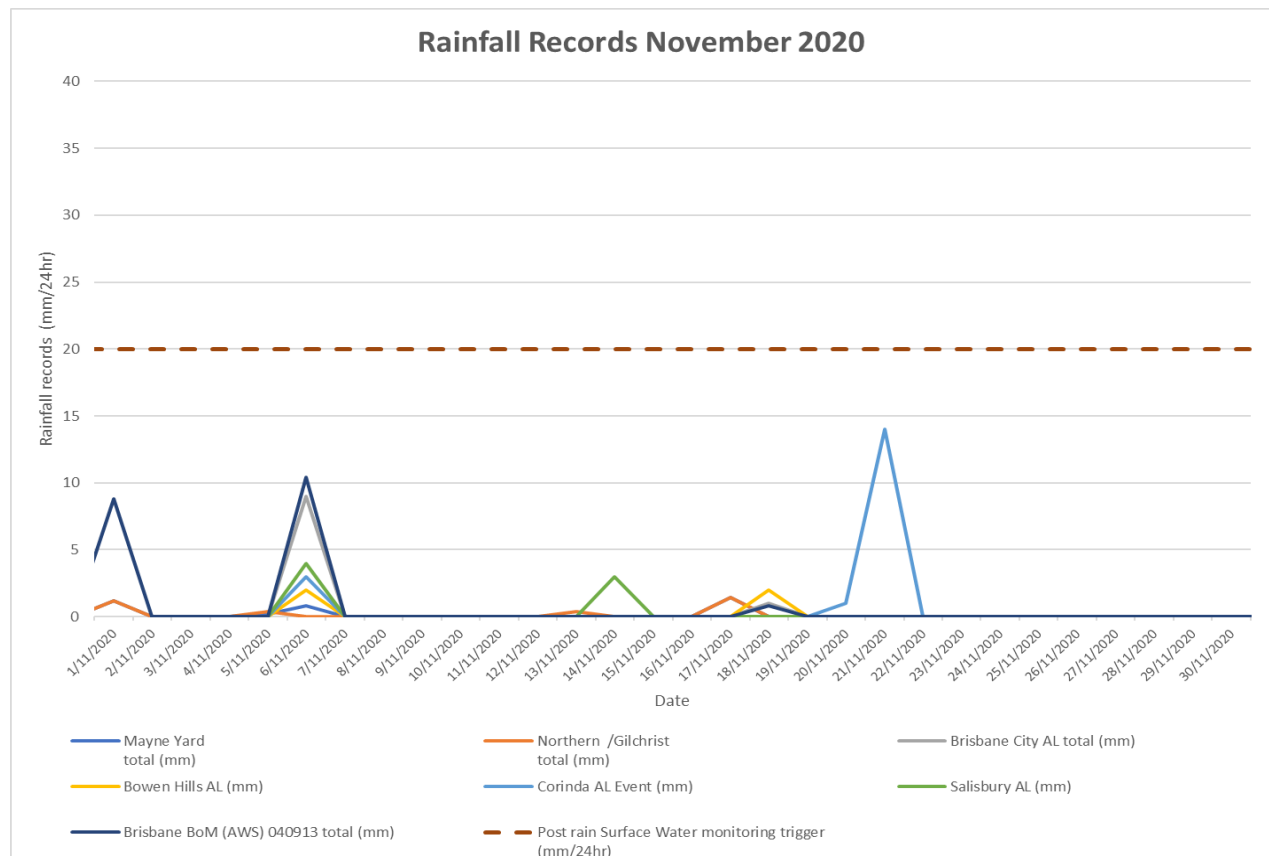


Figure 4: Rainfall – November 2020 Results

3.3.2 Groundwater Discharge Monitoring Results

Groundwater discharge monitoring was not triggered during the reporting period.

3.3.3 Surface Water Discharge Monitoring / 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 higher intensity may cause run-off which would also trigger post rain monitoring consistent with the C-EMP.

Post rainfall monitoring was not triggered during the reporting period.

3.3.4 Routine Surface Water Monitoring Results

During the reporting period, UNITY undertook one (1) round of routine surface water monthly monitoring. This monitoring is being undertaken as it may inform the Dis-1 Credit for the ISCA 'Excellent Rating' the Project is pursuing. The results are presented in Table 5.

Table 5: Routine Surface Water Monitoring Results

Date	Location	Waterway	Tide	Turbidity (NTU)	TSS (mg/L)	DO (%)	pH (pH Unit)
17/11/20	SW 1 – Upstream of Mayne Yard	Breakfast Creek	Rising Brackish to marine conditions	In Field: 39 Lab: 28	38	78	7.3
17/11/20	SW 2 – Adjacent to Mayne Yard	Breakfast Creek	Rising Brackish to marine conditions	In Field: 45 Lab: 34	52	98	7.6
17/11/20	SW 3 – Downstream of Mayne Yard	Breakfast Creek	Rising Brackish to marine conditions	In field: 25 Lab: 22	28	97	7.7
17/11/20	SW 4 – Downstream of Northern Corridor	York's Hollow	Not applicable – non tidal environment	In Field: 11 Lab: 11	9	110	8.1
17/11/20	SW 5 – Upstream rail corridor	Moolabin Creek	Not applicable – non tidal environment	Field: 10 Lab: 8	<5	95	7.3
17/11/20	SW 6 – Downstream rail corridor	Moolabin Creek	Not applicable – non tidal environment	Field: 5 Lab: 3	<5	78	7.4
17/11/20	SW 7 – Upstream Rail corridor	Rocky Water Holes Creek	Not applicable – non tidal environment	Field: 8 Lab: 9	7	46	7.0
17/11/20	SW 8 – Downstream Rail corridor	Rocky Water Holes Creek	Not applicable – non tidal environment	Field: 5 Lab: 3	<5	84	7.1
17/11/20	SW 9 – Downstream Rail corridor	Stable Swamp Creek	Not applicable – non tidal environment	Field: 6 Lab: 4	<5	85	7.4

3.3.5 Interpretation

No discharges were recorded from site during November.

Therefore, it has been concluded that the RIS scope of works is achieving the outcomes set out by the CGCR and OEMP.

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 6 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					

4.1.2 Review of Dust Deposition gauge AQ-03 Exceedance

During the monitoring period of 13 October to 13 November 2020, the Unity AQ-03 Dust Deposition Gauge results exceeded of the Coordinator General dust deposited dust goals.

The closest sensitive place to the Project Works being undertaken between the Landbridge and Bowen Bridge Road is the Centenary Pool Complex, located approximately 150 m due east.

To ascertain whether this exceedance is representative of potential nuisance to the Sensitive Places cause by the Project works the following information has been reviewed:

- Location and siting of the dust deposition gauge, and
- Project Works during the monitoring period, and
- Other air quality monitoring results available for the airshed, and
- Predominant winds during the monitoring period.

4.1.2.1 DDG Location and siting

AQ-03 was located at a representative location between the May to October period to ascertain whether high risk activities (e.g. bulk earthworks within the northern corridor) were adversely affecting air quality at sensitive places.

The commencement of the sewer (PUP) works early November resulted in AQ-03 being located in the immediate vicinity (within 5m) of these works.

Therefore for 50% of the dust deposition monitoring period, AQ-03 was located in a position deemed representative of source emissions rather than representative of the deposited dust levels the nearest sensitive places would be likely to experience as a result of the Project Works contribution to the airshed quality.

As such, whilst the deposited dust results at AQ-03 are exceeding the Air Quality Goal, they cannot be relied upon to ascertain whether the Project Works did indeed result in an exceedance of the air deposited dust air quality goal at the nearby sensitive place.

4.1.2.2 Project Works during the monitoring period

During the monitoring period of 13 October to 13 November 2020, the scale and intensity of the high risk activities within the Northern Corridor significantly reduced.

Whilst placement of capping material within the Northern Corridor was ongoing, bulk earthworks activities were completed.

Detailed earthworks were still occurring comprising of drainage final trim and trenches excavations for drainage and services routes installation

4.1.2.3 Other Air Quality Monitoring Results

Transurban Queensland operates the Legacy Way tunnel in accordance with conditions established by the Queensland Co-ordinator General.

Transurban has engaged third parties to establish External Ambient Air Quality Monitoring Stations along their footprint. Two of the monitoring stations are located near the Northern Corridor Area, within 1km from where the works occurred.

- The two Transurban air quality Monitoring stations are as follows:
- East Victoria Park (E1) which is located approximately 300m due north from the northern corridor, and
- Eastern Centenary Pool (E2) which is located approximately 150m due east from the northern corridor.

External Ambient Air Quality data is collected for Carbon monoxide (CO), Nitrogen dioxide (NO₂), Particulate matter less than 10 µm (PM₁₀), and Particulate matter less than 2.5 µm (PM_{2.5}).

PM₁₀ is one of the indicators for which the Coordinator General has imposed a goal of 50 µg/m³ (over an averaging period of 24 hours) the project must aim to achieve under Condition 13(a) of the CGCR.

The same goal has been imposed on the Cross-River Rail Project.

Transurban monitoring data doesn't have dust deposition result that can be directly comparable with Unity AQ-03, however the presented PM₁₀ data is a particulate subset (typically between 40% - 70%) of total suspended particles (TSP) which are the precursor to dust deposition (when TSP falls out of suspension it becomes dust deposition). In the absence of dust deposition data at the Centenary Pool Complex, the trend of Transurban E2 PM₁₀ data can provide an indication if significant particulate emissions were experienced at the sensitive place.

Validated air quality data for the Legacy Way tunnel is shown below. These data as well as prevalent wind conditions during the deposited dust monitoring period has been reviewed to help ascertain whether the deposited dust goal exceedance is likely to have been caused by the Project Works.

The information has been sourced from the Legacy Way website. The data used on this webpage is collected by third parties using equipment which is not controlled by Transurban Queensland and as such may be subject to faults or errors by third parties, external weather or environmental events, or server access issues.

Legacy Way E1, E2, W1 and W2 - PM₁₀ 24 hour average

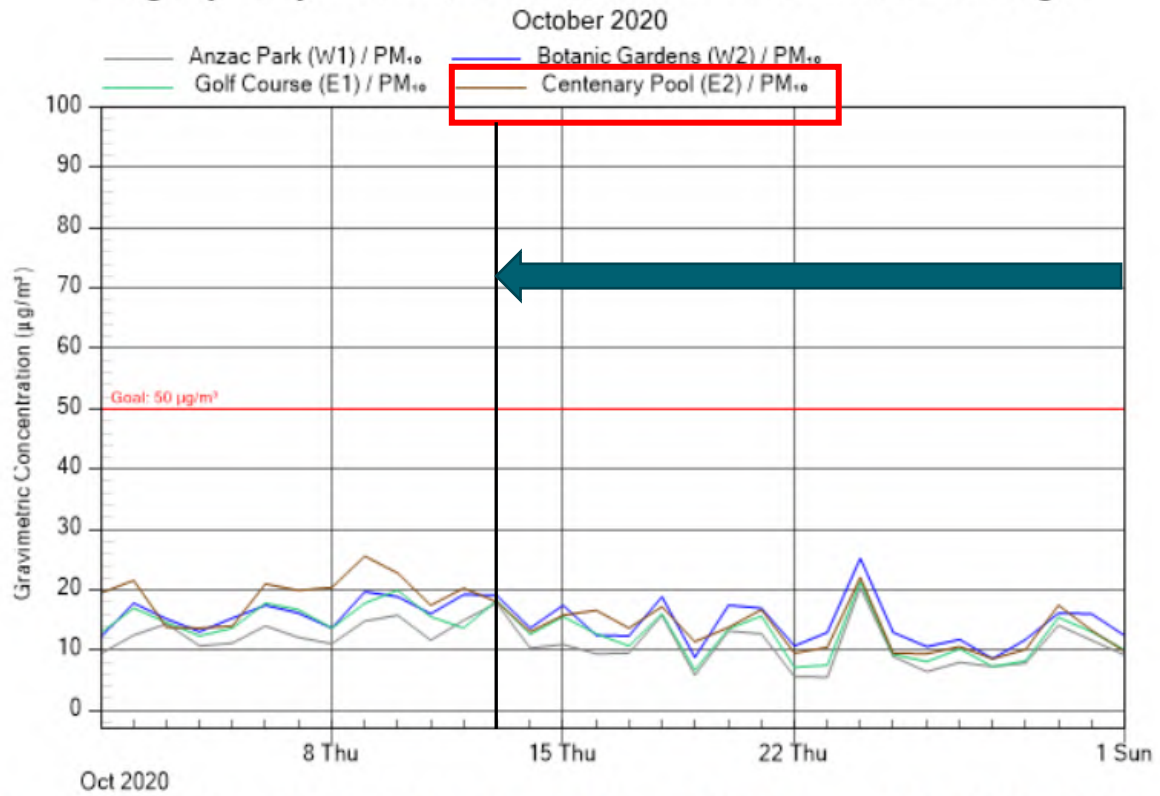


Figure 5: Transurban QLD Legacy Way (E1, E2, W1 and W2) - PM₁₀ graph for October 2020

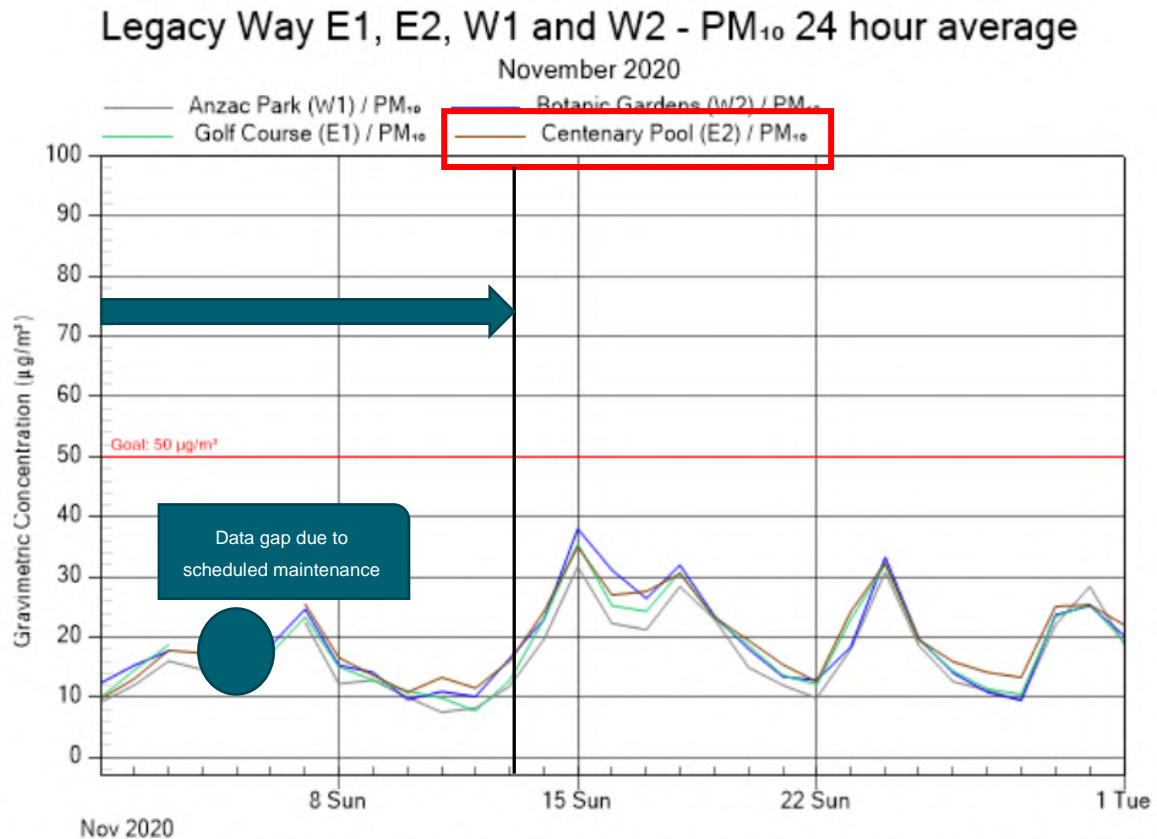


Figure 5: Transurban QLD Legacy Way (E1, E2, W1 and W2) - PM₁₀ graph for November 2020

There were no exceedances recorded for the reporting period for PM₁₀ at the Centenary Pool Complex air quality station. The records from this monitoring station are also consistent with the records from the Unity monitoring station located at BGGS.

The lack of divergence between Transurban E2 PM₁₀ concentrations and the other PM₁₀ monitoring locations indicates that there was not any localised particulate or dust impacts at the Centenary Pool Complex.

Of note, there also were no air quality related complaints for these works.

Of further note, capping material placement and detailed earthworks were also occurring between College Road and the Land Bridge during the monitoring period.

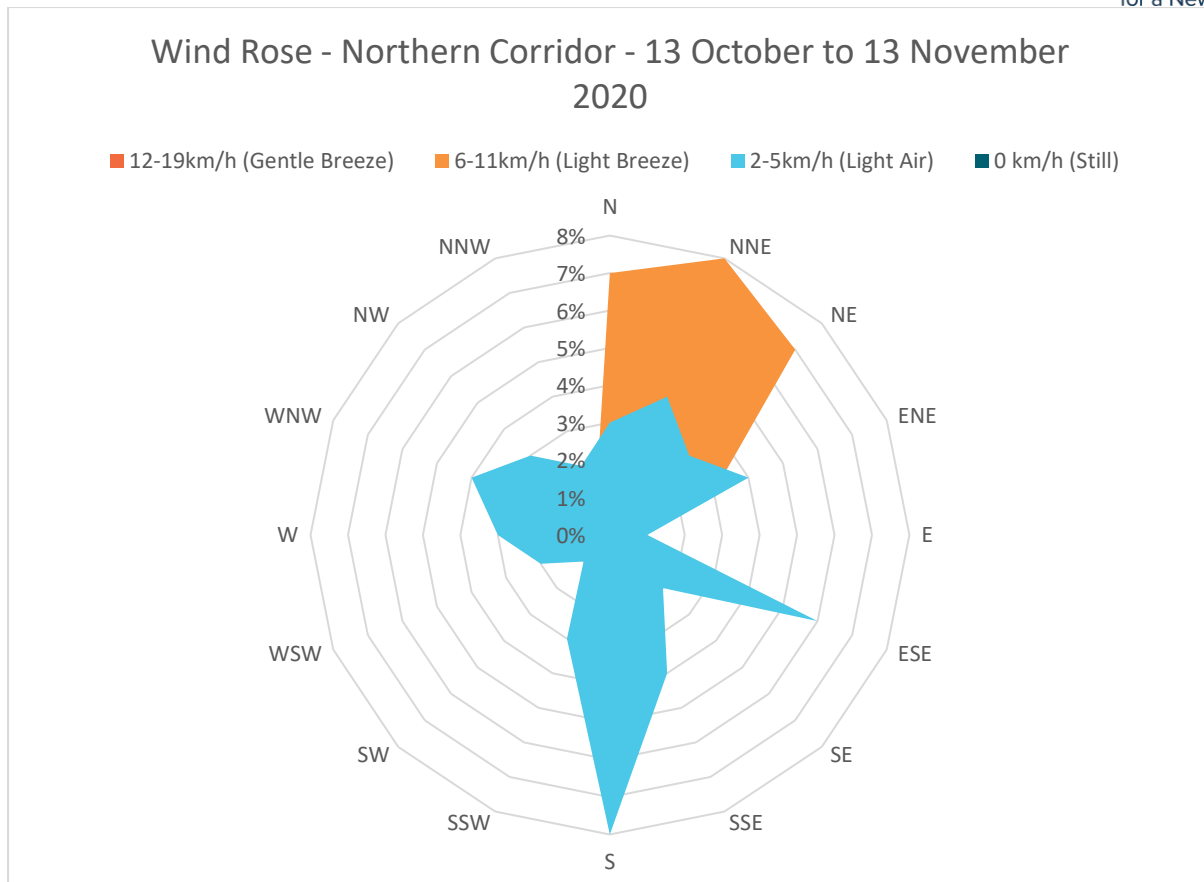
AQ-02 (dust deposition gauge located within the BGGS school grounds) continued to be located at a suitable distance from the Project Works to ascertain whether they adversely affecting air quality.

The deposited dust result recorded at AQ-02 did not exceed the deposited dust goals.

Predominant wind conditions

During the monitoring period Project Works were occurring Monday to Saturday 6.30 am t 6.30pm as well as during approved rail possession during Extended Hours and as Managed Works 24hrs/7days.

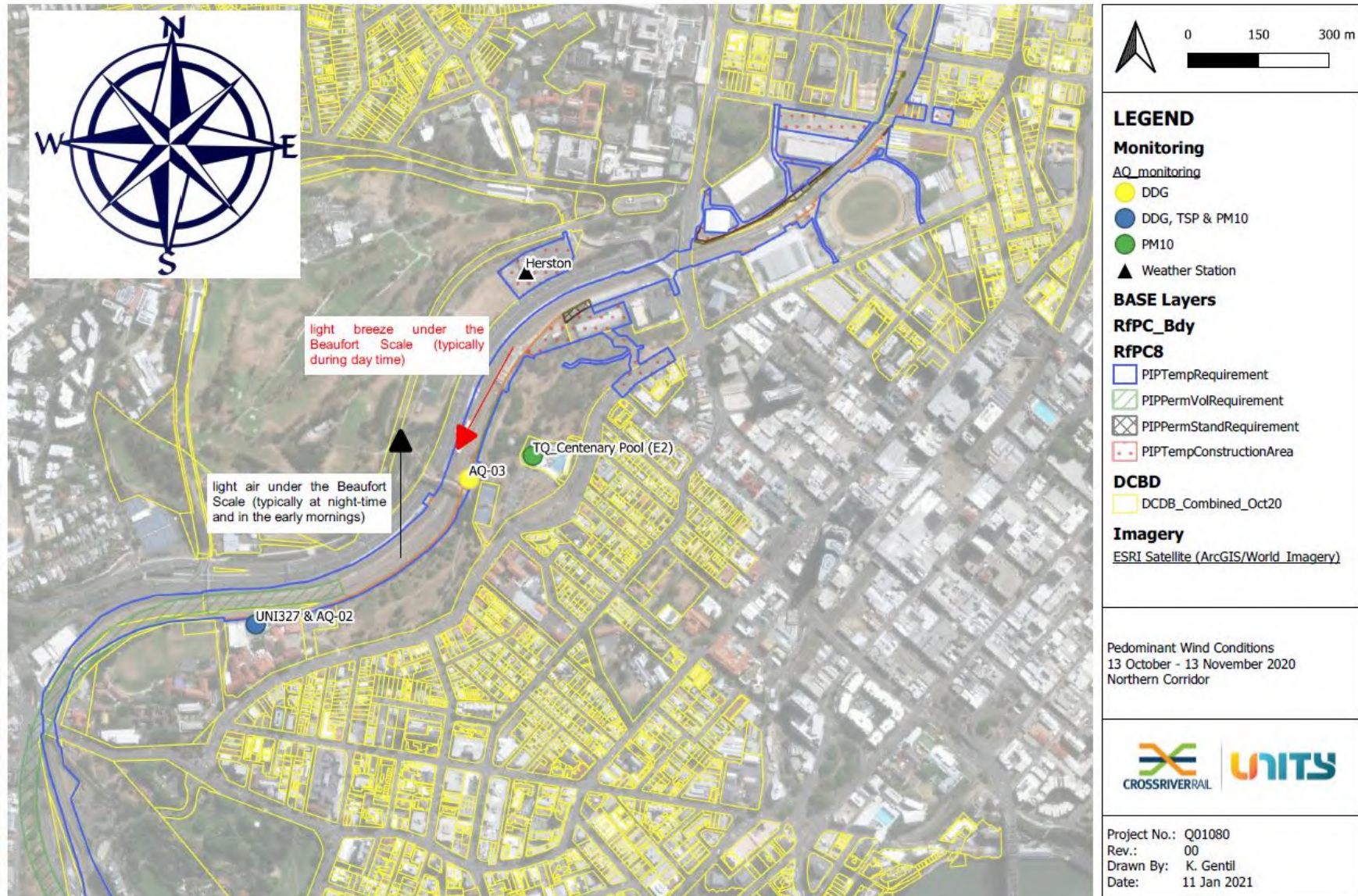
Therefore, all wind records for the monitoring period collected at the Herston weather Station were used to generate the below wind rose.



The predominant winds were

- southerly winds classified as light air under the Beaufort Scale (typically at night-time and in the early mornings), and
- north/north-easterly winds classified as light breeze under the Beaufort Scale (typically during daytime).

Therefore, the sensitive place of the Public Aquatic Facility was not located directly downwind from the Project Works during the monitoring period as depicted in the below figure.



Conclusion

The review of the information by Unity's CAQP confirms that:

- The positioning of AQ-03 is no longer an indicative location for the purpose of compliance monitoring.
- The lack of divergence between Transurban E2 PM₁₀ concentrations and the other Transurban PM₁₀ monitoring locations indicates that there was not any localised particulate or dust impacts at the Centenary Pool Complex.
- The deposited dust results at AQ-03 are not representative of the air quality conditions experienced at the Centenary Pool Complex.
- The deposited dust nuisance goal is unlikely to have been exceeded at the Centenary Pool Complex.

The CAQP also recommends the decommissioning of this DDG on or around 14 December 2020 as Project Works high risk activities are complete in the area

4.2 CEMP Compliance

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

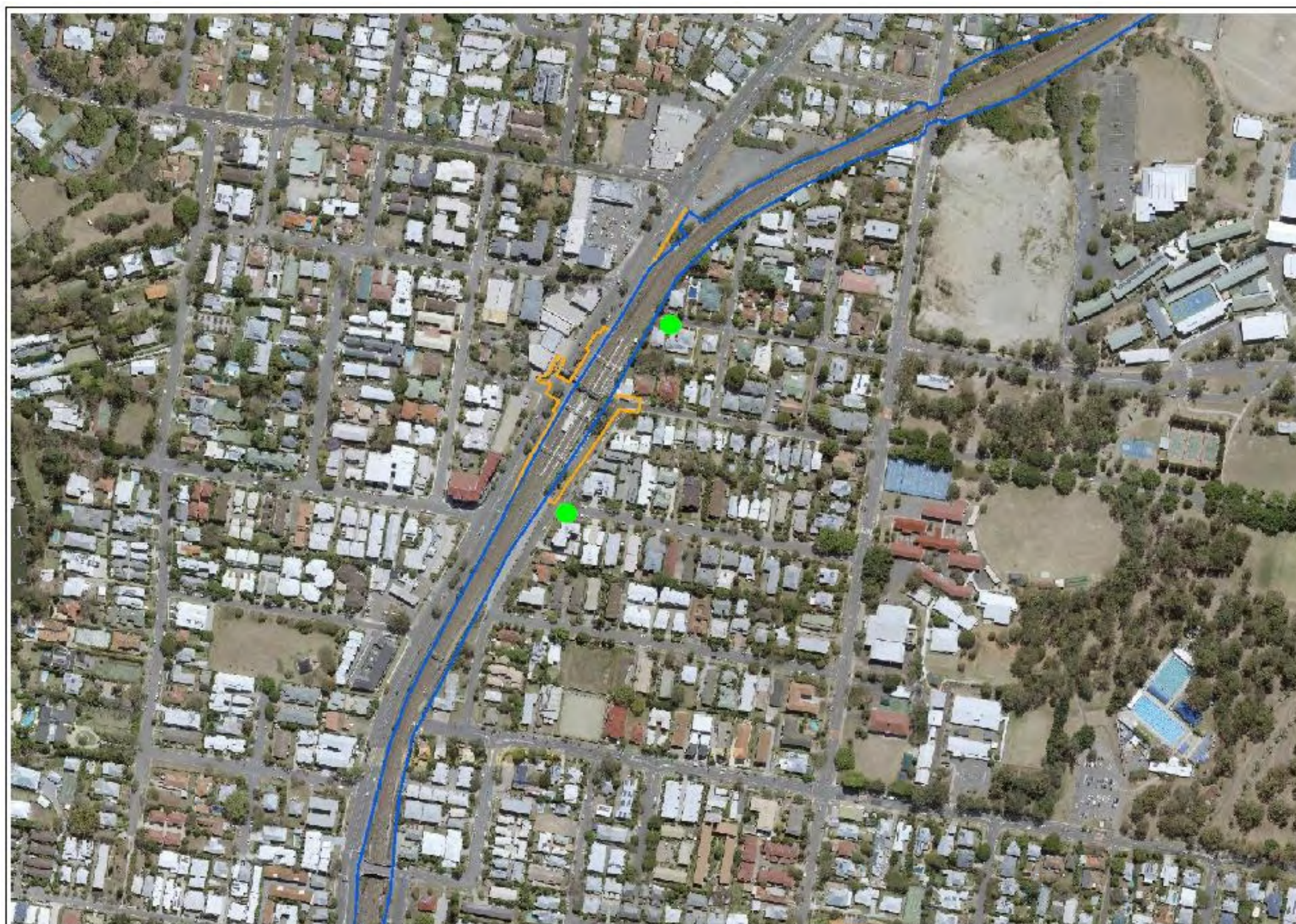
Table 7 CEMP and relevant Subplans monitoring requirements – Compliance Status for the reporting period

Aspect	Monitoring requirement	Activities risk profile	Monitoring undertaken	Compliance status with CEMP / 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 undertaken as part of routine inspections Monitoring for TSP, PM ₁₀ and deposited dust also undertaken	Compliant	Not Applicable
Air Quality	Complaints response	Moderate to High	Not triggered – no complaints pertaining to nuisance dust	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	Compliant	Not Applicable
Noise	Complaints response	Moderate to High	Yes	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	Not triggered	Compliant	Not Applicable
Vibration	Complaints response	Moderate to High	Not triggered – no complaints	Compliant	Not Applicable
Water Quality	Monthly monitoring	N/A	Yes	Compliant	Not Applicable
Water Quality	Post Rainfall	Moderate to High	Not Triggered	Compliant	Not Applicable
Water Quality	Dewatering	Moderate to High	Not triggered – no dewatering to receiving water systems	Compliant	Not Applicable

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

None for this reporting period.

Attachment 2 Monitoring Locations – Noise



- Legend**
- Project Boundary RFPC10 - Permanent
 - Project Boundary RFPC10 - Temporary Construction
 - Project Boundary RFPC10 - Volumetric Brisbane Imagery (27/09/2020)
 - Construction Monitoring at Sensitive places

A FOR INFORMATION			
Issue	Description	Date	Approved
	Noise Map 1		
Scale 1: 3,716			
189	0	94.4	189 Meters
© EIC Activities GIS			

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THIS MAP IS NOT TO BE USED FOR NAVIGATION

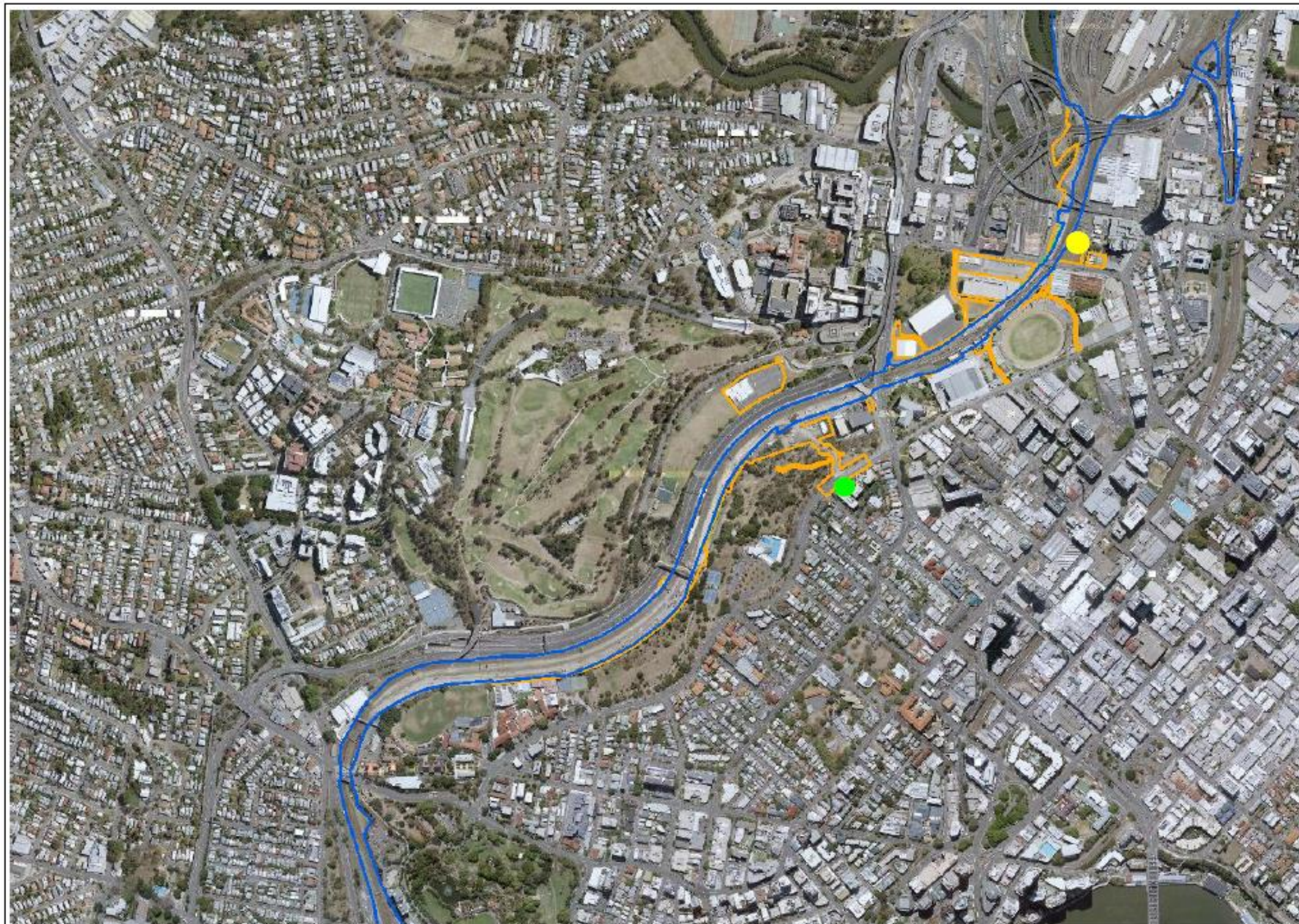
GIS OUTPUT NOT USED FOR CONSTRUCTION			
Original Size	A3	Drawn	
Coordinate System	GDA MGA94-56	Designed	
Height Datum	AHD	Date Printed	10-Dec-2020



Cross River Rail - RIS Alliance

Monthly CG Report

Noise Map 1



Legend

- Project Boundary RFPC10 - Permanent
- Project Boundary RFPC10 - Temporary Construction
- Project Boundary RFPC10 - Volumetric Brisbane Imagery (27/09/2020)

● Complaint Response

● Construction Monitoring at Sensitive places

A FOR INFORMATION

Issue	Description	Date	Approved
	Noise Map 2		

Scale 1: 10,000

508 0 254.0 508 Meters

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THIS MAP IS NOT TO BE USED FOR NAVIGATION

GIS OUTPUT NOT USED FOR CONSTRUCTION			
Original Size	A3	Drawn	
Coordinate System	GDA MGA94-56	Designed	
Height Datum	AHD	Date Printed	10-Dec-2020



Cross River Rail - RIS Alliance

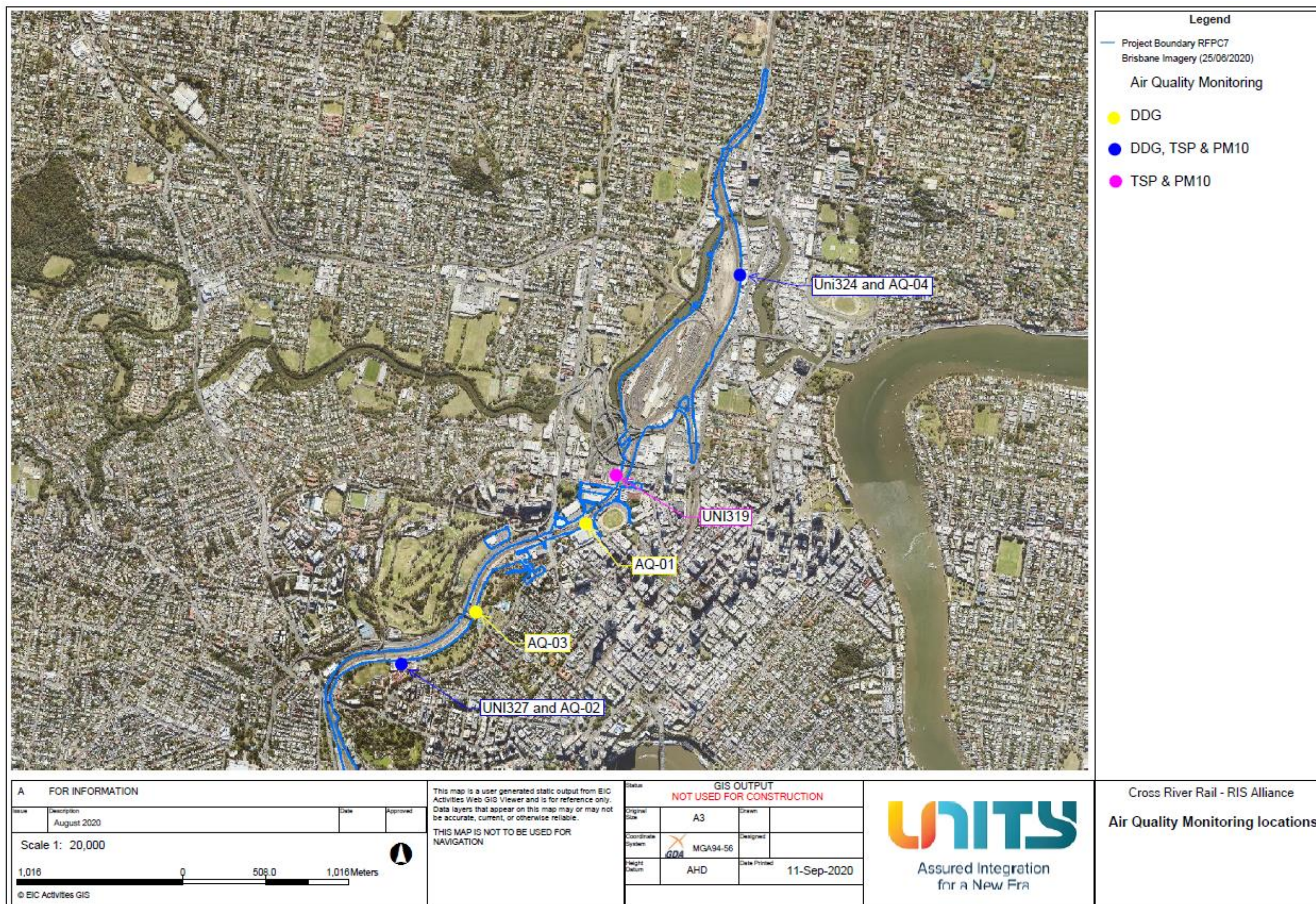
Monthly CG Report

Noise Map 2

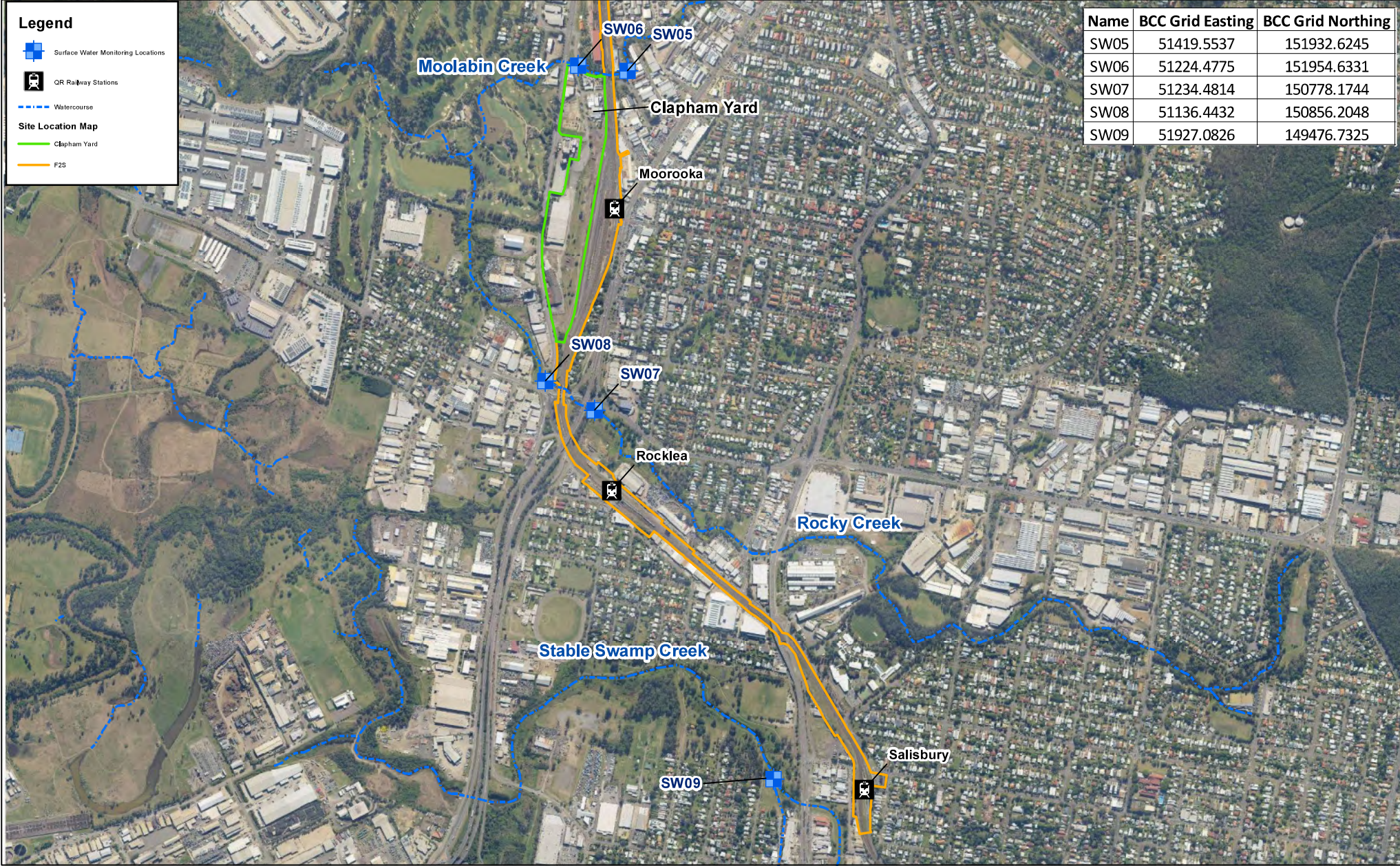
Attachment 3 Monitoring Locations – Vibration

Not triggered during this monitoring period

Attachment 4 Monitoring Locations – Air Quality



Attachment 5 Monitoring Locations – Surface Water



Appendix B – TSD Monthly Report

COORDINATOR GENERAL MONTHLY REPORT: November 2020

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

1. Monthly Monitoring Summary

It is the Project'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 twenty (20) occasions, and noise monitoring was conducted on twenty-nine (29) occasions during November 2020. Each vibration and noise monitoring event confirmed works adhered to project requirements.

Ambient air quality monitoring was conducted at the Roma Street, Albert Street, Woolloongabba and Boggo Road precinct sites during November 2020. Air quality monitoring confirmed works adhered to project requirements.

Water quality monitoring was conducted before the release of water from the site on thirteen (13) occasions. Each monitoring event confirmed project requirements were adhered to. One (1) round of surface water quality monitoring was also conducted that confirmed no impacts were generated by the Project.

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	Project works have been conducted compliant 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 works were conducted in accordance with the Construction Environmental Plan (CEMP) (Rev 7).
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 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	Project works have been conducted in accordance with the approved hours of work.
11.	Noise – Work must aim to achieve internal noise goals for human health and well-being.	Yes	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.

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
	Vibration – Works must aim to achieve vibration goals for cosmetic damage, human comfort and sensitive building contents.	Yes	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	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	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	The Project possesses processes that 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	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 Project 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	The Project possesses processes that ensure erosion & sediment control is managed in accordance with Imposed Condition 18.
19.	Acid Sulfate Soils managed as per the <i>Queensland Acid Sulfate Soil Technical Manual</i> .	Yes	The Project possesses processes that ensure acid sulphate soils are managed in accordance with Imposed Condition 19.
20.	Landscape and open space – general requirement to minimise impacts on landscapes and open space values and specific requirements around Victoria park	Yes	Project works are designed and implemented in accordance with Condition 20.

CG Condition	Requirement Summary	Compliance Met (Yes/No/NA)	Comment
21.	Worksite rehabilitation – worksites rehabilitated as soon as practicable upon completion of works or commissioning, and in consultation with Brisbane City Council.	Yes	Project works are designed and implemented in accordance with Condition 21.

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 exist that these goals may not be achieved.

Twenty (20) vibration monitoring sessions were conducted during November 2020.

All vibration monitoring adhered to project requirements and is detailed in the table below.

Table 2: Vibration Monitoring Data

Start Date	Time (AM/PM)	Finish Date	Location (Street Name) (Construction Precinct)	Average Vibration level (mm/s)	Max Vibration Level (mm/s)	Vibration Goal (mm/s)	Receiver / Goal Type	Adhered to Project Requirements (Yes / No)
02/11/2020	14:05	10/11/2020	Roma Street (Roma Street Precinct)	0.09	0.20	2	Heritage Structure	Yes
05/11/2020	14:23	5/11/2020	Albert Street (Albert Street Precinct)	-	1.00	50	Commercial	Yes
05/11/2020	14:10	6/11/2020	Albert Street (Albert Street Precinct)	0.37	1.94	50	Commercial	Yes
05/11/2020	16:02	5/11/2020	Albert Street (Albert Street Precinct)	-	4.75	10	Controlled Blast (Heritage Structure)	Yes
06/11/2020	13:38	12/11/2020	Albert Street (Albert Street Precinct)	0.10	0.40	2	Heritage Structure	Yes
09/11/2020	15:55	09/11/2020	Albert Street (Albert Street Precinct)	-	4.20	10	Controlled Blast (Heritage Structure)	Yes

Start Date	Time (AM/PM)	Finish Date	Location (Street Name) (Construction Precinct)	Average Vibration level (mm/s)	Max Vibration Level (mm/s)	Vibration Goal (mm/s)	Receiver / Goal Type	Adhered to Project Requirements (Yes / No)
12/11/2020	16:02	12/11/2020	Albert Street (Albert Street Precinct)	-	0.70	10	Controlled Blast (Heritage Structure)	Yes
13/11/2020	09:18	20/11/2020	Albert Street (Albert Street Precinct)	0.11	0.46	2	Heritage Structure	Yes
13/11/2020	15:00	13/11/2020	Roma Street (Roma Street Precinct)	-	3.65	10	Controlled Blast (Heritage Structure)	Yes
16/11/2020	16:06	16/11/2020	Albert Street (Albert Street Precinct)	-	1.45	10	Controlled Blast (Heritage Structure)	Yes
17/11/2020	11:00	19/11/2020	Roma St-Heritage Station	0.12	0.25	2	Heritage Structure	Yes
17/11/2020	16:00	17/11/2020	Albert Street (Albert Street Precinct)	-	3.25	10	Controlled Blast (Heritage Structure)	Yes
19/11/2020	10:40	27/11/2020	Roma Street (Roma Street Precinct)	0.17	1.13	50	Commerical	Yes
21/11/2020	16:06	21/11/2020	Albert Street (Albert Street Precinct)	-	2.15	10	Controlled Blast (Heritage Structure)	Yes
25/11/2020	15:31	25/11/2020	Albert Street (Albert Street Precinct)	-	3.80	10	Controlled Blast (Heritage Structure)	Yes
26/11/2020	16:54	27/11/2020	Busway / QR Corridor (Boggo Road Precinct)	0.40	3.62	50	Structure	Yes
27/11/2020	12:30	1/12/2020	Albert Street (Albert Street Precinct)	0.83	3.48	50	Commercial	Yes
27/11/2020	11:52	27/11/2020	Albert Street (Albert Street Precinct)	-	0.08	50	Commercial	Yes

Start Date	Time (AM/PM)	Finish Date	Location (Street Name) (Construction Precinct)	Average Vibration level (mm/s)	Max Vibration Level (mm/s)	Vibration Goal (mm/s)	Receiver / Goal Type	Adhered to Project Requirements (Yes / No)
27/11/2020	11:52	27/11/2020	Albert Street (Albert Street Precinct)	-	2.90	50	Commercial	Yes
28/11/2020	07:31	28/11/2020	Albert Street (Albert Street Precinct)	-	3.35	10	Controlled Blast (Heritage Structure)	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.

Noise monitoring was conducted on twenty-nine (29) occasions during November 2020. All noise monitoring data adhered to project requirements and is provided in the table below.

Table 3: Noise Monitoring Data

Date	Time (AM / PM)	Location (Street Name) (Construction Precinct)	Purpose of Monitoring	Internal or External ^[3] Monitoring	Activity	Dominate noise source	Noise Goal LA10 ^[1]	Noise level LA10 ^[1]	Noise Goal LAeq ^[2]	Noise level LAeq ^[2]	Adhered to Project Requirements (Yes / No)
3/11/2020	10:03:00 PM	Hubert Street & Stanley Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling, Excavation and Spoil Haulage	Road traffic	54	62.6	47	58.8	Yes
3/11/2020	10:27:00 PM	Mark Lane (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling, Excavation and Spoil Haulage	Road traffic	54	57.1	47	56.5	Yes
5/11/2020	2:17:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition	Construction	72	88.9	62	85.7	Yes
5/11/2020	3:24:00 PM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition	Construction	67	70.7	57	70.9	Yes
5/11/2020	4:01:00 PM	Albert Street (Albert Street Precinct)	Controlled Blast	External	Tunnelling	Construction	130 ^[4]	126 ^[4]	N/A	N/A	Yes
8/11/2020	2:08:00 PM	Mark Lane (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling, Excavation and Spoil Haulage	Road traffic	54	60.1	47	59.2	Yes
8/11/2020	2:30:00 PM	Reid Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling, Excavation and Spoil Haulage	Road traffic	49	56.9	42	55.8	Yes

Date	Time (AM / PM)	Location (Street Name) (Construction Precinct)	Purpose of Monitoring	Internal or External ^[3] Monitoring	Activity	Dominate noise source	Noise Goal LA10 ^[1]	Noise level LA10 ^[1]	Noise Goal LAeq ^[2]	Noise level LAeq ^[2]	Adhered to Project Requirements (Yes / No)
9/11/2020	3:55:00 PM	Albert Street (Albert Street Precinct)	Controlled Blast	External	Tunnelling	Construction	130 ^[4]	127.7 ^[4]	N/A	N/A	Yes
9/11/2020	10:39:00 AM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition	Construction	67	68	57	66	Yes
9/11/2020	11:00:00 AM	Albert Street (Albert Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition	Construction	72	73.3	62	70.8	Yes
12/11/2020	3:57:00 PM	Albert Street (Albert Street Precinct)	Controlled Blast	External	Tunnelling	Construction	130 ^[4]	102 ^[4]	N/A	N/A	Yes
13/11/2020	3:00:00 PM	Roma Street (Roma Street Precinct)	Controlled Blast	External	Tunnelling	Construction	130 ^[4]	126.9 ^[4]	N/A	N/A	Yes
16/11/2020	4:06:00 PM	Albert Street (Albert Street Precinct)	Controlled Blast	External	Tunnelling	Construction	130 ^[4]	123 ^[4]	N/A	N/A	Yes
17/11/2020	4:00:00 PM	Albert Street (Albert Street Precinct)	Controlled Blast	External	Tunnelling	Construction	130 ^[4]	124.5 ^[4]	N/A	N/A	Yes
21/11/2020	3:31:00 PM	Albert Street (Albert Street Precinct)	Controlled Blast	External	Tunnelling	Construction	130 ^[4]	126.7 ^[4]	N/A	N/A	Yes
23/11/2020	11:20:00 AM	Albert Street (Albert Street Precinct)	Complaint response	Internal	Demolition and Spoil Haulage	General public noise	55	53.7	45	52.1	Yes
23/11/2020	11:36:00 AM	Albert Street (Albert Street Precinct)	Complaint response	Internal	Excavation	Construction	55	89.1 ^[5]	45	83.8	Yes
23/11/2020	8:25:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	Internal	Demolition and Spoil Haulage	General public noise and construction	60	72.9	50	70	Yes
23/11/2020	8:55:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition and Spoil Haulage	Construction	72	64	62	62.6	Yes

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 ^[1]	Noise Goal LAeq ^[2]	Noise level LAeq ^[2]	Adhered to Project Requirements (Yes / No)
24/11/2020	11:03:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	Internal	Demolition and Spoil Haulage	General public noise and construction	60	71.1	50	68.9	Yes
24/11/2020	11:23:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition and Spoil Haulage	General public noise and construction	67	70.8	57	68.4	Yes
24/11/2020	11:59:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	Internal	Demolition and Spoil Haulage	General public noise and construction	60	70.2	50	68.2	Yes
24/11/2020	9:59:00 PM	Anglesey Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling, Excavation and Spoil Haulage	Road traffic	54	55.5	47	54.4	Yes
24/11/2020	10:17:00 PM	Anglesey Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	External	Tunnelling, Excavation and Spoil Haulage	Road traffic	54	59.9	47	58.2	Yes
24/11/2020	10:33:00 PM	Anglesey Street (Woolloongabba Precinct)	Construction Monitoring at Sensitive Places	Internal	Tunnelling, Excavation and Spoil Haulage	Road traffic	42	34.5	35	35	Yes
25/11/2020	3:57:00 PM	Albert Street (Albert Street Precinct)	Controlled Blast	External	Tunnelling	Construction	130 ^[4]	126.9 ^[4]	N/A	N/A	Yes
27/11/2020	8:19:00 AM	Roma Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	Internal	Demolition	General public noise and construction	60	72.5	50	70.2	Yes
27/11/2020	8:45:00 AM	George Street (Roma Street Precinct)	Construction Monitoring at Sensitive Places	External	Demolition	General public noise and construction	72	75.8	62	75.3	Yes
28/11/2020	7:31:00 AM	Albert Street (Albert Street Precinct)	Controlled Blast	External	Tunnelling	Construction	130 ^[4]	126 ^[4]	N/A	N/A	Yes

- [1] Intermittent noise goal (LA10)

- [2] Continuous noise goal (LAeq)

- *[3] 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.*
- *[4] Blasting is measured in dB Linear Peak.*
- *[5] Relevant requirements implemented (eg Imposed Condition 11c)*

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 exist that these goals may not be achieved.

Dust deposition monitoring was performed during November 2020. The dust deposition gauges result for the reporting period are detailed below, and all monitoring data adhered to project requirements.

Table 4: Air Quality Monitoring – Deposited Dust Data

Location	Project Wide Air Quality Criteria & Goals ^[1]			Monitoring results	Comments
	Criterion	Air Quality Indicator	Goal		
Roma Street Precinct/ Northern Portal	Nuisance	Deposited dust	120 mg/m ² /day	16.6 mg/m ² /day	Air quality monitoring was performed during the reporting period. All results adhered to project requirements.
Albert Street Precinct				26.6 mg/m ² /day	
Woolloongabba Precinct				48.3 mg/m ² /day 96.7 mg/m ² /day	
Boggo Road Precinct/ Southern Portal				22.5 mg/m ² /day Sample 2 – Damaged ^[2]	

- ^[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] Glass monitoring vessel damaged during the monitoring period. Sample compromised. New monitoring vessel installed.

3.3.2 Particulates and Ambient Air Quality Results

Total Suspended Particules (TSP) and particulate matter less than 10µm (PM10) monitoring was conducted during November 2020.

TSP and PM10 are monitored using portable air quality units, as well as nearby Government air quality stations. Targeted monitoring of potential dust-generating activities is conducted by the mobile air quality units and was completed at the Roma Street, Albert Street, Woolloongabba, and Boggo Road Precincts during November 2020. Three (3) Government air quality stations near to the Construction Precincts are also utilised.

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

Date	Woolloongabba				Roma Street				Boggo Road				Albert Street			
	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10
	(µg/m3/24 hr)															
01-Nov-20	80	5.11	50	4.90	80	2.95	50	2.64	80	6.91	50	6.87	80	7.33	50	7.22
02-Nov-20	80	3.94	50	3.82	80	2.19	50	1.96	80	5.34	50	5.3	80	5.84	50	5.77
03-Nov-20	80	4.56	50	4.49	80	2.26	50	2.12	80	5.91	50	5.86	80	7.74	50	7.69
04-Nov-20	80	5.29	50	5.16	80	2.33	50	2.07	80	4.9	50	4.89	80	7.30	50	7.25
05-Nov-20	80	11.14	50	10.90	80	3.23	50	2.87	80	10.44	50	10.41	80	14.54	50	14.43
06-Nov-20	80	4.61	50	4.35	80	3.14	50	2.52	80	4.42	50	4.36	80	7.15	50	7.02
07-Nov-20	80	5.22	50	5.16	80	2.62	50	2.45	80	6.1	50	6.09	80	9.47	50	9.44
08-Nov-20	80	2.98	50	2.93	80	2.14	50	2.04	80	3.82	50	3.81	80	5.93	50	5.91
09-Nov-20	80	3.06	50	3.00	80	3.76	50	3.41	80	4.1	50	4.01	80	4.89	50	4.87
10-Nov-20	80	2.78	50	2.73	80	2.69	50	2.56	80	3.76	50	3.75	80	7.70	50	7.65
11-Nov-20	80	3.94	50	3.81	80	3.24	50	2.84	80	3.19	50	3.18	80	4.37	50	4.33
12-Nov-20	80	2.91	50	2.80	80	3.02	50	2.89	80	2.91	50	2.89	80	4.87	50	4.83
13-Nov-20	80	9.76	50	9.61	80	5.05	50	4.9	80	8.74	50	8.72	80	11.64	50	11.60
14-Nov-20	80	19.24	50	19.12	80	11.24	50	11.14	80	24.14	50	24.1	80	27.28	50	27.22
15-Nov-20	80	28.95	50	28.86	80	4.59	50	4.56	80	39.82	50	39.81	80	42.10	50	42.05
16-Nov-20	80	22.77	50	22.66	80	8.52	50	8.46	80	27.84	50	27.82	80	30.35	50	30.31
17-Nov-20	80	15.14	50	15.00	80	3.94	50	3.81	80	17.15	50	17.12	80	20.13	50	20.07
18-Nov-20	80	7.62	50	7.48	80	3.39	50	3.19	80	9.49	50	9.44	80	13.80	50	13.74
19-Nov-20	80	4.88	50	4.82	80	3.23	50	3.04	80	5.61	50	5.6	80	9.16	50	9.13
20-Nov-20	80	5.21	50	5.11	80	5.03	50	5.19	80	6.65	50	6.63	80	6.19	50	6.13
21-Nov-20	80	4.12	50	4.05	80	7.37	50	7.34	80	5.27	50	5.2	80	_[1]	50	_[1]
22-Nov-20	80	3.45	50	3.42	80	6.56	50	6.55	80	4.18	50	4.16	80	_[1]	50	_[1]
23-Nov-20	80	13.74	50	13.57	80	6.89	50	6.82	80	17.23	50	17.22	80	_[1]	50	_[1]

Date	Woolloongabba				Roma Street				Boggo Road				Albert Street			
	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10	TSP GOAL	TSP	PM10 GOAL	PM10
	(µg/m3/24 hr)															
24-Nov-20	80	16.93	50	16.74	80	9.57	50	9.47	80	30.09	50	30.03	80	4.37	50	4.26
25-Nov-20	80	4.26	50	4.14	80	9.64	50	9.57	80	5.83	50	5.79	80	7.68	50	7.64
26-Nov-20	80	4.62	50	4.52	80	7.05	50	7.03	80	4.89	50	4.87	80	7.69	50	7.62
27-Nov-20	80	3.30	50	3.19	80	5.93	50	5.9	80	3.69	50	3.68	80	6.61	50	6.55
28-Nov-20	80	3.24	50	3.19	80	5.76	50	5.73	80	3.39	50	3.37	80	6.10	50	6.06
29-Nov-20	80	14.55	50	14.47	80	23.14	50	23.1	80	20.13	50	20.11	80	23.81	50	23.73
30-Nov-20	80	7.01	50	6.88	80	14.68	50	14.64	80	10.38	50	10.35	80	14.20	50	14.13

- [1] Due to a technical fault, the Albert Street mobile air quality unit stopped functioning between 21st to 23rd November 2020. The fault occurred over the weekend and rectified as soon as practicable. A nearby (Brisbane CBD) DES Air Quality Station demonstrated compliant air quality during November. The levels are also consistent with levels recorded early in the month when the unit was operating.

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

- Brisbane CBD: PM₁₀ daily Maximum average: **48.0 µg/m3/24 hr** (<https://apps.des.qld.gov.au/air-quality/chart/?station=cbd¶meter=18&date=1/11/2020&timeframe=month>)
- South Brisbane: PM₁₀ daily Maximum average: **60.0 µg/m3/24 hr** (<https://apps.des.qld.gov.au/air-quality/chart/?station=sbr¶meter=18&date=1/10/2020&timeframe=month>)
- Woolloongabba: PM₁₀ daily Maximum average: **41.5 µg/m3/24 hr** (<https://apps.des.qld.gov.au/air-quality/chart/?station=woo¶meter=18&date=1/10/2020&timeframe=month>)

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

The consistency of the PM₁₀ goal exceedances (order of magnitude, day, duration) at stations located away from the direct zone of influence from the works confirms that the exceedances of the PM₁₀ air quality goal over a 24hours averaging period are not relating to CBGU JV's works.

Brisbane had experienced elevated particulate concentration during the 24th to the 25th November 2020 due to regional-scale events, which likely had a significant impact on reported particulate concentrations.

Ambient air quality measurements can be influenced by external events outside of CBGU JV's control (e.g. road traffic, dust storms, fires).

Particle PM10 at Brisbane CBD, 1–30 November 2020 [about Particle PM10](#)

 [Brisbane CBD station overview](#)

 The guideline for Particle PM₁₀ is 120µg/m³ (1hr avg) and 50µg/m³ (24hr avg).

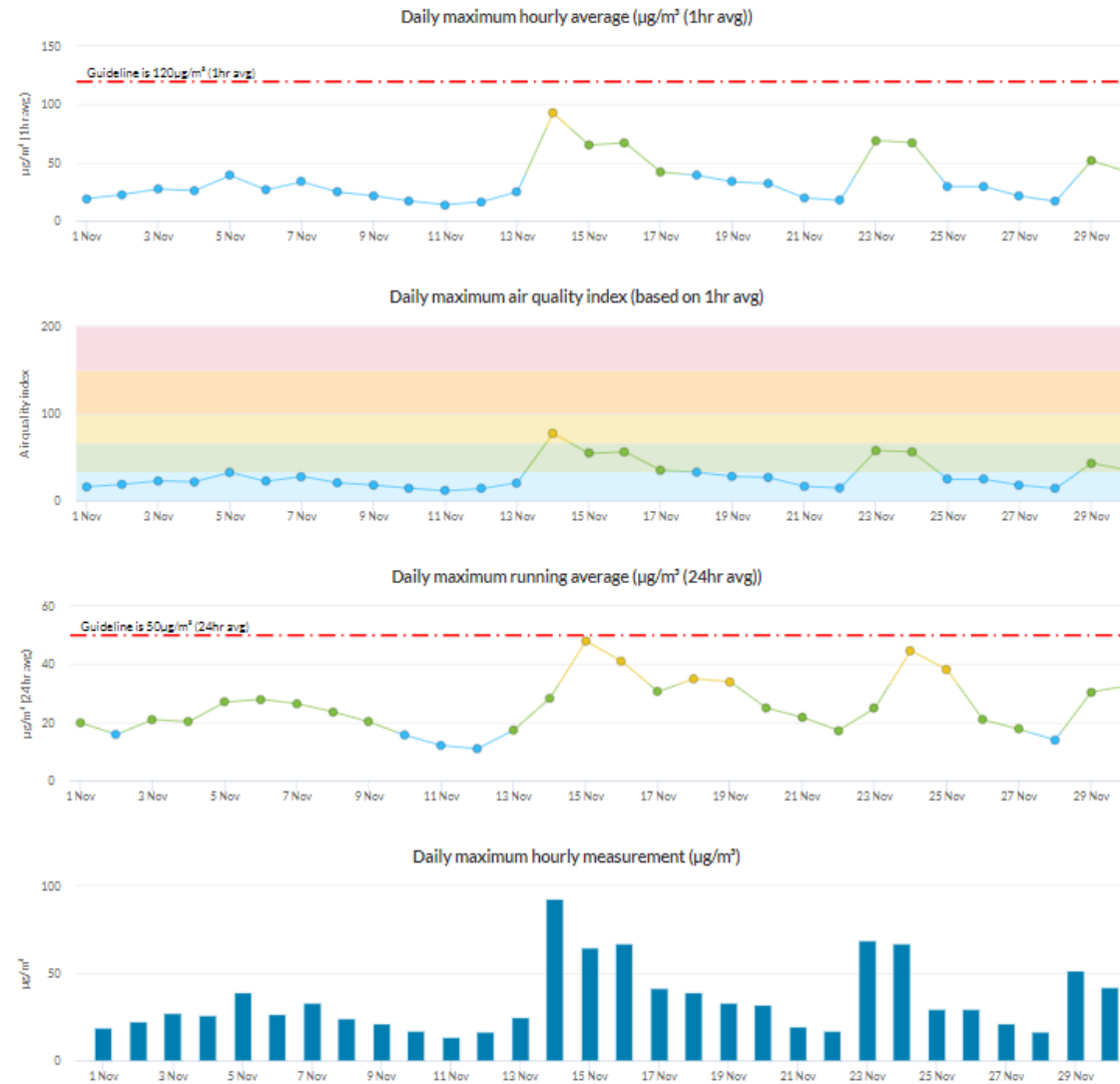


Figure 1: Brisbane CBD – DES Station - PM10 graph for November 2020 (reproduction from the DES website).

Particle PM₁₀ at South Brisbane, 1–30 November 2020 [about Particle PM₁₀](#)

[South Brisbane station overview](#)

The guideline for Particle PM₁₀ is 120µg/m³ (1hr avg) and 50µg/m³ (24hr avg).

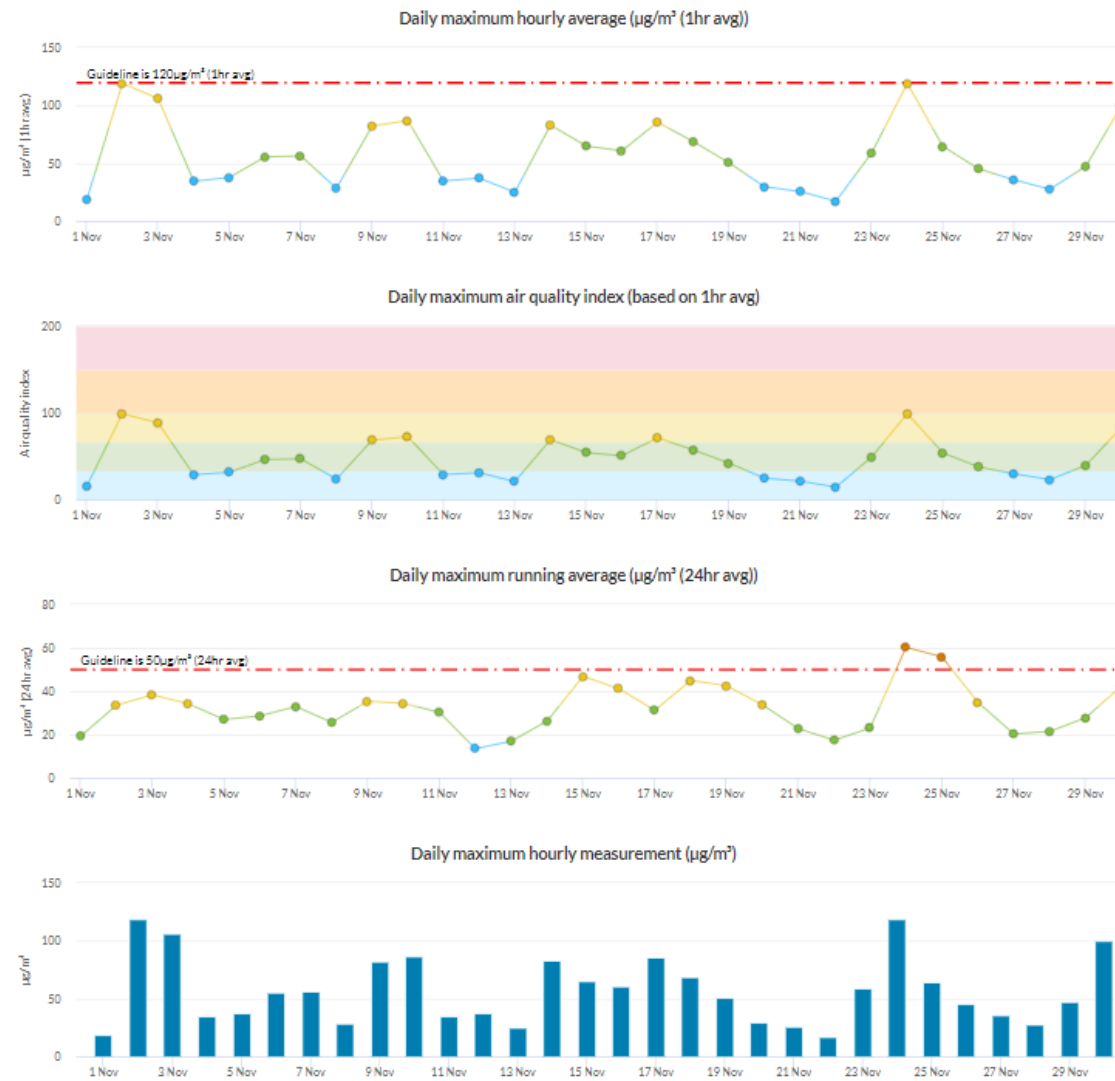


Figure 2: South Brisbane – DES Station - PM₁₀ graph for November 2020 (reproduction from the DES website accessed).

Particle PM10 at Woolloongabba, 1–30 November 2020 [about Particle PM10](#)

[Woolloongabba station overview](#)

The guideline for Particle PM₁₀ is 120 µg/m³ (1hr avg) and 50 µg/m³ (24hr avg).

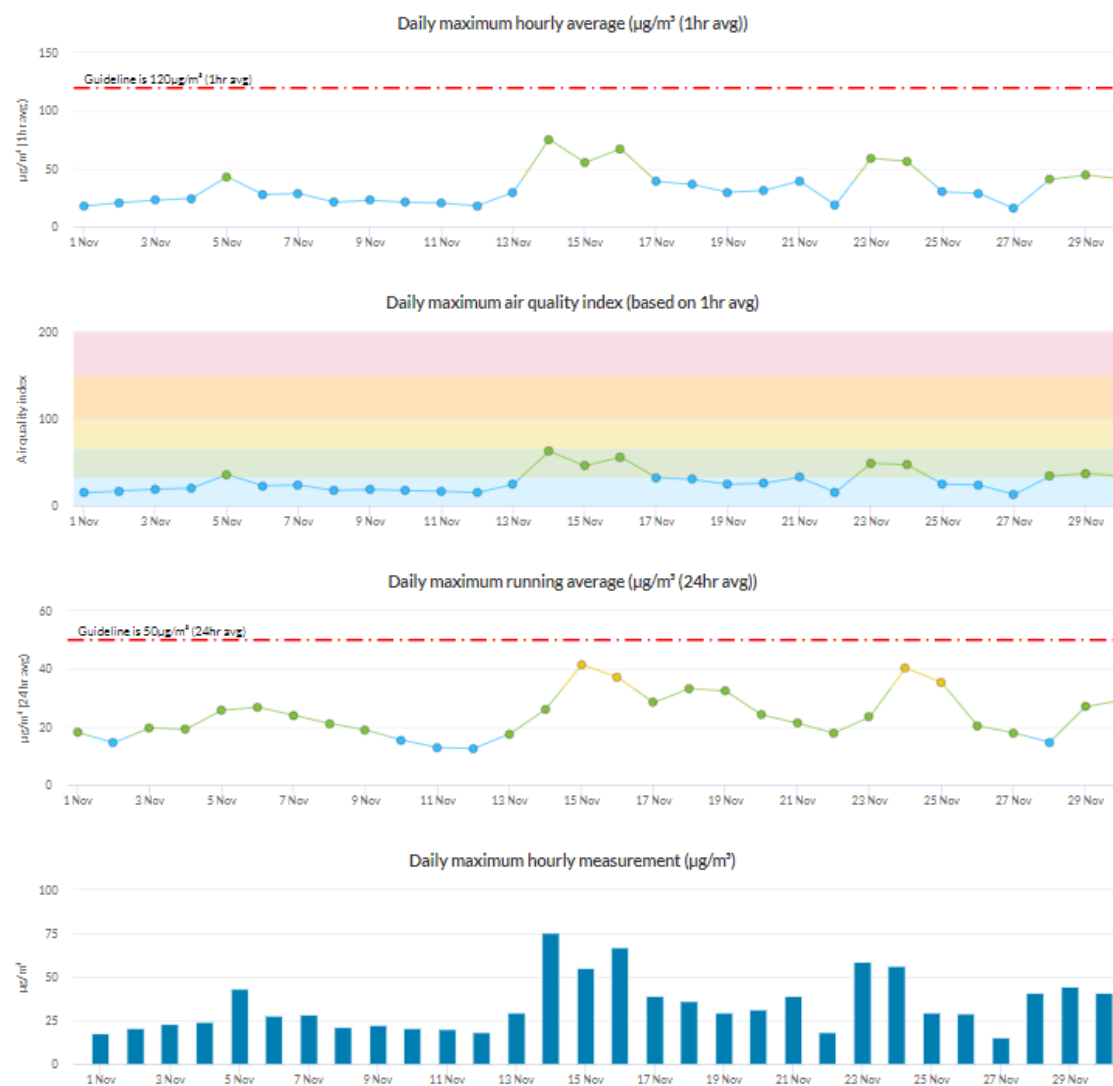


Figure 3: Woolloongabba – DES Station - PM10 graph for November 2020 (reproduction from the DES website).

3.4 Water Quality – Discharge

CBGU undertook thirteen (13) water quality monitoring events prior to the release (groundwater and surface water) from the site during November 2020.

3.4.1 Groundwater Discharge

Water quality monitoring data is provided in the table below.

Table 6: Groundwater Discharge - Water Quality Monitoring Data

Location	Date	Water Quality Objectives ^[1]											Adhered to Project Requirements (Yes / No)
		Turbidity (NTU)	Suspended solids (mg/L)	Chlorophyll a (µg/L)	Total nitrogen (µg/L) ^[3]	Oxidised N (µg/L) ^[3]	Ammonia N (µg/L) ^[3]	Organic N (µg/L) ^[3]	Total phosphorus (µg/L)	Filterable reactive phosphorus (FRP) (µg/L)	Dissolved oxygen (%) ^[2]	pH	
Albert Street	13/11/2020	0.80	<5	<1	8200.00	2880.00	3630.00	1700.00	20.00	<10	106.52	7.92	Yes
Roma Street	17/11/2020	0.70	<5	<1	4600.00	370.00	1390.00	2800.00	20.00	<10	89.56	7.50	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] Adhered to project requirements regarding aiming to achieve the water quality objective. 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] Adhered to project requirements regarding aiming to achieve the water quality objective. These samples identified results generally consistent with pre-construction conditions, and no external influences were introduced by construction activity.
- Note: 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 Poned/surface water Discharge

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

Table 7: Surface Water Discharge - Water Quality Monitoring Data

Location	Date	Water Quality Objectives ^[1]		Adhered to Project Requirements (Yes / No)
		Turbidity (NTU)	pH	
Boggo Road	2/11/2020	10.10	7.24	Yes
Roma Street	3/11/2020	0.80	7.50	Yes
Boggo Road	3/11/2020	2.52	7.50	Yes
Boggo Road	4/11/2020	8.82	7.62	Yes
Boggo Road	5/11/2020	5.32	7.72	Yes
Boggo Road	5/11/2020	2.12	7.66	Yes
Boggo Road	6/11/2020	4.12	7.82	Yes
Boggo Road	6/11/2020	6.26	7.89	Yes
Woolloongabba	13/11/2020	23.50	7.13	Yes
Boggo Road	26/11/2020	34.00	7.17	Yes
Boggo Road	27/11/2020	28.00	7.57	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 November 2020, CBGU JV undertook one (1) round of surface water sampling at four (4) locations (upstream and downstream).

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 provided within section 3.4 above.

Table 8: Offsite Upstream & Downstream Water Quality Data

Location	Date	Purpose of Monitoring	Turbidity (NTU)	EC (µS/cm)	Dissolved oxygen (%)	pH
Albert Street	13/11/2020	Monthly	14.74	43100	91.64	7.90
Albert Street	13/11/2020	Monthly	16.16	43200	91.64	7.90
Roma Street	13/11/2020	Monthly	39.70	40200	88.35	7.71
Roma Street	13/11/2020	Monthly	42.10	40600	90.77	7.78
Boggo Road ^[1]	13/11/2020	Monthly	15.05	25800	37.52	7.45
Woolloongabba	13/11/2020	Monthly	16.48	41700	94.4	7.20
Woolloongabba	13/11/2020	Monthly	40.60	33500	96.82	7.53

- [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

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
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Nil for this reporting period

5 Complaints

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

During November 2020, sixteen (17) 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.	4/11/2020	Kent Street (Southern Area)	Traffic Management	A stakeholder emailed the Project regarding traffic management at the Kent Street bikeway. CBGU reviewed the arrangements and implemented additional traffic controls. CBGU reminded the workforce via a toolbox talk about the interests of cyclists..	Closed
2.	05/11/2020	Albert Street (Albert Street Precinct)	Noise / vibration	A stakeholder contacted the Project regarding noise and vibration from the Albert Street precinct during standard construction hours. CBGU provided the stakeholder with an overview of the works occurring and their duration at the Albert Street precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.	Closed

No.	Date	Location	Description of Issue	Responses	Status of Event
				The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.	
3.	5/11/2020	Roma Street (Roma Street Precinct)	Noise	<p>A stakeholder contacted the Project regarding noise from the Roma Street precinct during non-standard construction hours.</p> <p>CBGU provided the stakeholder with an overview of the works occurring and their duration at the Roma Street precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.</p> <p>The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.</p>	Closed
4.	5/11/2020	Roma Street (Roma Street Precinct)	Noise	<p>A stakeholder contacted the Project regarding noise from the Roma Street precinct during non-standard construction hours.</p> <p>CBGU provided the stakeholder with an overview of the works occurring and their duration at the Roma Street precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.</p> <p>The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.</p> <p>Note: Another contractor, not associated with CRR, was undertaking tree lopping works on Makerston Street at the time of the complaint.</p>	Closed
5.	06/11/2020	Kent Street (Southern Area)	Traffic Management	<p>A stakeholder contacted the Project regarding traffic management at the Kent Street bikeway.</p> <p>CBGU provided the stakeholder with an overview of the traffic management works occurring at the Kent Street bikeway.</p> <p>CBGU reviewed the arrangements and implemented additional traffic controls. CBGU reminded the workforce via a toolbox talk about the interests of cyclists.</p>	Closed
6.	7/11/2020	Albert Street (Albert Street Precinct)	Noise	<p>A stakeholder contacted the Project regarding noise from the Albert Street precinct during standard construction hours.</p> <p>CBGU provided the stakeholder with an overview of the works occurring and their duration at the Albert Street precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.</p> <p>The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.</p>	Closed

No.	Date	Location	Description of Issue	Responses	Status of Event
7.	9/11/2020	Peter Doherty Street	Noise	<p>A stakeholder contacted the Project regarding work force behaviour on Peter Doherty Street.</p> <p>CBGU investigated the circumstances and confirms this complaint did not relate to the Project.</p>	Closed
8.	10/11/2020	Albert Street (Albert Street Precinct)	Noise	<p>A stakeholder contacted the Project regarding noise from the Albert Street precinct during standard construction hours.</p> <p>CBGU provided the stakeholder with an overview of the works occurring and their duration at the Albert Street precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.</p> <p>The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.</p>	Closed
9.	12/11/2020	Albert Street	Waste Management	<p>A stakeholder contacted the Project regarding waste management on Mary Street.</p> <p>CBGU addressed the workforce via a toolbox talk about appropriate waste management.</p>	Closed
10.	12/11/2020	Albert Street	Vibration and Property	<p>A stakeholder contacted the Project regarding vibration from the Albert Street precinct.</p> <p>CBGU provided the stakeholder with an overview of the works occurring and their duration at the Albert Street precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.</p> <p>The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.</p>	Closed
11.	18/11/2020	Tunnel alignment	Building Condition Survey	<p>A stakeholder contacted the Project regarding a pre-construction building condition survey. A notification was issued requesting property access to conduct a building condition survey at the property, however the stakeholder advised that she (specifically) was not notified that the survey would be undertaken.</p>	Closed
12.	23/11/2020	Albert Street	Noise	<p>A stakeholder contacted the Project regarding noise from the Albert Street precinct during standard construction hours.</p> <p>CBGU provided the stakeholder with an overview of the works occurring and their duration at the Albert Street precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.</p> <p>The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.</p>	Closed

No.	Date	Location	Description of Issue	Responses	Status of Event
13.	24/11/2020	Albert Street	Vibration and Property	<p>A stakeholder contacted the Project regarding vibration from the Albert Street precinct. CBGU provided the stakeholder with an overview of the works occurring and their duration at the Albert Street precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.</p> <p>The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.</p>	Closed
14.	25/11/2020	Albert Street	Noise	<p>A stakeholder contacted the Project regarding noise from the Albert Street precinct during non-standard construction hours. CBGU provided the stakeholder with an overview of the works occurring and their duration at the Albert Street precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.</p> <p>The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.</p>	Closed
15.	26/11/2020	Albert Street	Injury	Project notified by a person that injury allegedly occurred within a public space.	Closed
16.	27/11/2020	Albert Street	Noise	<p>A stakeholder contacted the Project regarding noise from the Albert Street precinct during non-standard construction hours. Complainant not contactable to provide feedback.</p> <p>The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.</p>	Closed
17.	27/11/2020	Albert Street	Noise	<p>A stakeholder contacted the Project regarding noise from the Albert Street precinct during non-standard construction hours. CBGU provided the stakeholder with an overview of the works occurring and their duration at the Albert Street precinct. The Project also outlined the mitigation measures used to alleviate potential impacts and ensure compliance.</p> <p>The Project also reviewed the circumstances and monitoring confirmed works adhered to project noise requirements.</p>	Closed