

PARRAMATTA LIGHT RAIL STAGE 1

Supply, Operate and Maintain Contract

Annual Environment Report – 2022

PLR1SOM-GLR-ALL-EN-RPT-000008

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1 Executive Summary

This Annual Environment Report covers the reporting period of 01/01/2022 to 31/12/2022, summarises the four 2022 Quarterly Environmental Reports prepared by Great River City Light Rail Pty Ltd (GRCLR) and provides additional information to meet contractual requirements.

The Parramatta Light Rail (PLR) project is subject to Infrastructure Approval (CSSI-8285) under the *Environmental Planning and Assessment Act 1979* (EP&A Act).

GRCLR is the Supply, Operate and Maintain (SOM) Contractor for Stage 1 of PLR and has contracted the design, construction, testing and commissioning of the SOM scope of works to Construcciones y Auxiliar de Ferrocarriles (CAF) and their sub-contractors.

Key environmental management activities undertaken during 2022 were:

- Revision of CEMP, and all relevant sub-plans and Site Establishment Management Plan (SEMP)
- Major construction work at the Stabling and Maintenance Facility (SaMF)
- Handover of entire main alignment from PCPLR to GRCLR
- Commencement of construction at stops
- Weekly environmental inspections by the Environmental Representative (ER)
- Environmental monitoring undertaken:
 - Noise (internally and by AA)
 - Air (deposited dust)
 - Water (assessment of water in accordance with discharge procedure)
- Auditing
- Completion and implementation of the Operational Noise and Vibration Review (ONVR)
- Preparation and submission of Out Of Hours Works permits in accordance with Environmental Protection Licence 21606

2 Purpose of the Annual Environment Report

The purpose of this Annual Environmental Report is to address the requirements of *Parramatta Light Rail Stage 1 Supply, Operate and Maintain Contract, Exhibit A – Management Requirements, Annexure 13 – Reporting Requirements, Clause 2.1 Annual Environment Reports*.

Under Clause 2.1 (g) this Annual Environment Report must address:

- (i) the relevant reporting requirements under the Project Plans
- (ii) any other reporting requirements identified within the Contract, Management Requirements and Scope and Performance Requirements
- (iii) any other information that TfNSW may reasonably request.

This Annual Environment Report covers the reporting period of 01/01/2022 to 31/12/2022, summarises the four 2022 Quarterly Environmental Reports prepared by Great River City Light Rail Pty Ltd (GRCLR) and provides additional information to meet the above requirements.

3 Statutory Context

Stage 1 of Parramatta Light Rail (PLR) has been subject to environmental impact assessment under the *Environmental Planning and Assessment Act 1979* (EP&A Act). It is classified as Critical State Significant Infrastructure (CSSI).

Stage 1 of PRL was approved by the Minister for Planning on 29 May 2018, under Section 5.19 of the EP&A Act 1979. An environmental impact statement (EIS) was prepared as part of the infrastructure application (CSSI-8285) as was a submissions and preferred infrastructure report (SPIR) following public exhibition of the EIS.

The Infrastructure Approval has subsequently been modified twice under Section 5.25 of the EP&A Act, with approvals issued on 21 December 2018 and 25 January 2019, respectively. The modifications related to changes to conditions of approval (CoAs) not the physical description of PLR.

The Infrastructure Approval, modifications and related environmental assessment documents can be found at:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8285.

Activities are also undertaken in accordance with the Environment Protection Licence (EPL) 21606, which was issued by the NSW Environment Protection Authority (EPA) to GRCLR on 14/12/2021.

4 Project Background

PLR is one of the NSW Government's major infrastructure projects being delivered by Transport for NSW (TfNSW) to serve a growing Sydney.

PLR will connect Westmead to Carlingford via Parramatta Central Business District (CBD) and Camellia. PLR is expected to be operational in 2024.

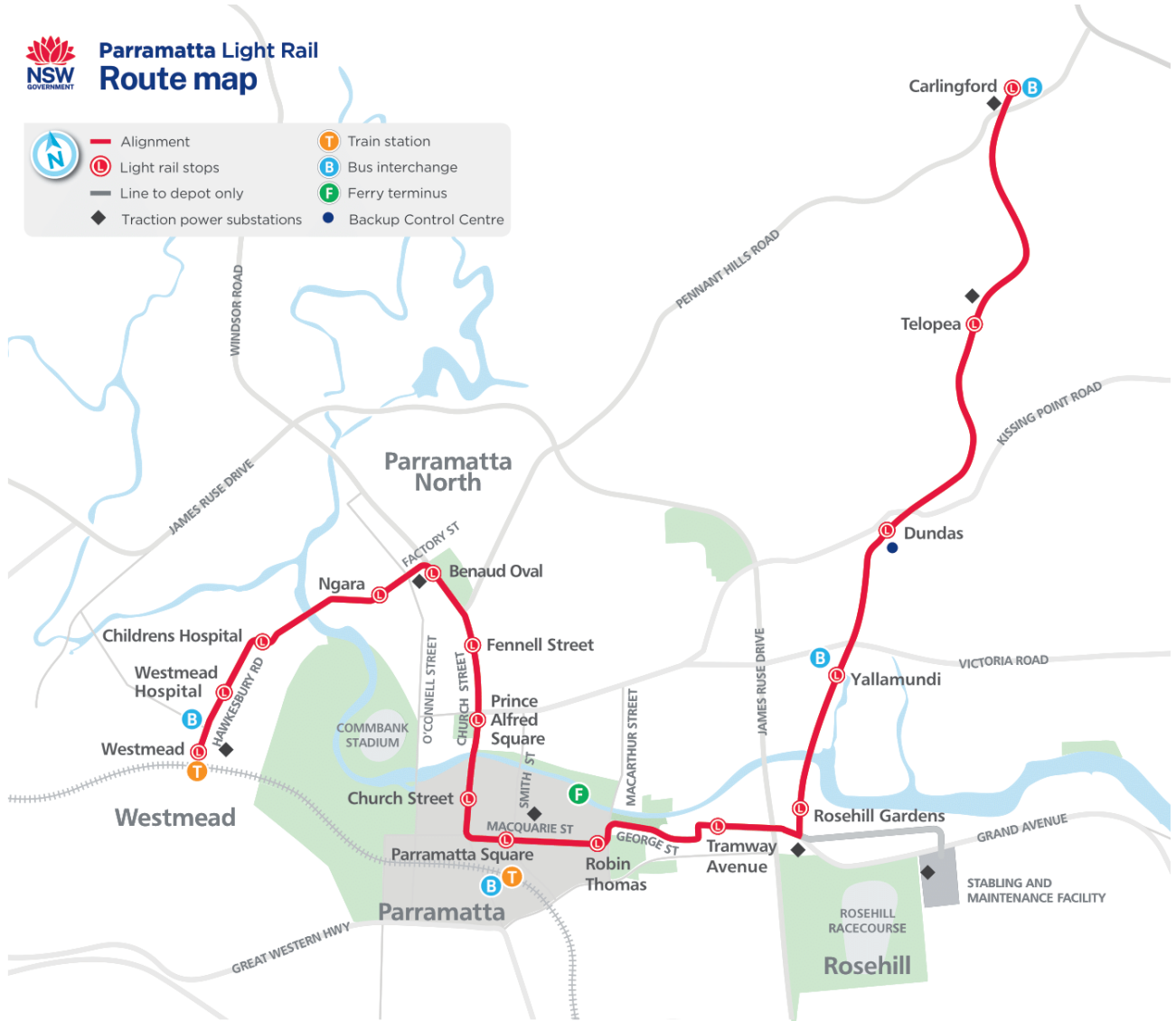
PLR will create new communities, connect great places and help both local residents and visitors move around and explore what the region has to offer. The route will link Parramatta's CBD and train station to a number of key locations, including the Westmead Precinct, the Parramatta North Growth Centre, the new Western Sydney Stadium, the Camellia Town Centre, the new Powerhouse Museum and Riverside Theatre arts and cultural precinct, the private and social housing redevelopment at Telopea, the Rosehill Gardens Racecourse and the three Western Sydney University campuses.

In summary, the key features of PLR include:

- A new dual track light rail network of approximately twelve kilometres in length, including approximately seven kilometres within the existing road corridor and approximately five kilometres within the existing Carlingford Line and Sandown Line, replacing current heavy rail services
- Sixteen stops that are fully accessible and integrated into the urban environment including a terminus stop at each end of Westmead and Carlingford
- High frequency 'turn-up-and-go' services operating seven days a week from 5am to 1am. Weekday services will operate approximately every 7.5 minutes in the peak period
- Modern and comfortable air-conditioned light rail vehicles, nominally 45 metres long and driver-operated, each carrying up to 300 passengers
- Intermodal interchanges with existing public transport services at Westmead terminus, Parramatta CBD and the Carlingford terminus
- Creation of two light rail and pedestrian zones (no general vehicle access) within the Parramatta CBD along Church Street (generally between Market Street and Macquarie Street) and along Macquarie Street (generally between Horwood Place and Smith Street)
- A stabling and maintenance facility (SaMF) located in Camellia for light rail vehicles to be stabled, cleaned and maintained
- New and modified bridge structures along the alignment including over James Ruse Drive and Clay Cliff Creek, Parramatta River (near the Cumberland Hospital), Kissing Point Road and Vineyard Creek, Rydalmere
- Alterations to the existing road network including line marking, additional traffic lanes and turning lanes, new traffic signals, and changes to traffic flows
- Relocation and protection of existing utilities
- Public domain and urban design work along the corridor and at Stop precincts
- Closure of the heavy rail line between Carlingford and Clyde
- Active transport corridors and additional urban design features along sections of the alignment and within Stop precincts
- Integration with the Opal Electronic Ticketing System (ETS)
- Real time information in light rail vehicles and at Stops via visual displays and audio.

An overview of the PLR route is shown in Figure 1.

Figure 1 Parramatta Light Rail Route



5 Supply Operate and Maintain (SOM) Scope of Work

TfNSW has divided the project into five packages of work – the SOM scope of work is designated Package 5 and is being delivered by the SOM Contractor.

As System Integrator for PLR, the SOM Contractor’s activities include:

- Delivery activities
- Light rail vehicle procurement
- Operation and maintenance.

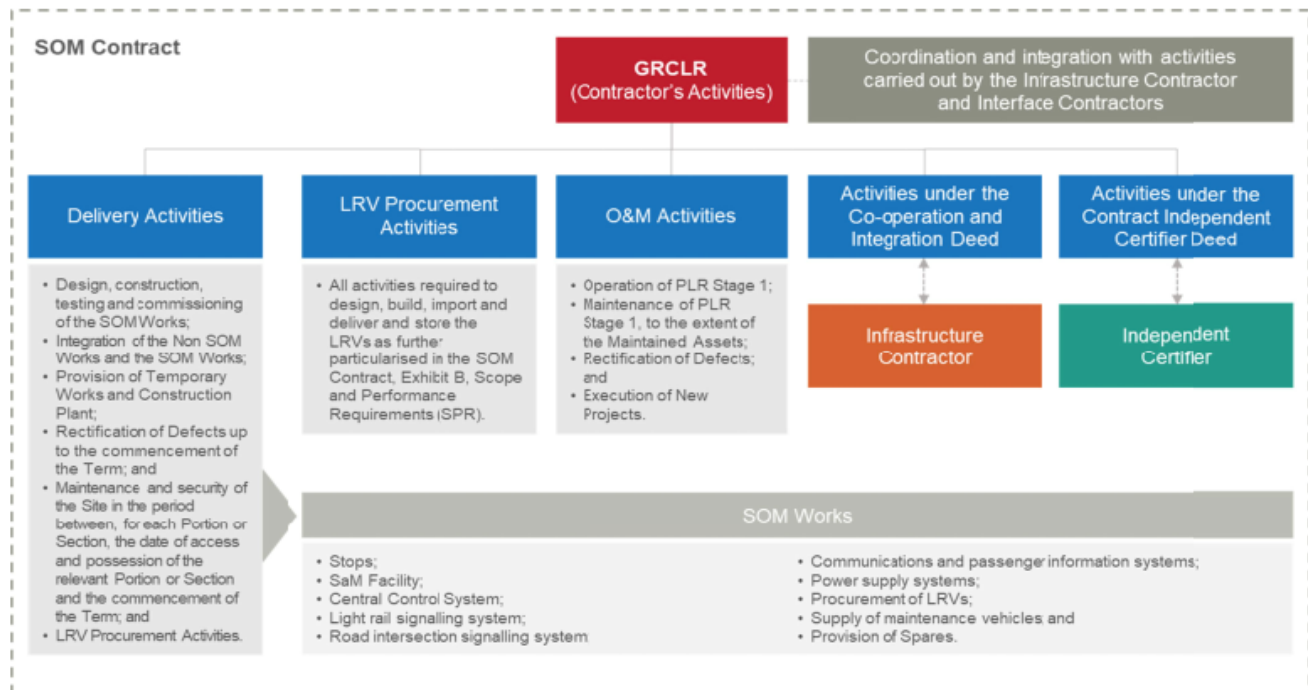
The delivery activities include all investigation, selection, specification, design, approvals, construction, manufacture, installation, testing and commissioning, operational readiness and activities to transition from the delivery phase to the operations phase.

In summary, the SOM package includes the following:

- All works above and additional to the platform concrete foundation slab at all stops
- Stabling and maintenance facility
- Central control system
- Light rail signalling system
- Elements of the road intersection signalling system
- Communications and passenger information systems
- Power Supply system
- Procurement of light rail vehicles (LRV)
- Maintenance plant and machinery for the LRVs
- Earthing and bonding, electrolysis and electromagnetic compatibility

Figure 2 further details these activities.

Figure 2 SOM Contract Activities for PLR



GRCLR is responsible for the delivery of the SOM works for PLR. GRCLR has sub-contracted out the supply component of these works to Construcciones y Auxiliar de Ferrocarriles (CAF) who has engaged Thales, General Electric and Laing O'Rourke Australia (LORAC) to undertake the design and construction responsibilities associated with the supply component of the works, which includes design and construction. The design and construction related scope covers:

- light rail systems
- high-voltage power supply
- stops above slab level
- SaMF.

Design and construction activities include testing and commissioning but exclude all operational and maintenance activities, which remain the responsibility of GRCLR.

6 Environmental Management – 2022

The environmental management activities undertaken by GRCLR during the 2022 reporting period are described below.

6.1 Environmental Management System (EMS)

The GRCLR Environment Management System (EMS) received Stage 1 accreditation under ISO14001 in February 2021. Certification was received after the Audit by BECERT in November 2021. Surveillance audit was completed on 12 December 2022 and there were no non-conformances raised. Awaiting issue of the ISO 14001 certification in due course.

Appendix A includes a copy of the GRCLR Environment and Sustainability Policy that was reviewed and updated in September 2022.

6.2 Environmental Design Requirements

The GRCLR Environment, Planning and Sustainability (EPS) team has continued to work with the Design team to close out comments on design packages and ensure compliance with the CoA, EPOs and REMMs relevant to design.

Environmental Design Review Reports (EDRRs) have been prepared with each design package submitted for review. Status of the EDRRs at the end of the reporting period is provided in Table 1. All packages are now Approved for Construction (AFC) except for one package, which is considered under the Detailed Design Review (DDR) stage, with PLR1SOM-GLR-ALL-SB-RPT-151002 Climate Change Impact Assessment Report Design Report updated on 22 November 2022 and closed by TfNSW on 9 December 2022.

Table 1: EDRR Status – end of 2022 reporting period

Design Package EDRR	Design Gate*	Design Package EDRR	Design Gate*	Design Package EDRR	Design Gate*
SOM 1	AFC	SOM 16	DDR	SOM 31	AFC
SOM 2	AFC	SOM 17	AFC	SOM 32	AFC
SOM 3	AFC	SOM 18	AFC	SOM 33	AFC
SOM 4	AFC	SOM 19	AFC	SOM 34	AFC
SOM 5	AFC	SOM 20	AFC	SOM 35	AFC
SOM 6	AFC	SOM 21	AFC	SOM 36	AFC
SOM 7	AFC	SOM 22	AFC	SOM 37	AFC
SOM 8	AFC	SOM 23	AFC	SOM 38	AFC
SOM 9	AFC	SOM 24	AFC	SOM 39	AFC
SOM 10	AFC	SOM 25	AFC	SOM 40	AFC
SOM 11	AFC	SOM 26	AFC	SOM 41	AFC
SOM 12	AFC	SOM 27	AFC	SOM 42	AFC
SOM 13	AFC	SOM 28	AFC	SOM 43	AFC
SOM 14	AFC	SOM 29	AFC	SOM 44	AFC
SOM 15	DDR	SOM 30	AFC	SOM 45	AFC

The Operational Noise and Vibration Review (ONVR) document was completed and submitted to DPE during Quarter 1 of 2022 and approved by DPE in Quarter 2 of 2022.

Interface meetings have been held with various project stakeholders including the Design Review Panel (DRP) and Aboriginal Focus Group (AFG). Consultation with NSW Heritage Office regarding heritage interpretation and design considerations was undertaken as part of the HIIP Rev.6 review.

6.3 Planning and Environmental Approvals

6.3.1 Planning Approvals

GRCLR is delivering the SOM scope of works under Infrastructure Approval (CSSI-8285) as modified.

Detailed compliance reporting addressing GRCLR progress against the requirements of the Conditions of Approval (CoAs), Environment Performance Objectives (EPOs) and Revised Environmental Mitigation Measures (REMMs) in TfNSW's compliance monitoring system (INX) was revised to half-yearly in 2022.

Consistency assessments (CAs) and Environmental Reviews (ERs) have been prepared under the Infrastructure Approval during the reporting period as outlined in the following sections. As the CEMP and sub-plans are finalised and endorsed (see Section 6.4.1), pre-construction minor works approvals (PCMWAs) are no longer required.

All operating sites have an endorsed Environmental Control Map (ECM) and all sites with ancillary facilities have an endorsed Minor Ancillary Facilities Checklist (MAFC), as per the below.

Table 2 Minor Ancillary Facilities Checklists submitted in 2022

Minor Ancillary Facilities Checklist	Submission date
Eat Street Stop Compound	Q1 2022
Stop Compounds 1 (Westmead, Westmead Hospital, Childrens Hospital, Ngara)	Q4 2022
Stop Compounds 2 (Carlingford, Telopea, Yallamundi, Rosehill Gardens)	Q4 2022
Robin Thomas stop	Q4 2022

6.3.1.1 Consistency Assessments (CAs)

During the reporting period, one CA relating to the SOM scope of works was prepared as outlined in Table 3.

Table 3 Consistency Assessments undertaken in 2022

Consistency Assessment	Status
Tetra masts	Revision 2 CA reviewed by TfNSW and comments provided – to be finalized Q1 2023.

6.3.1.2 Environmental Reviews (ERs)

During the reporting period, four Environmental Reviews (ERs) relating to the SOM scope of works was prepared as outlined in Table 5

Table 4: Environmental Reviews undertaken in 2022

Environmental Review	Status
GRCLR-ER-004 Utililies Installation, TPS6, Telopea	Endorsed by Environmental Representative, Q3 2022
GRCLR-ER-006 Utililies Installation, TPS1, Westmead	Endorsed by Environmental Representative, Q4 2022
GRCLR-ER-007 SaMF eastern boundary fencing, Camellia	Endorsed by Environmental Representative, Q4 2022
GRCLR-ER-008 TPS6 delivery pruning	Submitted Q4 2022

6.3.2 Environment Protection Licence

The Project is being carried out in accordance with Environment Protection Licence (EPL) 21606. The Pollution Incident Response Management Plan (PIRMP) associated with this EPL was finalised and issued for use during Q1 2022 (08/02/2022).

6.4 Environment in Construction

6.4.1 Construction Environmental Management Plans

By the end of the 2022 reporting period, the CEMP, all sub-plans and the Site Establishment Management Plan (SEMP) were endorsed or approved as required by the Infrastructure Approval, as well as updated to ensure consistency with the requirements of EPL 21606.

6.4.2 Construction Activities

During 2022, construction activities were undertaken at both the Stabling and Maintenance Facility (SaMF) at 6 Grand Avenue, Camellia, and along the main alignment.

Stabling and Maintenance Facility (SaMF)

Construction activities undertaken at the SaMF during the reporting period included the following:

- Maintenance and management of environmental controls (e.g. erosion and sedimentation controls)
- Earthworks as required
- Drainage works
- Slab construction
- Construction and fit-out of various buildings, including the administration, maintenance, sand and wash facilities
- Retaining wall construction
- Waste classification and disposal of excavated materials
- Utilities works
- Track construction
- Delivery and installation of the TPS8 substation
- Inspections of remediation solution
- Dewatering and off-site disposal of contaminated water
- Regular environmental inspections
- Dewatering and off-site discharge of suitably assessed water

Main alignment

All sections of the alignment were handed over to GRCLR during 2022. Stop construction has commenced at all stop locations, traction power substation (TPS) sites, and back-up operations control centre (BOCC). The following construction activities occurred along the alignment in 2022:

- Compound set-up at all stops
- Successful delivery and installation of stop canopies at 15 of the 16 stops
- Paver installation at a number of the stops
- Physical and electrical fit out at stops
- Delivery and installation of the TPS6 substation at Telopea
- Construction of the BOCC at Dundas
- Various other supporting works (tree trimming etc.)
- Regular environmental inspections
- Defect walks and other inspections with PCPLR.

6.4.3 Inspections and Monitoring

6.4.3.1 Inspections

Thirty-eight (38) inspections were undertaken of SOM activities by the Environmental Representative (ER) during 2022, at both the SaMF and main alignment locations. These inspections were attended by TfNSW and GRCLR representatives. One inspection was undertaken by TfNSW on behalf of the ER, who was unable to attend. Details of these inspection are provided in Table 5.

Table 5 ER Inspections in 2022

Inspection No.	Date	Location	Issues Identified	Cumulative Issues Identified*	Issues Closed	Cumulative Issues Closed*
SOM007	11/01/2022	SaMF	1	9	0	7

SOM008	1/02/2022	SaMF	2	11	0	7
SOM009	18/02/2022	SaMF	1	12	3	10
SOM010	1/03/2022	SaMF	1	13	2	12
SOM011	14/03/2022	SaMF	2	15	1	13
SOM012	30/03/2022	SaMF	3	18	2	15
SOM013	21/04/2022	SaMF	1	19	2	17
SOM015	4/05/2022	SaMF	1	20	2	19
SOM016	18/05/2022	SaMF	3	23	3	22
SOM017	1/06/2022	SaMF	2	25	2	24
SOM018	8/06/2022	Dundas / Eat Street	2	27	0	24
SOM019	15/06/2022	SaMF	2	29	2	26
SOM020	22/06/2022	Dundas / Eat Street	1	30	1	27
SOM021	29/06/2022	SaMF	0	30	0	27
PLR-1SOM-001 (TfNSW only)	6/07/2022	Dundas Stop	3	33	2	29
SOM022	12/07/2022	SaMF	3	36	0	29
SOM023	20/07/2022	Dundas-Telopea	2	38	0	29
SOM24	27/07/2022	SaMF	4	42	0	29
SOM25	3/08/2022	Carlingford-Grand Ave	7	49	2.5	31.5
SOM26	10/08/2022	Carlingford-Grand Ave	1	50	5	36.5
SOM27	17/08/2022	SaMF, Carlingford-Grand Ave	3	53	6.5	43
SOM28	24/08/2022	SaMF	1	54	1	44
SOM29	30/08/2022	SaMF	3	57	3	47
SOM30	8/09/2022	SaMF	4	61	4	51
SOM31	14/09/2022	SaMF	7	68	1	52
SOM32	21/09/2022	SaMF	1	69	6	58
SOM33	28/09/2022	SaMF	5	74	5	63
SOM34	5/10/2022	Westmead to Fennell Street	4	78	0	63
SOM35	12/10/2022	SaMF, TPS7 to BOCC	5	83	6	69
SOM36	19/10/2022	Westmead to Eat Street	4	87	3	72
SOM37	26/10/2022	SaMF, Dundas-Rydalmere, TPS6	4	91	12	84
SOM38	2/11/2022	Westmead – Cumberland, TPS 2/3	1	92	2	86
SOM39	10/11/2022	SaMF, Dundas, TPS4 & TPS6	5	97	2	88
SOM40	18/11/2022	Westmead, Children's Hospital, TPS4 & TPS6	5	102	3	91
SOM41	24/11/2022	SaMF, Telopea Stop, TPS6	5	107	6	97
SOM42	30/11/2022	Westmead-Parra Square	2	109	3	100

SOM43	6/12/2022	SaMF, TPS7-TPS6	8	117	3	103
SOM44	14/12/2022	TPS3, Tramway, Fennell St. Stops	5	122	3	106
SOM45	19/12/2022	SaMF	3	125	4	110

In addition, regular inspections of the SaMF site and sections of the alignment were undertaken by environmental management professionals from GRCLR and subcontractors.

6.4.3.2 Noise and Vibration Monitoring

Attended noise monitoring was carried out internally during the out of hours works at the Eat Street Stop on 21 June 2022, with no issues identified.

During the Ngara Canopy Lift on 14 November 2022, internal noise monitoring and direct observations were undertaken of the Parramatta Park Grey Headed Flying Fox (GHFF) Camp. No issues or impact upon the Camp from the works were identified.

Thirteen inspections were undertaken by the Acoustic Advisor (AA), covering both INF and SOM activities, as shown in Table 6, below.

Table 6: AA inspections during 2022

Inspection No.	Date	Location	Activity	SOM Issues identified
SOM	20/06/2022	Church Street Stop	OOHW - Canopy installation	1
SOM3	13/07/2022	Dundas, Hawkesbury Rd/Coraline St	Excavation, spoil removal, sawing	1
SOM4	8/08/2022	Tramway Avenue	Rock breaking, saw cutting	0
SOM5	23/08/2022	Dundas, TPS6	Crane, piling planned but not commenced	0
SOM6	5/09/2022	Factory St, Church St	No SOM works	0
SOM7	13/09/2022	TPS6	Piling	1
SOM7	27/09/2022	Main alignment	No SOM works	0
SOM8	10/10/2022	Childrens Hospital, Westmead	OOHW - Canopy installation	1
SOM9	14/10/2022	Teloepa	OOHW - Canopy installation	0
SOM11	28/10/2022	SaMF	Active construction	0
SOM11	4/11/2022	Area 1 (all stops), Area 2 (Tramway Avenue)	Minimal activity - hand tools, small generators	0
SOM12	12/11/2022	Teloepa	Traffic control and crane arrival for canopy install	2
SOM13	11/12/2022	Teloepa	OOHW - Delivery and install of TPS unit	3

6.4.3.3 Soil and Water Monitoring

Testing of soil for contamination was undertaken at the SaMF site during the reporting period, both to ensure the health and safety of the construction teams, and for classification of waste to be disposed off-site.

Monitoring of volume and quality of water at the SaMF site has been undertaken during the reporting period to meet the requirements of the Long Term Environmental Management Plan for the site. Excessive volumes of groundwater have been measured at one of the capillary break layer (CBL) pits and investigations into the cause of these measurements are ongoing. Water collected in the CBL pits is removed regularly for disposal at a licensed facility.

Stormwater discharge monitoring was undertaken during the reporting period to ensure captured stormwater met the water quality parameters identified in the project Soil and Water Management Plan prior to discharge offsite. Monitoring data for discharged water is provided below in Table 7.

Table 7 Stormwater Discharge Monitoring in 2022

Discharge Date	Permit #	Water Source	Discharge To	Oil & Grease	pH (6.5 - 8.5)	Turbidity (NTU)
10/01/2022		SaMF - North East Excavation	Stormwater	Nil	8.35	18.5
11/01/2022		SaMF - North East Excavation	Stormwater	Nil	8.48	11.6
17/01/2022		SaMF - North East Excavation	Stormwater	Nil	8.39	48.5
19/01/2022		SaMF - Tank 0	Stormwater	Nil	7.73	46
19/01/2022		SaMF - Tank 3	Stormwater	Nil	8.11	14.9
19/01/2022		SaMF - Tank 4	Stormwater	Nil	7.71	47.8
21/01/2022		SaMF - North East Excavation	Stormwater	Nil	8.35	45.2
7/02/2022		SaMF - North East Excavation	Stormwater	Nil	8.35	31.5
7/02/2022		SaMF - Tank 3	Stormwater	Nil	7.56	11.5
7/02/2022		SaMF - Tank 2	Stormwater	Nil	8.01	22.4
8/02/2022		SaMF - North East Excavation	Stormwater	Nil	8.35	27
9/02/2022		DS Pit 1	Stormwater	Nil	7.9	6.4
9/02/2022		DS Pit 7	Stormwater	Nil	8.01	11.8
10/02/2022		SaMF - Tank 3	Stormwater	Nil	8.34	31.9
15/02/2022		SaMF - North East Excavation	Stormwater	Nil	8.37	27.9
12/03/2022		SaMF - North East Excavation	Stormwater	Nil	8.21	48.9
14/03/2022		SaMF - North East Excavation	Stormwater	Nil	8.44	22.5
18/03/2022		SaMF - North East Excavation	Stormwater	Nil	8.14	37.5
19/03/2022		SaMF - North East Excavation	Stormwater	Nil	8.25	30.9
21/03/2022		SaMF - North East Excavation	Stormwater	Nil	8.09	4.6
22/03/2022		SaMF - North East Excavation	Stormwater	Nil	7.96	7.6
6/04/2022		SaMF - North East Excavation	Stormwater	Nil	7.79	26.1
11/04/2022		SaMF - North East Excavation	Stormwater	Nil	8.10	34.8
12/04/2022		SaMF - North East Excavation	Stormwater	Nil	8.27	29.7
13/04/2022		SaMF - North East Excavation	Stormwater	Nil	8.33	31.7
2/05/2022		SaMF - North East Excavation	Stormwater	Nil	8.3	0.3
24/05/2022		DS Pit 7	Stormwater	Nil	6.81	6.8
25/05/2022		DS Pit 7	Stormwater	Nil	6.79	19.5
26/05/2022		SaMF - North East Excavation	Stormwater	Nil	6.89	42.6
27/05/2022		SaMF - North East Excavation	Stormwater	Nil	7.03	36
27/05/2022		SaMF - Container 3	Stormwater	Nil	6.9	22.7
30/05/2022		SaMF - North East Excavation	Stormwater	Nil	7.04	43.7
30/05/2022		SaMF - North East Excavation	Stormwater	Nil	6.92	27.7
30/05/2022		SaMF - Drainage pit	Stormwater	Nil	7.03	36.5
10/06/2022		DS Pit 7	Stormwater	Nil	7.2	17.6
15/06/2022		DS Pit 7	Stormwater	Nil	6.8	0
16/06/2022		NE Basin	Stormwater	Nil	6.8	45.2
17/06/2022		NE Basin	Stormwater	Nil	7.1	42.9
17/06/2022		DS1	Stormwater	Nil	6.9	11.6
17/06/2022		DS7	Stormwater	Nil	7	34.2
20/06/2022		NE Basin	Stormwater	Nil	7.8	49.8

20/06/2022		DS1	Stormwater	Nil	7.2	2.2
20/06/2022		DS7	Stormwater	Nil	7.2	8.7
21/06/2022		DS7	Stormwater	Nil	7.2	36.4
22/06/2022		DS1	Stormwater	Nil	7.2	9.3
22/06/2022		DS7	Stormwater	Nil	7.8	8
22/06/2022		Tank 1	Stormwater	Nil	7.2	22.4
22/06/2022		Tank 4	Stormwater	Nil	6.8	36.3
23/06/2022		DS7	Stormwater	Nil	7.2	9.1
24/06/2022		DS7	Stormwater	Nil	6.9	3.1
27/06/2022		DS1	Stormwater	Nil	7.2	8.6
27/06/2022		DS7	Stormwater	Nil	6.8	20.6
7/07/2022		DS1	Stormwater	Nil	7.9	0.26
7/07/2022		DS2	Stormwater	Nil	7.73	0.18
7/07/2022		DS3	Stormwater	Nil	7.68	0.3
7/07/2022		DS4	Stormwater	Nil	8.04	18.26
7/07/2022		DS5	Stormwater	Nil	8.15	6.73
7/07/2022		Retention Pond North East	Stormwater	Nil	6.8	40.1
8/07/2022	49	DS2	Stormwater	Nil	7.7	0.97
8/07/2022	49	DS3	Stormwater	Nil	7.75	0.69
8/07/2022	49	DS4	Stormwater	Nil	7.98	16.47
8/07/2022	49	DS5	Stormwater	Nil	7.96	6.09
8/07/2022	49	DS6	Stormwater	Nil	7.81	3.8
8/07/2022	50	Track – Stabling Facility	Stormwater	Nil	7.05	4.5
8/07/2022	51	Maintenance building	Stormwater	Nil	7.92	26.73
8/07/2022	51	SPS2	Stormwater	Nil	7.05	21.43
8/07/2022	52	Retention Pond	Stormwater	Nil	6.54	25.68
11/07/2022	52	Maintenance Building	Stormwater	Nil	7.64	8.36
11/07/2022	52	Retention Tank 5	Stormwater	Nil	8.31	4.8
12/07/2022	53	Maintenance Building	Stormwater	Nil	7.01	11.09
12/07/2022	53	Retention Tank 5	Stormwater	Nil	6.9	4.14
12/07/2022	53	Retention Tank 4	Stormwater	Nil	6.89	6.32
12/07/2022	54	DS1	Stormwater	Nil	8.32	0
12/07/2022	54	DS2	Stormwater	Nil	7.94	0.06
12/07/2022	54	DS3	Stormwater	Nil	8.08	0.3
12/07/2022	54	DS4	Stormwater	Nil	8.19	2.96
12/07/2022	54	DS5	Stormwater	Nil	8.2	2.82
12/07/2022	54	DS6	Stormwater	Nil	8.28	0.13
13/07/2022	55	Maintenance Building	Stormwater	Nil	8.26	12.73
13/07/2022	55	Retention Tank 3	Stormwater	Nil	8.37	4.97
13/07/2022	55	SPS2	Stormwater	Nil	8.36	30.4
13/07/2022	55	Retention Pond	Stormwater	Nil	8.43	7.72
13/07/2022	56	DS1	Stormwater	Nil	7.92	0.3
13/07/2022	56	DS2	Stormwater	Nil	8.24	1.49
13/07/2022	56	DS3	Stormwater	Nil	7.98	0.28
13/07/2022	56	DS4	Stormwater	Nil	8.2	3.73

13/07/2022	56	DS5	Stormwater	Nil	8.33	1.79
13/07/2022	56	DS6	Stormwater	Nil	8.17	0.22
14/07/2022	57	Retention Tank 2	Stormwater	Nil	6.5	41.2
14/07/2022	57	Retention Tank 4	Stormwater	Nil	7.98	28
14/07/2022	58	Retention Tank 1	Stormwater	Nil	8.5	5.6
14/07/2022	59	DS1	Stormwater	Nil	8.48	6.8
14/07/2022	59	DS3	Stormwater	Nil	8.43	20.8
15/07/2022	60	DS4	Stormwater	Nil	8.37	6
15/07/2022	60	DS1	Stormwater	Nil	8.5	3.3
15/07/2022	61	Retention Tank 5	Stormwater	Nil	7.66	2.8
15/07/2022	62	Retention Tank 3	Stormwater	Nil	6.52	0
18/07/2022	63	Retention Tank 5	Stormwater	Nil	7.69	15.7
18/07/2022	63	Retention Tank 2	Stormwater	Nil	6.95	16.9
18/07/2022	64	DS7	Stormwater	Nil	8.15	2.4
20/07/2022	65	Retention Tank 2	Stormwater	Nil	6.54	4.1
20/07/2022	66	DS6	Stormwater	Nil	8.22	2.6
20/07/2022	66	DS1	Stormwater	Nil	7.58	3.2
21/07/2022	67	Retention Tank 3	Stormwater	Nil	6.52	2.9
21/07/2022	68	DS7	Stormwater	Nil	7.42	10.2
22/07/2022	69	Retention Tank 1	Stormwater	Nil	7.6	5.5
22/07/2022	69	Retention Tank 2	Stormwater	Nil	7.49	28.5
22/07/2022	69	Retention Tank 4	Stormwater	Nil	6.53	11.9
22/07/2022	70	Retention Tank 3	Stormwater	Nil	6.71	13.1
22/07/2022	70	Retention Tank 4	Stormwater	Nil	6.56	11.6
22/07/2022	71	DS1	Stormwater	Nil	8.49	17.9
22/07/2022	71	DS6	Stormwater	Nil	6.82	7.6
22/07/2022	71	DS7	Stormwater	Nil	8.46	39.4
25/07/2022	72	Retention Tank 1	Stormwater	Nil	8.48	5
25/07/2022	72	Retention Tank 2	Stormwater	Nil	8.16	0
25/07/2022	72	Retention Tank 5	Stormwater	Nil	8.49	2
25/07/2022	72	Blue Tank (south)	Stormwater	Nil	8.28	0
25/07/2022	73	Retention Tank 3	Stormwater	Nil	6.68	0
25/07/2022	73	Retention Tank 4	Stormwater	Nil	6.56	0.7
25/07/2022	73	Retention Pond	Stormwater	Nil	6.94	21.1
25/07/2022	73	Blue Tank (northeast)	Stormwater	Nil	6.8	0.4
25/07/2022	74	Service Lane 3	Stormwater	Nil	6.96	7.9
25/07/2022	74	Service Lane 4	Stormwater	Nil	6.65	49.9
25/07/2022	75	DS1	Stormwater	Nil	8.34	7.6
27/07/2022	76	Retention Tank 1	Stormwater	Nil	6.76	0.7
27/07/2022	76	Retention Tank 2	Stormwater	Nil	6.74	1.3
27/07/2022	76	Retention Tank 3	Stormwater	Nil	6.74	2.2
27/07/2022	76	Retention Tank 4	Stormwater	Nil	6.78	0
27/07/2022	76	Retention Tank 5	Stormwater	Nil	6.76	13.8
27/07/2022	77	DS2	Stormwater	Nil	6.87	7.3
27/07/2022	77	DS3	Stormwater	Nil	6.82	6.3

27/07/2022	77	DS4	Stormwater	Nil	6.75	22.7
27/07/2022	77	DS5	Stormwater	Nil	6.78	35.9
27/07/2022	77	DS6	Stormwater	Nil	6.92	1.7
27/07/2022	77	DS7	Stormwater	Nil	6.86	39
28/07/2022	78	Retention Tank 5	Stormwater	Nil	6.85	26.5
28/07/2022	79	DS1	Stormwater	Nil	6.89	16.9
28/07/2022	79	DS3	Stormwater	Nil	6.62	21.3
28/07/2022	79	DS4	Stormwater	Nil	6.63	23.5
28/07/2022	79	DS5	Stormwater	Nil	6.73	26.7
28/07/2022	79	DS7	Stormwater	Nil	6.9	27.8
28/07/2022	80	NE drainage line, from pit 02-A-18	Stormwater	Nil	7.2	35
29/07/2022	81	Retention Tank 1	Stormwater	Nil	6.88	0.8
29/07/2022	81	Retention Tank 2	Stormwater	Nil	7.03	0
29/07/2022	81	Retention Tank 3	Stormwater	Nil	6.84	0
29/07/2022	81	Retention Tank 4	Stormwater	Nil	7.08	3.7
29/07/2022	81	Retention Tank 6	Stormwater	Nil	6.91	41.1
29/07/2022	82	DS1	Stormwater	Nil	6.89	16.9
29/07/2022	82	DS2	Stormwater	Nil	6.83	13
29/07/2022	82	DS3	Stormwater	Nil	6.83	7.5
29/07/2022	82	DS4	Stormwater	Nil	6.95	8.4
29/07/2022	82	DS5	Stormwater	Nil	7.23	28.9
29/07/2022	82	DS7	Stormwater	Nil	6.96	38.3
1/08/2022	83	Retention Tank 4	Stormwater	Nil	7.37	1.8
3/08/2022	84	Northeast Blue Tank	Stormwater	Nil	8.49	0
4/08/2022	85	Retention Tank 4	Stormwater	Nil	8.46	0
4/08/2022	86	DS7	Stormwater	Nil	8.3	0
18/08/2022	87	DS1	Stormwater	Nil	8.5	0
18/08/2022	87	DS4	Stormwater	Nil	7.09	20.6
18/08/2022	87	DS5	Stormwater	Nil	7.1	8.7
18/08/2022	87	DS7	Stormwater	Nil	8.41	11.5
19/08/2022	88	Retention Tank 1	Stormwater	Nil	7.95	14.2
19/08/2022	88	Retention Tank 2	Stormwater	Nil	8.33	3.4
19/08/2022	88	Retention Tank 3	Stormwater	Nil	8.24	5.9
19/08/2022	88	Retention Tank 4	Stormwater	Nil	8.15	0
19/08/2022	88	Retention Tank 5	Stormwater	Nil	8.23	0.3
19/08/2022	88	Retention Tank 6	Stormwater	Nil	8.17	1
19/08/2022	89	DS7	Stormwater	Nil	8.29	13.6
19/08/2022	89	DS5	Stormwater	Nil	7.75	1.8
19/08/2022	89	DS4	Stormwater	Nil	8.21	32.2
24/08/2022	90	DS7	Stormwater	Nil	8.2	38.2
24/08/2022	90	DS1	Stormwater	Nil	8.16	33.2
25/08/2022	91	Retention Tank 4	Stormwater	Nil	8.15	25.7
25/08/2022	91	Retention Tank 5	Stormwater	Nil	8.28	36.8
29/08/2022	92	Retention Tank 4	Stormwater	Nil	7.94	2.3
29/08/2022	92	Blue Tank	Stormwater	Nil	7.58	7.1
29/08/2022	93	DS1	Stormwater	Nil	8.23	1.1

29/08/2022	93	DS7	Stormwater	Nil	8.03	20
30/08/2022	94	Retention Tank 4	Stormwater	Nil	8.32	6.4
30/08/2022	94	Retention Tank 2	Stormwater	Nil	8.17	0
30/08/2022	94	Blue Tank S	Stormwater	Nil	8.46	10.4
30/08/2022	94	Blue Tank NW	Stormwater	Nil	8.41	34.9
7/09/2022	95	Retention Tank 2	Stormwater	Nil	7.9	27.2
7/09/2022	95	Retention Tank 4	Stormwater	Nil	7.96	23.5
7/09/2022	95	Retention Tank 5	Stormwater	Nil	8.18	4.4
7/09/2022	95	Retention Tank 6	Stormwater	Nil	7.92	33.9
9/09/2022	97	Retention Tank 2	Stormwater	Nil	8.39	1.4
13/09/2022	98	Wheel Lathe	Stormwater	Nil	8.5	5.5
13/09/2022	98	Track 3	Stormwater	Nil	8.38	7.5
13/09/2022	98	Track 4	Stormwater	Nil	8.26	36.2
13/09/2022	98	Track 5	Stormwater	Nil	8.21	12.6
13/09/2022	98	Retention Tank 4	Stormwater	Nil	8.08	3.7
15/09/2022	99	Wheel Lathe	Stormwater	Nil	8.34	36
15/09/2022	99	Blue Tank (N)	Stormwater	Nil	8.1	14.2
16/09/2022	100	Retention Tank 4	Stormwater	Nil	8.37	8.3
16/09/2022	101	DS3	Stormwater	Nil	8.31	32.3
16/09/2022	101	DS4	Stormwater	Nil	8.33	25.5
16/09/2022	101	DS5	Stormwater	Nil	8.37	45.5
16/09/2022	102	Track 2	Stormwater	Nil	8.4	35.3
16/09/2022	102	Track 4	Stormwater	Nil	7.97	12.6
21/09/2022	103	Retention Tank 2	Stormwater	Nil	7.53	46.3
21/09/2022	103	Retention Tank 4	Stormwater	Nil	7.34	8.4
21/09/2022	103	Blue Tank (North)	Stormwater	Nil	7.31	4.6
21/09/2022	104	Retention Tank 1	Stormwater	Nil	8.46	23.6
21/09/2022	104	Retention Tank 5	Stormwater	Nil	8.33	2.7
21/09/2022	104	Retention Tank 6	Stormwater	Nil	8.17	37.9
23/09/2022	105	Retention Tank 1	Stormwater	Nil	8.23	39.7
23/09/2022	105	Retention Tank 5	Stormwater	Nil	8.46	31.4
23/09/2022	105	Retention Tank 6	Stormwater	Nil	7.86	6.6
23/09/2022	106	DS1	Stormwater	Nil	8.48	29.5
23/09/2022	106	DS7	Stormwater	Nil	8.45	40.7
26/09/2022	107	DS7	Stormwater	Nil	8.23	1.1
28/09/2022	109	Retention Tank 2	Stormwater	Nil	8.47	8.6
28/09/2022	109	Retention Tank 6	Stormwater	Nil	8.46	30.4
29/09/2022	110	Retention Tank 1	Stormwater	Nil	8	8.3
29/09/2022	110	Retention Tank 2	Stormwater	Nil	6.9	3.1
29/09/2022	110	Retention Tank 3	Stormwater	Nil	8.35	6.6
29/09/2022	110	Retention Tank 4	Stormwater	Nil	6.8	6.6
29/09/2022	110	Retention Tank 6	Stormwater	Nil	6.8	49.7
29/09/2022	111	DS1	Stormwater	Nil	8.4	12.5
29/09/2022	111	DS4	Stormwater	Nil	6.8	4.1
29/09/2022	111	DS5	Stormwater	Nil	6.6	0

29/09/2022	111	DS6	Stormwater	Nil	6.8	9.2
29/09/2022	111	DS7	Stormwater	Nil	8	9.6
4/10/2022	112	Retention Tank 1	Stormwater	Nil	7.2	7.5
4/10/2022	112	Retention Tank 5	Stormwater	Nil	6.8	14.2
4/10/2022	112	Retention Tank 6	Stormwater	Nil	6.9	46.2
6/10/2022	113	Retention Tank 2	Stormwater	Nil	7.1	4.6
6/10/2022	113	Retention Tank 3	Stormwater	Nil	6.9	36.5
6/10/2022	113	Retention Tank 4	Stormwater	Nil	7.8	21.5
7/10/2022	114	Retention Tank 6	Stormwater	Nil	6.8	17.1
7/10/2022	115	Retention Tank 1	Stormwater	Nil	6.8	17.1
7/10/2022	115	Retention Tank 2	Stormwater	Nil	6.8	15.4
7/10/2022	115	Retention Tank 3	Stormwater	Nil	7.8	47.5
7/10/2022	115	Retention Tank 4	Stormwater	Nil	6.9	17.9
11/10/2022	116	Retention Tank 3	Stormwater	Nil	6.8	13.5
11/10/2022	116	Retention Tank 4	Stormwater	Nil	7.1	18.5
11/10/2022	117	DS4	Stormwater	Nil	6.8	15.6
11/10/2022	117	DS5	Stormwater	Nil	6.9	25.7
11/10/2022	118	Retention Tank 2	Stormwater	Nil	6.7	30.6
11/10/2022	118	Retention Tank 6	Stormwater	Nil	6.8	15.2
11/10/2022	119	Retention Tank 1	Stormwater	Nil	6.6	31.7
11/10/2022	120	Maintenance Workshop	Stormwater	Nil	8.1	46.6
12/10/2022	121	Retention Tank 4	Stormwater	Nil	8.2	38.8
12/10/2022	122	Retention Tank 3	Stormwater	Nil	6.7	13.6
12/10/2022	122	Retention Tank 6	Stormwater	Nil	6.8	37.2
12/10/2022	123	Retention Tank 1	Stormwater	Nil	7.5	41.7
12/10/2022	123	Retention Tank 4	Stormwater	Nil	7.1	5.9
12/10/2022	123	Retention Tank 5	Stormwater	Nil	6.8	4.6
12/10/2022	124	DS7	Stormwater	Nil	8.1	24.1
17/10/2022	125	Retention Tank 6	Stormwater	Nil	8.14	0.84
17/10/2022	126	Retention Tank 1	Stormwater	Nil	7.4	0.26
18/10/2022	126	Retention Tank 2	Stormwater	Nil	6.93	20.61
18/10/2022	126	Retention Tank 3	Stormwater	Nil	7.32	3.51
19/10/2022	127	Retention Tank 4	Stormwater	Nil	8.5	2.8
25/10/2022	128	Retention Tank 5	Stormwater	Nil	8.31	1.1
25/10/2022	129	Retention Tank 2	Stormwater	Nil	7.95	26.2
25/10/2022	129	Retention Tank 3	Stormwater	Nil	7.66	10.2
25/10/2022	129	Retention Tank 6	Stormwater	Nil	7.92	33.9
26/10/2022	130	Retention Tank 1	Stormwater	Nil	7.91	4.3
26/10/2022	130	Retention Tank 4	Stormwater	Nil	6.95	12.5
27/10/2022	131	Retention Tank 2	Stormwater	Nil	6.98	18.9
27/10/2022	131	Track Road 4	Stormwater	Nil	7.3	9.2
28/10/2022	132	Retention Tank 4	Stormwater	Nil	6.98	18.9
28/10/2022	132	Retention Tank 6	Stormwater	Nil	8.28	0.7
28/10/2022	132	Track Road 4	Stormwater	Nil	8.31	5.1
28/10/2022	133	Retention Tank 2	Stormwater	Nil	6.71	14.4
31/10/2022	134	Retention Tank 6	Stormwater	Nil	7.05	0

2/11/2022	135	Track 3	Stormwater	Nil	7.96	3.7
2/11/2022	135	Track 4	Stormwater	Nil	7.8	2
2/11/2022	135	Track 5	Stormwater	Nil	7.76	13.4
2/11/2022	135	Retention Tank 1	Stormwater	Nil	7.04	1.7
2/11/2022	135	Retention Tank 4	Stormwater	Nil	6.57	8.8
3/11/2022	136	Retention Tank 2	Stormwater	Nil	8.29	39.7
3/11/2022	136	Retention Tank 3	Stormwater	Nil	7.69	0
3/11/2022	136	Retention Tank 5	Stormwater	Nil	6.71	1.5
15/11/2022	137	Retention Tank 4	Stormwater	Nil	7.04	17.04
16/11/2022	138	Retention Tank 1	Stormwater	Nil	8.13	10.9
16/11/2022	138	Retention Tank 2	Stormwater	Nil	7.71	7.8
16/11/2022	138	Retention Tank 6	Stormwater	Nil	7.84	25.3
16/11/2022	138	Blue Tank (South)	Stormwater	Nil	8.29	0.1
17/11/2022	139	Retention Tank 3	Stormwater	Nil	7.53	0
17/11/2022	139	Blue Tank (South)	Stormwater	Nil	8.3	12.1
22/11/2022	140	Wheel Lathe	Stormwater	Nil	8.27	38.5
25/11/2022	141	Retention Tank 3	Stormwater	Nil	8.08	5.6
30/11/2022	142	Retention Tank 4	Stormwater	Nil	8.09	3.4
30/11/2022	143	DS7	Stormwater	Nil	7.7	17.6
2/12/2022	144	Wheel Lathe	Stormwater	Nil	7.35	4.9
5/12/2022	145	DS1	Stormwater	Nil	8.03	5.5
7/12/2022	146	DS7	Stormwater	Nil	8.01	1.5
7/12/2022	147	Wheel Lathe	Stormwater	Nil	7.12	14.2
7/12/2022	148	Wheel Lathe	Stormwater	Nil	7.63	7.3
8/12/2022	149	DS1	Stormwater	Nil	8.1	3.9
8/12/2022	149	DS7	Stormwater	Nil	8.07	1.4
15/12/2022	150	Retention Tank 2	Stormwater	Nil	8.01	1.3
15/12/2022	151	DS1	Stormwater	Nil	8.36	13.2
15/12/2022	151	DS7	Stormwater	Nil	8.1	2.8
16/12/2022	152	Service Roads (m. building)	Stormwater	Nil	7.44	7.88

6.4.3.4 Air Quality Monitoring

Monthly deposited dust monitoring for the SaMF site was undertaken during the reporting period by use of a deposited dust gauge in the west of the site, with results assessed against the dust management goals in the AQMP. Dust Monitoring results are periodically reported, and a rolling average summary of dust emissions is presented in Table 8.

Table 8: Dust monitoring results, 2022.

Month	Date on	Date off	Stabling and Maintenance Facility (Total Insoluble Matter - g/m2/month)	Rolling Average (Total Insoluble Matter – g/m2/month)	Notes
January			3.3		Sample bottle full of water

February			-	2.51	Sample damaged - overtopped with water
March			1.6		
April			-		Sample - overtopped with Water
May			3.3		
June	15/06/2022	20/07/2022	4.7		35 days, outside of typical.
July					No July result due to overlap period of other samples.
August	20/07/2022	1/09/2022	3.6		43 days, outside of typical.
September	1/09/2022	10/10/2022	2.1		39 days, outside of typical.
October	10/10/2022	7/11/2022	0.8		28 Days
November	7/11/2022	10/12/22	0.8		33 Days
December	10/12/22	17/01/23	1.4		38 days outside of typical due to Christmas break

6.5 Environmental Performance

6.5.1 Internal/External Audits

In Q1 of 2022, a Project Audit Schedule was developed to ensure project audit requirements are met, and an independent environmental audit was undertaken during March. Two recommendations were made by the auditor, relating to the reporting of events to the EPA and updating of erosion and sediment control plans. An audit of office waste, as well as an audit of spoil waste from the SaMF were also undertaken. Recommendations included improving classification and reporting processes, as well as waste tracking. Additionally, an ISO 14001 Surveillance Audit was carried out by BCERT, of which a report is yet to be received.

6.5.2 Environmental Incidents and non-conformances

Four non-conformances with the Infrastructure Approval were identified and reported during 2022, summarised below:

1. Pumping of water from an excavation on the SaMF without a water discharge permit;
 - Permit system improved to ensure this would not be repeated.
2. Implementation of noise mitigation measures identified in the Operational Noise and Vibration Review (ONVR) within eighteen months of the commencement of construction;
 - ONVR implementation is ongoing.
3. Minor Ancillary Facility Checklist not completed and endorsed by ER prior to establishing the Minor Ancillary Facilities
4. Works conducted at the Stabling and Maintenance Facility (SaMF) were outside of the construction boundary.

Three environmental incidents occurred during 2022, summarised below:

1. Overflow and discharge of diluted wastewater onto the ground within the SaMF following a septic system malfunction.
 - The spilled material did not leave site and was collected and disposed offsite to a licenced waste facility. The ablution block was decommissioned and removed,
2. Incorrect removal of asbestos waste prior to receiving waste classification.

- Receiving facility was informed, waste was rejected and disposed of in accordance with the correct classification. Additional controls regarding waste disposal processes were developed and implemented.
3. Minor diesel spill during refuelling activities.
- Spill kit procedures were implemented and spill was cleaned up.

No non-conformances with the EPL conditions were identified during the reporting period.

6.5.3 Key Performance Indicators (KPIs)

The *Parramatta Light Rail Stage 1 Supply, Operate and Maintain Contract, Schedule 27 – Performance and Compliance Incentive Payment Scheme* outlines the key result areas (KRAs) and key performance indicators (KPIs) for GRCLR. Table 9 provides the status of the KPIs for the Environment KRA.

Table 9: KPI Status for 2022

Measure	KPI Points	Performance
KPI 1 – Action Close-out rate: Environment inspections and audits		
Environmental inspections and audits (including TfNSW and the Environmental Representative)	0 points at ≤85% of actions closed out within agreed timeframes. Pro rata points of 10 at 100% of actions closed out within agreed timeframes.	90.1% of actions raised during ER inspections closed out by the ER during 2022.
KPI 2 – Action Close-out rate: Environment incidents and non-compliances		
Environment incidents and non-compliances	0 points at ≤85% of actions closed out within agreed timeframes. Pro rata points of 20 at 100% of actions closed out within agreed timeframes.	Three environment incidents and four non-conformances occurred during 2022 were closed out in consultation with the TfNSW within agreed timeframes
KPI 3 – Attendance and pro-active participation rate		
Issue and risk identification, review and minimisation	0 points at ≤85% of attendance and proactive participation. 20 points for 100% attendance and pro-active participation at: <ul style="list-style-type: none"> • Regular meetings with TfNSW representative(s) and/or ER • Environmental Management Coordination meetings • Environmental Reference Group meetings. 	100% attendance and pro-active participation in relevant meetings during 2022.
KPI modifier:		
No payment will be made in respect of the Environmental Management category in respect of any month in which: <ul style="list-style-type: none"> • Any infringement notices or fines are issued • Any prosecutions notified or commenced in respect of environmental breaches • A Stop Work direction is issued in respect of environmental non-compliance. 		During 2022: <ul style="list-style-type: none"> • No infringement notices or fines issued • No prosecutions notified or commenced in respect of environmental breaches • No Stop Work directions issued.

Appendix A GRCLR Environment and Sustainability Policy

GREAT RIVER CITY LIGHT RAIL ENVIRONMENT AND SUSTAINABILITY POLICY

Intent

Great River City Light Rail Pty Ltd (GRCLR) is the Supply, Operate and Maintain (SOM) Contractor for Parramatta Light Rail Stage 1. We understand what goes into making every journey an exceptional customer experience that is safe, reliable and integrated with other modes of transport.

GRCLR will design, construct, operate and maintain a world-class light rail network that empowers prosperity for the Greater Parramatta Area and supports the realisation of the Future Transport 2056 Strategy.

GRCLR is committed to ensuring an environmentally sustainable future for Parramatta Light Rail, our customers and the Greater Parramatta Area.

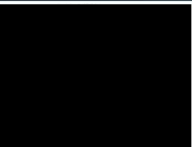
Policy

To achieve this, GRCLR will:

1. Lead effectively and live our accountabilities and responsibilities at all levels of the organisation, starting with the Directors through to employees and Subcontractors. This includes all upholding the principles of social sustainability and social accountability across our workforce, our activities and our supply chain;
2. Comply with all environmental requirements included in relevant legislation, the Conditions of Approval, Preferred Infrastructure Report and the Environmental Impact Statement;
3. Integrate sustainability principals across all GRCLR activities, including design, construction, procurement, commissioning, operations and maintenance;
4. Collaborate with and proactively engage with all stakeholders at all levels;
5. Create a culture of continuous improvement for environment and sustainability management;
6. Understand, comply with and embrace our environment and sustainability compliance obligations;
7. Establish annual objectives for environmental management and regularly verify the compliance and effectiveness of the measures to ensure that objectives are met;
8. Promote an environmentally aware, sustainability-focused culture within GRCLR, stakeholders, customers and the Greater Parramatta Community;
9. Commit to the prevention of pollution, protection of biodiversity, implementation of restorative actions, minimisation of resource use and waste, reduction of greenhouse gas emissions, and enhancement of climate change resilience through adaptation and mitigation across the delivery of works and during operations; and
10. Identify environmental and sustainability aspects and document the related impacts. Assess the risk exposures from the work activities and establish objectives and targets for "High" and "Medium" risks. Plan effectively and provide and use the necessary resources to meet environmental and sustainability objectives and targets.

To support this policy, GRCLR has established an Integrated Management System (IMS), with appropriate policies, procedures and practices in place, which captures the requirements of AS/NZS ISO 14001:2016.

This Policy will be communicated to and applies to all GRCLR employees and Subcontractors, and will be made publicly available.



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		Review period	Annual
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