

PARRAMATTA LIGHT RAIL STAGE 1

# Supply, Operate and Maintain

## Annual Environment Report 2019

PLR1SOM-GLR-ALL-EN-RPT-000002

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## 1. Purpose of the Annual Environment Report

The purpose of the Annual Environmental Report is to address the requirements of SOM Contract Exhibit A - Management Requirements Annexure 13 - Reporting Requirements, clause 2.1 Annual Environment Reports. The SPR does not include any reference to the scope of the minimum requirements of the Annual Environment Reports, however once approved, the project makes commitments to report on various environment outcomes within its associated Construction Environment Management Plan and associated sub-plans.

## 2. Statutory Context

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).

The Parramatta Light Rail was approved by the Minister for Planning on 29 May 2018, under Section 5.19 of the Environmental Planning and Assessment Act (EP&A Act) 1979. An environmental impact statement (EIS) was prepared as part of the infrastructure application (SSI-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 (CoA) 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](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8285).

### 3. Project Background

Parramatta Light Rail (PLR) is one of the NSW Government's major infrastructure projects being delivered 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 2023.

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 Error! No text of specified style in document.-1



Figure-1: Parramatta Light Rail Route

## 4. Supply Operate and Maintain

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

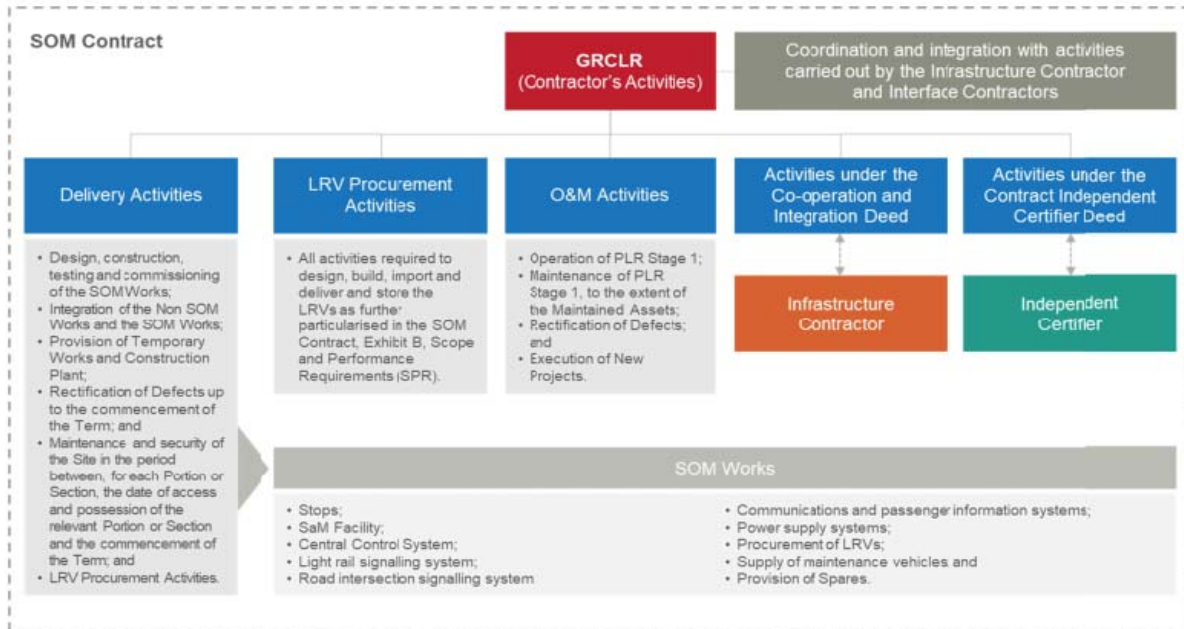
- Delivery activities
- Light rail vehicle procurement
- Operation and maintenance.

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. Figure Error! No text of specified style in document.-2 further details these activities.

- 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: SOM Contract Activities for PLR**

Great River City Light Rail (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 the design and construction related activities including testing and commissioning, and excludes all operational and maintenance activities.

GRCLR is the owner of the Construction Environmental Management Plan (CEMP) and is responsible for ensuring implementation of and compliance with this CEMP by all subcontractors during construction works of Package 5, which include the construction of the light rail systems, high-voltage power supply and stops above slab level, as well as the stabling and maintenance facility (the Project).

## 5. Environment Management – 2019

The status of the environment activities is as follows:

### 5.1. Environment in Design

- Environment and design review process commenced (EDR process).
- Environment Design Requirement Review (EDRR) template was submitted to TfNSW and the IC and was approved for use.
- EDRR were prepared for all design packages as required
- Operational Noise and Vibration Review (ONVR) workshop was held 26 November 2019 and a draft ONVR was submitted to TfNSW (21 November 2019)
- Allocation of environmental requirements into the design has been undertaken as part of the PDR
- Review of INFRA design documentation as provided
- Interface meetings held with HAC team including SOM Noise and Vibration Specialist

### 5.2. Environment in Construction

#### 5.2.1. Construction Activities

Construction activities have not commenced. Therefore, in this period there are no monitoring activities to report. The following activities occurred in readiness for construction:

- Draft updates to Staging Report
- CEMP program developed and engagement of specialist's consultants
- Review of EPL requirements for construction
- Identification for early work requirements commenced

#### 5.2.2. Monitoring Results

There are no monitoring results to report for the 2019 reporting period.

##### 5.2.2.1. Inspections

##### 5.2.2.2. Noise and Vibration

##### 5.2.2.3. Soil and Water

##### 5.2.2.4. Air Quality



## 5.3. Environment Performance

### 5.3.1. Internal/External Audits

No audits completed in the 2019 reporting period.

### 5.3.2. Management Review

Environment Management System (EMS) currently in development, therefore no reviews completed in this period.

## 6. Key Performance Indicators

Schedule 27 - Performance and Compliance

Measure	KPI Points	Performance
<b>KPI 1 – Action Close-out rate: Environment inspections and audits</b>		
<b>100% of actions closed out in agreed timeframes</b>	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.	Construction inspections have not commenced to measure status against this KPI
<b>KPI 2 – Action Close-out rate: Environment incidents and non-compliances</b>		
<b>100% Close out rate of Environment incidents and non-compliances</b>	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.	Construction has not commenced to measure status against this KPI
<b>KPI 3 – Attendance and pro-active participation rate</b>		
<b>100% Pro-active Participation in issue and risk identification, review and minimisation</b>	0 points at <85% of attendance and proactive participation. 20 points for 100% attendance and proactive participation at: <ul style="list-style-type: none"> <li>Regular meetings with TfNSW representative(s) and / or ER,</li> <li>Environmental Management Coordination meetings</li> <li>Environmental Reference Group meetings</li> </ul>	100% attendance to all TfNSW and ER governance meetings occurred in 2019.

# 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. Plan effectively, and provide and use the necessary resources to meet environmental objectives.

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.

  
Project Director



Document Owner	Document Number	Version	Date of Issue	24/09/2021
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