GREAT RIVER CITY LIGHT RAIL

Parramatta Light Rail Stage1 Supply, Operate and Maintain Contract ISD-17-6720

Delivery Phase Progress Report – Quarterly Environment Report

Q3 2019

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1 Reporting Context

1.1 Purpose

The purpose of this Quarterly Environment Report is to detail the status and progress of Delivery Phase environmental activities undertaken by the SOM Contractor during the relevant quarterly reporting period.

1.2 Reporting Requirements

This report has been prepared in accordance with the requirements set out in the Parramatta Light Rail – Stage 1, Supply, Operate and Maintain (SOM) Contract (ISD-17-6720) Exhibit A *(Management Requirements)*, Annexure 13 *(Reporting Requirements)*. This report has been submitted to comply with the:

- submission and update frequency of progress reports defined in clause 2.1(f) and Table 2; and
- minimum content requirements set out in clause 2.2.4 (*Quarterly Environment Reports*), namely:
 - any reporting requirements identified in the Deed, SPR Appendix E (*Environmental Requirements*) and the Planning Approval;
 - details of the Tree Protection Plans in place during the reporting period, including summaries of monthly monitoring of tree protection measures;
 - an updated Tree Register and progress of tree removals, relocations and pruning activities;
 - update on the progress of the tree plantings as required under the landscape designs; and
 - compliance reporting against the Construction Environmental Management Plan (CEMP).

The reporting requirements address environmental compliance during both the design process and construction activities.

1.3 Definitions: Abbreviations and Acronyms

Table 1 outlines the meaning of terms contained within this report.

The abbreviations and their definitions have the same meaning as abbreviations set out in Parramatta Light Rail Stage 1 SOM Contract (ISD-17-6720), Exhibit B *(SPR)*, Appendix A *(Definitions and Abbreviations)*.

Abbreviation	Definition		
CAF Construcciones y Auxiliar de Ferrocarriles, S.A			
CEMP	Construction Environmental Management Plan		
СоА	Condition of Approval		
СоР	City of Parramatta		

Table 1: Report Definitions: Abbreviations and Acronyms

Supply, Operate and Maintain Contract (ISD-17-6720) Delivery Phase Progress Report



Abbreviation	Definition
DPPR	Delivery Phase Progress Report
ECM	Environmental Control Measure
EIS	Environmental Impact Statement
GRCLR	Great River City Light Rail
ID	Identification
IMS	Integrated Management System
NSW	New South Wales
PLR	Parramatta Light Rail
PLRC	Permanent Light Rail Corridor
REMMM	Revised Environmental Mitigation and Management Measure
SaM Facility	Stabling and Maintenance Facility
SOM Supply, Operate and Maintain	
SPR	Scope and Performance Requirement
TfNSW	Transport for New South Wales

2 Summary of Works

The following SOM Contract activities were undertaken during this reporting period:

- Finalised CEMP program and procurement of specialist's consultants
- Integration and compliance of environmental and planning requirements into the design as part of the PDR ongoing
- Progression of the noise and vibration modelling and outputs
- Review of INFRA design documentation as part of PDR submission
- Development of environmental design requirements into RVTM
- HAC Development Agreement requirements being progressed
- Documentation for early works
- SOM draft updates to Staging Report
- EPL review requirements for construction
- Contamination review of SaMF site
- Internal design review presentations held
- Internal environmental risk workshops held
- PDR design development and consistency checks undertaken.

There were no construction works undertaken during this quarter.

2.1 Tree Management

As part of Exhibit B (*SPR*), Appendix E (*Environmental Requirements*) Section 1.4 there are specific requirements regarding the management of trees during development of the design and construction delivery. This includes the following:

- Tree Register, which is to be maintained and provided with the Environmental Design Review Reports;
- Tree Protection Plans;
- Submission of weekly tree report; and
- Monthly inspections of tree protection works.

As construction work has not commenced, no site inspections, tree protection works or updates to the tree register have been undertaken. The Tree Protection Plans will be developed by the GRCLR design and environmental teams when the requirement is triggered.

3 Progress this Quarter

Integration of environmental requirements and considerations into the design has been a key focus this quarter, along with advancing documentation for early access works to inform the design. The CEMP program has been updated with a phased approach to submission to TfNSW and drafting of the Staging Report has occurred with internal GRCLR review being undertaken. Key to this quarter has also been understanding and providing comment on the interface environmental management issues and risks. A specific focus has been the Stabling and Maintenance Facility given the contamination risks and the release of design information this quarter.

3.1 Conditions of Approval Requirements

Attachment 1 lists the reports and notifications required under Schedule 1 of the Planning Approval (Application No. SSI 8285).

Status: Attachment 1 of this Report includes a GRCLR status update, which reflects progress against activities in accordance with the Obligations Matrix in Schedule 11 of the Deed.

Key actions for this quarter included:

- Meeting held with TfNSW 30 September to discuss the Operational Noise and Vibration Report (ONVR). The meeting outlined the approach to undertake additional road noise monitoring to update the background noise levels and to enable a comparison of the existing road noise to that of the operational light rail vehicles.
- A revised CEMP program was submitted 4 September to address TfNSW's request for information. Comments were received back from TfNSW 24 September. GRCLR updated and revised the CEMP program following comments for resubmission.
- Staging Report is being prepared for discussion with TfNSW next month, prior to lodgement with DPIE.
- Consultants are being engaged to assist in preparation of CoA approvals documentation.
- Site Establishment Management Plan (SEMP) is underway for SaMF site.
- Baseline noise and vibration model has been completed, including HAC area.

3.2 Environmental Design Requirements

As part of the design process an Environmental Design Review Report for each design package is required.

Status: Internal Design Review process for PDR has commenced in this quarter with compliance against REMMMs and CoA being undertaken.

Key actions for this quarter included:

- Integration and compliance of environmental and planning requirements into the design as part of the PDR ongoing
- Progression of the noise and vibration modelling and outputs
- Environmental design requirements incorporated into the RVTM

[Note: Table 2 will be updated in future quarterly environment reports.]

EDRR will be submitted as part of the parent Design Packages at PDR (staggered submission).

Table 2: Status of Environmental Design Review Reports

Design Package	Environmental Design Review Report Status
Environmental Design Review Report template	Submitted to TfNSW for review 30 May 2019
Design Package X (sample)	TBC

3.3 Trees and Vegetation Management Requirements

3.3.1 Tree Register

A Tree Register will be maintained as part of the SOM Contract and will include specific details and attributes of trees/vegetation, as well as potential impacts and any actions or changes. The Tree Register is a key input to the Environmental Design Review process.

Status: No tree removals, relocations or pruning activities were planned or undertaken during the reporting period. The Tree Register is under development, building on the TfNSW Tree Register, and will be included as an attachment in future quarterly environment reports where impacts have occurred. To date there have been no impacts.

Tree Register has been received from the Independent Arborist at irregular intervals with receipt of Rev 20..

3.3.2 Tree Protection Plans

As part of the design process Tree Protection Plans are required for all trees to be retained or and/or pruned that are located within 15 metres of the SOM Works footprint. Monitoring of protection measures implemented will be undertaken during construction.

Status: Tree Protection Plans (TPP) are to be developed, based on the Tree Register and updated as the design further progresses. A table summarising the status of Tree Protection Plans will be developed and included in future quarterly environment reports when applicable. At this stage no trees have been identified for a TPP.

3.3.3 Progress of the tree plantings

Status: No tree planting activities were planned or undertaken during the reporting period. A table summarising tree planting activity will be developed and included in future quarterly environment reports.

3.4 Compliance reporting against the CEMP

Compliance reporting against the CEMP is in accordance with Planning Approval and the compliance management requirements detailed in TfNSW's Compliance Tracking Program developed for the Project.

The Compliance Tracking Program will be maintained and updated in the INX System and will be reviewed quarterly. The INX System will be used to register and maintain records of engagement, identify and manage issues and assign and track tasks against the CoA and REMMMs.

Status: A revised CEMP program was submitted to TfNSW as part of the project program appended to the September Monthly Report. A pre-construction compliance report will be developed before commencement of construction of the SOM Contractor's Activities, which must be endorsed by the ER and submitted to the Secretary for information.

 A draft update to the Staging Report has been prepared to include the SOM contract updates

4 Conclusion

For the Q1 2020 quarterly environmental reporting period there are no non-compliances. The design has commenced with input from the environment and sustainability team. No construction works have commenced however there are proposed pre-construction minor works to inform the development of the design.

Attachment 1 – Planning Approval Reporting Requirements and GRCLR Status

The table below lists the reports and notifications required under Schedule 1 of the Planning Approval (Application No. SSI 8285) and as reported in the Conditions of Approval 'Summary of Reporting Requirements' Table 2. The table includes a GRCLR status update, which reflects progress against activities in accordance with the Obligations Matrix in Schedule 11 of the Deed.

Condition	Report / Notification / Appointment	Timing	Purpose	Status (GRCLR)
Part A – Adr	ninistrative			
A13	Staging Report (related to SOM Contractor's Activities)	No later than one month before the commencement of construction (or operation) of the proposed stages of construction	Approval	Stage-specific report to be developed before commencement of construction of the SOM Contractor's Activities.
				TfNSW have ownership of the Staging Report.
				A draft update to the Staging Report in being prepared by GRCLR
A19 / A20	Environmental Representative (ER)	No later than one month before the commencement of works	Approval	Responsibility of TfNSW to engage.
				GRCLR have met and established communications with the ER
A23	Environmental Representative	Within seven days following the end of each month	Information	Responsibility of ER
	Monthly Reports			Monthly reports are provided to TfNSW for input to ER Monthly Report
A29	Noise and Vibration Report	Within seven days following the end of each month	Information	Responsibility of Acoustic Advisor
				No inputs requested of GRCLR in this reporting period.



Condition	Report / Notification / Appointment	Timing	Purpose	Status (GRCLR)
				Meeting to be arranged between GCRLR's acoustic specialists and the AA.
A30 / A31	Compliance Tracking Program	At least one month before the commencement of works	Information	Responsibility of TfNSW to establish Compliance Tracking Program GRCLR to utilise INX for compliance tracking. Survey works will commence in Q4 as approved under the pre-construction minor works
A34	Pre – Construction Compliance Report	No later than one month before the commencement of construction (or each stage of construction in staging report)	Information	Stage-specific report to be developed before commencement of construction of the SOM Contractor's Activities Report template received from TfNSW. Construction not due to commence until mid 2020 hence no updates on the Pre- construction Compliance Report. Noting the survey works are defined as 'Construction'
A38	Pre – Operation Compliance Report	No later than one month before commencement of operation	Information	To be developed before commencement of operation. Operation not due to commence until 2023 hence no updates to the Pre-Operational Compliance Report
A40	Environmental Audit Program	No later than one month before the commencement of construction	Information	Responsibility of TfNSW during construction No inputs requested of GRCLR in this reporting period (Responsibility of GRCLR during operations; audit program to be developed prior to operations phase in 2023)
A43	Environmental Audit Reports	Within six weeks of completing the audit	Information	Responsibility of TfNSW during construction No inputs requested of GRCLR in this reporting period



Condition	Report / Notification / Appointment	Timing	Purpose	Status (GRCLR)
				(Responsibility of GRCLR during operations; audit report template to be developed prior to operations phase in 2023)
A44	Notifications of Incidents	Immediately after the Proponent becomes aware of an incident	Notification	Responsibility of TfNSW to notify Department of Planning, Industry & Environment
				GRCLR responsibility to prepare reports and notify TfNSW. GRCLR has no incidents to report in this reporting period.
A45	Incident Report	Within one week of notification of an incident	Information	Responsibility of TfNSW to submit report to Department of Planning, Industry & Environment.
				An Incident Report Template has been included in Appendix 5 of the Incident Management Plan and will form part of the IMS which GRCLR will complete and submit in the event there is an incident.
				GRCLR has no incidents to report in this reporting period
A47	Notification of Incident notified under POEO	Within 24 hours after notification given to EPA	Information	GRCLR has no incidents to report in this reporting period
Part B – Com	munication Information and Reportir	JQ		
B1 / B3	Community Communication Strategy	No later than one month before the commencement of works	Approval	Responsibility of TfNSW (with inputs from GRCLR as requested)
				No inputs requested of GRCLR in this reporting period
B9 / B10	Complaints	On request	Information	TfNSW will prepare a Complaints Management System (with inputs from GRCLR as requested)



Condition	Report / Notification / Appointment	Timing	Purpose	Status (GRCLR)
				Nil complaints in this reporting period for the SOM contract
Part C – Cons	struction Environmental Managemen	t		
C7	Construction Environmental Management Plan	No later than one month before the commencement of construction (endorsed by ER and submitted to	Approval	First draft submitted to TfNSW 9 April 2019 and comments received 24 May 2019
		Department of Planning & Environment)		Proposed schedule for resubmission to TfNSW in November 2019. TfNSW have requested a staggered submission of CEMP sub plans prior to the November deadline. The program for this is currently under development.
C16	Construction Monitoring Program	At least one month before the commencement of construction	Information	Draft monitoring programs under development for Water Quality (Turbidity) and Noise and Vibration Monitoring
C18	Site Establishment Management Plan	One month before establishment of any construction ancillary facility	Approval	To be prepared in Q4, 2019
Part D – Oper	ration Environmental Management		1	
D3 / D6 / D7	Operation Management Plan	No later than one month before the commencement of operation	Information	To be developed prior to operations phase (2023), in consultation with TfNSW and the Interface Contractors
Part E – Key I	ssues			
Traffic and Tr	ansport			
E10	Network Management Strategy	Before impacts on the road network commence	Information	TfNSW will prepare a Network Management Strategy (with inputs from GRCLR as requested), to be implemented by GRCLR
				No inputs requested of GRCLR in this reporting period
E11	Parking Management Strategy	Before long term loss of parking occurs	Information	Responsibility of TfNSW



Condition	Report / Notification / Appointment	Timing	Purpose	Status (GRCLR)
E14	Pedestrian and Cyclist Network and Facilities Strategy	Before construction of pedestrian/cyclist permanent built works	Information	Stage-specific report to be developed before construction of pedestrian/ cyclist permanent built works as part of the SOM Contractor's Activities
E19	Operational Traffic, Transport and Access Performance Review	Within one month of completion	Information	Responsibility of TfNSW (with inputs from GRCLR as requested)
				No inputs requested of GRCLR in this reporting period
Noise and V	ibration			
E28	Out-of-Hours Work Protocol	Before commencement of any out-of-hours works	Approval	Protocol has been developed by TfNSW and is approved.
				N&V CEMP will address incorporating this requirement into the project
				GRCLR to implement. At present no proposed works have triggered the use of the protocol.
E39	Out-of-Hours Work Respite	Following consultation at three monthly intervals	Information	N&V CEMP will address incorporating this requirement into the project
				At present no proposed works have triggered the use of the OOHWR.
E48	Operational Noise and Vibration Review	Before the implementation of mitigation measures	Approval	Operational N&V modelling has commenced for inclusion into the design and identification of the mitigation measures and other requirements under this condition.
E58	Noise and Vibration Compliance Assessment Report	Within one month of completion of noise and vibration monitoring (which must be undertaken within six months of commencement of operation of the CSSI)	Information	To be developed within one month of completion of noise and vibration monitoring. Construction works do not commence until mid 2020.



Condition	Report / Notification / Appointment	Timing	Purpose	Status (GRCLR)
E59	Noise and Vibration Compliance Assessment Report – update	Within one month of completion of additional noise and vibration monitoring (if required)	Information	To be developed if required
Heritage				
E64	Heritage Interpretation Strategy	Before work affecting identified items	Information	SOM updates to staging reports to address this condition. SOM to continue working with INFRA regarding heritage interpretation.
				SOM works have limited, if any, impacts to heritage items
E67	CHIP Hostel Options Analysis	Before commencement of construction in Cumberland Hospital East or at the intersection of Fleet and Factory streets that could preclude alternative outcomes	Approval	INFRA are undertaking this assessment as they have direct impact to this site SOM works do not impact on these areas.
E75	Archaeological Excavation Report	Within 12 months of completing archaeological investigations	Information	To be prepared where triggered
Urban Desig	n and Visual Amenity	1		1
E84	Feasibility of wire-free running	Before construction commences in identified locations	Information	Responsibility of TfNSW (with inputs from GRCLR as requested)
				No inputs requested of GRCLR in this reporting period
E85	Feasibility of grass track	Before construction commences in identified locations	Information	Responsibility of TfNSW (with inputs from GRCLR as requested)
				No inputs requested of GRCLR in this reporting period
E87	Urban Design Requirements Report	Following review by the Design Review Panel	Approval	INFRA to prepare with inputs from SOM contract. Information is being presented to the DRP in a collaborative approach between the SOM and INFRA contracts



Condition	Report / Notification / Appointment	Timing	Purpose	Status (GRCLR)
E93	Design Review Panel members	Before development of detailed design and before construction commences	Approval	Responsibility of TfNSW
E95	Design Review Panel Terms of Reference	Following formation of Design Review Panel	Approval	Responsibility of TfNSW (with inputs from GRCLR as requested)
				No inputs requested of GRCLR in this reporting period
Biodiversity	and Revegetation			
E102	Independent Arborist	Before works commence	Approval	Responsibility of TfNSW
E106	Tree Register	Before the removal, damage or pruning of a tree for the purposes of the CSSI	Information	At present no updates from the SOM contract on the Tree Register as no impacts/triggers for this
Socio-Econo	mic, Land Use and Property			
E113	Flood Management Design Report	At each design stage with potential to cause adverse flooding impacts	Information	Stage-specific report to be developed for the SaM Facility. All information relating to the stops and TPS locations will be reported in the report prepared by INFRA
E117	Electromagnetic Management Plan	Before commencement of operations	Information	Stage-specific report to be developed. Draft has been prepared and submitted as SDR. Further consultation is being undertaken to determine adequate mitigation and design solutions. Ongoing process. Plan not required until prior to operations. Consultation via TfNSW is being undertaken for HAC area.
E124	Site Audit Statement (Contamination)	No later than one month before commencement of operation	Information	To be prepared if triggered. It is not anticipated this will be triggered.
E132	Final Hazard Analysis and Construction Safety Study	Before commencement of construction of any hazardous works or works adjacent to hazardous infrastructure	Approval	Stage-specific report to be developed



Condition	Report / Notification / Appointment	Timing	Purpose	Status (GRCLR)
E133	Post-Start up Compliance Report	Three months after commencement of operations	Information	To be developed. Not due until Q3, 2020
E137	Sustainability Strategy	Within six months of the date of approval	Information	Responsibility of TfNSW, to be implemented by GRCLR
				GRCLR's final Delivery Phase Sustainability Management Plan will be resubmitted in Q4, 2019