Landscape and Rehabilitation Sub-Plan

Cross River Rail – Rail, Integration and Systems Alliance

Project number:	Q01080
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Revision number:	02

Document Approval

Rev	Date	Prepared By	Reviewed By	Approved By	Remarks
А	28/06/19	UNITY Environmental Advisor	UNITY Environment and Approvals Manager		IFR
В	22/01/21		UNITY Environment and Approvals Manager		IFR
00	08/03/21	Senior Environmental Advisor	UNITY Environment and Approvals Manager	Alliance Manager	IFU
01	26/08/21	Senior Environmental Advisor	UNITY Environment and Approvals Manager		IFR
02	11/10/21			UNITY Environment and Approvals Manager	IFU
Signature:					





Plan Control

This Landscape and Rehabilitation Sub-Plan (the plan) has been developed for the Cross River Rail – Rail, Integration and Systems Project.

Approvals, Revisions and Amendments

Plan approval is in accordance with Section 4.1.2 of the Construction Environmental Management Plan (C-EMP).

Plan reviews and updates is in accordance with Section 7 and Section 8.1 of the C-EMP.

Revision Details

Revision	Remarks
А	Final C-EMP for Review and endorsement by the Environmental Monitor
В	Updated LRMP to address consolidated comments from Environmental Monitor
00	Issued for Use
01	Issued for review to the IEM 6 monthly review and updates associated with: • RfPC-11, and • The addition of the Southern Area Scope of Works (Dutton Park and Buranda)
02	Issued for Use



1 Purpose of this Plan

This sub-plan has been prepared to comply with:

- Coordinator-General's Conditions of Approval Appendix 1 Part C
 - Condition 20(a), 20(b) and 20(d)
 - Condition 21 (all)
- Final Outline-Environmental Management Plan (O-EMP) Outline Construction Worksite Management Plan
- Final Outline-Environmental Management Plan (O-EMP) Outline Visual Amenity and Lighting Management Plan

Management Plan	
Component	Details
Environmental Outcome(s)	 Prepare and implement landscape and rehabilitation plans to include investigation of opportunities for improvements to habitat, as a result of the project works
	 Project works designed and implemented to minimise impacts on landscape and open space values
	 Project works and worksites in Victoria Park must be designed, planned and implemented to avoid or minimise the loss of trees and ornamental plantings, and must minimise the area of the park directly impacted during such works
	 Existing pathways and recreational facilities in Victoria Park must be relocated within the park for the duration of the works, in consultation with Brisbane City Council (BCC). On completion of the project works, assets such as pathways and facilities must be re-established in locations in the park in consultation with BCC
	 Worksites for project infrastructure, such as the surface connections, stations and ancillary buildings, must be rehabilitated as soon as practical upon completion of the works
	 All other worksites required to support commissioning activities must be rehabilitated as soon as practical on completion of commissioning, or sooner where possible
	 Rehabilitation must address soil erosion and sedimentation, dust nuisance and landscape and visual impact
	 Any planting, landscaping and streetscape works undertaken as part of rehabilitation must be undertaken in accordance with landscape and urban design plans prepared in consultation with BCC
	 Construction activities should minimise and mitigate impacts on the visual and landscape environment
	 Revegetation is designed and constructed with consideration of DTMR specification MRTS16 Landscape and Revegetation
	 Construction worksites are rehabilitated progressively and as soon as practicable following construction works
	 Ecological, habitat and natural asset values of open space areas near the project, are maintained.
Relevant Area	Site wide Key areas: Mayne Yard and associated Enoggera/Breakfast Creek for marine plants Exhibition Station (RNA) Northern Corridor inclusive of Victoria Park All F2S stations and Dutton Park Station Clapham Yard Key worksites: Gilchrist Avenue Construction Worksite Exhibition Station Construction Worksite.



Component	Details
Relevant Works/Activities	 Temporary vegetation removal re-instatement associated with the demobilisation of the temporary works footprint such as construction worksites Permanent works (such as station precinct) where soft landscaping is proposed as part of the design.
Performance Criteria	 Rehabilitation and landscape plans incorporate species appropriate for the surrounding landscape and infrastructure, and where practical, use endemic plants Construction worksites are rehabilitated as soon as practical following completion of the works in accordance with rehabilitation plans A worksite rehabilitation plan is developed for each worksite during the design phase Habitat for significant vegetation removed during construction is restored and rehabilitated to the extent reasonable and practicable, consistent with a rehabilitation plan agreed with BCC or the relevant agencies Rehabilitation and landscape plans incorporate species appropriate for the surrounding landscape and infrastructure, and, where practicable, use endemic plants.
Sustainability	Eco-1, Lan-2, Urb-1 and Urb-2.
Mitigation Measure	 Where feasible, salvage and preserve existing topsoil material for re-use during the re-instatement phases Comply with the mitigation measures in the Nature Conservation Management Plan to minimise impact to existing and retained vegetation within or immediate proximity
	of the Project Work Comply with the mitigation measures in the Biosecurity Management Plan to minimise impact to existing and retained vegetation within or immediate proximity of the Project Works that could be causes by the introduction of pest species
	 For areas of marine plants: Minimise the extent of permanent and temporary disturbance to a reasonable and practical level
	 Develop a marine plant rehabilitation strategy to support consultation with the Department of Agriculture and Fisheries (DAF), as part of the development approval application process
	 Rehabilitate the temporary marine plants disturbance in accordance with the relevant Approvals Conditions set by DAF
	For Riparian Vegetation (freshwater creek) Minimize the system of paragraphs and temporary disturbance to a recognish.
	 Minimise the extent of permanent and temporary disturbance to a reasonable and practical level
	 Develop a rehabilitation strategy to support consultation with the Department of Resources (DoR), as part of the development approval application process
	 Rehabilitate the disturbance in accordance with the relevant Approvals Conditions set by DoRFor areas of heritage values:
	 Minimise the extent of permanent and temporary disturbance to a reasonable and practical level
	 Develop a landscaping design strategy to support consultation with the relevant stakeholders (e.g. BCC, Queensland Heritage Council, Queensland Rail Heritage Council) as part of the heritage approvals application process
	Comply with the relevant heritage approvals conditions granted For all other areas propose rehabilitation place through the design process for
	For all other areas, prepare rehabilitation plans through the design process for approval by the relevant asset owners, taking into consideration and detailing: The protocol and problem of the other levels and to problem of the other levels.
	The nature and quality of the shallow subsoils and topsoils to inform the amelioration requirements required, if any
	 Operational and maintenance requirements and practices of the ultimate asset owners (e.g BCC, QR) to support the selection of appropriate types of vegetation (e.g avoid trees near sensitive overhead lines)
	 Alternatives to seeding and/or planting where traditional re-instatement measures are deemed inadequate by the ultimate asset owners.



Component	Details
	 For all rehabilitation works, species selection must promote the use of native species suited for the area (e.g. character of the place, suitability for local native wildlife) and land conditions (e.g. aquatic vs. terrestrial)
Monitoring	Undertaken in accordance with the Construction Monitoring Program (Attachment 4 of the C-EMP).
	Where monitoring requirements are conditioned by Development Approvals or Permits requirements, these take precedence over the C-EMP requirements.
Reporting	Reporting is undertaken in accordance with Section 8.2 of the C-EMP
	Where reporting requirements are conditioned by Development Approvals or Permits requirements, these take precedence over the C-EMP requirements.
Corrective Action	Management of corrective actions will be undertaken as per Section 6 of the C-EMP Where management of corrective actions is conditioned by Development Approvals or Permits requirements, these take precedence over the C-EMP requirements.
Auditing	As per Section 7 of the C-EMP
	Where auditing requirements are conditioned by with Development Approvals or Permits requirements, these take precedence over the C-EMP requirements.