Sustainability Management Plan

Document and Revision History

Document Details	
Document number	BRD-JHG-PM-0000-MPL-12016
Title	Sustainability Management Plan
Client	ARTC – Botany Rail Duplication
JHG contract number	NSW-TC-06115-00

Revisions

Revision	Date	Description	Prepared by	Reviewed by
0	22/09/2021	Draft for ARTC Review	Krissy Vajda	James Renwick
1	17/12/2021	Updated to address ARTC comments	Ann Azzopardi Mira Segaran	Rachael Labruyere
2	14/01/2021	Updated to address ARTC comments	Ann Azzopardi	Rachael Labruyere
3	08/08/2022	Minor edits following 6-monthly review	Ann Azzopardi	Rachael Labruyere
4	14/02/2023	Minor edits following 6-monthly review	Ann Azzopardi	Rachael Labruyere
5	14/09/2023	Minor edits following 6-monthly review	Ann Azzopardi	Hamish Russell

Management reviews

Review date	Details	Reviewed by
08/04/2022	6-monthly review	Rachael Labruyere
14/02/2023	6-monthly review	Rachael Labruyere
14/09/2023	6-monthly review	Ann Azzopardi

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Compliance matrix

<table>
<tr><th>Requirement</th><th>Location in document</th></tr>
<tr><td colspan="2">Technical Specification and Works Description Appendix 20 – Sustainability Requirements</td></tr>
<tr><td>20.2 General Requirements
(a) The Contractor must ensure that sustainability is addressed throughout the performance of the Contractor's Activities and that sustainability is embedded into the design and construction of the Project Works and the Temporary Works.</td><td>Section 4</td></tr>
<tr><td>(b) The ARTC Project Manager will register the Project with the Infrastructure Sustainability Council of Australia and pay the required fees.</td><td>Responsibility of ARTC</td></tr>
<tr><td>(c) The Contractor must enter into a ratings agreement with the Infrastructure Sustainability Council of Australia to obtain an Infrastructure Sustainability rating for the Contractor's Activities, in consultation with the ARTC Project Manager.</td><td>Section 7.1</td></tr>
<tr><td>(d) The Contractor must achieve a certified "design" rating score of at least 65 points, using the Infrastructure Sustainability Council of Australia Infrastructure Sustainability rating tool version 1.2 "Design and As Built" for the design of the Project Works and Temporary Works.</td><td>Section 7</td></tr>
<tr><td>(e) The Contractor must achieve a certified "as built" rating score of at least 65 points, using the Infrastructure Sustainability Council of Australia Infrastructure Sustainability rating tool version 1.2 "Design and As Built" for the construction of the Project Works and Temporary Works.</td><td>Section 7</td></tr>
<tr><td>20.3 Sustainability Targets
The Contractor must achieve the sustainability targets identified in Table 20.1.
Table 20.1 Sustainability Targets
<table>
<tr><th>No.</th><th>Sustainability targets</th><th>Target</th></tr>
<tr><td>1</td><td>A climate change risk assessment to be developed and adaptation measures identified and implemented.</td><td>Achievement of credit Cli-1 and Cli-2 Level 3</td></tr>
<tr><td>2</td><td>Reduction in greenhouse gas emissions compared to a base case footprint.</td><td>>25% reduction</td></tr>
<tr><td>3</td><td>Construction vehicle fuel usage to be alternative fuels (i.e., biodiesel B10 or B20).</td><td>10% of fuel usage to utilise B20 fuel</td></tr>
<tr><td>4</td><td>Site-based electricity energy from Green Power or renewable sources.</td><td>>25% renewable energy sources</td></tr>
<tr><td>5</td><td>Reduction in water use compared to a base case footprint.</td><td>>25% reduction</td></tr>
<tr><td>6</td><td>Maximising the proportion of water from non-potable sources (substituting for potable).</td><td>>70% non-potable water usage</td></tr>
<tr><td>7</td><td>Reduction in material lifecycle impacts by 10-30% compared to a base case footprint.</td><td>>25% lifecycle impact decrease</td></tr>
<tr><td>8</td><td>Reduction in absolute quantity of Portland cement compared to a base case footprint.</td><td>>30% reduction in Portland Cement</td></tr>
<tr><td>9</td><td>Materials/products by value have an ISC approved environmental label.</td><td>>9% of products</td></tr>
<tr><td>10</td><td>Implementing a closing the loop initiative.</td><td>2 initiatives</td></tr>
<tr><td>11</td><td>Topsoil (by volume) is beneficially re-used on or nearby to the Project.</td><td>100% is beneficially reused</td></tr>
</table></td><td>Section 3.2</td></tr>
</table>

Requirement			Location in document
12	Spoil is diverted from landfill.	100% is diverted	
13	Inert and non-hazardous waste is diverted from landfill.	>90% is diverted	
14	Office waste is diverted from landfill.	>60% is diverted	
15	Components or prefabricated units used can be easily separated on disassembly/deconstruction into material types suitable for recycling or reuse.	>50% of components or prefabricated units can be easily separated	
16	Increase ecological value across the Project.	>20%	
17	Workforce to include persons under 25 years of age.	≥8% of workforce	
18	Workforce to include women in trade related work.	≥2% of trade related roles	
19	Workforce to include Aboriginal or Torres Strait Islander workers.	>2.5% of workforce	
20	Procurement spend to include Aboriginal and/or Torres Strait Islander participation through subcontracts, employment and training, or procurement.	≥1.5% of procurement spend, including a minimum of two subcontracts	
21	Contract value to include indirect activities or engagement of social enterprises that benefit disadvantaged, disabled and under- represented groups.	≥1%	
22	Project employees are from the local region (Greater Sydney).	≥50% of Project employees are	
23	Trade positions are to include apprentices.	≥20% of all trade positions are	
24	Total full-time equivalent positions are to include learning workers.	≥20% of total full-time equivalent positions are learning workers	
25	Provide work placements for people over 16 years of age currently in school.	≥6 work placements per	
26	Provide placements for university undergraduates or recent graduates.	≥6 undergraduate/graduate placements per annum (pro rata)	
27	Heritage value assessment on the Project.	Has been interpreted and implemented to enhance (Her- 1 Level 3)	
28	Minimise impacts to key stakeholders and streamline Approvals processes and deliver best practice outcomes through a ‘consult/ involve/ collaborative’ approach.	Collaborative approach implemented	
29	Development of an innovation and continuous improvement framework.	Achieved	
30	Implement innovations to be submitted for verification (as per Inn-1 credit within the IS v1.2 Technical Manual).	≥2 innovations	

Technical Specification and Works Description Appendix 28 – Project Plan Requirements	
28.16 Sustainability Management Plan (a) The Sustainability Management Plan must identify how the Contractor ill comply with the sustainability requirements of the contract.	This Plan, including this Compliance Matrix

Requirement	Location in document
(b) The initial Sustainability Management Plan is contained in Appendix 45 of the TSWD.	This Plan, including this Compliance Matrix
(c) The Sustainability Management Plan must:	
(i) be prepared and initially submitted to the ARTC Project Manager and the Project Verifier, as required by clause 7.18(c) of the contract within 60 Business Days of the date of the contract; and	Requirement met (Plan initially submitted to ARTC on 22/09/2021)
(ii) contain, as a minimum, the contents specified for the Sustainability Management Plan in the TSWD, including this Appendix 28.	This Plan, including this Compliance Matrix
(d) Further to the requirements of clause 7.18(i)(ii) of the contract, the Contractor must undertake the ongoing development, amendment and updating of the Sustainability Management Plan throughout the duration of the Contractor's Activities including to take into account:	Section 4.9
(i) new elements of the Project Works and Temporary Works which the existing Sustainability Management Plan does not address; and/or	
(ii) changes in construction sequencing or methodology.	
(e) The ARTC Sydney Projects Sustainability Management Plan Template must be used as the basis for the preparation of the Sustainability Management Plan.	This plan
(f) The Sustainability Management Plan must, as a minimum, address and detail:	
i. the sustainability management team structure, including key personnel, authority and roles of key personnel, lines of responsibility and communication, minimum skill levels and competencies required for each role and interfaces with the overall project organisation structure;	Section 4.5
ii. sustainability initiatives to be implemented during the performance of the Contractor's Activities and milestones for key sustainability initiatives;	Section 6
iii. processes and methodologies for embedding sustainability initiatives into design, procurement and construction processes;	Sections 4.1, 4.3, and 4.4
iv. processes and methodologies for ensuring that identified sustainability targets are met;	This plan
v. processes and methodologies for ensuring that a "design" and "as built" rating score of least 65 points under the Infrastructure Sustainability Council of Australia Infrastructure Sustainability rating tool version 1.2 "Design and As Built" for the design and construction of the Project Works and Temporary Works will be achieved; and	This plan
vi. interfaces with other Project Plans.	Section 1.5
Technical Specification and Works Description Appendix 45 – Initial Sustainability Management Plan	
The issues identified in Table 45.1 below must be addressed in the preparation of the Sustainability Management Plan based on the initial Sustainability Management Plan. Ensuring that the Sustainability	

<table>
<tr><th>Requirement</th><th>Location in document</th></tr>
<tr><td>Management Plan addresses the issues referred to below will not in any way limit the warranty given by the Contractor under clause 7.18 of the contract that the Sustainability Management Plan will be fit for its intended purpose.
The identified issues to be addressed are not exhaustive and ARTC does not warrant that:
(a) it has checked the relevant documents for compliance with the requirements of the contract; or
(b) compliance with the requirements of Table 45.1 will ensure that the Contractor fulfils all the requirements of the contract and TSWD.
Table 45.1 Issues to be addressed in the preparation of the Sustainability Management Plan
<table>
<tr><th>Issue No.</th><th>Issues to be addressed in the preparation of the Sustainability Management Plan</th></tr>
<tr><td>1</td><td>Other Project Plans - the Sustainability Management Plan must recognise, be consistent with and address the requirements of each of the other individual Project Plans to the extent that they are relevant and applicable to the Sustainability Management Plan.</td></tr>
<tr><td>2</td><td>Key Personnel and project resources - The Sustainability Management Plan must be updated to be consistent with Schedule 3 (Contractor’s Key People).</td></tr>
<tr><td>3</td><td>Tables, figures and diagrams - tables, figures and diagrams within the Sustainability Management Plan must be updated to align with the planned Contractor’s Activities.</td></tr>
</table>
</td><td>Section 1.6
Section 4.5
This Plan</td></tr>
<tr><td colspan="2">Conditions of Approval</td></tr>
<tr><td>E47: The Proponent must endeavour to achieve a best practice level of performance for the CSSI being a minimum ‘Design’ and ‘As built’ rating score of 65 using the Infrastructure Sustainability Council of Australia infrastructure rating tool or an equivalent level of performance using a demonstrated equivalent rating tool.</td><td>This plan</td></tr>
<tr><td colspan="2">Submissions Report</td></tr>
<tr><td>CRW1: Where feasible and practicable, construction material will be sourced from within the Sydney region.</td><td>Section 4.1 and Section 6.2</td></tr>
<tr><td>CSO3: ARTC will work with the nominated construction contractor to seek opportunities, where possible, to use local and Indigenous labour as part of the workforce requirements for the construction of the project.</td><td>Section 4.1.2 and Section 4.2</td></tr>
</table>

Purpose of this document

Australian Rail and Track Corporation (ARTC) has appointed John Holland under a Contract to perform the Botany Rail Duplication Project (BRD).

The Sustainability Management Plan (SMP) provides a framework for the management of sustainability and project scope requirements for the Botany Rail Duplication (BRD) Project, in line with the requirements of TSWD Annexure 28. It outlines how sustainability will be managed, measured and reported through the design and construction phases, as well as considering operation and maintenance requirements.

The SMP outlines the following:

- A description of the applicable sustainability requirements and targets
- Approach to addressing climate change vulnerability through the development of a climate change risk assessment to identify and assess the risks from climate change and incorporates adaptation measures into the BRD activities to minimise significant risks
- Resources – Sustainability Strategies
- Sustainability initiatives that will be implemented or are being further investigated for implementation during design and construction to deliver sustainability outcomes and John Holland's additional strategies and commitments to further enhance sustainability performance
- The process and methodology for how JH will achieve a certified "design" rating score of at least 65 points, using the Infrastructure Sustainability Council of Australia Infrastructure Sustainability rating tool version 1.2 "Design and As Built" for the design of the Project Works and Temporary Works.
- The process and methodology for how JH will achieve a certified "as built" rating score of at least 65 points, using the Infrastructure Sustainability Council of Australia Infrastructure Sustainability rating tool version 1.2 "Design and As Built" for the construction of the Project Works and Temporary Works.
- A draft IS Scorecard which illustrates how these initiatives will achieve the targeted 'Excellent' IS Rating at Appendix B.

Definitions and abbreviations

Terms and abbreviations used in this document are detailed in Table 1, below.

Table 1: Terms, abbreviations, and definitions for this plan

Term/ Abbreviation	Definition
BRD	Botany Rail Duplication Project
CEMP	Design & Construct Environmental Management Plan
DA	Development Application
D&C	Design and construct
EIS	Botany Rail Duplication Environmental Impact Statement, dated 1 October 2019
EM	Environmental Manager
EMS	Environmental Management System
Environmental policy	Statement by the organisation of its intention and principles for environmental performance.
GHG	Greenhouse gas
GHG	Greenhouse gas
IMS	Integrated Management System
IS	Infrastructure Sustainability (Rating Scheme)
ISAP	Infrastructure Sustainability Accredited Professional
ISC	Infrastructure Sustainability Council
ISP	Independent Sustainability Professional
ISP	Independent Sustainability Professional
IV	Independent Verifier
JH	John Holland Group
JHET	John Holland Event Tracker
LGA	Local Government Area
NGER Scheme	National Greenhouse and Energy Reporting Scheme
NGER Scheme	National Greenhouse and Energy Reporting Scheme
Non-compliance	Failure to comply with the requirements of the Project approval or any applicable licence, permit or legal requirements.
Non-conformance	Failure to conform to the requirements of the Project system documentation including this SEMP or supporting documentation.
PD	Project Director
PPW	Project Pack Web
RAATM	Requirement Allocation and Analysis Traceability Matrix
REF	Review of Environmental Factors
RVTM	Requirements Verification & Traceability Matrix
SMP	Sustainability Management Plan
SMS	Sustainability Management System
SQE	Safety, Quality and Environment
SQP	Suitably Qualified Person
TSWD	Technical Specification and Works Description

1. Introduction

1.1. Project Scope of Work

The Botany Rail Duplication (BRD) Project (the Project) is a Design and Construct (D&C) contract, involving the conversion of the current single- track configuration of the Botany Rail Line between Mascot and Botany to a duplicated track configuration within the existing rail corridor. Works also include providing a signalling system that enables bidirectional running between Botany Yard and Cooks River Loop and into, out of, and throughout Botany Yard. The completed Project will enable operational capacity on the Botany Rail Line to increase from the current 20 train movements per day to 45 train movements per day by 2030.

This Project is supported by the Australian Government as a priority rail freight transport initiative, to alleviate constraints and increase the capacity of Sydney's freight rail network to meet existing and future demand. John Holland is delivering the Project on behalf of the Australian Rail Track Corporation (ARTC).

Specific elements of the works include:

- Track duplication, realignment (i.e., slewing), and upgrades across the Botany Rail Line
- Construction of crossovers near Banksia Street, O'Riordan Street, and Botany Yard
- Upgrades to Gelco Siding with the construction of motorised turnouts, catchpoints, and associated track
- Construction of four new underbridge structures at Mill Stream, Southern Cross Drive, O'Riordan Street, and Robey Street and demolition of two existing underbridge structures at O'Riordan Street and Robey Street
- Construction of a new turnout, catchpoint, and track at the Botany Yard end of the Cooks River Loop
- Construction of new track formation and retaining structures to support the track duplication and realignment
- Installation of an upgraded signalling system to provide for bi-directional running
- Demolition of the existing Qantas footbridge
- Demolition and removal of Kelloggs Siding.

1.2. Plan Distribution

This Plan is distributed to the Client team (ARTC) as requested, to John Holland Group (JH) line management and is available to all JH project staff and subcontractors.

The controlled copy of this plan will be maintained in the JH Document Management System and uploaded into Aconex where required. Each revision of the plan will also be uploaded via Aconex.

Copies of this Plan downloaded by project personnel shall be deemed uncontrolled.

1.3. Regulatory Drivers

The key legislation relevant to sustainability management includes:

- *Environmental Planning and Assessment Act 1979* (EP&A Act)
- *Protection of the Environment Operations Act 1997* (POEO Act)
- *National Greenhouse and Energy Reporting Act 2007* (NGER Act) (Cth)
- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (Cth)

1.4. Guidelines

Table 2 outlines guidelines and standards relating to the management of sustainability, to be considered as part of the BRD works.

Table 2: Sustainability guidelines and standards

Document	Relevance to the BRD Works
Infrastructure Sustainability Council (ISC) Infrastructure Sustainability Technical Manual Version 1.2, November 2018	The application of the ISC IS Technical Manual Version 1.2 is to align Projects and associated contract packages with best practice performance in relation to sustainability for infrastructure projects.

Document	Relevance to the BRD Works
Infrastructure Sustainability Materials Calculator Guideline	The IS Materials Calculator evaluates environmental impacts in relation to use of materials on infrastructure projects and assets and is used to address the requirements of the BRD Works Materials Management Strategy and ISC credit Mat-1. Application of the IS Materials Calculator to the BRD Works will be undertaken in accordance with this guideline.
National Greenhouse Accounts Factors	The National Greenhouse Accounts Factors document sets out greenhouse gas emissions factors for use in calculating emissions. The emissions factors have been estimated by the Department of the Environment and Energy using the Australian Greenhouse Emissions Information System (AGEIS). The Project will use the latest version of the National Greenhouse Accounts Factors at the time of preparing the Base Case Proposal and design modelling.

1.5. Further Development and Updating this plan

This Plan will be further developed and revised to address any changes in the project management process, comments by the Client Representative in accordance with the Contract, and changes identified by continuous improvement as will the other management plans referred to herein.

Regardless of further development of this plan to address changes in the project management process, this plan will be reviewed by the Project Director, with the assistance of senior project staff, at regular intervals of not less than twelve months.

1.6. Interfaces with Other Plans

This Plan is part of a suite of management plans and sub-plans that form a detailed, cohesive and consistent framework for managing all aspects of the BRD Works. It has the following interrelationships with other management plans and documents:

- The Construction Environmental Management Plan (CEMP) sets out governance, monitoring, reporting, auditing and corrective action processes applicable to sustainability
- The Design Plan sets out the design management process including detailing the (Requirements Allocation and Traceability Matrix) RAATM process which will be utilised to ensure that all requirements including sustainability requirements are embedded in the design
- The Quality Plan outlines reporting and auditing requirements for the BRD Works
- The Community Communications Strategy which sets out the framework for community and stakeholder liaison and engagement for the works
- The Procurement Plan details how JH will manage procurement and tender processes during the BRD Works.
- The Construction Soil, Water and Groundwater Management Plan strategies to be applied to minimise water usage, manage soil and contamination, surface water and groundwater and maximise water reuse during the BRD Works.
- Construction Heritage Management Plan details management strategies to minimise impacts on Aboriginal and historic heritage items and archaeology
- Construction Flora and Fauna Management Plan details management strategies to minimise impacts on flora and fauna
- Construction Noise and Vibration Management Plan details assessment protocols and management strategies for minimising construction noise and vibration

2. JH Commitment and Approach to Sustainability

2.1. Policy

The BRD Project has adopted the John Holland Sustainability Policy to guide the Project's commitment to sustainability and achievement of net positive environmental and social outcomes (see Appendix A). The Policy sets out the principles for delivering the BRD Works to maximise environmental, social, and economic benefits, while minimising impacts. The Sustainability Policy has been endorsed by the BRD Project Director and has been in place since commencement of the Project (Contract Award).

2.2. JH Sustainability Management Framework

The JH Sustainability Framework (Figure 1) governs the way we work through four key pillars (Leadership and Strategy, Our Community and Partners, Built and Natural Environment; and Our People) and 12 Sustainability Elements. These 12 Sustainability Elements focus on the key interactions with our supply chain, customers, communities, and the environment, throughout the project lifecycle. The Framework also enables John Holland to work towards the UN Sustainable Development Goals.

The Framework is designed to leverage our people and diverse expertise by encouraging a thoughtful, collaborative, interconnected approach to decision making, centring on building resilience. Each component of our framework is interconnected, each of the 4 pillars and their 12 elements define our inclusive and thoughtful approach to decision-making that we see as a 'whole of business' challenge – that is one we are all working towards together. More detail on JH's Sustainability Framework can be found on the JH Intranet Group Sustainability page.

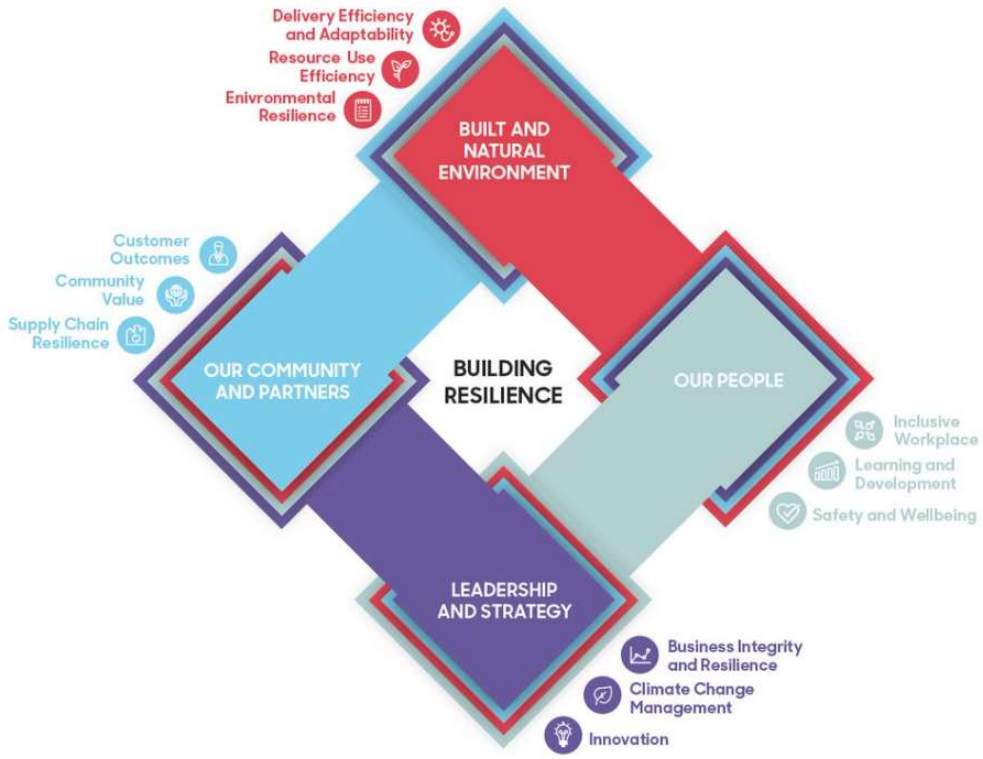

Figure 1: John Holland Sustainability Management Framework

2.3. JH Sustainability Management System

John Holland's Sustainability Management System (SMS) is shown in Figure 2. The SMS is applicable to all Rail projects and details how sustainability is implemented across its projects. The Sustainability Management System fits within John Holland's Integrated Management System (IMS) certified to AS/NZ ISO9001, AS/NZ ISO14001 and AS/NZ ISO4801 and can be accessed via the John Holland Intranet and John Holland HSES Portal. The SMS provides proven procedures, tools, and templates to support the Project to achieve successful delivery with a strong focus on resource use (energy, water, waste, materials) efficiency.

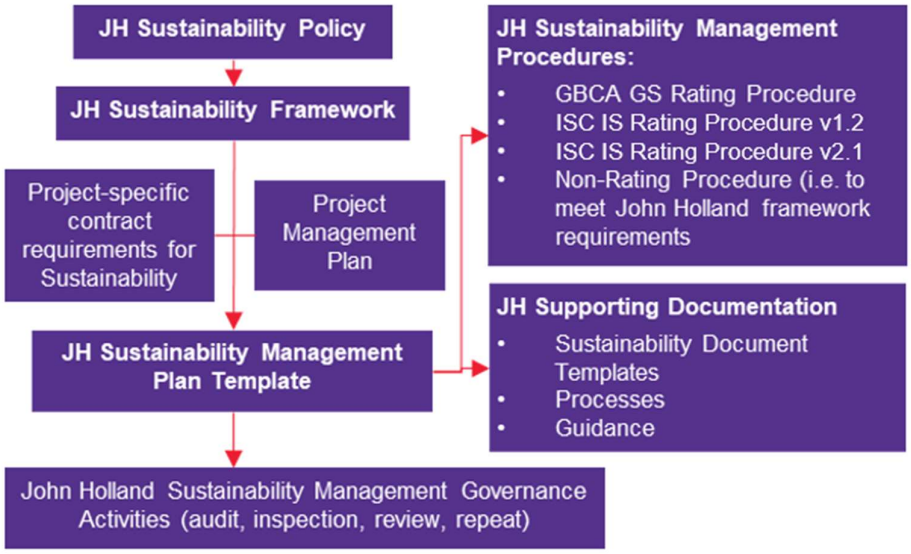

Figure 2: John Holland Sustainability Management Framework

3. Sustainability Objectives and Targets

The Project's commitment to sustainability is further reflected in objectives and targets that have been set to drive sustainability outcomes on the Project. This is discussed further below.

3.1. Objectives

The primary objective of the Project is to provide appropriate resources, management systems, and support to deliver the Project in accordance with compliance, risk management, and budget requirements, and to meet JH project programs. In achieving this objective, JH will:

- Safely deliver the BRD program
- Continually drive social and environmental outcomes through delivery of the BRD program
- Minimise impact to the community (business, residents, customers), e.g., disruptions, efficient possessions
- To attract, retain and develop skilled and critical resources to deliver the project.

3.2. Targets

The sustainability targets adopted for the BRD Works are derived from Appendix 20 of the Technical Specification and Works Description (TSWD). These sustainability targets, as listed below in Table 3, aim to guide how JH will address sustainability during Project delivery.

Our focus has been on setting achievable objectives and targets to not only minimise the negative impact of the BRD works but achieve net positive benefits and ensure continual improvement. These objectives and targets will guide efforts of the JH team in delivering the BRD works and ensure the Project has a lasting positive legacy for individuals, the construction industry, and communities.

Table 3: Sustainability Targets

No.	Sustainability objective	Target	BRD approach
1	A climate change risk assessment to be developed and adaptation measures identified and implemented.	Achievement of credit Cli-1 and Cli-2 Level 3	Refer to Section 5
2	Reduction in greenhouse gas emissions compared to a base case footprint.	>25% reduction	Refer to Section 6.1
3	Construction vehicle fuel usage to be alternative fuels (i.e., biodiesel B10 or B20).	10% of fuel usage to utilise B20 fuel	To be addressed during Project procurement phase when engaging with prospective subcontractors/suppliers
4	Site-based electricity energy from Green Power or renewable sources.	>25% renewable energy sources	Green Power will be purchased through the Project's electricity provider (confirmed during procurement)
5	Reduction in water use compared to a base case footprint.	>25% reduction	Refer to Section 6.4
6	Maximising the proportion of water from non-potable sources (substituting for potable).	>70% non-potable water usage	
7	Reduction in material lifecycle impacts by 10-30% compared to a base case footprint.	>25% lifecycle impact decrease	Refer to Section 6.2
8	Reduction in absolute quantity of Portland cement compared to a base case footprint.	>30% reduction in Portland Cement	
9	Materials/products by value have an ISC approved environmental label.	>9% of products	
10	Implementing a closing the loop initiative.	2 initiatives	
11	Topsoil (by volume) is beneficially re-used on or nearby to the Project.	100% is beneficially reused	Refer to Section 6.3
12	Spoil is diverted from landfill.	100% is diverted	
13	Inert and non-hazardous waste is diverted from landfill.	>90% is diverted	
14	Office waste is diverted from landfill.	>60% is diverted	
15	Components or prefabricated units used can be easily separated on disassembly/deconstruction into material types suitable for recycling or reuse.	>50% of components or prefabricated units can be easily separated	Deconstructability of Project components will be considered during the design and procurement phases, including consideration of end-of-life management and impacts.
16	Increase ecological value across the Project.	>20%	The Project has engaged ecology consultant, AMBS, to manage biodiversity impacts during construction. Opportunities for enhancement of ecological value will be determined through consultation with AMBS.
17	Workforce to include persons under 25 years of age.	≥8% of workforce	Social workforce procurement targets will be managed by the Project Procurement Team. Targets will be discussed with prospective subcontractors and suppliers during tendering and incorporated into sub-contracts, where relevant. JH will work collaboratively with subcontractors and suppliers to provide support and ensure targets are met.
18	Workforce to include women in trade related work.	≥2% of trade related roles	
19	Workforce to include Aboriginal or Torres Strait Islander workers.	>2.5% of workforce	
20	Procurement spend to include Aboriginal and/or Torres Strait Islander participation through subcontracts, employment and training, or procurement.	≥1.5% of procurement spend, including a minimum of two subcontracts	
21	Contract value to include indirect activities or engagement of social enterprises that benefit disadvantaged, disabled and under-represented groups.	≥1%	

No.	Sustainability objective	Target	BRD approach
22	Project employees are from the local region (Greater Sydney).	≥50% of Project employees are	
23	Trade positions are to include apprentices.	≥20% of all trade positions are	
24	Total full-time equivalent positions are to include learning workers.	≥20% of total full-time equivalent positions are learning workers	
25	Provide work placements for people over 16 years of age currently in school.	≥6 work placements per	
26	Provide placements for university undergraduates or recent graduates.	≥6 undergraduate/graduate placements per annum (pro rata)	
27	Heritage value assessment on the Project.	Has been interpreted and implemented to enhance (Her-1 Level 3)	The Project has engaged heritage consultants, AMBS, to provide assessment of heritage aspects, including mitigation strategies. Opportunities for heritage interpretation and enhancement will be investigated and considered throughout design and construction.
28	Minimise impacts to key stakeholders and streamline Approvals processes and deliver best practice outcomes through a 'consult/ involve/ collaborative' approach.	Collaborative approach implemented	Stakeholder and community engagement will be managed by the Project's Community Team in line with the Project Community and Stakeholder Engagement Management Plan (BRD-JHG-PM-0000-MPL-12015). JH will identify opportunities for collaboration with community and stakeholders throughout design and construction.
29	Development of an innovation and continuous improvement framework.	Achieved	To be established with Project senior leadership team.
30	Implement innovations to be submitted for verification (as per Inn-1 credit within the IS v1.2 Technical Manual).	≥2 innovations	Innovations being pursued on the Project include: ▪ Addressing IC-8 ISupply Innovation Challenge ▪ Adoption of TufDuct in the freight rail corridor (NSW first) ▪ Early strength concrete initiative associated with bridge construction at Robey Street and O'Riordan Street (Australian first)

4. Embedding Sustainability

4.1. Sustainability in Procurement

Procurement is a critical element of embedding sustainability in the BRD Project as there is significant scope of influence for sustainable outcomes, typically relating to the procurement of materials. A commitment to sustainable procurement is embedded within the JH Procurement Policy. Further, the project has a Sustainable Procurement Checklist for subcontractors (Appendix C) that will be used on the BRD Project to ensure subcontractors operate in line with Project sustainability and procurement policy positions.

John Holland's Procurement Policy sets out the commitment to sustainable procurement: strive to maximise value for the company, its shareholders, clients, and the communities we operate in through best in class ethical and sustainable procurement practices. The Policy commits to ongoing engagement with the supply chain and suppliers and establishes that John Holland expects its

employees, contractors and business partners to ensure procurement decisions take into consideration total lifecycle cost and triple bottom line being the economic, environmental and social impacts.

4.1.1. Tender Sustainability Requirements

The sustainability team will also provide support for the procurement and engineering teams to:

- Assist in the development of procurement packages
- Participate in tender interview meetings for key packages
- Participate in the post tender clarification process

Sustainability requirements for the project will be included as terms and conditions of each sub-contract or supply agreement. The sustainability objectives and targets have been prepared and incorporated into sub-contracts and supply agreements.

Depending on the nature of the sub-contract or supply agreement, relevant clauses will be extracted from the sustainability contract requirement and inserted into scope of works, and the specification will be issued in its entirety as part of the sub-contract or supply agreement documentation.

4.1.2. Tender Evaluation

The Project procurement process will require all tenderers to complete a supplier evaluation questionnaire. The questionnaire will request information on quality, health & safety, environmental management, sustainability, training, workforce development and indigenous participation. The questionnaire developed will be aligned to the procurement policy and some guidance from ISO20400:2017. Compliance with the Project sustainability specification will be a key assessment criterion in the sustainability component of the evaluation.

A tender evaluation form will be used in which non-financial criteria is required to contribute up to a minimum of 35% of the evaluation weighting. Responses to the supplier evaluation questionnaire will be used as the means of scoring within the tender evaluation form.

Additionally, to confirm compliance with the *Modern Slavery Act 2018*, suppliers and sub-contractors will be required in the tender evaluation process to confirm:

- There are no outstanding investigations into their operations, and they have not been convicted of any offence under the Modern Slavery Legislation; and
- Any actions or agreements held by the supplier/sub-contractor will potentially cause the Project to breach the Modern Slavery Legislation

4.1.3. Reporting, Review and Management

Supplier and sub-contractor performance will be monitored by the sustainability and contract administration teams and managed through the monthly progress claims process. Managed by the Commercial team, the subcontractor portal allows subcontractors and suppliers to complete monthly reporting in response to all subcontract requirements (including water, energy, waste, and materials use). All entries made to the portal are validated and approved by the Sustainability Manager.

Ongoing engagement with suppliers will include continuously improving supplier relationships and working to identify new and emerging sustainability opportunities. Supplier sustainability performance will be monitored for the duration of the contract against the Project's sustainability targets with instances of non-compliance being actively managed and instances of success encouraged and communicated.

4.2. Sustainability in Community Relations

John Holland acknowledges that community engagement and consultation are critical to the success of the Project. Community engagement and consultation will be managed as per the Project Community Communications Strategy. Furthermore, the project is committed to identifying and implementing social sustainability initiatives which provide demonstrable and tangible benefits to local community groups during the construction period and beyond the construction period. These will be further investigated during detailed design for implementation during construction.

4.3. Sustainability in Design

Sustainability opportunities and initiatives will be identified and developed through Design Opportunity Workshops. The workshops with the project design team are to brief them on the sustainability requirements of the Project and investigate opportunities on the key themes of materials (life cycle assessment, LCA), energy, water, and innovation. Sustainability requirements for the Project will be allocated and addressed depending on their classification as a process or technical requirement.

- Technical Requirements – allocated into the Requirements Verification & Traceability Matrix (RVTM) and responded to through relevant design and specification documents.
- Process Requirements – allocated and responded to in applicable management plans and/or Sustainability section of the design reports

The sustainability team will assist the systems assurance team to ensure requirements are appropriately mapped and addressed by the requirement owner. The sustainability team will:

- Participate in design team meetings
- Work with each design discipline to ensure sustainability requirements are incorporated into the relevant design reports and specifications
- Participate in design report reviews to ensure that sustainability requirements and design initiatives are incorporated

4.4. Sustainability in Construction

The sustainability team will be an integrated part of the construction delivery team. The sustainability team will provide a key support role to assist the construction team with management of Project requirements and the collection of compliance and reporting data.

The sustainability team will run targeted training and awareness sessions to ensure the construction team are aware of the project requirements and key sustainability themes including materials, energy, water, sustainability rating tools and sustainability reporting.

Sustainability opportunities and initiatives will be identified and developed through Construction Opportunity Workshops. The workshops with the project construction team are to investigate opportunities on the key themes of materials (LCA), energy, water and innovation. The sustainability team will also work with the construction team to identify and implement sustainability initiatives in procurement and construction.

Inspections of the worksite will also be completed by the environment and sustainability team, identifying potential sustainability improvements for the Project. Ongoing monitoring, reporting and auditing will continue throughout the construction to ensure that all ISC credits being targeted can be achieved and ensure other set sustainability indicators and requirements are being met. This monitoring process will ensure that requirements that are not being met can be identified and measures will be implemented for improvement. Sustainability successes and progress will be communicated across the construction teams.

4.5. Roles and Responsibilities

The successful delivery of a sustainable and IS rated project requires a collaborative effort with multidisciplinary responsibility for ensuring achievement of sustainability outcomes. Therefore, this section provides an overview of John Holland's approach to embedding sustainability responsibilities across several roles. The key relevant roles and responsibilities for sustainability management on the BRD Project are outlined in Table 4. The key skill levels for the sustainability personnel are also included within the table.

Table 4: Roles and Responsibilities

Role	Responsibilities	Skill Levels
Project Director	▪ Overall delivery of the Project including delivery of the Contractual and CoA sustainability requirements. ▪ Ultimate responsibility for the SMP ▪ Act as Contractors Representative. ▪ Full list of role and responsibilities provided in the corresponding management plan for this role.	▪ Possess a recognised qualification relevant to the position and the Project Activities

Role	Responsibilities	Skill Levels
Environment Manager	▪ Central responsibility for management of Project sustainability aspects, including compliance requirements. This roles forms part of the Project senior leadership team. ▪ Provide data to the Project Sustainability Manager for sustainability reporting ▪ Ensure that relevant sustainability requirements are reflected in subcontracts ▪ Participate in the review of sustainability performance and other relevant sustainability meetings and programs ▪ Full list of role and responsibilities provided in the corresponding management plan for this role.	▪ Possess a recognised qualification relevant to the position and the Project Activities
Sustainability Manager (ISAP accredited)	▪ Responsible for managing project sustainability with day-to-day SMP implementation and management responsibility ▪ Develop, implement, monitor and update (as necessary) SMP – this includes ensuring the SMP is up to date with any regulatory changes, such as for emissions reporting requirements ▪ Leadership and technical direction to design, construction, commercial and operational personnel on sustainability issues and adoption of sustainability initiatives ▪ Work alongside the senior management team ▪ Track implementation of sustainability initiatives, policy and strategy ▪ Work with commercial/procurement teams to ensure sustainability objectives, targets and/or indicators are tied to relevant supply contracts ▪ Interface with, and report to, key project stakeholders in relation to sustainability issues ▪ Provide sustainability training for project team and host sustainability workshops ▪ Project Manage the ISC rating submission	▪ Possess a recognised qualification relevant to the position and the Project Activities and have at least five years' recent relevant experience in sustainability management on projects similar to the Project Works ▪ Have a recognised and demonstrated competence in sustainability management experience in the design and construction of sustainable infrastructure or buildings
Sustainability Coordinator/Graduate (ISAP accredited)	▪ Provide technical sustainability support to the Project Sustainability Manager ▪ Coordinate the ISC submission including the collection, interpretation and submission of data required to achieve ISC IS ratings and maintaining the IS tracking register	▪ Possess a recognised qualification relevant to the position and the Project Activities
Independent Sustainability Professional (ISAP accredited)	▪ Review and report on project sustainability performance addressing environment, social and economic aspects ▪ Making findings and providing useful recommendations and suggested areas for improvement to the Project Sustainability Manager in a manner than demonstrates objectivity, transparency, and absence of bias ▪ Consult with the team and key stakeholders ▪ Act independently and objectively to challenge conventional thinking and provide a fresh set of eyes ▪ Required to meet the requirements stated in ISC's IS Man-3 credit	▪ Possess a recognised qualification relevant to the position and the Project Activities ▪ Meet the requirements of Man-3 suitably qualified professional ▪ Independent sustainability professional with a minimum 10 years' experience engaged to monitor and review sustainability performance
Design Manager	▪ Ensure relevant sustainability requirements are addressed in design development. ▪ Full list of role and responsibilities provided in the corresponding management plan for this role.	▪ Possess a recognised qualification relevant to the position and the Project Activities
Construction Manager	▪ Manage the delivery of the construction process, in relation to sustainability across all sites in conjunction with the Project Sustainability Manager. ▪ Oversee and facilitate the collection of records and evidence to support achievement of sustainability objectives and targets	▪ Possess a recognised qualification relevant to the position and the Project Activities

Role	Responsibilities	Skill Levels
	▪ Full list of role and responsibilities provided in the corresponding management plan for this role.	
Commercial / Procurement Manager	▪ Ensure that relevant sustainability requirements are considered in procuring materials and services. ▪ Oversee and facilitate the maintenance of registers (waste, materials, etc) and collection of NGERS and other sustainability reporting data from subcontractors. ▪ Full list of role and responsibilities provided in the corresponding management plan for this role.	▪ Possess a recognised qualification relevant to the position and the Project Activities
Quality Manager	▪ Ensure that relevant sustainability requirements are delivered to a high-quality standard. ▪ Full list of role and responsibilities provided in the corresponding management plan for this role.	▪ Possess a recognised qualification relevant to the position and the Project Activities
Workplace Health and Safety Manager	▪ Ensure that relevant sustainability related WHS risks and requirements are managed. ▪ Full list of role and responsibilities provided in the corresponding management plan for this role.	▪ Possess a recognised qualification relevant to the position and the Project Activities
Communication and Stakeholder Manager	▪ Communicate and coordinate sustainability initiatives to the community and key stakeholders. ▪ Full list of role and responsibilities provided in the corresponding management plan for this role.	▪ Possess a recognised qualification relevant to the position and the Project Activities
HR Training and Development Manager	▪ Develop and implement strategies to achieve the BRD workforce targets	▪ Possess a recognised qualification relevant to the position and the Project Activities

Figure 3 outlines the sustainability team structure.

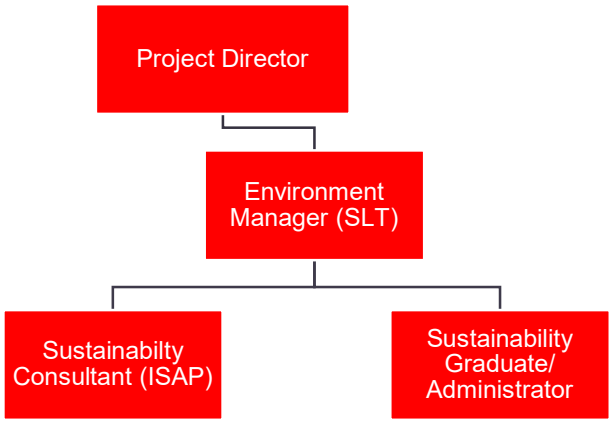

Figure 3: John Holland Sustainability Management Framework

4.6. Training, Awareness and Communication

John Holland is committed to the ongoing development of its staff and workforce in relation to sustainability knowledge. The following initiatives will be utilised to ensure effective sustainability training, awareness and communication is provided throughout duration of the Project. Training records are maintained by the HR Training and Development Coordinator.

4.6.1. Project Inductions

All Project staff, including sub-consultants and contractors will participate in a project induction. This induction will include a section on sustainability that details obligations to achieving the Project's sustainability objectives and how all personnel on the Project, as individuals, can contribute to achieving the sustainability objectives, targets, and requirements.

4.6.2. Training

Key Project staff, the Sustainability Manager and Sustainability Graduate will undertake the training for ISC (ISAPs) to assist in the Project team delivery of the IS Rating.

Targeted training will also be delivered to the broader Project team by the environment and sustainability team, for example, through toolbox talks. This training will cover key sustainability aspects of the Project as relevant to the delivery stage and site activities.

4.7. Internal and External Knowledge Share

Internal knowledge sharing will occur throughout the duration of the Project through newsletters/ updates, training and induction, and formal knowledge sharing sessions. These will be discussed and developed with the Project communications team.

Sustainability knowledge sharing will occur formally and informally through workshops, meetings, ISC working groups, attendance at industry conferences, and other activities during detailed design and construction. This will facilitate knowledge sharing between projects, between contractors and the industry as a whole.

Relevant lessons learnt from previous and current projects will be shared to facilitate improved sustainability outcomes. To communicate to the wider industry, John Holland will use ISC's knowledge sharing networks, industry events and conferences. John Holland regularly runs internal sessions where ISC lessons learnt, and good practices can be shared across the business.

4.8. Reporting

4.8.1. Monthly Report

Sustainability reporting will be provided in compliance with the requirements of TSWD 27 - Documentation and Reporting Requirements Section 27.2.12. A summary of performance in meeting sustainability requirements and targets will be provided as part of the monthly project report.

4.8.1. Sustainability Data Capture and Reporting

The web-based project management system, Project Pack Web (PPW) was specifically developed by John Holland in-house using Microsoft.NET to manage the collection and reporting of site and project operational information associated with IMS management processes. PPW integrates information from each supporting system via a series of prescribed workflows, records, and storage. It distributes project documentation in accordance with the practices identified in management plans, ensuring the integrity of the project delivery process.

PPW will be used as the central repository for all data captured during Project delivery, the consumption of resources including energy, water and materials and the generation of waste will be captured monthly within PPW to enable emissions monitoring through John Holland reporting procedure. This will be conducted in line with the John Holland IMS Resource Use Reporting Procedure for Energy and the John Holland National Greenhouse and Energy Reporting Guidelines, where appropriate. Subcontractors will be provided with a Subcontractor Energy, Water and Waste Report form with the information uploaded into the John Holland Project Pack Web NGER data collection platform.

4.8.2. Non-conformance

Sustainability non-conformances will be identified through review and monitoring processes as documented in the Construction Environment Management Plan. When a non-conformance is identified, actions, close-out details and verification will be documented in a non-conformance register in the John Holland Event Tracker (JHET) system. Sustainability non-conformances, corrective and preventative actions will be managed by the Sustainability Manager.

4.9. Review and Audit

Sustainability performance on the Project will be reviewed and audited in line with the requirements of IS Rating credits Man-3 and Man-4. Periodic reviews will be conducted by the Project's Independent

Sustainability Professional (ISP), as detailed in Table 4, above. External sustainability audits will be conducted by persons independent to the project who satisfy the competency requirements of ISO 19011 (as per IS Rating credit Man-4). Audits and reviews will provide an opportunity to update processes and systems as the project progresses.

The JH Project team will also conduct a formal review of sustainability performance annually, involving the Project's senior management team. Performance against sustainability targets will also be reviewed as part of Project monthly reporting.

Further detail on sustainability monitoring, review, and auditing requirements under the IS Rating scheme is provided in Section 7, below.

JH will undertake ongoing development, amendment and updating of this Sustainability Management Plan as necessary throughout the duration of the Project, including to take into account:

- New elements of the Project Works and Temporary Works which the existing Sustainability Management Plan does not address, and
- Any material changes in construction sequencing or methodology.

4.10. Document and Record Management

The project will use Aconex, a web-based collaboration application for project information and process management. Aconex will be used to manage:

- Correspondence – general correspondence, submissions, progress claims, contractual correspondence, meeting minutes etc.
- Documentation and drawing control – document registers, transmittals, drawings, reports, schedules and programs
- Design management functions - reviews, RFIs and design change requests.

4.11. Project Completion

At the completion of the D&C Contractor Works, relevant sustainability information and documentation, including the SMP, will be provided for inclusion in the Operational Environment Management Plan. The SMP will be updated to include relevant information on the monitoring of sustainability initiatives and documents developed as part of the ISC Design and As-Built Ratings.

5. Climate Change Strategy

5.1. Design Phase – Climate Change Risk Assessment Workshop

A multidisciplinary Climate Change Risk Assessment (CCRA) workshop is proposed to set the overarching initial and residual (post-adaptation actions) risk for the project. This workshop will highlight the historical and projected direct and indirect risks to the project using monitored and modelled data conducted in accordance with AS 5334:2013 Climate Change Adaptation for Settlements and Infrastructure, consistent with the requirements of IS Rating credit Cli-1. It will also provide alignment with the NSW Government Climate Adaptation Strategy, including the Core Principles for adaptation in the Strategy:

- Adaptation programs should be risk-based and people-focused.
- A healthy natural environment is fundamental to successful adaptation, providing critical ecosystem services and support for community wellbeing.
- Adaptation involves continuous improvement.
- Adaptation responses should be evidence-based, effective, flexible, equitable, inclusive and able to respond to new information.
- Adaptation is best achieved through collaboration, with responsibility shared across all levels of government, industries and communities.
- Adaptation, resilience and risk management should be integrated into all levels of policy, planning and implementation.
- Adaptation must be sustainable and avoid perverse outcomes, including detrimental impacts on communities, other sectors, the economy or the natural environment.
- Adaptation action is complementary to mitigation action.

5.2. Design Phase - CCRA and Report

Following the workshop, the risk levels and adaptation measures identified will be discussed and agreed with the project team and Sustainability Manager. A CCRA Report will be drafted including the historical and projected weather events, direct and indirect risks and corresponding risk levels (ranging from low to extreme) identified adaptation measures, and the residual direct and indirect risks and levels.

5.3. Design & Construction Phase - Embed Adaptation Actions in Design and Monitor Risks

Following the development of the CCRA Report, design and construction teams will be responsible for embedding the selected adaptation measure into the design, construction and, where appropriate, operation processes. Where relevant, risks will be included in the project Workplace Risk Assessment (WRA) and tracked throughout the duration of the Project.

6. Resources – Sustainability Strategies

6.1. Carbon and Energy Management

John Holland is committed to the reduction of energy use and carbon emissions during construction and operation of the asset by addressing the following objectives:

- Design to reduce energy use and carbon emissions during operations.
- Reduce energy use and carbon emissions during construction.
- Support innovative and cost-effective approaches to energy efficiency, low carbon / renewable energy sources and energy procurement.

The Project will adopt the energy management hierarchy shown in Figure 4, below.

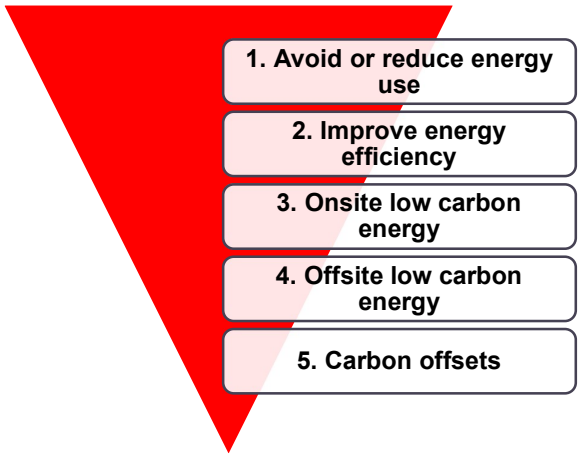

Figure 4: Energy management hierarchy

There are several activities during the design, construction, and eventual operation of BRD that will likely result in greenhouse gas emissions as detailed in Table 5. Energy and emissions modelling will be undertaken to demonstrate potential reductions in emissions that BRD could achieve when initiatives are confirmed during detailed design. This modelling will include the sources of energy and greenhouse emissions identified at the Tender Stage and the emissions boundary will be determined to identify the appropriate Scope 1, Scope 2, and land clearing emissions.

The modelling will serve as a baseline to demonstrate the reductions achieved through the implementation of energy use-reduction and renewable energy initiatives and will inform the ISC Base Case submission.

Table 5: Indicative Energy and Greenhouse Emissions Sources

Activity	Emissions Source	Type of Energy / Emissions
Construction compound	Site sheds operation; site lighting; ancillary facilities; site vehicles	Diesel; Petrol; Electricity
Vegetation clearing	Vegetation clearing equipment; site vehicles; cleared vegetation	Diesel; Petrol; Land Use Change
Earthworks	Earthwork plant and equipment; site vehicles	Diesel; Petrol
Intersections, pavement and utility infrastructure	Construction plant and equipment; site vehicles; materials including concrete, asphalt and steel	Diesel; Petrol; Embodied Emissions
Bridges	Construction plant and equipment; site vehicles; materials including concrete, asphalt and steel	Diesel; Petrol; Embodied Emissions
Signals	Signal operations	Electricity
Track	Construction plant and equipment; site vehicles; materials including steel	Diesel; Petrol; Embodied Emissions

6.1.1. Energy and Greenhouse Emissions Reduction Initiatives

Table 6 outlines a preliminary list of energy and emissions reduction initiatives that the Project team is investigating for implementation during the BRD works. This includes both energy efficiency and energy use reduction measures and initiatives that aim to minimise the use of non-renewable resources.

Throughout the Project, John Holland will measure and report on the measures implemented to minimise energy consumption and GHG emissions to quantify the benefits of their implementation and to meet contractual and ISC obligations.

Table 6: Energy and Greenhouse Emissions Reduction Initiatives

Initiative	Sustainability Outcome	Associated Target(s)	Milestones
Biofuel blends for generators, plant and equipment where feasible	Reduced carbon emissions; use renewables	▪ 10% of fuel usage to utilise B20 fuel ▪ >25% reduction in greenhouse gas emissions compared to a base case footprint	Procurement and construction
Electric/hybrid vehicles and plant where feasible (e.g., excavators)	Energy efficiency, reduced transport emissions (combustion) and potential renewables from the grid	▪ >25% renewable energy sources ▪ >25% reduction in greenhouse gas emissions compared to a base case footprint	Procurement and construction
Solar lighting towers	Reduced carbon emissions; Use renewables	▪ >25% renewable energy sources ▪ >25% reduction in greenhouse gas emissions compared to a base case footprint	Procurement and construction
Solar PV arrays / GreenPower / PPA	Reduced carbon emissions; Use renewables	>25% renewable energy sources >25% reduction in greenhouse gas emissions compared to a base case footprint	Procurement and construction

Initiative	Sustainability Outcome	Associated Target(s)	Milestones
Higher temperature settings for AC; Passive Design	Energy efficiency	>25% reduction in greenhouse gas emissions compared to a base case footprint	Procurement and construction
Minimising traffic staging / switching	Energy efficiency	>25% reduction in greenhouse gas emissions compared to a base case footprint	Construction
Carbon Offset credits	Reduced carbon emissions	>25% reduction in greenhouse gas emissions compared to a base case footprint	Construction and operation

6.1.2. Monitoring of Energy Consumption

Energy consumption during the delivery of the Project will be monitored by JH to ensure collection of data to fulfil monthly reporting requirements as well as completion of the Project's IS Rating As Built submission. The following are examples of data sources that may be used to obtain energy consumption data:

- Electricity invoices or site meter readings
- Monthly subcontractor reports including fuel consumption data
- Fuel supplier dockets/statements
- Modelling to provide estimation of onsite renewable energy generation (e.g. solar lighting towers)

Data will be recorded in the Project's sustainability data capture system and will be used to track performance against targets.

6.2. Sustainable Material Use Strategy

John Holland is committed to reducing carbon emissions associated with material use, the key materials objectives are:

- Reduce use throughout the project life-cycle;
- Consider embodied impacts in selection;
- Give preference to reuse and recycled materials;
- Recycle and reuse onsite; and
- Influence subcontractors and suppliers to adopt sustainability objectives in their works and procurement.

In alignment with the John Holland resource use efficiency principles, the materials management hierarchy shown in Figure 5 will be adopted.

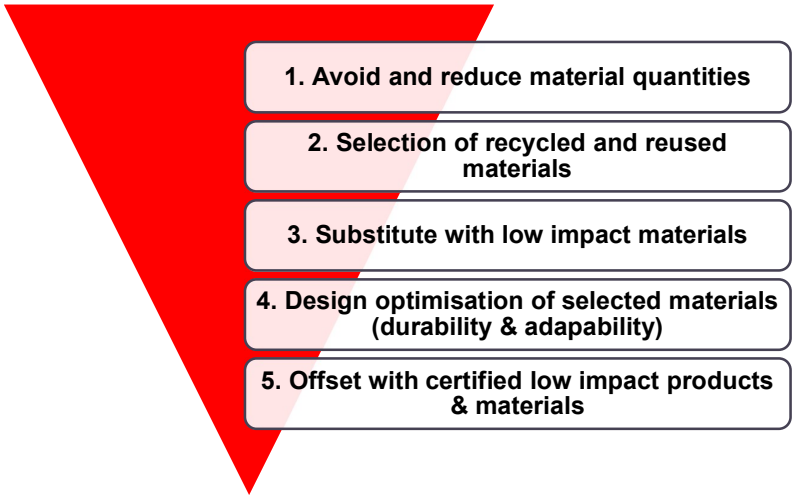

Figure 5: Materials management hierarchy

6.2.1. Sustainable Materials Initiatives

John Holland's Procurement Policy demonstrates the commitment to efficiency, effective, ethical and sustainable procurement. This commitment underpins the sustainable materials initiatives outlined in this section. Opportunities to limit the quantum of materials will be further investigated during detailed design. Table 7 outlines a preliminary list of sustainable material initiatives that the project team is further investigating for implementation.

Table 7: Sustainable materials initiatives

Initiative	Sustainability Outcome	Associated Target(s)	Milestones
Reuse of existing infrastructure where possible	Avoids need for demolition works (and associated fuel consumption and waste generation) and consumption of additional materials and energy to construct new infrastructure	▪ Reduction in material lifecycle impacts by 10-30% compared to a base case footprint, targeting >25% lifecycle impact decrease	Design
Maximising supplementary cementitious material (SCM) content of concrete mix designs	Decreases amount of Portland cement clinker, reducing GHG emissions	▪ Reduction in absolute quantity of Portland cement by >30% compared to a base case footprint ▪ Reduction in material lifecycle impacts by 10-30% compared to a base case footprint, targeting >25% lifecycle impact decrease	Design, procurement, and construction
Recycled Glass Fines in concrete	Recycled product, reduced embodied GHG emissions	▪ Reduction in material lifecycle impacts by 10-30% compared to a base case footprint, targeting >25% lifecycle impact decrease ▪ Implementing a closing the loop initiative.	Design, procurement, and construction
Adoption of precast concrete elements	Offers dematerialisation advantages when compared to in-situ concrete (including reduced concrete and steel reinforcement quantities), and associated embodied GHG emissions reduction	Reduction in material lifecycle impacts by 10-30% compared to a base case footprint, targeting >25% lifecycle impact decrease	Design, procurement, and construction

Initiative	Sustainability Outcome	Associated Target(s)	Milestones
Reductions in CSR route	Decreases sand, conduits required - reduced GHG emissions Reduced embodied GHG emissions	Reduction in material lifecycle impacts by 10-30% compared to a base case footprint, targeting >25% lifecycle impact decrease	Design
TufDuct	Recycled product, reduced embodied GHG emissions	▪ Reduction in material lifecycle impacts by 10-30% compared to a base case footprint, targeting >25% lifecycle impact decrease ▪ Implementing a closing the loop initiative.	Design, procurement, and construction
Recycled steel	Use of recycled content in steel	▪ Reduction in material lifecycle impacts by 10-30% compared to a base case footprint, targeting >25% lifecycle impact decrease ▪ Implementing a closing the loop initiative.	Procurement and construction
Steel produced using less carbon intensive processes	Reduced embodied GHG emissions	Reduction in material lifecycle impacts by 10-30% compared to a base case footprint, targeting >25% lifecycle impact decrease	Procurement and construction

6.2.2. Environmentally Labelled Products

Where feasible, and in line with the Project's targets and ISC requirements, materials with environmental labels will be procured. This may include the following opportunities:

- **Good environmental choice Australia ecolabel** - The first scheme of its kind in Australia, GECA certifies products that promote a healthier and safer environment. Following ISO 14024 principles and the ISEAL frameworks for global best practice in ecolabelling, GECA independently assesses and certifies products to demonstrate sustainability in products manufactured for construction. GECA certifications are recognised by ISC's rating schemes to satisfy requirements for Mat-2.
- **Environmental Product Declarations** - Published Environmental Product Declarations (EPDs) are independently verified and registered documents that communicate information and data about the life-cycle impacts of products. Although only a declaration of the lifecycle impacts, rather than a certification that the product has an improved environmental impact, EPDs are useful for calculating the impact of certain products and improving industry transparency. EPDs are also used under the ISC rating system to demonstrate supply chain transparency. EPD Australasia runs the EPD Programme in Australia, with various products and producers listed including for concrete and steel.
- **WorldSteel Association's Climate Action Plan** - The WorldSteel Association's Climate Action Recognition Program recognises steel producers that have participated in the WorldSteel CO2 emissions data collection program. Current Australian steel manufacturers who are members of the 2019-2020 Climate Action program include BlueScope Steel and InfraBuild (formerly Liberty Steel). The Australian Steel Institute also publishes a list of certified companies that are members of its Environmental Sustainability Charter and conduct their business in accordance with the requirements of the Charter.

6.3. Waste Reduction Initiatives

John Holland is committed to delivering waste reduction and recycling opportunities in both design and construction, including:

- Minimising waste generation throughout the project life cycle
- Implementing waste management strategies in accordance with the *Waste Avoidance and Resource Recovery Act 2001*
- Setting targets for the recovery, recycling or reuse of construction waste, and beneficial reuse of spoil.

In alignment with the John Holland commitment to resource use efficiency, the waste management hierarchy shown in Figure 6 will be adopted.

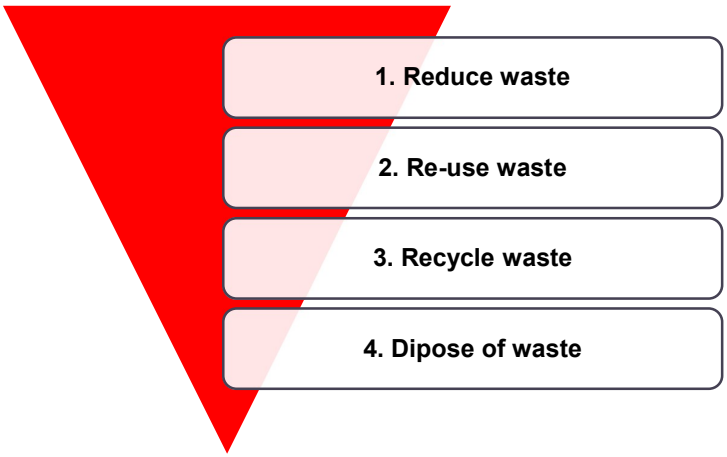

Figure 6:Waste management hierarchy

6.3.1. Waste minimisation initiatives

Waste minimisation initiatives to be implemented in design and construction will be identified through the opportunities register process and in relevant design reports and sustainability documentation. The following waste related performance targets have been adopted:

- 100% by volume of reusable spoil diverted from landfill
- 90% by volume of inert and non-hazardous waste diverted from landfill
- 60% by volume of office waste diverted from landfill

Table 8 outlines a preliminary list of waste management initiatives that the Project team is further investigating for implementation during the works.

Table 8: Waste reduction initiatives

Initiative	Sustainability Outcome	Associated Target(s)	Milestones
Offsite PVC Recycling	PVC offcuts or removed PVC sent to recycling facility	>90% inert and non-hazardous waste is diverted from landfill	Construction
Offsite oil recycling	Waste oils collected and taken to licenced oil recycling facility	>90% inert and non-hazardous waste is diverted from landfill	Construction
Onsite reuse of spoil: Topsoil (direct placement or backfill or on-site rehabilitation) Uncontaminated spoil (fill) Reuse of contaminated spoil along the alignment	Reduced use of virgin spoil, contaminated spoil, onsite recycling, reduced transport emissions	▪ 100% spoil is diverted from landfill ▪ 100% topsoil (by volume) is beneficially re-used on or nearby to the Project	Construction

Initiative	Sustainability Outcome	Associated Target(s)	Milestones
Onsite green waste reuse, including use of: ▪ Native vegetation as mulch in revegetation or landscaping ▪ Non-native vegetation as erosion control on exposed areas or as bunds	Reuse of materials onsite; reduction in importation of virgin materials and associated transport costs and GHG emissions; reduced water use and irrigation needs.	>90% inert and non-hazardous waste is diverted from landfill	Construction
Offsite packaging take-back schemes and opportunities to recycle soft plastic packaging waste	Recycle waste product into new products (for example Replas), supporting the circular economy	>90% inert and non-hazardous waste is diverted from landfill	Procurement and construction
Onsite segregation of waste streams (e.g., metals; office waste) for offsite recycling	Increased recycling and reuse opportunities	▪ >90% inert and non-hazardous waste is diverted from landfill ▪ >60% office waste is diverted from landfill.	Construction
Reuse of formwork between sites; free issue rails from ARTC	Reduction of materials scope 3 GHG emissions; increased recycling and reuse opportunities	>90% inert and non-hazardous waste is diverted from landfill	Procurement and construction
Recycling ballast (where possible)	Reduction in waste sent to landfill and increased recycling and reuse opportunities	>90% inert and non-hazardous waste is diverted from landfill	Construction

6.3.2 Waste management and tracking processes

Table 9 details the potential waste streams and estimates of waste quantities (where possible) anticipated to be generated during delivery of the project. It is noted that it is difficult to quantify potential waste streams with certainty at this stage in the Project, and particularly given opportunities for waste minimisation and reuse will be prioritised over disposal but require assessment on a case-by-case basis during construction.

Table 9: Botany Rail Duplication Project waste estimates (source: Botany Rail Duplication EIS)

Activity	Potential Waste Stream	Indicative Volumes	Likely Classification of Waste Streams
Activities at construction offices and compounds	Putrescibles (food and other organic waste)	< 10 tonnes (based on average waste consumption per staff for the duration of project)	General solid waste (putrescible)
	Paper, cardboard, plastics, glass and printer cartridges and other office waste	< 6 tonnes	General solid waste (non-putrescible)
	Grey water, sewerage	< 800 litres	Liquid waste
Maintenance of construction plant, vehicles and equipment	Adhesives, lubricants, waste fuels and oils, engine coolant, containers, batteries, hoses	< 2 tonnes	General solid waste (non-putrescible) Hazardous waste Liquid waste
	Plastic film wrap and other packaging	Minimal	General solid waste (non-putrescible)
Early and Enabling Works			
Track Realignment/ Slewing	Metals (cut rail, welding offcuts)	2.9 km of new track (2 x rails) and 100 m of crossovers	General solid waste (non-putrescible)
	Spoil comprising VENM or ENM	See below as part of total spoil volume.	General solid waste (non-putrescible)
	Contaminated soils (including asbestos contaminated soil) and acid sulfate soils	4,000 m^3	Restricted solid waste or general solid waste (non-putrescible)1

Activity	Potential Waste Stream	Indicative Volumes	Likely Classification of Waste Streams
	Ballast	TBC as part of detailed design	General solid waste (non-putrescible) or restricted solid waste1
	Rail clips, pads and insulators	Clips: 2.9 km / 0.6 m x 4Pads and insulators: 2.9 km / 0.6 m x 2	General solid waste (non-putrescible)
	Plastic film wrap and other packaging	Minimal	General solid waste (non-putrescible)
Utility Service Relocation and/or protection	Vegetation/Green Waste	TBC as part of detailed design	General solid waste (non-putrescible)
	Aggregates	See below as part of total spoil volume.	General solid waste (non-putrescible)
	Pipe/conduit and cable offsets	Minimal	General solid waste (non-putrescible)
	Excess spoil comprising VENMENM	See below as part of total spoil volume.	General solid waste (non-putrescible)
	Contaminated Soils and Acid Sulfate Soils	See below as part of total spoil volume.	General solid waste (non-putrescible)
	Concrete ground level troughing segments	2.9 km	General solid waste (non-putrescible)
	Concrete, metal framed utilities pit lids	60	General solid waste (non-putrescible)
	Plastic film wrap and other packaging	Minimal	General solid waste (non-putrescible)
Billboard removal	Billboard materials (wood, paper, plastic)	None	General solid waste (non-putrescible)
	Reinforcing steel, concrete, structural steel	15 tonnes	General solid waste (non-putrescible)
	Concrete footings or structures	10 m^3	General solid waste (non-putrescible)
	Plastic film wrap and other packaging	Minimal	General solid waste (non-putrescible)
Site Establishment	Vegetation/Green Waste	TBC as part of detailed design	General solid waste (non-putrescible)
	Top Soil	Will be reused where possible. See below as part of spoil volume for soil not reusable	General solid waste (non-putrescible)
	General Debris/Litter	Minimal	General solid waste (non-putrescible)
	Plastic film wrap and other packaging	Minimal	General solid waste (non-putrescible)
Main Construction and Commissioning Works including Track and Bridge Works			
Installation of new track, upgrade of existing track and installation of new crossovers	Excess spoil comprising VENMENM	See below as part of total spoil volume.	General solid waste (non-putrescible)
	Metals (cut rail, metal offcuts)	Included for track/slewing	General solid waste (non-putrescible)
	Wood (formwork)	Minimal	General solid waste (non-putrescible)
	Aggregates	See below as part of total spoil volume.	General solid waste (non-putrescible)

Activity	Potential Waste Stream	Indicative Volumes	Likely Classification of Waste Streams
	Concrete, asphalt and aggregate	See below as part of total spoil volume.	General solid waste (non-putrescible)
	Plastic film wrap and other packaging	Minimal	General solid waste (non-putrescible)
Construction of new bridges and demolition of existing bridges	Excess spoil comprising VENMENM	See below as part of total spoil volume.	Restricted solid waste or general solid waste (non-putrescible)1
	Contaminated Soils and Acid Sulfate Soils	See below as part of total spoil volume.	General solid waste (non-putrescible)
	Metal, steel reinforcement	150kg for existing O'Riordan bridge quantities	General solid waste (non-putrescible)
	Concrete, asphalt and aggregate	TBC as part of detailed design	General solid waste (non-putrescible)
	Bricks and mortar	Minimal	General solid waste (non-putrescible)
	Structural steel	TBC as part of detailed design	General solid waste (non-putrescible)
	Plastic film wrap and other packaging	Minimal	General solid waste (non-putrescible)
Signaling and electrical work	Pipe/conduit offsets, Electrical/cable offcuts	Minimal	General solid waste (non-putrescible)
	Electrical and signalling components	TBC as part of detailed design	General solid waste (non-putrescible)
	Metal signal cabinets	10 (approximately)	General solid waste (non-putrescible)
	Concrete and steel reinforcement	10 m^3	General solid waste (non-putrescible)
	Plastic film wrap and other packaging	Minimal	General solid waste (non-putrescible)
Finishing and Rehabilitation Work			
Finishing Work	Metals (damaged fencing, work signs)	TBC as part of detailed design	General solid waste (non-putrescible)
	Vegetation/Green Waste	TBC as part of detailed design	General solid waste (non-putrescible)

6.3.3 Waste management and tracking processes

Waste generated during construction of the Project will be managed in accordance with the Construction Environmental Management Plan (CEMP) (BRD-JHG-PM-0000-MPL-12007) and the included Waste Environmental Control Plan. All waste will be classified and disposed/recycled/reused in accordance with the NSW Waste Classification Guidelines and relevant legislative and Project requirements.

As detailed in the Waste Environmental Control Plan, waste removed from site will be tracked through collection and retention of dockets/receipts. The quantities and fate of waste removed and from site will be recorded and reported as part of the Project's monthly reporting process.

Waste-to-destination audits will be conducted 6-monthly during construction in accordance with the requirements of IS Rating credit Was-1. Key waste streams that may be audited include spoil, construction waste, and contaminated waste (to be determined based on the program of works and the associated significant waste streams being generated).

6.4 Water Use Strategy

John Holland is committed to delivering water efficient practices in both design and construction with material use. In alignment with the John Holland resource use efficiency principles, the water management hierarchy shown in Figure 7 will be adopted.

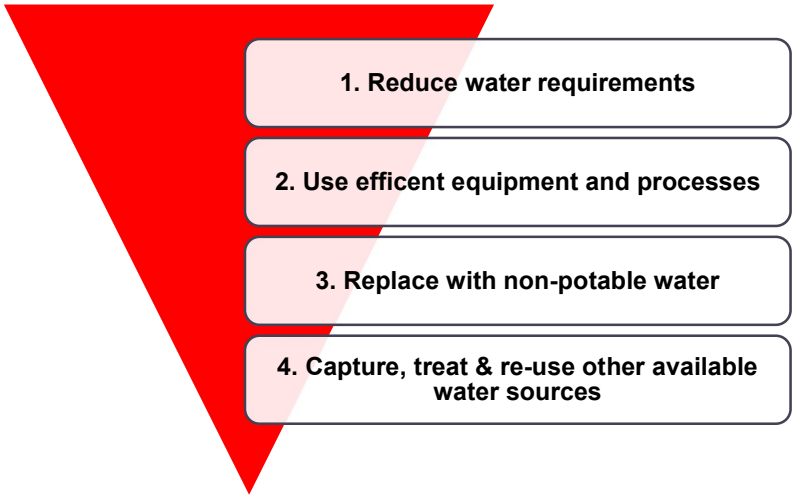

Figure 7: Water management hierarchy

6.4.2 Water Use Reduction Initiatives

Table 10 outlines a preliminary list of water use reduction initiatives that the project team is further investigating. This includes both water efficiency and reduction measures and initiatives to capture and reuse water. Throughout the Project, JH will measure and report on the measures implemented to minimise water consumption to quantify the benefits of their implementation and to meet contractual and ISC obligations.

Table 10: Water Use Reduction Initiatives

Initiative	Sustainability Outcome	Associated Target(s)	Milestones
High water efficient fixtures and fittings for site sheds and compounds	Water use reduction	>25% reduction in water use compared to a base case footprint	Procurement and construction
Rainwater harvesting	Potable water reduction / water use reduction	Maximising the proportion of water from non-potable sources (substituting for potable), targeting >70% non-potable water usage	Construction
Polymer dust suppression	Potable water reduction / water use reduction	>25% reduction in water use compared to a base case footprint	Construction
Treated recycled water for dust suppression and engineering fill / compaction	Potable water reduction / water use reduction	Maximising the proportion of water from non-potable sources (substituting for potable), targeting >70% non-potable water usage	Construction
Work with suppliers to use recycled water in precast concrete structures	Potable water use reduction	Maximising the proportion of water from non-potable sources (substituting for potable), targeting >70% non-potable water usage	Procurement and construction
Plant species selection e.g., zero irrigation species	Water use reduction	>25% reduction in water use compared to a base case footprint	Design, construction, and operation

Temporary site offices and compounds will be metred or monitored through invoices from water utilities. John Holland's monthly water use during construction will be determined by collecting water use data in line with the John Holland IMS Resource Use Reporting Procedure, including the water use data of subcontractors with data captured through monthly subcontractor forms.

This will allow John Holland to calculate the total water consumption, the total potable water consumption and the total non-potable water consumption quantities and drive continual improvement. This data will be included in monthly sustainability reports and ISC tracking register.

6.4.3 Monitoring of Water Consumption

Water consumption during the delivery of the Project will be monitored by JH to ensure collection of data to fulfil monthly reporting requirements as well as completion of the Project's IS Rating As Built submission. The following are examples of data sources that may be used to obtain water consumption data (potable and non-potable):

- Water invoices or site meter readings
- Monthly subcontractor reports including water consumption data (e.g. non-potable water)
- Discharge permits with estimates of water reuse onsite

Data will be recorded in the Project's sustainability data capture system and will be used to track performance against targets.

7. ISC Rating Approach

This section describes the processes and methodologies for ensuring that the targeted IS rating is achieved. The implementation of the IS Design and As-Built ratings follows the rating process outlined in Figure 8.

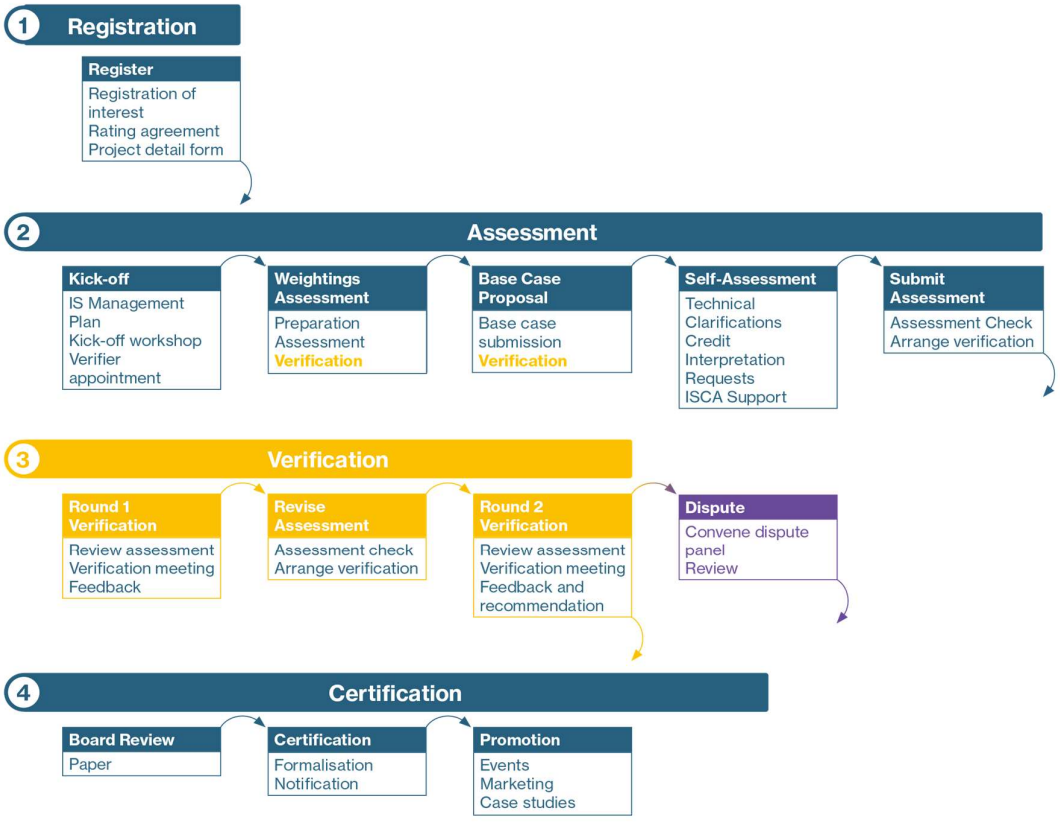

Figure 8: IS Design & As-Built Rating

7.1 IS Rating Scope and Target

The Project's IS Rating submission will apply to the scope of works approved under the Infrastructure Approval (SSI-9714), as assessed in the Environmental Impact Statement (EIS). JH will prepare Design and As Built rating submissions in line with Condition of Approval E46, as discussed below.

JH is targeting an IS Rating score of 65 ('Excellent' rating) for Design and As Built, in line with Project requirements, with stretch target of >75 ('Leading' rating).

7.2 BRD IS Rating Implementation

The Rating Process outlined in Figure 8 requires several deliverables associated with the submission of an IS Design and As-Built rating. Table 11 outlines the indicative IS rating implementation timeframes, tasks and actions required to achieve the IS Design rating. A table for the As-Built rating will be developed in future revisions of the SMP.

Table 11: IS Tasks and Deliverables Implementation - Design Rating

IS Stage / Project Stage	Timeframe	Task / Action
Registration	Following Contract Award	Register project for IS Design (and As-Built, if required at the time). This notifies ISC of the intent to register a project via a Registration of Interest form.

IS Stage / Project Stage	Timeframe	Task / Action
Sustainability Management Plan (this Plan)	Within 60 Business Days after contract award	Finalise Sustainability Management Plan for design phase
Kick off Meeting and Weightings Assessment	Within 10 Days of the project being registered with ISC	Development of weightings assessment for the Project. The weightings assessment identifies the most important sustainability issues for the project and adjusts the weightings of particular credits in the IS rating tool.
Climate Change Workshop	Prior to 50% DD	Multi-disciplinary climate change workshop to confirm climate change risks (initial and residual)
Climate Change Risk and Adaptation (CCRA) Report	Prior to 50% DD	Draft CCRA Report with adoption of agreed risks and adaptation options in design
IS Base Case	At the end of Stage 2	Prepare IS Base Case. The IS rating scheme incorporates the development of a “Base Case” assessment for the certain credits within the Using Resources theme: Ene-1, Wat-1, Wat-2 and Mat-1.
IS Tracking Register	Ongoing	Prepare and periodically update IS tracking register with current IS performance, at least monthly during design and construction.
IS Scorecard Development	Ongoing	Completion of IS Scorecard credit summary sections and references to evidence. Self-assessment against nominated criteria. There are options for addressing uncertainty with how the credit criteria is applied: Technical Clarifications (TCs) may be submitted to provide clarity around a specific criteria’s application. Credit Interpretation Request (CIRs) outline an alternative approach to achieving a particular credit. Often many of these questions have been previously asked on other IS rated projects and so it is advised to check on the online rulings register prior to submission of a TC or CIR. The TC or CIR submissions are subject to the ISC Technical Steering Committee review, with final rulings published on the ISC website.
IS Rating Design Submission (Round 1)	Following completion of Issued For Construction (IFC) Design stage	Completed IS Scorecard and associated evidence submitted to ISC for Round 1 assessment
IS Rating Design Submission Revision and Submission (Round 2)	TBC (dependent on Design Round 1 submission timing)	IS Scorecard revised with necessary amendments following Round 1 assessment and submit for Round 2
IS Rating As Built Submission (Round 1)	Following Practical Completion	Completed IS Scorecard and associated evidence submitted to ISC for Round 1 assessment
IS Rating As Built Submission Revision and Submission (Round 2)	TBC (dependent on As Built Round 1 submission timing)	IS Scorecard revised with necessary amendments following Round 1 assessment and submit for Round 2

7.3 ISC Document List

Table 12 lists key ISC documents, templates, and guidelines that will be used and/or referenced during preparation of the Project’s IS Rating submissions.

Table 12: ISC documents, templates, and guidelines

Document Name	Document Type	Description
IS Technical Manual Version 1.2	Manual	Provides the technical guidance to the requirements for achieving an IS V1.2 Rating. The ISAP will use the Technical Manual to guide the development of the IS Rating submission and to inform the Project team of IS Rating requirements.

Document Name	Document Type	Description
IS Submission Guidelines	Guideline	This document was recently released by ISC to provide guidance on the preparation of an IS Rating submission. It supplements the IS Technical Manual and includes tips for preparing a high-quality IS Rating submission, the types of evidence documents to collect and reference, and advice for the verification process.
IS Scorecard	Template (Excel)	The IS Scorecard is the official rating tool that has tabs for the weightings assessment and each credit with information on the target level and criteria. This is to be made available to the project team to be used as reference and should only be updated by the Sustainability Manager and/or Advisor. This will be used as a basis of the submission to ISC and will explain how the compiled evidence addresses the criteria for each credit. The IS Scorecard also includes a tab for completion of the Weightings Assessment, which identifies the material aspects of the Project and determines the distribution of scoring across the credits.
Base Case Proposal Form	Template (Word)	The IS base case outlines a “business as usual” footprint for the “Using Resources” categories: energy and carbon, water and materials use. The Base Case Proposal Form template will be used to define how the Base Case will be calculated for energy, water and materials credits and outline the assumptions behind the Project’s base case modelling.
Credit summary forms	Template (Word)	The ISC credit summary form templates for a v1.2 IS Rating will be used for the Project’s Design and As Built submissions. These templates will be used to summarise the Project’s performance against the benchmark requirements of each targeted IS Rating credit.
IS Materials Calculator	Template (Excel)	The IS Materials Calculator calculates the lifecycle impacts of the materials used in BRD project across the asset lifecycle based on the detailed design (typically 80% complete) and compares it to the base case to demonstrates reduction in materials lifecycle impacts.
IS Rulings Register	Register	A register of formal rulings issued by ISC outlining approved alternative approaches to achieving credit requirements. This will be referenced when preparing the Project’s IS Rating submission, with the adoption of relevant rulings to be highlighted in the credit summary forms.
Technical Clarification Forms	Template (Word)	This form is used to clarify technical issues in relation to the credits and the application of the credit criteria. The need for submission of Technical Clarification (TC) requests will be determined as preparation of the IS Rating progresses.
Credit Interpretation Request Forms	Template (Word)	The form is used to propose an alternative, yet equivalent, method for meeting a Credit. As with TCs, the need for submission of a Credit Interpretation Request (CIR) will be determined as preparation of the IS Rating progresses.
IS v1.2 Innovation Credit Guideline and Innovation Challenge Appendix	Guideline	This document details the timeframes and evidence requirements for IS Rating Innovation Credit submissions, and also sets out the requirements for individual Innovation Challenges.

7.4 Credit Timing

Several IS credits have time critical components which must be met to ensure compliance with the credit requirements. ISC allows a maximum IS establishment period of six months from the beginning of Detailed Design (DD) to the construction phase, where all management systems must be established, and reporting must commence before the end of the six months. Table 13 outlines the time critical credits (Design Rating only) and associated timeframes, this does not include timing for inspections during construction.

Table 13: Time critical credits (Design Submission Only)

Credit	Time Critical Component	Timeframe
Man-1 Sustainability Leadership and Commitment	Sustainability policy in place for duration of project.	Start of project
Man-2 Risk and Opportunity Management	Risk assessment is updated at least annually.	Annually

Credit	Time Critical Component	Timeframe
Man-3 Organisational Structure and Roles and Responsibilities	An IS Accredited Professional (ISAP) is appointed throughout the relevant rating phase.	Start of design process
	An Independent Sustainability Professional (ISP) is engaged to monitor and review sustainability performance, review is required quarterly during design phase.	Quarterly
Man-4 Inspection and Auditing	At least one external review of the sustainability management system conducted during design (within 6 months of detailed design commencing) and internal sustainability management system reviews must be conducted on a regular basis.	6 monthly
Man-5 Reporting and Review	Sustainability performance is reported at least quarterly to senior management.	Quarterly
	Sustainability performance is reviewed formally at least annually by senior management.	Annually
Pro-1 and Pro-2 Procurement	Requires establishment of a sustainable procurement policy and associated processes (sustainability pre-qualification questionnaires, supplier evaluation criteria, and performance monitoring processes) prior to procurement commencement.	Prior to procurement
Cli-2 Adaptation Measures	Require early consideration and flood modelling of climate change scenarios for incorporation of appropriate design measures to mitigate climate risks.	Prior to 50% DD
Dis-1 Receiving Water Quality	Modelling of potential impacts on receiving water quality and stormwater flows for construction and operations	During planning and/or design
Dis-2 Noise	Modelling of potential noise impacts on surrounding receivers for construction and operations	During planning and/or design
Dis-3 Vibration	Modelling of potential vibration impacts on surrounding receivers for construction and operations	During planning and/or design
Dis-4 Air Quality	Modelling of potential air quality impacts on surrounding receivers for construction and operations	During planning and/or design
Dis-5 Light Pollution	Lighting desktop study required to identify whether and where sensitive receptors may be impacted by light spill	During planning and/or design
Lan-4 Flooding	Require early consideration and flood modelling of climate change scenarios for incorporation of appropriate design measures to mitigate climate risks.	Prior to 50% DD
Hea-1 Community Health and Wellbeing	Requires early community engagement in determining priority issues for community health and wellbeing.	Prior to 50% DD
Her-1 Heritage Assessment and Management	Requires early engagement with community heritage values through consultation.	Start of design process
Sta-1, Sta-2, Sta-3 and Sta-4 Stakeholder Participation	Stakeholder engagement credits require early engagement of community.	Prior to 50% DD
Inn-1 Innovation Strategies and Technologies	Requires analysis of opportunities for adoption of innovative technologies or processes as part of design development	Start of design process

7.5 Indicative ISC IS V1.2 Scorecard – Design Rating

An indicative IS V1.2 Scorecard – Design Rating has been developed and is provided at Appendix B. This is based on the verified Weightings Assessment and anticipated credit level targets for the IS Rating Design submission. The indicative IS Scorecard generates a forecast total score of 87.0 points for the Design Rating, equating to a 'Leading' IS Rating. The As-Built Rating will be assessed later in the project. It is noted there will be some credits to potentially to be scoped out due to the project scope of works. Therefore, these scores are indicative only and are subject to confirmation by ISC verifiers and are subject to change.

7.6 ISC Monitoring, Review and Auditing Compliance

Table 14 provides a breakdown of the monitoring, auditing and reviews required for the IS Design and As-Built submission.

Table 14: ISC Monitoring, Auditing and Review Requirements

Category	Credit	IS Phase	Monitoring, Auditing, and/or Review	IS Timing	IS Requirements
Management Systems	Man-3	Design	Monitor and Review	Quarterly	Independent sustainability professional with a minimum 10 years' experience engaged to monitor and review sustainability performance.
		As-Built	Monitor and Review	6-Monthly	Independent sustainability professional with a minimum 10 years' experience engaged to monitor and review sustainability performance.
	Man-4	Design	Review or Audit	At least once	External review or audit conducted by suitably qualified auditor who is not part of the project or asset management team
		As-Built	Monitor	Weekly	Internal sustainability inspections of site management when construction is occurring.
		As-Built	Audit	At least 4 per year	Audits conducted, where at least one is external.
Procurement and Purchasing	Pro-4	As-Built	Monitor	Ongoing	Supplier sustainability performance is monitored for the duration of contracts, against the objectives and/or targets.
Energy and Carbon	Ene-1	Design and As-Built	Audit	Once	The monitoring and modelling of energy and GHG emissions must be either managed by, reviewed by, or audited by a suitably qualified person with at least 5 years' experience or registered on NGERS Register of Auditors.
Discharges to Air, Land and Water	Dis-1	As-Built	Monitor	Ongoing	Monitoring of water discharges and receiving waters demonstrates no adverse impact on receiving water environmental values.
	Dis-2	As-Built	Monitor	Ongoing	For construction, monitoring demonstrates no recurring or major divergences from the noise management process in ISC approved noise guidelines.
	Dis-3	As-Built	Monitor	Ongoing	For construction, monitoring demonstrates no exceedances of vibration goals for structural damage to buildings and structures.
	Dis-4	As-Built	Monitor	Ongoing	Monitoring demonstrates no recurring or major exceedances of air emission or air quality goals.
Land	Lan-3	Design and As-Built	Review or Audit	Once	The site assessment and remediation appraisal should be managed, reviewed or audited by a suitably qualified professional.
Waste	Was-1	As-Built	Monitor	Monthly	Monitoring of waste detailing volumes and categories
			Reviewed and Audited	Annually	Waste monitoring and management must be managed, reviewed and audited by a suitably qualified professional. *Note: Preparation or review of monitoring and management plan is all that is required for the design phase.*

Category	Credit	IS Phase	Monitoring, Auditing, and/or Review	IS Timing	IS Requirements
			Audit	6-Monthly	Waste auditing to final destination (at least waste facility).
Community Health, Wellbeing and Safety	Hea-1	As-Built	Monitor	Appropriate Intervals	Monitoring of community health and wellbeing indicators.
Heritage	Her-2	As-Built	Monitor	TBD	Monitoring demonstrates maintenance of heritage values.
Stakeholder Participation	Sta-3	Design	Audited	Once	The community has been provided with information that: was provided in a timely manner supported community participation was meaningful and relevant was accessible This has been verified by an independent suitably qualified professional/auditor who is not part of the project or asset management team and IAP2 Accredited.
		As-Built	Audited	Annually	The community has been provided with information that: ▪ was provided in a timely manner ▪ supported community participation ▪ was meaningful and relevant ▪ was accessible This has been verified by an independent suitably qualified professional/auditor who is not part of the project or asset management team and IAP2 Accredited.
	Sta-4	Design	Audited	Once	The community believe their concerns have been considered and addressed. This has been verified by an independent suitably qualified professional/auditor who is not part of the project or asset management team and IAP2 Accredited.
		As-Built	Audited	Annually	The community believe their concerns have been considered and addressed. This has been verified by an independent suitably qualified professional/auditor who is not part of the project or asset management team and IAP2 Accredited.

Appendix A Sustainability Policy

Policy

JOHN HOLLAND

Sustainability Policy

Our commitment

John Holland is committed to integrating economic growth, environmental resilience, and social progress as priorities into decision-making at every level of the business, with the ambition to create long-term value.

Our approach

John Holland will undertake its business in a manner that maximises positive social and economic impact for our people and stakeholders. We are adopting a resilient and enduring strategic approach to meet and mitigate the existing and emerging challenges for society and our infrastructure environment. John Holland acknowledges that sustainability enables long term financial resilience.

Sustainability Policy in practice

- Create a sense of place for communities, by making a positive and meaningful difference to the community by genuinely engaging with the community and stakeholders
- Work closely with our customers to achieve optimal and resilient outcomes for users and society
- Decision making to integrate economic, social, environmental and governance aspects, and seek to achieve positive outcomes in each
- Minimise whole of life asset impact by future proofing our assets and responding to climate change
- Address environment considerations in a manner that is sensitive to the needs of our stakeholders and the environment, creating enhanced environmental outcomes wherever practical
- Be recognised as an industry leader in making our workplaces safer through innovation, collaboration and effective planning and management of risks
- Enhance workforce health and wellbeing and inclusion and diversity, through employee empowerment to deliver sustainable outcomes
- Source sustainably and ethically, including prioritising local industry participation, social procurement initiatives and a commitment to avoiding modern slavery
- Encourage innovation amongst our delivery teams and supply chain to achieve sustainable outcomes
- Manage all activities ethically, measuring and reporting the sustainability performance of the project
- Govern for sustainability by implementing project systems and processes to ensure the effective and efficient delivery and operation of the project
- Support the UN Sustainable Development Goals

Joe Barr
Chief Executive Officer
John Holland Group Pty Ltd
January 2023

Caring
Empowering
Imaginative
Future-focused

Appendix B Indicative ISC Summary Scorecard

Infrastructure Sustainability Scorecard
Credit Summary

Project: Botany R
Location: Mascot
Rating Type: Design

Category	Credit		Materiality Score	Score Possible	Target Level	Target Score
Management Systems						
Man-1	Sustainability leadership and commitment		2	0.91	3/3	0.91
Man-2	Risk and opportunity management		2	0.91	2/2	0.91
Man-3	Organisational structure, roles and responsibilities		2	0.91	2/2	0.91
Man-4	Inspection and auditing		2	0.91	2/2	0.91
Man-5	Reporting and review		2	0.91	2/3	0.61
Man-6	Knowledge sharing		2	2.05	3/3	2.05
Man-7	Decision-making		2	2.96	1/3	0.99
		Sub-total		9.57		7.29
Procurement and Purchasing						
Pro-1	Commitment to sustainable procurement		2	1.14	3/3	1.14
Pro-2	Identification of suppliers		2	1.14	3/3	1.14
Pro-3	Supplier evaluation and contract award		2	-	0/3	-
Pro-4	Managing supplier performance		2	-	0/3	-
		Sub-total		2.28		2.28
Climate Change Adaptation						
Cli-1	Climate change risk assessment		4	4.56	3/3	4.56
Cli-2	Adaptation options		4	4.56	3/3	4.56
		Sub-total		9.11		9.11
Energy and Carbon						
Ene-1	Energy and carbon monitoring and reduction		3	12.30	2/3	8.20
Ene-2	Use of renewable energy		3	2.05	1/3	0.68
		Sub-total		14.35		8.88
Water						
Wat-1	Water use monitoring and reduction		3	6.15	3/3	6.15
Wat-2	Replace potable water		3	3.42	2/3	2.28
		Sub-total		9.57		8.43
Materials						
Mat-1	Materials footprint measurement and reduction		2	5.47	2/3	3.64
Mat-2	Environmentally labelled products and supply chains		2	-	0/3	-
		Sub-total		5.47		3.64
Discharges to Air, Land & Water						
Dis-1	Receiving water quality		3	3.25	2/3	2.16
Dis-2	Noise		4	4.33	3/3	4.33
Dis-3	Vibration		3	3.25	3/3	3.25
Dis-4	Air quality		2	2.16	3/3	2.16
Dis-5	Light pollution		2	0.91	1/1	0.91
		Sub-total		13.90		12.81
Land						
Lan-1	Previous land use		2	2.28	3/3	2.28
Lan-2	Conservation of on site resources		0	-	0/3	-
Lan-3	Contamination and remediation		4	3.64	3/3	3.64
Lan-4	Flooding design		3	2.05	0/2	-
		Sub-total		7.97		5.92
Waste						
Was-1	Waste management		2	1.82	2/2	1.82
Was-2	Diversion from landfill		2	-	0/3	-
Was-3	Deconstruction/ Disassembly/ Adaptability		1	0.68	3/3	0.68
		Sub-total		2.51		2.51
Ecology						
Eco-1	Ecological value		2	6.83	3/3	6.83
Eco-2	Habitat connectivity		0	-	0/3	-
		Sub-total		6.83		6.83
Community Health, Well-being and Safety						
Hea-1	Community health and well-being		2	2.28	3/3	2.28
Hea-2	Crime prevention		1	1.14	2/2	1.14
		Sub-total		3.42		3.42
Heritage						
Her-1	Heritage assessment and management		4	4.56	3/3	4.56
Her-2	Monitoring and management of heritage		4	-	0/3	-
		Sub-total		4.56		4.56
Stakeholder Participation						
Sta-1	Stakeholder engagement strategy		3	1.71	2/3	1.14
Sta-2	Level of engagement		3	1.71	3/3	1.71
Sta-3	Effective communication		3	1.71	2/2	1.71
Sta-4	Addressing community concerns		3	1.71	2/2	1.71
		Sub-total		6.83		6.26
Urban and Landscape Design						
Urb-1	Urban design		2	3.64	0/3	-
Urb-2	Implementation		2	-	0/2	-
		Sub-total		3.64		-
Innovation						
Inn-1	Innovation		2	10.00	5/10	5.00
		Sub-total		10.00		5.00
		Grand-total		110.00		86.9

Score 87

Rating LEADING

Appendix C Sustainable Procurement Checklist for Subcontractors Supply Chain

Tender Questionnaire

Project:	Botany Rail Duplication Project	Project No:	7642

Package No & Name:	
Tendering Company Name & ABN:	
Name:	
Signature:	
Position:	
Date:	
Contact Phone No:	
Email Address:	

This questionnaire [insert doc number] is supplementary to the Sub-Contractor / Major Supplier Tender Interview Questionnaire JH-FRM-PMA-005-04 which is completed by short listed tenderers.

The Project has implemented the following weightings which apply to assessment of all tenders for works / services / supply on this Project and includes an Infrastructure Sustainability Council of Australia requirement that not less than 20% of evaluation criteria is assigned to non-financial items.

Item No	Section of Questionnaire	Selection Criteria	Weighting Percentage (WP)*	
1	**Price**		**55.0%**	
	N/A	Price		55.0%
2	**Commercial**		**5.0%**	
	N/A	Prior performance		1.0%
	N/A	Conditions / quals		1.5%
	N/A	Financial Report		1.5%
	1	Financing Arrangements		1.0%
3	**Capability**		**5.0%**	
	2	Previous Experience		1.5%
	3	Key Personnel for this project		1.5%
	3	Current Capability		2.0%
4	**Project Management / Systems / Sustainability**		**35.0%**	
	4	Safety		variable according to heat map risk assessment
	5	OHS		
	6	QA		
	7	Environment		
	8	Plant		
	9	Sustainability		
	10	Workforce Development		
	11	Industry Participation		
	12	Industrial Relations		
	13	Community Relations		
		Total	100%	100%

Tender Questionnaire

Responses to this questionnaire, together with other documents comprising the tender submission, will be used to evaluate returned tenders against the criteria assigned above. Note that incomplete answers and / or lack of supporting documentation may result in your tender being considered non- conforming or result in a low score.

It is mandatory that the Subcontract / Major Supplier completes and returns this form [insert doc number] as part of any Expression of Interest or Tender submission (whichever is applicable). Failure to do so may render your tender non-conforming.

If there is insufficient space when completing the form, attach details of request and reference them in the space provided.

1.	GENERAL					
1.1	Company Name:					
	Trading Name:					
	ABN:					
1.2	Address:					
1.3	Postal Address: if different					
1.4	Type of Business and number of employees i.e. sole trader, partnership, private / public company or trust company					
1.5	Names of Principals / Directors:					
1.6	**Insurances:**	Please ensure certificates of currency are included with your Tender submission				
		Contract Works	**Professional Indemnity**	**Workers' Compensation**	**Public Liability**	**Plant and Equipment**
	Insurer					
	Limit of Cover					
	Expiry Date					
	Policy number					
1.7	Provide particulars of your company's bank or other financial institution to which John Holland is authorised to refer for financial reference.					
	Account Name:					
	Bank:					
	Address:					
	Contact Name:					
1.8	Provide details of any financing arrangements currently in effect which will materially affect your financial standing if withdrawn *(eg, overdraft facilities, director's loans, debentures due for maturity)*					

1.9	Provide a copy of your company's Annual Report / Financial Return for the last financial year. Attached ☐

2.	PREVIOUS EXPERIENCE

2.1 Similar projects (type and size) completed in previous 5 years (no more than 5 projects):

Contract Name / Title	Client	Type of Project	Value ($ x 1000)	Contact Name	Phone No:

2.2 **Previous Work for ARTC:**

Have you worked for ARTC previously? If "Yes", advise names of Projects (last 5 years only)	☐ Yes	☐ No

2.3 **Previous Work for John Holland:**

Has your company worked for John Holland previously? If "Yes", provide details below (last 5 years only):	☐ Yes	☐ No

Contract Name / Title	Type of Project	Value ($ x 1000)	Contact Name	Phone No:

3.	RESOURCES & CAPABILITY				
3.1	**BRD Project** List key and / or supervisory personnel to be employed on the Project.				
	Name	**Position**	**Years with the Company**		
	Attach Resumes				
3.2	**Personnel**				
	Provide an overview of your recruitment process.				
	Does the recruitment process include obtaining references and the checking of any workers' compensation claims, all qualifications, licences and certificates of competency?			☐ Yes	☐No
	Are relevant (including Rail Category) pre-employment and recertification medicals undertaken by your company?			☐Yes	☐No
	Is drug / alcohol screening undertaken? If Yes: How often does this occur and what is your company's procedure on Fitness For Duty?			☐Yes	☐No
	Are any of your personnel living with a registered disability (If yes, please provide details)			☐Yes	☐No
	Is there a system for recording the training each employee receives?			☐Yes	☐No
3.3	**Current Workload**				
	Contract Name / Title	**Client**	**Type of Project**	**Value ($ x 1000)**	**Target Completion Date**

3.4	**Subletting part of the work:**		
	Are any sections of the work package on the project intended to be sublet? If 'Yes', list which parts of the work package are intended to be sublet and to whom.	☐ Yes	☐No
	If 'Yes', provide a brief explanation how the sub-contractor / sup-supplier has been assessed for suitability.		

4.	**SAFETY**		
4.1	**Policy**		
	Does your company have a documented Safety Policy including Rail Safety? If "Yes", attach a copy of the policy to this questionnaire.	☐ Yes	☐ No
	Give a brief overview of how this policy is communicated to employees and implemented.		
4.2	**Management System**		
	Does your company have a Safety Management System and / or Safety Procedures?	☐ Yes	☐ No
	If "Yes", does the system comply with any standards? ☐ AS4801 ☐ AS4804 ☐ Other		
	Does your company prepare site-specific safety plans?	☐ Yes	☐ No
	If "No", attach explanation of how your company proposes to control safety and Rail Safety on this project. (This will be subject to review by John Holland for suitability) If "Yes", has your company's system been certified by a Third Party? Attach a copy of the current certificate.		
4.3	**Statistics**		
	For your company, give the following details as per AS 1885.1-1990 for the preceding three years.		

Year:	**2021**	**2020**	**2019**
Number of Lost Time Injuries			
Number of injuries where 10 or more days have been lost			
Permanent Disability or Fatality (if any, attach details to this questionnaire)			

4.	SAFETY			
	Number of inspections completed			
	Number of non-injury incidents			
	Number of First Aid Injuries			
	Number of Toolboxes completed			
	Total Man Hours Worked			
4.4	**Workers' Compensation**			
	What is your company's gazetted workers' compensation premium?			**.....%**
	Under which industry has your company's gazetted rate been determined?			
	Is the premium subject to claims experience penalty / discount?		☐ Yes	☐ No
	What is the penalty / discount?			
	Is your company willing to allow John Holland to verify the above with the insurer?		☐ Yes	☐ No
4.5	**Workers' Rehabilitation**			
	Does your company have a rehabilitation programme for your injured employees?		☐ Yes	☐ No
	If "Yes", provide a copy.			
	Does your company have a preferred treating Doctor for its injured employees? If "Yes", please provide contact details		☐ Yes	☐ No
4.6	**Breaches**			
	Has your company received any notices / breaches from SafeWork NSW (or any other relevant WHS or Rail Safety regulator) in the last 2 years? If "Yes", state number of the following:		☐ Yes	☐ No
	Improvement Notices:			
	Prohibition Notices:			
4.7	**Prosecutions**			
	Has your company ever been prosecuted for breach of WHS or OHS Acts or Regulations?		☐ Yes	☐ No
	If "Yes", provide a brief description or attach details.			

4.8	**First Aid / Training**		
	What percentage of your employees are holders of occupational first aid and applied first aid certificates?	Occupational % Applied ……%	
	Have your supervision / management/employees received Safety and Health training?	☐ Yes	☐ No
	If "Yes", attach details to this Questionnaire.		
4.9	**Induction**		
	Does your company have a Safety Induction System for employees?	☐ Yes	☐ No
	Does your company have a Safety Induction System / Management Programme for newly hired or promoted supervisors / managers?	☐ Yes	☐ No
4.10	**Operational Control**		
	Does the company have a Safety Management System (SMS), Policies and objectives taking into account legislative requirements and information about hazards or risks?	☐ Yes	☐ No
	Does the company have a clearly defined Risk Management process in place, capturing Risk Assessments and SWMS?	☐ Yes	☐ No
	Does the company possess all relevant licences and accreditations required to undertake the scope of works? If yes please specific and provide copies:	☐ Yes	☐ No
	Does your company hold regular toolbox or safety meetings with its employees?	☐ Yes	☐ No
	Does the company have in place a framework to ensure the competency of all personnel undertaking works on our behalf?	☐ Yes	☐ No
	Are all items of plant, tools and chemicals/hazardous substances to be used on site risk assessed and maintained in accordance with legislative requirements?	☐ Yes	☐ No
	For external reviews, state by whom and what were the outcomes?		
4.11	**Alcohol and Drugs**		
	Does your company have an alcohol and other drugs programme?	☐ Yes	☐ No
	If "Yes", attach programme to this questionnaire. Does your company understand the zero tolerance to alcohol and other drugs policy that applies to this project and penalties will apply for positive test results?	☐ Yes	☐ No
4.12	**Commitment**		
	Does your company have a person who is responsible for Safety and Health management?	☐ Yes	☐ No
	If "Yes", attach Résumé.		
4.13	**Rail Safety Performance & Approach**		
	What does your company/organization understand its Rail Safety responsibilities to be and how will your company/organisation manage Rail Safety risks on the site? Please provide a brief description.		

4.14	How will your company satisfy Rail Safety legislative requirements to devise and work in compliance with Safe Work Method Statements (or equivalent) for work activities within the rail corridor or in proximity to live rail operations? Please provide a brief description.
4.15	What dedicated Rail Safety resource will be available to you or provided by your company/organization to assist with Rail Safety compliance on the site?
4.16	How will you ensure that all your workers and subcontractors, where required, possess the appropriate Track Access Accreditation and Rail Industry Worker induction/training, to allow them to work in the rail corridor.
4.17	How does your company ensure that operators of rail mounted plant working for you have appropriate licenses, certificates of competency, machine specific competency and what evidence can you provide?
4.18	How will your company demonstrate that all operators of rail mounted plant are competent, whether or not a license or certificate of competency is required? Are you aware that this VOC will be performed by the JH Rail engineering team?
4.19	If your company is providing Rail Mounted Plant/Rolling Stock that has attachments such as trailers and trolleys, you will need to ensure those trailers/trolleys are fitted with fail safe brakes and provide the required documented evidence before the trailers/trolleys will be approved to operate on track.
4.20	How will your company comply with rail mounted plant safety issues? • Copies of certificates to comply with Rail Safety legislation, codes and John Holland Hi-rail/Rolling Stock standards. (In particular – Registration of Rail Mounted Plant with Rail Infrastructure managers. • Plant hazard assessments • Current maintenance history of the overall item of rail mounted plant. • Daily Safety Check Log Books
4.21	Does your Rail Mounted Plant/Rollingstock have the required emergency equipment specified for the rail network defined in the scope of works?
4.22	How will your company ensure that all your employees and sub-contractors attend the Rail safety Pre Work Briefing delivered by the Protection Officer before they enter the Rail Reserve and Danger Zone.
4.23	How will your company comply with the John Holland Management of Alcohol & Drugs procedure.
4.24	What strategies does your company have in place for creating awareness on the use of alcohol and other

	drugs in the workplace.
4.25	How will your company manage all relevant permits, authorisations and approvals before commencing any activities on site?
4.26	How will your company ensure that your employees and sub-contractors attend the daily breath and drug screening and comply with John Hollands approach of ZERO tolerance to alcohol and other drugs.
4.27	Does your company understand that should any of your employees or subcontractors provide a non-negative result for alcohol and/or other drugs, penalties will be applied by the Rail Infrastructure Manager which may result in : • termination of the employee, or ; • loss of track access accreditation for the employee, or ; • other penalties against the employee, or your company per the contract. • Criminal prosecution by the rail safety regulator. Does your company also understand that it is a requirement by law to supply a drug and/or other drugs sample and refusal is deemed as a non-negative result.
4.28	How will you ensure that all your employees and subcontractors hold the relevant Rail Safety Medical in line with their Rail Track Accreditation (Safe Working) Training as well as Category 1 Medicals for all track machine operators.
4.29	Has your company been charged with any breach of Rail Safety legislation? If so, provide details.
4.30	If your company is operating mobile plant within the rail corridor, how will you ensure the plant remains more than 3 metres away from the nearest running rail.
4.31	If your company is operating mobile plant or rail mounted plant in the electrified network, how will you ensure no part of the plant/rollingstock or associated attachments come within one metre of the overhead wiring system and associated structures in order to prevent damage to the overhead wiring system, loss or damage to the plant, or injury to the operator or other personnel.
4.32	Do you agree that your company will participate in John Holland's Safety, Quality, Environment Risk Management programme to manage and control Rail Safety risks as required?
4.33	How will your company ensure all employees and subcontractors hold and carry a Rail Industry Worker identification card for those employees and subcontractors who are performing Rail Safety work?

4.34	How will your company manage risks associated with work adjacent to live rail operations?	
4.35	How will your company manage risks of fatigue for Rail Safety Workers? Do you understand that if you do not have a system for fatigue management, that you must comply with John Holland's Fatigue Management Program?	
4.36	Do you understand that you must fully comply with John Holland's Rail Site Emergency Management Procedure?	
4.37	Do you understand that if an incident or a near-miss occurs and your workers were involved or witnessed it, they must immediately report it to the John Holland supervisors submit and treat all incident sites as non-disturbance until otherwise advised?	
4.38	Does your company agree to comply with the Special Terms and Conditions (health, safety and rail safety) of the contract offered to you?	
4.39	**Contact Person**	
	Who is your contact person to discuss Safety Management?	
	Name:	
	Email:	
	Phone:	

5.	**OCCUPATIONAL HEALTH, HYGIENE AND WELLBEING**	
5.1	Does your company have an occupational health, hygiene, and wellbeing policy? If 'Yes', please attach to this questionnaire	☐ Yes ☐ No
	Give a brief overview of how this policy is communicated to all employees and implemented.	
5.2	**Management Plan**	
	Does your company have an occupational health, hygiene, and wellbeing management plan? If 'Yes', please attach to this questionnaire	☐ Yes ☐ No
	Give a brief overview of how this management plan is communicated to all employees and implemented.	

5.3	**Health Monitoring**	
	Where there is a significant risk of exposure to health hazards, do you have a health monitoring program in place for your personnel? If 'Yes', please attach to this questionnaire	☐ Yes ☐ No
5.4	**Education**	
	Do you have an educational program in place to ensure your workers are aware of the significant health hazards present during their work activities? If 'Yes' please provide documentary evidence of program	☐ Yes ☐ No
5.5	**Health Risk and Exposure Control**	
	Do you use innovative technologies to control exposure to your workforce? If 'Yes' please provide evidence	☐ Yes ☐ No
5.6	What are the anticipated significant health risks for your workers during their works?	
5.7	Using the hierarchy of controls, how do you plan on using higher order controls (items 1-4 below) to minimise exposure to your identified significant health risks? Hierarchy of Controls includes: 1. Elimination 2. Substitution 3. Isolation 4. Engineering 5. Administration 6. PPE	
5.8	Where your workers are required to wear respiratory protection during their works, do you have a respiratory protection program, inclusive of fit testing and maintenance of PPE? If 'Yes', please attach to this questionnaire	☐ Yes ☐ No
5.9	Where your workers are required to wear hearing protection during their works, do you have a hearing protection program? If 'Yes', please attach to this questionnaire	☐ Yes ☐ No

6.	QUALITY MANAGEMENT		
6.1	**Policy**		
	Does your company have a quality policy statement? If "Yes", please attach to this questionnaire	☐ Yes	☐ No
	Give a brief overview of how this policy is communicated to all employees and implemented.		
6.2	**Management System**		
	Does your company have a quality management system?	☐ Yes	☐ No
	If "Yes", does the system comply with any standards?	☐ Yes	☐ No
	Identify the standard: ☐ ISO 9001:2015 ☐ Other		
	Does your company prepare site-specific quality plans? If "No", attach an explanation of how your company proposes to control quality on this project. (This will subject to review by John Holland for suitability)	☐ Yes	☐ No
	If "Yes", has your company's system been certified by a Third Party?	☐ Yes	☐ No
	Attach a copy of the current certificate.		
	If not certified, are records of inspection, test and other QA / QC activities maintained?	☐ Yes	☐ No
	Does your company undertake internal quality audits?	☐ Yes	☐ No
	Does your company undertake external quality audits?	☐ Yes	☐ No
6.3	**Capability to Perform Process Validation**		
	Is your company required to perform process validation activities to ensure the effective monitoring of the Works? *These may include, but are not limited to, the development and finalisation of Inspection and Test Plans, the completion of testing and commissioning activities and the provision of the associated quality assurance records.* If the answer is "Yes" please provide the relevant section of the Quality Plan where these requirements are addressed.	☐ Yes	☐ No
6.4	**Responsible Person**		
	Who is responsible for quality in your company?		
	Name:		
6.5	**Contact Person**		
	Who is your contact person to discuss quality assurance?		
	Name:		
	Email:		
	Phone:		

7.	ENVIRONMENTAL MANAGEMENT		
7.1	**Policy**		
	Does your company have an environmental policy statement? If "Yes", please attach to this questionnaire.	☐ Yes	☐ No
	Give a brief overview of how this policy is communicated to all employees and implemented.		
7.2	**Management System**		
	Does your company have an environmental management system?	☐ Yes	☐ No
	If "Yes", does the system comply with any standards?	☐ Yes	☐ No
	Identify the standard: ☐ ISO 14001 ☐ Other		
	Does your company prepare site-specific environmental plans?	☐ Yes	☐ No
	If "No", attach explanation of how your company proposes to control environmental on this project. (This will subject to review by John Holland for suitability) If "Yes", has your company's system been certified by a Third Party? Attach a copy of the current certificate.		
	If not certified, are records of inspection and other environmental activities maintained?	☐ Yes	☐ No
	Does your company undertake internal environmental system audits?	☐ Yes	☐ No
7.3	**Incidents / Breaches**		
	Identify the number of environmental incidents that have occurred in the last 12 months and required reporting to the EPA or other Authority:		
7.4	**Prosecutions**		
	Has your company ever been prosecuted for breaches of Acts or Regulations that relate to the environment?	☐ Yes	☐ No
	If "Yes", provide a brief description or attach details.		
7.5	**Risk Management**		
	Provide an overview of your procedure for managing environmental issues and risks or aspects and impacts.		

7.6	**Responsible Person** Who is responsible for environmental issues in your company? Name:		
	Name:		
7.7	**Contact Person**		
	Who is your contact person to discuss environmental management?		
	Name:		
	Email:		
	Phone:		

8.0	**PLANT (MOBILE AND FIXED)**		
8.1	**Heavy Vehicle National Law**		
	Will your company/organisation be using vehicles exceeding 4.5 Tonnes for the scope of works? If "Yes", proceed to question 8.2. If "No", proceed to Section 9.	☐ Yes	☐ No
	Has your company/organisation successfully completed the National Heavy Vehicle Accreditation Scheme (NHVAS)? If "Yes", provide copy. If "No", complete the Heavy Vehicle National Law Chain of Responsibility Compliance Checklist (HVNL CoR) provided with the tender documentation. **Note: Evidence of Compliance with the Heavy Vehicle National Law must be provided prior to a contract being awarded.**	☐ Yes	☐ No
8.2	**Planned Risk Assessment**		
	Does your company hold current risk assessment for the plant you will supply as required by the Work Health and Safety Regulation?	☐ Yes	☐ No
8.3	**Planned Maintenance**		
	(a) Does your company have maintenance schedules for the plant and equipment?	☐ Yes	☐ No
	If "Yes", attach a typical schedule to this questionnaire.		
	(b) Does your company keep records of maintenance?	☐ Yes	☐ No
	If "Yes", attach a typical record to this questionnaire.		
	(c) Does your company have systems in place to monitor the certification status of registered/classified plant e.g. elevated work platforms, cranes, hoists, etc?	☐ Yes	☐ No
8.4	**Competency of Plant Operators**		
	Have you documented records that establish the competency of plant operators?	☐ Yes	☐ No

9.	SUSTAINABILITY
9.1	**Sustainability Ratings**
	Does your company have a Sustainability Policy Statement? ☐ Yes ☐ No
	Give a brief overview of how this policy is communicated to all employees and implemented.
	Does your company have experience in delivering ISCA or green star ratings? ☐ Yes ☐ No
	If "Yes", please list specific projects (no more than last 5 projects).
	Give a brief overview of your scope on the project/s.
9.2	**Modern Slavery**
	Can your company confirm: There are no outstanding investigations into your operations, and you have not been convicted of any offence under the Modern Slavery Legislation; ☒ Yes ☐ No and any actions or agreements held by your suppliers/sub-contractors that could potentially cause the Project to breach Modern Slavery Legislation (2108). ☐ Yes ☐ No
	Give a brief overview of details in relation to the above.
9.3	**Sustainability Management**
	Does your company monitor, measure and have the ability to provide reports on any of the following sustainability performance aspects? ☐ Energy efficiency (including renewables) ☐ Yes ☐ No ☐ Water efficiency ☐ Yes ☐ No ☐ Carbon emissions ☐ Yes ☐ No ☐ Pollution control ☐ Yes ☐ No ☐ Waste management and recycling ☐ Yes ☐ No ☐ Workforce management and issues (including diversity) ☐ Yes ☐ No ☐ Community contributions/benefits ☐ Yes ☐ No ☐ Supply chain management ☐ Yes ☐ No
9.4	**Supply Chain – Materials**
	Is your organization willing to sign up and participate in free online sustainability awareness training through the “Supply Chain Sustainability School” as part of the tendering process, if required? ☐ Yes ☐ No

	Is your company able to provide materials and products that meet the following sustainability criteria? a. Reused products ☐ Yes ☐ No b. Recycled content in products (percentage of mass to be provided) ☐ Yes ☐ No c. Environmental Product Declarations (product specific or industry wide ☐ Yes ☐ No d. Third party certification ☐ Yes ☐ No e. Stewardship programs ☐ Yes ☐ No
	If yes please evidence of products/materials that will be provided.
9.5	**Supply Chain – Packaging Takeback**
	Would your company facilitate the takeback of packaging for products supplied under this contract? ☐ Yes ☐ No
	If yes, please provide details of packaging takeback opportunities.
9.6	**Supply Chain – Local Products & Materials**
	The project is targeting to source a significant percentage of products and materials that are produced or manufactured in Australia. Is your company able to provide products and materials produced or manufactured within Australia? ☐ Yes ☐ No
	Please nominate the estimated % of products & materials you will supply that are wholly produced or manufactured in Australia.
9.7	**Innovations**
	Has your company successfully implemented any initiatives or innovative processes that have improved and/or reduced environmental impacts in a similar scope of works, that could be utilised on this project? ☐ Yes ☐ No
	If yes, please provide details If no, would you be open to having discussions with John Holland on opportunities?
9.8	**Responsible Person**
	Do you have a dedicated person responsible for sustainability issues and answering queries in your company? ☐ Yes ☐ No
	Name: Position:

10	WORKFORCE DEVELOPMENT
10.1	Our project has a specific requirement to engage workers under 25 years of age. In accordance with the head contract, 8% of the workforce must include those under 25 years of age. • What is your company's current strategy towards engaging employees under 25 years of age? • What % of your current workforce is under 25 years of age? • Does your company foresee any issues with assisting the project to meet this target? ☐ Yes ☐ No • Will the company commit to the above target? ☐ Yes ☐ No
10.2	Our project is committed to employing females in trade related roles. In accordance with the head contract, 2% of all trade related roles must include females. • What type of trade-related roles does your company employ and do you have a strategy in place to engage females in your trade related roles? • What % of your current trade workforce identify as female? • Will your company commit to the above target? ☐ Yes ☐ No
10.3	The project is dedicated in providing employment opportunities to Indigenous people. As per the head contract, 2.5% of the total workforce must include Indigenous workers. • What % of your current workforce identify as Indigenous? • What is your company's current strategy towards engaging Indigenous workers? • Does your company foresee any issues with assisting the Project to meet this requirement? ☐ Yes ☐ No • Will your company commit to the above target? ☐ Yes ☐ No
10.4	The Project has specific requirements regarding Apprentices. In accordance with the head contract, 20% of all trades work (i.e. 1 in 5 tradespeople) is to be carried out by an apprentice. • Does your company have a strategy in place towards engaging Apprentices? If yes, please provide detail • What type of apprenticeship opportunities does your business offer? (If applicable) • What % of your current workforce is an apprentice? (if applicable) • Is your company able to assist the project in meeting the above requirement? ☐ Yes ☐ No

10.5	The Project has specific requirements regarding Learning Workers (trainees, apprentices or a worker undergoing accredited training relevant to the delivery of the project). In accordance with the head contract, 20% of total full-time equivalent positions are to include learning workers. Does your company have a strategy in place towards engaging Learning Workers? If yes, please provide detail • What % of your current workforce is a learning worker? (if applicable) • Is your company able to assist the project in meeting the above requirement? ☐ Yes ☐ No
10.6	Does your business engage trainees? ☐ Yes ☐ No If answered yes, please advise what type of traineeships that you offer and what % of your workforce are trainees.
10.7	Our project is required to inspire future talent and support work experience placements for high school, tertiary, and higher education. Would your company have capacity to facilitate these placements? ☐ Yes ☐ No
10.8	What % of your workforce are from the local region (Greater Sydney)?

11	**INDUSTRY PARTICIPATION**
11.1	Is your company a recognised Indigenous owned business, Australian Disability Enterprise and/or Social Enterprise? ☐ Yes ☐ No If yes, please provide further details:
11.2	Does your company contribute towards social enterprises that benefit disadvantaged, disabled and under-represented groups through indirect activities or direct engagement? ☐ Yes ☐ No If yes, please provide further details:
11.3	Does your company confirm it will prioritise local employment, local suppliers and businesses and the engagement of Aboriginal owned business in its supply chain and will: • Comply with the NSW Government's Aboriginal Participation in Construction Policy (APIC) June 2018; • Investigate opportunities to engage social enterprise and, • Consider sustainable workforce initiatives in procurement ☐ Yes ☐ No

12	INDUSTRIAL RELATIONS
12.1	John Holland ensures that Subcontractors are engaged in a manner consistent with the Building Code 2016 and applicable employment legislation including relevant state codes and guidelines. This means that Subcontractors seeking to be or engaged by John Holland will not be: • discriminated against on the basis of Association and/or union membership or non-membership; • discriminated against on the basis of the nature, form or content of the Industrial instrument to which the Subcontractor is a party to or which the Subcontractor proposes to become party John Holland does not require the Subcontractor to: • comply with a particular industrial instrument as a condition of tendering for or being awarded work; • apply a particular wage rate or allowance, including a site allowance as a condition of tendering for or being awarded work; • contribute to any third-party fund as a condition of tendering for or being awarded work. A 'third party fund' includes any superannuation fund or redundancy fund •
12.2	Please confirm that your company will comply with the obligations of relevant Federal and State legislation, the applicable industrial instrument, and the project Workplace Relations Management Plan (WRMP). ☐ Yes ☐ No
12.3	Please confirm that your company understands that it is responsible for any further third-party subcontractors that it engages on the project and will ensure their compliance with Federal and State legislation, the applicable industrial instrument, and the project WRMP. ☐ Yes ☐ No
12.4	Does your company have a copy of the Building Code and the NSW Code and Guidelines and can confirm they are familiar with the content? (Details of the Building Code can be accessed at https://www.abcc.gov.au/building-code ☐ Yes ☐ No
12.5	Does your company recognise that the Building Code and the NSW Code and Guidelines apply to this project and understand that they and any further subcontractors which they engage must comply with the Code(s) at all times whilst performing work on the Project? ☐ Yes ☐ No
12.6	Prior to contract award, your company and any further Subcontractors, must submit a Declaration of Compliance (and provide an ABCC compliance letter or self-declaration as relevant for your industrial instrument). ☐ Yes ☐ No
12.7	Please confirm that your company understands that failure to maintain compliance with the Building Code and the NSW Code and Guidelines will be a substantial breach of their contract with John Holland. ☐ Yes ☐ No
12.8	Does your company recognise that once a contract has been awarded, your company may be requested by John Holland at any time to provide evidence of compliance with applicable workplace relations legislation, the Building Code and NSW Code and Guidelines and the WRMP. ☐ Yes ☐ No
12.9	Does your company confirm that where breaches of the WRMP are found, John Holland will intervene to ensure the outcome is in line with the federal and state legislation, the Building Code, NSW Code and Guidelines and Fair Work Act 2009. ☐ Yes ☐ No
12.10	Please confirm that your company is fully accountable for the actions, decisions and consequences of labour it engages (and the labour of its subcontractors) and will report all disputes and industrial risks to John Holland. ☐ Yes ☐ No
12.11	Please confirm that all disputes will be managed by your company in line with the industrial instrument without disruption to the delivery of project works. ☐ Yes ☐ No
12.12	Please confirm that your company has the resources to ensure a prompt and effective response to industrial action. ☐ Yes ☐ No
12.13	Please confirm that your company will take all requisite steps to stop any unlawful industrial action including pursuing damages, penalties and recovery of any losses. ☐ Yes ☐ No

12.14	Please confirm that your company will manage unlawful industrial action in line with the Building Code and NSW Code and Guidelines. ☐ Yes ☐ No
12.15	Please confirm that your company will properly report and record any industrial action taken by your company's employees whilst on the Project. ☐ Yes ☐ No
12.16	Please confirm that your company understands it is prohibited from making strike payments and acknowledges that John Holland will audit your company's payroll systems to ensure compliance. ☐ Yes ☐ No
12.17	Please confirm that your company will report to John Holland any Right of Entry requests received within one hour of receipt. ☐ Yes ☐ No
12.18	Does your company acknowledge John Holland has the right to refuse any labour engaged by your company that does not meet the required minimum standards. ☐ Yes ☐ No
12.19	Does your company understand the Freedom of Association and all policies and procedures promote this. ☐ Yes ☐ No

13	**COMMUNITY RELATIONS**
13.1	Does your company have a Community or Customer relations Policy? ☐ Yes ☐ No If yes, please provide a copy
13.2	Does your company have a complaints management procedure? ☐ Yes ☐ No If yes, please provide a copy
13.3	Please describe any training you have undertaken to ensure your employees and subcontractors are aware of community obligations. This includes being courteous to members of the public and avoiding behaviours that would cause offence or a nuisance (e.g. parking on private property, or using bad language near homes)
13.4	Does your company understand it is not permitted to make any media statements or release any information about the project to the public without prior approval. This includes media releases, photographs, website copy, social media such as Linkedin, and Facebook, or industry/conference presentations. ☐ Yes ☐ No

14 REPORTING

If you are successful in your tender, specific targets for workforce development and sustainability will be included in your subcontract. It is a requirement of any ensuing subcontract that you will report against specific targets and provide safety and environmental reporting to John Holland each month.

Provide details of the person responsible for this reporting, for each discipline:

	Safety	Quality	Environment	Sustainability	Workforce / IR	Community
Name						
Email						
Phone						

The information on this questionnaire is an important part of your tender submission, and without it your tender may be rendered non-conforming. Thank you for taking the time to complete this questionnaire.