

Annual Sustainability Report – NorthLink WA

June 2016



mainroads
WESTERN AUSTRALIA

Annual Sustainability Reporting Template for Major Projects with IS commitments	Period Covering July 2015 to June 2016
<p>This reporting template is to be used as a basis for a MRWA major project to produce a stand-alone sustainability report. While these indicators are a basis as to what the report should include the author should be aware that to produce a report targeted at the intended report audience (it is linked to MRWA's Annual and Sustainability Report) and it should include all information necessary so that it can be read as a stand-alone report. This report is also an opportunity for the project to showcase its sustainability credentials and strengthen the project partners reputation for sustainable development.</p> <p>The indicators below are loosely based on the indicators of the Global Reporting Initiative (GRI) v4. Main Roads encourages the use of GRI principles when developing a public sustainability report for a major project and many of the indicators can be explained or defined further by referring to the information and guidance available via the GRI website.</p>	
Project Name	NorthLink WA Southern Section

Topic	What to report?	Content Reported
General Project Information	General Project Overview including: -location; length; who is involved; project value; improvements considered; reasons for these improvements; other reasons why the project is important; values, principles, standards and norms project has adopted; governance structure	<p>Location: Tonkin Highway between Guildford Road and Reid Highway Length: Approximately 6km Client: MRWA Contractor: John Holland Value: Approximately \$180M Improvements included: Upgrading Tonkin Highway to a six lane freeway between Guildford Road and Reid Highway. Constructing a new interchange at Collier Road (Collier Road will be realigned and raised to go over Tonkin Highway, with on and off ramps connecting the two roads). Constructing a new interchange at Morley Drive (this includes a roundabout at ground level on Morley Drive that will connect with a raised Tonkin Highway). A flyover at Benara Road over the Tonkin Highway. New cycling and pedestrian facilities including a 4m wide shared path alongside Tonkin Highway. Reasons for these improvements: Improve freight capacity, efficiency and productivity. Reduce urban congestion now and into the future. Improve road safety in line with the State's 'Towards Zero' policy. Maximise sustainability through economic, social and environmental responsibility. Improve amenity for the community, tourists and road users. Create value through affordable infrastructure. Values, principles, etc: Contractual obligation; 'When planning for and designing the Project Works, the Contractor must simultaneously consider social, environmental and economic</p>

Topic	What to report?	Content Reported
		<p>matters to ensure the Project Works are consistent with sustainability principles'</p> <p>Governance Structure: Design and Construct Contract with tri-partite agreement between John Holland, MRWA and the Independent Certifier</p>
<p>Why is Sustainability important to this project?</p>	<p>Statement from most senior decision maker on why sustainability and sustainable development is important to the project</p> <p>Highlight the top Sustainability aspects for the project and why they were determined to be the top aspects</p>	<p>John Holland Project Sustainability Policy: The John Holland Project team is committed to creating lasting benefits through an integrated consideration of social, environmental, and economic aspects in all that we do (Signed by Project Manager)</p> <p>Contractual obligation: 'When planning for and designing the Project Works, the Contractor must simultaneously consider social, environmental and economic matters to ensure the Project Works are consistent with sustainability principles'</p>
<p>Status of Infrastructure Sustainability rating</p>	<p>Is the project registered for a rating?</p> <p>What is targeted rating?</p> <p>What rating has been achieved to date?</p> <p>Any other important progress information</p> <p>IS credit case study or outstanding achievement for sustainability</p>	<p>Registration: Infrastructure Sustainability Council of Australia (Registration No.60)</p> <p>Contractual obligation: The Contractor must use the Infrastructure Sustainability Council of Australia's (ISCA) Infrastructure Sustainability Rating Tool Scorecard to report on the level of sustainable practice embedded within the Project Works...</p> <p>Targeted Rating: The Contractor must achieve at least an IS Design Rating and IS As-Built Rating of Excellent</p> <p>Ratings Achieved to Date: None</p> <p>ISCA Case Study: To be developed regarding Life Cycle Assessment</p>
<p>Report Profile</p>	<p>Specify reporting period; previous report (if any); reporting cycle i.e annual; point of contact(for report and</p>	<p>Reporting Period: 2015/16</p> <p>Reporting Cycle: Annual, first report prepared by Contractor</p>

Topic	What to report?	Content Reported
	project); state if any of the information is subject to external assurance	
Water use by Source	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement	Management Approach: A full Lifecycle Analysis in accordance with ISO14044 and EN 15978 is being undertaken Importance: Contractual obligation: Water used by the Contractor for material compaction and dust suppression must be obtained from sources other than Water Corporation water supply services, existing wetlands or the Swan River, unless it can be demonstrated to the satisfaction of Main Roads' Representative that alternatives are not viable, and all required approvals have been obtained. Legal obligation: License to construct a well/take water required from Department of Water under the Rights in Water and Irrigation Act 1914 Initiatives under consideration: Designing out reticulated landscape treatments
Scheme/potable	Water purchased from the scheme in litres	No water bills received within 2015-16
ground water	Water pumped from bores in litres	No ground water utilised within 2015-16
surface water	Water pumped from rivers, lakes or harvested in litres	No surface water utilised within 2015-16
recycled water	Recycled or waste water use (typically from another industry) in litres	No recycled water used within 2015-16
Carbon Emissions & Energy	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement. Link the indicators listed below to	Management Approach: A full Lifecycle Analysis in accordance with ISO14044 and EN 15978 is being undertaken Importance: Operational energy associated with lighting is the biggest direct environmental impact from the project. Operational energy associated with users (traffic) is very significant, and is the biggest indirect environmental impact from the project. Construction energy (diesel) is also significant. Initiatives under consideration: LED lighting, adaptive lighting and dimming are all under consideration. Use of a Single Point Urban Interchange (SPUI), Roundabout interchange and Flyover to address traffic flow and congestion. Specification of emission standards for construction plant and equipment.

Topic	What to report?	Content Reported
	the explanation of the management approach for this sustainability aspect	
Energy usage by source in Mega-joules		Not Reported
From fuel	Fuel usage by type and split by on-road and off-road in litres	1655 Litres (diesel)
From electricity	Total Electricity purchased from the grid in kwh	9317 kWh
% from renewable sources	report the % of renewable energy mix in fuels, the kwh purchased from the grid or the amount produced from significant renewable energy installations on site and not included in total energy purchased from the grid	0%* *solar powered equipment (CCTV, lighting, VMSs have been used but have not yet been factored into the reporting)
Energy saved	Report in kwh or litres of fuel the energy saved from any energy saving initiative implemented.	To be confirmed, a full Lifecycle Analysis in accordance with ISO14044 and EN 15978 is being undertaken. The base case and the improved scenarios are still being finalised.
Materials Usage	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or	Management Approach: A full Lifecycle Analysis in accordance with ISO14044 and EN 15978 is being undertaken Importance: Impacts associated with materials are very significant, in particular asphalt, concrete and steel. They also form a significant portion of the costs associated with this D&C contract Initiatives under consideration: In all cases initiatives are being pursued to reduce demand for materials through lean design and the use of site won materials, seek alternative lower impact materials via suppliers and to increase the durability of installed materials beyond the specified design life.

Topic	What to report?	Content Reported
	achievement. Link the indicators listed below to the explanation of the management approach for this sustainability aspect	
Total materials used in tonnes	as per MRWA materials reporting survey	4.5m3 concrete
Total recycled materials used in tonnes	as per MRWA materials reporting survey	0m3
Total materials planned to be used in tonnes	Give estimates of total materials required as per the final design	To be confirmed, a full Lifecycle Analysis in accordance with ISO14044 and EN 15978 is being undertaken. The base case and the improved scenarios are still being finalised.
Total recycled materials planned	Give estimates of total recycled materials the project is committed to using as per the final design	To be confirmed, a full Lifecycle Analysis in accordance with ISO14044 and EN 15978 is being undertaken. The base case and the improved scenarios are still being finalised.
Total materials disposed of.	Total materials disposed of in tonnes (as per MRWA materials reporting survey); report the disposal method - recycling, landfill, on-site storage, composting, other	0m3* formal reporting regime is currently being established
Environmental	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or	Management Approach: John Holland's ISO 14001 certified Environmental Management System (EMS) Importance: Contractual Obligation: The Contractor must plan, establish, implement and maintain a documented environmental management system (EMS) in accordance with the requirements of AS/NZS ISO 14001 Environmental Management Systems...The Contractor must prepare and implement a detailed Environmental Management Plan for the Project

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	achievement. Link the indicators listed below to the explanation of the management approach for this sustainability aspect	
Planned/actual Clearing	Estimate the amount of land that is to be cleared in Ha or give actuals	79ha (of which 13.5ha is considered 'native vegetation')
Planned/actual rehabilitation	Estimate the amount of land that is only temporarily cleared and is to be rehabilitated in Ha or give actuals; report status of rehabilitation at the close of reporting period; report size and location of rehabilitation	To be confirmed, landscaping design is at 15% and the extent of various treatments has not yet been quantified.
Planned/actual Offsets	The amount of environmental offsets that the project is committed to delivering in Ha or actuals; report if a third party is involved in these offsets and who the third party is and their level of expertise; report status of offset at the close of the reporting period; report size and location of offset	Lot M2091 on Plan 6457 Ippolo Road, Chittering, WA 45 Ha
Protected Areas and areas of high biodiversity value	Report if the project is impact either directly or in-directly protected areas or areas of high biodiversity value outside of protected areas. Report: geographic location; position of area in relation to project; Listing of protected status; the attribute of the protected area or high biodiversity value area; report nature of significant direct and indirect impacts on	See below - no areas were required to be conserved.

Topic	What to report?	Content Reported
	biodiversity i.e. pollution, pests, reduction of species, habitat conservation, ecological processes (salinity or changes in groundwater); species effected, extent of impacts, duration or impacts, reversibility or impacts, run-off or discharge,	
List of significant species/habitat	Give details of significant species and habitat that is directly or indirectly impacted by the project	The project area contained up to 14.27 ha, of suitable foraging habitat for the Forest Red-Tailed Black Cockatoo (<i>Calyptorhynchus banksii naso</i>) and the Carnaby's Cockatoo (<i>Calyptorhynchus latirostris</i>). 106 potential Black Cockatoo breeding trees were identified within the project the majority of which were young Marri (<i>Corymbia calophylla</i>), although none had obvious hollows.
Amount Spent on Environmental Offsets	linked to Planned/actual Offsets In regards to types of offsets that could result in financial payments, please see the list below: <ul style="list-style-type: none"> • Vegetation establishment <ul style="list-style-type: none"> - Planting, direct seeding or topsoil respread - Control of Weeds and Pests - Fencing (Installation/removal) - Weed Matting/mulch (installation/removal) • Purchase of Offset Land • Provision of Funds for Research • Provision of Funds for the maintenance of conservation land (including establishment of firebreaks, fencing and feral animal control) • Provision of Funds for the purchase of Land • Translocation programs of vegetation • Site preparation (ripping or mounding) 	To be confirmed by MRWA

Topic	What to report?	Content Reported
	soil) • Funds can be used for Adaptive management • Funds can be paid to the WA Environmental Offsets Fund • Nesting boxes/ Artificial Dreys (in lieu of breeding trees)	
Environmental Impact Assessment	Has the project been subject to an EIA and will there be on-going monitoring	The project has not been subject to an EIA
Environmental Impact Assessment	Are the results of the EIA publically available? If so, where? (link)	The project has been referred to the EPA, information is available here https://consultation.epa.wa.gov.au/seven-day-comment-on-referrals/tonkin-highway-grade-separation/supporting_documents/Tonkin%20Highway%20Grade%20Separation%20%20Attachments.pdf
Economic	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement. Link the indicators listed below to the explanation of the	To be confirmed, a full Lifecycle Analysis in accordance with ISO14044 and EN 15978 is being undertaken. The base case and the improved scenarios are still being finalised. LCA can be presented in relation to \$. Sustainability evaluation undertaken for prospective suppliers of key packages. Used to inform selection of preferred proponents. Inclusion of targeted sustainability clauses/requirements developed with preferred proponents and included in sub-contracts. Decision making criteria applied during design includes consideration of economic factors (capital and lifecycle cost)

Topic	What to report?	Content Reported
	management approach for this sustainability aspect	
Planned BCR and other measures of productivity		To be confirmed by MRWA
No. of people employed by project supply chain	No. of people have been inducted to site Total Employee wages	63 inducted to the end of June
No. of businesses engaged by the project	No. of contractors awarded contracts for delivery of the project	Project had recently mobilised and construction is only beginning in earnest currently. A significant number of subcontracts will be let in the forthcoming period.
\$ spent buy local	Value of purchases or contracts awarded to business located within the regional location of the project including local employment, training, research & innovation	Committed to source all required subcontractors, suppliers and materials from within WA \$10207100 spend on subcontracts
\$ spent aboriginal enterprise	Dollar spend on registered aboriginal enterprises http://www.abdwa.com.au/home.asp?cmd=	Committed to encouraging local and indigenous participation in the project \$39,000 (BCE Boodja Surveying) \$21755 (Snappy Gum Heritage, a significant proportion was used to pay SWALSC approved traditional owners)
\$ spent disability enterprise	Dollar spend on registered disability enterprises http://wade.org.au/	0\$
Legacy Project, 'additional' infrastructure or service supported	Is a legacy project (or additional infrastructure or services) delivered for this project? If so, describe. Include \$ spent, linkage to local community needs i.e. is a defined goal of a local council etc, what is the extent of the impact of the project? Positives?	MRWA determined priority health and wellbeing issues include tree canopy in LGA (conservation of additional trees vs permitted clearing envelope); water quality of drainage to Swan River (focus on onsite infiltration, vegetated treatment systems); improving walkability, cycle-ability, active transport and liveability (additional and larger underpasses, shared paths, principal shared paths and connections compared to existing and reference scenarios); noise and air quality (additional noise barriers, achievement of

Topic	What to report?	Content Reported
	Negatives? Were these investments commercial, in-kind or pro bono engagements	State Planning Policy Noise Goals for 2040 traffic, improvement compared to reference scenario); and climate change adaptation (mitigation of extreme and high risks). These were also confirmed as priority issues within a recent CRG meeting.
Planned legacy project BCR		Additional noise barriers, achievement of State Planning Policy Noise Goals for 2040 traffic, improvement compared to reference scenario.
Local workforce development	No. of FTE equivalents sourced from the MRWA region that the project is taking place in Proportion of senior project management hired from local community (WA)	Project had recently mobilised and construction is only beginning in earnest currently. A significant number of workforce will be arranged in the forthcoming period.
Workforce Development	Average hours of training per year per employee by gender, and by employee category % of employees receiving regular performance and career development reviews by gender, and by employee category	Committed to achieving 11.5% apprentices and trainees within the John Holland WA workforce.
Value of overall project/contract	Value of contract(s) awarded for the project	Approximately \$180M
Average Property value before and after project (difference compared to overall property values		NA
Savings to freight or contribution to Gross State Product		NA
Risk to Climate Change	Value of Asset at Extreme or High Risk to Climate Change Actions to adapt the asset to Climate Change	Risks have been identified by MRWA, Extreme and High risks to be mitigated during design

Topic	What to report?	Content Reported
Fines or sanctions	Value and nature of any fines or sanctions from non-compliance with laws and regulations (ie environmental or safety etc)	none
Diversity of entire project workforce	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement. Link the indicators listed below to the explanation of the management approach for this sustainability aspect	John Holland is committed to building, valuing and promoting diversity and inclusiveness across our business. We know that diverse perspectives result in greater innovation and will help us to remain one of Australia's most recognised and respected construction brands.
% women in workforce	No. of FTE equivalent positions held by women No. of women inducted to site	Project has recently mobilised and construction is only beginning in earnest currently. A significant number of workforce will be arranged in the forthcoming period.
% women in senior positions	No. of FTE equivalent management/ senior positions held by women expressed as a percentage	Project has recently mobilised and construction is only beginning in earnest currently. A significant number of senior positions will be arranged in the forthcoming period.
% aboriginals in workforce	No. FTE equivalent positions held by aboriginal people No. of aboriginal people inducted to site	Project had recently mobilised and construction is only beginning in earnest currently. A significant number of workforce will be arranged in the forthcoming period.

Topic	What to report?	Content Reported
Safety of entire project workforce (includes sub-contractors)	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement. Link the indicators listed below to the explanation of the management approach for this sustainability aspect	Management Approach: John Holland's AS/NZS 4801 certified Workplace Health and Safety Management System (WHSMS) Importance: The Contractor must manage its OHS obligations through the implementation of a third party certified safety management system compliant with AS/NZS 4801 Occupational Health and Safety Management Systems....The Contractor must prepare and implement a detailed Safety and Health Management Plan for the Project
% of workforce represented in formal health and safety committees		Committed to 1 HSR per work group
Types of injury		none
Lost time injury rate		0
Fatalities		0
Workers with high incidence or high risk of specific diseases		not applicable
Stakeholder Engagement	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a	Management Approach: Contractual obligation: The Contractor must prepare a detailed Community and Stakeholder Engagement Plan for the Project to address communication and co-operation with the community and stakeholders, including the Construction Reference Group (CRG), Local Government Authorities (LGAs), government departments and people with disabilities. The Community and Stakeholder Engagement Plan must complement and support Main Roads' Community Engagement Policy and Western Australian Government's Sustainability and Citizenship Strategies.

Topic	What to report?	Content Reported
	project website please do so. Provide a case study of an initiative or achievement. Link the indicators listed below to the explanation of the management approach for this sustainability aspect	
Results of Value Assurance Review		To be confirmed by MRWA
Effective Communication	Results of stakeholder engagement surveys	Project has recently mobilised and construction is only beginning in earnest currently. Market research is being prepared for the forthcoming period
Addressing community concerns	Results of stakeholder engagement surveys No of community concerns addressed. Top topics or concerns raised by community or stakeholders	112 email/telephone enquiries to the end of June, all closed bar 11 pending at that time 18 relating to Benara Road 17 relating to noise impacts 16 relating to abbey street closure 16 relating to property impacts 13 relating to Collier Rd 12 relating to environmental
Social Impact Assessments	Was the project subject to a Social Impact Assessment?	Not to our knowledge
Social Impact Assessments	Is the results of the SIA publically available? If so, where?	not applicable
Indigenous rights and consultation	Details of any Indigenous consultation undertaken by the project Detail any issues raised by indigenous communities impacted by the project	See MRWA supplied tender information; No. 24 Desktop Aboriginal Heritage Report No. 33 Ethnographic Report No. 89 Archaeological Assessment of the NorthLink WA Project

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Road Safety	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement. Link the indicators listed below to the explanation of the management approach for this sustainability aspect	Management Approach: Contractual obligation: Road safety audits must be conducted in accordance with Austroads' Guide to Road Safety – Part 6: Road Safety Audit... Road safety audits, including follow up, must be conducted by the Contractor at the following stages: (i) completion of 15% of design; (ii) completion of 85% of design; (iii) completion of 100% of design for any elements that change from the 85% design; (iv) immediately prior to opening to the public of any section of road for the continuous unrestricted passage of vehicles; and (v) within two weeks after the road being opened to the public for continuous passage of vehicles.
Traffic Management	Details of Road Safety Initiatives for traffic through the project site	See applicable RSA reports
Incident Frequency	No of serious traffic incidents within project boundary compared to volume of traffic	To be confirmed by MRWA
Road Safety Upgrades	Detail of Road Safety initiatives implemented as part of road design or upgrades	Selection of SPUI and RAB Additional barriers and segregation
Community Amenity	Details of community amenity and facilities to improve road side areas (and in turn encourage travellers to take breaks etc) Details of any road design for crime prevention	CPTED design principles used to inform all designs. This will be documented within 100% design reports

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Sustainable Transport	Detail the management approach to this sustainability aspect. Give an indication if this was important to the project, any strategies/plans/policies implemented to reduce/improve the projects impact to this aspect and what the successes or failures were. If you can reference further information/content on a project website please do so. Provide a case study of an initiative or achievement. Link the indicators listed below to the explanation of the management approach for this sustainability aspect	Ultimate design allows for rail infrastructure within median. Existing bus routes/stops to be maintained Additional and larger underpasses, shared paths, principal shared paths and connections compared to existing and reference scenarios
Cycling and Pedestrians	Details of any Cycling and Pedestrian facilities provided by the project	As above
Road Based Public Transport	Details fo any facilities or design features aimed at improving road based public transport or access to rail based public transport	As above
Travel Smart	Details of any initiatives to encourage sustainable transport by the project team. % breakdown of trips of workforce getting to and from site: Vehicle; public transport/bus; cycling	bus routes/stop passing site office
Feedback	Give an opportunity to provide feedback on the report, including providing contact details and how to do this.	