Kwinana Freeway Northbound Widening- Russell Road to Freight Rail Section: Annual Project Sustainability Report 2018-19

This annual report covers the period from 2018/19.

Sustainability Lead – Thomas Hiles BMD Constructions

About this Report

This report has been prepared by the Kwinana Freeway Northbound Widening – Russell to Freight Rail project team on behalf of Main Roads Western Australia. This report forms part of Main Roads' annual sustainability reporting which is integrated into its Annual Report. The report content is prepared in accordance with GRI principals. Main Roads processes determine which aspects are Material and to be reported on by the project.

Introduction

"Kwinana Freeway has experienced significant growth in traffic volumes over recent years, resulting in congestion and flow breakdown just south of the Kwinana Freeway Northbound. The project will increase capacity on the Kwinana Freeway Northbound route allowing for an extra capacity 1,800 vehicles per hour therefore reducing average travel times and eliminating the well-known bottle neck around the Cockburn station area. The project itself will boost the local economy by easing the congestion along the freeway. The project team has targeted key areas in the environmental and social aspects in order to finish the project with positive outcomes for the triple bottom line (Economy, Environment and Social). The team consistently liaise with industry leaders & entrepreneurs in order to find effective and innovative designs/products that will better the projects life cycle sustainability. This report will highlight the Sustainable outcomes already achieved and the targets set for the upcoming months."

-Jacek Michalczuk

-Project Construction Manager

Highlights

Environmental - Recycling and Reuse

The Kwinana Freeway Northbound Widening project will be the first in Western Australia to utilise crushed recycled concrete and demolition waste as road base in line with the guidelines jointly developed with the Department of Water and Environmental Regulation. BMD anticipates 15,000t will be used as subbase under the Kwinana Freeway.

BMD investigated the appropriateness of the 'ECOCREAM & ECOGREY blocks' as a replacement of limestone blocks for the retaining walls designed for the project. The ECO-blocks consist of crushed and screened high quality construction materials and waste concrete put together to make a construction block. After an investigation from BMD and MRWA is has been deemed that these ECO-BLOCKS are suitable for the retaining walls designed, the team have allowed ECOGREY (100% recycled materials) as backing blocks and the ECOCREAM blocks as facing blocks (50% recycled materials). Currently there has been 1812t of blocks used on site.

The project has sourced smaller local projects and sold 56,783t of sand for the suitable material to be reused.

All these great outcomes have reduced the amount of waste going to landfill.

Social

During the clearing of the project an initiative was sort out to relocate 60 native grass trees to a suitable location. BMD were able to relocate all of these grass trees to the nearby North Lake Road reserve area. BMD continue to seek local labour and local businesses as a part of their commitment to the project.

BMD have committed to seeking to exceed expectations when it comes to Aboriginal employment and Aboriginal businesses. Currently BMD have engaged 2 permanent full-time aboriginal employees, 2 full time aboriginal trainees and 1 permanent foreman for the project. As a percentage from total man-hours BMD have engaged 18% as Aboriginal employees. A target has been set to achieve just over $1M of spend with local Aboriginal businesses.

Engagement with the local community and road users has been important in achieving positive social outcomes for the project. The projects Construction Reference Group (CRG) made up of local residents and businesses has met up several times and as a whole helped to improve the design of:

- Enhancement of the noise wall design including noise wall painting scheme
- Shared path access point upgrades, closures and detour planning
- Protection and relocation of native vegetation
- Revision to traffic management based on road user experience and feedback, this includes the implementation of PSP detours through out construction zones to better suite PSP users experience during the construction.

Economic

The project itself will reduce the overall Freeways traffic congestion by 50% and allow for 1800 vehicles per hour, positively impacting Perth's economy once complete. Additionally, the design has incorporated short term and long-term visions when look at its design lift criteria. The North Lake Road Bridge project has been identified within the Kwinana Freeway project, the design has been adapted to take this into account, including the allowance for a temporary PSP for the interim period. The project will also look to collaborate to ensure the most economic outcome for all involved.

Overview

Kwinana Freeway has experienced significant growth in traffic volumes over recent years, resulting in congestion and flow breakdown just south of the Kwinana Freeway Northbound.

The State and Australian Governments have committed $49 million to widen Kwinana Freeway northbound from Russell to Roe Highway, as part of a $2.3 billion package of road and rail infrastructure works. The project is considered brown fields and is located South of Perth, Western Australia.

The Eastern Boundary of the project is the Public Transport Authority Rail Corridor which the Concrete Barriers will define. The Western Boundary is generally the private property boundary including residential, commercial and light industrial premises, the boundary will be defined by noise barriers and perimeter fencing.

The project involves widening Kwinana Freeway to provide a third lane for the seven kilometres from Russell Road to just before the Freight Railway line. Other works include:

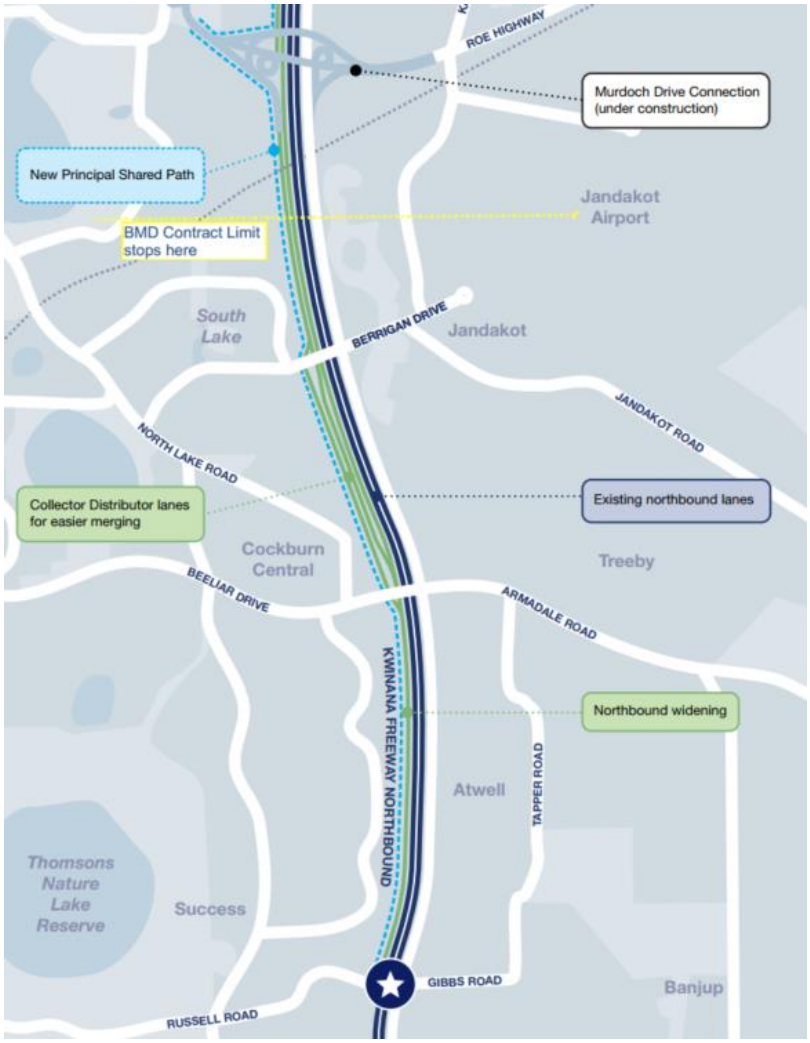
- Construction of noise walls along the western side of Kwinana Freeway, where required according to noise modelling
- Upgrade and realignment of the existing Principal Shared Path (PSP)
- Modifications to drainage, kerbing, surfacing, lighting, road safety barriers, service relocations, variable message signs, signage and line marking

Related works;

- Construction of Collector Distributor (CD) roads associated with the Armadale Road to North Lake Road Bridge project. CD roads are lower speed roads parallel to the freeway to provide merging opportunities.

Construction of a fourth lane along Kwinana Freeway from the CD road on ramp to the freight rail.

This project forms part of Main Roads overall plan to transform Mitchell and Kwinana Freeways to support population growth and economic development.



Link to project website can entered here for further information

Overall approach to Sustainability

Both BMD and WSP have deployed sufficient experienced resources to effectively implement the project Sustainability Management Plan. The project organisational chart, provided in the IPMP, shows the Project Management Team for the Kwinana Freeway Northbound Widening – Russell Road to Freight Rail Section Project. Sustainability will be embedded in the responsibilities of our key leaders and managers to drive a sustainability culture. The Project Management Team key people have undertaken IS Foundation training to support the success of the Project's sustainability performance throughout the life of the Project. Sustainability is strongly integrated with, and complementary to, the objectives and outcomes of all Project work streams, as well as responding to the needs and values of the community. The top-down establishment of a strong sustainability culture, focused on shared targets and accountability, is integral to the success of a sustainability agenda. BMD's sustainability team structure reinforces the central importance of sustainability at the D&C Project Leadership level. The Environment and Sustainability Team will be fully integrated within the delivery and operations teams to ensure sustainability is considered and incorporated at all stages of the Project. Our whole-of-project approach to resourcing will ensure sustainability expertise and continuity across all phases of the Project. The Project Manager will have central responsibility for delivering sustainability through the appointment of appropriate resources and direction for the implementation of the Sustainability Management Plan. The Construction Manager and Quality Manager will be accredited ISAPs and will assist the Project Manager in the management and implementation of the Sustainability Management plan.

Sustainability Policy

This policy encompasses all BMD Group subsidiaries including BMD Constructions, BMD Urban, Empower, JMac Constructions and Urbex. For ease of reference, the term 'BMD' is used throughout this policy to reference the BMD Group and its subsidiaries. This policy also applies to projects involving BMD being carried-out under a joint venture arrangement where no other policy of this type exists.

This policy applies to all workers, subcontractors, and visitors to BMD sites. It is the responsibility of these parties to understand and apply the required statutory obligations, business policies, procedures and associated documentation as it applies to their scope of work.

BMD is committed to maintaining our position and reputation as a leader in our industry. This is based on our commitment to applying the principles of sustainability in the decision-making process and activities that BMD engages in across multiple jurisdictions. To achieve this commitment, BMD is addressing these principles in ways that include, but are not limited to:

Growth and economic benefit

- Decisions balanced between short and long term will be based on economic, environmental and community needs and considerations.
- Aiming to grow the business for increased benefit to the community via engineering solutions.

Environment and efficient resource use

- Implementing best practice environmental management to minimise environmental harm.
- Efficient use of resources (energy, materials, water) when conducting its operations
- Consider the life cycle of its products and services

Labour practices

- Protection of human rights through ensuring equal opportunity employment for all and fair labour practices.

Community respect and protection

- Increasing community respect and wellbeing by demonstrated best practices in environmental management.
- Providing the opportunity for public involvement and consultation, as appropriate, in all communities in which we operate.

BMD also commits to encouraging other stakeholders, including suppliers and subcontractors, to embrace sustainability as part of their business activities.

To underpin sustainability across BMD, we currently hold a number of industry recognised, multi-site certifications for environmental management systems, as part of our Business Management System. BMD is committed to continual improvement through the implementation of these systems and certifications. Through the leadership of our senior management, BMD strives to implement industry best practice across all operations.

Scott Power Group Executive Director – Operations	Mick Power AM Group Board Chairman and Managing Director

Role	Responsibilities
Project Manager	• Central responsibility for delivering sustainability through the appointment of appropriate resources and direction for the implementation of the Sustainability Management Plan; • Management of resources to implement the Sustainability Management Plan.
Construction Manager / Quality Manager	• Trained as an ISCA Accredited Professional; • Oversee the implementation of the Sustainability Management Plan; • Liaise with ISCA representatives throughout the rating process; • Register the project for an ISCA rating and coordinate workshops for project staff including determining and assigning responsibility for ISCA credits to project and design staff where necessary; • Record evidence provided over the project to achieve desired ISCA rating; • Coordinate and report on evidence required to meet targeted credits under the ISCA rating.
General Foreman / Foreman	• Responsible for recording and reporting on the evidence collected on site for the relevant targets; • Coordinate and report on progress of sustainability initiatives and accomplishments on site.
Project / Site Engineers	• Responsible for achieving relevant sustainability credits under the ISCA rating scheme and for recording and reporting on the evidence collected for these targets; • Coordinate and report on progress of sustainability initiatives and accomplishments.
Stakeholder Engagement and Communications	• Develop and implement a comprehensive stakeholder engagement strategy to align with ISCA requirements; • To undertake high level engagement with stakeholders; • Meaningful communication with the community in a clear and timely manner to a level that achieves the desired credit under the ISCA rating scheme; • Coordinate and report on evidence required to meet targeted credits under the ISCA rating.
Design Leads	• Include sustainability objectives and targets in project contracts and include sustainability objectives and targets in design management plan; • Consider relevant ISCA design related requirements during the design and ensure significant design decisions are considered against the project MCA process; • Ensure significant design decisions are recorded and detailed in design report; • Attend necessary workshops as organised by BMD; • Include the use of renewable resources in the design plan.

Objective	Target
Demonstrate Sustainability Leadership and Continual Improvement	• Achieve an ISCA Excellent Design and As Built Rating (>50). • The leadership team to meet at least monthly to discuss sustainability. • Prepare progress sustainability reports for quarterly review by Senior BMD management. • Share sustainability knowledge and lessons learnt across BMD projects. • Appoint a sustainability representative.

Objective	Target
	• Encourage new personnel to undertake ISCA training
Protect and enhance the natural environment and heritage	• No serious pollution incidents occur during construction. • Proactively manage any impacts to flora and fauna. • Protect and proactively manage any Heritage items or locations during construction. • Improve ecological values of the project area.
Contribute to liveable communities	• Project designed to reduce road congestion and travel times. • Maintain, relocate or improve pedestrian and cycle paths and connections. • Create/enhance public open space.
Optimise Resource Efficiency Materials	• Identify and implement opportunities to reduce material use and maximize the use of materials with low embodied energy • Optimise the amount of cement replacement material used in concrete. • Optimise the amount of recycled material used in earthworks, road base and sub base. • Investigate in detail the feasibility of crushed recycled concrete as a sub-base material • Monitoring and modelling of materials lifecycle impacts undertaken using the Materials Calculator. Project reference footprint to be established and reduced by a minimum of 5% • Promote the use of EME2 pavements reducing material usage
	Energy and Carbon • Monitoring and modelling demonstrates reduction in scope 1 and 2 GHG emission savings during the D&C activities. • Commitment to reduce GHG emissions by 5% below an approved reference point.
	Water • Investigate opportunities to reduce water use (in particular potable water use) and reuse water (e.g. stormwater, groundwater) during construction and operation. • Recycle/reclaim water (e.g. stormwater, wastewater) generated/collected where economically viable. • Monitoring and modelling demonstrates no potable water use (except for drinking) or justify why this is not economically or environmentally feasible. • Monitoring to ensure a reduction of total water use by 5% across the life of the Project
	Waste and Spoil • Reuse/recycle usable spoil (in accordance with relevant legislation) • Quantaties of waste to be forecast for the construction and operation of the Project. • Measures identified and implemented to minimise total waste using the hierarchy of avoidance, reduction, reuse and recycling. • Achieve the following targets for landfill diversion: - 70 - 80% by volume of spoil - 25 - 50% by volume of inert and on-hazardous - 25 – 40% by volume of office waste
Increased resilience to future climate	• Undertake a climate change risk assessment utilising multi-disciplinary member of the Project Team • Indirect climate change risks are identified • Climate change projections are identified and adopted
Sustainable procurement – whole-	• Develop a Social Procurement Plan to identity and implement opportunities to engage disadvantaged groups on the project.

Objective	Target
of-life environmental, social and economic considerations	• Incorporate sustainability criteria into project contracts and tender evaluation criteria.
Maximise equitable training and employment opportunities	• Develop an Aboriginal Participation Plan to outline strategies to deliver structured training to the workforce, trainees, apprentices and disadvantaged groups.

The project is not registered for an Infrastructure Sustainability rating.
The current target is 50.0 and the Kwinana Freeway Northbound Widening Project is currently tracking at 17.7 points to date.

Environmental Aspects Performance

At a glance

Aspect	Year to 30 June	Total for Project
Clearing planned (ha)	14	14
Actual clearing to date (ha)	14	14
Rehabilitation/revegetation planned (ha)	14	14
Actual rehabilitation/revegetation to date (ha)	0	0
Environmental offset via Monetary contribution actual ($)	0	0
Total Water Consumption to date (kL)	38688.64	38688.64
Total GHG emissions (scope 1 & 2) to date (t CO_2-e)	TBC	TBC
Total energy consumption to date (mj)	5,415,000	5,415,000
Total quantity of recycled content used in project (t)	1912	1912
Total imported materials used in project (t)	21225	21225
Total waste generated by project (t)	26t	26t

Environmental context

The project itself has been assessed and approved by the EPA, the following documents were provided in the contract:

- Statement that a proposal may be implemented (Pursuant to the provisions of the Environmental Protection Act 1986(WA)) dated 26 February 1993 (Ministerial Statement 304)
- Attachment 2 to Ministerial Statement 304, Change to Proposal Approved Under Section 45C of the Environmental Protection Act 1986 (WA) dated 13 December 2017.
- Clearing Permit CPS818

The key environmental aspects of the project include:

- Ensuring native vegetation clearing area limits as described in CPS 818/12 are not breached
- Protect any potential Carnaby's Black Cockatoo habitat area
- Construction noise
- Vibration damage and nuisance
- Dust nuisance
- Reducing materials that have large embodied energy

The team has focused heavily in design in order to lean the project up through innovative and clever

design and reducing materials with large embodied energy but also looking at the project's lifecycle.

The following legislation has been identified as impacting the project:

Commonwealth Government

- *Aboriginal and Torres Strait Island Heritage Protection Act 1984*
- *Aboriginal and Torres Strait Island Heritage Protection Regulations 1984*
- *Biosecurity Act 2015*
- *Biosecurity Regulations 2016*
- *Environmental Protection and Biodiversity Conservation Act 1999*
- *Environmental Protection and Biodiversity Conservation Regulations 2000*
- *National Environmental Protection Council Act 1994*
- *National Greenhouse and Energy Reporting Act 2007*
- *National Greenhouse and Energy Reporting Regulations 2008*

State Government

- *Environmental Protection Act 1986 (WA);*
- *Environmental Protection Regulations 1987 (WA);*
- *Biodiversity Conservation Act 2016 (WA);*
- *Wildlife Conservation Act 1950 (WA);*
- *Wildlife Conservation Regulations 1970 (WA);*
- *Contaminated Sites Act 2003 (WA);*
- *Contaminated Sites Regulations 2006 (WA);*
- *Rights in Water and Irrigation Act 1914 (WA);*
- *Rights in Water and Irrigation Regulations 2000 (WA);*
- *Biosecurity and Agriculture Management Act 2008 (WA);*
- *Biosecurity and Agriculture Management Regulations 2013 (WA);*
- *Aboriginal Heritage Act 1972 (WA);*
- *Aboriginal Heritage Regulations 1974 (WA);*
- *Heritage Act 1990 (WA)*
- *Heritage Regulations 1991 (WA)*

Environmental Management

The project has set a KPI for managing environmental risk on the project and setting good aspirations, these include:

- Reducing the energy use and GHG emissions from the BAU case by 5%
- Reducing the water usage against a BAU case by 5%
- Reducing the life cycle environmental impacts of materials by 5% (use of recycled materials to increase)

BMD operates an Environmental Management system accredited to the ISO14001 standard. A project specific Environmental Management plan has been developed to target specific project risks.

Original EPA assessment can be found here. Please not Attachment 2 to Statement 304 is applicable to this project.

Water Management

Water has not been identified as a huge problem over the project's lifecycle, the project has been designed to control the water run offs and protect the freeway.

- The water to be used for the project is during the construction process.

Source	Year to 30 June	Total for Project
Water purchased from the scheme in litres	138.64	138.64
Water pumped from bores in litres	38550	38550
Water pumped from rivers, lakes or harvested in litres	0	0
Recycled or waste water use (typically from another industry) in litres	0	0

Carbon Emissions & Energy

The projects KPI for reducing GHG emissions is a reduction of 5% against business as usual practices.

Some key notes BMD are investigating for the reduction of GHG emissions are:

- Utilisation of low energy consumption plant (e.g LED lighting towers)
- The utilisation of reclaimed asphalt pavement during delivery
- The use of battery powered rammers for implementation of compaction of drainage and/or electrical trenches.
- Implementation and use of EME2 Asphalt, which will substantially reduce the base layer thickness and potentially have a longer lasting product hence reducing the amount of GHG that goes into the construction/maintenance operations.
- General purpose cement replacement of 65% via fly ash for the projects most common mix design.

The Kwinana Freeway project continues to actively seek innovative solutions it reduces the projects GHG emission effects against a business as usual case in a design, construction and operational aspect.

Source	Year to 30 June	Total for Project
Energy usage by source in mega joules	TBC	TBC
From fuel use (mj)	5,413,230	5,413,230
From electricity (mj)	1443.7	1443.7
Energy saved (mj)	928,446	928,446

Materials & Recycling

The project has identified a multitude of material recycling opportunities, as seen below:

- Crushed recycled concrete – the project will be placing 15,000t of crushed recycled concrete as subbase in the freeways
- ECOCREAM and ECOGREY blocks – the project has replaced conventional limestone retaining wall blocks with environmentally friendly blocks that included engineered concrete and construction rubble as a main constituent. 1812t of blocks has been used to-date.
- Increased RAP content – the project is looking into ways to increase the use of recycled asphalt product used across the job.

Material and Waste Statistics

Imported Materials	**Year to 30 June**	**Total for Project**
Sand (t)	0	0
Gravel (t)	0	0
Limestone (t)	15831	15831
Crushed Rock (t)	0	0
Aggregate (t)	0	0
Asphalt (t)	0	0
Precast Concrete (t)	2793	2793
Concrete (t)	1773.6	1773.6
Steel (t)	189.09	189.09
Reinforced concrete (t)	Same as previous	Same as previous
Emulsion (t)	0	0
Bitumen cutter (t)	0	0
Bitumen (t)	0	0
Other (t)	0	0

Waste	**Year to 30 June**	**Total for Project**
Unsuitable fill moved offsite (t)	0	0
Landfill (t)	13.68	13.68
Sewage (t)	0	0
Concrete rubble (t)	500	500
Pavement rubble (t)	0	0
Unsuitable material (m^3)	0	0
General/Green Waste (t)	26.64	26.64
Unsuitable fill used for rehabilitation purposes (t)	0	0
Recycled (t)	57316.54	57316.54

Imported recycled content	**Year to 30 June**	**Total for Project**
Sand (t)	0	0
Road Base (t)	0	0
Asphalt/Profiling (t)	0	0
Steel (t)	189.09	189.09
Concrete (t)	1773.6	1773.6
Other (t) ECOBLOCKS	1912	1912

Noise (from construction and future operation)

The project has monitored and modelled the effects to the local community with regards to the additional traffic flow on the freeway. This has been incorporated into the Noise wall design to ensure the surrounding residents are not being adversely affected. The effectiveness of the noise walls will also be monitored over a period after the construction completes.

Vibration

Vibration monitors are placed where ever construction activities occur that cause vibrations. This is to ensure that no damage is occurring to surrounding residents or local businesses. The project has set a KPI to have zero instances where vibrations exceed 5mm/s adjacent to local properties. In addition to this the project has carried out dilapidation surveys on over 100 residents adjacent to the project to better understand the impacts the project has on surrounding properties.

Economic Aspects Performance

At a glance

Economic Aspect	Year to 30 June	Total for Project
No. of vehicles per day	43200(increase)	43200(increase)
Travel Time Saving	15 mins	15 mins
Increase of vehicle capacity	50%	50%
Workforce and Supply Chain		
Total number of suppliers engaged	58	58
Total number of Indigenous Enterprise	10	10
Buy Local Spend (to date)	All	All

Economic context

BMD are committed to working with subcontractors who have potential sustainable opportunities within their business. To do this the project has a qualitive pre-award evaluation which takes sustainability into account.

The project looks to increase the traffic flow volumes 1800 vehicles per hour, and hopefully increasing the average commute times over the 6-kilometre section by 15 minutes.

Key Economic Outcomes

- Increased traffic flow capacity
- Reduced average travel times

Sustainable Procurement and Buy local

All items procured are from local businesses. This includes the precast concrete panels and steel posts within the noise wall, which have all been procured locally in Perth.

BMD are targeting to spend $1.135M with aboriginal businesses, currently we BMD have spent $253k with aboriginal businesses.

Climate Change Assessments

The project conducted a climate change workshop in order to look at the key risks' climate change had on the project mostly for the design. This identified some minor design changes in order to reduce some of these risks.

Sustainable Transport

One of the main project concerns is the PSP that runs adjacent to the Freeway project. The project is upgrading this PSP and has to stage the PSP detours in a manner that improved the cyclists and pedestrian users experience during construction. In doing so temporary PSP detours have been established that safely allows the users reach their destination.

Community & Stakeholder Engagement

Community and Stakeholder Engagement Plan details BMD's approach to stakeholder communication and consultation on the Kwinana Freeway Northbound Widening Russell Road to Freight Rail Section

Project (the project). Primary responsibility for managing relationships with the project's community and institutional stakeholders will rest with BMD's Community and Stakeholder Engagement Manager, in close cooperation with Main Roads, who will provide input and approval of all key messages, procedures, systems and communication mechanisms.

Communication and consultation offer valuable opportunities including:

- Collaboration between Main Roads, BMD to develop a communications benchmark for future road projects.
- Increasing awareness of stakeholder needs across project personnel and contractors to reduce the likelihood and severity of construction impacts.
- Recognition of project achievements – e.g. community and regional benefits, project milestones, commencement and completion of works.
- Recognition of project significance – e.g. improved safety and transport efficiency; enhancement of natural and built environment consistent with sustainability principles.
- Facilitating collaboration to generate innovative ideas that enhance design, construction and delivery.
- Harnessing expertise and diverse opinions to optimise social and environmental decision-making.
- Reducing impediments to timely, efficient and low-fuss project delivery
- Demonstrating transparency and compliance with standards and requirements.
- Promptly identifying and effectively resolving potential issues and complaints.
- Encouraging knowledge-sharing and skills transfer across organisations, interest groups and technical disciplines.
- Enhancing the image and reputation of Main Roads and other project proponents.

Engagement with the local community and road users has been important in achieving positive social outcomes for the project. The projects Construction Reference Group (CRG) made up of local residents and businesses has met up several times and as a whole helped to improve the design of:

- Enhancement of the noise wall design including noise wall painting scheme
- Shared path access point upgrades, closures and detour planning
- Protection and relocation of native vegetation
- Revision to traffic management based on road user experience and feedback, this includes the implementation of PSP detours throughout construction zones to better suite PSP users experience during the construction.

Addressing community concerns

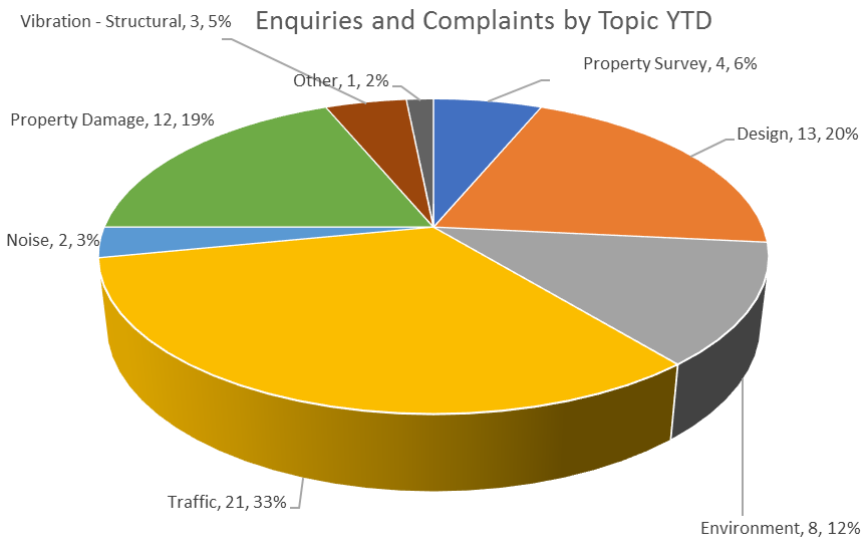
BMD document procedures for community contact, complaints handling and investigation. This process requires issues are shared with the Project team, resulting in a consistent and unified response.

These procedures will include:

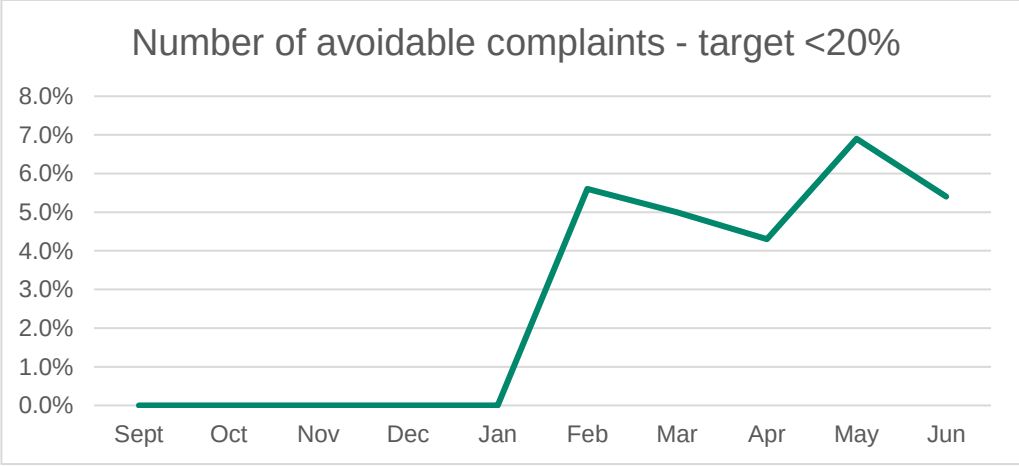
- Production of appropriate responses to each complaint received.
- The establishment and maintenance of a complaints (contact) register, including complaint 'closure' processes, from start of substantial construction until the date of completion.
- Reporting on the receipt and responses to complaints received in the monthly progress report.
- Recording of the closure process for each complaint received.
- Lodging inquiries and complaints via a telephone, email or post.
- Directing inquiries or complaints from relevant agencies, including Main Roads and local authorities, to the Community and Stakeholder Engagement Manager.
- Logging inquiries and complaints into a formal register for analysis, feedback and audit purposes.
- Directing issues requiring immediate action to the Project Manager who will be able to contact key personnel during or after work hours.

- The community will be advised of the issue/inquiry and complaints procedure and appropriate contact details upon request. This will be provided in writing to the complainant if requested.
- BMD's Community and Stakeholder Engagement Manager will monitor all issues / enquiries and respond to complaints. These will be documented in the contact register and discussed at regular project meetings. Any contentious inquiries or complaints with potential to escalate as political, public or media issues will be referred immediately to Main Roads

Below is a chart showing the general Enquiries and complaints by Topic.



BMD have set KPIs when it comes to addressing community concerns. One KPI can be seen below.



Heritage

Heritage has been scoped out for the project, there are no listed heritage sites within the projects area.

Road Safety & Traffic Management

The project has developed key objectives within the traffic management plan;

- Maintain or improve flows through the worksite and surrounding areas of impact to meet or exceed expectations of MRWA
- Minimise congestion and journey time delays, particularly during AM and PM peak periods.
- Provide safe access for all modes of transportation including vehicles, pedestrians and cyclists at all times during construction

- Minimise complaints from individual stakeholders and the community relating to traffic control management
- A no-surprises approach ensuring land owners, community members and other stakeholders are kept informed of any planned changed traffic conditions by notifying of any access changes.

The traffic manager is responsible for ensuring all traffic controls requirements are maintained in accordance with this plan and relevant Acts, Codes, Standards and Guidelines. Regular inspections are carried out to verify that this is the case.

During normal work hours BMD ensure access to a tow truck within a close proximity to site is available, on the event of a break down with the barriers deployed BMD are working closely with MRWA to ensure the vehicle is safely taken to a place of refuge therefore making it safer and freeing up the freeway.

Workforce Safety

BMD always have a 'zero harm' safety focus and have a great record on the Kwinana Freeway project.

BMD implement Activity Based conversations and weekly safety/environmental inspections for the projects management to ensure they are having risk-based conversations with the work crews each week and being recorded.

To date there has been no recordable injuries.

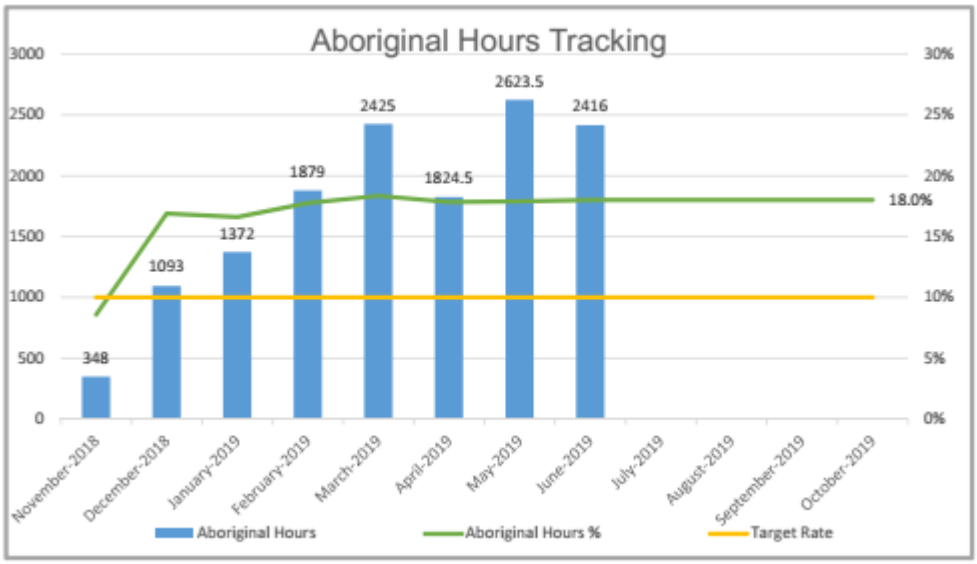
Diversity

BMD continue to lead the way with Aboriginal engagement in the construction industry, this includes the engagement of:

- 2 permanent full time BMD aboriginal employees
- 2 permanent full time BMD aboriginal trainees
- 1 permanent BMD foreman
- Average of 10 Aboriginal labourers/operators via Subcontractors on any given day of the project's life.

BMD have set a target to have the aboriginal participation hours at a percentage higher then 10% of the total man-hours for the project.

The following chart shows the percentage tracking to date, end of June 2019.



A new target to improve this engagement has been set to 20%, which the project actively seeks suitable candidates to perform the required roles.

Appendix 1 - List of Protected Areas Project interfaces with:

One area has been identified to have Phytophthora Dieback. This area has positive specimens and has been cordoned off at the Verna Basin. No protected areas other than this infested area have been identified.

Appendix 2 - Protected fauna and flora species and habitat

- Carnaby's Black-Cockatoo
- Forest Red-tailed Black Cockatoo
- Quenda

Appendix 3 – List of Stakeholders to the project

- Adjacent property owners
- Environmental groups
- Land-owners and infrastructure operators
- Road users
- PSP users
- Regulators
- Main Roads
- Project Team
- Transperth
- Murdoch Drive Connection project (MDC)
- City of Cockburn
- Local businesses
- Water Corp
- Politicians