



Infrastructure
Sustainability
Rating Scheme

Case Study Webinar Series

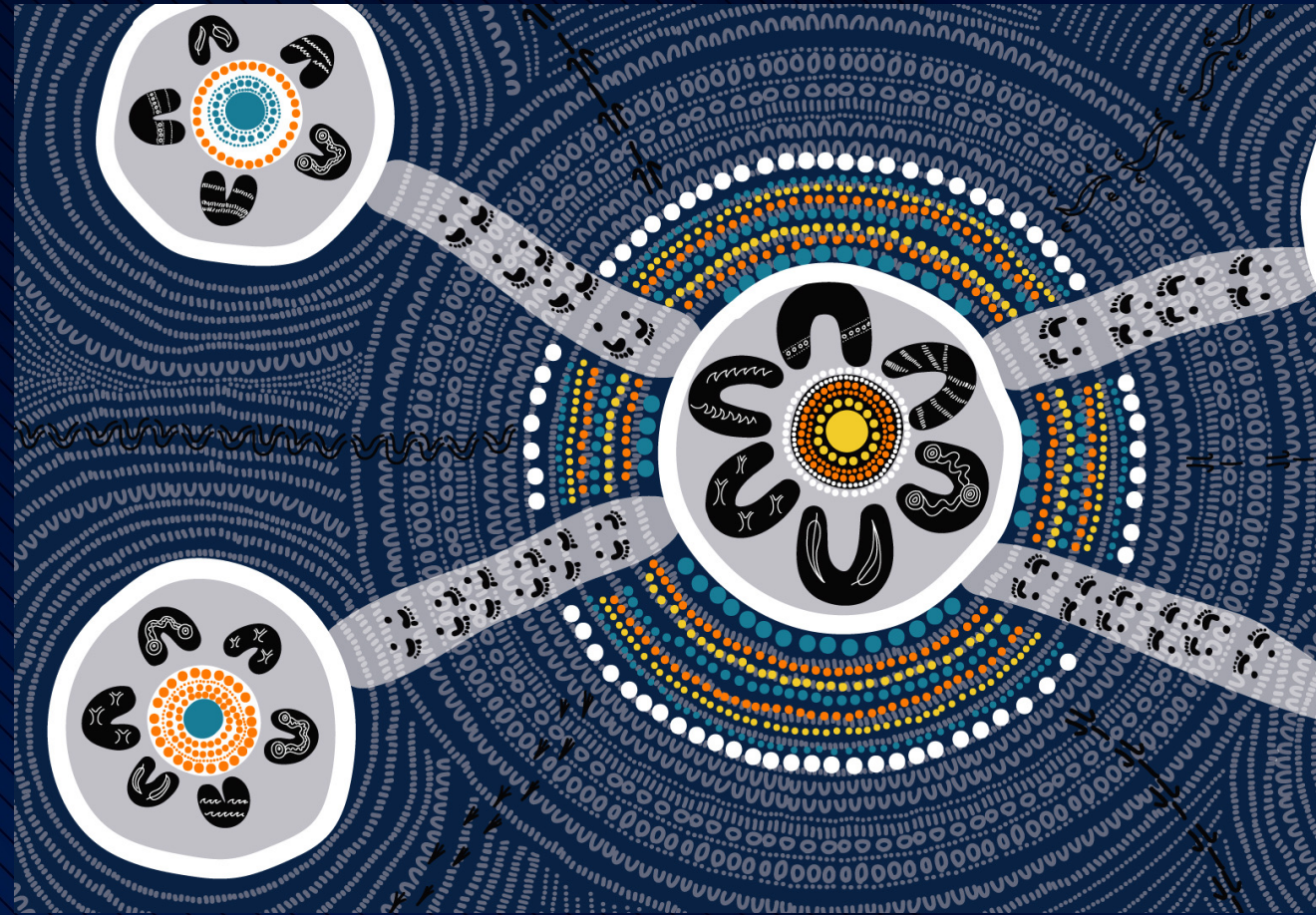
Thursday 15 February 2024 | 12:00 – 1:00 PM (AEDT)

Hear from project teams from across Australia & Aotearoa New Zealand



Acknowledgment Of Country

The Infrastructure Sustainability Council would like to begin by acknowledging the Traditional Custodians of the land on which we meet today. I acknowledge their deep connection to land, water and culture, and pay my respects to their Elders past and present.



Agenda



1

Ratings Project Case Study 1 – Takitimu North Link

2

Ratings Project Case Study 2 – The Bruce Highway, Cairns Southern Access Corridor, (Stage 3) Edmonton to Gordonvale Project

3

Question & Answer



Please add any questions to the Q&A function,
we will answer these at the end of the
presentations



Takitimu North Link Project





Waka Kotahi | NZ Transport Agency

Rebekah Pokura-Ward

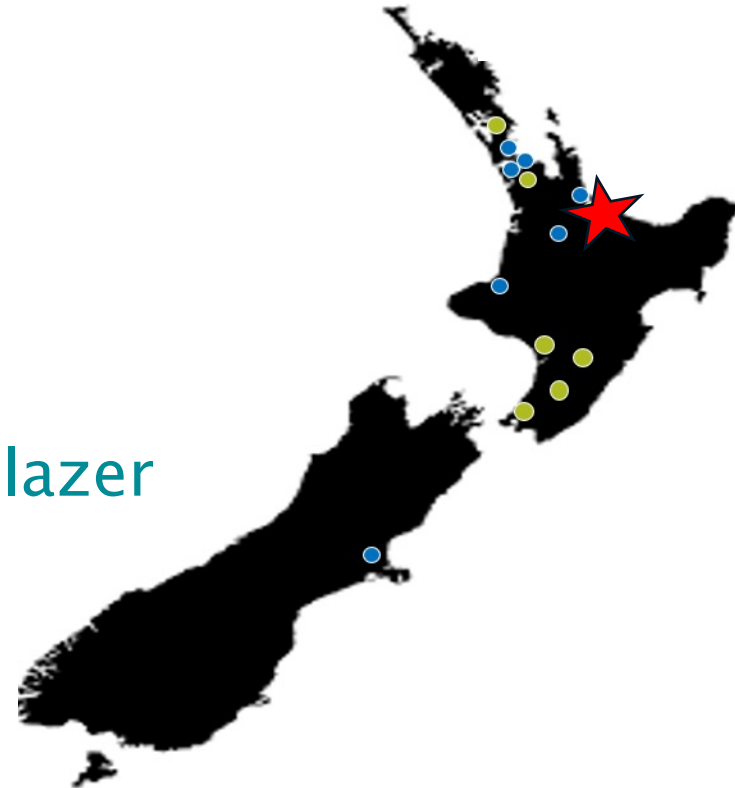
NZTA Waka Kotahi



P49 SUSTAINABILITY RATING SCHEME APPLICATION DURING TENDER AND DELIVERY OF CAPITAL WORKS PROJECTS

WAKA KOTAHĪ SUSTAINABILITY RATING TEAM, PROGRAMME &
STANDARDS
1 APRIL 2022
V_2

- Sustainability policy 2020- projects >\$100 M to undertake ISC rating
- 16 projects undertaking ISC ratings across Aotearoa/NZ- more to come
 - Takitimu North Link a sustainability trailblazer
“walking the talk”



Takitimu North Link Project

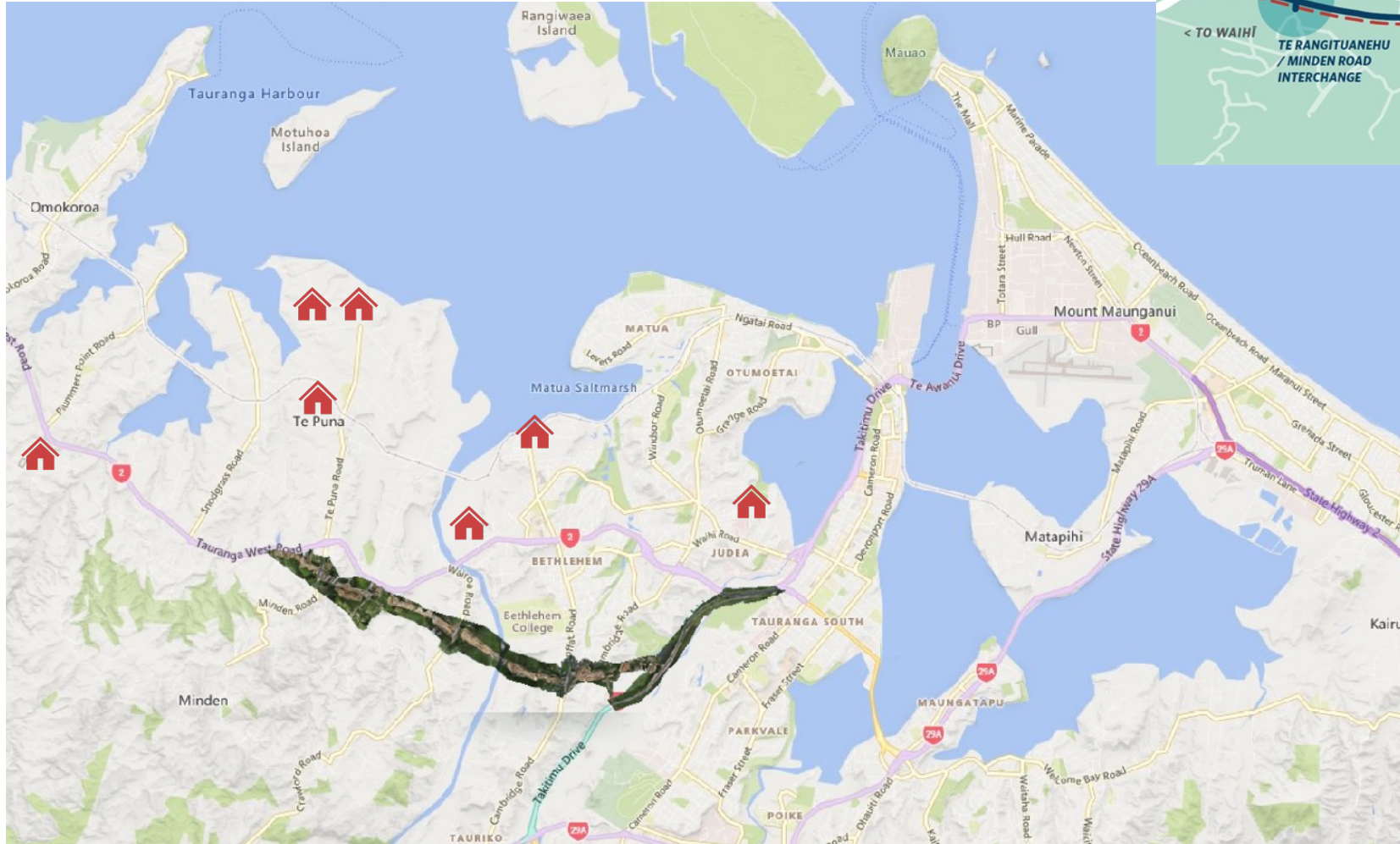
Social Sustainability

Kaleb Winiata
Monique Nee Nee

Takitimu



Project Overview



<p>6.8 km FOUR-LANE EXPRESSWAY</p>	<p>MORE WAYS TO TRAVEL</p>	<p>8 BRIDGES</p>
<p>350-400 JOBS</p>		<p>3 MILLION M³ EARTHWORKS</p>
<p>29 CULVERTS</p>	<p>8 STREAM DIVERSIONS</p>	<p>7 WETLANDS</p>
<p>20,000 VEHICLES CROSS WAIROA RIVER BRIDGE EVERY DAY PREDICTED TO INCREASE TO MORE THAN 30,000 BY 2031</p>	<p>WESTERN BAY OF PLENTY IS ONE OF THE FASTEST GROWING REGIONS IN NZ</p> <p>900,000 PLANTS</p>	

Partnering with Tangata Whenua (First Nations)

- 7 x hapū Māori groups
- Collective group formed in 2020 to work in unity, as one - kotahitanga
- Resourced by Crown Agent/Waka Kotahi/NZ Transport
- Monthly meetings with the Crown Agent and the Contractor
 - On-going monitoring of 'their' Cultural Management Plan



Pre-tender Consultation with Tangata Whenua (First Nations)

- Discussions started early 1990's
- Road designation lodged in 1998
- Cultural Values Assessment (CVA):
 - Cultural response to resource consent application – outlines group values and project measures
- Mitigation Agreement
- Cultural Management Plan provided
- Broader social outcomes - think-tank sessions:
 - Provided for and facilitated by the 'preferred' Contractor
 - Opportunity for tangata whenua to express and have their aspirations heard/captured/included > capacity and capability building > provided for within the tender bid – step change and broader social outcomes

Construction Phase Outcomes



Employment

- 176 total onsite – 24 Tangata Whenua Māori
 - Step Change Coordinator (wahine)
 - Sustainability Advisor
 - Landscape Coordinator
 - Commercial Nursery Trainer (wahine)
 - Environmental Graduate
 - Engineering Scholarship
 - Earthworks Machine Operators (wahine)
 - Structures – Steel Fixing and Carpenters
 - Drainage & Utilities (wahine)
 - Entry Level Labour

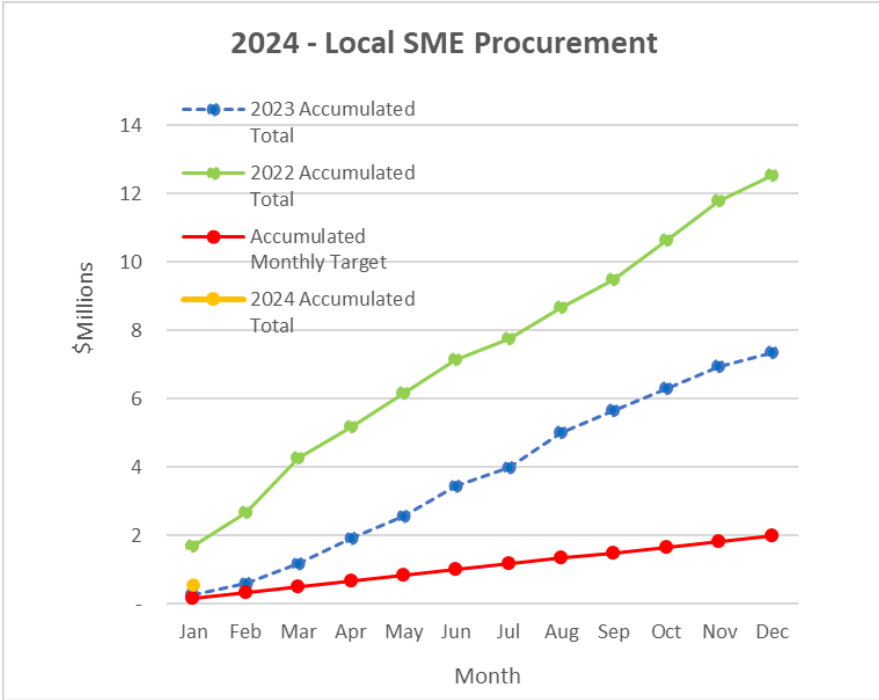
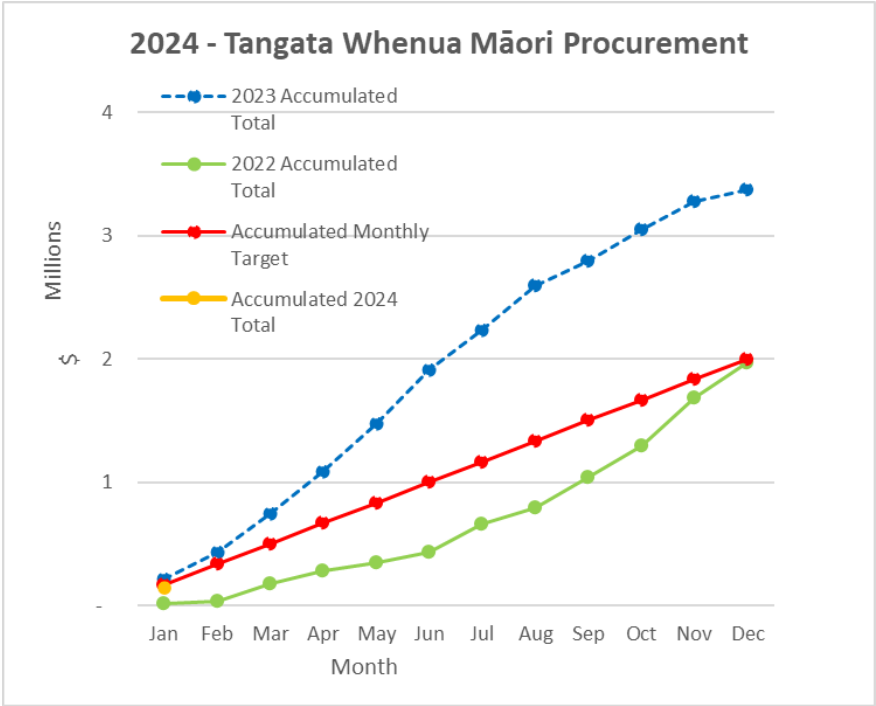


Business

- 18 x Tangata Whenua Māori SME businesses successfully awarded contracts:
 - \$2M target p.a
 - \$2M in 2022
 - \$3.3M in 2023

>2.5%
of construction
value delivered
by Māori owned
businesses

>2.5%
of the
construction
value delivered
by local SME's



Wera Works

- Turning a boy into a man overnight
- Pro-active, confident, self-starter
- Employee at steel fabrication company since leaving school
- Start-up business 2021
- 5 employees
- Value to date \$1.1M

Cultural Value	Expression
Manaakitanga - social care and responsibility	Hapū members and businesses are given the opportunities for prosperous outcomes.



Micro-Nurseries

- Acknowledging spiritual connection of Tangata Whenua (First Nations) and the land - Providing tangata whenua an opportunity to grow and learn
- Ahikāroa Cultural Tāonga Planting Framework
 - Whakapapa/blood-line based model – plants, people, nursery site
 - Restoring the mauri (life-force) of the land
 - Memory lane
- Seed collection (100% eco-sourced)
- Training & empowering kaitiakitanga (Environmental stewardship)
- 50% of plants supplied by Tangata Whenua.

Cultural Value	Expression
Kaitiakitanga – protection and guardianship of the physical and cultural environment	Ngā hapū o Te Paerangi to be given the opportunity to establish a nursery
	Planting with cultural taonga plant species which originated from the rohe. To maximise indigenous or endemic vegetation.



Kaiarahi & Kaitiaki

Protect
Native flora
and fauna

- Roles and what they do
 - Monitoring virgin topsoil stripping, ecology/flora/fauna work
 - Ensure works done are culturally appropriate
- Up to 12 kaitiaki on site
- Upskilling – aligning western science to mātauranga Māori

Cultural Value	Expression
Wairuatanga and Mauri embedded emotional and perceptive connection to place.	Ngā hapū o Te Paerangi host a responsibility to care for the natural world to ensure the whakapapa from which they collectively descend is unbroken.



Re-homing materials

Cultural Value

Manaakitanga - social care and responsibility

Expression

Provides outcomes to improve the lives of hapū people.

> 25%
Of waste
diverted
from landfill



11 houses gifted to the different hapū groups on the project



7 containers of salvage materials



600m³ of chopped firewood and 100m³ of logs for carving from vegetation clearance

Knowledge sharing in the community

- Marakai – permaculture and kumara garden planting with local kindy
- Donated materials and Chrissy our project, Commercial Nursery Trainer a.k.a plant wiz!

Cultural Value	Expression
<p>Manaakitanga - social care and responsibility</p>	<p>Opportunities to develop community vegetable gardens and education on garden to plate. Healthy living and nutrition.</p>



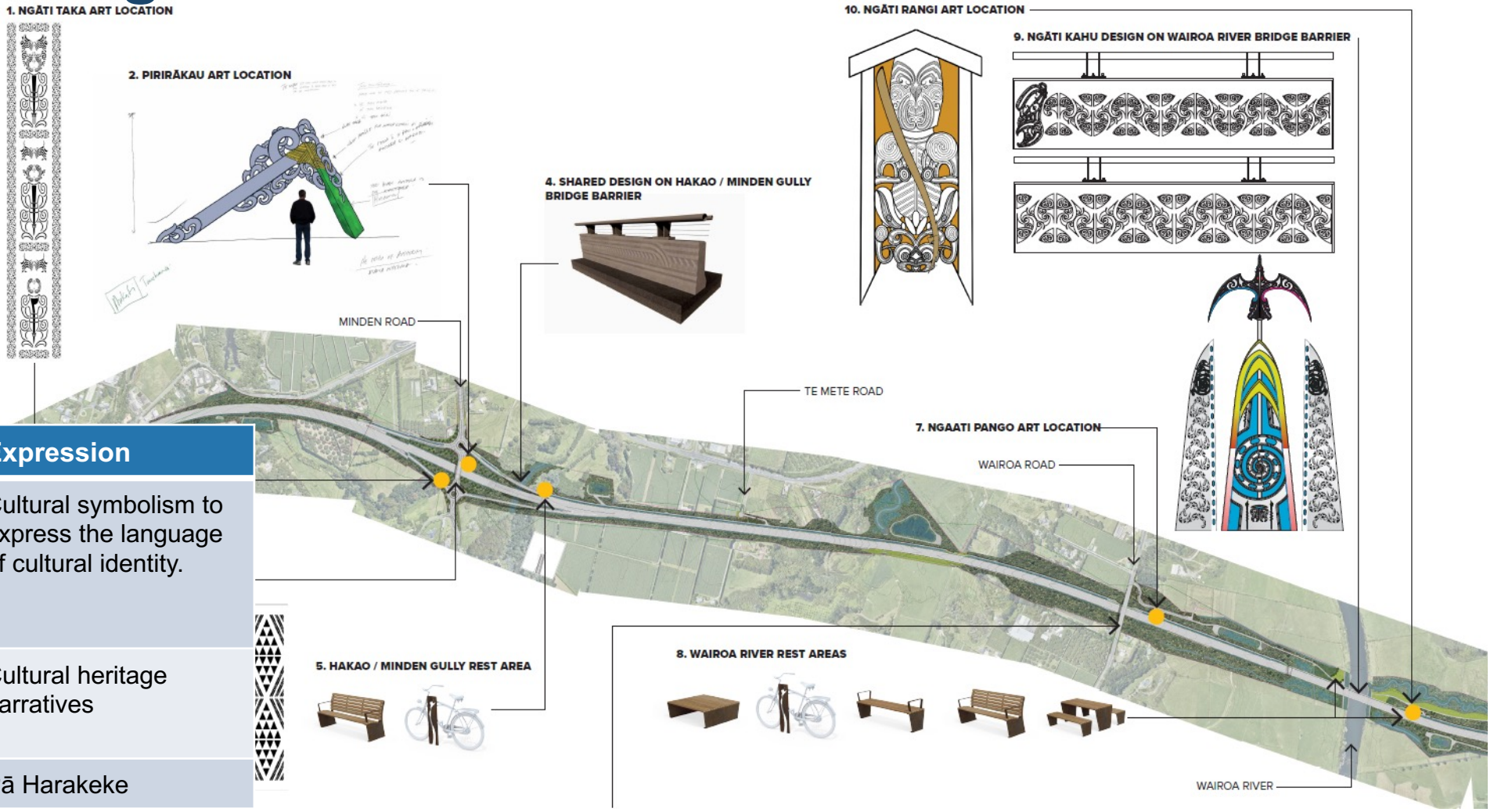
Tikanga

- Karakia/blessings/opening
- Cultural induction for all staff

Cultural Value	Expression
Wairuatanga and Mauri embedded emotional and perceptive connection to place.	Restore ngā hapū o Te Paerangi memory back into landscape and waterways to be reflected throughout end of project
Rangatiratanga – Assertion of ngā hapū o Te Paerangi authority, presence, influence, and management	Inductions of Waka Kotahi, Contractors and Planners and cultural monitor training of hapū people is delivered as instructed by ngā hapū o Te Paerangi



Landscape design



Cultural Value	Expression
<p>Kotahitanga – social and community connectivity and cohesion</p>	<p>Cultural symbolism to express the language of cultural identity.</p>
	<p>Cultural heritage narratives</p>
	<p>Pā Harakeke</p>

IS Credit (v1.2) Impact

- Hea-1 Community Health and Wellbeing
- Her-1 Heritage assessment and management
- Urb-1 Urban design
- Stakeholder Credits
- Procurement Credits



What we've learned along the way

- Early and consistent engagement
 - Capture aspirations and tracks alignment
- Get it written down
 - Translate aspirations into contractual obligation.
- Eager, adaptable team
 - Ability to quickly respond to cool opportunities



The Bruce Highway, Cairns Southern Access Corridor, (Stage 3) Edmonton to Gordonvale Project (E2G).





HSA Group Joint Venture (John Holland, Seymour Whyte, AECOM)

Andrew Kindness



IS Council Webinar: Social Outcomes on an IS Rated Project

Cairns Southern Access Corridor (Stage 3) Edmonton to Gordonvale Project (E2G)

Social Sustainability



15th February 2024




Cairns Southern Access Corridor Stage 3
Edmonton to Gordonvale

**JOHN
HOLLAND**

**SEYMOUR
WHYTE**

AECOM

 Queensland Government
Department of Transport and Main Roads

Logo designed by Zephaniah, age 9 | Djarragun College

Acknowledgement to Country

We acknowledge the Turrbal people, Traditional Custodians of the land on which meet and the Gimuy Walubara Yidinji and Dulabed Malanbarra Yidinji peoples, Traditional Custodians of the Edmonton and Gordonvale areas. We recognise their continuing connection to the land, sea and water.

We pay respect to Elders past, present and emerging and extend that respect to all Aboriginal and Torres Strait Islander Peoples.

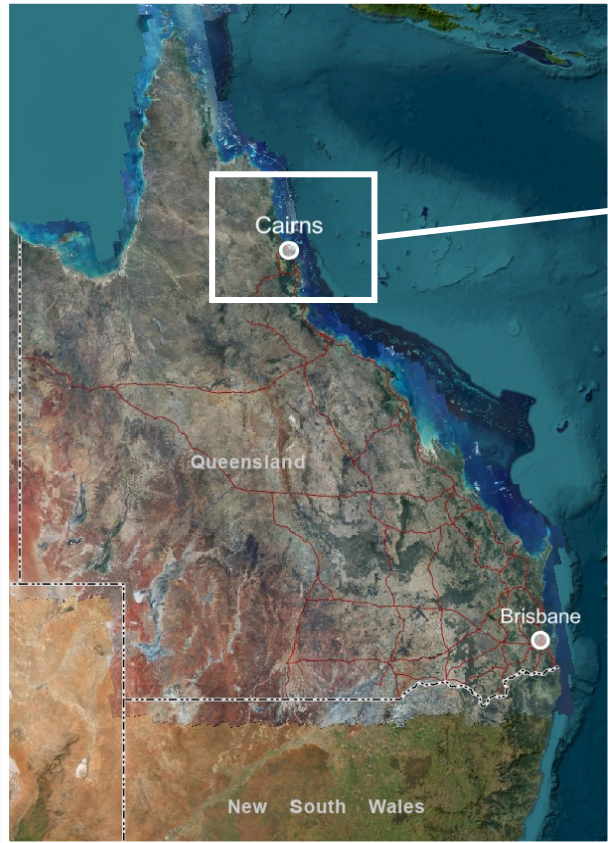


Agenda

- Project Overview
- Social Sustainability
- Project Outcomes
- Challenges
- Resourcing a Team For Success



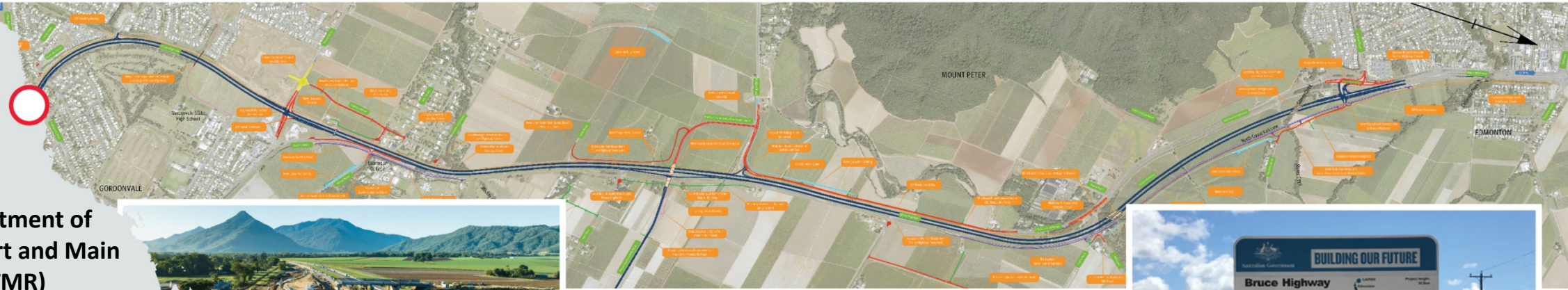
Project Context



["Queensland Globe", State of Queensland](#). Retrieved 14 June 2023. Boundaries: Parks



Cairns Southern Access Corridor Stage 3: Edmonton to Gordonvale



Client: The Department of Transport and Main Roads (TMR)

Value: \$535m

Dates: Oct 2019 – August 2023



10 new bridges

10 new bridges (road, rail, pedestrian and shared path)

10.5km duplication

10.5km duplication of Bruce Highway between Edmonton and Gordonvale, south of Cairns



10.5km service roads

10km new service roads to remove local trips from the highway



4.5km rail realignment and upgrade

Realignment & upgrade of 4.5km Queensland Rail North Coast Line

11km cane rail relocation and upgrade

Relocation & upgrade of 11km existing cane rail



11km cycleway shared path

11km of dedicated off-road high-speed cycleway and shared path



4 intersection upgrades

3 signalised intersection upgrades

1 grade separated overpass

Social Sustainability

Integrating with the community

- Local community engagement
- Traditional owners
- Social legacy
- Training and upskilling
- Supporting Schools and youth programs



Social Sustainability

Significant outcomes and achievements

- 79.6% of total contract value spent within local community
- Exceeded social sustainability targets
 - >240% Target total training hours (360,000 Hours)
 - >134% Target for apprentices and new entrants to workforce (65 apprentices employed on project)
 - >150,000 Hours (6.5%) worked by indigenous workers
 - Achieved ~ 95% compliance with managing stakeholder complaints and queries (Key Project KPI)
- Partnered with 3 local schools to support indigenous student programs, mock interviews, work experience days and school based apprenticeships
- Actively engaged with Traditional Owners and achieved significant outcomes to preserve and celebrate cultural heritage



Multi-generational training: William and Canaan Rist both completed training and upskilling supported by the project.



The project collaborated with local schools to facilitate school-based traineeships and apprenticeships on site.



Through gaining work on the project, local owner operators have been able to not only gain valuable skills and experience, but also purchase modern, state of the art machines and seek additional work on the back of their well-deserved reputations



The project logo was designed through a competition held in partnership with the local indigenous School Djarragun College. Zephariah, age 9, won with the "E2G Turtle"

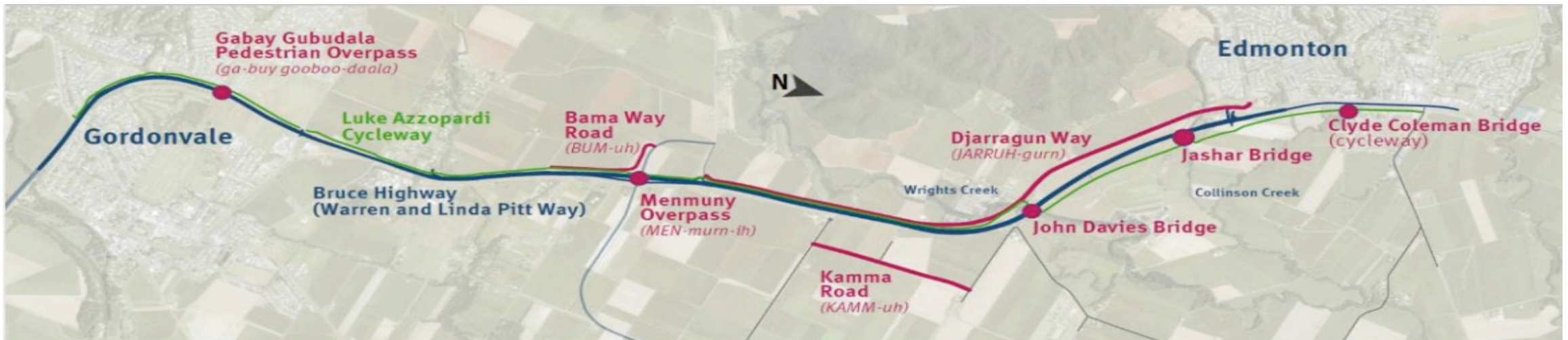
Social Sustainability

Significant outcomes and achievements

- Cultural Heritage outcomes and achievements:
 - Identification & preservation of heritage sites
 - Archaeological discoveries
 - Legacy heritage areas
 - Cultural celebrations & events
 - Heritage trees & infrastructure naming
 - Artwork & history
 - Cultural heritage inductions for 2,653 people



Active engagement throughout construction and events such as NAIDOC week toolboxes fostered broader community engagement and understanding of the local cultural heritage



Challenge 1 – Building a Foundation

- Legacy Concerns from the community that can lead to challenges
 - i. No project operates in a vacuum, and you have to operate in the context of what has happened in the area prior to your project.
 - ii. Other projects in the area also have an impact on the community.
 - iii. Landowners who aren't happy with the project who have connections and influence on the local community (rural project, farming community etc) and were often involved in resumptions during the project delivery.



Contractors working nearby who appear to be associated with your project can have unintended impacts. As an example; clearing of trees your project made efforts not to touch can quickly sour a relationship with a large groups of the community



Vocal stakeholders who aren't happy with the project before you start works, often due to resumptions due to tight corridors, can make it difficult to integrate with the community and make meaningful social impacts.

Challenge 1 – Building a Foundation

- Trust
 - i. Building of trust with local groups (community, business, indigenous community) was the hardest part of project.
 - ii. Without these relationships implementing meaningful sustainability initiatives will be impossible
 - iii. First 12 months was a process to build reputation to facilitate the smooth running for the remainder of the project.

Build trust with stakeholders by keeping commitments such as timings of works and responding to inquiries quickly and personally.



Building trust with the community was a hands-on task, and required demonstrating that the project can keep commitments such as around working hours and keeping stakeholders informed of works

Challenge 2 - Aligning Community Visions with Project Deliverables

- Understanding issues and determining the impact or effect the project could have on those issues
 - i. Spending time with the community to understand their issues and drivers
 - ii. Spending time with the project team to fully understand the project deliverables and negotiables
 - iii. Determine the sweet spot where community expectations and project deliverables align
 - iv. Understanding where the project will have problems in this space as early as possible.
 - v. Determining mitigation strategies for those problems

You will need support from project leadership
(staff and workforce) to achieve anything meaningful



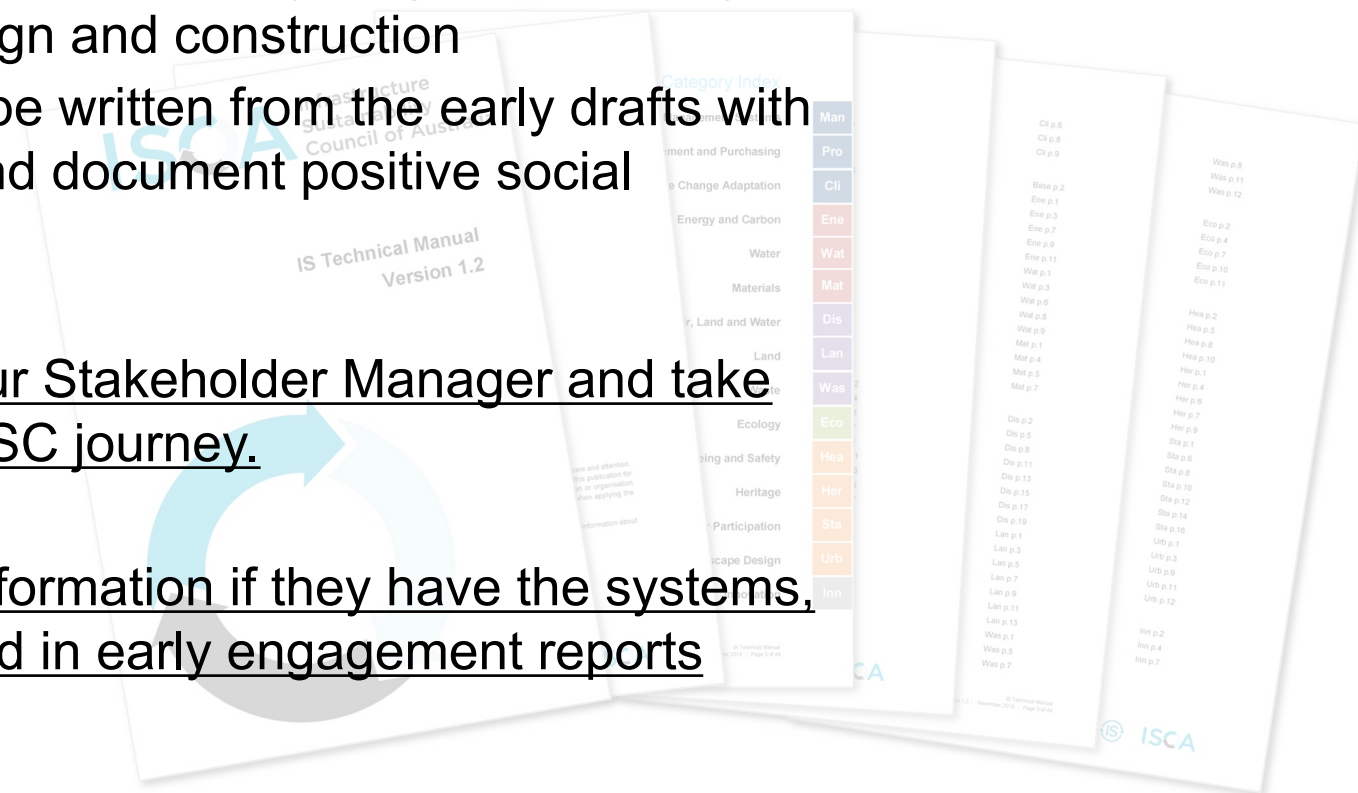
Putting project leadership and stakeholders together to discuss a priority issue is risky but can sometimes be beneficial for both sides to fully understand the situation and find an acceptable outcome

Challenge 3 – “What is ISC and why do I have to do all this extra work?”

- Sustainability professionals will be familiar with ISC, how it works and what is required, the project stakeholder team likely will not and will not have resourced to address ISC requirements.
- STA, HEA and many other credits require stakeholder engagement with a significant amount of research and setup in the early stages of the project and ongoing check-ins throughout design and construction
- Project Stakeholder plans will need to be written from the early drafts with ISC in mind to achieve credit criteria and document positive social outcomes.

As ISAPs you need to influence your Stakeholder Manager and take them on the ISC journey.

Lean on your client for stakeholder information if they have the systems, you'll be surprised what you'll find in early engagement reports



Challenge 4 – “Isn’t that an Enviro Responsibility?”

ITEMS TO FOCUS ON EARLY

Select Sustainability Champions within each team:

- Civils, Structures, Drainage, Public Utilities, Survey, Traffic, Communications, Human Resources, Safety, Environment

Commercial decision making – include an environmental sustainability non-financial in Multi Criteria Assessments (suppliers + subcontractors)

Sustainability takes a team, use your people and build your project systems to help you

SUSTAINABILITY CHAMPIONS

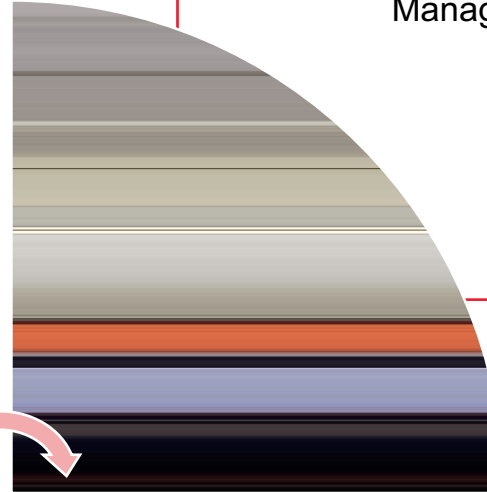


Resourcing – Making it work

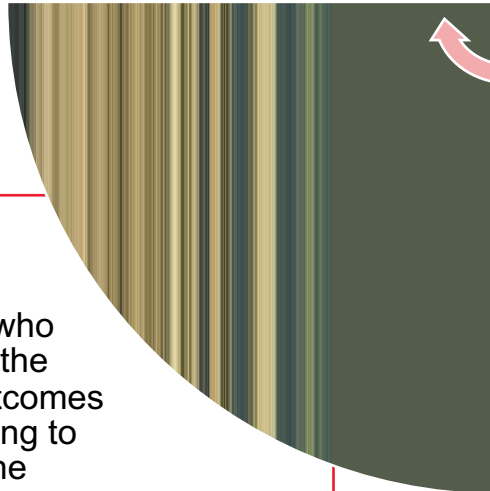
Skilled community engagement expert who operates in the leadership team



Balanced Project Manager



Project Staff who understand the required outcomes and are willing to support in the context of their roles



Considerate General Superintendent



Question & Answer

