Environmental Challenges on the MacKays to Peka Peka Expressway Project

Presentation to the Road Engineering Association
August 2014
Presentation Content

- Project overview and the M2PP Alliance
- Environmental challenges
  - Impacts on the built environment
  - Impacts on the natural environment
  - Cultural considerations and archaeology
  - Stakeholder and community engagement
  - Keeping the team on track
- Construction update

Kapiti Road Overpass
The Alliance
Alliance History

- **Consortium selected**: 2009
- **3 years concept design and consenting (BoI)**
- **High Court Appeal**
- **Construction Alliance formation**: NZTA-Beca-Fletcher-Higgins
- **Pricing**: August 2014
- **Detailed Design**
- **Construction Delivery**
- **Commencement**: September 2013
- **Final Completion**: Early 2017
M2PP - some details

- 18km, 4 lane expressway and cycleway, walkway, bridleway
- $540 million over 3.5 years
- 18 bridges
- 50 culverts
- 3,000,000m³ of earthworks
- A few consents . . .
Resource Consents

Pre-Board of Inquiry
• 12 consents for investigation works
• 1 designation for Otaihanga RA
• 1 consent for Otaihanga RA

Board of Inquiry
• 1 designation
• 29 consents

Other
• 14 HTP/HNZ authorities
• 18 building consents (demolition and temporary works)
• 1 wildlife permit (lizards)

Post Board of Inquiry
• 13 new consents
• 5 change of consent conditions
• 7 alterations to the designation
• 33 on the list to do... and counting...

All up
• > 100 sets of conditions (not including building consents)
M2PP Environmental Management

Alliance Performance - Environmental KPIs

• Being good neighbours: respecting the built environment around us
• Leaving behind something better than we started with: respecting the natural environment
• Minimising our waste: limiting our impacts on the planet
• Environmental innovation: doing things differently to minimise potential adverse impacts, increase positive outcomes and deliver financial benefits.

Environmental Management Resources

• Manager, Advisors and Engineers + technical experts
Environmental Risk Management

Managing our impacts on the environment...

- Residential
- Freshwater fish
- Valued vegetation
- Contaminated land
- Air quality
- Settlement
- Lizards
- Urban
- Contaminated water
- Hazardous Substances
- Sediment discharges
- Surface water
- Wetlands
- Fern birds and pipits
- Groundwater
- Traffic
- Waahi Tapu site
- Archaeology
- Noise and vibration
- Archaeology
- MacKays to Peka Peka: Wellington Northern Corridor
- New Zealand Government
Compliance

- Approx. 3000 consent conditions
- High level Management Plans
- Site Specific Management Plans
- CS-Vue
Erosion and Sediment Control

• ESC Management Plan and SSESCPs
• Design for distinct construction phases
• Working in the flood plain – allow water into the site
• Working in sand – lack of infiltration
• Perimeter controls – bunds and silt fences
• Stabilisation techniques
Dust, Noise & Vibration
<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
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<tbody>
<tr>
<td>Pipit</td>
<td>Kanuka</td>
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<tr>
<td>Drains are still streams!</td>
<td>Common skink</td>
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<tr>
<td>North Island fernbird</td>
<td>Mahoe &amp; forest</td>
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<td>Riparian vegetation</td>
<td>Common gecko</td>
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<tr>
<td>Grey duck</td>
<td>Wetlands</td>
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<tr>
<td>Native fish</td>
<td>Green gecko</td>
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Archaeology

- 14 Authorities
- Archaeologists and Iwi monitoring
- Koiwi finds
- 60 archaeological sites to date have been uncovered during construction and investigated
Waahi tapu area
Stakeholder and Community Engagement

• Working with Iwi, community, neighbours and the media to foster two-way positive community engagement
• Face to face meetings
• NIFs and CLGs
• Coastlands Information Centre
• Website
• eNewsletter Expresslane
• Press releases and local media
• Flyers and letter drops
• 24/7 hotline
• Info@m2pp.co.nz
  Flickr photostream
Waikanae river in flood over the weekend - Great work by the Goodmans crew and others on Saturday coping with the flooding about the Waikanae River. Also very positive feedback from GWRC – all our systems worked as planned.

Al’s not happy – silt fence damaged by a machine, costs time and money and risks our compliance record.

Culvert 34 install making good progress. All of our controls stood up to the weekends weather - no discharge off site!

1: Best practice, 2: minor issue – maintenance required, 3: control constructed or maintained poorly.

Poplar Ave - looking so clean that you wouldn’t mind eating your dinner off it.
Construction progress
Southern Zone
Central Zone
46 – Bulk earthworks almost complete
Northern Zone
What's coming up?
August / September 2014

- Kapiti stone columns
- Otaihanga Road bridge construction
- Vector pipeline
- Paetawa drain bridge
- Pre-load Poplar Avenue
- Waikanae bridge piers north side
- Bulk earthworks Ngarara
- Earthworks Peka Peka