

Transmission Gully Project

A NZ Transport Agency PPP Project



Transmission Gully

Presentation to PMINZ Conference

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Historic Investigations

1919

First known reference

- Interest by local MP reported in Evening Post newspaper

1940's

U.S. Marines stationed at Paekakariki

- Persistent “urban myth” about offer to build Transmission Gully

1980's

MoW/WRC “GATS” Study

- Desktop study - concept route design & cost estimate

1995-96

Designation Process

- Designation established, but resource consents not sought

2004-06

Western Corridor Transportation Study

- Compared alternative strategies (across all travel modes)
- Consultation showed strong public preference for TG
- Western Corridor Plan adopted by RLTC, GWRC & Transit NZ

Project Development

2006-08

Detailed Investigations & Scheme Assessment

- Compared options and determined “Preferred Alignment”

2009-11

Preparation of Consent Applications

- Detailed assessment of environmental effects

2011-12

Board of Inquiry Process

- Hearing of technical evidence and public submissions

2012-14

PPP Contract Procurement

- PPP proposals sought, evaluated and negotiated

July 2014

PPP Contract Let

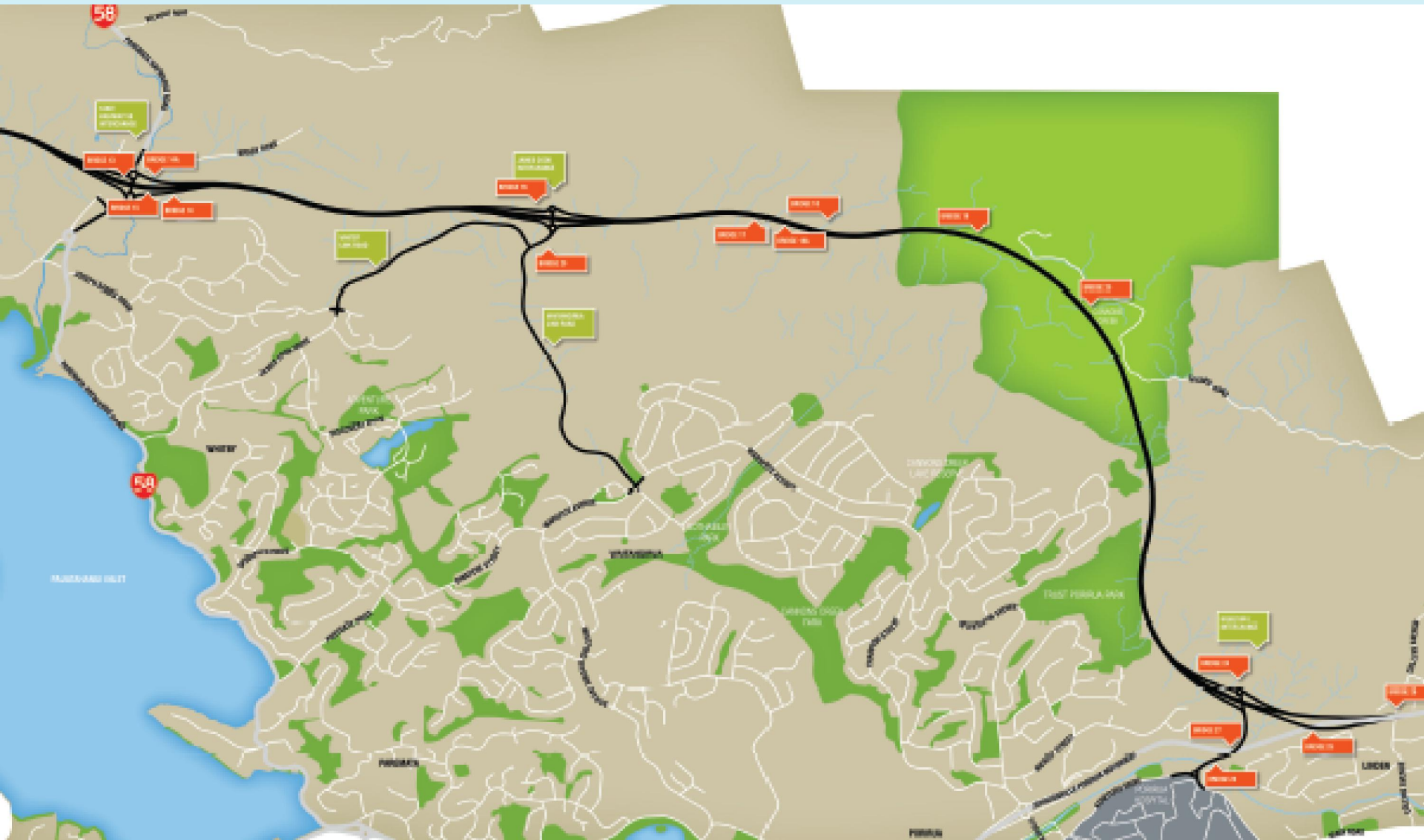
- Design & Construction phase commenced
- Motorway due to open in 2020

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The Route



Key Features

PROJECT SCOPE

- Mackays Crossing to Linden (28km) plus associated link roads
- Minimum of two lanes in each direction
- Extra “crawler lane” on steep uphill sections
- “Motorway” design standards
 - Interchanges rather than intersections
 - 110 km/h design speed
 - 3.0m shoulders
 - Full length median barrier and side protection barriers

The Challenges

MAJOR CONSTRUCTION CHALLENGES

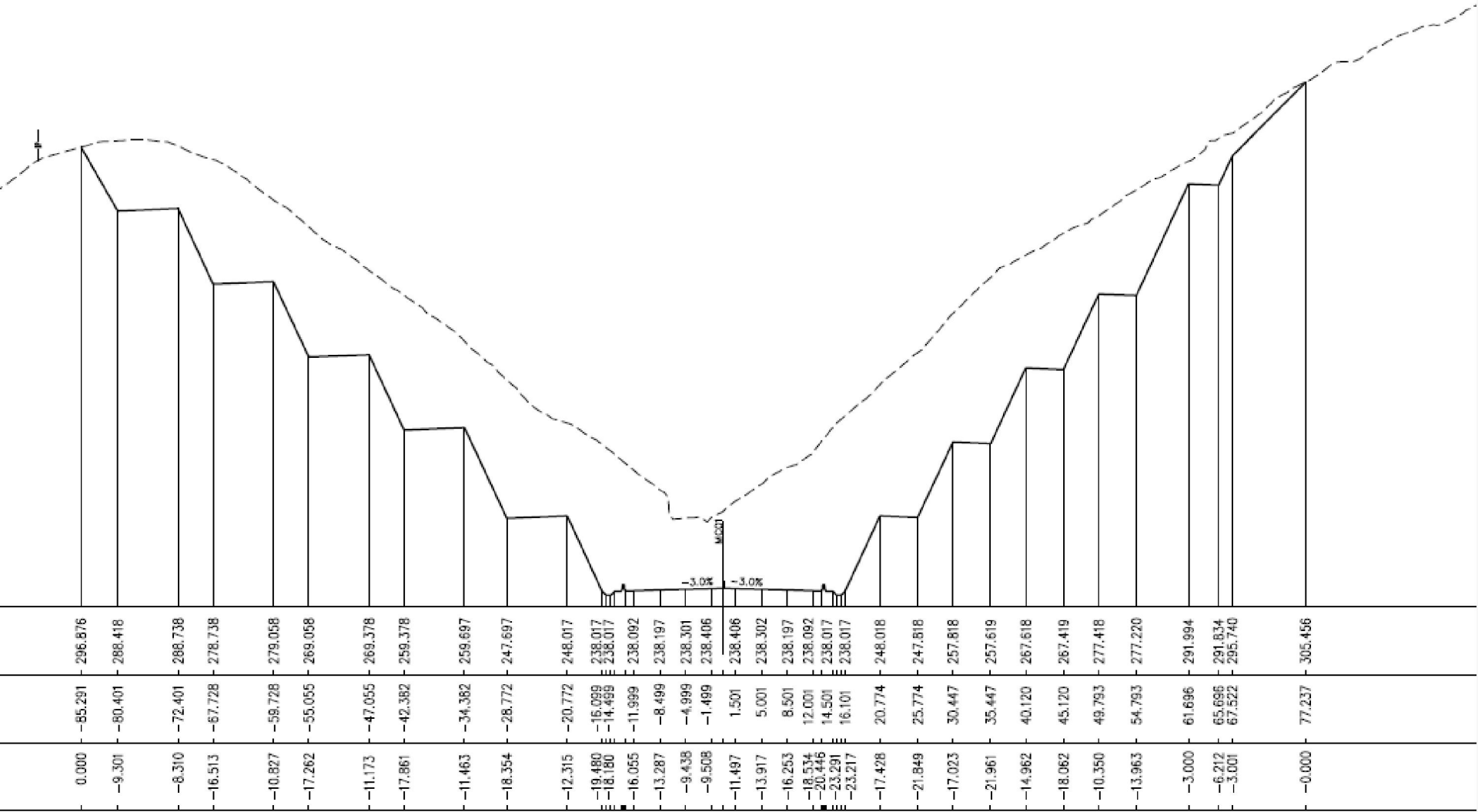
- Scale of the project:
 - Earthworks ~ 8M m³ cut and fill
 - Cut heights up to ~ 70 m
 - Significant lengths of reinforced soil embankments (~ 4 km), up to 40 - 50 m high
 - 27 bridges and major culverts
 - Takapu Bridge 230m long, ~ 60m high
- Access constraints
- Impact on other Infrastructure:
 - Transpower, First Gas, Wellington Water, Wellington Electricity

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Wainui Saddle Cut



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Public-Private Partnership (PPP)



NZ PPP Model

TREASURY'S PPP DEFINITION

“A long term contract for the delivery of a service, where the provision of the service requires the construction of a new asset, or the enhancement of an existing asset, that is privately financed on a non-recourse basis, and for which full legal ownership is retained by the Crown.”



Transport Agency's PPP Model

PPP MODEL PHILOSOPHY

- Long term contract (30+ years) to design, construct, finance, maintain and operate the project.
- Transfer design, construction and operational risk to PPP consortium, which is incentivised to bring innovative and efficient approaches, including “whole of life” asset management.
- Pay quarterly Unitary Charge for 25–years following road opening, based on availability and performance.

Transport Agency's PPP Model

PPP MODEL OUTCOMES

- PPP model structured to achieve full road availability and delivery of four project outcomes:
 - Safer journeys
 - Reduced travel time;
 - Improved travel time reliability and resilience; and
 - Satisfied customers.

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Progress To Date



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Paekākāriki



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Te Puka Valley



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Wainui Saddle



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Horokiri Valley



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SH58 Interchange



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Takapu Bridge



Kenepuru Link Road and SH1 Southern Connection



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Collins Avenue Bridge



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Any Questions?

FOR MORE INFORMATION SEE:

www.tg.co.nz

FOR PHOTOS AND VIDEOS SEE:

www.nzta.govt.nz/projects/wellington-northern-corridor/transmission-gully-motorway/images-and-videos/



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TRANSMISSION GULLY MOTORWAY

Flythrough - 22 March 2019



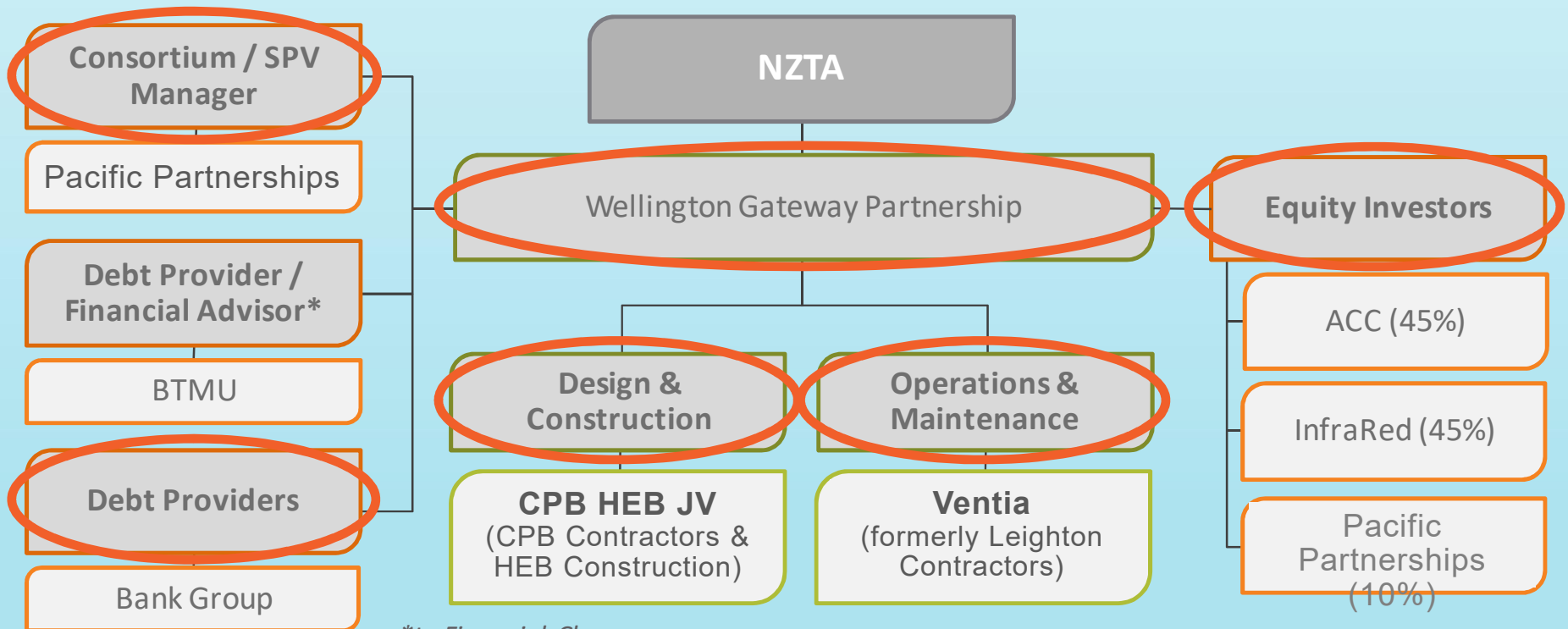
New Zealand Government

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Wellington Gateway Partnership



**to Financial Close*

Quality Assurance

MULTI-FACETED APPROACH TO QUALITY ASSURANCE

- Treasury (formerly SSC) Gateway Review Process
- Contractual “Works Requirements”
- Contractual “Design Review” Process
- Independent Reviewer
- Construction Quality Assurance
- Works Completion Plan & Close-out Plan