



# AGENDA

## City Future Committee Workshop meeting Tuesday, 1 April 2025

I hereby give notice that a City Future Committee Workshop meeting will be held on:

**Date:** Tuesday, 1 April 2025

**Time:** 2:00 pm

**Location:** Tauranga City Council  
Ground Floor Meeting Rooms 1 & 1b  
306 Cameron Road  
Tauranga

*Please note that this meeting will be livestreamed and the recording will be publicly available on Tauranga City Council's website: [www.tauranga.govt.nz](http://www.tauranga.govt.nz).*

**Marty Grenfell**  
Chief Executive



## Order of Business

<b>1</b>	<b>Business.....</b>	<b>4</b>
1.1	Presentation - City Future Committee Meeting - 31 March 2025 .....	4

## 1 BUSINESS

### 1.1 Presentation - City Future Committee Meeting - 31 March 2025

**File Number:** A17839908

**Author:** Anahera Dinsdale, Governance Advisor

**Authoriser:** Clare Sullivan, Team Leader: Governance Services

**Presenter(s):** Chris Barton, Programme Director: Major Projects

### Attachments

1. Presentation - 15th to Welcome Bay - City Future Committee Workshop - 1 April 2025 - A17839292 [↓](#) 



# 15<sup>th</sup> Avenue to Welcome Bay

City Futures Committee Workshop – 1 April 2025



# Agenda

- Project overview and update
- What we are focused on
- What our plans to control these potential risks
- What else are you worried about?
- Proposed next steps



March 2025

*Tauranga City*

## 15<sup>th</sup> Ave Turret to Welcome Bay - Scope

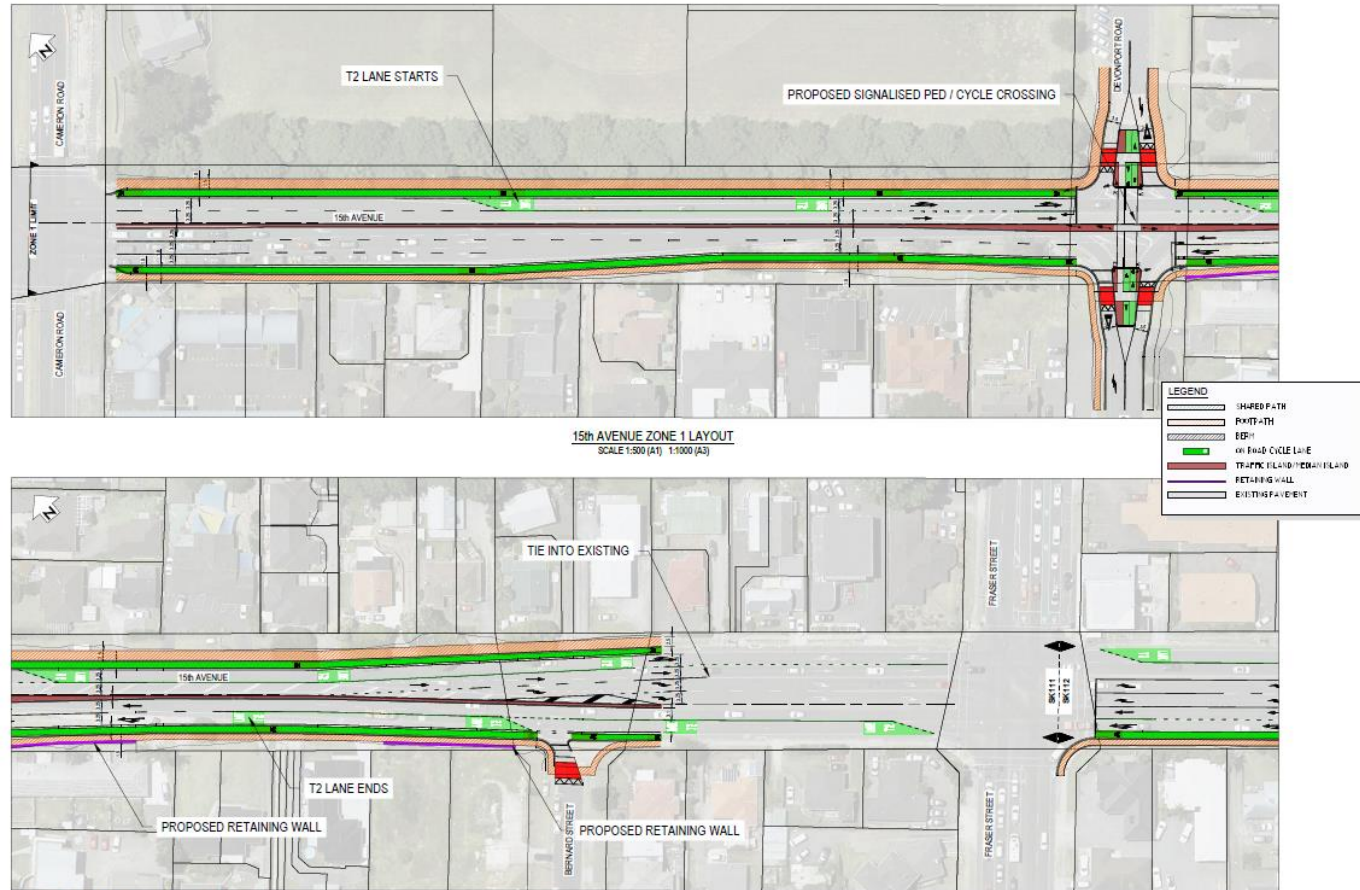
- Completing the four-laning of 15th Avenue between Cameron and Burrows Street.
- Three-laning of Turret Road, the Hairini Bridge and causeway. New 'clip-on' shared path on the existing bridge, to allow the existing bridge deck width to be allocated for three traffic lanes.
- A tidal-flow (dynamic lane) system along Turret Road. Options to utilise for T2 and HOV.
- Services and utilities replacement and upgrades
- Pavement Renewal
- James Cook Dr intersection upgrade





# Concept Design

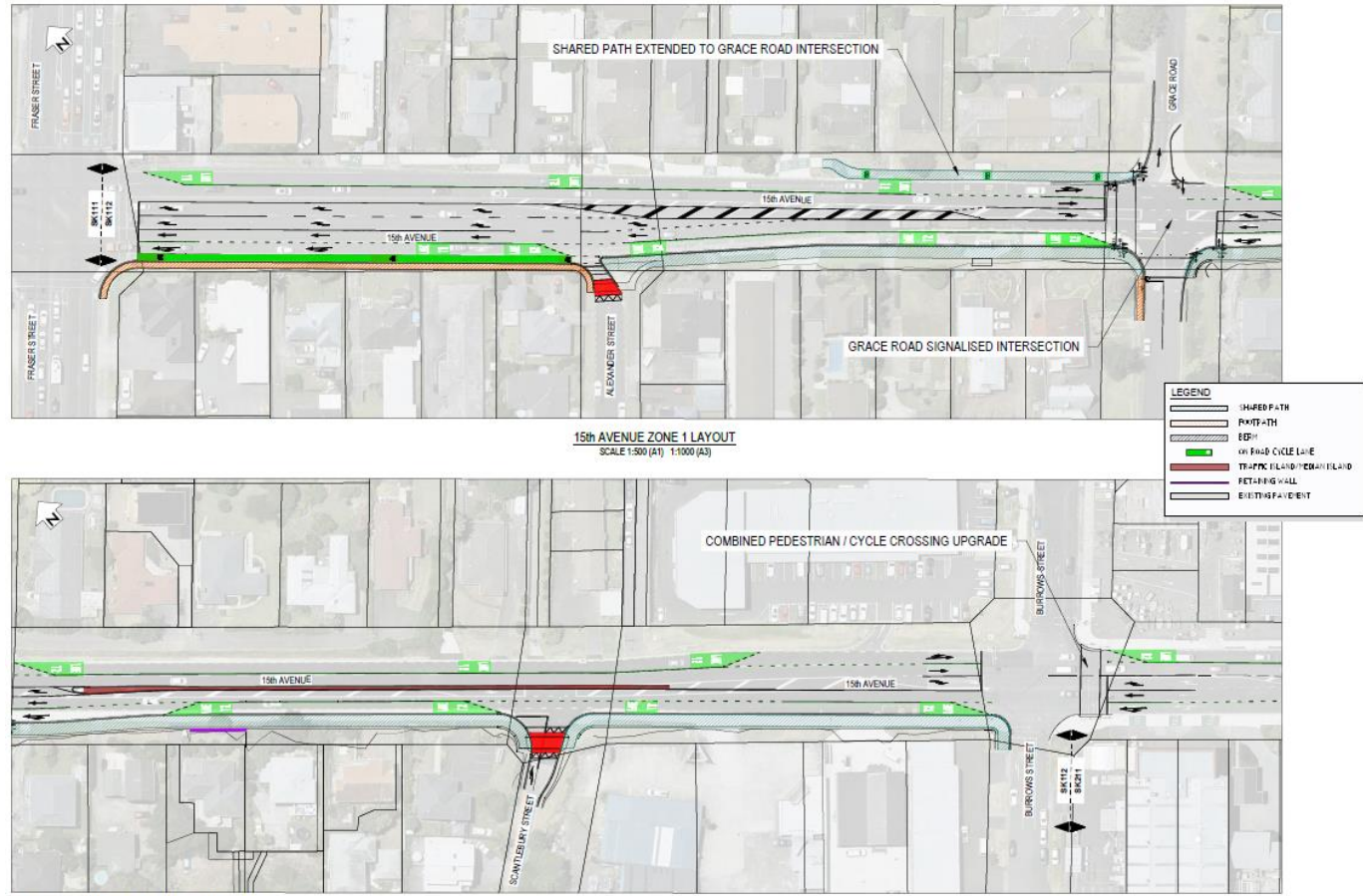
## *Cameron Rd to Fraser St*





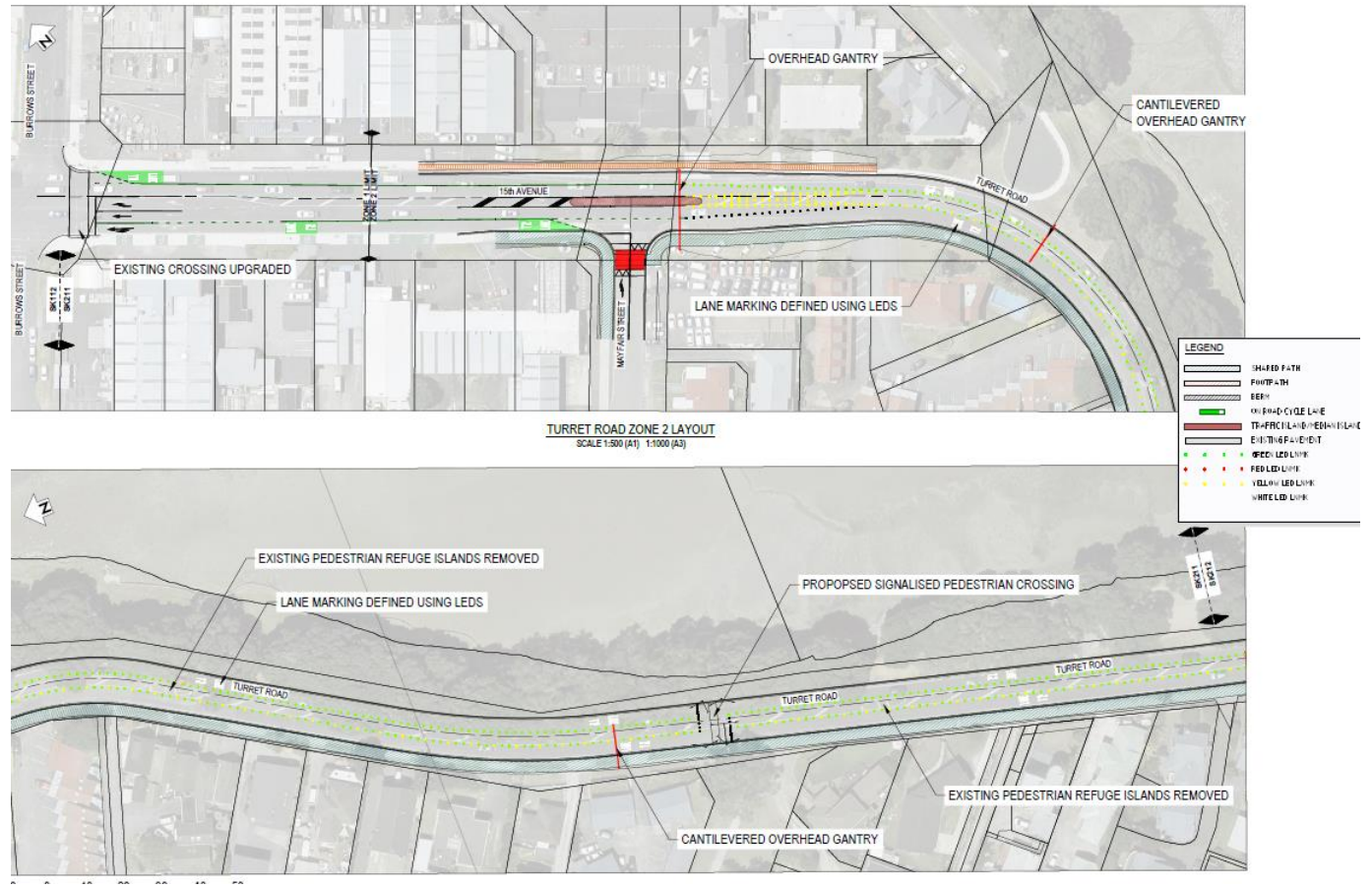
# Concept Design

## Fraser St to Burrows St



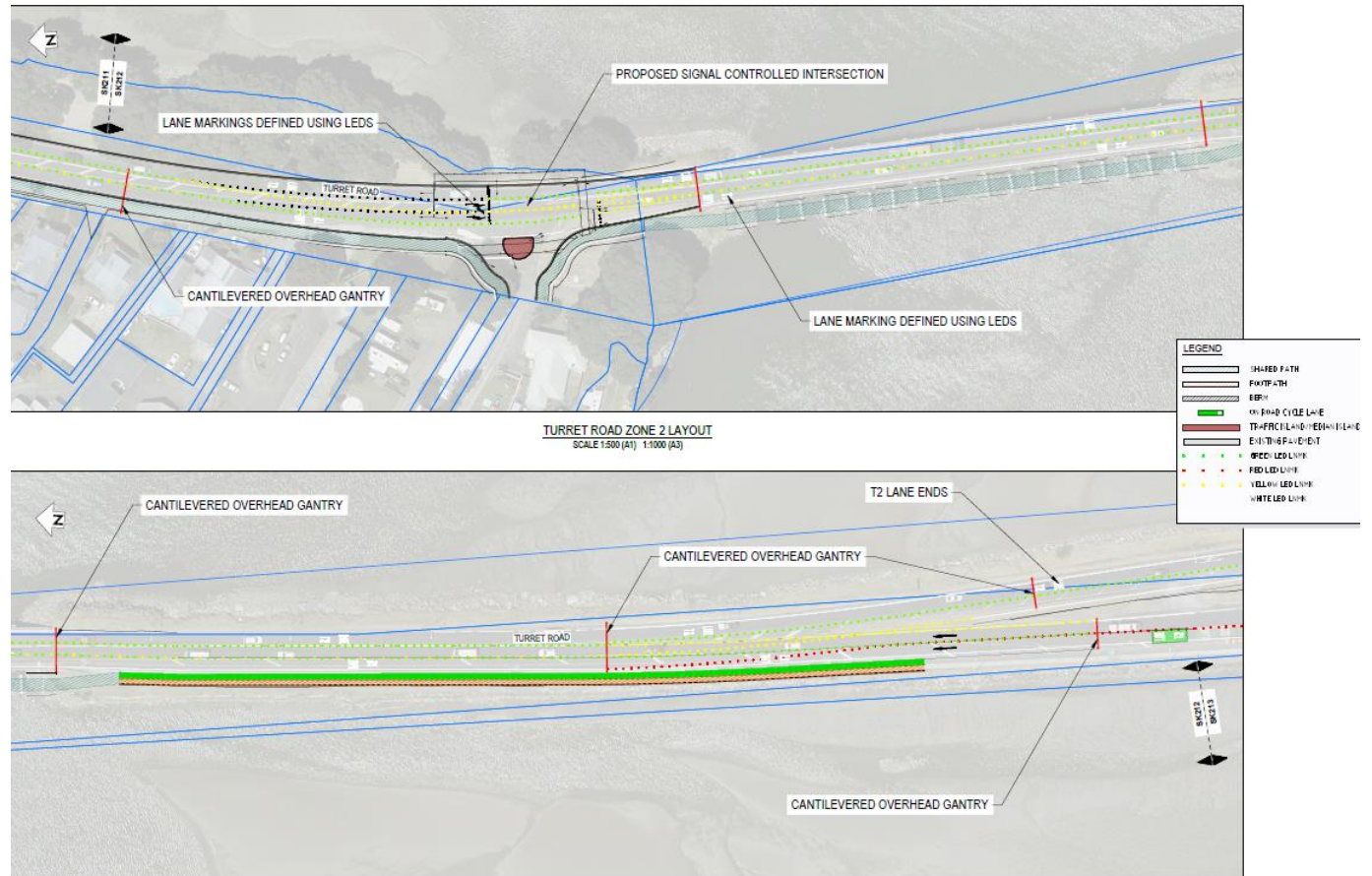
# Concept Design

## *Burrows St to Turret Road and Hairini Bridge*



# Concept Design

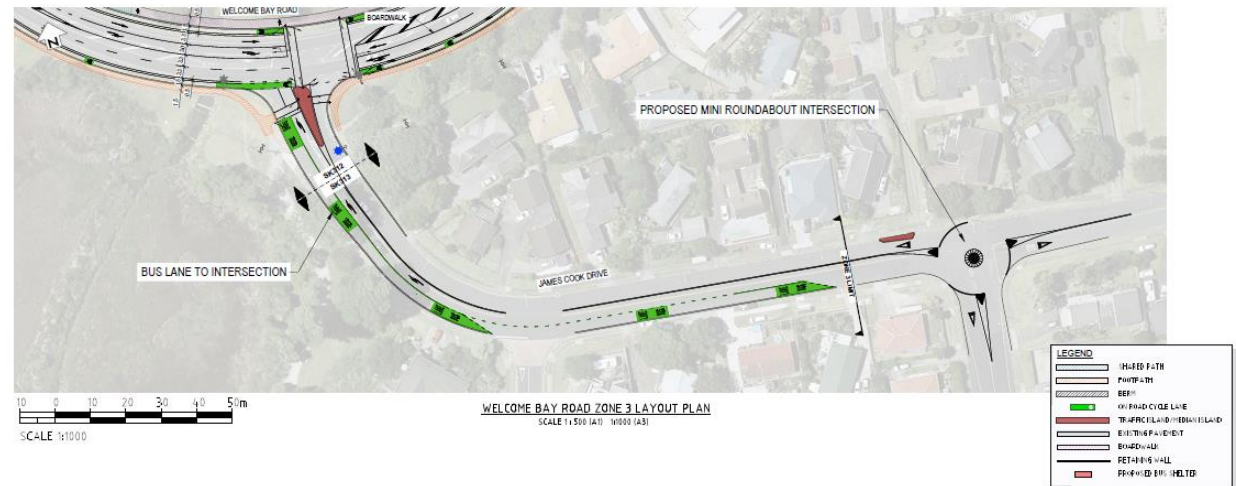
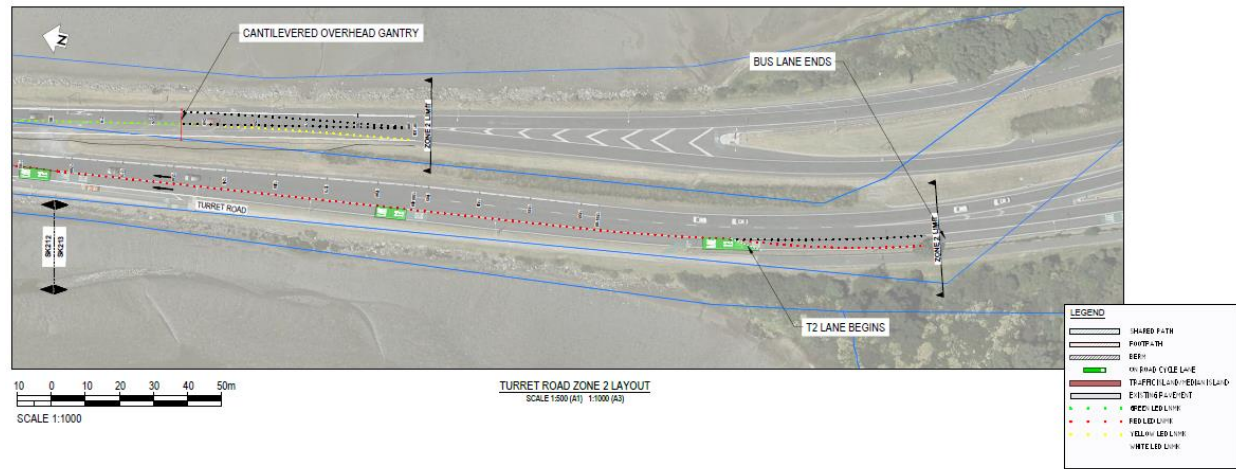
## *Turret Road and Hairini Bridge*





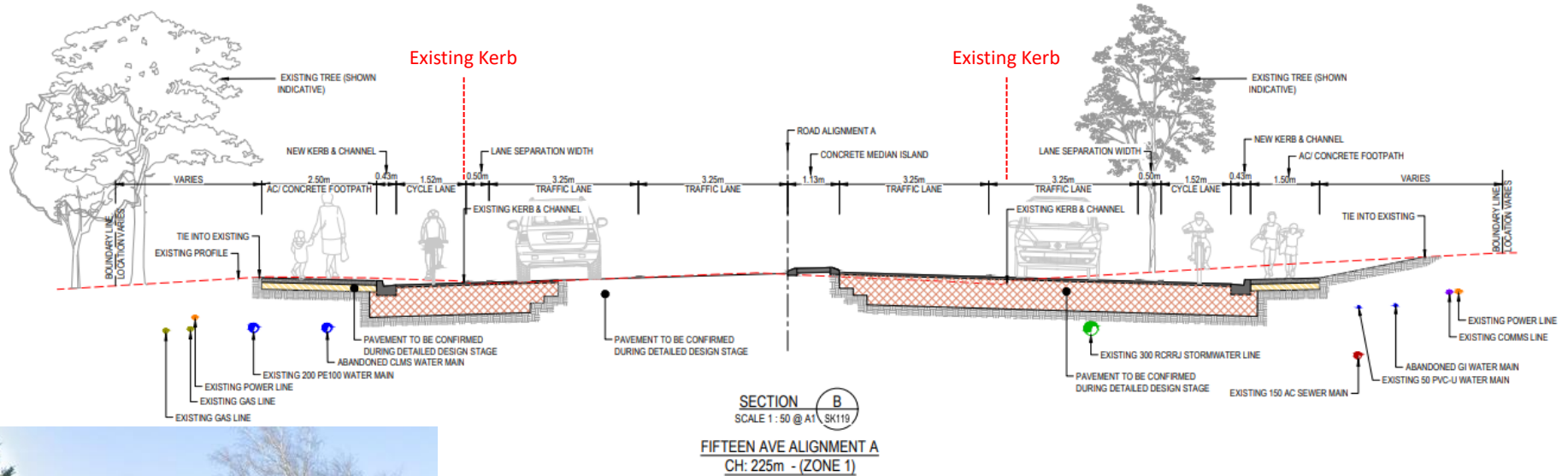
# Concept Design

## Turret Road and James Cook Dr Intersection



# Proposed Cross-Section Fifteenth Avenue

Cross-section Fifteenth Ave beside Devonport Rd including services and pavement



Fifteenth Avenue currently between Cameron Rd and Devonport Rd

# Proposed Cross-section Hairini Bridge 3lanes + shared path clip-on

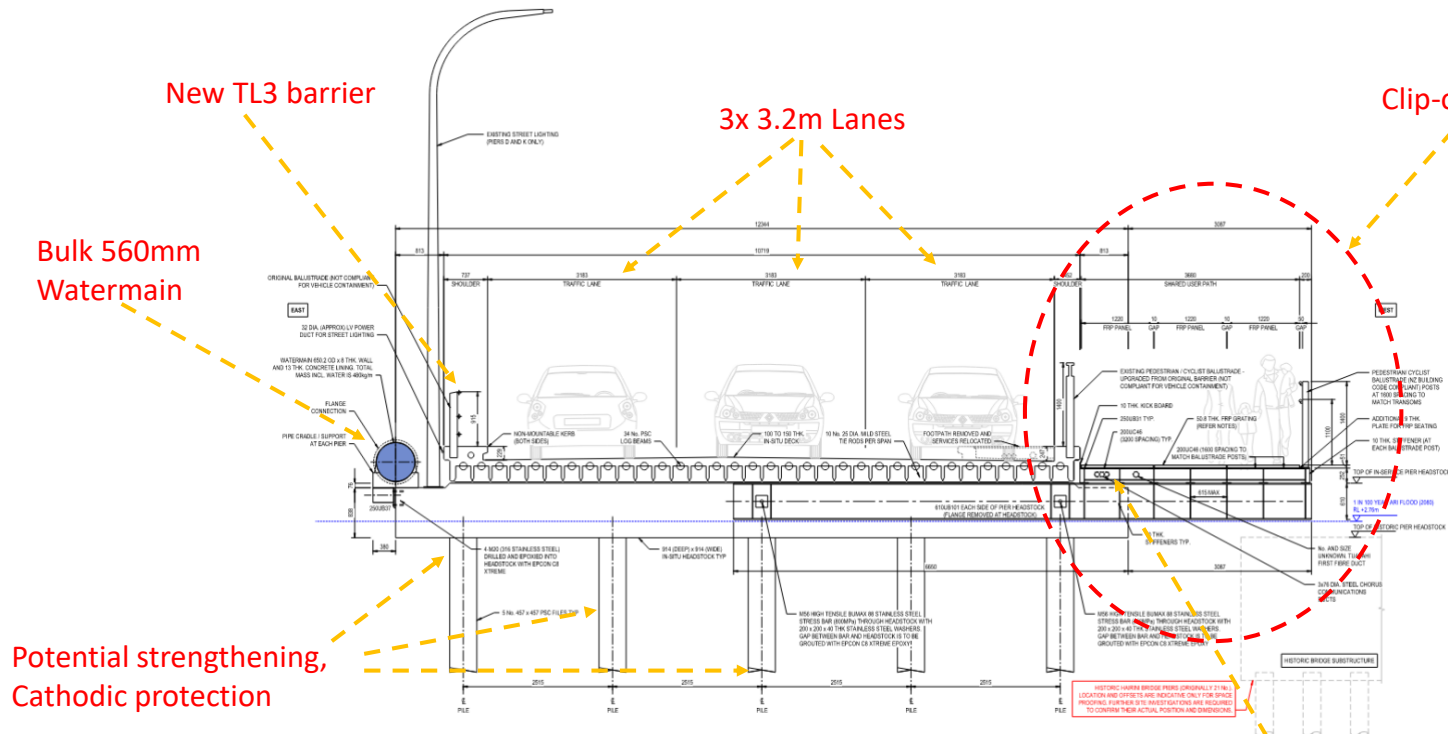


Figure 12 SUP Option 1 – Typical Elevation

Hairini Bridge profile



Concept of clip-on construction



# Cost Estimate & Key Risks

## Financials

For the Fifteenth Ave to Welcome Bay project the current total cost estimate range is:

- Base Estimate - \$100m
- P50 Expected Estimate - \$128m
- P95 Estimate - \$169m

## Key Risks

- Hairini Bridge structural and seismic capacity. Go/No-Go gate or potential requirement for additional strengthening.
- NZTA implementation funding approval gate
- Balancing construction disruption vs delivery efficiency
- Stakeholder and public buy-in
- Utilities alterations, site constraints (width) and coordination

Project Estimate - Form C		DBE		
Project Name: 15th Ave to Welcome Bay Hybrid Stage 1(Cameron to SH29A onramps incl Bridge)		Detailed Business Case Estimate		
Item	Description	Base Estimate	Contingency	Funding Risk
A	Nett Project Property Cost	0	0	0
Project Development Phase				
B	Total Project Development	4,000,000	0	
Pre-Implementation Phase				
C	Total Pre-Implementation	7,833,105	2,193,269	2,807,385
Implementation Phase				
Implementation Fees				
- Consultancy Fees		5,091,518		
- Client-Managed Costs		2,741,587		
- Consent Monitoring Fees				
Sub Total Base Implementation Fees		7,833,105	2,741,587	3,701,142
Physical Works				
D1	Environmental Compliance	805,895.6		
D2	Earthworks	308,527.1		
D3	Ground Improvements	0.0		
D4	Drainage	4,844,275.1		
D5	Pavement and Surfacing	7,337,009.2		
D5A	Pavement Rehab	8,272,283.8		
D6	Bridges / Structures	10,489,494.8		
D7	Retaining Walls	182,231.2		
D8	Traffic Services	5,820,977.9		
D9	Utility Services	2,639,403.0		
D9A	Waters Scope	14,173,998.6		
D10	Landscaping	636,592.5		
D11	Traffic Management and Temporary Works	5,214,109.5		
D12	Preliminary and General	11,082,722.9		
D13	Offsite Overheads and Profit	8,523,524.3		
Sub Total Base Physical Works		80,331,045	23,000,000	35,000,000
D	Total for Implementation Phase	88,164,150	25,741,587	38,701,142
E	Project Base Estimate (A+B+C+D)	99,997,254		
F	Contingency (Assessed / Analysed) (A+B+C+D)		27,934,856	
G	Project Expected Estimate (E+F)		127,932,110	
Nett Project Property Cost Expected Estimate			0	
Project Development Phase Expected Estimate			4,000,000	
Pre-Implementation Phase Expected Estimate			10,026,374	
Implementation Phase Expected Estimate			113,905,737	
H	Funding Risk (Assessed / Analysed) (A+B+C+D)			41,508,527
I	95 <sup>th</sup> Percentile Project Estimate (G+H)			169,440,637





# What are we worried about ?

## Key project challenges:

### 1. Managing Network Disruption During Construction

- There are construction options which will be considered seeking to balance construction time/cost efficiency with network disruption.
- Wider network disruption is a key consideration with mitigation options being considered
- Need to seek and maintain awareness of other works/projects potentially planned in similar timeframe which could impact the network and assess options for delivery staging

### 2. Stakeholder buy-in – maintaining social and community license to operate

- Extensive engagement and communication is planned to support engagement with local residents and businesses (particularly regarding access both during construction and operation phases) and the wider community
- Managing open work faces will be a key consideration

### 3. Bridge structural and seismic capacity

- Structural life of bridge

### 4. Behaviors around operation after opening

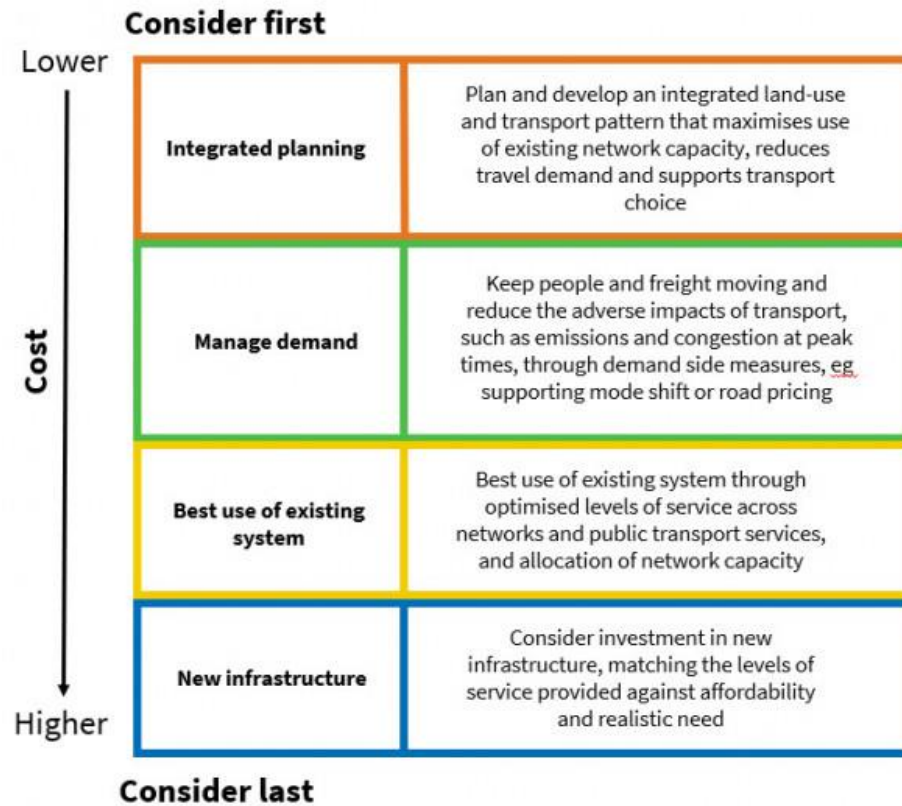
- Particularly for the tidal flow, this will be a new type of operation which will require education

### 5. Affordability

- Staged approval process through hold points and stage gates
- Potential for additional scope requirements (utility relocations / pavement rehabilitation etc)
- Create a value for money and optimisation culture within the delivery team to seek cost efficiency opportunities

### 6. Environmental Effects and Statutory Requirements

# Intervention Hierarchy



# Managing the network through disruption

- What transport network users is this disruption likely to affect
- Managing expectations
  - Traffic modeling
  - Congestion communication
- Traffic Operations Centre
  - Control of traffic signals
  - Incident management
  - *Squeezing the most out of the system*

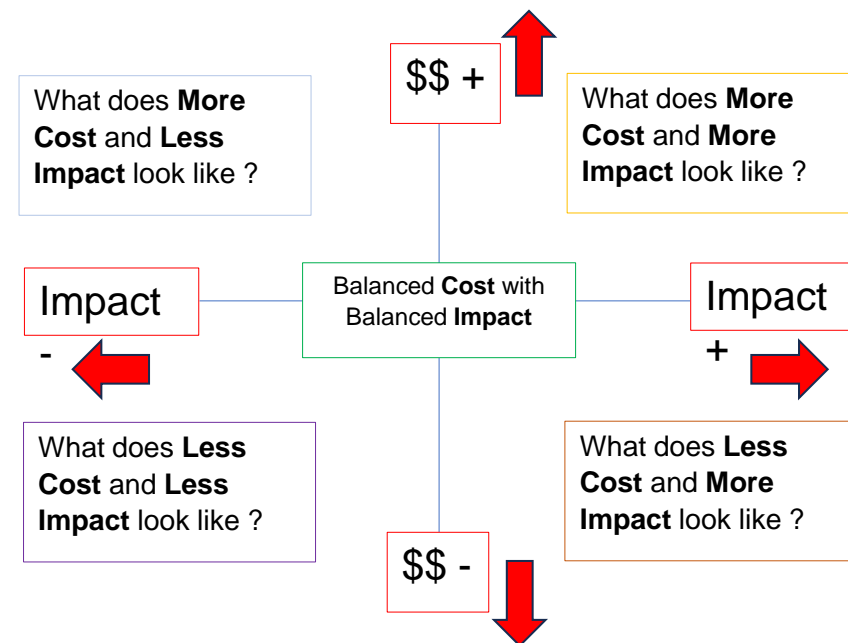
## UFTI Movement Corridors



# Network Disruption – On Route

Construction method dependent, this is the benefit of an Early Contractor Involvement process. Options which will be assessed include:

- Closing sections of the site to through traffic could enable faster and cheaper construction.
- Making use of periods of lower demand for closures (i.e. December/ January)
- Targeted opportunities for night works



# Disruption and Construction Staging Options

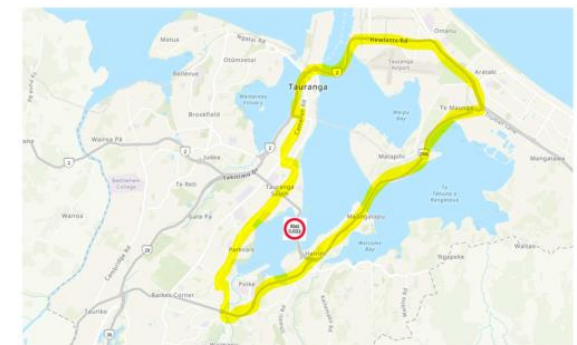
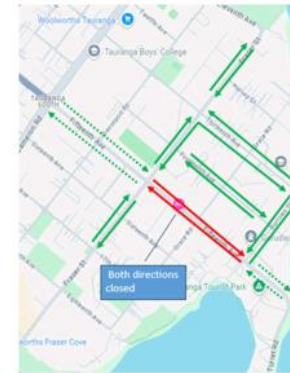
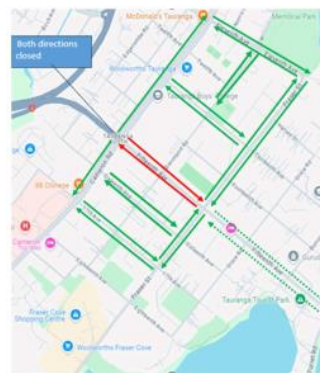


Construction zones and stage areas are to be further assessed.

To be further broken into

- Westbound and Eastbound traffic;
- 1 and 2way traffic;
- link closures (intersection to intersection) with diversions.

- Consider disruption impact of link and adjacent landuse/area vs delivery programme/cost



-Stage 3 -Detours

Link closures and diversion examples from Nov24 Constructability Review.



# Network Disruption – Wider Network

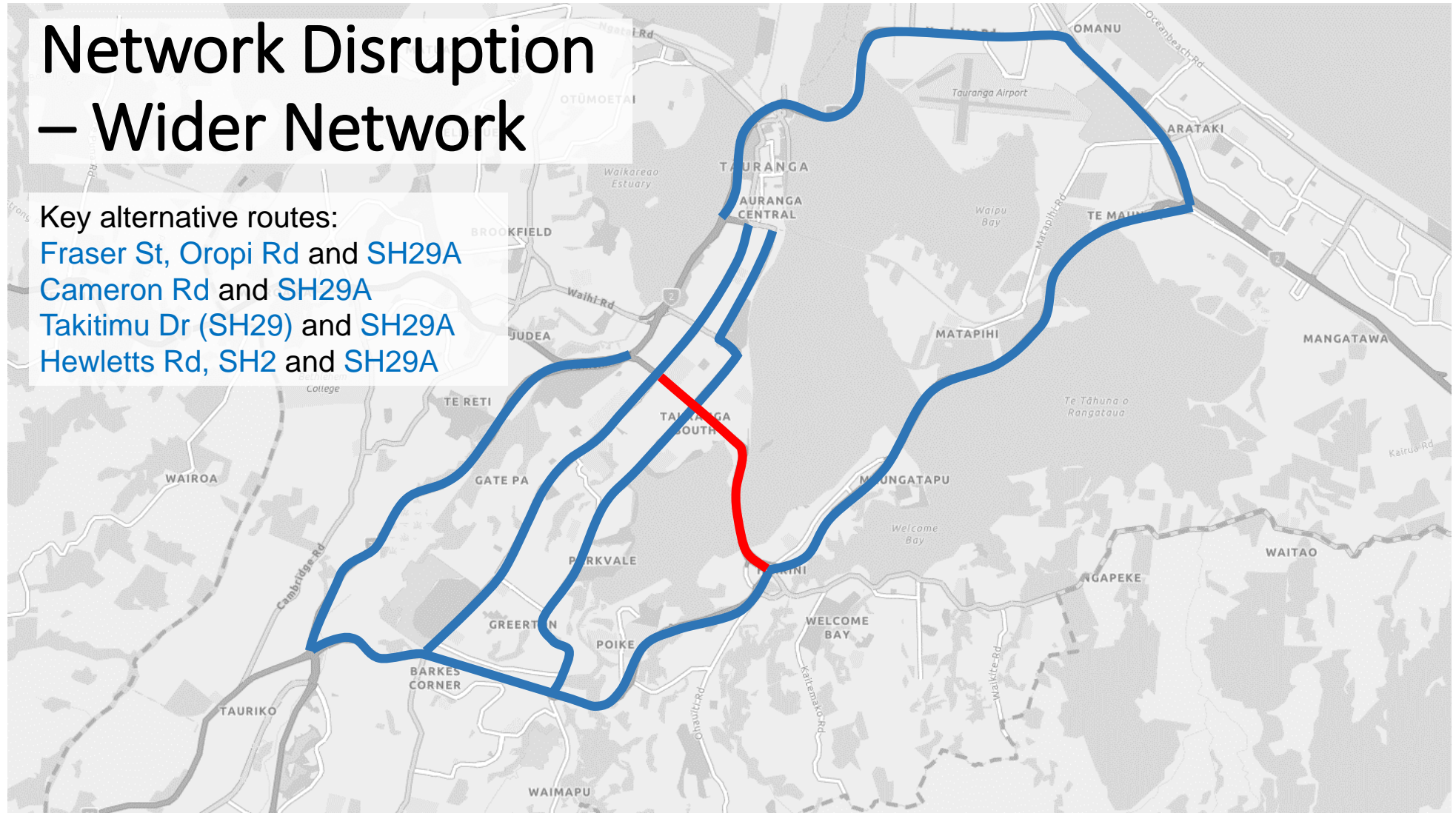
Key alternative routes:

Fraser St, Oropi Rd and SH29A

Cameron Rd and SH29A

Takitimu Dr (SH29) and SH29A

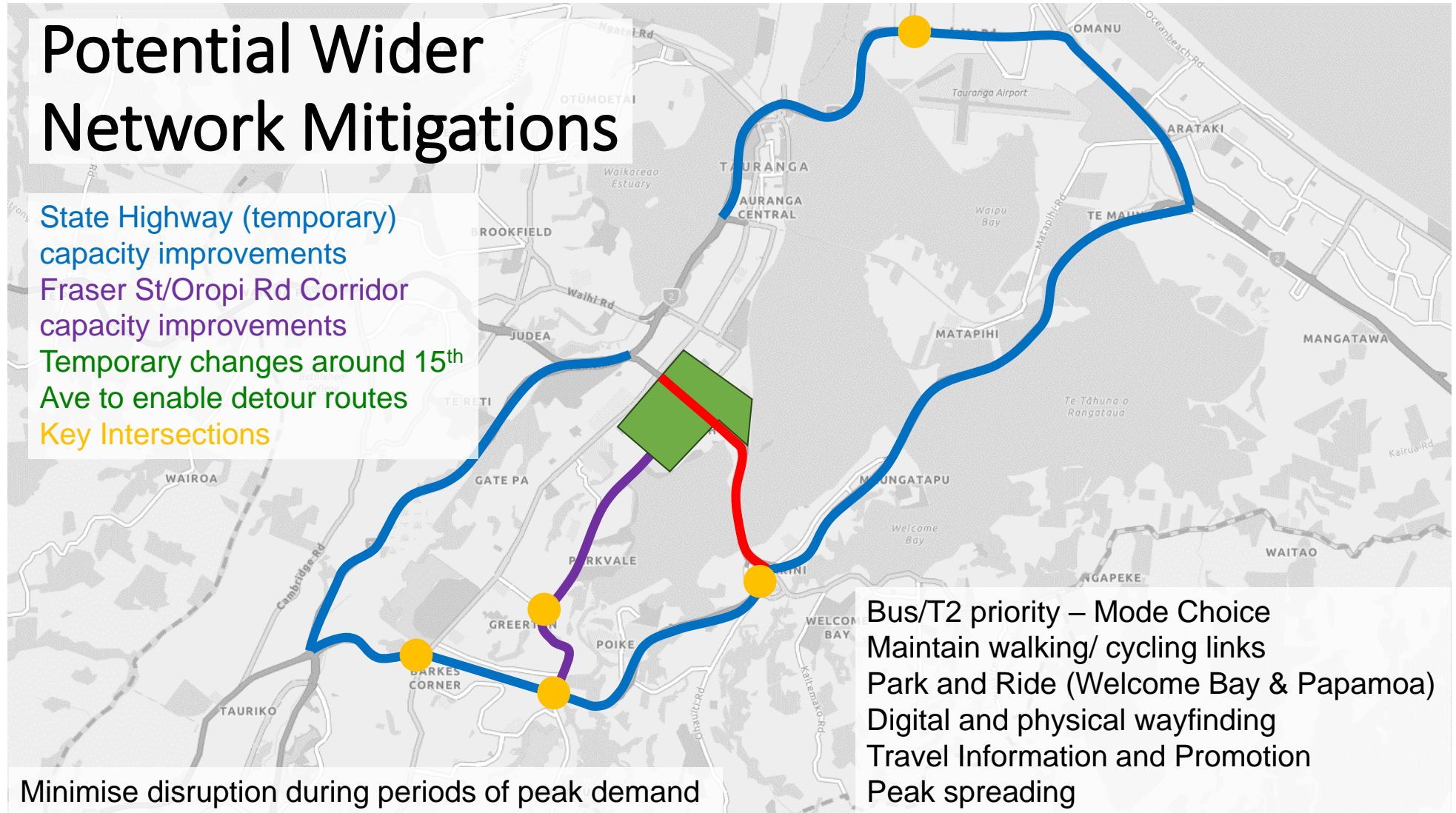
Hewletts Rd, SH2 and SH29A



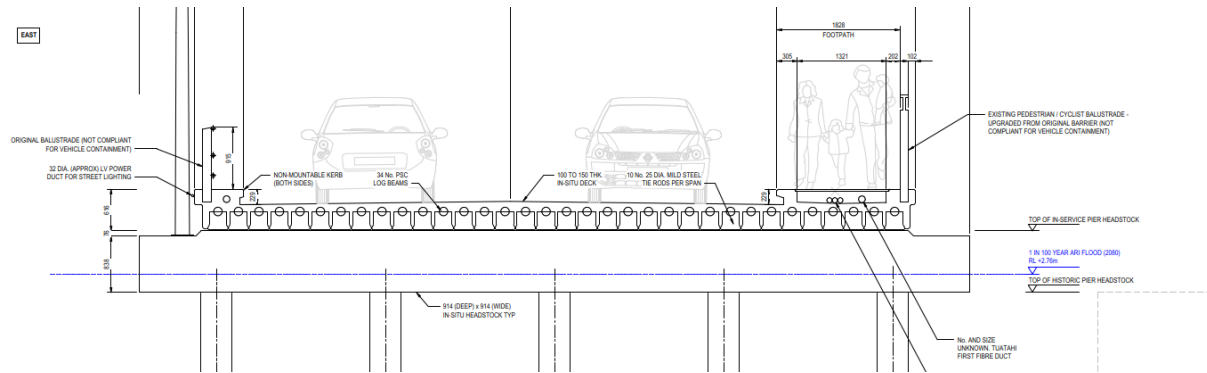


# Network Disruption – Wider Network

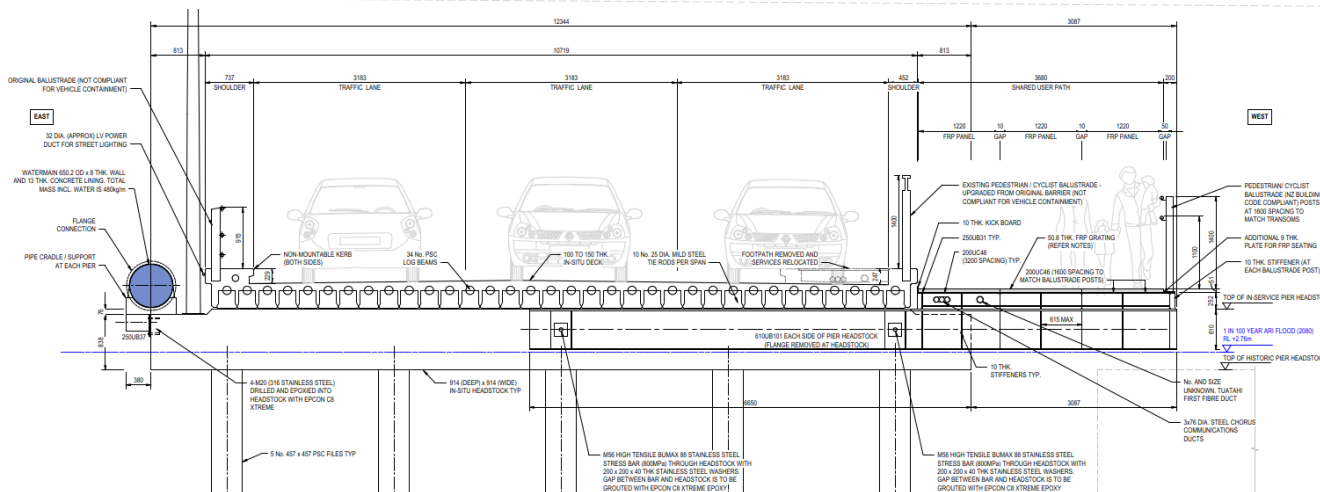
- Additional expected disruption on alternative routes in similar timeframes
  - Fraser St Water Renewals
  - Oropi Road Water Renewals
  - Hewletts Rd 'T3'
  - Tauranga Northern Link (TNL) Stage 1
  - PowerCo upgrades and renewals
  - Land development and building works along the corridors
  - Potential Cameron Road Stage 2



# Hairini Bridge structural and seismic capacity



Existing configuration  
(2 x traffic lanes + footpath)



Proposed configuration  
(3 x traffic lanes + clip-on shared path)

# Hairini Bridge structural and seismic capacity

Existing	Proposed
Pile capacity approx. 100% utilized based on best estimate of capacity	8% additional loading means piles become overstressed. Potential for settlement
Non-compliant barriers for vehicle containment	Insufficient space for fully compliant barriers. New barriers will be better than existing but not comply with bridge manual requirements.
<p><b>1 in 100-year earthquake:</b> Failure of top of abutment piles, likely repairable. <i>(39.5% probability in next 50 years)</i></p> <p><b>1 in 250-year earthquake:</b> Flexural failure of abutment piles, moderate liquefaction and settlement. Repair would be difficult (and possibly not economic). <i>(18.2% probability in next 50 years)</i></p>	<p>Seismic performance will be worse than existing due to additional loading.</p> <p>Current bridge manual requires design for 1 in 1000-year earthquake.</p> <p>If full earthquake strengthening was required indicative estimates of additional costs \$28m-\$40m</p>



# Proposed Mitigations

Risk	Mitigations
8% additional loading means piles become overstressed	<p>Dynamic pile testing and pile scanning to confirm pile capacity and reinforcement.</p> <p>Design development to reduce additional loading as much as possible.</p>
Insufficient space for fully compliant barriers. New barriers will be better than existing but not comply with bridge manual requirements.	ECI to review what can be provided (barrier capacity vs traffic lane widths), agree preferred way forward and prepare departure request.
<p>Seismic performance will be worse than existing due to additional loading.</p> <p>Current bridge manual requires design for 1 in 1000-year earthquake.</p>	<p>ECI to carry out detailed seismic assessment of existing and proposed performance in seismic events as first activity.</p> <p>Work with SME advisors on acceptable level of risk and/or mitigation requirements.</p> <p>TCC to confirm acceptance parameters and building consent sign-off requirements and responsibility</p> <p>Ongoing engagement with NZTA to confirm acceptance of approach to risks.</p>

What else are you worried about – what have we missed ?



# Summary and Next Steps

- Although there are a number of key risks, we are confident that we are setting up the project appropriately to best manage these risks through the next stages of design development
  - Procurement approach will create a collaborative client / contractor / designer relationship, which will also support sharing of risk (rather than all risk sitting with the client)
  - Through design development we anticipate options will emerge including trade-offs (traffic management methodologies or scope options etc) which we will seek direction from Council on. Prompt decision making will be important to support design and construction planning.
  - Further assessment will progress regarding wider transport network mitigation options
  - Through procurement and delivery we will continue to reinforce our key project drivers:
    - to minimise disruption; and
    - providing value for money to TCC.





