

# RiverLink...

## WHAT WE ARE TRYING TO ACHIEVE



Greater Wellington Regional Council (GWRC), Hutt City Council (HCC) and the New Zealand Transport Agency (NZTA) are working together to achieve some big improvements for Lower Hutt - the project is called RiverLink.

RiverLink aims to address flood protection, city centre revitalisation and transport objectives.

We are keen to get your feedback to help us progress.

### FLOOD PROTECTION

**CHANNEL WIDTH**  
A wider channel will reduce the risk of flooding.

**CHANNEL CONSTRICTIONS**  
The Melling Bridge restricts flood flows and traps debris being carried by a flood. We are investigating how and when to replace Melling Bridge.

**RESILIENCE**  
New stopbanks would reduce the risk of flooding in Lower Hutt and at the Melling intersection.

### LIFESTYLE MAKING PLACES

**ECONOMIC + SOCIAL NEEDS**  
City centre revitalisation will attract people and investment and boost the city economy.

**IDENTITY**  
Becoming a 'River City' will strengthen identity and the sense of who we are for the people of the Lower Hutt. A new Melling bridge will provide a better 'front door' gateway into the city.

### TRANSPORT

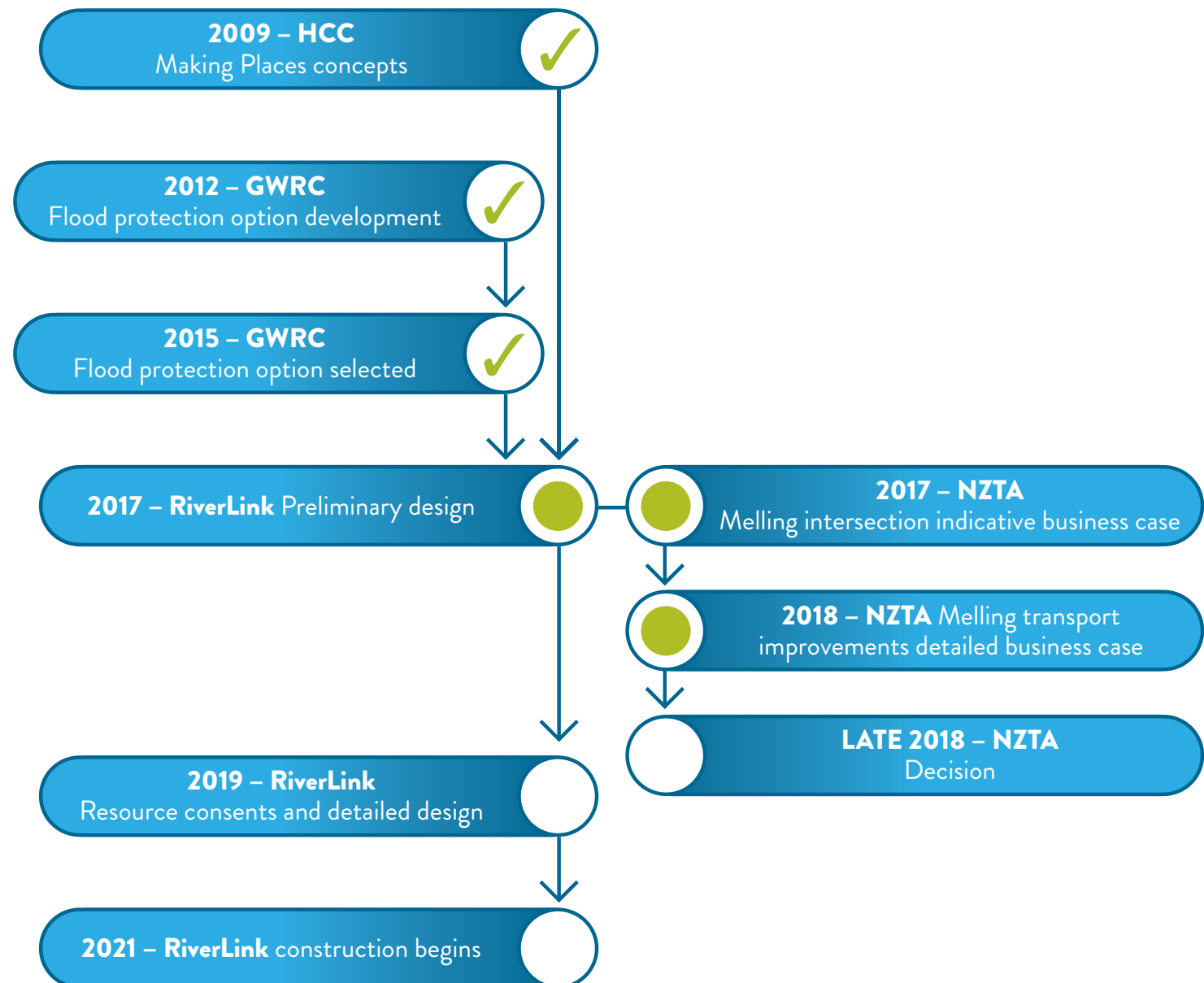
**SAFETY**  
We aim to make the intersection safer for motorists, cyclists and pedestrians.

**RELIABILITY**  
A new interchange and river bridge will reduce congestion and delay during peak travel periods.

**TRANSPORT CHOICE**  
We are seeking to improve access for pedestrians, cyclists and those using public transport.

### TIMELINE

GWRC, HCC and NZTA continue to align design and implementation programmes within the RiverLink framework.



# Give us your feedback on Melling transport improvements

The purpose of this engagement is to get your input on three options under consideration for a new Melling interchange and to share our progress on the river corridor design.

We've talked with you about many aspects of RiverLink over the past few years. Your input is helping shape a project that delivers flood protection, urban revitalisation and transport improvements.

## Taking you on the journey...



**2015 RIVERLINK STARTED**  
Community engagement on the RiverLink vision.

**OCT 2015 FLOOD PROTECTION OPTIONS**  
Community engagement about preferred option – agreement to widen the river to provide long-term resilience in the event of flooding.

**OCT 2016 TRANSPORT USER EXPERIENCE**  
Survey of your experience with using SH2/Melling transport system.

**OCT 2016 RIVERLINK DESIGN IDEAS**  
Community engagement about ideas and opportunities to inform design.

**APRIL 2017 ENGAGEMENT AND UPDATE**  
Community engagement about HCC annual plan, location of a new Melling Bridge and an update on river corridor plans.

**NOV 2017 MOVING THE RAILWAY STATION**  
Engaged with rail commuters about location of a new railway station.

**MAY 2018 TRANSPORT IMPROVEMENTS**  
Community engagement on interchange options and sharing river corridor plans.

# How the plans to deliver RiverLink are progressing

## MELLING TRANSPORT IMPROVEMENTS

Our project team has evaluated a range of options to improve transport at Melling. Today we want to share our short list of three options and explain how they were selected. We'll also share the designs of some discarded options and explain why they were not selected.

Things we considered were:

- where to locate a new river bridge and how it connects to Lower Hutt City centre
- pedestrian and cycling safety
- options for connecting Tirohanga Road and Harbour View Road
- fit with flood protection measures
- impacts to the space for the Hutt River
- location of the Melling railway station
- the interchange form (ie diamond, roundabout, etc).

## RIVER CORRIDOR

We considered your comments from various community events as we've progressed the preliminary design for the river corridor. Today we will show how the river corridor design has brought together the flood protection elements and lifestyle components to produce improved resilience and an enhanced environment.

The Hutt City Council has committed funding in its Long Term Plan (LTP) and the Greater Wellington Regional Council have signaled funding in their draft LTP between 2018 and 2028.



*Artist's impression showing how the corridor could look once RiverLink is fully implemented.*

# How you helped design the future Melling experience

The team at RiverLink has asked for your input at various stages of the project to help create a new Melling experience that will better meet your needs for getting around and enjoying your community.

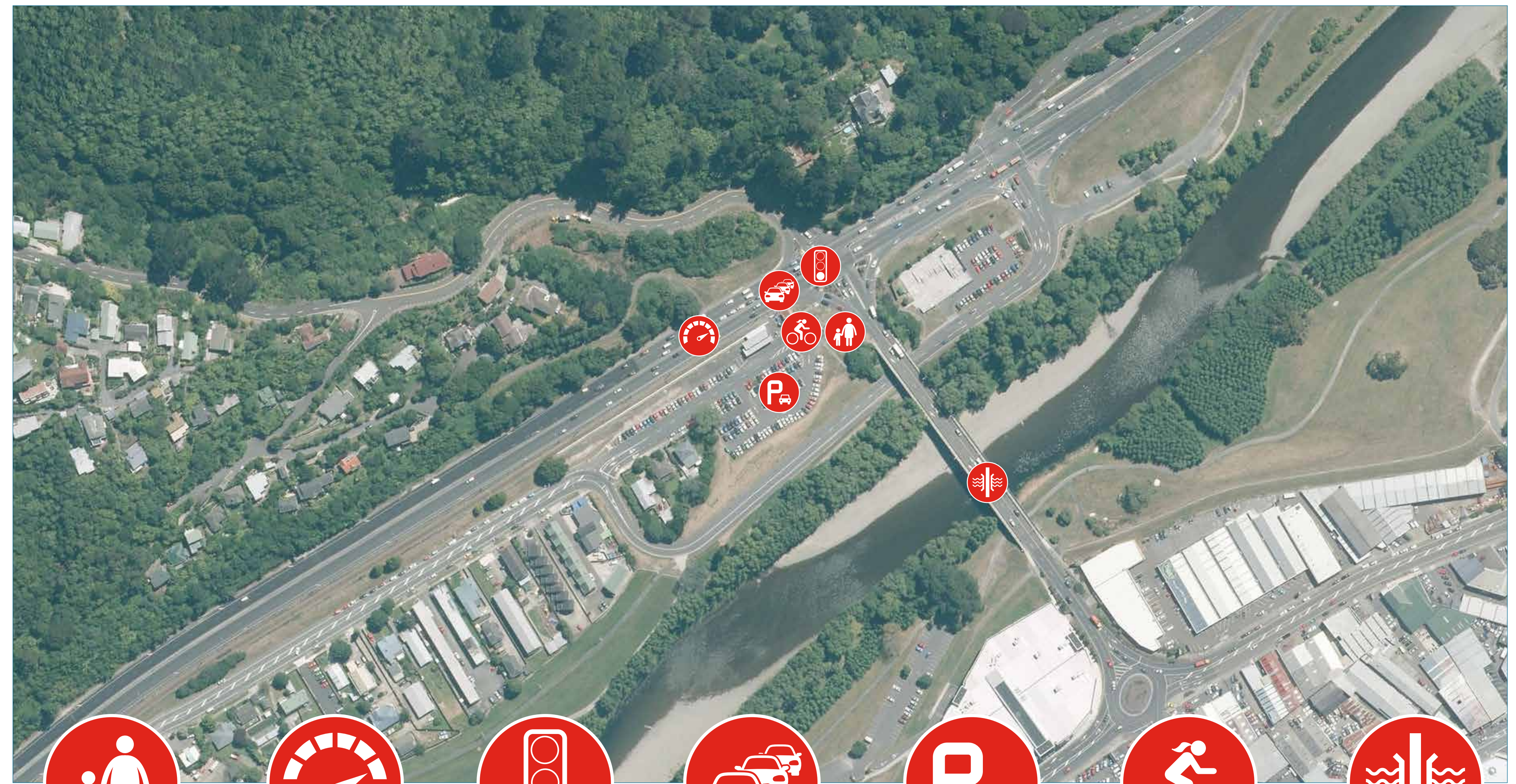
## TALKING WITH YOU ABOUT MELLING

The Transport Agency talked to over 70 people at the Riverbank Saturday market and at Melling railway station and held in-depth face-to-face interviews with local residents and business owners. We asked people about their experience using the Melling intersection and bridge. The word cloud below summarises what people had to say.



## HOW WE'LL ADDRESS YOUR 'PAIN POINTS'

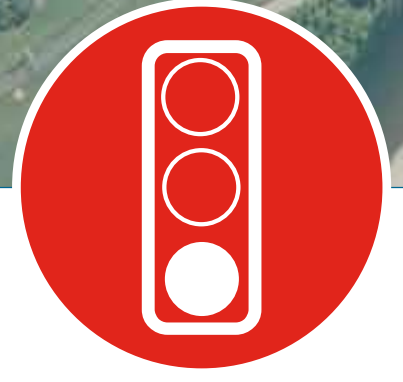
Our interviews clearly teased out the points of pain for those accessing the Melling area. The map below shows these pain points and how the transport improvements will help address them.



**PEDESTRIANS FEEL UNSAFE**  
 Pedestrians will be separated from traffic.



**SPEED OF VEHICLES**  
 Highway traffic will be separated from the interchange traffic so those turning won't be affected by the speed of motorway traffic.



**TRAFFIC SIGNALS**  
 There will no longer be at-grade traffic signals on SH2 at Melling.



**QUEUE FOR RIGHT TURN INTO MELLING LINK**  
 A grade separated interchange eliminates queuing on SH2 through lanes.



**LACK OF PARKING AT MELLING STATION**  
 A new Melling station could have 200 more car parks than the current station.



**POOR CYCLING INFRASTRUCTURE**  
 The new interchange will have better cycling connections and separate facilities for both cyclists and pedestrians.



**BRIDGE IS TOO NARROW**  
 A new bridge at either location will be wider and allow for more traffic lanes. Pedestrians and cyclists will be separated from traffic.

## TALKING WITH YOU ABOUT MOVING THE RAILWAY STATION

To make space for any new interchange at Melling, the railway station needs to be moved. We wanted to learn the best place to put a new station. Your feedback indicated that a new station opposite the planned new cycling/pedestrian bridge is the preferred location. This location provides better access to the planned waterfront promenade, Queensgate and city centre bus stops. You also told us about your safety concerns and the delays you experience when crossing SH2 from the western suburbs. Lack of parking at the current station was also a frequently cited problem. Moving the Melling railway station means that we need to reconsider the service frequency which is also affected by service changes on the Hutt Valley line. Based on what you told us, we'll look at providing more carriages and operating trains later at night and on weekends.

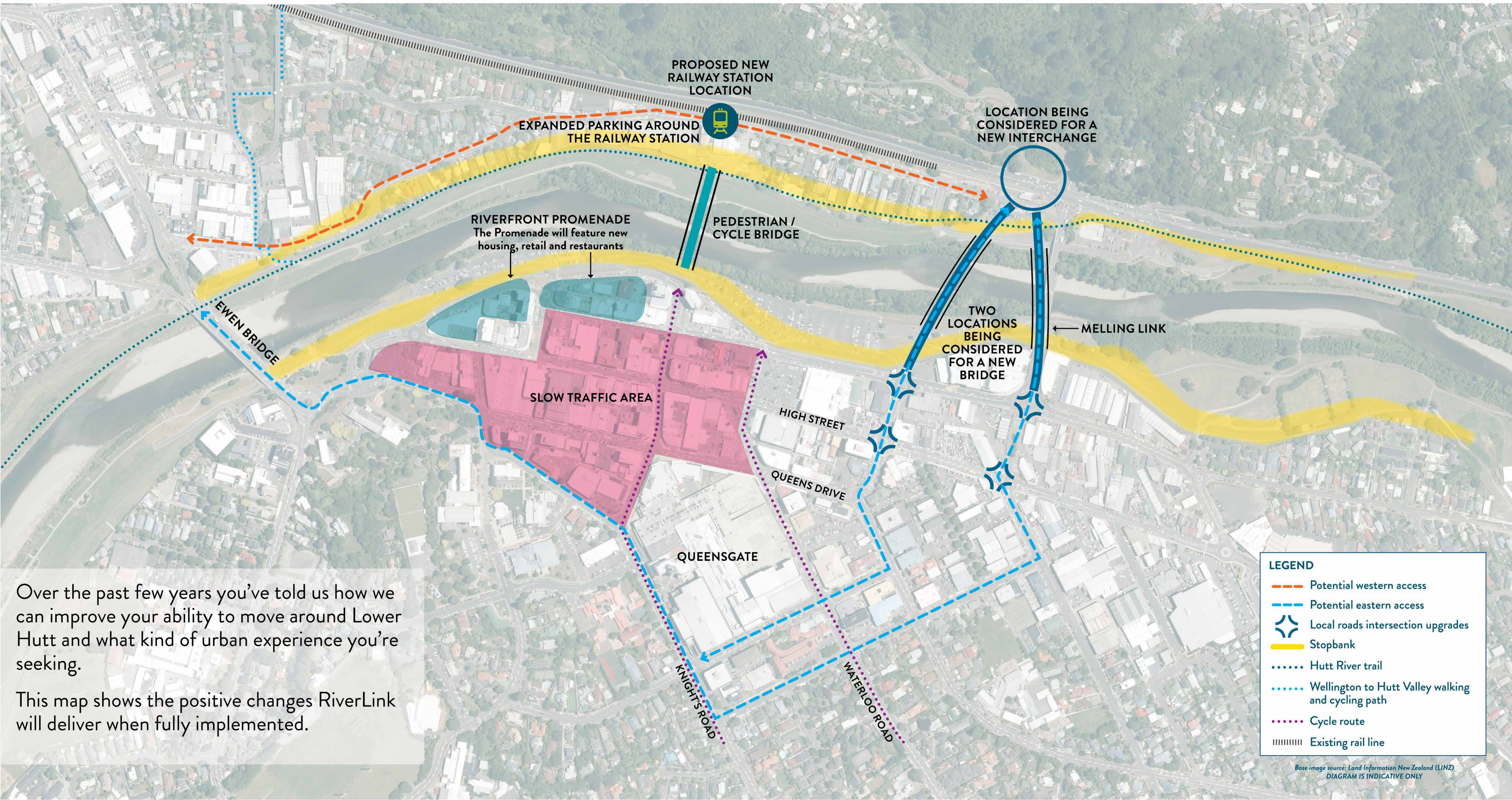
## A NEW STATION CREATES OPPORTUNITY

Our survey of rail users revealed that what they'd like most at a new station are weather protected waiting areas, good pedestrian and cycle access and security measures such as cameras and lighting. The photo below shows what a new Melling rail station might look like.



The recently remodelled Tawa railway station. Photo provided compliments of Paul McCredie, photographer and Novack & Middleton Limited, architects.

# Transport and urban design changes in Lower Hutt



Over the past few years you've told us how we can improve your ability to move around Lower Hutt and what kind of urban experience you're seeking.

This map shows the positive changes RiverLink will deliver when fully implemented.

# Designing the transport improvements

All RiverLink partners were involved in narrowing down the interchange options. Working closely together ensured that implications for the stopbanks and urban renewal were considered alongside the transport effects.

## STAGE 1

From the outset, the RiverLink team wanted to consider as many options as possible. During this stage 43 options for a new interchange at Melling/SH2 were explored, developed and scored against the following criteria:



TRANSPORT - EFFECTS ON CONGESTION, JOURNEY TIMES AND RELIABILITY



OPPORTUNITIES TO INTEGRATE RAIL AND BUS



PEDESTRIANS AND CYCLISTS



RESILIENCE TO FLOODING AND EARTHQUAKES



FIT WITH THE LOCAL ROAD SYSTEM



SAFETY BENEFITS FOR MOTORISTS, CYCLISTS AND PEDESTRIANS



ENGINEERING DIFFICULTY - HOW CHALLENGING IS IT TO BUILD?



URBAN DESIGN OPPORTUNITIES - STRENGTHEN THE CITY CENTRE



STAGING - CAN WE START BUILDING A NEW RIVER BRIDGE BEFORE THE INTERCHANGE?

This process resulted in the following outcomes:

- selection of a grade separated interchange
- a new bridge is needed to achieve flood protection design
- it is necessary to remove the current Melling Bridge and build a new bridge at either Queens Drive or Melling Link
- the rail station needs to move south.

## STAGE 2

At the end of stage 1, the options had been narrowed down to 13. During stage 2 the project team:

- selected a diamond interchange design
- agreed that connecting Tirohanga Road via Harbour View Road was the best option for connecting the western hills.

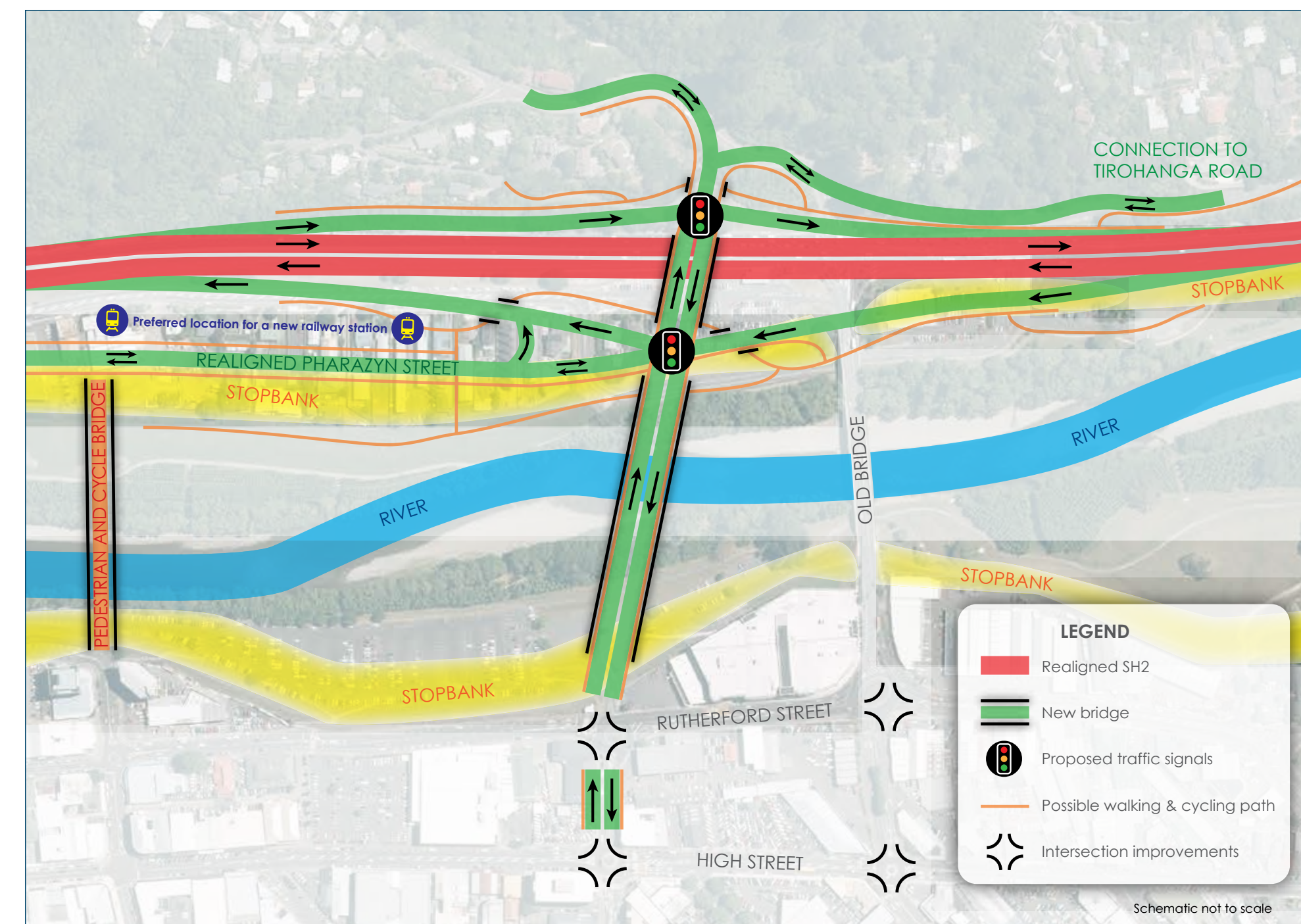
At the end of stage 2, the options were narrowed to three.

# Three options for a new Melling interchange

## HOW THESE OPTIONS ARE THE SAME

The three options now being considered for a new Melling interchange have the following things in common:

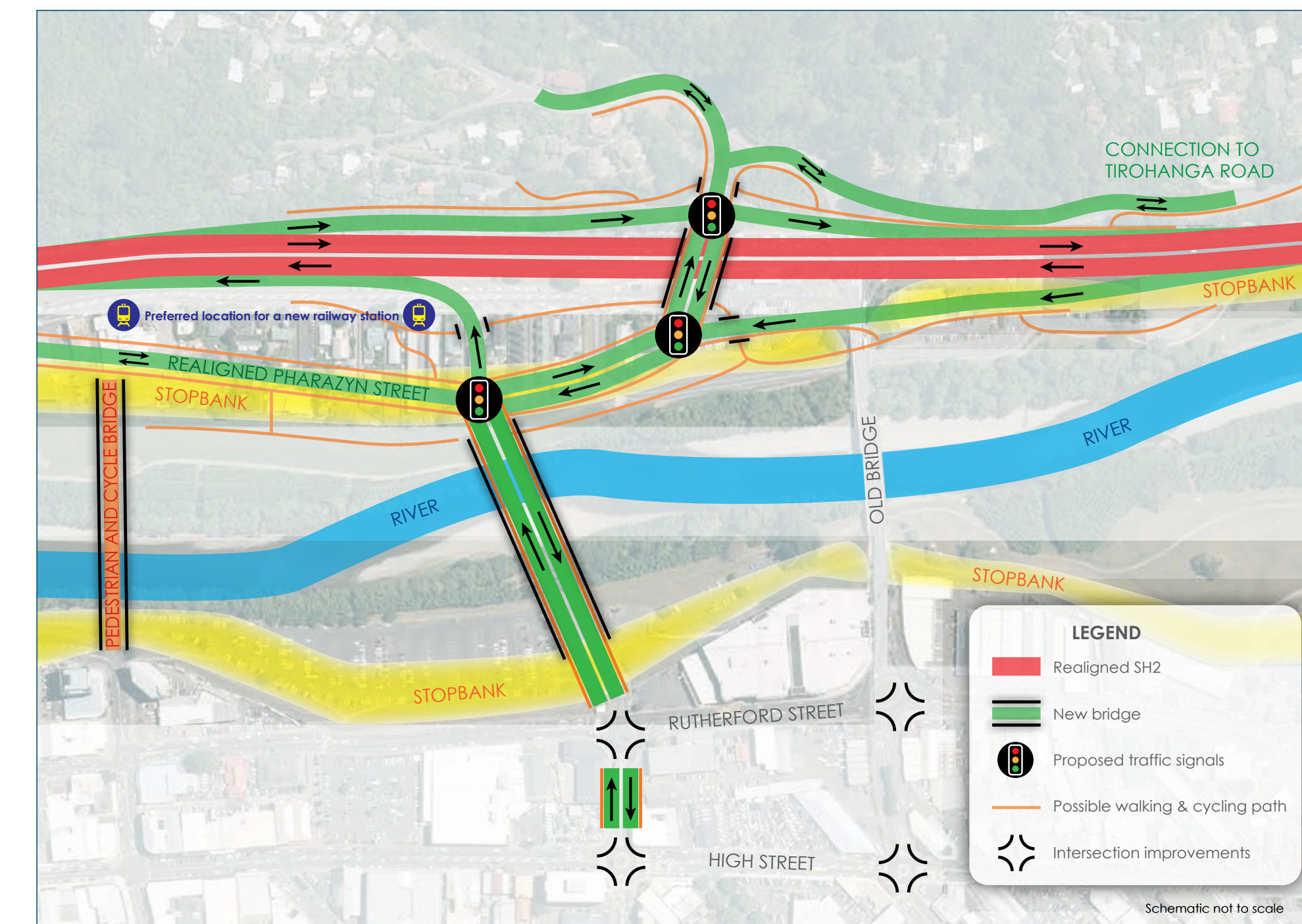
- a grade separated diamond interchange
- a new river bridge
- reduces risk of flooding to the city centre
- reduces traffic congestion
- requires local road improvements
- safer than current intersection
- removes the at-grade traffic signals from SH2
- moves the railway station closer to the city centre and provides better park and ride
- Tirohanga Road connects to Harbour View
- pedestrians and cyclists are separated from traffic
- future proofed for a possible extension of the Melling railway line.



## DIAMOND INTERCHANGE CONNECTING TO QUEENS DRIVE

### HOW THIS OPTION IS DIFFERENT:

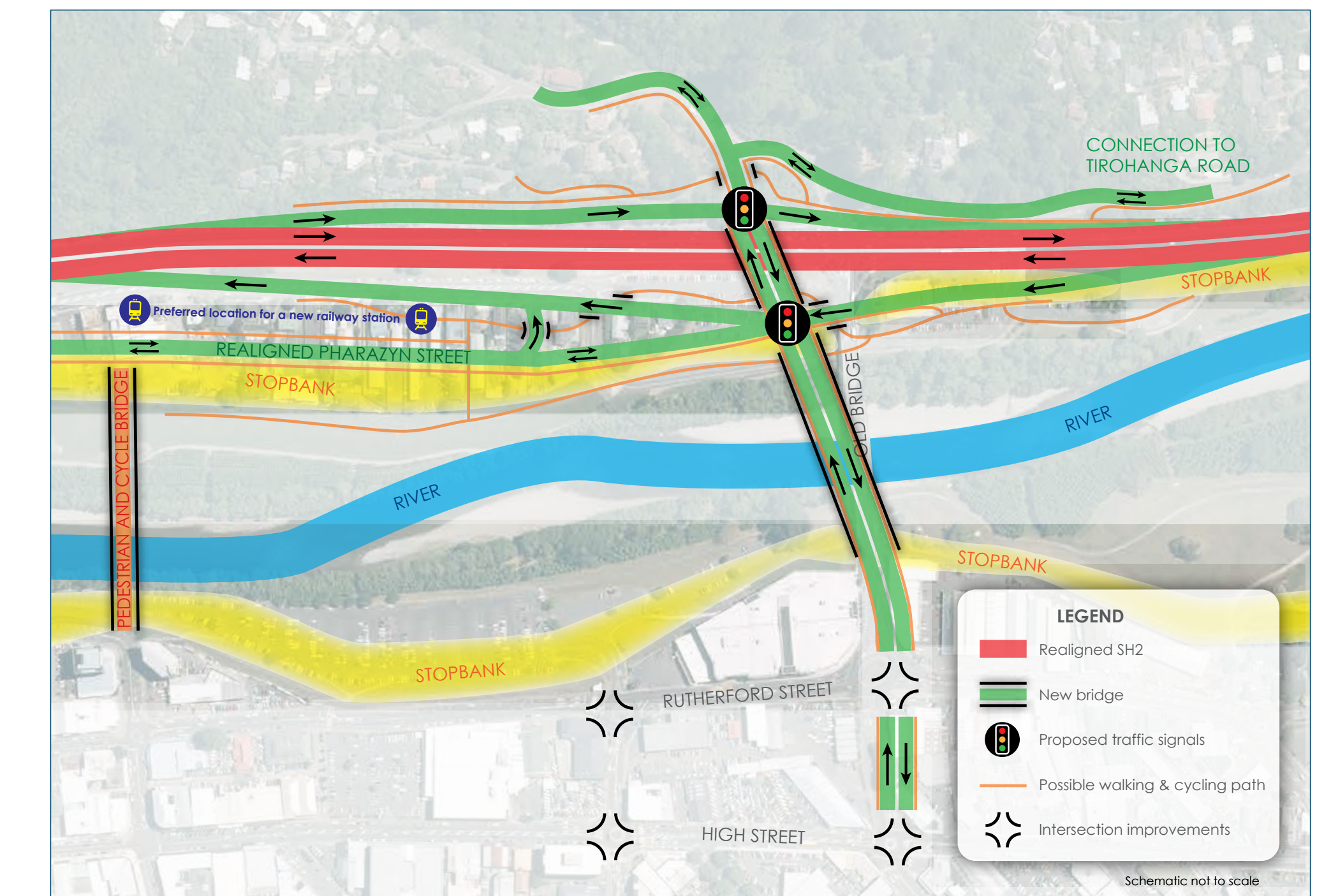
- provides a direct connection onto Queens Drive
- provides good walking and cycling connections into the city centre
- promotes a more compact city centre.



## DIAMOND INTERCHANGE WITH AN INDIRECT CONNECTION TO QUEENS DRIVE

### HOW THIS OPTION IS DIFFERENT:

- has an indirect connection onto Queens Drive
- reduces traffic congestion more than the other option because of the distance between the intersections
- allows more local traffic to avoid the interchange because of the direct connection to Pharazyn.



## DIAMOND INTERCHANGE CONNECTING TO MELLING LINK

### HOW THIS OPTION IS DIFFERENT:

- provides a direct connection into Melling link
- provides good walking and cycling connections into Melling
- reduces the effectiveness of flood prevention work because the bridge will be at the narrowest part of the river
- traffic delays and disruption as the bridge is built around the existing road network.

## KEY DECISIONS

WHERE TO LOCATE A NEW BRIDGE.

DIRECT OR INDIRECT APPROACH TO THE BRIDGE.

# Discarded options

## STAGE 1

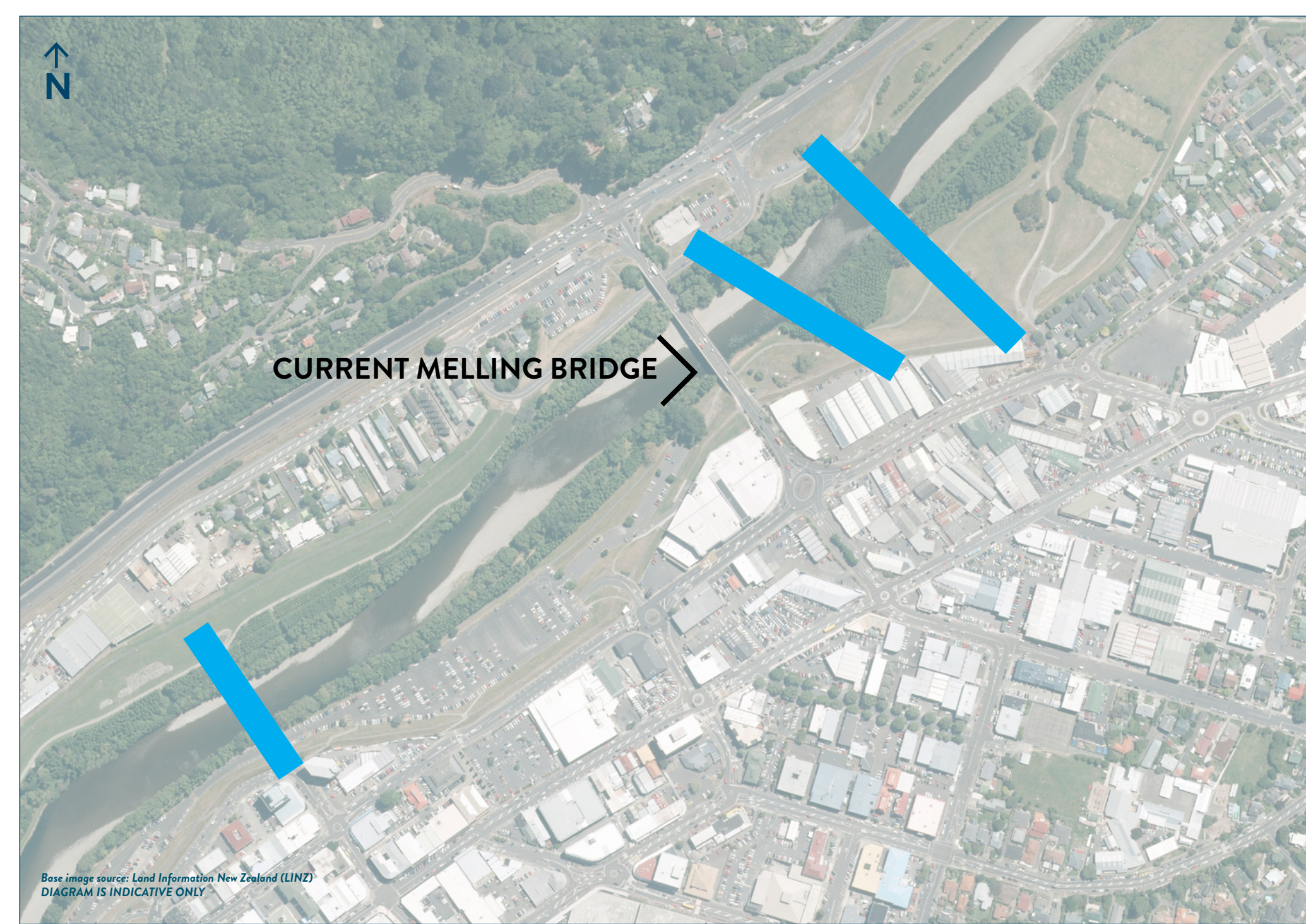
During stage 1 of the design process the team discarded:

- options with bridges north of Melling Link and south of Queens Drive
- options where SH2 goes over the interchange
- at-grade improvements were discarded because they would not solve safety, efficiency and flooding problems.

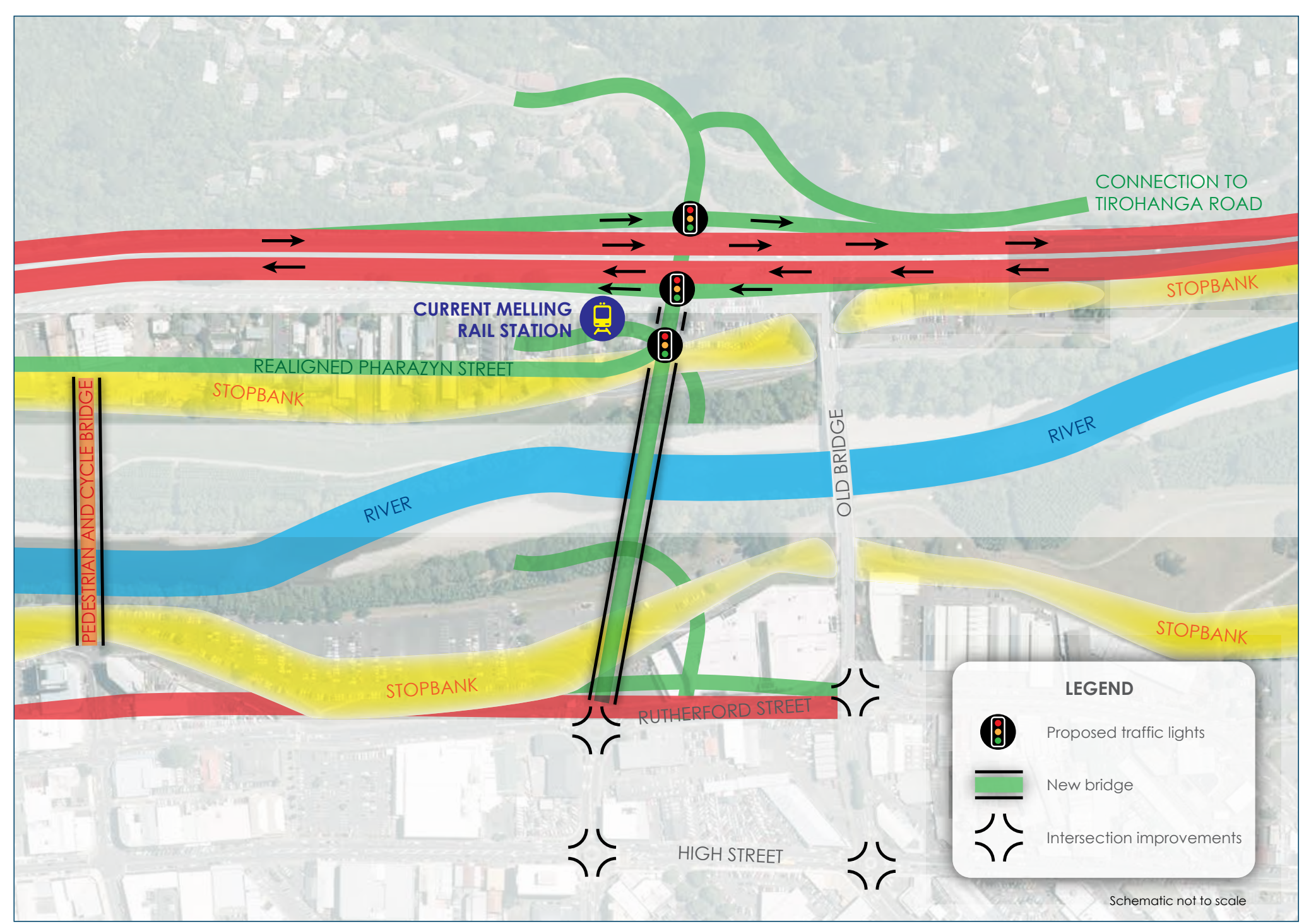
## STAGE 2

During stage 2 of the design process the team discarded:

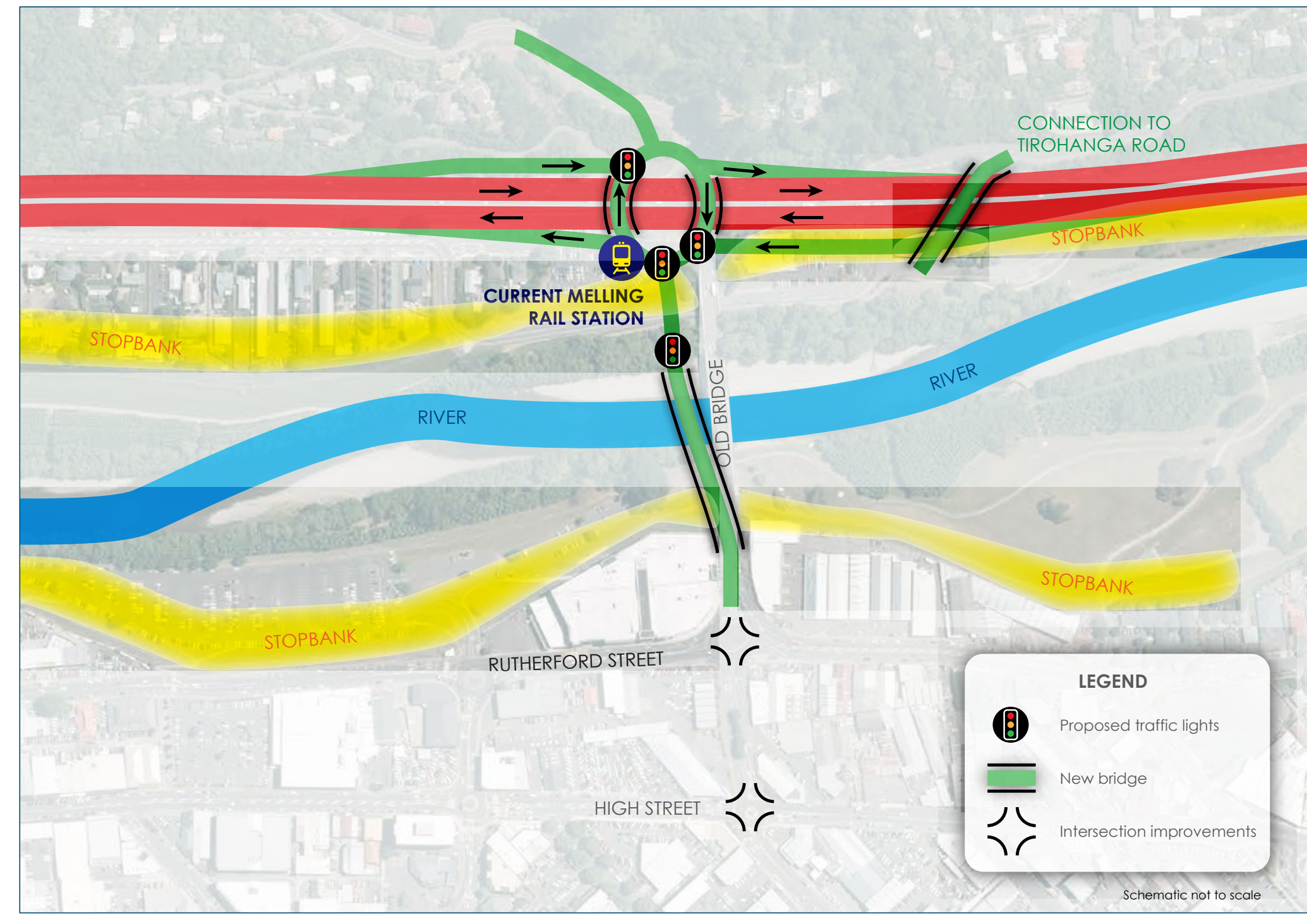
- roundabout style interchanges
- diverging diamond interchange
- connecting Tirohanga Road via another bridge across the highway.



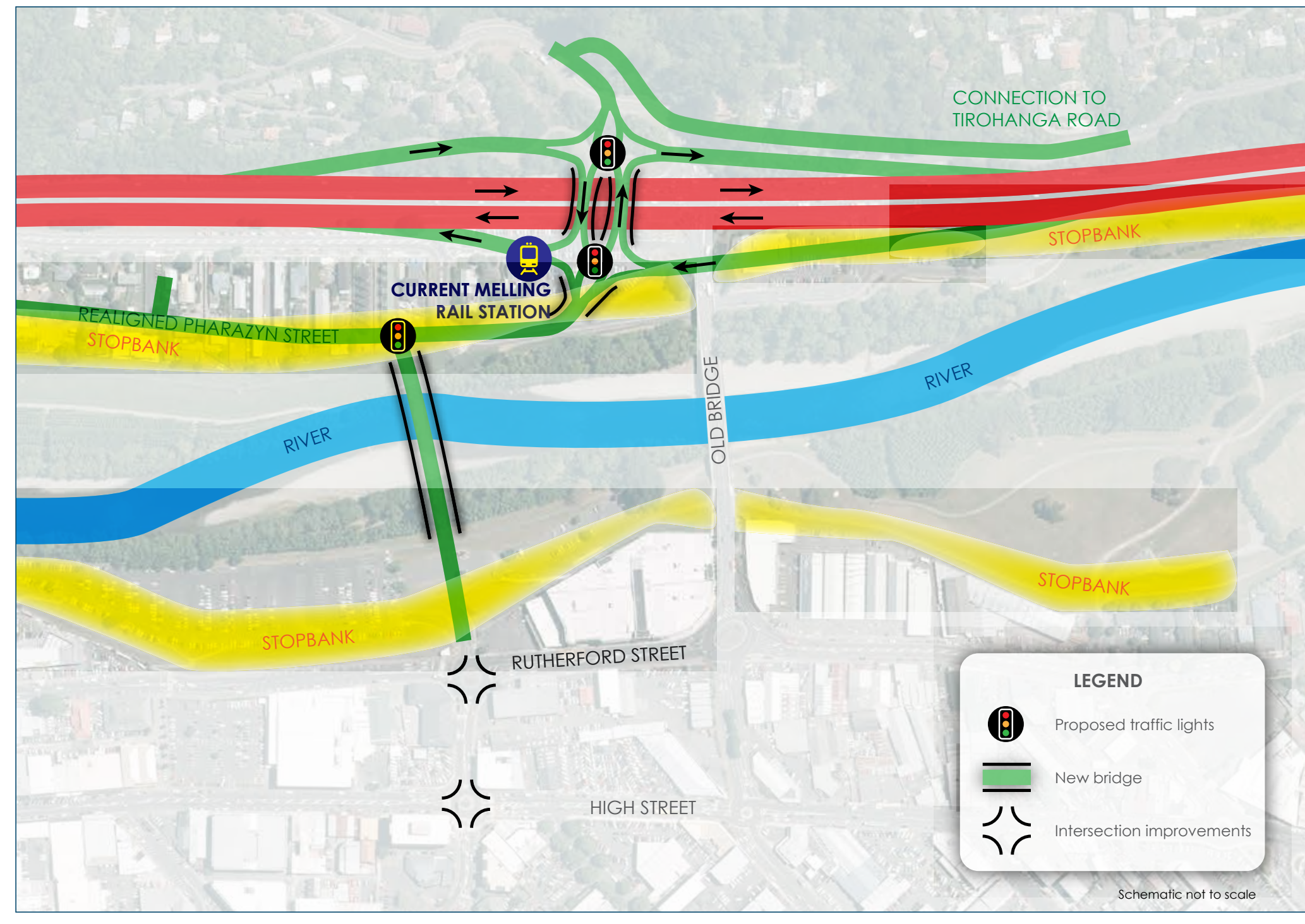
The bridge location south of Queens Drive was discarded because it put too much traffic into the city centre and would create conflicts with pedestrians, cyclists and buses. Two bridge locations north of the current bridge were discarded because they are too far from the city centre and do not provide a gateway to Hutt City.



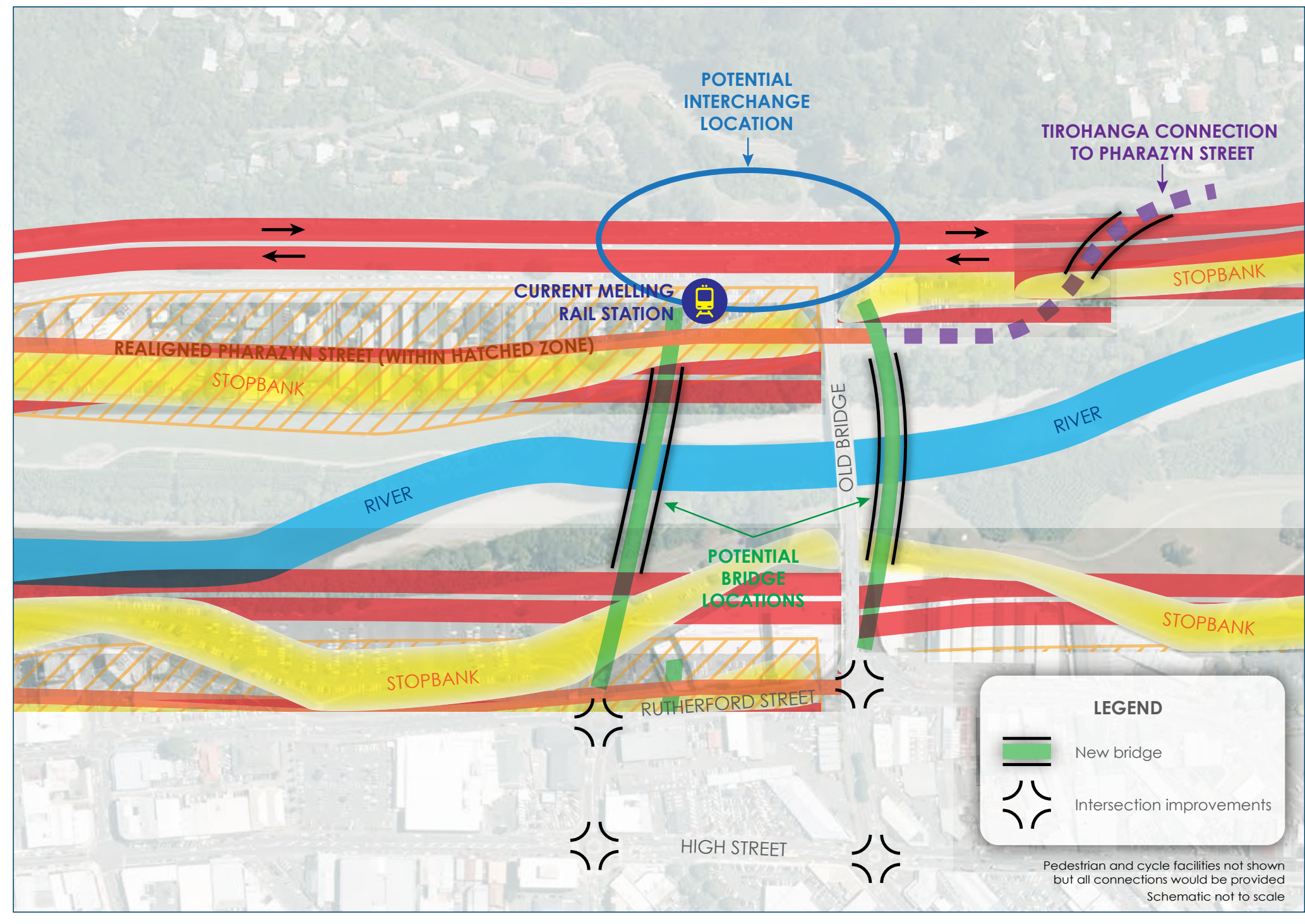
Options that involved SH2 going over the interchange were discarded because the road from the western hills needs access to a bridge over the river. These roads are higher than the highway so it makes sense to keep the state highway at ground level beneath the local road connection.



Roundabouts: While good for safety, roundabout options were discarded because they are difficult for pedestrians and cyclists to navigate and it would encroach over the stopbank.



Diverging Diamond: The diverging diamond design has never been built in New Zealand. This option was discarded due to safety concerns and because there isn't enough space to build it. Drivers could find it confusing being on the 'wrong' side of the road.



Connecting Tirohanga Road via Pharazyn Street was discarded because it is less intuitive for drivers making it less safe as people might travel the wrong way down the southbound off-ramp. It also encroaches into the river corridor making it flood risk.



# A joined up approach: delivering better results for you

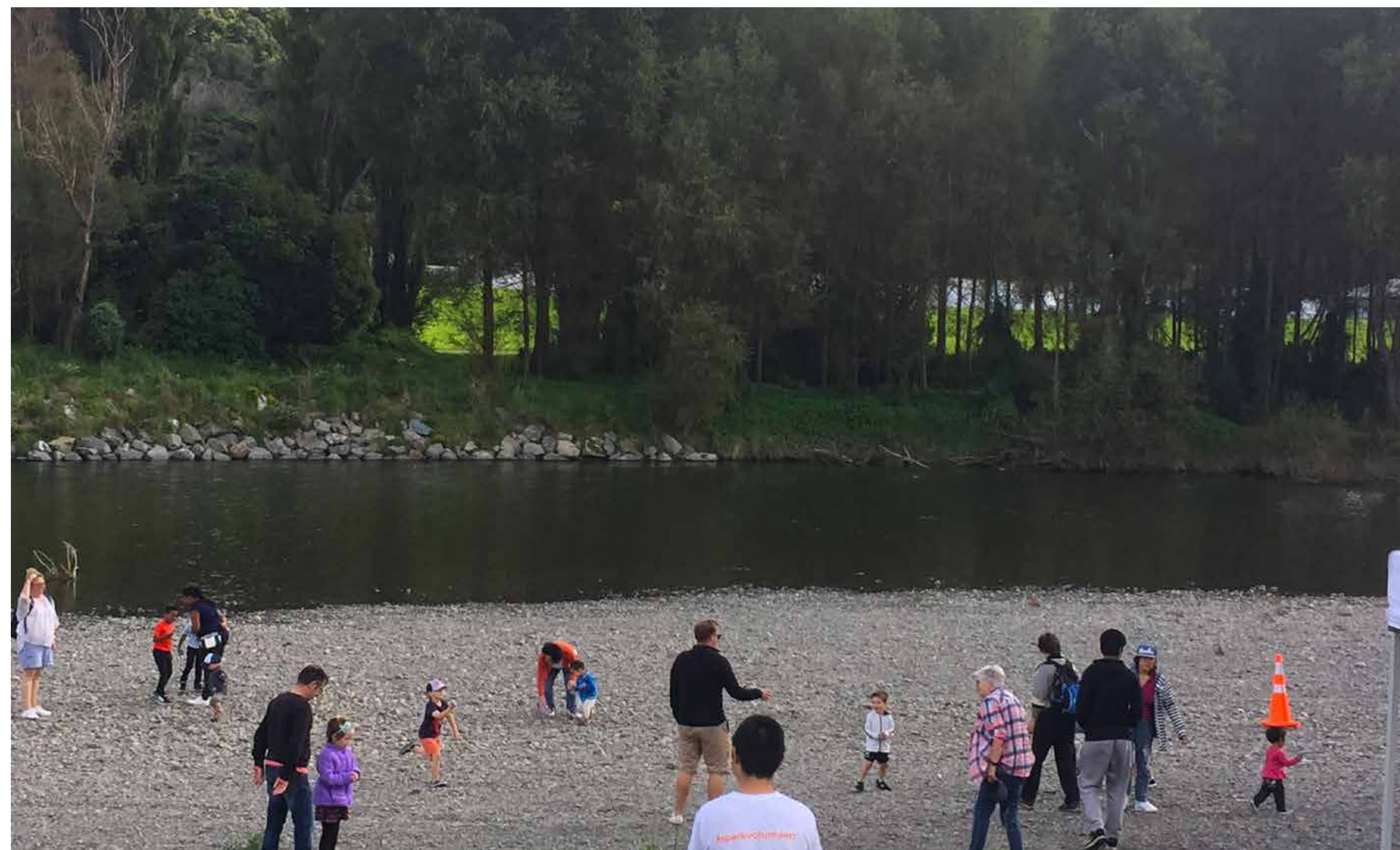
RiverLink is a complex project. By joining together, NZTA, GWRC and HCC can deliver this project more efficiently than by working independently.

Knowing the form and location of the Melling transport improvements will allow other elements of RiverLink to progress with certainty with designs that are integrated with the interchange design.

A new interchange and bridge will:

- enable greater flood protection
- support better urban lifestyle
- enable improvements to public transport and walking and cycling access and safety.

The timing for building the transport improvements hasn't yet been determined. However, once a preferred option is confirmed, the flood protection and urban renewal aspects of RiverLink can be designed to fit in with the new interchange when it is built.



# Update on the river corridor design work

We have confirmed the shape and form of the river corridor to deliver an increased level of flood resilience, an enhanced urban space and improved links in and out of river corridor.

Design is an iterative process. We are ready to start the work needed to prepare resource consent applications for the required consents and then begin construction.

Some parts of the project can begin soon under existing GWRC and HCC statutory approvals. For example, the Belmont Stormwater Treatment Wetland will start taking shape later this year.

*Boat landing and linear skate track near Ewen Bridge.*



*Cross section of the Belmont Stormwater Treatment Wetland.*

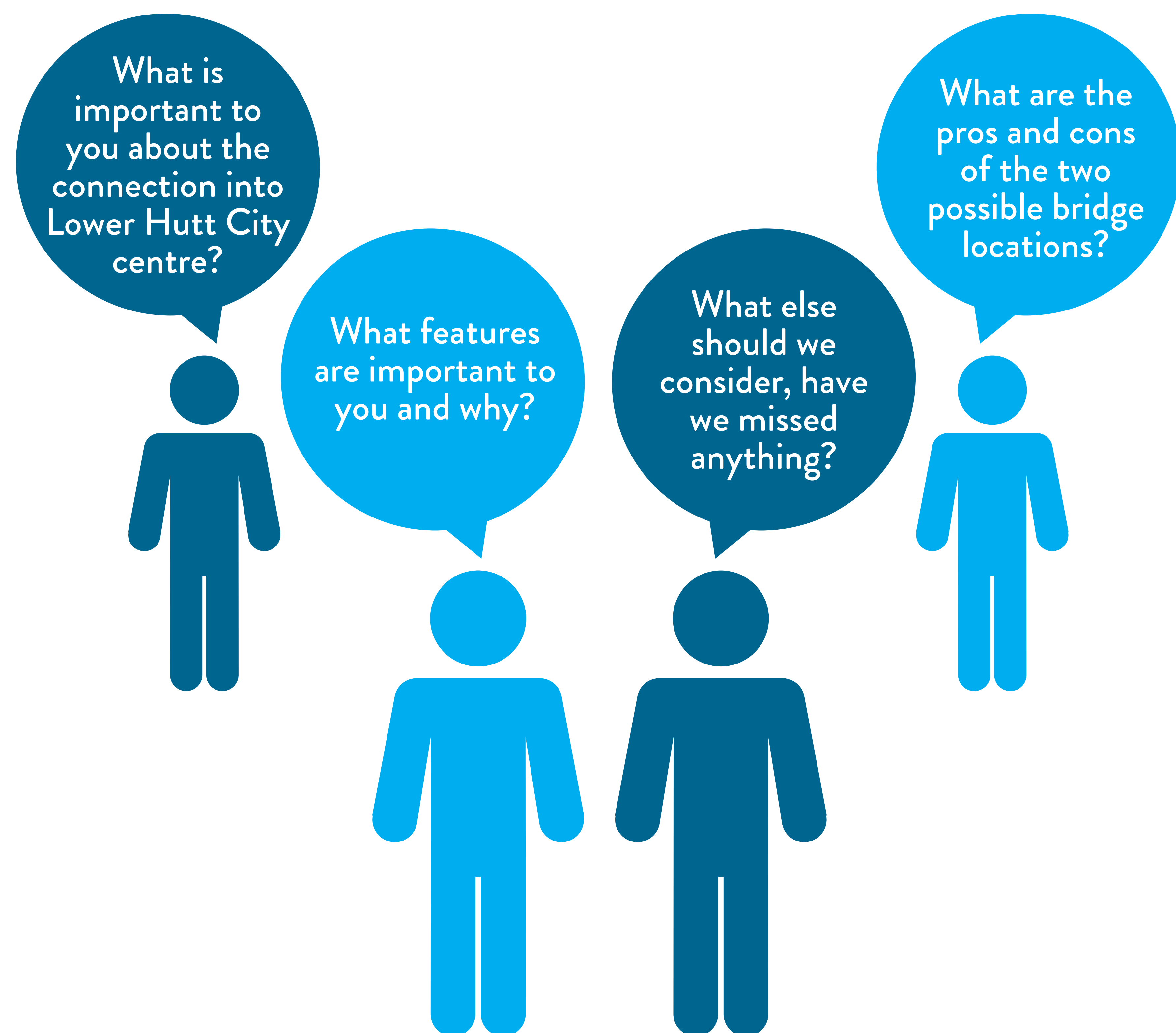


*A cycling/pedestrian bridge will connect to the new Melling railway station, the Hutt River Trail and the city centre. People will be able to access the river from multiple locations on both sides of the river.*

# Transport improvements: next steps

## GIVE US YOUR FEEDBACK TO HELP US CHOOSE A PREFERRED OPTION

We want to know:



## HOW WE'LL USE YOUR FEEDBACK

We will use your feedback, alongside technical information, to select a preferred option.

## DECISIONS

You should know that funding hasn't been agreed and timing for this project is uncertain.

The Transport Agency needs to make decisions on:

- the preferred option
- how we should continue to work with our partners
- the timing of this project
- how this project could be funded.

Following this engagement period, the NZTA will:

- work with GWRC and HCC to assess the technical information and the community feedback
- make decisions on the above.

## HOW YOU CAN GIVE US YOUR FEEDBACK

Complete a feedback form at an open day or online at [riverlink.co.nz](https://riverlink.co.nz)

Email us at [riverlink@gw.govt.nz](mailto:riverlink@gw.govt.nz)



# Comments and Questions

