

# **WCC Transitional Cycleways Multi Criteria Analysis**

Kilbirnie Connections

22 August 2022



# Absolutely Positively Wellington City Council

Me Heke Ki Pōneke

Version	Date	Description	Author	Approver
1	01/07/2022	Draft for client review	B Rodenburg	A Head
2	29/07/2022	Final concept issue	B Rodenburg	A Head
3	22/08/2022	Update to final concept issue	B Rodenburg	A Head

1. Assessment Details.....	3
1.1 Kilbirnie Connections transitional cycleway.....	3
1.2 Adjacent projects .....	4
2. Multi Criteria Analysis (MCA) Process.....	6
2.1 MCA Process.....	6
2.2 Criteria and considerations.....	6
2.3 Scoring .....	6
2.4 Scoring scale .....	6
2.5 Types of cycle lanes/ways used for options .....	6
2.6 Design dimensions.....	7
2.7 Alternatives considered in long list assessment .....	9
2.8 Updates following stakeholder review of draft MCA .....	10
3. MCA Outcomes .....	11
3.1 Tacy Street .....	11
3.2 ASB carpark .....	15
3.3 ASB carpark ramp.....	17
3.4 Coutts Street.....	19
3.5 Airport Underpass Connection .....	22
3.6 Tirangi Road.....	24
3.7 Onepu Road - centre .....	26
3.8 Onepu Road - residential .....	29
4. Conclusions.....	31
Appendix A – Assessment criteria	
Appendix B – Tacy Street options and MCA table	
Appendix C – ASB Carpark options and MCA table	
Appendix D – ASB Carpark ramp options and MCA table	
Appendix E – Coutts Street options and MCA table	
Appendix F – Airport Underpass Connection options and MCA table	
Appendix G – Tirangi Road options and MCA table	
Appendix H – Onepu Road (Centre) options and MCA table	
Appendix I – Onepu Road (Residential) options and MCA table	

# 1. Assessment Details

## 1.1 Kilbirnie Connections transitional cycleway

The WCC Transitional Cycleways programme proposes interim transitional cycleways to quickly roll out the WCC cycleway network over months rather than years. These transitional cycleways will be formed with minimal physical works and temporary materials in an interim fashion.

The transitional programme has divided the proposed network into routes, with each route forming an individual project. This report relates to the Kilbirnie Connections Transitional Cycleway shown below in Figure 1



Figure 1 Project extents

There are currently significant gaps in the cycleways that exist in Kilbirnie, Rongotai and Lyall Bay. This makes it difficult for people to cycle safely around these suburbs. Several routes have been identified in the Paneke Pōneke Bike Network Plan to create a connected network in these suburbs. The route is highlighted in yellow, orange, green, red, purple, turquoise and pink in Figure 1 above.

The Kilbirnie Connections Transitional Cycleway project includes five routes;

- Tacy Street, connecting the new Cobham Drive pedestrian and cyclist crossing, the Kemp Street shared path and the cycle lanes on Rongotai Road;
- ASB Carpark, connecting the new Cobham Drive pedestrian and cyclist crossing, the ASB sports centre and the accessway between Kemp Street and Rongotai Road;
- Coutts Street between Te Whiti Street and the airport underpass improving the existing on-road cycle lanes to cater for less confident cyclists; and
- Tirangi Road between Coutts Street and the Leonie Gill Pathway to connect the pathway with the airport underpass
- Onepu Road, extending the existing cycle facility on Evans Bay Parade south to the Leonie Gill pathway and Lyall Bay;

The Council, following public consultation in December 2022, have included these corridors in the list of transitional projects that require quick and cost-effective cycle infrastructure improvements.

The transitional programme uses interim installations to provide a ‘first cut’ of the whole route using adaptable materials. Once installed, the Council gathers feedback via consultation on the changes and can make improvements to things such as signs, street markings, parking and the position of dividers between the bike lanes and traffic.

Kilbirnie Connections has been divided into eight sub-areas to reflect the differences in road layout, gradient, character and design along the route. These sub areas are;

- Tacy Street
- ASB Carpark
- ASB Carpark ramp
- Coutts Street (between Te Whiti Street and Tirangi Road)
- Airport Underpass Connection (Coutts Street between Tirangi Road and the airport underpass)
- Tirangi Road
- Onepu Road – Residential
- Onepu Road – Centre

## 1.2 Adjacent projects

A number of adjacent projects interact with this transitional cycleway route. These are described in Table 1 below

**Table 1 Adjacent projects**

Project	Status	Description
LGWM Targeted Improvements Project CSTIEC15 ASB wayfinding and shared path	Planning, installation expected early 2023	Improved wayfinding within Kilbirnie/ Rongotai to ASB Sports Centre. The LGWM scope for this project has been expanded to include the ASB carpark ramp and shared path described in Sections 3.2 and 3.3
LGWM Targeted Improvements Project CSTIEC13 Rongotai Road/Kemp St Pedestrian Improvements	Planning, construction expected early 2023	Pedestrian improvements including: <ul style="list-style-type: none"> <li>• Rongotai Road/ Kemp Street laneway (at 131 Rongotai Road) improvements including lighting and surface treatment</li> <li>• Kemp Street pedestrian crossing in the vicinity of Rongotai Road/ Kemp Street laneway</li> </ul>

Project	Status	Description
Rongotai Road/Evans Bay Parade/ Onepu Road intersection upgrade	Design, construction expected 2023	Intersection upgrade including; <ul style="list-style-type: none"> <li>• Dual pedestrian and cyclist crossings across all legs</li> <li>• Cycle left turn bypasses</li> <li>• Connection to Tacy Street for cyclists.</li> </ul>
Cobham Drive crossing	Currently under construction	New dual pedestrian and cyclist at grade signalised crossing to improve access between Kilbirnie and the new Tahitai walking and bike paths which link the eastern suburbs with the central city along Cobham Drive.  This includes a 3.0m wide shared path connecting to the end of Tacy Street

The LGWM Targeted Improvements Project CSTIEC14 (Tacy Street pedestrian/cycle improvements) will now be delivered by the Transitional Cycleways project. This will include pedestrian and cycle improvements on Tacy Street and at the intersection of Tacy Street and Kemp Street to provide safe levels of service for pedestrians and cyclists accessing the new Cobham Drive crossing. Refer Section 3.1 for more detail.

## 2. Multi Criteria Analysis (MCA) Process

### 2.1 MCA Process

There were two major steps to the MCA process, identifying short list options and confirming the preferred solution.

Short list options were identified by reviewing constraints which limited the feasibility of long list options and assisted in eliminating options to arrive at the short list. This is described in Section 2.7, and specific assessment for each section provided in the relevant appendix.

The preferred option was confirmed through the scoring against the MCA criteria. The highest scoring option or options were confirmed as preferred. Summaries for each route section are provided in Section 3. For a detailed breakdown refer to Appendix A.

### 2.2 Criteria and considerations

The MCA applies criteria prepared for the transitional cycleway programme by WCC and provided to the project team for this assessment. This has been based on the criteria used by WCC for the Brooklyn Hill cycleway project with adjustment reflecting learnings from the MCA criteria previously applied for the Newtown to City, Botanic Gardens ki Paekākā to City, Ngaio and Aro Valley transitional cycleways.

### 2.3 Scoring

The project team identified how each consideration would be assessed on a scale of –3 to +3. The scoring scale and descriptions are provided in Appendix A.

### 2.4 Scoring scale

The project criteria were given weighting depending on their perceived importance<sup>1</sup>. The weighting for each consideration varies. The scoring scale is attached in Appendix A.

### 2.5 Types of cycle lanes/ways used for options

The options refer to cycle lanes, buffered cycle lanes and protected cycleways as different treatments. Specifically these are as follows;

Cycle lane/way	Description
Cycle lane	<p>Up to 1.5m width (1.8m width if adjacent to parking). Markings comprise an edge line and cycle symbols at regular intervals. Coloured surfacing, no-stopping markings, and/or cycle lane signage may also be used at selected locations.</p> <p>The majority of interested but concerned are comfortable riding in cycle lanes at modest volumes and speeds. However, as traffic volumes, traffic speeds and provision/use of adjacent parking increase, cycle lanes become increasingly uncomfortable.</p>
Buffered cycle lane	1.5 to 1.8m width. Markings as for cycle lanes plus a second edge line offset by 200mm to 300mm between the cycle lane and the traffic lane to encourage cyclists to ride in the centre of the lane with additional space from passing traffic

<sup>1</sup> For example, as described in Page 20 of the Paneke Pōneke, Bike Network Plan (2022) cycling is rated highly in the Sustainable Transport Hierarchy of the Wellington City Council to improve connectivity and movement of people within Wellington and achieve the multi-modal vision of the Spatial Plan. Within the context of this project the cycling criteria are weighted highly compared with other modes.

Cycle lane/way	Description
	The high-level cross-sections provided do not show pavement markings, refer to dimensions and descriptions for each option in the relevant appendix.
Separated cycle way	Greater than 1.8m width <sup>2</sup> . A facility exclusively for cycling with physical separation from motor traffic.  The high-level cross-sections provided show an indicative bollard separation but not pavement markings. A raised concrete buffer is often perceived as a buffer for a separated cycleway, however this is not within scope for the transitional projects. Refer also to the dimensions and descriptions for each option in the relevant appendix.
Bi directional cycleway	A facility exclusively for two way cycling with physical separation from motor traffic. Cyclists in opposing direction are riding contraflow to adjacent traffic  The high-level cross-sections provided show an indicative bollard separation but not pavement markings. A raised concrete buffer is often perceived as a buffer for a bidirectional cycleway, however this is not within scope for the transitional projects.

## 2.6 Design dimensions

Local and national design guidance was referenced to identify design widths for the elements being considered in the options. Specifically, the guidance considered was:

- Waka Kotahi guidance<sup>3</sup>
- Austroads guidance, as referenced by Waka Kotahi guidance
- WCC guidance as described in the WCC Code of Practice for Land Development

Table 2 outlines the absolute minimum, desirable minimum, and desirable widths for relevant transport facilities, as noted in the reference guidelines.

Using a combination of these reference guidelines, best practice, and input from WCC, a list of minimum and desirable widths was identified for each of the design elements being considered on the Kilbirnie Connections Transitional Cycleway. This list, provided in Table 3, was used as the basis for developing the options for the Kilbirnie Connections Transitional Cycleway. Note that absolute minimums can only be used in certain situations as outlined in the relevant guidance.

**Table 2 Design guidance recommended widths**

Design element	Recommended widths			Reference
	Absolute minimum	Desirable minimum	Desirable	
Footpath	1.65m	1.8m	-	PNG <sup>1</sup>
	1.5m	-	2.0m	COP <sup>2</sup>
Cycle lane next to kerb	1.4m	1.6m	-	CNG <sup>3</sup>
	1.5m	-	2.2m	CF <sup>4</sup>
Cycle lane next to parallel parking	-	1.8m	-	CNG <sup>3</sup>
Bi-directional cycle facility <sup>5</sup>	2.5m	3.0m	3.5m	CNG <sup>3</sup>
	2.5m	-	-	CF <sup>4</sup>
Protection buffer zone (between a cycle path/lane and a traffic lane)	0.3m	-	1.0m	CNG (described in TN004 <sup>6</sup> )
	0.6m	-	-	CF

<sup>2</sup> WCC have advised that their maintenance contract has been updated to include a 1.4m wide sweeper (refer email between J Kennett and B Rodenburg dated 14/6/22). To accommodate this the minimum design width between separators (up to 0.3m wide) and the kerb face is 1.5m.

<sup>3</sup> <https://www.nzta.govt.nz/walking-cycling-and-public-transport/cycling/cycling-standards-and-guidance/cycling-network-guidance/>. This has been developed with consideration of international best practice such as the CROW Design Manual for Bicycle Traffic 2016

Design element	Recommended widths			Reference
	Absolute minimum	Desirable minimum	Desirable	
Protection buffer zone (between a cycle path/lane and parallel parking)	0.7m	0.85	1.0m	CNG (described in TN004)
	-	1.0m	1.2m	CF
Traffic lane	3.0m	-	3.5m	SHGDM <sup>7</sup>
	-	-	3.5m	COP/CF
	-	3.2m	-	WCC <sup>8</sup>
Central traffic path <sup>9</sup>	2.2m	-	-	CROW manual <sup>10</sup>
Parallel parking	1.9m	-	2.0m	CNG <sup>3</sup>
	-	2.0m	2.5m	WCC <sup>8</sup>
Shared Path	2.5m	3.0m	1.5m footpath & 2.5m cycle path	CNG (refers to Austroads <sup>11</sup> )

#### Notes

1 – Waka Kotahi Pedestrian Network Guide

2 – WCC Code of Practice for Land Development – Part C: Road Design and Construction

3 – Waka Kotahi Cycle Network Guidance

4 – WCC Cycling Framework

5 – For up to 150 cyclists per hour during peak periods. As a comparison, cyclist volumes reported on the WCC Cycle count data website shows peak cycle volumes on Hutt Road and the Cobham Drive shared path as 135 and 70 cyclists respectively. Even allowing for growth the transitional cycleways feed into these routes and are unlikely to exceed 150 cyclists in the peak hour prior to the transformational projects being installed.

6 – Waka Kotahi Cycle Network Guidance Technical Note 004 Buffered cycle lane design, dated August 2020

7 – Waka Kotahi State Highway Geometric Design Manual *DRAFT*

8 – Advice provided by WCC's Transport & Infrastructure team on the desirable minimum width of traffic lanes on bus routes.

9 – For low volume streets with two-way traffic, vehicles required to deliberately veer onto the cycle lane when encountering oncoming traffic

10 – CROW Design Manual for Bicycle Traffic 2016.

11 – Austroads Guide to Road Design, Part 3 and Part 6A

**Table 3 Dimensions used in developing options for transitional cycleways**

Design element	Width	
	Minimum	Desirable
Footpath	N/A <sup>1</sup>	N/A <sup>1</sup>
Cycle lane	1.5m	2.0m
Bi-directional cycle facility	2.5m	3.5m
Protection next to cycle facilities	Next to traffic lane	0.3m <sup>2</sup>
	Next to parallel parking	0.7m
	Next to angle parking	0.6m
Traffic lane <sup>3</sup>	3.0m	3.5m
Two-way traffic lane	5.5m	
Central traffic path <sup>4</sup>	3.0m	3.5m
Parallel parking	1.9m	2.0m
Shared path	2.5m	1.5m footpath & 2.5m cycle path

1 – Footpath widths are unchanged due to the transitional approach which excludes any options which require kerb changes

2 – Minimum dimension reduced for transitional cycleways to minimum for temporary kerb to be installed

3 – Desirable to accommodate large vehicles such as trucks and buses. Where shared with cyclists a traffic lane should be either less than 3.2m or greater than 4.2m to avoid unsafe overtaking as described in the Waka Kotahi Cycle Network Guidance

4 – Based on minimum and desirable width for a traffic lane

Where bus stops interact with the cycle facility, guidance in the Waka Kotahi Public Transport Design Guidelines applies. Separated and buffered cycle lanes will continue through the bus stop, and the stop will be raised and a different colour to promote shared use. This will likely be the

same ZICLA<sup>4</sup> products being used in the Newtown to City and Botanic Gardens Ki Paekākā to City transitional cycleways.



Figure 2 Zicla bus stop outside the hospital for the Newtown to City Transitional Cycleway

## 2.7 Alternatives considered in long list assessment

The transitional cycleway approach limits the cycle facility options along the route. In general, the following considerations were applied to exclude options from the short list for the MCA. These are further detailed for each route section in the respective appendices (refer also to Section 3 below).

- Do nothing. There would be no improvement to the existing situation which has been identified as requiring improvement for cyclists through consultation on the Paneke Pōneke Bike Network Plan
- Alternate routes. These routes are identified in the Wellington Cycle Network Plan which has been consulted and approved in a separate process which considered alternate route options. Our assessment is not intended to repeat this
- Sealed shoulders. These are also not significantly different from cycle lanes (which could be considered sealed shoulders with cycle markings). Sealed shoulders may also be used for other purposes such as car parking which means that opportunity for a cyclist to use the space can be intermittent. This does not meet the Paneke Pōneke Bike Network Plan concept of a connected cycleway network
- Bidirectional paths where gradients exceed 4% and there is limited road width. As described in the Waka Kotahi Cycle Network Guidance this is the point at which uphill cyclists are likely to require extra width for wobbling, and downhill cyclists travel faster so require extra width for safe manoeuvring
- Shared paths where routes are intended to form key parts of the cycle network with high cyclist volumes.
- Change in road space through kerb realignment. The transitional cycleways are intended to require minimum physical works and ability to amend or reinstate if required

<sup>4</sup> <https://www.zicla.com/en/>

- Extensive kerb realignment or similar works will result in permanent changes not suitable for this programme
- Removing high priority parking<sup>5</sup> where there are no alternative spaces nearby
- Bus lane removal due to the negative impact on public transport users
- Central traffic paths<sup>6</sup> where traffic or heavy vehicle volumes mean a significant proportion of drivers will be required to pass opposing vehicles (indicatively around 1,000 vehicles per day). This results in significant delays and frequent encroachment into the cycle space.

## 2.8 Updates following stakeholder review of draft MCA

The draft MCA was issued for review on 1 July 2022. Council arranged reviews by various internal and external stakeholders including Waka Kotahi, Greater Wellington Regional Council, and cycling and walking representatives. A range of feedback was received, and this is reflected in the following updates;

- Section 1.2 added describing adjacent walking and cycling projects which interact with this transitional cycleway route
- Update to scoring as required in response to feedback comments
- Tacy Street Option 3 (central traffic path) removed as there is a significant proportion of heavy vehicles accessing businesses on Tacy Street
- Added additional detail on how the preferred option for Tacy Street will be identified
- Tacy Street Option 4 (two-way cycleway) updated to show the cycleway on the eastern side of the road. This is now called Option 3 as the previous Option 3 has been removed as described above.
- ASB Carpark Option 2 updated to install the two-way cycleway within the planted berm on the west side and no change to parking layout
- Coutts Street Options 1 and 2 updated to show parking on the south side of the road to enable the terminus bus stop outside Rongotai College to be retained
- Airport Underpass Connection Option 4 (separated cycleways each direction, flush median) removed as low traffic and turning volumes mean that there is limited conflict between opposing vehicles so a flush median is not required
- Added additional detail on potential for different options to progress to 30% design for Onepu Road north and south of the Leonie Gill Pathway respectively.
- Key information added to comment on turning demand and percentage of properties with off-street parking
- Project integration between LGWM Targeted Improvements and Transitional Cycleways and confirming which project will deliver each section.
- Confirmation of the preferred options to progress to 30% design

In addition a number of feedback responses related to specific improvements that should be considered. These included suggestions such as parking for various activities, identifying opportunities to provide/improve street furniture, and other urban design considerations. These are recorded and will be considered during detailed design and the development of the parking management plan.

---

<sup>5</sup> As defined in the Wellington Parking Policy 2020. Refer to the Kilbirnie Connections Transitional Cycleways Parking Assessment for a description of how this applies to the Kilbirnie area

<sup>6</sup> As defined in Table 1

### 3. MCA Outcomes

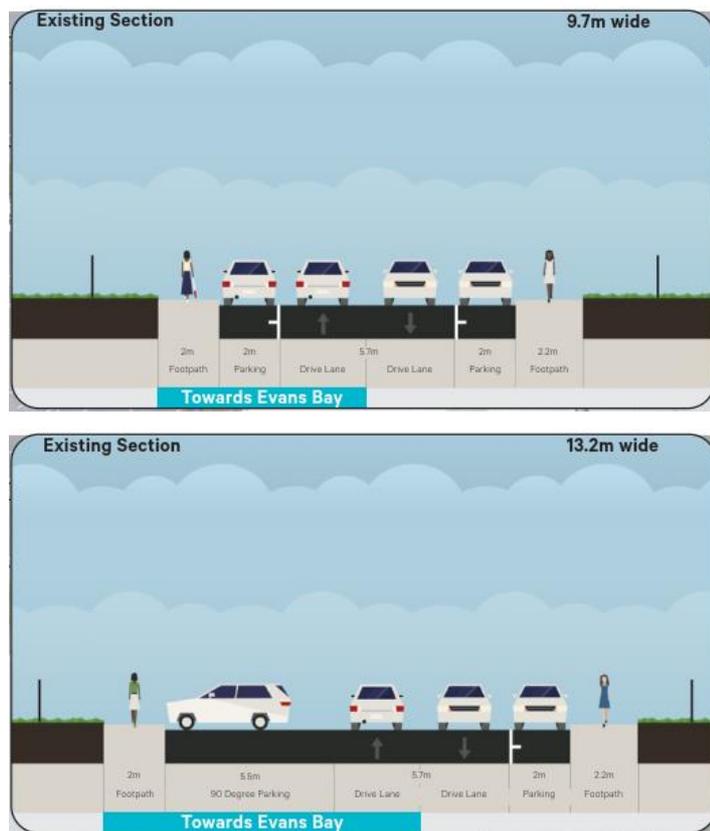
A summary of the assessment for each route is provided below. For a detailed breakdown refer to the scoring tables attached in the respective appendices.

The options assessed are what generally fits within the road along each section of the route. Specific pinch points such as pedestrian crossings, kerb buildouts, right turn bays and tight corners will be addressed during 30% design with specific treatments that continues the preferred concept design option but may require applying absolute minimums (for instance the cycle lane width could be reduced for a short distance, bollards stopped or a short section of parking could be removed).

Other improvements such as pedestrian crossings, kerb ramps, bus stop locations, rationalising bus stops, areas for street furniture/facilities, connection with parks, enforcement of parking restrictions and priority parking generally equally apply across all of the concept options. These will therefore be included in the 30% designs for comment.

#### 3.1 Tacy Street

Tacy Street is currently a two-lane road with parking on each side. Parking is mostly parallel, although there are sections of Tacy Street that are wider with 90 degree parking along the west side. As a result there are two existing typical sections along Tacy Street as shown below.

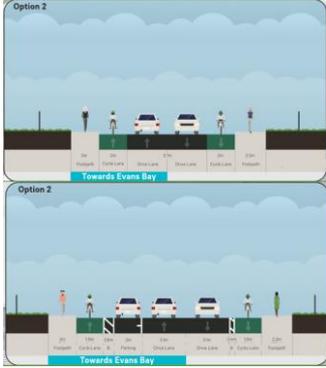
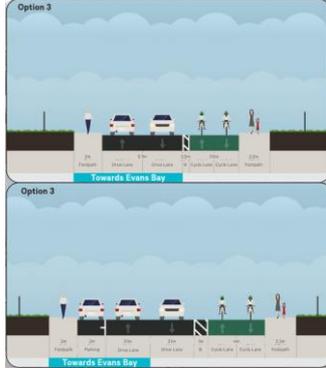


Key corridor information is included in Appendix A. Highlights for this section of the route include;

- Section length is approximately 490m
- Average carriageway width is 9.7m
- Five-day average daily traffic is approximately 2,096 vehicles
- Recorded 85<sup>th</sup> percentile speeds (46 km/hr) do not exceed the posted speed limit (50 km/hr)
- Designated a Local Road in the District Plan

- The parking survey indicated that less than half of the parking demand was from residents. The remainder is likely workers commuting to adjacent businesses and recreational parking for the netball courts, sports fields and the ASB Sports Centre.
- Approximately 90% of properties have off-street parking.
- Council have advised that if the preferred ASB carpark option (Option 2) proceeds this will become the primary cycle route and Tacy Street will be a secondary route<sup>7</sup>
- As described in Section 1.2, LGWM are also delivering pedestrian and cycle improvements on Tacy Street.

**Table 4 Tacy Street MCA scores**

	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>
<b>Description</b>	Neighbourhood greenway both directions, parking both sides, traffic calming, reduced speed environment	One way buffered cycle lane on each side, parking along 13m section of the street	Two-way cycleway north side, parking along 13m section of the street
<b>Streetmix section</b>			
<b>Key differentiating factors</b>	<p>Slower speed environment improves safety for all road users including cyclists</p> <p>Minimal impact to parking availability</p> <p>90-degree parking requires vehicles to reverse blindly into the shared lane with the potential to crash with a cyclist. There can be high turnover during weekend sports which increases the likelihood of a crash</p> <p>No specific cycling provision may reduce uptake for cyclists not confident to share lane with traffic</p>	<p>Dedicated facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Parking adjacent to cycle lane can cause visibility issues for vehicles entering and exiting driveways across the cycle lane and requires pedestrians to cross cycle lane to access parking</p> <p>The existing 90 degree parking would be changed to parallel and the additional width used for the cycle lane.</p> <p>Most parking removed. Likely to be able to accommodate some users within a 5 minute walk, but not all.</p>	<p>Protected facility for cyclists in both directions improving cyclist uptake</p> <p>Two-way facility less familiar for road users, less likely to look both directions when entering and exiting driveways. Southbound cyclists riding contraflow increases crash risk.</p> <p>The existing 90 degree parking would be changed to parallel and the additional width used for the cycle lane.</p> <p>Most parking removed. Likely to be able to accommodate some users within a 5 minute walk, but not all.</p> <p>Has a wider, more visible part of the corridor for walking and cycling improving overall amenity</p>
<b>Weighted score</b>	0.98	1.00	1.00
<b>Rank</b>	2	1=	1=

<sup>7</sup> As defined in the Paneke Pōneke - Bike Network Plan 2022

	Option 4	Option 5
<b>Description</b>	Shared path on south side, no change to on road layout	Contraflow northbound cycle lane and shared path (southbound cyclists only), parking north side
<b>Streetmix section</b>		
<b>Key differentiating factors</b>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Cyclists and pedestrians required to share footpath space</p> <p>Two-way shared path less familiar for road users, less likely to look both directions when entering and exiting driveways</p> <p>Civil works required to widen footpath</p> <p>No impact on parking</p> <p>Has a wider, more visible part of the corridor for walking and cycling improving overall amenity</p>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Southbound cyclists and pedestrians required to share footpath space</p> <p>Two-way shared path less familiar for road users, less likely to look both directions when entering and exiting driveways</p> <p>Parking only on one side but high priority residential parking demand is lower so all of existing demand can likely be accommodated with an appropriate parking scheme to prioritise high priority users.</p> <p>Has a wider, more visible part of the corridor for walking and cycling improving overall amenity</p>
<b>Weighted score</b>	0.73	0.78
<b>Rank</b>	5	4

ASB carpark Option 2 has been confirmed to proceed (refer Section 3.2). This will become the primary cycle route and Tacy Street will be a secondary route, which reduces the significance of Tacy Street in the cycle network.

Following this decision Council have confirmed the following Tacy Street options to be progressed to 30% design;

- Tacy Street Option 1 for north of Kemp Street (to the cul-de-sac). Feedback received noted that the ASB Sports Centre connection would provide a fully protected facility for cyclists between the Cobham Crossing, the existing shared path on Kemp Street and the existing separated cycleways on Rongotai Road, meaning that a less disruptive but reduced separation option for Tacy Street would be more appropriate.

- Tacy Street Option 4 for south of Kemp Street (to Rongotai Road), although also considering elements of Option 1 to control speed in the street space for use by more confident cyclists. This will tie into the shared path on Kemp St and the new two-way cycle connection proposed by the Onepu Road intersection project<sup>8</sup>. Although this option scored worst it is being pursued by Council for other reasons
- Walking and cycling upgrades at the Tacy Street/ Kemp Street intersection. This was being delivered as LGWM Targeted Improvements project CSTIEC14. However, with the ASB Sports Centre work now being delivered by Targeted Improvements (refer Section 3.2) it was decided that this would be delivered by Transitional Cycleways. This also helps streamline the interfaces between the two projects.

Other considerations identified for this section include;

- Providing cycle parking near the netball courts at Evans Bay Intermediate School
- Threshold treatments at the intersections with Rongotai Road and Kemp Street
- Turning requirements for large vehicles in the Tacy Street cul-de-sac (also noted in Section 3.3)

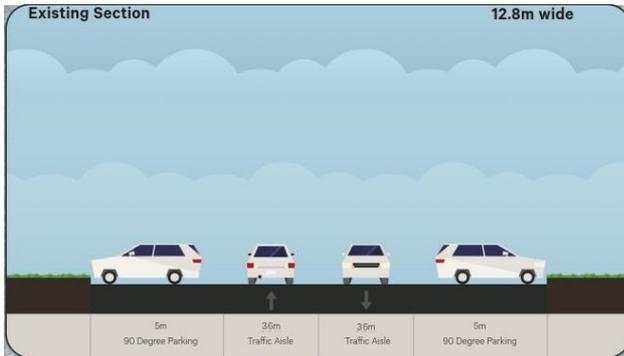
These will be considered at 30% design.

---

<sup>8</sup> Rongotai Road/Evans Bay Parade/ Onepu Road intersection upgrade, refer Section 1.2 for more detail

## 3.2 ASB carpark

The ASB carpark currently has two traffic aisles and 90 degree parking on each side. The northern end is connected to Tacy Street via a set of stairs (refer Section 3.3 below)

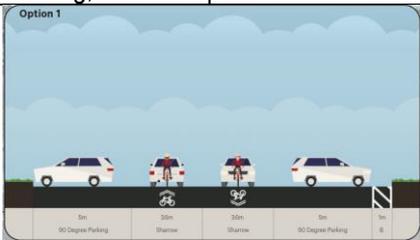


Key corridor information is included in Appendix A. Highlights for this section of the route include;

- Approximately 290 parking spaces (151 above ground and 142 via underground access ramps) located in this part of the carpark
- Average carriageway width is 16.8m (including 90 degree angle parking on either side of the traffic aisle)
- Flat and straight alignment
- Not a public road, part of the ASB Sports Centre site.

Option 2 requires permanent changes and physical works beyond that expected for a transitional approach. This has been included at the request of Council as an opportunity to advance more permanent changes for this section.

**Table 5 ASB carpark MCA scores**

	Option 1	Option 2
<b>Description</b>	Shared lanes both directions, 90 degree reverse in parking both sides, traffic calming, reduced speed environment	Two-way cycleway within planted berm on west side, no change to parking, walking and cycling connections to ASB centre
<b>Streetmix section</b>		
<b>Key differentiating factors</b>	<p>Slower speed environment improves safety for all road users including cyclists</p> <p>Minimal impact to parking availability</p> <p>90-degree parking requires vehicles to reverse blindly into the shared lane with the potential to crash with a cyclist.</p> <p>No specific cycling provision may reduce uptake for cyclists not confident to share lane with traffic</p>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>No change to existing parking and aisle (as path is located in planted berm)</p> <p>Has a wider, more visible part of the corridor for walking and cycling improving overall amenity</p> <p>Better alignment with adjacent cycle connections (Kemp Street accessway and Cobham Crossing, both shared paths separated from traffic)</p>
<b>Weighted score</b>	0.15	0.75
<b>Rank</b>	2	1

Option 2 received the highest score during the MCA and was identified as the recommended option to proceed to 30% design.

Following discussion this will be delivered jointly between the LGWM targeted improvements project and the transitional cycleways team.

Other considerations identified for this section include;

- Covered cycle parking for the ASB Centre
- Confirming vehicle tracking and turning within the carpark
- Making the existing access from Kemp Street into entry only (with exiting vehicles required to travel past the front of the centre to the eastern exit)
- Options to replace the planted berm along the adjacent building wall, for example climbing plants or wall art.

These will be communicated to the Targeted Improvements design team for consideration in the 30% designs.

### 3.3 ASB carpark ramp

The northern end of the ASB carpark is adjacent to the end of Tacy Street. Tacy Street is at a lower level than the ASB carpark. Stairs provide access for pedestrians but there is no accessible or cycling connection.



Figure 3 Steps from Tacy Street to ASB carpark (source Google Maps)

Key corridor information is included in Appendix A. Highlights for this section of the route include;

- Vertical change of approximately 0.7m for Option 2, and 1.2m for Options 1 and 3
- Not a public road, part of the ASB Sports Centre site.

The three options require physical changes and have limited impact on the interaction between pedestrians, cyclists and other road users. As a result the MCA scoring criteria for cyclist safety, pedestrian safety, public transport and parking mitigation scores are not applicable and were excluded from the MCA scoring.

**Table 6 ASB carpark ramp MCA scores**

	Option 1	Option 2	Option 3
<b>Description</b>	Steep path (8% grade) entering north end of carpark, loss of two parking spaces at the top and two at the bottom of the ramp	Angled accessible boardwalk from existing steps within planted area, loss of three parking spaces at top and one at bottom	Add bicycle access ramp to existing stairs, two parking spaces removed at top of stairs and one at bottom
<b>Streetmix section</b>			
<b>Key differentiating factors</b>	<p>Achieves reasonable level of convenience for cyclists</p> <p>Good alignment with Cobham Crossing</p>	<p>Highly convenient for cyclists and pedestrians</p> <p>Good alignment with both the Cobham Crossing and the ASB Carpark Option 2 (two-way cycleway in vegetation buffer)</p> <p>Significant construction works required</p>	<p>Small benefit for cyclists as it makes it possible to wheel your bike up/down the steps</p> <p>No improvement for pedestrians or urban amenity</p> <p>No impact on parking</p> <p>Can be delivered quickly</p>
<b>Weighted score</b>	0.58	0.83	0.15
<b>Rank</b>	2	1	3

Option 2 received the highest score during the MCA and has received concept approval from managers at the ASB Sports Centre.

Following discussion this will be delivered jointly between the LGWM targeted improvements project and the transitional cycleways team.

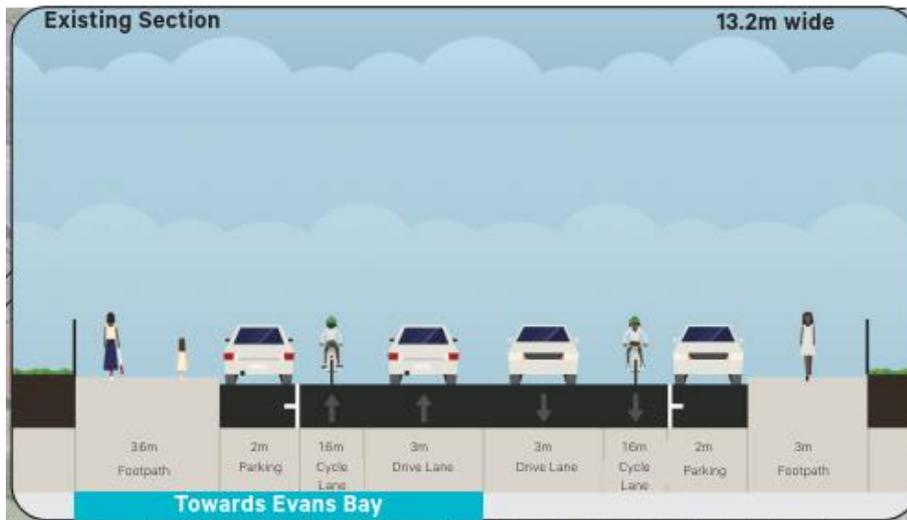
Other considerations identified for this section include;

- Turning requirements for large vehicles in the Tacy Street cul-de-sac (also noted in Section 3.1)
- Managing conflict between cyclists and vehicles in the driveway off the Tacy Street cul-de-sac

These will be communicated to the Targeted Improvements design team for consideration in the 30% designs.

## 3.4 Coutts Street

Coutts Street (between Tirangi Road and Te Whiti Street) is currently a two-lane road with parking on each side. There are on road cycle lanes at each end, but these stop either side of the flush median provided for turning vehicles at Mamari Street, Salek Street and the entrance to Rongotai College.



Key corridor information is included in Appendix A. Highlights for this section of the route include;

- Section length is approximately 430m
- Average carriageway width is 13.2m
- Five-day average daily traffic is approximately 11,278 vehicles
- Recorded 85<sup>th</sup> percentile speeds (48 km/hr) are lower than the posted speed limit (50 km/hr)
- Bus route
- Designated a Collector Road in the District Plan
- Low vehicle turning movement demand into adjacent land uses
- Approximately 96% of properties have off-street parking

**Table 7 Coutts Street MCA scores**

	<b>Option 1</b>	<b>Option 2</b>
<b>Description</b>	Separated cycleways in each direction, parking south side	Two-way separated cycleway on north side, parking south side
<b>Streetmix section</b>		
<b>Key differentiating factors</b>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Parking adjacent to cycle lane can cause visibility issues for vehicles entering and exiting driveways across the cycle lane and requires pedestrians to cross cycle lane to access parking</p> <p>Parking demand is high over night (i.e. residents parking) so some high priority parking would likely be displaced to surrounding streets.</p>	<p>Protected facility for cyclists in both directions improving cyclist uptake</p> <p>Small flush median provides additional width to traffic lanes</p> <p>Two-way facility less familiar for road users, less likely to look both directions when entering and exiting driveways. Eastbound cyclists riding contraflow increase crash risk.</p> <p>Section is short and at the western end cyclists would transition back on to the road. This transition is considered less intuitive for road users and requires more physical works to get cyclists across the road.</p> <p>Parking demand is high over night (i.e. residents parking) so some high priority parking would likely be displaced to surrounding streets.</p> <p>Has a wider, more visible part of the corridor for walking and cycling improving overall amenity</p>
<b>Weighted score</b>	1.10	1.05
<b>Rank</b>	1	2

	Option 3	Option 4
<b>Description</b>	On road buffered cycle lanes, parking both sides, reduced traffic lane width	Separated cycleways in each direction, flush median, no parking
<b>Streetmix section</b>		
<b>Key differentiating factors</b>	<p>Unprotected cyclists required to ride adjacent to traffic and parked vehicles with reduced safety and uptake</p> <p>No impact on parking</p> <p>Increased delay for traffic (including buses) due to narrow lane width</p>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Flush median provides space for turning vehicles to wait and look for cyclists, and for pedestrians to wait while crossing</p> <p>All parking removed. Likely to be able to accommodate some users within a 5 minute walk, but not all.</p>
<b>Weighted score</b>	0.18	0.63
<b>Rank</b>	4	3

Option 1 received the highest score during the MCA. This could also be combined with Option 4 to provide turning bays at specific intersections.

Based on the MCA scoring we recommend that Option 1 is progressed to 30% design.

Other considerations identified for this section include;

- Turning lane requirements at Salek Street and other intersections
- Consider banning right turns from Coutts Street into Te Whiti Street to reduce traffic volumes on the cycle route

These will be considered at 30% design.

### 3.5 Airport Underpass Connection

Coutts Street between the Airport Underpass and Tirangi Road is currently a two-lane road with on road cycle lanes and parking on each side. Parking is mostly parallel, although east of Bridge Street there is a short section of angled parking along the north side.



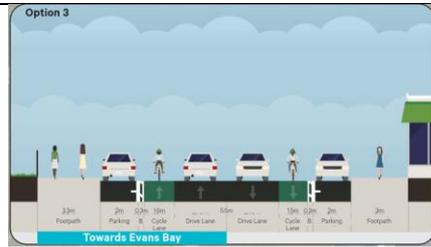
Key corridor information is included in Appendix A. Highlights for this section of the route include;

- Section length is approximately 200m
- Average carriageway width is 13.2m
- Five-day average daily traffic is approximately 1,033 vehicles (reducing to an estimated 400 vehicles east of Bridge Street)
- Recorded 85<sup>th</sup> percentile speeds (42 km/hr) are lower than the posted speed limit (50 km/hr)
- Designated a Local Road in the District Plan
- Low vehicle turning movement demand into adjacent land use
- Parking survey indicated some long-term parking, and feedback noted that some of this is likely being used by people travelling to the airport. This does not meet the definition of high priority parking in the WCC Parking Policy. Refer to the Parking Assessment for further detail.
- Approximately 61% of properties have off-street parking.

**Table 8 Airport Underpass Connection MCA scores**

	<b>Option 1</b>	<b>Option 2</b>
<b>Description</b>	Separated cycleways in each direction, parking north side	Two-way separated cycleway on south side, parking north side
<b>Streetmix section</b>		
<b>Key differentiating factors</b>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Parking adjacent to cycle lane can cause visibility issues for vehicles entering and exiting driveways across the cycle lane and requires pedestrians to cross cycle lane to access parking</p>	<p>Protected facility for cyclists in both directions improving cyclist uptake</p> <p>Small flush median provides additional width to traffic lanes</p> <p>Two-way facility less familiar for road users, less likely to look both directions when entering and exiting driveways. Eastbound cyclists riding contraflow increase crash risk.</p>

	Option 1	Option 2
	Parking only on one side but parking demand is low so all existing demand can be accommodated.	Parking only on one side but parking demand is low so all existing demand can be accommodated.  Has a wider, more visible part of the corridor for walking and cycling improving overall amenity
<b>Weighted score</b>	1.18	0.93
<b>Rank</b>	2	3

	Option 3	Option 4
<b>Description</b>	On road buffered cycle lanes, parking both sides, reduced traffic lane width	Neighbourhood green zone with reduced speed limit and placemaking, parking both sides, landscape space. More space to do other things
<b>Streetmix section</b>		
<b>Key differentiating factors</b>	Unprotected cyclists required to ride adjacent to traffic and parked vehicles with reduced safety and uptake  No impact on parking  Increased delay for traffic due to narrow lane width	Slower speed environment improves safety for all road users including cyclists  Minimal impact to parking availability  No specific cycling provision may reduce uptake for cyclists not confident to share with traffic
<b>Weighted score</b>	0.50	1.20
<b>Rank</b>	4	1

Option 4 received the highest score during the MCA.

However, based on the feedback received Council have advised to proceed with Option 3 to 30% design. Although this option scored worst it is being pursued by Council for other reasons, such as to bring this section in to line with Waka Kotahi guidelines. Feedback also noted that the width and road uses does not suit being a neighbourhood green zone and it may reduce rather than improve uptake.

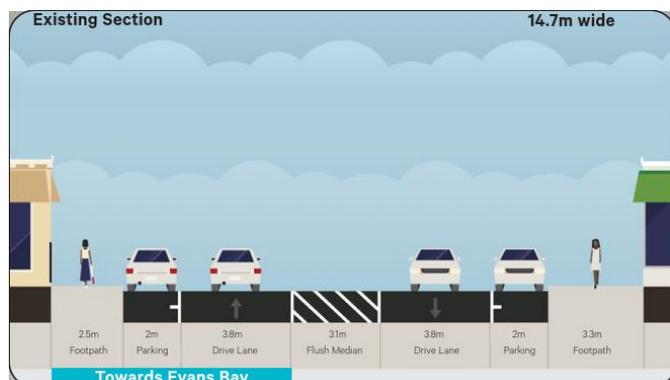
Other considerations identified for this section include;

- Changing the angle parking to parallel
- Introducing planting areas
- Parking restrictions (for examples P8 hrs, residents exempt) to manage airport parking

These will be considered at 30% design and development of the Parking Management Plan.

## 3.6 Tirangi Road

Tirangi Road is currently a two-lane road with parking on each side and a central flush median. Cycling improvements for Tirangi Road have previously been considered in 2017 when a traffic resolution (TR) proposed 2m-wide cycle lanes on each side of the road between the footpath and traffic lanes.



Key corridor information is included in Appendix A. Highlights for this section of the route include;

- Section length is approximately 110m
- Average carriageway width is 14.7m
- Five-day average daily traffic is approximately 10,197 vehicles
- Recorded 85<sup>th</sup> percentile speeds (47 km/hr) are lower than the posted speed limit (50 km/hr)
- Designated a Collector Road in the District Plan
- Low vehicle turning movement demand into adjacent land use

**Table 9 Tirangi Road MCA scores**

	<b>Option 1</b>	<b>Option 2</b>
<b>Description</b>	Separated cycleways in each direction, flush median, no parking (adjusted TR option)	Separated cycleways in each direction, parking east side
<b>Streetmix section</b>		
<b>Key differentiating factors</b>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Flush median provides space for turning vehicles to wait and look for cyclists, and for pedestrians to wait while crossing</p> <p>Parking removed, however parking survey shows low demand</p>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Small flush median provides additional width to traffic lanes</p> <p>Parking adjacent to cycle lane can cause visibility issues for vehicles entering and exiting driveways across the cycle lane and requires pedestrians to cross cycle lane to access parking</p> <p>Parking only on one side but parking demand is low so all existing demand can be accommodated.</p>
<b>Weighted score</b>	1.25	1.20
<b>Rank</b>	1	2

	Option 3	Option 4	Option 5
<b>Description</b>	Two-way separated cycleway on west side, parking east side	Separated cycleways in each direction, parking both sides, reduced traffic lane width	On road cycle lanes, parking both sides, reduced traffic lane width
<b>Streetmix section</b>			
<b>Key differentiating factors</b>	<p>Protected facility for cyclists in both directions improving cyclist uptake</p> <p>Small flush median provides additional width to traffic lanes</p> <p>Two-way facility less familiar for road users, less likely to look both directions when entering and exiting driveways. Southbound cyclists riding contraflow increase crash risk.</p> <p>Section is short and at the southern end cyclists would transition back on to the road. This transition is considered less intuitive for road users and requires more physical works to get cyclists across the road.</p> <p>Parking only on one side but parking demand is low so all of existing demand can be accommodated.</p> <p>Has a wider, more visible part of the corridor for walking and cycling improving overall amenity</p>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Parking adjacent to cycle lane can cause visibility issues for vehicles entering and exiting driveways across the cycle lane and requires pedestrians to cross cycle lane to access parking</p> <p>No impact on parking</p> <p>Increased delay for traffic (including buses) due to narrow lane width</p>	<p>Unprotected cyclists required to ride adjacent to traffic and parked vehicles with reduced safety and uptake</p> <p>No impact on parking</p>
<b>Weighted score</b>	1.00	1.08	0.33
<b>Rank</b>	4	3	5

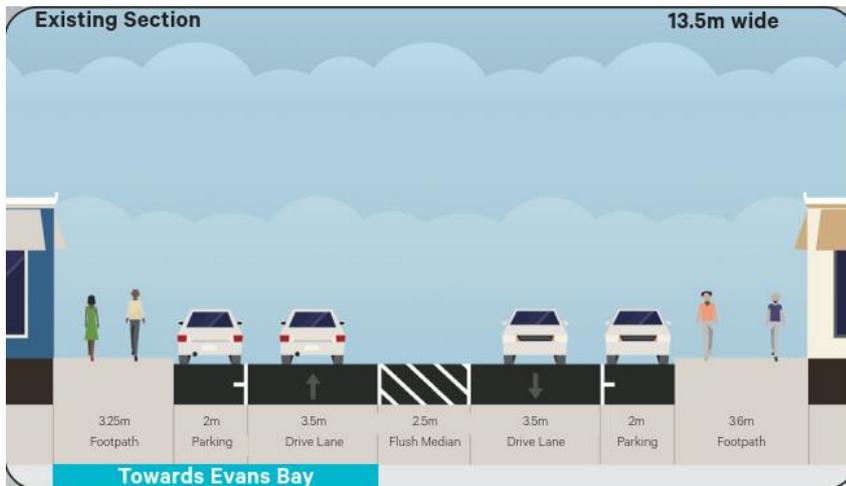
Option 1 received the highest score during the MCA. Option 2 also received a relatively high score. Options 1 and 2 could be combined to provide turning bays at specific intersections.

Based on the MCA scoring we recommend that Option 1 is progressed to 30% design. This aligns with the 2017 traffic resolution design and may be able to be progressed on that basis.

Considerations for 30% design include the treatment at thresholds into the roundabout (this was noted as a cycle accident hotspot), and potential for other safety treatments that could be implemented on the roundabout.

### 3.7 Onepu Road - centre

Onepu Road between Coutts Street and Rongotai Road is currently a two-lane road with parking on each side and a central flush median.



Key corridor information is included in Appendix A. Highlights for this section of the route include;

- Section length is approximately 220m
- Average carriageway width is 13.5m
- Five-day average daily traffic is approximately 8,026 vehicles
- Recorded 85<sup>th</sup> percentile speeds (41 km/hr) are lower than the posted speed limit (50 km/hr)
- Bus route
- Designated a Principal Road in the District Plan
- High vehicle turning movement demand into adjacent businesses

**Table 10 Onepu Road - centre MCA scores**

	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>
<b>Description</b>	Separated cycleways in each direction, parking west side	Two-way separated cycleway on east side, parking west side	Two-way separated cycleway on east side, flush median, no parking
<b>Streetmix section</b>			
<b>Key differentiating factors</b>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Parking adjacent to cycle lane can cause visibility issues for vehicles entering and exiting driveways across the cycle lane and requires pedestrians to cross cycle lane to access parking</p>	<p>Protected facility for cyclists in both directions improving cyclist uptake</p> <p>Small flush median provides additional width to traffic lanes</p> <p>Two-way facility less familiar for road users, less likely to look both directions when entering and exiting driveways Southbound cyclists riding contraflow increase crash risk.</p> <p>Has a wider, more visible part of the corridor for walking and cycling improving overall amenity</p>	<p>Protected facility for cyclists in both directions improving cyclist uptake</p> <p>Two-way facility less familiar for road users, less likely to look both directions when entering and exiting driveways. Southbound cyclists riding contraflow increase crash risk.</p> <p>Flush median provides space for turning vehicles to wait and look for cyclists, and for pedestrians to wait while crossing</p> <p>All parking removed with limited ability to reallocate on-street. However WCC also completed a survey of off-street parking capacity which showed there was plenty of parking capacity in the business car parks.</p> <p>Has a wider, more visible part of the corridor for walking and cycling improving overall amenity</p>
<b>Weighted score</b>	0.98	0.73	0.58
<b>Rank</b>	2	3	4

	<b>Option 4</b>	<b>Option 5</b>	<b>Option 6</b>
<b>Description</b>	On road cycle lanes, parking both sides, reduced traffic lane width	Separated cycleways in each direction, flush median, no parking	Shared lanes both directions with reduced speed limit and placemaking, flush median, parking both sides. More space to do other things
<b>Streetmix section</b>			
<b>Key differentiating factors</b>	<p>Unprotected cyclists required to ride adjacent to traffic and parked vehicles with reduced safety and uptake</p> <p>No impact on parking</p> <p>Increased delay for traffic (including buses) due to narrow lane width</p>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Flush median provides space for turning vehicles to wait and look for cyclists, and for pedestrians to wait while crossing</p> <p>All parking removed with limited ability to reallocate on-street. However WCC also completed a survey of off-street parking capacity which showed there was plenty of parking capacity in the business car parks.</p>	<p>Slower speed environment improves safety for all road users including cyclists</p> <p>Flush median provides space for turning vehicles to wait and look for cyclists, and for pedestrians to wait while crossing</p> <p>Minimal impact to parking availability, minor changes to improve visibility around driveway entrances.</p> <p>No specific cycling provision may reduce uptake for cyclists not confident to share with traffic</p> <p>Adjacent land-use is not aligned with place-making and shared zone environment</p>
<b>Weighted score</b>	0.13	1.03	0.33
<b>Rank</b>	6	1	5

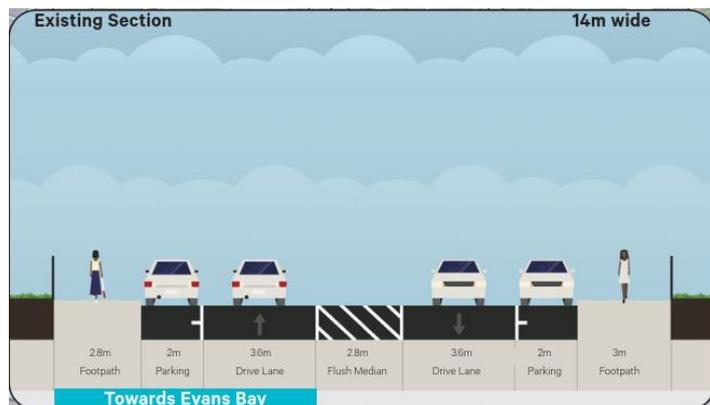
Option 5 received the highest score during the MCA. Option 1 also received a relatively high score. Options 5 and 1 could be combined to provide parking along part of the section.

Based on the MCA scoring we recommend that Option 5 is progressed to 30% design.

Other considerations identified for this section include potential relocation of Bus Stop 6237 to the south side of the Coutts Street intersection.

### 3.8 Onepu Road - residential

Onepu Road between Lyall Parade and Coutts Street is currently a two-lane road with parking on both sides. There is also a central flush median between Apu Crescent and Cockburn Street.



Key corridor information is included in Appendix A. Highlights for this section of the route include;

- Section length is approximately 1000m
- Average carriageway width is 14.0m
- Five-day average daily traffic is approximately 7,456 vehicles
- Recorded 85<sup>th</sup> percentile speeds (49 km/hr) are lower than the posted speed limit (50 km/hr)
- Bus route
- Designated a Principal Road in the District Plan
- Low vehicle turning movement demand into side roads and adjacent residential land use
- Approximately 90% of properties south of the Leonie Gill Pathway have off-street parking.

**Table 11 Onepu Road - residential MCA scores**

	<b>Option 1</b>	<b>Option 2</b>
<b>Description</b>	Separated cycleways in each direction, flush median, no parking	Separated cycleways in each direction, parking west side
<b>Streetmix section</b>		
<b>Key differentiating factors</b>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Flush median provides space for turning vehicles to wait and look for cyclists, and for pedestrians to wait while crossing</p> <p>All parking removed. Residents parking demand high overnight so will likely result in surrounding streets not having sufficient capacity</p>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Parking adjacent to cycle lane can cause visibility issues for vehicles entering and exiting driveways across the cycle lane and requires pedestrians to cross cycle lane to access parking</p> <p>Residents parking demand high overnight so will likely expand to surrounding streets</p>
<b>Weighted score</b>	1.03	1.05
<b>Rank</b>	2	1

	Option 3	Option 4	Option 5
<b>Description</b>	Two-way separated cycleway on east side, parking west side	Separated cycleways in each direction, parking both sides, reduced traffic lane width	On road cycle lanes, parking both sides, reduced traffic lane width
<b>Streetmix section</b>			
<b>Key differentiating factors</b>	<p>Protected facility for cyclists in both directions improving cyclist uptake</p> <p>Small flush median provides additional width to traffic lanes</p> <p>Two-way facility less familiar for road users, less likely to look both directions when entering and exiting driveways. Northbound cyclists riding contraflow increase crash risk.</p> <p>Residents parking demand high overnight so will likely expand to surrounding streets</p> <p>Has a wider, more visible part of the corridor for walking and cycling improving overall amenity</p>	<p>Protected facility for cyclists in both directions improving cyclist safety and uptake</p> <p>Parking adjacent to cycle lane can cause visibility issues for vehicles entering and exiting driveways across the cycle lane and requires pedestrians to cross cycle lane to access parking</p> <p>No impact on parking</p> <p>Increased delay for traffic (including buses) due to narrow lane width</p>	<p>Unprotected cyclists required to ride adjacent to traffic and parked vehicles with reduced safety and uptake</p> <p>No impact on parking</p> <p>Increased delay for traffic (including buses) due to narrow lane width</p>
<b>Weighted score</b>	0.85	0.88	0.18
<b>Rank</b>	4	3	5

Option 2 received the highest score during the MCA. Option 1 also received a high score. Options 2 and 1 could be combined to provide turning bays at specific intersections.

Based on the MCA scoring we recommend that Option 2 is progressed to 30% design.

Other opportunities identified for this section include;

- Avoiding separators outside the bus terminus and having parking on the west side of the road to allow opportunity to position northbound boarding bus stop shelters in the parking lane.
- Coordinating with planned changes to Bus Stop 7330 (Onepu Road at Lyall Bay Shops) to address issue of buses striking the canopy and lack of accessibility for bus customers.
- Coordinating with the WCC Transport and Infrastructure teams planned upgrade to the pedestrian crossing at Wha Street.
- Bus stop rationalisation
- Improved connection to the Leonie Gill Pathway including reducing traffic speeds at the crossing location

These will be considered at 30% design.

## 4. Conclusions

This Multi Criteria Analysis (MCA) has been undertaken to assess the recommended option for the Kilbirnie Connections Transitional Cycleway project.

To assist with scoring the route was broken into seven sections to reflect the differences in road layout, gradient, character and design along the route.

A number of constraints such as road width and traffic volumes limited the feasibility of long list options and assisted in eliminating options to arrive at the short list.

Each short-listed option was scored in accordance with the MCA criteria and scoring scale. The preferred option was generally the highest scoring in the MCA, although for several sections the preferred option is a combination of the two highest scoring options.

The recommended option identified by the MCA<sup>9</sup> is;

- For cyclists travelling between Evans Bay and the airport underpass
  - Cobham Drive signalised crossing (currently being constructed by others)
  - Angled accessible boardwalk up to the ASB Carpark
  - Two-way separated cycleway adjacent to the ASB Carpark to Kemp Street
  - Two-way accessway between Kemp Street and Rongotai Road (existing)
  - Separated cycleways along Rongotai Road (existing)
  - On road cycle lanes on Te Whiti Street (existing)
  - Separated cycleways in each direction along Coutts Street to Tirangi Road
  - Buffered cycle lanes along Coutts Street between Tirangi Road and the Airport underpass
  - Separated cycleways in each direction along Tirangi Road connecting Coutts Street and the Leonie Gill pathway
- For cyclists travelling between Evans Bay and Lyall Bay
  - Cobham Drive signalised crossing (currently being constructed by others)
  - Neighbourhood greenway (shared lanes, slow speed environment) along Tacy Street to Kemp Street
  - Shared path along Tacy Street between Kemp Street and Rongotai Road
  - Two-way cycle connection between Tacy Street and Onepu Road (currently being designed by others)
  - Separated cycleways in each direction along Onepu Road

Subject to Council's confirmation this will be progressed to 30% design.

---

<sup>9</sup> Existing connections along the routes not part of the transitional project scope are greyed out

# Appendix A – Assessment criteria

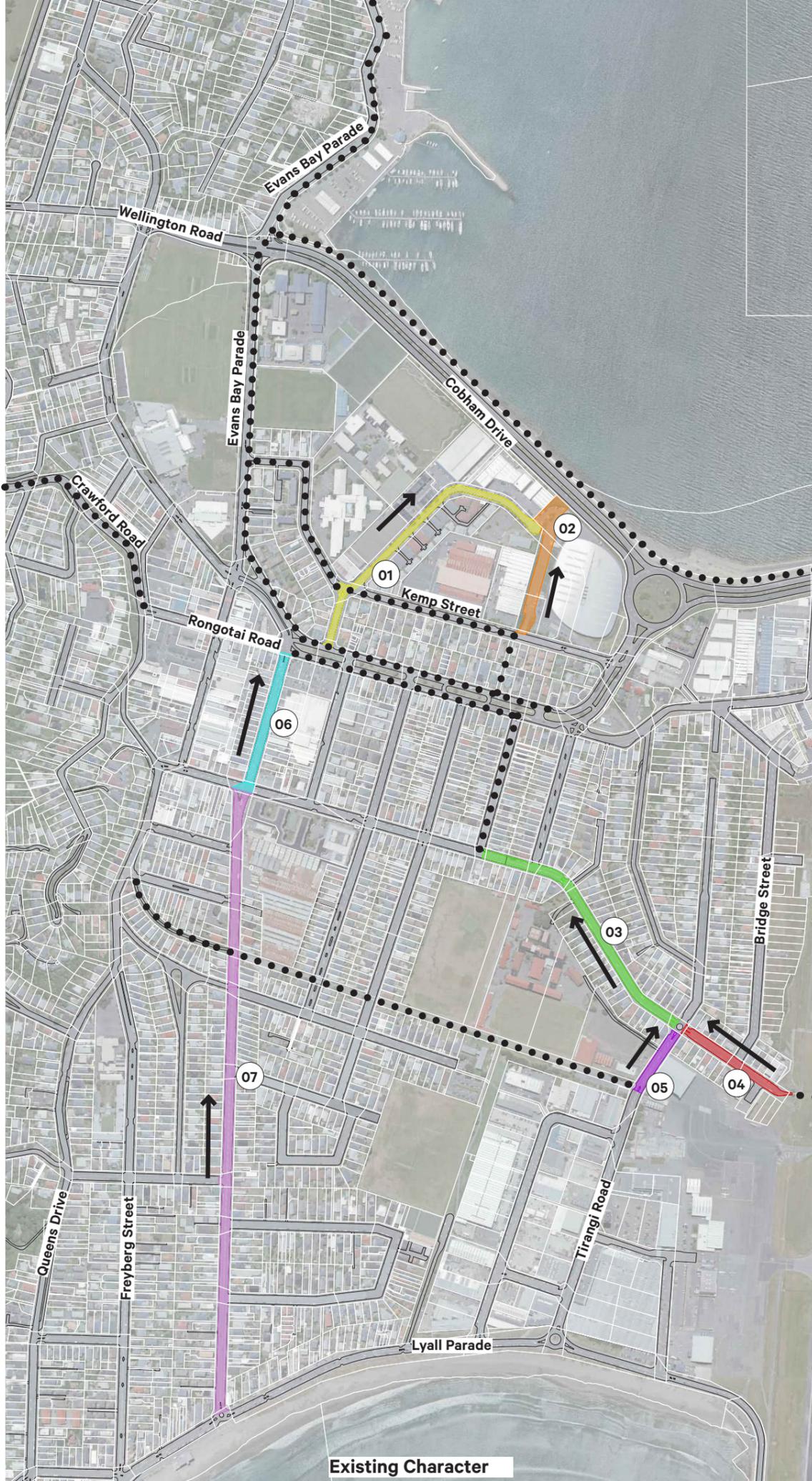
- Key corridor information
- Route and section layout showing existing road corridor
- MCA criteria and scoring application provided by WCC
- Scoring scale

**Table 12 Key corridor information**

	<b>Source</b>	<b>Tacy Street</b>	<b>ASB carpark</b>	<b>Coutts Street (between Te Whiti St and Tirangi Rd)</b>	<b>Airport Underpass Connection (Coutts Street between Tirangi Rd &amp; Airport Tunnel)</b>
<b>Approximate section length (m)</b>	Measured on Google Maps	490m	250m	430m	200m
<b>ONF category</b>	Megamaps	Local Streets	N/A	Urban Connectors / Activity Streets (approx. 50-50)	Urban Connectors
<b>WCC Road Hierarchy</b>	WCC District Plan Map 33	Local Road	Local Road	Collector Road	Local Road
<b>Mean operating speed</b>	Megamaps	<30 km/h	N/A	Majority 40-44 km/h	<30 km/h
<b>Safe and Appropriate Speed</b>	Megamaps	30 km/h	N/A	30 km/h	40 km/h
<b>Recorded 85th Percentile speed (towards Airport/Lyall Bay)</b>	WCC Traffic counts	46 km/h	NR	47 km/h	44 km/h
<b>Recorded 85th Percentile speed (towards Evans Bay)</b>	WCC Traffic counts	46 km/h	NR	49 km/h	40 km/h
<b>Average gradient (towards Evans Bay)</b>	Measured on site	< 2%	< 2%	4%	< 2%
<b>Peak hour bus frequency (in each direction)</b>	Metlink	Not a bus route	Not a bus route	2 per hour (school bus route)	Not a bus route
<b>Average carriageway width</b>	Measured on aerial photo	9.7m	16.8m	13.2m	13.2m
<b>Two way traffic volume (five day ADT)</b>	WCC Traffic counts	2,096 vpd	NR	11,278 vpd	1033 vpd (est. 400 east of Bridge Street)
<b>Heavy vehicle proportion</b>	WCC Traffic counts	1.5%	NR	6.0%	7.8%
<b>Percentage of properties with off-street parking</b>	Provided by WCC	10% (1 of 9) between Kemp St and Rongotai Rd All properties north of Kemp St have off-street parking	NR	4% (2 out of 58)	31% (8 out of 26)

	Source	Tirangi Road	Onepu Road - Centre (Rongotai Rd to Coutts St)	Onepu Road - Residential (Coutts St to Lyall Bay)
<b>Approximate section length (m)</b>	Measured on Google Maps	110m	220	1000
<b>ONF category</b>	Megamaps	Activity Streets	Main Streets	Urban Connectors / Activity Streets (approx. 50-50)
<b>WCC Road Hierarchy</b>	WCC District Plan Map 33	Collector Road (southern end only until roundabout)	Principal Road	Principal Road
<b>Mean operating speed</b>	Megamaps	35-39 km/h	<30	40-44
<b>Safe and Appropriate Speed</b>	Megamaps	30 km/h	30	30/40 (approx 50-50)
<b>Recorded 85th Percentile speed (towards Airport/Lyall Bay)</b>	WCC Traffic counts	47 km/h	40	50
<b>Recorded 85th Percentile speed (towards Evans Bay)</b>	WCC Traffic counts	47 km/h	43	49
<b>Average gradient (towards Evans Bay)</b>	Measured on site	< 2%	3%	< 2%
<b>Peak hour bus frequency (in each direction)</b>	Metlink	6 per hour	12 per hour  Towards CBD AM: Every 10min; Towards CBD PM: Every 9min/ Towards Bays AM: Every 10min; Towards Bays PM: Every 20min (but alternate/interval bus route every 10min)	12 per hour  Bus #3: To Wgt station AM: Every 10min; To Wgt station PM: Every 10min; To Lyall Bay AM: Every 10min; To Lyall Bay PM: Every 20min w/ 10min intervals between direction Rongotai/Lyall Bay
<b>Average carriageway width</b>	Measured on aerial photo	14.7m	13.5	14
<b>Two way traffic volume (five day ADT)</b>	WCC Traffic counts	10,197 vpd	8,026	7,456
<b>Heavy vehicle proportion</b>	WCC Traffic counts	7.2%	9.1%	5.4%
<b>Percentage of properties with off-street parking</b>	Provided by WCC	NR	NR	South of Leonie Gill Pathway: 10% (11 out of 107) North of Leonie Gill Pathway: NR

# Kilbirnie Transitional Cycleway.



## Existing Character

<b>Tacy Street</b> - Industrial mixed with residential character - Poor legibility of connection to Cobham Drive and ASB Centre	<b>ASB Carpark</b> - Wide vehicle lanes - Poor legibility of exit towards Cobham Drive - Carpark is busy during evenings and weekends, quieter on weekdays	<b>Coutts Street</b> - Residential character - Some existing on road cycle lane with no buffer	<b>Airport Underpass</b> - Underpass is narrow and low - Lots of space on either side of tunnel - Tunnel provides separated space for cycling and pedestrians	<b>Tirangi Road</b> - Very wide road - Industrial and residential character - Crossing island indicates access to Leonie Gill Pathway	<b>Onepu Road - Centre</b> - High turning movements due to supermarkets and large format retail	<b>Onepu Road - Residential</b> - Very wide road - Area around Wha Street junction appears confusing/not intuitive
---	---	--	--	--	--	--

**Legend.**

- 01) Tacy Street
- 02) ASB Carpark
- 03) Coutts Street
- 04) Airport Underpass Connection
- 05) Tirangi Road
- 06) Onepu Road - Centre
- 07) Onepu Road - Residential
- Other cycle connections
- Towards Evans Bay

A1 SCALE 1:4000  
0 40 80 120 160 200 (m)

**For discussion only.**

Absolutely Positively Wellington City Council **abley**  
Me Heke Ki Pōneke

**Tonkin+Taylor** **Isthmus.**

1	DRAFT FOR CLIENT REVIEW	01.07.22		
2	FINAL CONCEPT ISSUE	29.07.22		
REV	DESCRIPTION	DATE	APPROVED	DATE

PROJECT No.	1017985.J903	CLIENT	WELLINGTON CITY COUNCIL
DESIGNED	FH Jul.22	PROJECT	TRANSITIONAL CYCLEWAYS - KILBIRNIE
DRAWN	CHLI Jul.22	TITLE	ROUTE SECTION SECTION PLAN
CHECKED	AH Jul.22	SCALE (A1)	1:4000
		FIG No.	1017985.J903-CD-000
		REV	2

COPYRIGHT ON THIS FIGURE IS RESERVED. C:\Users\chli\Desktop\TT ROAD PROJECT\KILBIRNIE\ROUTE SECTION.dwg 2022-Jun-27 2:16:47 pm Plotter: B7-CHARLETT

**MCA criteria and scoring application**

MCA criteria and scoring application				Example of scoring application						
Criteria	Consideration	Facilities Measure	Comment	-3	-2	-1	0	1	2	3
1. Improve safety, accessibility, attractiveness and convenience to encourage people to choose cycling and micro-mobility devices	Improved safety for people cycling and using micro-mobility devices	Austrroads Safe Systems Assessment cycling product		Reduction in SSA of 21 or more	Reduction in SSA of 11-20	Reduction in SSA of 4-10	No change	Improvement in SSA of 4-10	Improvement in SSA of 11-20	Improvement in SSA of 21 or more
	Improved convenience for people cycling and using micro-mobility devices	Austrroads LOS Framework for cyclists and extent of protected facility and how well the type of facility aligns to any existing and planned adjacent cycle infrastructure (including access to facilities)	Refer to Dutch Design Manual for Bicycle Traffic, section 4.3. Consider not only cohesion and directness, but also comfort and attractiveness.	Less efficient route, more difficult to pass slow cyclists, significantly slower and less comfortable.			No change			Easier, faster, smoother, more enjoyable.
2. Improve safety, accessibility, attractiveness and convenience to encourage people to choose walking and mobility devices	Improved safety for people walking and using mobility devices	Austrroads Safe Systems Assessment pedestrian product		Reduction in SSA of 21 or more	Reduction in SSA of 10-20	Reduction in SSA of 4-10	No change	Improvement in SSA of 4-10	Improvement in SSA of 11-20	Improvement in SSA of 21 or more
	Improved convenience for people walking and using mobility devices	Assessment of available pedestrian space	Consider not only cohesion and directness, but also comfort and attractiveness.	Removal of existing pedestrian path, removal of pedestrian crossing facility.		Bus stop bypasses impact footpath width at some locations	No change			Wider footpaths, increased pedestrian crossing priority and reduced delays at crossings
3. Improve bus experience and journey time compared to private vehicles	Improved travel time and experience of PT compared with private vehicles	Traffic capacity relative to public transport. Improvements such as bus jumps at intersections, bus stop rationalisation, bus stop layout improvements, as well as changes that reduce traffic lanes and increase general traffic time. Where a cycle lane crosses through the bus stop this would likely reduce travel time as bus passengers take longer to alight and disembark.		Traffic capacity increased relative to PT			No change or equal reduction in travel time		Bus priority at intersections, reduced traffic capacity	Bus stop rationalisation, bus priority at intersections, reduced traffic capacity
4. Retain high priority parking and provide transport alternatives	Retain high priority parking for businesses and residents where essential (e.g., mobility parking)	Alignment with WCC Parking policy primary and secondary success measures. Increase or decrease in loading provisions for businesses	Need to assess impact of different type of parking using hierarchy from policy. Eg. Removing mobility parking worse than commuter parking	Significant loss of high priority parking.		Loss of low-priority parking only	No change	Not used	Not used	Not used
	Provide alternatives to lost carparks (ie, provide car share, etc)	Provide alternatives: car share, public transport, other parking places.	Consider car park sharing, as well as car sharing parks, etc.	Not used	Not used	Not used	No change	Some loss of parking and ability to convert 1-10 parks from low-priority to high-priority	Some loss of parking and ability to convert 10+ parks from low-priority to high-priority	No loss of parking and ability to convert low-priority parking to high-priority parking.
5. Enables benefits to be delivered quickly with minimal disruption	Alignment with other planned works in the road corridor	Considering current and upcoming planned works recorded in open Corridor Access Requests (CARs), within the Wellington Forward Works Viewer and references by the project team.		Cycle priority will have to be removed to allow implementation of other planned works along the corridor with no ability to retain continuous cycle provision during construction	Closure of part-time transport facilities during construction (e.g. peak hour bus lanes)		No change			Changes will make it easier to implement other planned works along the corridor whilst maintaining good LOS for sustainable modes
	Ability to deliver quickly and with less disruption compared with a typical transport project.	Scale of works required, any consenting or external approval requirements, lead times for key components or contracting staff. Reduced civil works, signals changes and other major works. Take into account political ease of delivery		Significant signal changes and carparking changes, etc. Specialist materials requiring long lead times. Enabling works such as removing kerbs.		Some changes to signals/carparks/kerbs that will slow delivery.	Typical project duration / disruption for a road-space reallocation project.	Only very minor changes to carparks, kerbs or other existing road layout, which are not considered significant.		Quick and easy delivery with minimal disruption. No changes to carparks, traffic signals or bus stops. No major work.
6. Improve the place amenity in the area by considering comfort, connectivity and accessibility, composition and activation achieved.	Improved urban amenity and expression of Mana Whenua values	Available space for place function enhancements such as street trees, seating, parklets, cycle parking (avoid hostile architecture) Separation of transportation modes (e.g. footpath, cycle lane, vehicle lane) Increase of biodiversity and habitat improvements for overall climate action response	Needs to be strategically assessed across entire CBD area and demographic development. "Place function enhancements" will differ from sub-urb to sub-urb, and the required space needing changes based on that	Reduction of available pedestrian space and footpaths, no use of surplus car-parks, increase of private vehicle use by increasing enabling structures (e.g. more car parks) and decreasing public open spaces. Increase of carbon footprint by not challenging "status quo", missed opportunities of community engagement and therefore loss of spatial quality	Identifying spatial opportunities (e.g. surplus car parks) but not following up on actions,	Identifying spatial opportunities (e.g. surplus car parks) but poorly executed spatial arrangement (e.g. min space requirement and accessibility standards) based on national and local govt regulations	No change	Find suitable spaces and improve their function/use and overall access, assess all existing functions, start creating an urban spatial network (e.g. key areas - what is missing, what is required for that space based on demographic and private/public use)	Link spatial elements, have a suite developed that identifies opportunities. Use of GNP (green network plan) and other strategic plans/policies (e.g. WSD, Wellington Design Manual)	Clear functional hierarchy of transportation modes (e.g. footpath, cycle lane, vehicle lane) and their intended use, widen footpaths/pedestrian areas to increase public open space, connect/link public spaces to create POIs, identify and use surplus vehicle areas to increase amenity spaces, provide exterior furniture elements for space enhancement, increase use of green elements (e.g. trees) with suitable foliage (provide shadow and cooling in summer, keep warmth during winter), assign clear functions to spaces, locate space enhancements in close proximity to public amenities (e.g. toilets, bus-stops), look at principles of the 15min city, look at principles of "livability"

Notes: Consideration should be given to fatal flaws, such as removing bus lanes, or causing significant safety issues.

### Scoring scale

Score	Benefits/disbenefits
3	Significantly achieves
2	Moderately achieves
1	Slightly achieves
0	Neutral
-1	Slightly reduces
-2	Moderately reduces
-3	Significantly reduces

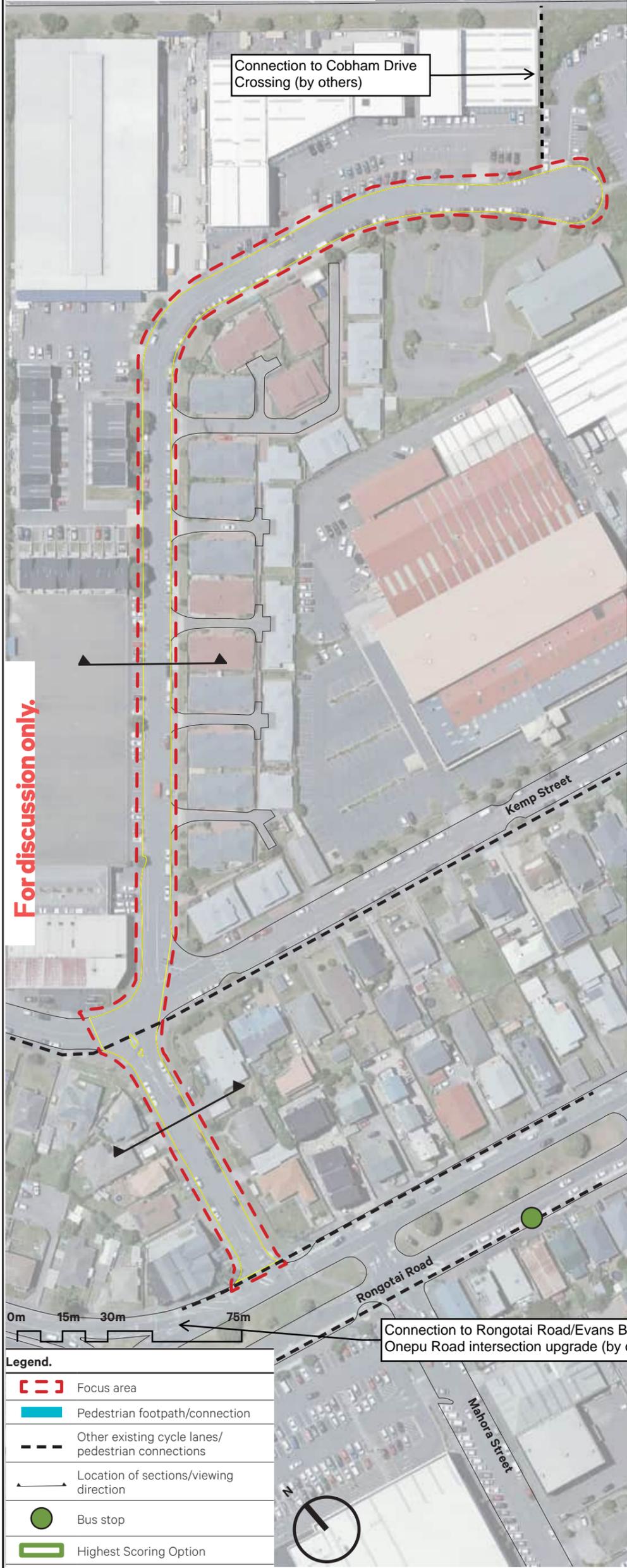
### Objective weightings

Criteria	Consideration	Weight	Weight
1. Improve safety, accessibility, attractiveness and convenience to encourage people to choose cycling and micro-mobility devices	Improved safety	20.0%	40%
	Improved convenience, comfort and attractiveness	20.0%	
2. Improve safety, accessibility, attractiveness and convenience to encourage people to choose walking and mobility devices	Improved safety	10.0%	15%
	Improved convenience	5.0%	
3. Improve bus experience and journey time compared to private vehicles	Improved bus speed and reliability	15.0%	15%
4. Retain high priority parking and provide transport alternatives	Retain high priority parking (e.g., short term and loading followed by residential).	7.5%	15%
	Mitigate parking impact (e.g., car share options, etc)	7.5%	
5. Enables benefits to be delivered quickly with minimal disruption	Alignment with other planned works in the road corridor	5.0%	10%
	Reduced civil works, signals changes and other major changes	5.0%	
6. Improve the place amenity in the area by considering comfort, connectivity and	Provides opportunities for improved urban amenity	5.0%	5%
<b>Total weights</b>		<b>100%</b>	<b>100%</b>

# Appendix B – Tacy Street options and MCA table

- Options
- Options excluded from the shortlist
- MCA Ranking

# Kilbirnie Transitional Cycleway. Tacy Street.



Connection to Cobham Drive Crossing (by others)

Connection to Rongotai Road/Evans Bay Parade/Onepu Road intersection upgrade (by others)

For discussion only.

For discussion only.

**Legend.**

- Focus area
- Pedestrian footpath/connection
- Other existing cycle lanes/pedestrian connections
- Location of sections/viewing direction
- Bus stop
- Highest Scoring Option



Absolutely Positively Wellington City Council **abley**

**Tonkin+Taylor** **Isthmus.**

PROJECT No. 1017985.J903-CD		CLIENT <b>WELLINGTON CITY COUNCIL</b>
DESIGNED	FH	Jul.22
DRAWN	CHLI	Jul.22
CHECKED	AH	Jul.22
1	DRAFT FOR CLIENT REVIEW	01.07.22
2	FINAL CONCEPT ISSUE	29.07.22
REV	DESCRIPTION	DATE

PROJECT <b>TRANSITIONAL CYCLEWAYS - KILBIRNIE</b>		TITLE <b>TACY STREET SECTION SECTION PLAN</b>
SCALE (A3)	1:1500	FIG No. 1017985.J903-CD-001
REV	2	

COPYRIGHT ON THIS FIGURE IS RESERVED  
C:\Users\charlie\Desktop\TTT ROAD PROJECT\KILBIRNIE\EXISTING SECTIONS.dwg 2022-Jun-28 3:46:52 PM Plotted by: CHARLIE TT

## Tacy Street options excluded from short list assessment

Long list opportunities	Reason for exclusion from short list
Do Nothing	Refer Section 2.4.
Alternate routes	Refer Section 2.4
Sealed shoulders	Refer Section 2.4
Change in road space through kerb realignment.	The transitional cycleways are intended to require minimum physical works and ability to amend or reinstate if required. This excluded widening to provide sufficient width for separated cycleways while retaining parking on both sides of the road.
Central traffic path	Considered fatal flaw as there is a significant proportion of heavy vehicles accessing businesses on Tacy Street. This results in significant encroachment into the cycle space.

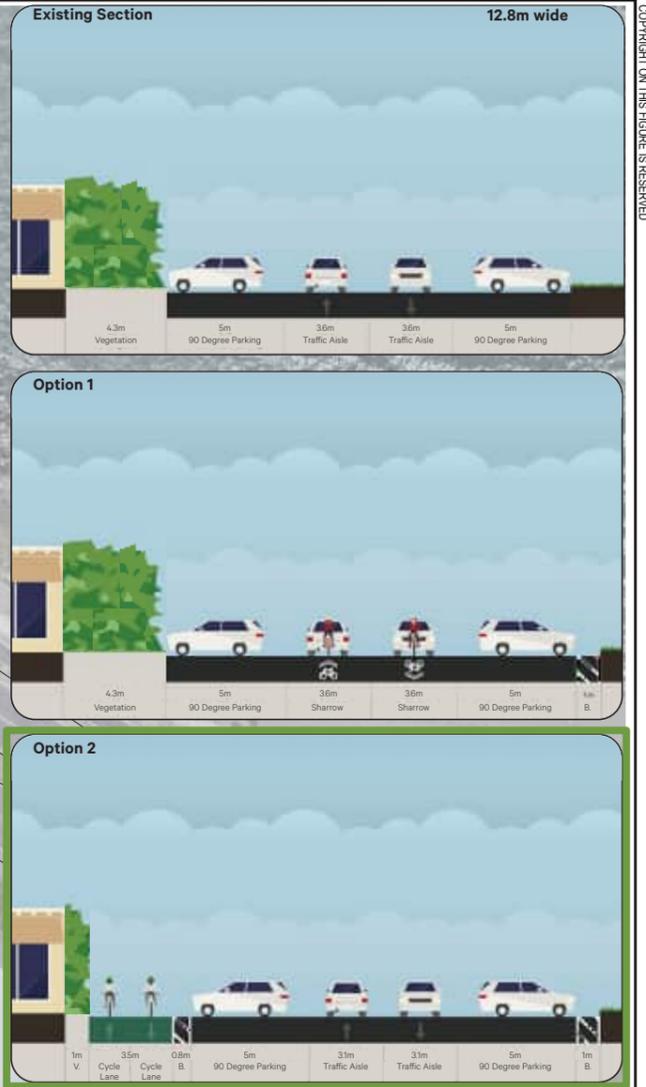
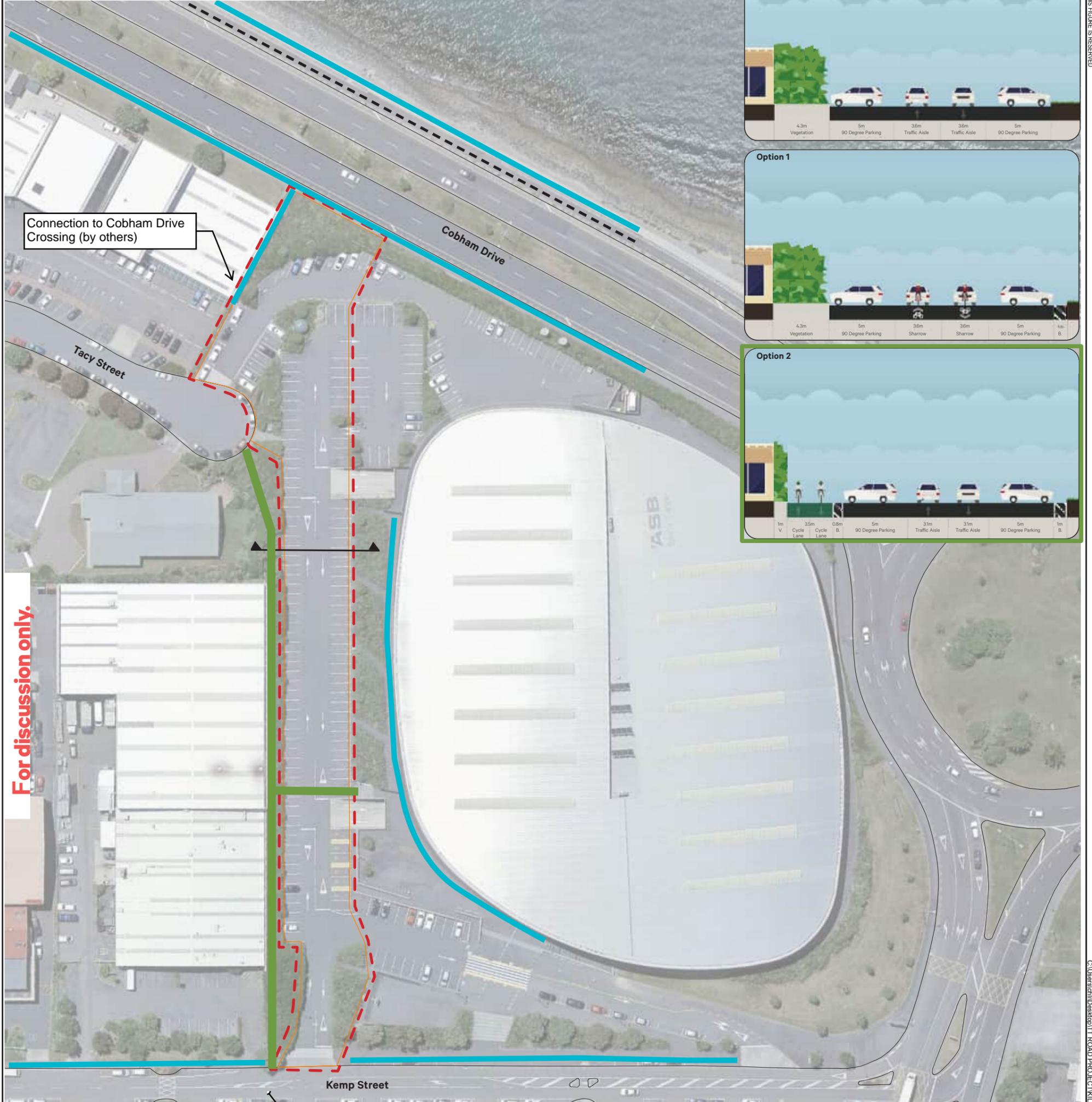
**Tacy Street MCA ranking**

Criteria	Consideration	Option 1	Option 2	Option 3	Option 4	Option 5	Comments
	Description	Neighbourhood greenway both directions, parking both sides, traffic calming, reduced speed environment	One way buffered cycle lane on each side, parking along 13m section of the street	Two-way cycleway north side, parking along 13m section of the street	Shared path on south side, no change to on road layout	Contraflow northbound cycle lane and shared path (southbound cyclists only) on south side, parking north side	Possibility to consider separate options north and south of Kemp Street
	Typically 9.7m wide. North of Kemp Street approximately half of Tacy Street (200m of the 350m) is 13.2m wide where there is currently 90 degree parking.	9.7m - Parking (2.0m), two way shared lane (5.7m), parking (2.0m) 13.2m - 90 degree reverse in parking (5.0m), shared lane (3.1m), shared lane (3.1m), parking (2.0m)	9.7m - Cycle lane (2.0m), two way traffic lane (5.7m), cycle lane (2.0m) 13.2m - Cycle lane (1.9m), buffer (0.8m), parking (2.0m), traffic lane (3.1m), traffic lane (3.1m), buffer (0.4m), cycle lane (1.9m)	9.7m - Two way cycle lane (3.5m), buffer (0.5m), two way traffic lane (5.7m) 13.2m - Two way cycle lane (4.0m), buffer (1.0m), traffic lane (3.1m), traffic lane (3.1m), parking (2.0m)	9.7m - Parking (2.0m), two way traffic lane (5.7m), parking (2.0m). Widen 2.0m wide footpath to 3.5m wide. 13.2m - 90 degree parking (5.0m), traffic lane (3.1m), traffic lane (3.1m), parking (2.0m). Widen 2.0m wide footpath to 3.5m wide.	9.7m - Parking (2.0m), two way traffic lane (5.7m), buffer (0.4m), contra-flow separated cycle lane (1.6m, for northbound cyclists), existing footpath (2.0m, accomodating southbound cyclists) 13.2m - Parking (5.0m), two way traffic lane (5.7m), buffer (0.4m), contra-flow separated cycle lane (2.1m, for northbound cyclists), existing footpath (2.0m, accomodating southbound cyclists)	
1. Improve safety, accessibility and convenience for people cycling and using micro-mobility devices	Improved safety for people cycling and using micro-mobility devices	2	3	2	2	2	Refer SSA
	Improved convenience for people cycling and using micro-mobility devices	0	1	2	1	1	Option 1: No dedicated facility, lower traffic speeds are appealing. Option 2: Dedicated cycling facility on either side of the street Option 3: Two way cycle lane less appealing than 1 way Option 4,5: Shared path appealing, but less appealing than cycle lanes
2. Improve safety, accessibility and convenience for people walking and using mobility devices	Improved safety for people walking and using mobility devices	2	1	1	-2	-1	Refer SSA
	Improved convenience for people walking and using mobility devices	0	0	0	-2	-2	Option 1, 2 & 3: no change to pedestrian arrangement Option 4,5: Shared path is less appealing and convenient for pedestrians
3. Improve bus speed and reliability	Improved travel time of PT compared with private vehicles	0	0	0	0	0	N/A - not a bus route
4. Retain high priority parking and mitigate parking impact	Retain high priority parking for businesses and residents where essential (e.g., mobility parking)	0	-3	-3	0	-1	Option 1,4: all parking retained Option 2,3: removal of high priority parking outside police station. Removal of some high priority parking outside businesses in 13m section Option 5: Parking removed on south side, some high priority parking removed
	Mitigate parking impact (ie, provide car share, etc)	3	1	1	3	2	Option 5: residents parking displaced, should all be within 5 minute walk Option 1,4: little removal of residents parking, all should be accommodated within 5 minute walk (validate with data)
5. Enables benefits to be delivered quickly with minimal disruption	Alignment with other planned works in the road corridor, and/or reduced disruption during construction.	0	2	2	1	1	Options 2 and 3 align with dedicated cycle facilities on Hongotai Road and Cobham Drive Option 4&5 aligns with the existing shared path on Kemp St
	Ability to deliver quickly, or sequenced for elements to deliver early. Reduced civil works, signals changes and other major works.	2	2	2	1	3	Option 1 reduces speed environment for all users which is likely to be perceived as delay Options 2 and 3 removes all parking, difficult for consultation Option 4 requires physical widening of the footpath
6. Improve the place amenity in the area	Improved urban amenity	1	1	1	2	2	Option 1: reduced speed environment improves urban amenity Options 2, 3: Separated cycle space increase urban amenity Options 4,5: This route is likely to have a higher proportion of cyclists travelling to destinations like the Kilbirnie Centre rather than commuters who have alternate routes through the ASB carpark and Evans Bay Parade. Provided these cyclists are encouraged to travel at reasonable speeds the shared path allocated space away from vehicles to active modes, increasing the attractiveness of the street.
	Weighted Score	0.98	1.00	1.00	0.73	0.78	
	Rank	3	1	1	5	4	

# Appendix C – ASB carpark options and MCA table

- Options
- Options excluded from the shortlist
- MCA Ranking

# Kilbirnie Transitional Cycleway. ASB Carpark.



For discussion only.

For discussion only.

**Legend.**

- Focus area
- Pedestrian footpath/connection
- Cobham Drive cycle lane
- Location of sections/viewing direction
- No bus stops along this section
- Highest Scoring Option

Absolutely Positively Wellington City Council **abley**

**Tonkin+Taylor** **Isthmus.**

PROJECT No. 1017985.J903-CD	
DESIGNED	FH Jul.22
DRAWN	CHLI Jul.22
CHECKED	AH Jul.22
1	DRAFT FOR CLIENT REVIEW 01.07.22
2	FINAL CONCEPT ISSUE 29.07.22
REV	DESCRIPTION DATE APPROVED DATE

CLIENT	WELLINGTON CITY COUNCIL
PROJECT	TRANSITIONAL CYCLEWAYS - KILBIRNIE
TITLE	ASB CARPARK SECTION SECTION PLAN
SCALE (A3)	1:1000
FIG No.	1017985.J903-CD-002
REV	2

COPYRIGHT ON THIS FIGURE IS RESERVED. C:\Users\charlie\Desktop\TT ROAD PROJECT\KILBIRNIE\EXISTING SECTIONS.dwg 2022-Jun-28 9:41:53 pm Plotted by CHARLIE TT

## ASB Carpark options excluded from short list assessment

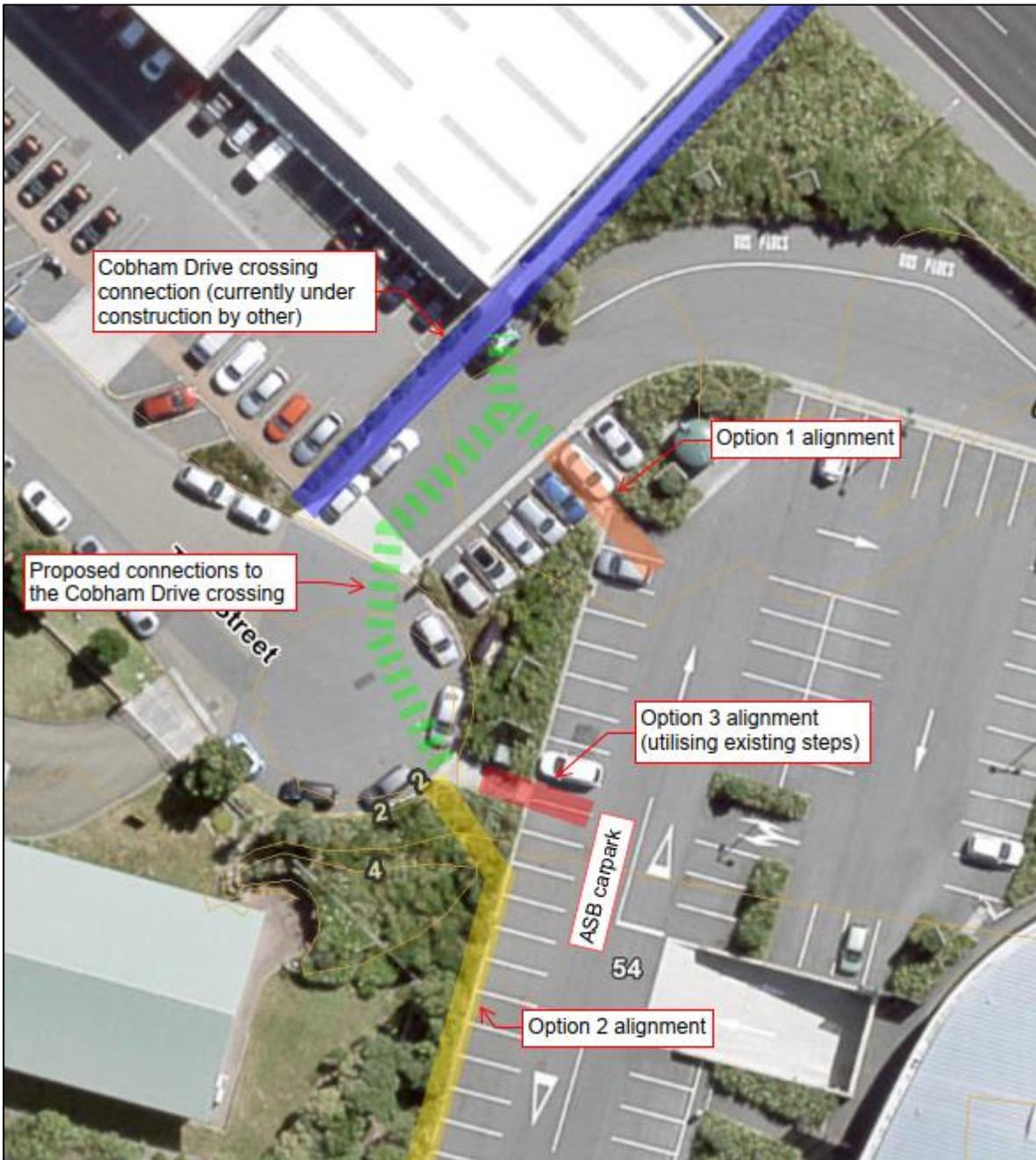
Long list opportunities	Reason for exclusion from short list
Do Nothing	Refer Section 2.4.
Alternate routes	Refer Section 2.4
Sealed shoulders	Refer Section 2.4
Bidirectional path	Insufficient width to accommodate this within the road corridor while maintaining traffic lanes
Shared path	There is no existing footpath and expected to be limited pedestrian demand to travel along the carpark as most pedestrians in this location are people walking between their cars and the ASB Sports Centre.
Change in road space through kerb realignment.	The transitional cycleways are intended to require minimum physical works and ability to amend or reinstate if required.
Reduced traffic lane width below 3.0m	Lane widths are at the minimum standard for vehicles to enter and exit the 90 degree parking spaces.
Reconfigure parking to parallel on the western side to provide space for a two-way cycleway	ASB Sports Centre staff have advised there is significant demand for these carparks, and this was highlighted in the parking surveys. This carpark is on the ASB Centre property rather than road reserve meaning that landowner approval of these changes is required. Consultation with ASB Sports Centre staff has ruled out this option.
Change parking to a shallower angle than 90 degrees to provide cyclist space while retaining angled parking on both sides	Angled carparks don't significantly reduce the width required until very shallow angles (30 degrees). Parking at this angle takes up significant space and is inefficient at each end of the row adjacent to accessway junctions.

**ASB Carpark MCA ranking**

Criteria	Consideration	Option 1	Option 2	Comments
	Description	Shared lanes both directions, 90 degree reverse in parking both sides, traffic calming, reduced speed environment	Two-way cycleway within planted berm on west side, no change to parking, walking and cycling connection to ASB centre	
	Dimensions (from left to right towards Evans Bay, to be measured, estimated 18.2m total)	90 degree reverse in parking (5.0m), two way shared lane (7.2m), 90 degree reverse in parking (5.0m), buffer (1.0m)	Vegetated buffer (1.0m), two way cycleway (3.5m), buffer (0.8m), 90 degree parking (5.0m), two way traffic aisle (6.2m), 90 degree parking (5.0m), buffer (1.0m)	
1. Improve safety, accessibility and convenience for people cycling and using micro-mobility devices	Improved safety for people cycling and using micro-mobility devices	0	1	Refer SSA
	Improved convenience for people cycling and using micro-mobility devices	0	2	Option 2: Separated cycleway provided
2. Improve safety, accessibility and convenience for people walking and using mobility devices	Improved safety for people walking and using mobility devices	0	0	Refer SSA
	Improved convenience for people walking and using mobility devices	0	0	No change
3. Improve bus speed and reliability	Improved travel time of PT compared with private vehicles	0	0	N/A - not a bus route
4. Retain high priority parking and mitigate parking impact	Retain high priority parking for businesses and residents where essential (e.g., mobility parking)	0	0	Both options don't remove any parking
	Mitigate parking impact (ie, provide car share, etc)	0	0	Both options currently used as high priority parking
5. Enables benefits to be delivered quickly with minimal disruption	Alignment with other planned works in the road corridor, and/or reduced disruption during construction.	0	1	Improved connection between Cobham crossing and Kemp Street accessway
	Ability to deliver quickly, or sequenced for elements to deliver early. Reduced civil works, signals changes and other major works.	3	1	
6. Improve the place amenity in the area	Improved urban amenity	0	1	Does not change current layout Option 2 provides urban amenity, good width two way lane
	Weighted Score	0.15	0.75	
	Rank	2	1	

# Appendix D – ASB carpark ramp options and MCA table

- Options
- MCA Ranking



**ASB Carpark Ramp MCA ranking**

Criteria	Consideration	Option 1	Option 2	Option 3	Comments
	Description	Steep path (8% grade) entering north end of carpark, loss of two parking spaces at the top and two at the bottom of the ramp	Angled accessible boardwalk from existing steps within planted area, loss of three parking spaces at top and one at bottom	Add bicycle access ramp to existing stairs, two parking spaces removed at top of stairs and one at bottom	
	Dimensions	N/A	N/A	N/A	
1. Improve safety, accessibility and convenience for people cycling and using micro-mobility devices	Improved safety for people cycling and using micro-mobility devices				Not scored
	Improved convenience for people cycling and using micro-mobility devices	2	3	0	Option 2 gives a high quality ramp gradient for all users, Option 1 gives a ramp that the majority of cyclists could use
2. Improve safety, accessibility and convenience for people walking and using mobility devices	Improved safety for people walking and using mobility devices				Not scored
	Improved convenience for people walking and using mobility devices	1	3	0	Option 2 gives a high quality ramp gradient for all users, Option 1 gives a ramp that the some pedestrians and mobility impaired users could use
3. Improve bus speed and reliability	Improved travel time of PT compared with private vehicles				Not scored
4. Retain high priority parking and mitigate parking impact	Retain high priority parking for businesses and residents where essential (e.g., mobility parking)	-1	-1	0	Options 1 and 2 lose 4 parking spaces, minor in scale of available parking
	Mitigate parking impact (ie, provide car share, etc)				Not scored
5. Enables benefits to be delivered quickly with minimal disruption	Alignment with other planned works in the road corridor, and/or reduced disruption during construction.	1	2	0	Option 1 best connects the Cobham Crossing with the preferred ASB Carpark Option (2-way cycleway in vegetated buffer), both Options 1 & 2 complete the cycling connection
	Ability to deliver quickly, or sequenced for elements to deliver early. Reduced civil works, signals changes and other major works.	2	0	3	Option 3 can be quickly implemented, Option 2 can be achieved with minor civil works
6. Improve the place amenity in the area	Improved urban amenity	1	1	0	Options 1 and 2 both improve connectivity and sense of place for cyclists and pedestrians
	Weighted Score	0.58	0.83	0.15	
	Rank	2	1	3	

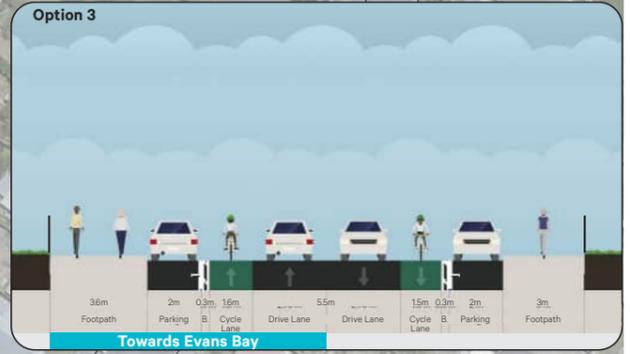
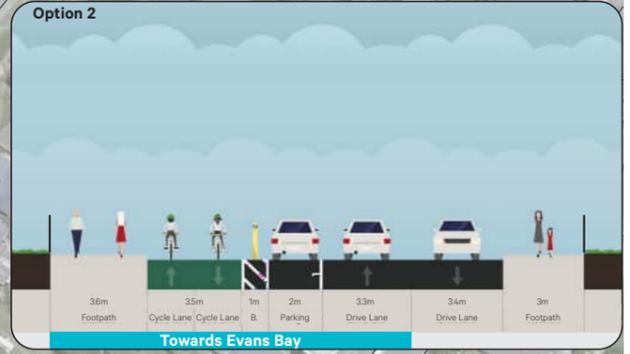
# Appendix E – Coutts Street options and MCA table

- Options
- Options excluded from the shortlist
- MCA Ranking

# Kilbirnie Transitional Cycleway. Coutts Street.



For discussion only.



For discussion only.

**Legend.**

- Focus area
- Pedestrian footpath/connection
- Existing cycle lane leading to airport underpass connection
- Location of sections/viewing direction
- Bus stops
- Highest Scoring Option

Absolutely Positively Wellington City Council **abley**  
Me Heke Ki Pōneke

**Tonkin+Taylor** **Isthmus.**

PROJECT No. 1017985.J903-CD		CLIENT	WELLINGTON CITY COUNCIL	
DESIGNED	FH	Jul.22	PROJECT TRANSITIONAL CYCLEWAYS - KILBIRNIE	
DRAWN	CHLI	Jul.22		
CHECKED	AH	Jul.22		
TITLE		COUTTS STREET SECTION SECTION PLAN		
1	DRAFT FOR CLIENT REVIEW	01.07.22	SCALE (A3) 1:1500	
2	FINAL CONCEPT ISSUE	29.07.22		
REV	DESCRIPTION	DATE	APPROVED	DATE

FIG No.	1017985.J903-CD-003	REV	2
---------	---------------------	-----	---

COPYRIGHT ON THIS FIGURE IS RESERVED. C:\Users\charlie\Desktop\TTT ROAD PROJECT\KILBIRNIE\EXISTING SECTIONS.dwg 2022 Jun-28 3:48:33 PM. Plotted By: CHARLIE.T.T.

## Coutts Street options excluded from short list assessment

Long list opportunities	Reason for exclusion from short list
Do Nothing	Refer Section 2.4.
Alternate routes	Refer Section 2.4
Sealed shoulders	Refer Section 2.4
Speed reductions	Coutts Street provides a key movement function for high traffic volumes. Adjacent speed environments are currently at 50 km/hr or higher. Not considered appropriate for this section of the route.
Shared path	This route is intended to form key parts of the cycle network with high cyclist volumes. This is not compliant with Austroads and Waka Kotahi guidance for shared paths.
Change in road space through kerb realignment.	The transitional cycleways are intended to require minimum physical works and ability to amend or reinstate if required. This excluded widening to provide sufficient width for separated cycleways while retaining parking on both sides of the road.
Central traffic path	Considered fatal flaw as high traffic volumes mean a significant proportion of drivers will be required to pass opposing vehicles. This results in significant delays and frequent encroachment into the cycle space.

**Coutts Street (between Te Whiti St and Tirangi Rd) MCA ranking**

Criteria	Consideration	Option 1	Option 2	Option 3	Option 4	Comments
	Description	Separated cycleways in each direction, parking north side	Two-way separated cycleway on south side, parking north side	On road buffered cycle lanes, parking both sides, reduced traffic lane width	Separated cycleways in each direction, flush median, no parking	
	Dimensions (from left to right towards Evans Bay, 13.2m total)	Separated cycleway (1.8m), buffer (0.8m), parking (2.0m), traffic lane (3.2m), traffic lane (3.2m), buffer (0.4m), separated cycleway (1.8m)	Two-way separated cycleway (3.5m), buffer (1.0m), parking (2.0m), traffic lane (3.3m), flush traffic lane (3.4m)	Parking (2.0m), buffer (0.3m), cycle lane (1.6m), two-way traffic lane (5.5m), cycle lane (1.5m), buffer (0.3m), parking (2.0m)	Separated cycleway (1.7m), buffer (0.4m), traffic lane (3.0m), flush median (3.0m), traffic lane (3.0m), buffer (0.4m), separated cycleway (1.7m)	
1. Improve safety, accessibility and convenience for people cycling and using micro-mobility devices	Improved safety for people cycling and using micro-mobility devices	2	2	0	3	Refer SSA
	Improved convenience for people cycling and using micro-mobility devices	2	2	0	2	Options 1, 2 & 4 provides separated facilities for cyclists in both directions. Option 3 provides little benefit over existing Option 3 protects cyclists from parked vehicles but not traffic.
2. Improve safety, accessibility and convenience for people walking and using mobility devices	Improved safety for people walking and using mobility devices	0	0	0	0	Refer SSA
	Improved convenience for people walking and using mobility devices	0	0	0	1	Option 4: Flush median acts as a refuge point for pedestrians crossing and gives opportunity for pedestrian refuges
3. Improve bus speed and reliability	Improved travel time of PT compared with private vehicles	0	0	-1	-3	Options 3 & 4 reduce road width making it hard for buses to pass opposing traffic (likely that one traffic lane will be required to give way to pass parked vehicles). Option 3: In addition the bus stop outside is a Rongotai College is a terminus stop so it can't be an 'in-line' stop in the live traffic lane.
4. Retain high priority parking and mitigate parking impact	Retain high priority parking for businesses and residents where essential (e.g., mobility parking)	-2	-2	0	-3	Option 1,2,4: removal of residents parking (high priority for outer residential areas)
	Mitigate parking impact (ie, provide car share, etc)	2	2	3	0	Option 1,2 & 3: Parking can be reallocated Option 4: Significant amount of residents parking removed, likely to be able to accommodate some users within a 5 minute walk, but not all
5. Enables benefits to be delivered quickly with minimal disruption	Alignment with other planned works in the road corridor, and/or reduced disruption during construction.	2	1	0	2	Options 1 & 4 tie in with other proposed cycleway options on Airport Underpass Connection and Tirangi Rd and for cyclists to continue on Coutts Street Option 3 is unprotected, not well aligned with cycleway network Option 2 requires additional tie in works at either end
	Ability to deliver quickly, or sequenced for elements to deliver early. Reduced civil works, signals changes and other major works.	3	2	2	2	Option 3 has reduced traffic lane widths, source of negative feedback on other cycleways projects for bus routes Option 4 removes all parking, difficult for consultation
6. Improve the place amenity in the area	Improved urban amenity	1	2	0	1	Options 1 & 4 contribute to urban spatial framework. Option 3 has limited change to existing Option 2 has a wider, more visible part of the corridor for walking and cycling improving overall amenity
	Weighted Score	1.10	1.05	0.18	0.63	
	Rank	1	2	4	3	

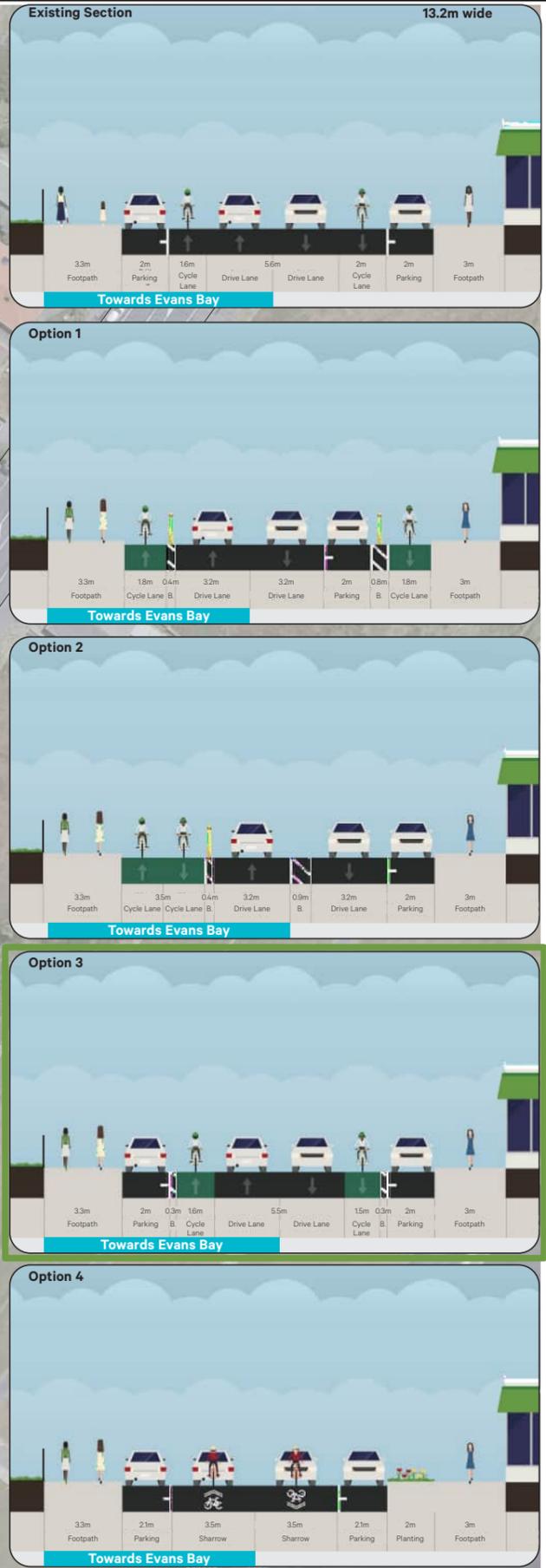
# Appendix F – Airport Underpass Connection options and MCA table

- Options
- Options excluded from the shortlist
- MCA Ranking

# Kilbirnie Transitional Cycleway. Airport Underpass Connection.



For discussion only.



For discussion only.

**Legend.**

- Focus area
- Pedestrian footpath/connection
- Existing cycle lane leading to airport underpass connection
- Location of sections/viewing direction
- No bus stops along this section
- Option to proceed to 30% design

Absolutely Positively Wellington City Council **abley**  
Me Heke Ki Pōneke

**Tonkin+Taylor** **Isthmus.**

PROJECT No. 1017985.J903-CD		CLIENT <b>WELLINGTON CITY COUNCIL</b>
DESIGNED	BLR	Aug.22
DRAWN	CHLI	Aug.22
CHECKED	AH	Aug.22
1	DRAFT FOR CLIENT REVIEW	01.07.22
2	FINAL CONCEPT ISSUE	29.07.22
3	UPDATE TO FINAL CONCEPT ISSUE	22.08.22
REV	DESCRIPTION	DATE
APPROVED	DATE	

PROJECT	<b>TRANSITIONAL CYCLEWAYS - KILBIRNIE</b>	
TITLE	<b>AIRPORT UNDERPASS CONNECTION SECTION SECTION PLAN</b>	
SCALE (A3)	1:1000	FIG No. 1017985.J903-CD-004
REV		3

COPYRIGHT ON THIS FIGURE IS RESERVED. C:\Users\charlie\Desktop\TT ROAD PROJECT\KILBIRNIE\EXISTING SECTIONS.dwg 2022 Jun-28 3:49:06 pm. Plotted by: CHARLIE TT

## Airport Underpass Connection options excluded from short list assessment

Long list opportunities	Reason for exclusion from short list
Do Nothing	Refer Section 2.4.
Alternate routes	Refer Section 2.4
Sealed shoulders	Refer Section 2.4
Shared path	This route is intended to form key parts of the cycle network with high cyclist volumes. This is not compliant with Austroads and Waka Kotahi guidance for shared paths.
Change in road space through kerb realignment.	The transitional cycleways are intended to require minimum physical works and ability to amend or reinstate if required. This excluded widening to provide sufficient width for separated cycleways while retaining parking on both sides of the road.
Central traffic path	Existing road width is sufficient to provide separated cycleways, parking and traffic lanes. This option results in unnecessary delays, frequent encroachment into the cycle space, and does not use the available width.
Removal of parking to provide flush median	Low traffic and turning volumes mean that there is limited conflict between opposing vehicles

**Airport Underpass Connection (Coutts Street between Tirangi Rd & Airport Tunnel) MCA ranking**

Criteria	Consideration	Option 1	Option 2	Option 3	Option 4	Comments
	Same option	Coutts St Option 1	Coutts St Option 2	Coutts St Option 3		
	Description	Separated cycleways in each direction, parking north side	Two-way separated cycleway on south side, parking north side	On road buffered cycle lanes, parking both sides, reduced traffic lane width	Neighbourhood greenway with reduced speed limit and placemaking, parking both sides, landscape space. More space to do other things	
	Dimensions (from left to right towards Evans Bay, 13.2m total)	Separated cycleway (1.8m), buffer (0.4m), traffic lane (3.2m), traffic lane (3.2m), parking (2.0m), buffer (0.8m), separated cycleway (1.8m)	Two-way separated cycleway (3.5m), buffer (0.4m), traffic lane (3.2m), flush median (0.9m), traffic lane (3.2m), parking (2.0m)	Parking (2.0m), buffer (0.3m), cycle lane (1.6m), two-way traffic lane (5.5m), cycle lane (1.5m), buffer (0.3m), parking (2.0m)	Parking (2.1m), shared lane (3.5m), shared lane (3.5m), parking (2.1m), landscape space (2.0m)	
1. Improve safety, accessibility and convenience for people cycling and using micro-mobility devices	Improved safety for people cycling and using micro-mobility devices	2	2	0	2	Refer SSA Option 3 is a shared lane in a low volume environment. Better than the existing situation due to speed limit reduction Option 2: two-way facility is less desirable than 1-way facilities Options 1 and 4 appear to promote less conflicts between drivers trying to park vs. cyclists travelling along the cycle lane
	Improved convenience for people cycling and using micro-mobility devices	2	1	1	2	
2. Improve safety, accessibility and convenience for people walking and using mobility devices	Improved safety for people walking and using mobility devices	0	0	0	1	Refer SSA. Lower speed environment for Option 4 reduces the crash severity
	Improved convenience for people walking and using mobility devices	0	0	0	0	
3. Improve bus speed and reliability	Improved travel time of PT compared with private vehicles	0	0	0	0	N/A - not a bus route
4. Retain high priority parking and mitigate parking impact	Retain high priority parking for businesses and residents where essential (e.g., mobility parking)	-1	-1	0	0	Option 1 and 2 remove high priority (residents) parking
	Mitigate parking impact (ie, provide car share, etc)	2	2	2	2	Option 4: could mitigate some of the impact of the previous section on Coutts St Option 1,2: Slight disruption to residents parking, can be accounted for using opposite side of the road
5. Enables benefits to be delivered quickly with minimal disruption	Alignment with other planned works in the road corridor, and/or reduced disruption during construction.	2	1	0	0	Option 1 ties in with other proposed cycleway options on Coutts Street and Tirangi Rd Option 3 is unprotected, not well aligned with cycleway network Option 4: does not connect with other cycleway sections planned in the corridor. Option 2 requires additional tie in works at either end
	Ability to deliver quickly, or sequenced for elements to deliver early. Reduced civil works, signals changes and other major works.	3	2	3	2	Option 4 reduces speed environment for all users which is likely to be perceived as delay
6. Improve the place amenity in the area	Improved urban amenity	1	2	0	1	Option 4: Lower speed limit increases amenity.
	Weighted Score	1.18	0.93	0.50	1.20	
	Rank	2	3	4	1	

# Appendix G – Tirangi Road options and MCA table

- Options
- Options excluded from the shortlist
- MCA Ranking

# Kilbirnie Transitional Cycleway. Tirangi Road.



For discussion only.



For discussion only.

Absolutely Positively Wellington City Council **abley**

**Tonkin+Taylor** **Isthmus.**

PROJECT No. 1017985.J903-CD		CLIENT	WELLINGTON CITY COUNCIL	
DESIGNED	FH	PROJECT	TRANSITIONAL CYCLEWAYS - KILBIRNIE	
DRAWN	CHLI	TITLE	TIRANGI ROAD SECTION	
CHECKED	AH		SECTION PLAN	
1	DRAFT FOR CLIENT REVIEW	01.07.22		
2	FINAL CONCEPT ISSUE	29.07.22		
REV	DESCRIPTION	DATE	APPROVED	DATE

SCALE (A3)	1:500	FIG No.	1017985.J903-CD-005	REV	2
------------	-------	---------	---------------------	-----	---

COPYRIGHT ON THIS FIGURE IS RESERVED. C:\Users\charlie\Desktop\TT ROAD PROJECT\KILBIRNIE\EXISTING SECTIONS.dwg 2022-Jun-28 3:46:32 PM Plotted By: CHARLIE TT

## Tirangi Road options excluded from short list assessment

Long list opportunities	Reason for exclusion from short list
Do Nothing	Refer Section 2.4.
Alternate routes	Refer Section 2.4
Sealed shoulders	Refer Section 2.4
Speed reductions	Tirangi Road provides a key movement function for high traffic volumes. Adjacent speed environments are currently at 50 km/hr or higher. Not considered appropriate for this section of the route.
Shared path	This route is intended to form key parts of the cycle network with high cyclist volumes. This is not compliant with Austroads and Waka Kotahi guidance for shared paths.
Change in road space through kerb realignment.	The transitional cycleways are intended to require minimum physical works and ability to amend or reinstate if required. This excluded widening to provide sufficient width for separated cycleways while retaining parking on both sides of the road.
Central traffic path	Considered fatal flaw as high traffic volumes mean a significant proportion of drivers will be required to pass opposing vehicles. This results in significant delays and frequent encroachment into the cycle space.

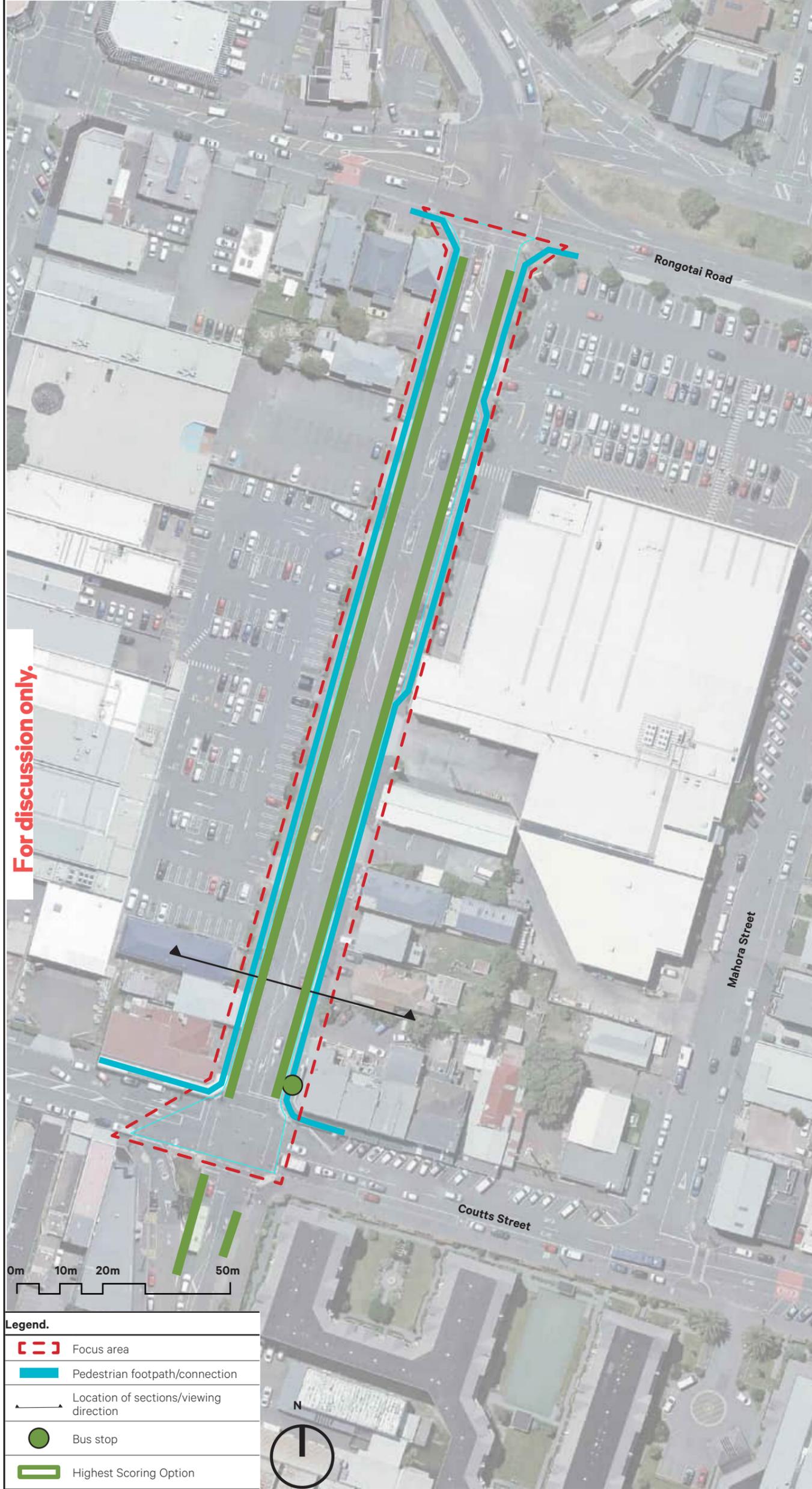
**Tirangi Road MCA ranking**

Criteria	Consideration	Option 1	Option 2	Option 3	Option 4	Option 5	Comments
	Description	Separated cycleways in each direction, flush median, no parking (adjusted TR option)	Separated cycleways in each direction, parking east side	Two-way separated cycleway on west side, parking east side	Separated cycleways in each direction, parking both sides, reduced traffic lane width	On road cycle lanes, parking both sides, reduced traffic lane width	
	Dimensions (from left to right towards Evans Bay, 14.7m total)	Separated cycleway (2.0m), buffer (0.6m), traffic lane (3.2m), flush median (3.1m), traffic lane (3.2m), buffer (0.6m), separated cycleway (2.0m)	Separated cycleway (2.0m), buffer (0.4m), traffic lane (3.2m), flush median (1.0m) traffic lane (3.2m), parking (2.0m), buffer (0.9m), separated cycleway (2.0m)	Two-way separated cycleway (4.0m), buffer (0.4m), traffic lane (3.2m), flush median (1.8m), traffic lane (3.2m), parking (2.1m)	Separated cycleway (1.7m), buffer (0.8m), parking (2.0m), two-way traffic lane (5.7m), parking (2.0m), buffer (0.8m), separated cycleway (1.7m)	Parking (2.0m), buffer (0.6m), cycle lane (1.6m), traffic lane (3.2m), traffic lane (3.2m), cycle lane (1.5m), buffer (0.6m), parking (2.0m)	
1. Improve safety, accessibility and convenience for people cycling and using micro-mobility devices	Improved safety for people cycling and using micro-mobility devices	3	2	2	2	0	Refer SSA
	Improved convenience for people cycling and using micro-mobility devices	2	2	1	2	0	Option 1,2,4: Separated facility in both directions Option 3: Two way facility is better than existing but not the most desirable Refer SSA
2. Improve safety, accessibility and convenience for people walking and using mobility devices	Improved safety for people walking and using mobility devices	0	0	0	0	0	
	Improved convenience for people walking and using mobility devices	0	-1	0	-1	-1	Option 2,4,5: Median removed which acts as a crossing refuge point currently
3. Improve bus speed and reliability	Improved travel time of PT compared with private vehicles	0	0	0	-1	0	Option 4 reduces road width making it hard for buses to pass opposing traffic (likely that one traffic lane will be required to give way to pass parked vehicles)
4. Retain high priority parking and mitigate parking impact	Retain high priority parking for businesses and residents where essential (e.g., mobility parking)	-1	0	0	0	0	Option 1,2,3 remove high priority (residents parking), however parking survey shows very low occupancy
	Mitigate parking impact (ie, provide car share, etc)	1	2	2	3	3	Option 1,2,3: no mitigation proposed, residents parking available within 5 minutes
5. Enables benefits to be delivered quickly with minimal disruption	Alignment with other planned works in the road corridor, and/or reduced disruption during construction.	2	2	1	2	0	Option 1,2,4: ties in well with proposed treatments on adjacent sections. Option 3 also ties in well with Leonie Gill Pathway, but less desirable for cyclists continuing on Tirangi Rd
	Ability to deliver quickly, or sequenced for elements to deliver early. Reduced civil works, signals changes and other major works.	2	3	2	2	3	Option 1 removes all parking, difficult for consultation Option 3 requires additional tie in works at either end Option 4 has reduced traffic lane widths, source of negative feedback on other cycleways projects for bus routes
6. Improve the place amenity in the area	Improved urban amenity	1	1	2	1	0	Option 1,2,3,4: Contributes to urban spatial framework
	Weighted Score	1.25	1.20	1.00	1.08	0.33	
	Rank	1	2	4	3	5	

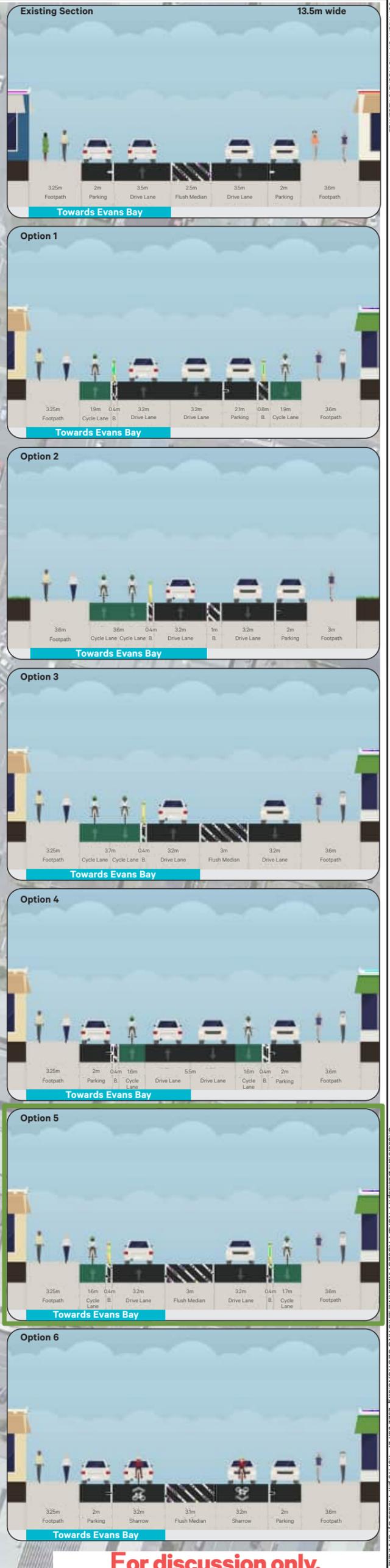
# Appendix H – Onepu Road - centre options and MCA table

- Options
- Options excluded from the shortlist
- MCA Ranking

# Kilbirnie Transitional Cycleway. Onepu Road - Centre.



For discussion only.



For discussion only.

**Legend.**

- Focus area
- Pedestrian footpath/connection
- Location of sections/viewing direction
- Bus stop
- Highest Scoring Option

Absolutely Positively Wellington City Council **abley**

**Tonkin+Taylor** **Isthmus.**

PROJECT No. 1017985.J903-CD		CLIENT <b>WELLINGTON CITY COUNCIL</b>
DESIGNED	FH	JUL.22
DRAWN	CHLI	JUL.22
CHECKED	AH	JUL.22
1	DRAFT FOR CLIENT REVIEW	01.07.22
2	FINAL CONCEPT ISSUE	29.07.22
REV	DESCRIPTION	DATE
APPROVED		DATE

PROJECT	<b>TRANSITIONAL CYCLEWAYS - KILBIRNIE</b>
TITLE	<b>ONEPU ROAD - CENTRE SECTION SECTION PLAN</b>
SCALE (A3)	1:1000
FIG No.	1017985.J903-CD-006
REV	2

COPYRIGHT ON THIS FIGURE IS RESERVED. CLIENT: CHILDPARTNERS/TTT ROAD PROJECT/KILBIRNIE/EXISTING SECTIONS.dwg 2022/Jun/27 4:37:49 pm Plotted By: CHARLIE LU

## Onepu Road (Centre) options excluded from short list assessment

Long list opportunities	Reason for exclusion from short list
Do Nothing	Refer Section 2.4.
Alternate routes	Refer Section 2.4
Sealed shoulders	Refer Section 2.4
Shared path	This route is intended to form key parts of the cycle network with high cyclist volumes. This is not compliant with Austroads and Waka Kotahi guidance for shared paths.
Change in road space through kerb realignment.	The transitional cycleways are intended to require minimum physical works and ability to amend or reinstate if required. This excluded widening to provide sufficient width for separated cycleways while retaining parking on both sides of the road.
Central traffic path	Considered fatal flaw as high traffic volumes mean a significant proportion of drivers will be required to pass opposing vehicles. This results in significant delays and frequent encroachment into the cycle space.

**Onepu Road - Centre (Rongotai Rd to Coutts Street) MCA ranking**

Criteria	Consideration	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Comments
	Description	Separated cycleways in each direction, parking west side	Two-way separated cycleway on east side, parking west side	Two-way separated cycleway on east side, flush median, no parking	On road cycle lanes, parking both sides, reduced traffic lane width	Separated cycleways in each direction, flush median, no parking (adjusted TR option)	Shared lanes both directions with reduced speed limit and placemaking, flush median, parking both sides. More space to do other things	
	Dimensions (from left to right towards Evans Bay, 13.5m total)	Separated cycleway (1.9m), buffer (0.4m), traffic lane (3.2m), traffic lane (3.2m), parking (2.1m), buffer (0.8m), separated cycleway (1.9m)	Parking (2.1m), traffic lane (3.2m), flush median (1.0m), traffic lane (3.2m), buffer (0.4m), two-way separated cycleway (3.6m)	Traffic lane (3.2m), flush median (3.0m), traffic lane (3.2m), buffer (0.4m), two-way separated cycleway (3.7m)	Parking (2.0m), buffer (0.4m), cycle lane (1.6m), two-way traffic lane (5.5m), cycle lane (1.6m), buffer (0.4m), parking (2.0m)	Separated cycleway (1.6m), buffer (0.4m), traffic lane (3.2m), flush median (3.0m), traffic lane (3.2m), buffer (0.4m), separated cycleway (1.7m)	Parking (2.0m), shared lane (3.2m), flush median (3.1m), shared lane (3.2m), parking (2.0m)	
1. Improve safety, accessibility and convenience for people cycling and using micro-mobility devices	Improved safety for people cycling and using micro-mobility devices	2	2	2	0	3	0	Options 3 and 5 score better as less parking to obscure visibility, and flush median provides space for turning vehicles to wait and look for cyclists rather than feel pressured by traffic queuing behind
	Improved convenience for people cycling and using micro-mobility devices	2	1	1	0	2	-1	Option 2.3: two-way cycleway not as appealing as single direction cycleways Option 4: On road cycle lane without physical separation desirable but not as much as option 1 Option 6: high traffic and turning volumes means this is not attractive for less confident cyclists
2. Improve safety, accessibility and convenience for people walking and using mobility devices	Improved safety for people walking and using mobility devices	0	0	0	0	0	1	Refer SSA
	Improved convenience for people walking and using mobility devices	-1	-1	0	-1	0	0	Option 1,2,4: removal of existing flush median which acts as a refuge point for pedestrians currently Option 4 reduces road width making it hard for buses to pass opposing traffic (likely that one traffic lane will be required to give way to pass parked vehicles)
3. Improve bus speed and reliability	Improved travel time of PT compared with private vehicles	0	0	0	-1	0	0	
4. Retain high priority parking and mitigate parking impact	Retain high priority parking for businesses and residents where essential (e.g., mobility parking)	-2	-2	-3	0	-3	0	Option 1.2: High priority (P60) parking removed outside PaknSave Option 3.5: removes all short term parking (high priority) and mobility parking Option 4.6: No parking removed
	Mitigate parking impact (ie, provide car share, etc)	1	1	0	3	0	3	WCC also completed a survey of off-road capacity which showed there was plenty of parking capacity in the business car parks. Option 1.2: Parking available on opposite side of the road still Option 3.5: parking only available in adjacent streets
5. Enables benefits to be delivered quickly with minimal disruption	Alignment with other planned works in the road corridor, and/or reduced disruption during construction.	2	1	1	0	2	1	Options 1,3: aligns with Onepu Rd preferred options Options 2, 3, 4: requires transition into shared lanes at either end Option 6: Does not align with any of the surrounding cycleway works
	Ability to deliver quickly, or sequenced for elements to deliver early. Reduced civil works, signals changes and other major works.	3	2	1	2	2	2	Options 2 and 3 require additional civil works at either end Options 3 and 5 removes all parking, difficult for consultation Option 5 reduces speed environment for all users which is likely to be perceived as delay Option 4 has reduced traffic lane widths, source of negative feedback on other cycleways projects for bus routes
6. Improve the place amenity in the area	Improved urban amenity	1	2	2	0	1	1	Option 6: Increased opportunity for placemaking Option 4: limited width Options 2 & 3 have a wider, more visible part of the corridor for walking and cycling improving overall amenity
	Weighted Score	0.98	0.73	0.58	0.13	1.03	0.33	
	Rank	2	3	4	6	1	5	

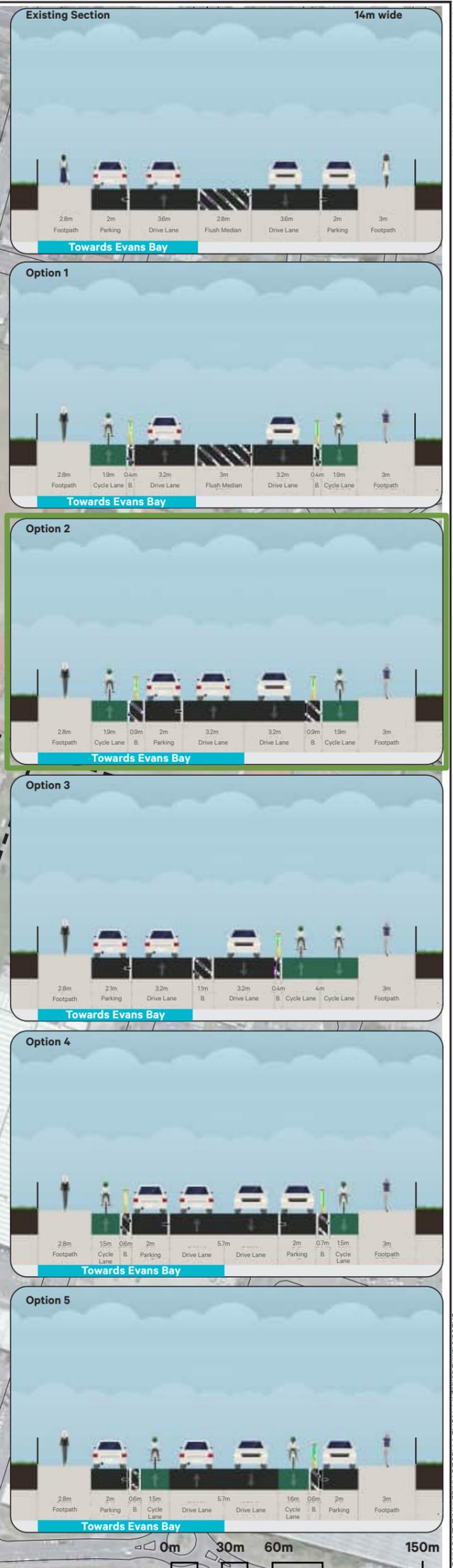
# Appendix I – Onepu Road - residential options and MCA table

- Options
- Options excluded from the shortlist
- MCA Ranking

# Kilbirnie Transitional Cycleway. Onepu Road - Residential.



For discussion only.



**Legend.**

- Focus area
- Pedestrian footpath/connection
- Location of sections/viewing direction
- Bus stop
- Highest Scoring Option
- Connection to Leonie Gill pathway

Absolutely Positively Wellington City Council **abley**

**Tonkin+Taylor** **Isthmus.**

PROJECT No. 1017985.J903-CD		CLIENT <b>WELLINGTON CITY COUNCIL</b>
DESIGNED	FH	Jul.22
DRAWN	CHLI	Jul.22
CHECKED	AH	Jul.22
1	DRAFT FOR CLIENT REVIEW	01.07.22
2	FINAL CONCEPT ISSUE	29.07.22
REV	DESCRIPTION	DATE
APPROVED	DATE	

PROJECT	<b>TRANSITIONAL CYCLEWAYS - KILBIRNIE</b>	
TITLE	<b>ONEPU ROAD - RESIDENTIAL SECTION SECTION PLAN</b>	
SCALE (A3)	1:3000	FIG No. 1017985.J903-CD-007
REV	2	

COPYRIGHT ON THIS FIGURES RESERVED  
CULVERS DALLINGHAM/TT ROAD PROJECT/KILBIRNIE/EXISTING SECTIONS DWG 2022-JUN-27 1:38:08 PM PLOTTED BY CHARLETT

## Onepu Road - residential options excluded from short list assessment

Long list opportunities	Reason for exclusion from short list
Do Nothing	Refer Section 2.4.
Alternate routes	Refer Section 2.4
Sealed shoulders	Refer Section 2.4
Speed reductions	Onepu Road (Residential) provides a key movement function for high traffic volumes. Adjacent speed environments are currently at 50 km/hr or higher. Not considered appropriate for this section of the route and therefore means a neighbourhood greenway design was not considered.
Shared path	This route is intended to form key parts of the cycle network with high cyclist volumes. This is not compliant with Austroads and Waka Kotahi guidance for shared paths.
Change in road space through kerb realignment.	The transitional cycleways are intended to require minimum physical works and ability to amend or reinstate if required. This excluded widening to provide sufficient width for separated cycleways while retaining parking on both sides of the road.
Central traffic path	Considered fatal flaw as high traffic volumes mean a significant proportion of drivers will be required to pass opposing vehicles. This results in significant delays and frequent encroachment into the cycle space.

**Onepu Road - Residential (Leonie Gill Pathway to Lyall Bay) MCA ranking**

Criteria	Consideration	Option 1	Option 2	Option 3	Option 4	Option 5	Comments
	Description	Separated cycleways in each direction, flush median, no parking	Separated cycleways in each direction, parking west side (As per new design for The Parade south of the Island Bay Shops)	Two-way separated cycleway on east side, parking west side	Separated cycleways in each direction, parking both sides, reduced traffic lane width	On road cycle lanes, parking both sides, reduced traffic lane width	
	Dimensions (from left to right towards Evans Bay, 14.0m total)	Separated cycleway (1.9m), buffer (0.4m), traffic lane (3.2m), flush median (3.0m), traffic lane (3.2m), buffer (0.4m), separated cycleway (1.9m)	Separated cycleway (1.9m), buffer (0.9m), parking (2.0m), traffic lane (3.2m), traffic lane (3.2m), buffer (0.9m), separated cycleway (1.9m)	Parking (2.1m) traffic lane (3.2m), flush median (1.1m), traffic lane (3.2m), buffer (0.4m), two-way separated cycleway (4.0m)	Separated cycleway (1.5m), buffer (0.6m), parking (2.0m), two-way traffic lane (5.7m), parking (2.0m), buffer (0.7m), separated cycleway (1.5m)	Parking (2.0m), buffer (0.6m), cycle lane (1.5m), two-way traffic lane (5.7m), cycle lane (1.6m), buffer (0.6m), parking (2.0m)	
1. Improve safety, accessibility and convenience for people cycling and using micro-mobility devices	Improved safety for people cycling and using micro-mobility devices	3	2	2	2	0	Refer SSA
	Improved convenience for people cycling and using micro-mobility devices					0	
2. Improve safety, accessibility and convenience for people walking and using mobility devices	Improved safety for people walking and using mobility devices	2	2	1	2		Option 3: two-way cycleway is not as desirable as individual direction cycleways' option 5: on-road cycle lanes not preferred over separated. Better than existing
	Improved convenience for people walking and using mobility devices	0	-1	0	-1	-1	Refer SSA
3. Improve bus speed and reliability	Improved travel time of PT compared with private vehicles	0	0	0	-2	-1	Options 2, 4 & 5: removed median which acts as a refuge for peds crossing traffic (likely that one traffic lane will be required to give way to pass parked vehicles)
	Retain high priority parking for businesses and residents where essential (e.g., mobility parking)	-3	-2	-2	0	0	Section is both outer residential and suburban centre (around shops). Removes residents and short term parking.
4. Retain high priority parking and mitigate parking impact	Mitigate parking impact (ie, provide car share, etc)	0	2	2	3	3	Option 1: No alternative options provided for removal of P10 outside shopping areas.
	Alignment with other planned works in the road corridor, and/or reduced disruption during construction.	2	2	1	2	1	Options 1, 2, 4: align with proposed works on Onepu Road (Centre). Options 3,5: requires transition at either end.
5. Enables benefits to be delivered quickly with minimal disruption	Ability to deliver quickly, or sequenced for elements to deliver early. Reduced civil works, signals changes and other major works.	2	3	2	2	2	Option 1 removes all parking, difficult for construction Option 3 requires additional tie in works at either end Options 4 and 5 have reduced traffic lane widths, source of negative feedback on other cycleways projects for bus routes
	Improved urban amenity	1	1	2	0	0	Option 3 has a wider, more visible part of the corridor for walking and cycling improving overall amenity Option 4.5: limited widths not ideal
	Weighted Score	1.03	1.05	0.85	0.88	0.18	
	Rank	2	1	4	3	5	

**Absolutely Positively  
Wellington City Council**

Me Heke Ki Pōneke

<https://wellington.govt.nz/parking-roads-and-transport/transport/cycling>