Appendix J - Cost Estimate Report







Wakatipu Active Travel Network (WATN) – DBC Cost Estimate Report

Prepared for Queenstown Lakes District Council (QLDC)
Prepared by Beca Limited

August 2019





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Revision History

Revision Nº	Prepared By	Description	Date
00	Tom Beedles	WATN Concept Design Estimate	03/05/2019
01	Tom Beedles	Design Assumptions Update	13/05/2019
02	Tom Beedles	Internal Review Update	28/05/2019
03	Tom Beedles	Extensions to Route 5 & 8, inclusion of Frankton Connections	11/06/2019
04	Tom Beedles	Updated to align with staged methodology	01/07/2019
05	Tom Beedles	Updated to align with revised route staging	10/07/2019
06	Tom Beedles	Updated to align with revised route staging	12/08/2019
07	Tom Beedles	Internal Review Update	20/08/2019

Document Acceptance

Action	Name	Signed	Date
Prepared by	Tom Beedles	Ebadls	20/08/2019
Reviewed by	Robbie Noble		20/08/2019
Approved by	Robbie Noble		20/08/2019
on behalf of	Beca Limited		

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1 Executive Summary

Our Expected Estimate of construction costs for the preferred alignments of the entire active travel network routes is \$84.63m (Excl GST), inclusive of property costings. This is a single point estimated cost based on the design information provided to date, however, we also offer an expected 95th percentile value that reflects current market conditions and unknown risks that can impact the project that are difficult to predict or value. The 95th percentile estimate for the combined active travel network \$97m. (Refer to section 4.1 for a further explanation of the percentile values). For additional clarity regarding the detail supporting these costs, please refer to the clarifications, assumptions, exclusions and items of cost risks that are outlined within section 4 of this report.

Further packages of work have been included within the economic evaluation including Queenstown town centre intersection and streetscaping works. These costs have been provided by QLDC and are included within table 1. The full expected estimate cost for the delivery of Package 1 (Stages 1 & 2) and Package 2 is \$133.4m, and the 95th Percentile estimate \$153.3m.

Stage	Route (Preferred Design Option)	Ехр	ected Estimate (\$)		ith Percentile Estimate	9	5th Percentile Estimate
1 2	A2 - Shotover bridge to SH6	S	2,586,000.00	\$	2,300,000.00	S	3,000,000.00
Package 1	A3/A4 - SH6 to Frankton Track including Marina safety Improvements	S	1,200,000.00	s	1,100,000.00	s	1,400,000.00
Stage 1 - 2018- 2021	A5/A7 - Jacks Point to Frankton including Frankton connection South upgrade	s	9,590,000.00	\$	8,400,000.00	\$	11,000,000.0
	A8 - Lake Hayes Estate to Frankton - DESIGN ONLY	s	250,000.00	\$	300,000.00	\$	300,000.0
	PACKAGE 1 STAGE 1 COST	\$	13,626,000.00	5	12,100,000.00	5	15,700,000.0
	B2 - Fernhill to Queenstown	S	4,200,000.00	S	3,600,000.00	S	4,800,000.0
	B3 - Frankton Track LoS improvements including Park Street Greenway	s	6,600,000.00	S	5,600,000.00	S	7,600,000.00
	*C2 - Brecon Street - DESIGN ONLY	\$	685,000.00	S	700,000.00	S	800,000.0
Package 1 Stage 2 - 2021-	*C3 - Park Street Upgrade - QLDC Cost - DESIGN ONLY	s	620,000.00	s	600,000.00	s	800,000.00
2024	C5 - Arthurs Point to Queenstown LoS improvements	s	8,300,000.00	s	7,000,000.00	s	9,500,000.0
	C7 - Lake Hayes Estate to Shotover Bridge	S	1,600,000.00	S	1,400,000.00	S	1,800,000.0
	A8 - Lake Hayes Estate to Frankton - Physical Works	s	4,000,000.00	\$	3,400,000.00	\$	4,500,000.0
	PACKAGE 1 STAGE 2 COST	\$	26,005,000.00	\$	22,300,000.00	\$	29,800,000.0
	*C1 - Rees Street - Gardens to Gondola - QLDC Cost	5	15,010,000.00	S	13,800,000.00	S	17,300,000.0
	*C2 - Brecon Street - PHYSICAL WORKS	S	8,945,000.00	5	8,200,000.00	S	10,300,000.0
	*C3 - Park Street Upgrade - QLDC Cost - PHYSICAL WORKS	s	7,960,000.00	s	7,300,000.00	s	9,200,000.0
	*C4 - Upper and Lower Beach Street - QLDC Cost	\$	15,560,000.00	5	14,300,000.00	\$	17,900,000.0
Package 2	C6 - Arthurs Point to Tuckers Beach	\$	1,600,000.00	S	1,400,000.00	S	1,800,000.0
Package 2	D1. Kelvin Heights to Frankton (track upgrades and greenway)	S	8,600,000.00	S	7,300,000.00	S	9,900,000.0
	D2. Tuckers beach to Frankton	S	3,400,000.00	\$	2,900,000.00	S	3,900,000.0
	D3. Arrowtown to Lake Hayes Track	S	5,100,000.00	S	4,400,000.00	S	5,900,000.0
	D4. Lake Hayes south to Shotover Bridge	S	5,300,000.00	S	4,500,000.00	S	6,000,000.0
	E1. Arrowtown to Arthurs Point	S	10,500,000.00	\$	8,900,000.00	S	12,100,000.0
	F1. Jacks Point to Kelvin Heights	S	11,800,000.00	S	10,000,000.00	S	13,500,000.0
	PACKAGE 2 COST	\$	93,775,000.00	\$	83,000,000.00	\$	107,800,000.0
	Sub Total - Expected Estimate	s	133,406,000.00	s	117,400,000.00	s	153,300,000.0

Table 1 - Estimate Summary



A more detailed breakdown of the estimated costs is included in section 4 and Appendix A of this report.

We have based our estimate on the concept designs (route general alignment and long sections) provided by Beca. As this design information is not yet at the detailed design stage the information is still limited and some areas of scope remain undefined. All aspects of the design of this current scheme are subject to further design development.

It is important to note that Queenstown Lakes region is currently experiencing significant movement in pricing across many sub-trades due to the current buoyant construction market. This is putting pressure on resources which is resulting in unpredictable and generally escalating pricing. We have not attempted to forecast this trend within this cost estimate.

Our assessment of the construction cost includes an allowance for design consultant fees and consent fees based on current industry benchmarks. We have, however, excluded other direct project costs such as legal fees, business relocation or interruption, land acquisition costs, alternative/ temporary dwellings during construction, and other operational costs outside those items that have been specifically allowed within the estimate.

We have included a total contingency across the Beca estimated routes of \$18.94m (30% of total estimated construction cost) to cover general design development; note that this is not to cover scope changes and does not include the contingency priced for the streetscape works. We would expect this sum to be incorporated in to the estimated construction costs as the design progresses. It is recommended that QLDC hold a separate contingency for any additional scope they may anticipate during execution of the project.

Please note that all values within this report and included in the attached estimate details are GST exclusive.



2 Introduction

This concept cost estimate has been prepared to establish the likely order cost for the development of the Wakatipu Active Travel Network (WATN), Wakatipu Basin. The project development will provide a resilient and connected network across the Wakatipu Basin area where active transport is the top priority. The proposed network aims at connecting communities and enhancing neighbourhoods, to encourage both residents and visitors to use active travel as a safe alternative to private vehicles. Three cost options were previously produced for the eleven proposed routes based upon differing design interventions; minimum/better/best. Following further design and engagement workshops, this was reduced to one 'preferred' option, which amalgamated elements from the three intervention options. Further works were then completed, and the preferred network was split into construction stages based upon differing funding sources and realistic delivery timeframes.

This report focuses on the costs for the preferred route alignment for the seventeen proposed routes including connections, to support the wider single stage business case.

3 Basis of Estimate

3.1 Site Visits

Site visits for costing purposes was completed week commencing 18th February 2019 to become familiar with the alignment, local area and constraints. During this period, approximately 75% of the proposed routes could be visually inspected;

- A2 Shotover bridge to State Highway 6
- A3 State highway 6 to Frankton track
- A4 Marina Safety improvements
- A5 Frankton connection south upgrade
- B2 Fernhill to Queenstown route
- B3 Frankton Track LoS improvements
- C5 Arthurs Point to Queenstown LoS improvements
- D1 Kelvin heights to Frankton (track upgrades and greenway)
- D2 Tuckers Beach to Frankton (50% accessible)
- D3 Arrowtown to Lake Hayes track
- D4 Lake Hayes south to Shotover bridge
- E1 Arrowtown to Arthurs Point
- F1 Jacks Point to Kelvin Heights

The remainder of the routes were inaccessible due to site access limitations (i.e private land or topography). For these routes' assumptions have been made, informed by the limited design information, local knowledge, aerial imagery and limited observations from distance. These routes include;

- A7 Jacks Point to Frankton Track
- A8 Lake Haves Estate to Frankton
- C6 Arthurs Point to Tuckers Beach
- C7 Lake Hayes Estate to Shotover river (late addition to the business case, exact alignment tbc)



3.2 Design Documentation

Further to the site visits, costings have been compiled utilising the information provided within the supplied drawings and specification. Those drawings and supporting information relied upon to generate the estimate are summarised below. Please refer to Appendix B for a combined layout map for the proposed routes.

Note; The below drawings exclude the QLDC streetscape works (QLDC Costs).

- Package 1 Stage 1
 - o A2 Shotover Bridge to SH6
 - 3333892-CA-A200 to A206 Rev A Sheets 1 to 6
 - A3 SH6 to Frankton Track
 - 3333892-CA-A300 to A303 Rev A Sheets 1 to 3
 - A4 Marina Safety Improvements
 - 3333892-CA-A401 Rev A
 - A5 Frankton South Connection
 - 3333892-CA-A501 Rev A
 - A7 Jacks Point to Frankton track
 - 3333892-CA-A700 to A719 Rev A Sheets 1 to 18
 - o A8 Lake Hayes to Frankton Detailed Design works only within Stage 1
- Package 1 Stage 2
 - B2 Fernhill to Queenstown
 - 3333892-CA-B200 to B208 Rev A Sheets 1 to 8
 - B3 Queenstown to Frankton
 - 3333892-CA-B300 to B321 Rev A Sheets 1 to 21
 - C5 Arthurs Point to Queenstown
 - 3333892-CA-C500 to C515 Rev A Sheets 1 to 15
 - C7 Lake Hayes Estate to Shotover River
 - 3333892-CA-C700 to C708 Rev A Sheets 1 to 8
 - A8 Lake Hayes to Frankton (Physical Works)
 - 3333892-CA-A800 to A816 Rev A Sheets 1 to 16
- Package 2
 - C6 Arthurs Point to Tuckers Beach
 - 3333892-CA-C600 to C615 Rev A Sheets 1 to 15
 - D1 Kelvin Heights to Frankton
 - 3333892-CA-D100 to D115 Rev A Sheets 1 to 15
 - D2 Tuckers Beach to Frankton
 - 3333892-CA-D200 to D205 Rev A Sheets 1 to 5
 - D3 Arrowtown to Lake Hayes
 - 3333892-CA-D300 to D305 Rev A Sheets 1 to 5
 - D4 Lake Hayes to Shotover Bridge
 - 3333892-CA-D400 to D418 Rev A Sheets 1 to 18



- E1 Arrowtown to Arthurs Point
 - 3333892-CA-E100 to E110 Rev A Sheets 1 to 10
- F1 Jacks Point to Kelvin Heights
 - 3333892-CA-F100 to F110 Rev A Sheets 1 to 10
- WATN Design Parameters Document
- WATN Photomontages Routes 2-6 & 8-9
- Beca Preferred Design Workshop 17/04/2019 Dunedin.
- QLDC Provided NZTA Form C Project Estimates (DBE) for the Streetscape Works

3.3 Procurement

The Queenstown lakes region is currently experiencing significant movement in pricing across many subtrades due to the current buoyant construction market. With the increase in land development and infrastructure, demands upon civils contractors have been increasing and the limited supply has resulted in pressure being placed on limited labour and plant resources. This is resulting in some increased being noted in general labour/ plant items. Although we believe that our rates included within the estimate make allowance for the current market conditions, we have not attempted to forecast this trend.

Statistical data submitted from Stats NZ identifies the 'Rest of the South Island', which is driven largely by the Otago region, gradually increasing year on year for the total value of building works completed (17.4% increase from 2017-18 and 4.6% increase from 2018-2019).

This increase in trends highlights the necessity for tender competition. For this estimate we have assumed current market rates and sums based on a traditional procurement route, ie. Fully designed and competitively tendering for lump sum tenders from at least three suitable selected tenderers.

3.4 Escalation

As per the NZTA cost estimation manual for this stage of estimate, escalation allowances have been excluded from the current estimate beyond 3rd Quarter 2019.



4 Estimate Summary

An estimate summary based upon the preferred design alignment option is included below. Further supporting elemental estimates and a summary table is included within the Appendices of this report:

Stage	Route (Preferred Design Option)	Ехр	ected Estimate (\$)	5	ith Percentile Estimate	9	5th Percentile Estimate
1	A2 - Shotover bridge to SH6	s	2,586,000.00	\$	2,300,000.00	S	3,000,000.00
Package 1	A3/A4 - SH6 to Frankton Track including Marina safety Improvements	s	1,200,000.00	S	1,100,000.00	S	1,400,000.00
Stage 1 - 2018- 2021	AS/A7 - Jacks Point to Frankton including Frankton connection South upgrade	s	9,590,000.00	s	8,400,000.00	S	11,000,000.00
	A8 - Lake Hayes Estate to Frankton - DESIGN ONLY	S	250,000.00	s	300,000.00	S	300,000.00
	PACKAGE 1 STAGE 1 COST	\$	13,626,000.00	5	12,100,000.00	5	15,700,000.00
	B2 - Fernhill to Queenstown	S	4,200,000.00	S	3,600,000.00	S	4,800,000.00
	B3 - Frankton Track LoS improvements including Park Street Greenway	s	6,600,000.00	S	5,600,000.00	S	7,600,000.00
	*C2 - Brecon Street - DESIGN ONLY	S	685,000.00	S	700,000.00	S	800,000.00
Package 1 Stage 2 - 2021-	*C3 - Park Street Upgrade - QLDC Cost - DESIGN ONLY	s	620,000.00	s	600,000.00	S	800,000.00
2024	C5 - Arthurs Point to Queenstown LoS improvements	s	8,300,000.00	s	7,000,000.00	S	9,500,000.00
	C7 - Lake Hayes Estate to Shotover Bridge	S	1,600,000.00	S	1,400,000.00	S	1,800,000.00
	A8 - Lake Hayes Estate to Frankton - Physical Works	s	4,000,000.00	s	3,400,000.00	s	4,500,000.00
	PACKAGE 1 STAGE 2 COST	\$	26,005,000.00	\$	22,300,000.00	\$	29,800,000.00
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	*C4 - Upper and Lower Beach Street - QLDC Cost	s	15,560,000.00	\$	14,300,000.00	\$	17,900,000.00
Package 2	C6 - Arthurs Point to Tuckers Beach	\$	1,600,000.00	S	1,400,000.00	S	1,800,000.00
Package 2	D1. Kelvin Heights to Frankton (track upgrades and greenway)	s	8,600,000.00	S	7,300,000.00	S	9,900,000.00
	D2. Tuckers beach to Frankton	S	3,400,000.00	S	2,900,000.00	S	3,900,000.00
	D3. Arrowtown to Lake Hayes Track	S	5,100,000.00	S	4,400,000.00	S	5,900,000.00
	D4. Lake Hayes south to Shotover Bridge	S	5,300,000.00	S	4,500,000.00	S	6,000,000.00
	E1. Arrowtown to Arthurs Point	S	10,500,000.00	S	8,900,000.00	S	12,100,000.00
	F1. Jacks Point to Kelvin Heights	S	11,800,000.00	S	10,000,000.00	S	13,500,000.00
	PACKAGE 2 COST	\$	93,775,000.00	\$	83,000,000.00	\$	107,800,000.00
	Sub Total - Expected Estimate	s	133,406,000.00	s	117,400,000.00	s	153,300,000.00

Table 2 - Estimate Summary

General Estimate Notes:

Note 1: Main Contractor Preliminary and General (P&G) - has been included at 15% (plus specifics) as separate line items within the route estimates, as displayed within the estimate summary (Appendix A). P&G otherwise known as On-Site Overhead costs covers the cost of overheads such as site supervision / management, site offices, stores, hoardings, amenities, plant, cranes, temporary works etc.

Note 2: Main Contractor Margin – is deemed included within the rates. Also referred to as Off-site Overheads and profit (OH&P), this covers the cost of contributions to cover the Main Contractors business operational costs, i.e. off-site overhead costs such as executive management, accounts, quality and health & safety systems and company profits.



Note 3: Construction Contingency - is a risk contingency to cover the cost of variation claims made by the contractor during the construction phase of the project. This contingency is integral to the estimated outturn cost and should be separately monitored during the construction phase. It is estimated based on the current project scope, exclusive of any client driven scope changes. We have allowed for a 30% contingency within the estimate, which we consider appropriate for this stage of estimate.

Note 4: Client Scope Change Risk - This allowance is **excluded from our estimate**. It is for use during both design and construction processes to provide for any client driven changes. It is excluded from our estimate and is a separate budget we recommend the client hold, if there is the potential for client scope changes to influence the outturn cost of the project. We would note that the above contingencies do not allow for any client driven scope change.

Note 5: **Inclusion of Costs for Streetscape works** – As part of the summary tables and total expected reported costs, we have included costs provided by QLDC for the Queenstown township Streetscape works. These are highlighted in grey within the estimate summary tables. We have included these costs within the cost report to align with the economics produced in the wider business case. It is important to note that Beca have relied on the accuracy, completeness and currency of the information provided, and have not sought to independently check or verify these. These streetscape works include;

Package 1 Stage 2 – 2021-2024 Funding includes:

- C2 Brecon Street (Design Costs only)
- C3 Park Street (Design Costs only)

Package 2 includes:

- C1 Rees Street 'Gardens to Gondola' (Design & Physical Works)
- C2 Brecon Street (Physical Works)
- C3 Park street upgrades (Physical Works)
- C4 Upper and Lower beach street (Design & Physical Works)

Note 6: Inclusion of Property Costs – The costs that feature within this report are inclusive of property costs. Please refer to the property report, included within the business case for further information regarding the assumptions and exclusions regarding these costs. It is noted that no property costs have been allowed for any land currently held by QLDC.



4.1 Estimate Percentile Values (5th & 95th)

Both the 5th and 95th percentile values have been provided for the expected estimates. These values represent the statistical probability with a level of confidence that the final out-turn cost will not exceed this value. The 5th percentile represents a 5% level of confidence that the final out-turn cost will not exceed this value, and similarly the 95th percentile represents a 95% level of confidence of project costs exceeding this value. Figure 2 provides a graphical representation of the cost estimate terminology.

The 95th percentile is the total of the expected estimate, plus an allowance for funding risk (approximately 15% in this instance), calculated in line with the NZTA SM014 cost estimation manual.

The estimate range provided between the 5th and 95th percentile is an indication of the degree to which the final cost outcome for a given project will vary from the expected estimated cost – it is not an additional contingency.

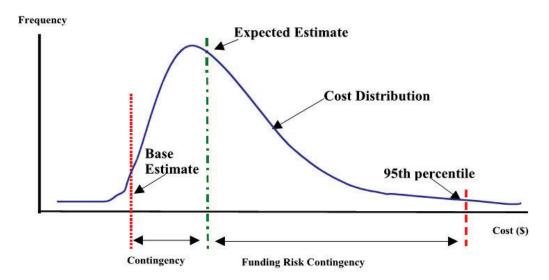


Figure 2 – NZTA Risk-adjusted cost estimate terminology (For illustration purposes only)

This estimate is based on *concept design* information that is under development and so is currently subject to an estimate range of \$35.9m between the 5th and 95th percentile values for the estimated active travel routes (including streetscape works).

On an estimated project cost of **\$133.4m**, this provides a 5th percentile estimate of **\$117.4m** and 95th percentile of **\$153.3m**.

This range highlights the following unknown risks that can impact the project that are difficult to predict or value. As the project gets further defined and closer to tender this range will reduce to reflect the level of confidence in the design and information available and level of risk. These risks could include:

- Procurement routes Additional costs may be incurred due to the chosen procurement route (outside of a traditional procurement route).
- · Major fluctuations in the market
- · Labour & material shortages
- · Health & Safety Hazards
- Unexpected ground and site conditions
- Exceptionally adverse weather



4.2 Assumptions and Clarifications

4.2.1 General Estimate Assumptions

- Elements of cost included within this estimate are based on costs from similar projects and other Beca cost benchmarks.
- It is assumed that as a minimum, each stage of the works will be undertaken by a single 'Main Contractor' through a single contract for the project.
- It is assumed that a robust tendering process will be followed and that a minimum of 3 subcontractor tenders (where possible) are received for the project as part of the agreed procurement process.
- It is assumed that all works are carried out during normal daytime working hours.
- It is assumed that the contractor will have unobstructed access to the whole site throughout the construction phase.
- All base prices are current to 3rd quarter 2019. No allowance for escalation has been included within the estimate.
- Professional fees (detailed design, procurement, construction monitoring) and consent fees are to be developed and subsequently an allowance has been applied to the estimate to cover these anticipated costs.
- A W-section barrier has been allowed for the separation of active travel users, where the proposed
 route runs directly alongside any State highway.
- It is assumed that services such as power (where required for the lighting columns) is readily
 available at either end of the proposed routes and network upgrades such as transformers will not be
 required.
- Overview signage and intermediate signs have been included for all routes.
- NZTA management costs of 1% for the pre-implementation stage and 1% for the implementation stage have been included within the estimate. It is unknown at this stage whether this management will be completed by NZTA or QLDC.

4.2.2 Route Specific Estimate Assumptions

As noted within the introduction, the initial estimates were undertaken based upon the WATN design parameters document, which identified the 'minimum/ better/ best' treatment intervention options. These costs were discussed during the 'preferred' design workshop (17/04/2019) and a 'preferred' option was sought. This preferred option is an amalgamation of the three design interventions and the subsequent estimated cost generally fall between the 'minimum' and 'better' parameters. Further works were undertaken to split the preferred route into staging costs for funding purposes.

The below table summarises some of the assumptions that have been used to determine the 'preferred - staged' option estimated costs. A staging map of the preferred network is included within Appendix B.

Route	Design Intervention	
	Preferred	
A2	• Existing infrastructure is to be utilised where possible. Greenways have been assumed from the exit from the historic bridge to Tucker-Beach Road and Jim's Way. For these areas, surfacing upgrades to chipseal have been allowed where the current surface is gravel.	



- From the end of Jim's way, the track will continue through the existing private land to omit the requirement to drop back down onto SH6.
- Entire path (width varies) to be chipseal finish
- 4m lighting columns at approx. 35m centres.
- Expected Estimate \$2.59m

A3/A4





- Existing infrastructure is to be utilised where possible. The existing road carriageway will be used on Gray Street (loss of parking), then from ch1650 the existing footpath will be used and widened to suit.
- Expected Estimate \$1.2m

A5



- A 2.5m wide strip of Asphalt surfacing will be provided for the existing gravel section to the end of Robertson Road (linking the existing footpath of SH6)
- Expected Estimate \$0.190m

A7



- The existing farm track will be upgraded to a chipseal finish (circa 4m wide), & the proposed route will be aligned in the existing track.
- The proposed route will run to the old Kawarau falls bridge, with additional retaining structures required on the left-hand embankment on approach.
- Allowances have been included for a bridge crossing to the Remarkables Park over the Kawarau River.
- Road crossing only of SH6 (it is considered that an underpass as proposed by Opus is not feasible in that location).
- No earthworks have been allowed to reduce any gradients throughout the route. It is assumed that the existing meets the design parameter of 1.14
- Traffic management has been allowed for the SH6 segment only. It is assumed that unobstructed access will be provided for the farmland

section.

- It is proposed that the route is aligned over the existing embankment parallel to the
 existing SH6 into the Kelvin heights junction. A safety fence for fall risks has been
 allowed within the estimate.
- Lighting bollard type columns at 25m centres has been allowed for the farmland section and 4m lighting columns to the road area.
- Chipseal finish to the entire length of the proposed route.
- Expected Estimate \$9.4m



A8



- Assumption that the proposed track utilises an existing gravel/4x4 road/platform from Boyd road to the bridge location.
- It is assumed that access to the bridge location will not limit installation plant.
- It is assumed that a post & wire fence to one elevation through the existing track across farmland will be required
- Is it assumed that a post & wire fence to both elevations through existing farmland will be required (link section from SH6 to Boyd Rd)
- 100mm gravel surfacing only.
- The detailed design and business case costs and physical works costs for this route have been split between package 1 stages 1 & 2.
- Expected Estimate \$4.25m

В2



- The initial section from Fernhill to the commencement of Cameron Place will be a bi-directional cycleway within the existing road shoulder, and will not require breaking out of the existing kerb/ footpath. Separation is achieved by Raised nib kerbs.
- The existing lighting through the main road elements and greenways is sufficient and will not require replacement. Only bollard lighting through the existing wood section has been allowed at approximate 25m centres.
- Cameron Place and Thompson/ Brunswick Street to be greenways with nominal allowances included for signage, road markings and traffic calming measures.
- No upgrades to the existing bridge structures (2nr). Signage to be provided where the path is narrow.
- Retaining structures allowed for the edge of the proposed path through various segments of the woodland.
- A small machinery cut/fill gang allowed to locally reduce the gradients of the existing trail through the woodland where possible.
- A barrier has been allowed to 60% of the woodland area, to reduce the fall risk.
- Asphalt finish for the trail from the commencement to Cameron Place, no surfacing through the greenways, and gravel overlay only to the woodland section.
- · Signalised pedestrian crossing allowance included for the end of Brunswick Street.
- Expected Estimate \$4.2m

В3



- The existing footpath along the lakefront (asphalt, kerbed) will remain, and will be extended to the rear (existing verge) as required to meet the revised width requirement.
- Seating to be provided in existing refuge/ widening sections.
- Existing lighting columns to Park street to be
- Entire length of the existing QT trail path to be finished with asphalt.
- Amendments/modifications will be provided to the existing link tracks.



- Assumed that the existing bridge structure on the Rees Hotel link road will remain, and signage only will be provided to reduce the width over the short length.
- New 4m lighting columns at 35m centres allowed for the existing gravel section.
- Assumed that the existing sub grade is good, with only an allowance for an additional 100mm AP40 and 25mm AC5 surfacing to the existing gravel section.
- A Gravel overlay to the existing path has been allowed for the extension of the route along the Frankton arm walkway to the KF Bridge.
- Expected Estimate \$6.6m

C5



- The first section from the traffic island at the intersection of Camp Street and Stanley Street will run through the existing recreation ground carpark. A new footpath has been allowed within this area.
- The proposed route will run up the East side of Robins Road and West Side of Gorge Road, existing parking will be lost.
- Route 5 will end at the Edith Cavell bridge (route extended June 2019). The existing timber bridge structure will remain and will not be upgraded/replaced, and no new/updated crossing will be provided at the Edith Cavell bridge.
- The existing power/comms poles up Gorge Road will not be relocated.
- W-section barrier from the end of the industrial estate to Watties Track.
- A new bridge (pedestrian only) will be provided to replace the existing on Robins Road.
- Asphalt wearing course from the commencement of the route in QT to the end of the industrial area, where it will change to a chipseal finish.
- Installation of lighting, 4m columns at approx. 30m centres it is assumed that the
 existing lighting along Robins Road to the end of the industrial area is sufficient and
 will not require replacement.
- Expected Estimate \$8.3m

C6



- Gravel finish to path over existing farmland areas & existing track on North side of Shotover River to Atley Road, average width 3m.
- Expected Estimate \$1.6m

C7



- It is assumed that this section of the route will utilise the existing infrastructure as installed during the sub-division works, however it is anticipated that the 2.5m wide pavement will be widened to 3.0m (gravel only).
- Expected Estimate \$1.6m



D1



Track

- Gravel overlay to the entire length of the existing path, 2.5m width average.
- 40% of the track (excluding the greenway measures) will require small retaining structures to widen pinch points to 2.5m.
- Willow place to be a 'greenway' with the only allowance being for minor improvement such as signage, line marking etc.
- Small machine gang cut/fill operations allowed for small improvements to the existing gradients (where possible).
- A small allowance has been included for rock blasting to improve sight lines.
- Where it is not feasible/ make economic sense to widen pinch points, additional signage will be provided to warn users of the route.
- An allowance has been included to increase the level around the front of the Hilton hotel. No design has yet been provided for this element so an indicative lump sum of \$450k has been allowed.
- Bollard lighting columns at 30metre centres.

Road

- It is assumed that the road section will run from the commencement of the trail to Lewis Road, whereby the users will then drop down onto the existing trail to continue the route.
- Speed humps along the main road have been allowed at approximately 500m centres.
- A footpath extension from Balmoral drive for approximately 600m has been allowed.
- · Traffic signs and cycle logos/ centreline improvements allowed

Combined Expected Estimate \$8.6m

D2



- Sections up Hansen Road and Atley Road to be a greenway.
- Allowances have been included to upgrade the surfacing of Hansen Road to chipseal (assume grade and overlay of existing only).
- Post and wire fence required to both sides of any newly installed travel network through open farmland.
- Access to the bridge location will not limit installation plant.
- Expected Estimate \$3.4m

D3



- Track to be aligned in the centreline of the verge where possible as to not affect or require road carriageway modifications.
- Cut/fill and retaining walls as deemed required.
- Gravel surfacing for the entire length of path.
- W-section Armco barrier to one side of carriageway for pedestrian/ path user protection.
- Expected Estimate \$5.1m



D4



• Existing infrastructure to be utilised where possible. Greenways from residential streets within Lake Hayes Estate to the existing gravel section beside Howards Drive, road section which links the historic bridge. For these areas, surfacing upgrades to chipseal have been allowed where the current surface is gravel.

- Services (power, waste water, water supply) are within 30m of the proposed toilet facility.
- An Exeloo Jupiter 52DD or similar toilet block has been assumed.
- · Cut/fill and retaining walls as deemed required.
- Crossing point with central refuge, localised road widening, tree removal, barriers, signage etc allowed at the mid-point of the route (approx. ch 7700).
- Gravel finish to SH6. Chipseal along SH6 to tie in at Howards Drive average width 2.5m.
- Expected Estimate \$5.3m

E1

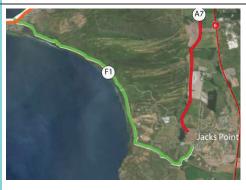


- •The LHS existing road shoulder will be used in locations of less clearance.
- •The route will not cross Malaghans Road at ch11800 as identified within the civils drawings and will instead continue within the fields until outside the woodland area (approx. ch

11100). From this point the track will cross the SH and an electronic advanced warning sign will be provided.

- 100mm Gravel surfacing to entire track.
- An allowance of \$150k has been provided to relocate existing power lines which run along the LHS of the proposed route.
- Expected Estimate \$10.5m

F1



- First section from Jacks Point along the main road will be a greenway. Section along road within Kelvin Heights to be a greenway.
- Retaining walls and handrails allowed for various pinchpoints along the existing track.
- 100mm gravel overlay to existing only (approx. 2.5m wide average).
- Allowance included for localised rock blasting to improve sight lines.
- Expected Estimate \$11.8m



4.3 Exclusions

4.3.1 General Estimate Exclusions

- Goods and services Tax (GST)
- Professional fees other than those allowed above
- Finance / Sales / Marketing costs
- Legal / Accounting fees

- Project costs to date, including fees/ investigations etc
- Escalation
- Seasonal variance (ie weather)

4.3.2 Project Specific Exclusions

The following items have been excluded from the Expected Estimate; however, the provided P95 cost is considered an appropriate upper range to allow for the following;

- · Out of hours working
- Contaminated materials
- Obstructions

- Relocation/ management of services (unless identified within the individual route assumptions)
- Business/ property relocation or interruption costs

4.3.3 Route Specific Exclusions

Route	Design Intervention
	Preferred
A2	Improvements/ modifications to the existing bridge structure.
A3	Lighting.
A4	Lighting.
A5	Lighting.
A7	Separation fences for the track across the farmland.
A8	Lighting.
B2	 Improvements/ modifications to the existing bridge structures (2nr).
ВЗ	 Relocation/ amendments to the existing 600mm dia wastewater pipe which runs parallel to the path (and in some locations protrudes the ground).
	 Improvements/ modifications to any jetties/ lakefront access.
	 Improvements/ modifications to gardens/private land which currently access the walkway.
C5	 Improvements/ modifications to private land/driveways which currently cross the proposed route alignment.
C6	Lighting.
C7	Services relocation or works to amend the existing sub-division infrastructure.
D1	 Relocation/ amendment to the large generator and retaining structure located East of the Franklin Recreational Reserve.



	 Improvements/ modifications to any jetties/ lakefront access.
	 Improvements/ modifications to gardens/private land which currently access the walkway.
	 Amendment/ replacement of existing structures (2nr small bridge crossings).
	 Relocation/ amendments to the existing 225mm dia wastewater pipe which runs parallel to the path (and in some locations protrudes the ground)
D2	Lighting.
D3	• Lighting
	 Improvements/ modifications to any jetties/ lakefront access.
	 Improvements/ modifications to gardens/private land which currently access the walkway.
D4	Improvements/ modifications to the existing bridge structure.
E1	Lighting.
F1	Lighting.

4.4 Staged Costings

This report focuses on the preferred route alignment based upon the staged network plan (Appendix B). These costs are present day, and no escalation has been included as per the New Zealand Transport Agency (NZTA) SM014 estimate guidance. It is assumed that this is has been taken into consideration within the economic assessment, and the wider business case. For each route, a project estimate form (C) for the Detailed Business case estimate (DBE) has been drafted. These are included within Appendix C for information.

5 Rates and Prices

A range of rates and costing assessment techniques have been used to compile the Expected Estimate. Each route may attract differing rates due to a range of factors, such as; location, access & the current condition/ nature of the existing trail. An example of the range of rates used within the assessment is included below.

Site Clearance

- Arborist crew: \$3000-6500/day
- General tree trimming \$40/m

Fencing

 Modifications to existing farm fences (post and wire) \$15/m

Road Restraint Systems (Vehicle and Pedestrian)

W-Section barrier \$120/m

- Shrubs/veg/verge clearance \$125/m
- New timber and wire fence \$55/m
- Safety fence \$150/m



Drainage and Service Ducts

Lump sum adjustments to culvert extensions, manholes and the like \$10000 to \$25000

Lighting

- Ducting \$70/m
- Bollard lighting columns \$2500ea
- Lighting columns 4m \$4500ea

- Lighting columns 6m high end spec \$12000ea
- Connections to existing infrastructure \$15000ea

Earthworks

Where unable to quantify due to design information, a two-gang machine crew for a cut/fill exercise (2no 8t 360's or similar) allowance of circa \$6000-7000 per day.

Where quantifiable, for an assumed 1m average cut/fill operation \$40/m3

Pavements

Allowance to mill and replace AC surfacing, inclusive of kerb and central reserve separation, reinstatement of line and cycle markings with allowance to tie into existing driveways \$150/m2.

All in rate for asphalt pavement, excavated to waste off site, complete with 100mm AP40 base course and 180mm GAP65 subbase, with timber edgings - \$88/m2 - \$105/m2. This rate reduces to circa \$75/m2 without subbase and increases to circa \$207/m2 when including a kerb and channel and introduction of service lid adjustments.

All in rate for chipseal pavement, excavated to waste off site, complete with 100mm AP40 base course and 180mm GAP65 subbase, with timber edgings & excavated swale - \$59/m2 to \$87.5/m2 depending on the condition of the existing trail and requirements for subgrade improvement.

All in rate for 100mm gravel pavement, complete with timber edging and excavated swale \$31/m2, this reduces to circa \$22/m2 where no timber edgings nor swale are deemed required.

Traffic Signs and Road Markings

- New wayfinding signage \$350/ea
- Delineation markings \$6/m
- Overview map boards \$1000ea

Piling and Embedded Retaining Walls

- Gabion basket retaining walls \$850/m2
- Shotcrete walls \$500/m2

Special Structures - Bridges

Bridges \$640k to \$1.15m depending on size and location.

Landscape and Ecology

- Bike Stands \$750ea
- Maintenance stands \$5000ea

- Advanced warning signage \$varies depending on arrangement
- Timber post and rail walls \$650-1500/m2

- Benches \$2500ea
- Archaeological assessments \$10000ea



Materials/ formation testing allowance

Risk allowances of \$12500 to \$50000 depending on the nature of the existing route.

Services Risk

Risk allowances of \$15000 to \$45000 depending on the nature of the existing route and indication of existing services within the proposed track alignment.

Environmental Compliance

Allowances of \$7500 to \$50000 depending on the nature and location of the proposed/ existing trail.

Temp Traffic Management

A range of 1% to 5% of the physical works cost, depending on the location and nature of the trail.

Temporary Works

Lump sum risk allowances from \$10000 to \$15000

Contractors P&G

15% allowance across the route assessments for P&G – margin deemed included within the rates and prices.

Pre-Implementation Fees

Consultant Fees - (Detailed Business Case/ Detailed Design) - 6% of the Physical works plus preliminaries cost.

NZTA Managed Costs - 1% of the Physical works plus preliminaries cost.

Implementation Fees

Consultant Fees - (Procurement & Construction Monitoring) - 5% of the physical works, preliminaries & pre-implementation fees

NZTA Managed Costs - 1% of the physical works, preliminaries & pre- implementation fees

Consenting – 1% of the physical works, preliminaries & pre- implementation fees.

Property Cost – As per the assessment completed by Beca – see the property report appended to the business case.

Contingency - 30% Across all the routes

6 Risks and Opportunities

Due to the level of design and investigation completed at this phase of the indicative single stage business case, there are several risks to the Expected Estimate which will remain until more detailed investigations/ design works are completed. An example of these risks which could greatly impact costings is; ground conditions, obstructions, contamination and existing services. We will not be able to provide greater price certainty/ pricing of these items until further design is completed. At this stage the Expected Estimate includes an estimating contingency for design development such as substructure, services and superstructure work. The provided 95th Percentile figure provided is considered the upper cost range for this project, and as such should allow for the risks identified above. Any costs in addition to the P95 should be considered unlikely.

There is also potential procurement risk due to movement in pricing across sub-trades. We recommend engagement with local civil engineering contractors and service providers as early as possible to ascertain



their availability and resourcing capability. The figures in this report are within the range of expectation for a project of this type.

We also note some potential opportunities; the largest of which is surrounding the co-ordination of these works with other planned/ currently progressing infrastructure/ development projects within the Lakes area. This could reduce the proposed scheme costs and avoid any re-development works. Further potential opportunities include the downgrading of primary routes to secondary, which would omit requirements for lighting/ amend the surface finish.

7 Legal Disclaimers

This report is solely for our Client's use for the purpose for which it is intended in accordance with the agreed scope of work. It may not be disclosed to any person other than the Client and any use or reliance by any person contrary to the above, to which Beca has not given its prior written consent.

This report must be read in its entirety and no portion of it should be relied on without regard to the report especially the assumptions, limitations and disclaimers set out in the estimate notes and elsewhere in the report.

While Beca believes that the use of the assumptions in the report are reasonable for the purposes of this study, Beca makes no assurances with respect to the accuracy of such assumptions and some may vary significantly due to unforeseen events and circumstances.

In preparing this estimate, Beca has relied on the accuracy, completeness and currency of the information provided, therefore is not responsible for the information provided, and has not sought to independently verify it. To the extent that the information is inaccurate or incomplete, the opinions expressed by Beca may no longer be valid and should be reviewed.

The cost estimates presented in this report have been developed for the purposes of comparing options and may be used for preliminary budgeting. They should not be used for any other purpose. The scope and quality of the works has not been fully defined and accordingly the estimates are not warranted or guaranteed by Beca. These estimates are typically developed based on budget quotes for some equipment items, extrapolation of recent similar project pricing and Beca's general experience. A functional design should be undertaken for budget setting purposes.



Appendices

Appendix A - Concept Design Estimate Summary



333392. Vakatigu Active Travel Network Indicative Busines Case Costings Ord and Legally Privileged Updated: Updated: See CostX For Detailed Costings Notes:

14/08/2019

Conting for Single stage business care (concept design), for active trivel (spicel wait act) entwork ungeneral, into Consentationni, ferming "Amus Point, Arrowcown, Like Inspet Estrato, Franktion, Jacks Found & Admirit

			Preferred Design	Preferred Design Routes - Staged Costings	stings		
Stage			Package 15	Package 1 Stage 1 - 2018-2021			
ltems	A2 - Shotover bridge to SH6		A3/A4 - SH6 to Frankton Track including Marina safety Improvements	AS/A7 - Jacks P including Frankto upg	AS/A7 - Jacks Point to Frankton Including Frankton connection South upgrade	A8 - Lake Ha Frankton - C	A8 - Lake Hayes Estate to Frankton - DESIGN ONLY
Physical Works	1950000			v	18 000 00	v	
Site Clearance Fencing	\$			n vo	69,672.95	n vo	
Dood Dartraint Curtame Makiela and Dadast dank	40	v.		\$	102,125.70	so.	٠
Doaln age and Service Ducts	\$ 12.500.00	ş		S	35.000.00	~	ŀ
Liehting	\$ 282,800.00			· «	1,408,687.20	· «	
Earthworks		s		s		\$	
Pavements	\$ 686,275.75	5	504,501.20	s	1,281,665.13	S	٠
Traffic Signs and Road Markings	\$ 45,284.90	\$ 0	64,426.00	s	89,855.28	s,	
Piling and Embedded Retaining Walls	\$ 211,250.00	\$ 0	47,586.50	\$	370,000.00	Ş	
Special Structures - Bridges		s		Ş	1,145,435.00	s,	
Land scape and Ecology	\$ 45,750.00	\$ 0	35,000.00	Ş	231,778.80	s	
Subtotal	\$ 1,303,360.65	5	651,513.70	ş	4,752,220.06	s	٠
Preliminaries							
Materials/ formation testing allowance	\$ 25,000.00	\$ 0	15,000.00	s,	20,000.00	s,	
Services Risk		\$ 0	5,000.00	s	15,000.00	s,	٠
Environmental Compliance	\$ 7,500.00	\$ 0	23,854.15	\$	25,000.00	s	
Temp Traffic Management		3	1,103.20	Ş	47,522.20	Ş	٠
Temporary Works	\$ 12,500.00	\$ 0		S	10,000.00	s	
Access During Works (Public & Contractor)						Ş	
Contractors P&G - 15%		\$ 9	104,470.66	s,	734,961.34	s	
Subtotal	\$ 339,958.69	\$ 6	149,428.01	S	882,483.54	s	٠
Other Costs							
Pre-implementation Fees							
Consultant Fees - Detailed Business Case/ Detailed Design	\$ 98,599.16	\$ 9	48,056.50	s	338,082.22	٠,	160,192.84
NZTA Managed Costs	\$ 16,433.19	\$ 6	8,009.42	s	56,347.04	S	26,698.81
Subtotal	\$ 115,032.35	5	56,065.92	ş	394,429.25	s	186,891.64
Implementation Fees							
Consultant Fees - Procurement/ Construction	\$ 87,917.58	8	40,293.67	\$	301,456.64	s,	
NZTA Managed Costs	\$ 17.583.52	2	8.058.73	S	60.291.33	s,	ŀ
Consenting	\$ 17,583.52		8,058.73	S	60,291.33	S	
Property Cost	\$ 140,000.00	\$ 0		s	1,140,000.00	·s	
Subtotal	\$ 263,084.62	\$ 2	56,411.14	ş	1,562,039.30	s	
Continuous	\$ 564.430.89	0	274 025 63	v	1935,351,65	v	56.067.49
Contribering			50.040/1.74	,	20.400,000,000	>	25.000
Total Expected Estimate (Rounded)	\$ 2,586,000.00	\$ 0	1,200,000.00	\$	9,590,000.00	\$	250,000.00

3333992 - Wakatigu Active Travel Network indicative Business Case Costnigs Drift and Legally Privileged Updated: Updated: See Cost K for Det alied Costings Notes: Notes:

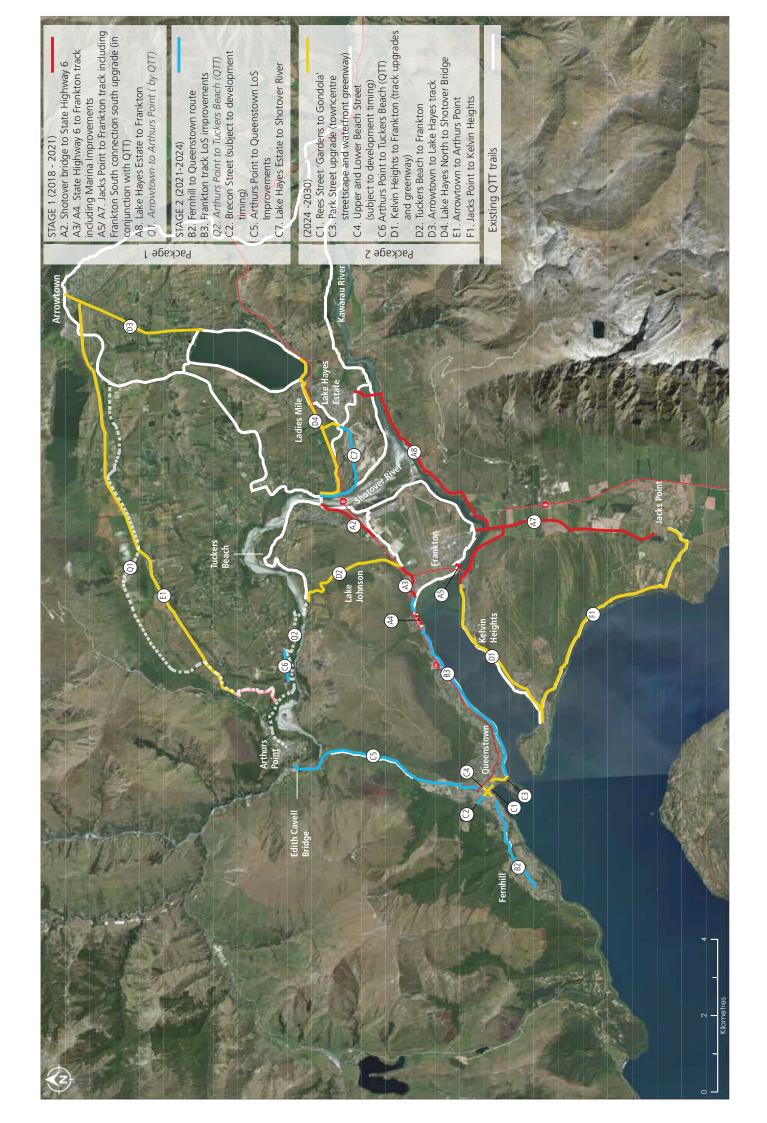
						0						
Stage					Packi	² ackage 1 Stage 2 - 2021-2024	021-2024					
kems		B2 - Fernhill to Queenstown	83 - Fran improveme Stree	B3 - Frankton Track LoS improvements including Park Street Greenway	*C2 - Brecon Street - DESIGN ONLY	*C3 - Park Street Upgrade - QLDC Cost - DESIGN ONLY	Street DC Cost -	CS - Arthurs Point to Queenstown LoS improvements		C7 - Lake Hayes Estate to Shoto ver Bridge		A8 - Lake Hayes Estate to Frankton - Physical Works
Physical Works												
Site Clearance	s	38,570.00	Ş	18,000.00				\$ 29,0	29,040.68		Ş	96,000.00
Fencing	S	87,000.00	Ş	75,000.00				s		\$ 20,000.00	s	384,450.00
Road Restraint Systems (Vehicle and Pedestrian)			s					\$ 334,9	334,978.80		s)	74,400.00
Drainage and Service Ducts	s/s	26,325.00	es.	25,000.00			01	\$ 15,00	15,000.00 \$	\$ 15,000.00	s	25,000.00
Lighting	s)	172,800.00	S	1,025,928.57			.,	\$ 985,5		\$ 106,493.20	s	
Earthworks	s	204,000.00	ş	120,000.00			.,	\$,		s	118,800.00
Pavements	s	769,376.00	s	1,525,712.59			,	\$ 2,189,081.36		\$ 444,567.20	s	223,550.00
Traffic Signs and Road Markings	s	30,777.33	s	75,061.96			-,	\$ 168,2.	168,243.23	\$ 42,049.12	s	25,305.98
Piling and Embedded Retaining Walls	s	855,000.00	\$	676,975.00				\$ 434,4	434,419.00 \$	\$ 159,900.00	s	297,825.00
Special Structures - Bridges	s		s					\$ 175,0	175,000.000 \$		s	903,105.00
Landscape and Ecology	s	20,600.00	s	97,047.31			,	3 40,7	40,750.00 \$	\$ 50,600.00	s	21,500.00
Subtotal	ss	2,234,448.33	s	3,638,725.44		ş		\$ 4,372,083.87		\$ 838,609.52	s	2,169,935.98
Preliminaries	H											
Materials/ formation testing allowance	s,	20,000.00	s.	20,000.00			01	\$ 50,00	50,000,00	\$ 25,000.00	s	50,000.00
Services Risk	ss	25,000.00	s	20,000.00				\$ 45,00	45,000.00 \$	\$ 10,000.00	s	25,000.00
Environmental Compliance	s	20,000.00	Ş	25,000.00				\$ 15,00	15,000.00 \$	\$ 20,000.00		15,000.00
Temp Traffic Management	ss.	89,377.93	Ş	72,774.51			"		218,604.19	\$ 16,772.19	s	21,699.36
Temporary Works	s	15,000.00	ş	15,000.00			y ,	\$ 25,00	25,000.00 \$		s	25,000.00
Access During Works (Public & Contractor)	ss							90'05	50,000,00		s	15,000.00
Contractors P&G - 15%	s)	365,073.94	s	577,724.99			.,	\$ 716,3	716,353.21	\$ 136,557.26	s	348,245.30
Subtotal	s	564,451.87	s	790,499.50		s		\$ 1,119,957.40		\$ 208,329.45	s	499,944.66
Other Costs	H											
Pre-implementation Fees	L											
Consultant Fees - Detailed Business Case/ Detailed Design	s,	167,934.01	s,	265,753.50	\$ 339,549.00	\$ 30	301,949.00	\$ 329,5	329,522.48	\$ 62,816.34	s,	
NZTA Managed Costs	S	27,989.00	Ş	44,292.25		S		\$ 54,9	54,920.41	\$ 10,469.39	s	
Subtotal	s	195,923.01	s,	310,045.75	\$ 571,131.00	ss			384,442.89	\$ 73,285.73		
Implementation Fees	+											
Consultant Fees - Procurement/ Construction Monitoring	s,	149,741.16	s	236,963.53				\$ 293,8;	293,824.21	\$ 56,011.23	s	142,838.61
NZTA Managed Costs	s	29,948.23	\$	47,392.71			91	\$ 58,76	58,764.84 \$	\$ 11,202.25		28,567.72
Consenting	s	29,948.23	Ş	47,392.71				\$ 58,70	58,764.84 \$	\$ 11,202.25	s	28,567.72
Property Cost	ss.		Ş					\$ 70,00	70,000,00		s	170,000.00
Subtotal	s	209,637.63	s	331,748.95		s		\$ 481,3	481,353.89	\$ 78,415.73	s	369,974.06
Contingency	s,	961,338.25	S	1,521,305.89	\$ 114,226.20	\$ 10	102,555.60	\$ 1,886,351.42		\$ 359,592.13	ss	860,956.41

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					Prefer	Preferred Design Routes - Staged Costings	Costings				
Stage						Package 2					
hens	*C1 - Rees Street - Gardens to Gondola - QLDC Cost	*C2 - B recon Street - PHYSICAL WORKS	*C3 - Park Street Upgrade - QLDC Gost PHYSICAL WORKS	*Cd-Upper and Lower GS - Arthurs Point Beach Street - QLDC Cost Tuckers Beach	C6 - Arthurs Point to Tuckers Beach	D1. Kelvin Heights to Frankton (track upgrades and greenway)	D2. Tuckers beach to Frankton	D3. Arrowtown to Lake Hayes Track	D2 Tucker beach to D3 Arrandown to Use D4 Like Hyps count to D1. Arrandown DA Arthur 17 Label Point to Ank Frankon Haye Track Stationer Bridge Past	krowtown to Arthurs El Point	. Jacks Point to Kelvi Heights
Physical Works											
Site Clearance					\$ 26,511.20	\$ 60,000.00	\$ 71,748.80	\$ 133,275.72	\$ 16,292.36 \$	237,832.88 \$	149,895.20
Fending					\$ 145,811.60	\$ 345,056.63	\$ 328,618.40	\$ 54,094.65	\$ 20,000.00 \$	283,009.50 \$	836,631.60
Road Restraint Systems (Vehicle and Pedestrian)						•	•	\$ 432,757.20	\$ 274,367.70 \$	1,422,600.00 \$	
Drainage and Service Ducts					\$ 5,000.00	30,000.00	\$ 15,000.00	\$ 25,000.00	\$ 37,500.00 \$	25,000.00	25,000.00
Lighting						\$ 818,649.03			\$ 426,394.05 \$		
Earthworks					\$ 212,089.60	\$ 313,300.00	\$ 477,990.40	\$ 507,080,00	\$ 41,100.00 \$	602,134.64 \$	
Pavements					\$ 71,580.24	\$ 653,415.90	\$ 328,676.96	\$ 295,473.25	\$ 1,122,764.97 \$	1,812,344.50 \$	732,427.17
TrafficSigns and Road Markings					\$ 10,000.00	\$ 73,891.83	\$ 15,678.00	\$ 54,291.50	\$ 63,061.48 \$	79,618.27 \$	40,563.32
Piling and Embedded Retaining Walls					\$ 258,484.20	\$ 2,399,220.00	\$ 582,550.80	\$ 1,248,000.00	\$ 531,900.00 \$	1,107,112.50 \$	4,596,350.85
Special Structures - Bridges									\$.		
Landscape and Ecology					\$ 52,800.00	\$ 77,059.75	\$ 70,440.00	\$ 79,913.05	\$ 281,663.05 \$	46,350.00 \$	69,983.75
Subtotal					\$ 782,276.84	\$ 4,770,593.13	\$ 1,890,703.36	\$ 2,829,885.37	\$ 2,815,043.61 \$	5,616,002.28 \$	6,450,851.89
Preliminaries											
Materials/formation testing allowance					\$ 12,500.00	\$ 50,000.00	\$ 25,000.00	\$ 25,000.00	\$ 50,000,00 \$	\$ 00'000'05	50,000,00
Services Risk						s		\$ 12,500.00	\$ 25,000.00 \$	150,000.00 \$	50,000,00
Environmental Compliance					\$ 12,500.00	S	\$ 12,500.00		\$ 20,000.00 \$	\$ 00:000.62	25,000.00
Temp Traffic Management					\$ 7,822.77	s	\$ 18,907.03	\$ 84,896.56		224,640.09 \$	161,271.30
Temporary Works					\$ 15,000.00	\$ 20,000.00	\$ 15,000.00	\$ 7,500.00	\$ 20,000.00 \$	\$ 00.000,02	100,000,00
Access During Works (Public & Contractor)						\$ 25,000.00					
Contractors P& G - 15%					\$ 126,389.94	\$ 747,736.06	\$ 301,816.56	445,842.29	\$ 465,960.71 \$	917,346.36 \$	
Subtotal	\$ 9,940,415.00	\$ 6,638,505.00	\$ 6,056,008.00 \$	10,490,954.00	\$ 174,212.71	\$ 962,049.96	\$ 373,223.59	\$ 588,238.85	\$ 684,821.80 \$	1,416,986.45 \$	1,411,839.78
Other Costs											
Pre-implementation Fees											
Consultant Fees - Detailed Business Case/ Detailed					\$ 58,139.37	\$ 343,958.59	\$ 138,835.62	\$ 205,087.45	\$ 210,441.92 \$	421,979.32 \$	471,761.50
NZTA Managed Costs					\$ 9,689.90	\$ 57,326.43	\$ 23,139.27	\$ 34,181.24	\$ 35,073.65 \$	\$ 68,625,00	78,626.92
Subtotal	\$ 852,075.00	excl	excl	\$ 902,722.00	\$ 67,829.27	\$ 401,285.02	\$ 161,974.89	\$ 239,268.70	245,515.58	492,309.21 \$	550,388.42
Implementation Fees											
Consultant Fees - Procure ment/ Construction					\$ 51.840.94	\$ 306,696,41	\$ 123,795.09	\$ 182.869.65	\$ 187,644.05 \$	376.264.90 \$	420.654.00
Monitoring					0103001	00.000.00	20 021 00	00000	4 10 00 10 1	00 020 20	00000
NZI A Managed Costs					0 10 368 10		\$ 24.759.02		2757881 5	25 252 36	84 130 80
Property Cost					\$ 110.000.00	. 45	- S			S	-
Subtotal	\$ 1,031,956.00	\$ 689,452.00	5 546,173.00	1,123,660.00	\$ 182,577.32	\$ 429,374.97	\$ 173,313.13	\$ 256,017.50	\$ 262,701.67 \$	526,770.86 \$	588,915.61
P. co. allico coccos co.	\$ 2001239.00	1465 501 40	1 320 436 30	281452500	\$ 327.010.04	1 068 000 00	272 764 40	\$ 1174 03213	130467480 ¢	2 415 620 64 ¢	2 700 508 71
Containgency	DOCUMENT OF THE PARTY OF THE PA	,	,	,	-000000000		Charles !		4, 200 TO 100 TO 100 U		Ш
Total Expected Estimate (Rounded)	\$ 15,010,000.00	8,945,000.00	7.960,000,00	15,560,000,00	\$ 1,600,000.00	8,600,000,00	\$ 3,400,000,00 \$	\$ 5,100,000.00 \$	\$ 5,300,000.00 \$	10.500.000.00	11.800,000,00

Appendix B – Preferred Network Staging Map





Appendix C – NZTA Project Estimate – Form C



Project Estimate - Form C Project Name: Wakatipu Active Travel Network - Route A2 **Detailed Business Case Estimate Funding Risk** Item Description **Base Estimate** Contingency Contingency Nett Project Property Cost 121,739.13 \$ 18,260.87 \$ 21,000.00 Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase - Consultancy Fees \$ 98.599.16 \$ 29.579.75 \$ 19.226.84 - QLDC Managed Costs 16,433.19 \$ 4,929.96 3,204.47 115,032.35 \$ 34,509.71 \$ 22,431.31 Total Pre-implementation Implementation Phase Implementation Fees - Consultancy Fees 87,917.58 \$ 26,375.28 \$ 17,143.93 - QLDC Managed Costs 17,583.52 \$ 5 275 06 \$ 3 428 79 - Consent Monitoring Fees 17,583.52 \$ 5,275.06 \$ 3,428.79 SubTotal Base Implementation Fees 123,084.62 \$ 36,925.39 \$ 24,001.50 Physical Works 7,500.00 \$ 2,250.00 \$ 1,462.50 **Environmental Compliance** Earthworks 19,500.00 \$ 5,850.00 \$ 3,802.50 **Ground Improvements** 25,000.00 \$ 7,500.00 \$ 4,875.00 Drainage 3.750.00 \$ 2.437.50 12.500.00 \$ 5 Pavement and Surfacing 686,275.75 \$ 205,882.73 \$ 133,823.77 6 Retaining Walls 211,250.00 \$ 63,375.00 \$ 41,193.75 8 **Traffic Services** 45,284.90 \$ 13,585.47 \$ 8.830.56 9 Service Relocations/ Lighting 295,300.00 \$ 88,590.00 57,583.50 10 Landscaping 45,750.00 \$ 13,725.00 \$ 8,921.25 Traffic Management and Temporary Works 11 64,634.43 \$ 19.390.33 \$ 12.603.71 12 Preliminary and General 230,324.26 69,097.28 \$ 44,913.23 **Extraordinary Construction Costs** SubTotal Base Physical Works 320<u>,</u>447.27 1.643.319.33 492.995.80 529,921.19 344,448.77 Total for Implementation Phase 1,766,403.95 (A+B+C+D) Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 582,691.76 **Project Expected Estimate** (E+F) 2,585,867.20 Rounded Expected Estimate 2,586,000.00 140,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate 149.542.06 Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate 2,296,325.14 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 387,880.08 95th percentile Project Estimate 2,973,747.28 (G+H) Nett Project Property Cost 95th percentile Estimate 161,000.00 Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 171,973.37 Implementation Phase 95th percentile Estimate 2,640,773.91

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

Note: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - Route A3/A4 **Detailed Business Case Estimate Funding Risk** Base Estimate Item Description Contingency Contingency Nett Project Property Cost Α \$ Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase - Consultancy Fees \$ 48.056.50 \$ 14.416.95 \$ 9.371.02 - QLDC Managed Costs 8,009.42 2,402.83 1,561.84 Total Pre-implementation 56,065.92 \$ 16.819.78 \$ 10.932.85 Implementation Phase Implementation Fees - Consultancy Fees 40,293.67 \$ 12,088.10 \$ 7,857.27 - QLDC Managed Costs 2 417 62 \$ 1 571 45 8.058.73 | \$ - Consent Monitoring Fees 8,058.73 \$ 2,417.62 \$ 1,571.45 SubTotal Base Implementation Fees 56,411.14 \$ 16,923.34 \$ 11,000.17 **Physical Works** 23,854.15 \$ 4,651.56 7,156.24 \$ **Environmental Compliance** Earthworks \$ **Ground Improvements** 15,000.00 \$ 4,500.00 2,925.00 Drainage 5 Pavement and Surfacing 504,501.20 \$ 151,350.36 \$ 98,377.73 6 Retaining Walls 47,586.50 \$ 14,275.95 \$ 9,279.37 8 **Traffic Services** 64,426.00 \\$ 19,327.80 \$ 12,563.07 9 Service Relocations/ Lighting 5,000.00 \$ 1,500.00 975.00 10 Landscaping 35,000.00 \$ 10,500.00 \$ 6,825.00 Traffic Management and Temporary Works 11 1.103.20 \$ 330.96 \$ 215.12 12 Preliminary and General 104,470.66 31,341.20 \$ 20,371.78 **Extraordinary Construction Costs** SubTotal Base Physical Works 800,941.71 156,183.63 240,282.51 857.352.84 257,205.85 167,183.80 Total for Implementation Phase Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 274,025.63 1,187,444.39 **Project Expected Estimate** (E+F) **Rounded Expected Estimate** 1,200,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 72 885 70 Implementation Phase Expected Estimate 1,114,558.70 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 178,116.66 95th percentile Project Estimate (G+H) 1,365,561.05 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

83,818.55

1,281,742.50

Note: (1) These estimates are exclusive of escalation and GST.

Pre-implementation Phase 95th percentile Estimate

Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - Route A5/A7 **Detailed Business Case Estimate Funding Risk** Item Description **Base Estimate** Contingency Contingency Nett Project Property Cost 991,304.35 \$ 148,695.65 \$ 171,000.00 Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 338,082.22 \$ - Consultancy Fees \$ 101.424.66 \$ 65.926.03 - QLDC Managed Costs 56,347.04 \$ 16,904.11 10,987.67 Total Pre-implementation 394,429.25 \$ 76,913.70 118.328.78 Implementation Phase Implementation Fees - Consultancy Fees 301,456.64 \$ 90,436.99 \$ 58,784.05 - QLDC Managed Costs 60 291 33 \$ 18 087 40 \$ 11 756 81 - Consent Monitoring Fees 60,291.33 \$ 18,087.40 \$ 11,756.81 SubTotal Base Implementation Fees 422,039.30 \$ 126,611.79 82,297.66 Physical Works 7,500.00 \$ 25,000.00 \$ 4,875.00 **Environmental Compliance** Earthworks 18,000.00 \$ 5,400.00 \$ 3,510.00 **Ground Improvements** 50,000.00 \$ 15,000.00 9,750.00 6.825.00 Drainage 35.000.00 \$ 10.500.00 \$ 5 Pavement and Surfacing 1,281,665.13 \$ 384,499.54 \$ 249,924.70 6 1,145,435.00 343,630.50 Retaining Walls 370,000.00 \$ 111,000.00 \$ 72,150.00 8 **Traffic Services** 191.980.98 \$ 57,594.29 \$ 37,436.29 9 Service Relocations/ Lighting 1,423,687.20 \$ 427,106.16 277,619.00 10 Landscaping 301,451.75 \$ 90,435.53 \$ 58,783.09 Traffic Management and Temporary Works 11 57.522.20 \$ 17,256.66 \$ 11.216.83 12 Preliminary and General 734,961.34 \$ 220,488.40 \$ 143,317.46 **Extraordinary Construction Costs** SubTotal Base Physical Works 1,098,767.20 5.634.703.60 1,690,411.08 6,056,742.90 1,817,022.87 1,181,064.87 Total for Implementation Phase Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 2,084,047.30 **Project Expected Estimate** (E+F) 9,526,523.80 Rounded Expected Estimate 9,590,000.00 Nett Project Property Cost Expected Estimate 1,140,000.00 Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 512,758.03 Implementation Phase Expected Estimate 7,873,765.77 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 1,428,978.57 95th percentile Project Estimate 10,955,502.37 (G+H) Nett Project Property Cost 95th percentile Estimate 1,311,000.00 Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 589,671.73

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

9,054,830.64

Note: (1) These estimates are exclusive of escalation and GST.

Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - B2 **Detailed Business Case Estimate Funding Risk** Item Description Base Estimate Contingency Contingency Nett Project Property Cost Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 167,934.01 \$ - Consultancy Fees 50.380.20 \$ 32.747.13 - QLDC Managed Costs 27,989.00 \$ 8,396.70 5,457.86 Total Pre-implementation 195,923.01 \$ 38,204.99 58.776.90 \$ Implementation Phase Implementation Fees 149,741.16 \$ - Consultancy Fees 44,922.35 \$ 29,199.53 - QLDC Managed Costs 29 948 23 \$ 8 984 47 \$ 5 839 91 - Consent Monitoring Fees 29,948.23 \$ 8,984.47 \$ 5,839.91 SubTotal Base Implementation Fees 62,891.29 \$ 40,879.34 209,637.63 \$ **Physical Works** 20,000.00 \$ 6,000.00 \$ 3,900.00 **Environmental Compliance** Earthworks 242,570.00 \$ 72,771.00 \$ 47,301.15 **Ground Improvements** 50,000.00 \$ 15,000.00 9,750.00 5.133.38 Drainage 26.325.00 \$ 7.897.50 \$ 5 Pavement and Surfacing 769,376.00 \$ 230,812.80 \$ 150,028.32 6 Retaining Walls 855,000.00 \$ 256,500.00 \$ 166,725.00 Traffic Services 8 30,777.33 \$ 9,233.20 \$ 6.001.58 9 Service Relocations/ Lighting 197,800.00 \$ 59,340.00 38,571.00 10 Landscaping 137,600.00 \$ 41,280.00 \$ 26,832.00 Traffic Management and Temporary Works 11 104.377.93 \$ 31,313.38 \$ 20.353.70 12 Preliminary and General 365,073.94 \$ 109,522.18 71,189.42 **Extraordinary Construction Costs** SubTotal Base Physical Works 545,785.54 2.798.900.21 839.670.06 **Total for Implementation Phase** 3,008,537.83 902,561.35 586,664.88 Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 961,338.25 **Project Expected Estimate** (E+F) 4,165,799.10 **Rounded Expected Estimate** 4,200,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 254,699.92 Implementation Phase Expected Estimate 3,911,099.18 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 624,869.87 95th percentile Project Estimate (G+H) 4,790,668.97 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 292,904.91 Implementation Phase 95th percentile Estimate 4,497,764.06

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

Note: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - B3 **Detailed Business Case Estimate Funding Risk** Item Description Base Estimate Contingency Contingency Nett Project Property Cost Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase - Consultancy Fees 265.753.50 \$ 79.726.05 \$ 51.821.93 - QLDC Managed Costs 44,292.25 \$ 13,287.67 8,636.99 Total Pre-implementation 310,045.75 \$ 60,458.92 93.013.72 \$ Implementation Phase Implementation Fees - Consultancy Fees 236,963.53 \$ 71,089.06 \$ 46,207.89 - QLDC Managed Costs 47,392.71 \$ 9 241 58 14.217.81 \$ - Consent Monitoring Fees 47,392.71 \$ 14,217.81 \$ 9,241.58 SubTotal Base Implementation Fees 331,748.95 \$ 99,524.68 64,691.04 Physical Works 25,000.00 \$ 7,500.00 \$ 4,875.00 **Environmental Compliance** Earthworks 138,000.00 \$ 41,400.00 \$ 26,910.00 **Ground Improvements** 50,000.00 \$ 15,000.00 9,750.00 4.875.00 Drainage 25.000.00 \$ 7.500.00 \$ 5 Pavement and Surfacing 1,525,712.59 \$ 457,713.78 \$ 297,513.96 6 Retaining Walls 676,975.00 \$ 203,092.50 \$ 132,010.13 Traffic Services 8 75,061.96 \$ 22,518.59 \$ 14.637.08 9 Service Relocations/ Lighting 1,075,928.57 322,778.57 \$ 209,806.07 10 Landscaping 172,047.31 \$ 51,614.19 \$ 33,549.23 Traffic Management and Temporary Works 11 87.774.51 \$ 26.332.35 \$ 17.116.03 12 Preliminary and General 577,724.99 \$ 173,317.50 \$ 112,656.37 **Extraordinary Construction Costs** SubTotal Base Physical Works 863,698.86 4.429.224.94 1,328,767.48 **Total for Implementation Phase** 4,760,973.89 1,428,292.17 928,389.91 Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 1,521,305.89 **Project Expected Estimate** (E+F) 6,592,325.52 **Rounded Expected Estimate** 6,600,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 403,059.47 Implementation Phase Expected Estimate 6,189,266.05 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 988,848.83 95th percentile Project Estimate (G+H) 7,581,174.35 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 463,518.39 Implementation Phase 95th percentile Estimate 7,117,655.96

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

Note: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - C5 **Detailed Business Case Estimate Funding Risk** Item Description **Base Estimate** Contingency Contingency Nett Project Property Cost 60,869.57 \$ 9,130.43 \$ 10,500.00 Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 329,522.48 \$ - Consultancy Fees \$ 98.856.74 \$ 64.256.88 - QLDC Managed Costs 54,920.41 16,476.12 10,709.48 Total Pre-implementation 384,442.89 \$ 74,966.36 115.332.87 Implementation Phase Implementation Fees - Consultancy Fees 293,824.21 \$ 88,147.26 \$ 57,295.72 - QLDC Managed Costs 17,629.45 58 764 84 \$ 11 459 14 \$ - Consent Monitoring Fees 58,764.84 \$ 17,629.45 \$ 11,459.14 SubTotal Base Implementation Fees 123,406.17 80,214.01 411,353.89 \$ Physical Works 15,000.00 \$ 4,500.00 \$ 2,925.00 **Environmental Compliance** Earthworks 29,040.68 \$ 8,712.20 \$ 5,662.93 **Ground Improvements** 50,000.00 \$ 15,000.00 9,750.00 2,925.00 Drainage 15.000.00 \$ 4.500.00 \$ 5 Pavement and Surfacing 2,189,081.36 \$ 656,724.41 \$ 426,870.87 6 175,000.00 52,500.00 34,125.00 Retaining Walls 434,419.00 \$ 130,325.70 \$ 84,711.71 8 **Traffic Services** 503,222.03 \$ 150.966.61 \$ 98,128.30 9 Service Relocations/ Lighting 1,030,570.80 \$ 309,171.24 200,961.31 10 Landscaping 40,750.00 \$ 12,225.00 \$ 7,946.25 Traffic Management and Temporary Works 11 243.604.19 \$ 73.081.26 \$ 47.502.82 12 Preliminary and General 766,353.21 \$ 229,905.96 \$ 149,438.88 **Extraordinary Construction Costs** SubTotal Base Physical Works 1,070,948.05 5.492.041.28 1,647,612.38 5,903,395.17 1,771,018.55 1,151,162.06 Total for Implementation Phase Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 1,895,481.85 **Project Expected Estimate** (E+F) 8,244,189.48 Rounded Expected Estimate 8,300,000.00 Nett Project Property Cost Expected Estimate 70,000.00 Project Development Phase Expected Estimate 499,775.76 Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate 7,674,413.72 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 1,236,628.42 95th percentile Project Estimate (G+H) 9,480,817.90 Nett Project Property Cost 95th percentile Estimate 80,500.00 Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 574,742.12

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

8,825,575.78

Note: (1) These estimates are exclusive of escalation and GST.

Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - C7 **Detailed Business Case Estimate Funding Risk** Item Description **Base Estimate** Contingency Contingency Nett Project Property Cost Α Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase - Consultancy Fees 62.816.34 \$ 18.844.90 \$ 12.249.19 - QLDC Managed Costs 10,469.39 \$ 3,140.82 2,041.53 Total Pre-implementation 73,285.73 \$ 14,290.72 21.985.72 \$ Implementation Phase Implementation Fees - Consultancy Fees 56,011.23 \$ 16,803.37 \$ 10,922.19 - QLDC Managed Costs 11,202.25 \$ 3,360.67 \$ 2 184 44 - Consent Monitoring Fees 11,202.25 \$ 3,360.67 \$ 2,184.44 SubTotal Base Implementation Fees 78,415.73 \$ 15,291.07 23,524.72 Physical Works 20,000.00 \$ 6,000.00 3,900.00 **Environmental Compliance** Earthworks **Ground Improvements** 25,000.00 \$ 7,500.00 4,875.00 Drainage 2.925.00 15.000.00 \$ 4.500.00 \$ 5 Pavement and Surfacing 444,567.20 \$ 133,370.16 \$ 86,690.60 6 Retaining Walls 159,900.00 \$ 47,970.00 \$ 31,180.50 8,199.58 Traffic Services 8 42.049.12 \$ 12,614.74 \$ 9 Service Relocations/ Lighting 116,493.20 \$ 34,947.96 22,716.17 10 Landscaping 70,600.00 \$ 21,180.00 \$ 13,767.00 Traffic Management and Temporary Works 11 16,772.19 \$ 5.031.66 \$ 3.270.58 12 Preliminary and General 136,557.26 \$ 40,967.18 \$ 26,628.66 **Extraordinary Construction Costs** SubTotal Base Physical Works 314,081.69 1.046.938.96 204,153.10 **Total for Implementation Phase** 1.125.354.69 337,606.41 219,444.16 Project Base Estimate Contingency (Assessed/Analysed) (A+B+C+D) 359,592.13 **Project Expected Estimate** (E+F) 1,558,232.54 **Rounded Expected Estimate** 1,600,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 95,271.45 Implementation Phase Expected Estimate 1,462,961.10 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 233,734.88 95th percentile Project Estimate (G+H) 1,791,967.42 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles Signed	
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

109,562.16

1,682,405.26

Note: (1) These estimates are exclusive of escalation and GST.

Pre-implementation Phase 95th percentile Estimate

Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - A8 **Detailed Business Case Estimate Funding Risk** Item Description **Base Estimate** Contingency Contingency Nett Project Property Cost 147,826.09 \$ 22,173.91 \$ 25,500.00 Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 160,192.84 \$ - Consultancy Fees \$ 48.057.85 \$ 31.237.60 - QLDC Managed Costs 26,698.81 \$ 8,009.64 5,206.27 Total Pre-implementation 56,067.49 \$ 186.891.64 \$ 36.443.87 Implementation Phase Implementation Fees - Consultancy Fees 142,838.61 \$ 42,851.58 \$ 27,853.53 - QLDC Managed Costs 8 5 7 0 3 2 \$ 5 570 71 28.567.72 | \$ - Consent Monitoring Fees 28,567.72 \$ 8,570.32 \$ 5,570.71 SubTotal Base Implementation Fees 199,974.06 \$ 59,992.22 38,994.94 Physical Works 15,000.00 \$ 4,500.00 \$ 2,925.00 **Environmental Compliance** Earthworks 214,800.00 \$ 64,440.00 \$ 41,886.00 **Ground Improvements** 50,000.00 \$ 15,000.00 9,750.00 4,875.00 Drainage 25.000.00 \$ 7.500.00 \$ 5 Pavement and Surfacing 223,550.00 \$ 67,065.00 \$ 43,592.25 6 903,105.00 270,931.50 176,105.48 Retaining Walls 297,825.00 \$ 89,347.50 \$ 58,075.88 8 **Traffic Services** 99,705.98 \$ 29,911.79 \$ 19.442.67 9 Service Relocations/ Lighting 25,000.00 \$ 7,500.00 4,875.00 10 Landscaping 405,950.00 \$ 121,785.00 \$ 79,160.25 Traffic Management and Temporary Works 11 46.699.36 \$ 14.009.81 \$ 9.106.38 12 Preliminary and General 363,245.30 \$ 108,973.59 70,832.83 **Extraordinary Construction Costs** SubTotal Base Physical Works 2.669.880.63 800.964.19 520,626.72 2,869,854.69 860,956.41 559,621.67 Total for Implementation Phase Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 939,197.81 **Project Expected Estimate** (E+F) 4,143,770.24 Rounded Expected Estimate 4,250,000.00 Nett Project Property Cost Expected Estimate 170,000.00 Project Development Phase Expected Estimate 242.959.14 Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate 3,730,811.10 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 621,565.54 95th percentile Project Estimate (G+H) 4,765,335.78 Nett Project Property Cost 95th percentile Estimate 195,500.00 Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 279,403.01

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

4,290,432.77

Note: (1) These estimates are exclusive of escalation and GST.

Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - C6 **Detailed Business Case Estimate Funding Risk** Item Description **Base Estimate** Contingency Contingency Nett Project Property Cost 95,652.17 \$ 14,347.83 \$ 16,500.00 Α Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 58.139.37 \$ - Consultancy Fees \$ 17.441.81 \$ 11.337.18 - QLDC Managed Costs 9,689.90 \$ 2,906.97 1,889.53 Total Pre-implementation 67,829.27 \$ 13,226.71 20.348.78 Implementation Phase Implementation Fees - Consultancy Fees 51,840.94 \$ 15,552.28 \$ 10,108.98 - QLDC Managed Costs 10 368 19 \$ 3,110.46 \$ 2 021 80 - Consent Monitoring Fees 10,368.19 \$ 3,110.46 \$ 2,021.80 SubTotal Base Implementation Fees 72,577.32 \$ 21,773.20 \$ 14,152.58 Physical Works 12,500.00 \$ 3,750.00 \$ 2,437.50 **Environmental Compliance** Earthworks 238,600.80 \$ 71,580.24 \$ 46,527.16 **Ground Improvements** 12,500.00 \$ 3,750.00 2,437.50 975.00 Drainage 5.000.00 \$ 1.500.00 \$ 5 Pavement and Surfacing 71,580.24 \$ 21,474.07 \$ 13,958.15 6 Retaining Walls \$ 258,484.20 \$ 77,545.26 50,404.42 3,000.00 \$ Traffic Services 8 10.000.00 \$ 1,950.00 9 Service Relocations/ Lighting 10 Landscaping 198,611.60 \$ 59,583.48 \$ 38,729.26 Traffic Management and Temporary Works 11 22.822.77 \$ 6.846.83 \$ 4.450.44 12 Preliminary and General 126,389.94 \$ 37,916.98 \$ 24,646.04 **Extraordinary Construction Costs** SubTotal Base Physical Works 286,946.86 186,515.46 956.489.55 **Total for Implementation Phase** 1,029,066.87 308,720.06 200,668.04 Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 343,416.67 **Project Expected Estimate** (E+F) 1,535,964.98 **Rounded Expected Estimate** 1,600,000.00 Nett Project Property Cost Expected Estimate 110,000.00 Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 88,178.05 Implementation Phase Expected Estimate 1,337,786.93 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 230,394.75 95th percentile Project Estimate (G+H) 1,766,359.72 Nett Project Property Cost 95th percentile Estimate 126,500.00 Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 101,404.76

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles Signed	
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

1,538,454.97

Note: (1) These estimates are exclusive of escalation and GST.

Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - D1 **Detailed Business Case Estimate Funding Risk** Item Description Base Estimate Contingency Contingency Nett Project Property Cost Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 343,958.59 \$ 103,187.58 \$ 67.071.92 - Consultancy Fees - QLDC Managed Costs 57,326.43 \$ 17,197.93 11,178.65 Total Pre-implementation 401,285.02 \$ 78,250.58 120.385.51 \$ Implementation Phase Implementation Fees 306,696.41 \$ - Consultancy Fees 92,008.92 \$ 59,805.80 - QLDC Managed Costs 61,339.28 \$ 18 401 78 \$ 11 961 16 - Consent Monitoring Fees 61,339.28 \$ 18,401.78 \$ 11,961.16 SubTotal Base Implementation Fees 429,374.97 \$ 128,812.49 83,728.12 Physical Works 30,000.00 \$ 9,000.00 \$ 5,850.00 **Environmental Compliance** Earthworks 373,300.00 \$ 111,990.00 \$ 72,793.50 **Ground Improvements** 50,000.00 \$ 15,000.00 9,750.00 Drainage 30.000.00 \$ 9.000.00 \$ 5.850.00 5 Pavement and Surfacing 653,415.90 \$ 196,024.77 \$ 127,416.10 6 Retaining Walls 2,399,220.00 \$ 719,766.00 \$ 467,847.90 Traffic Services 8 73,891.83 \$ 22,167.55 \$ 14.408.91 9 Service Relocations/ Lighting 843,649.03 253,094.71 164,511.56 10 Landscaping 422,116.38 \$ 126,634.91 \$ 82,312.69 Traffic Management and Temporary Works 25,294.17 \$ 11 84.313.91 \$ 16.441.21 12 Preliminary and General 772,736.06 \$ 231,820.82 \$ 150,683.53 **Extraordinary Construction Costs** SubTotal Base Physical Works 1,719,792.93 1,117,865.40 5.732.643.10 **Total for Implementation Phase** 6,162,018.06 1,848,605.42 1,201,593.52 Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 1,968,990.92 **Project Expected Estimate** (E+F) 8,532,294.01 **Rounded Expected Estimate** 8,600,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 521,670.52 Implementation Phase Expected Estimate 8,010,623.48 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 1,279,844.10 95th percentile Project Estimate (G+H) 9,812,138.11 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 599,921.10 Implementation Phase 95th percentile Estimate 9,212,217.01

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

Note: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - D2 **Detailed Business Case Estimate Funding Risk** Item Description **Base Estimate** Contingency Contingency Nett Project Property Cost Α Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 27.072.95 - Consultancy Fees 138.835.62 \$ 41.650.69 \$ - QLDC Managed Costs 23,139.27 6,941.78 4,512.16 Total Pre-implementation 31,585.10 161.974.89 \$ 48.592.47 \$ Implementation Phase Implementation Fees - Consultancy Fees 123,795.09 \$ 37,138.53 \$ 24,140.04 - QLDC Managed Costs 24,759.02 \$ 4 828 01 7.427.71 \\$ - Consent Monitoring Fees 24,759.02 \$ 7,427.71 \$ 4,828.01 SubTotal Base Implementation Fees 173,313.13 \$ 51,993.94 33,796.06 **Physical Works** 12,500.00 \$ 3,750.00 \$ 2,437.50 **Environmental Compliance** Earthworks 549,739.20 \$ 164,921.76 \$ 107,199.14 **Ground Improvements** 25,000.00 \$ 7,500.00 4,875.00 Drainage 2.925.00 15.000.00 \$ 4.500.00 \$ 5 Pavement and Surfacing 328,676.96 \$ 98,603.09 \$ 64,092.01 6 Retaining Walls \$ 582,550.80 \$ 174,765.24 \$ 113,597.41 Traffic Services 8 15,678.00 \$ 4,703.40 \$ 3,057.21 9 Service Relocations/ Lighting 10 Landscaping 399,058.40 \$ 119,717.52 \$ 77,816.39 Traffic Management and Temporary Works 11 33.907.03 \$ 10.172.11 \$ 6.611.87 12 Preliminary and General 301,816.56 \$ 90,544.97 \$ 58,854.23 **Extraordinary Construction Costs** SubTotal Base Physical Works 679,178.09 2,263,926.95 441,465,76 **Total for Implementation Phase** 2,437,240.08 731,172.02 475,261.82 Project Base Estimate (A+B+C+D) 779,764.49 Contingency (Assessed/Analysed) **Project Expected Estimate** (E+F) 3.378.979.46 **Rounded Expected Estimate** 3,400,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 210,567.35 Implementation Phase Expected Estimate 3,168,412.11 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 506,846.92 95th percentile Project Estimate (G+H) 3,885,826.38 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 242,152.46

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles Signed	
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

3,643,673.92

Note: (1) These estimates are exclusive of escalation and GST.

Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - D3 **Detailed Business Case Estimate Funding Risk** Item Description Base Estimate Contingency Contingency Nett Project Property Cost Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 205,087.45 \$ 39.992.05 - Consultancy Fees 61.526.24 \$ - QLDC Managed Costs 34,181.24 \$ 10,254.37 6,665.34 Total Pre-implementation 239,268.70 \$ 46,657.40 71.780.61 \$ Implementation Phase Implementation Fees - Consultancy Fees 182,869.65 \$ 54,860.89 \$ 35,659.58 - QLDC Managed Costs 10 972 18 \$ 7 1 3 1 9 2 36.573.93 | \$ - Consent Monitoring Fees 36,573.93 \$ 10,972.18 \$ 7,131.92 SubTotal Base Implementation Fees 256,017.50 \$ 76,805.25 \$ 49,923.41 **Physical Works** 12,500.00 \$ 3,750.00 \$ 2,437.50 **Environmental Compliance** Earthworks 640,355.72 \$ 192,106.72 \$ 124,869.37 **Ground Improvements** 25,000.00 \$ 7,500.00 4,875.00 7.500.00 4.875.00 Drainage 25.000.00 \$ \$ 5 Pavement and Surfacing 295,473.25 \$ 88,641.98 \$ 57,617.28 6 Retaining Walls 1,248,000.00 \$ 374,400.00 \$ 243,360.00 Traffic Services 8 487.048.70 | \$ 146,114.61 \$ 94.974.50 9 Service Relocations/ Lighting 12,500.00 \$ 3,750.00 2,437.50 10 Landscaping 134,007.70 \$ 40,202.31 \$ 26,131.50 Traffic Management and Temporary Works 11 92.396.56 \$ 27,718.97 \$ 18.017.33 12 Preliminary and General 445,842.29 \$ 133,752.69 \$ 86,939.25 **Extraordinary Construction Costs** SubTotal Base Physical Works 3.418.124.21 1,025,437.26 666,534.22 **Total for Implementation Phase** 3,674,141.72 1,102,242.52 716,457.64 Project Base Estimate Contingency (Assessed/Analysed) (A+B+C+D) 1,174,023.12 5,087,433.54 **Project Expected Estimate** (E+F) **Rounded Expected Estimate** 5,100,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 311,049.30 Implementation Phase Expected Estimate 4,776,384.23 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 763,115.03 95th percentile Project Estimate (G+H) 5,850,548.57 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 357,706.70 Implementation Phase 95th percentile Estimate 5,492,841.87

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

Note: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - D4 **Detailed Business Case Estimate Funding Risk** Item Description Base Estimate Contingency Contingency Nett Project Property Cost Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 210,441.92 \$ - Consultancy Fees 63.132.58 \$ 41.036.18 - QLDC Managed Costs 35,073.65 \$ 10,522.10 6,839.36 Total Pre-implementation 47,875.54 245.515.58 \$ 73.654.67 \$ Implementation Phase Implementation Fees 187,644.05 \$ - Consultancy Fees 56,293.21 \$ 36,590.59 - QLDC Managed Costs 37,528.81 \$ 11 258 64 \$ 7 3 1 8 1 2 - Consent Monitoring Fees 37,528.81 \$ 11,258.64 \$ 7,318.12 SubTotal Base Implementation Fees 78,810.50 \$ 262,701.67 \$ 51,226.83 **Physical Works** 20,000.00 \$ 6,000.00 \$ 3,900.00 **Environmental Compliance** Earthworks 57,392.36 \$ 17,217.71 \$ 11,191.51 **Ground Improvements** 50,000.00 \$ 15,000.00 9,750.00 11.250.00 7.312.50 Drainage 37.500.00 \$ **S** 5 Pavement and Surfacing 1,122,764.97 \$ 336,829.49 \$ 218,939.17 6 Retaining Walls 531,900.00 \$ 159,570.00 \$ 103,720.50 Traffic Services 8 337,429.18 \$ 101,228.75 \$ 65,798.69 9 Service Relocations/ Lighting 451,394.05 135,418.22 88,021.84 10 Landscaping 301,663.05 \$ 90,498.92 \$ 58,824.29 37,158.33 \$ Traffic Management and Temporary Works 11 123.861.09 \$ 24.152.91 12 Preliminary and General 465,960.71 \$ 139,788.21 \$ 90,862.34 **Extraordinary Construction Costs** SubTotal Base Physical Works 3.499.865.41 1.049.959.62 682,473.75 **Total for Implementation Phase** 3.762.567.08 1,128,770.12 733,700.58 Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 1,202,424.80 **Project Expected Estimate** (E+F) 5,210,507.45 **Rounded Expected Estimate** 5,300,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 319,170.25 Implementation Phase Expected Estimate 4,891,337.20 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 781,576.12 95th percentile Project Estimate (G+H) 5,992,083.57 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 367,045.79 Implementation Phase 95th percentile Estimate 5,625,037.78

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

Note: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - E1 **Detailed Business Case Estimate Funding Risk** Item Description Base Estimate Contingency Contingency Nett Project Property Cost Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 421,979.32 \$ - Consultancy Fees 126.593.80 \$ 82.285.97 - QLDC Managed Costs 70,329.89 \$ 21,098.97 13,714.33 Total Pre-implementation 492,309.21 \$ 96,000.30 147.692.76 Implementation Phase Implementation Fees - Consultancy Fees 376,264.90 \$ 112,879.47 \$ 73,371.65 - QLDC Managed Costs 75 252 98 \$ 22 575 89 \$ 14 674 33 - Consent Monitoring Fees 75,252.98 \$ 22,575.89 \$ 14,674.33 SubTotal Base Implementation Fees 526,770.86 \$ 158,031.26 102,720.32 **Physical Works** 7,500.00 \$ 25,000.00 \$ 4,875.00 **Environmental Compliance** Earthworks 839,967.51 \$ 251,990.25 \$ 163,793.66 **Ground Improvements** 50,000.00 \$ 15,000.00 9,750.00 4.875.00 Drainage 25.000.00 \$ 7.500.00 \$ 5 Pavement and Surfacing 1,812,344.50 \$ 543,703.35 \$ 353,407.18 6 Retaining Walls 1,107,112.50 \$ 332,133.75 \$ 215,886.94 Traffic Services 8 1,502,218.27 \$ 450.665.48 | \$ 292.932.56 9 Service Relocations/ Lighting 150,000.00 \$ 45,000.00 29,250.00 10 Landscaping 329,359.50 \$ 98,807.85 \$ 64,225.10 Traffic Management and Temporary Works 82,392.03 \$ 11 274.640.09 \$ 53.554.82 12 Preliminary and General 917,346.36 \$ 275,203.91 \$ 178,882.54 **Extraordinary Construction Costs** SubTotal Base Physical Works 7.032.988.73 2,109,896.62 1,371,432.80 **Total for Implementation Phase** 7.559.759.58 2,267,927.87 1,474,153.12 Project Base Estimate (A+B+C+D) Contingency (Assessed/Analysed) 2,415,620.64 **Project Expected Estimate** (E+F) 10,467,689.43 **Rounded Expected Estimate** 10,500,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 640 001 97 Implementation Phase Expected Estimate 9,827,687.46 Funding Risk Contingency (Assessed/Analysed) 1,570,153.41 (A+B+C+D) 95th percentile Project Estimate (G+H) 12,037,842.85 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 736,002.27 Implementation Phase 95th percentile Estimate 11,301,840.58

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

Note: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form C Project Name: Wakatipu Active Travel Network - F1 **Detailed Business Case Estimate Funding Risk** Item Description Base Estimate Contingency Contingency Nett Project Property Cost Project Development Phase - Consultancy Fees excl - QLDC Managed Costs excl **Total Project Development** Pre-implementation Phase 471,761.50 \$ 91.993.49 - Consultancy Fees 141.528.45 \$ - QLDC Managed Costs 78,626.92 23,588.07 15,332.25 Total Pre-implementation 165,116.52 \$ 107,325.74 550.388.42 \$ Implementation Phase Implementation Fees - Consultancy Fees 420,654.00 \$ 126,196.20 \$ 82,027.53 - QLDC Managed Costs 84,130.80 \$ 25,239.24 \$ 16 405 51 - Consent Monitoring Fees 84,130.80 \$ 25,239.24 \$ 16,405.51 SubTotal Base Implementation Fees 588,915.61 \$ 176,674.68 \$ 114,838.54 Physical Works 7,500.00 \$ 25,000.00 \$ 4,875.00 **Environmental Compliance** Earthworks 149,895.20 \$ 44,968.56 \$ 29,229.56 **Ground Improvements** 50,000.00 \$ 15,000.00 9,750.00 4.875.00 Drainage 25.000.00 \$ 7.500.00 \$ 5 Pavement and Surfacing 732,427.17 \$ 219,728.15 \$ 142,823.30 6 Retaining Walls 4,596,350.85 \$ 1,378,905.26 \$ 896,288.42 Traffic Services 8 40.563.32 \$ 12,169.00 \$ 7.909.85 9 Service Relocations/ Lighting 50,000.00 \$ 15,000.00 9,750.00 10 Landscaping 906,615.35 \$ 271,984.61 \$ 176,789.99 Traffic Management and Temporary Works 11 261.271.30 \$ 78.381.39 \$ 50.947.90 12 Preliminary and General 1,025,568.48 \$ 307,670.54 \$ 199,985.85 **Extraordinary Construction Costs** SubTotal Base Physical Works 7.862.691.67 2,358,807.50 1,533,224.87 **Total for Implementation Phase** 8,451,607.27 2,535,482.18 1,648,063.42 Project Base Estimate (A+B+C+D) 2,700,598.71 Contingency (Assessed/Analysed) 11,702,594.40 **Project Expected Estimate** (E+F) **Rounded Expected Estimate** 11,800,000.00 Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate 715 504 94 Implementation Phase Expected Estimate 10,987,089.45 Funding Risk Contingency (Assessed/Analysed) (A+B+C+D) 1,755,389.16 95th percentile Project Estimate (G+H) 13,457,983.56 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Pre-implementation Phase 95th percentile Estimate 822,830.68

Date of Estimate 27/06/2019	Cost Index (Qtr/Year) Q3/2019
Estimate prepared by Tom Beedles	Signed
Estimate internal peer review by Jonathan Pimlott	Signed
Estimate external peer review by N/A	Signed
Estimate accepted by NZTA	Signed

12,635,152.87

Note: (1) These estimates are exclusive of escalation and GST.

Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name:QLDC - STREETSCAPES- Lower Brecon Detailed Business Case Estimate Base Estimate (Base Estimate (including **Funding Risk** Description Item excluding Contingency Services Contingency Services Upgrade) Upgrade) Nett Project Property Cost Α Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 107,627 89,147 - QLDC Managed Costs 50,839 42,110 Total Pre-implementation 131.257 158.465 Implementation Phase Implementation Fees - Consultancy Fees 92,434 76.563 - QLDC Managed Costs 90,242 74,747 - Construction Monitoring Fees 9,243 7,656 Sub Total Base Implementation Fees 191,919 158,966 Physical Works **Environmental Compliance** 12,498 12,498 Earthworks 210,527 210,527 Removal of existing services 2a 2.399 excluded **Ground Improvements** Drainage 6,062 6,062 4a Stormwater Renewals 74,176 excluded 373,454 Pavement and Surfacing 373,454 6 Bridges 0 Retaining Walls 8 Traffic Services 36,620 36,620 9 Service Relocations 82,988 82,988 9b Services - renewals 100,161 excluded 10 Landscaping 126,594 126,594 Accomodation Works 3,838 11 3,838 11a Traffic Management and Temporary Works 319.071 264,286 Preliminary and General 214,339 177,537 **Extraordinary Construction Costs** 13 285,951 236,853 Sub Total Base Physical works 1,848,678 1,531,257 Total for Implementation Phase 2,040,597 1,690,223 Project Base Estimate (A+C+D) 2,199,063 1,849,189 (A+C+D) F Contingency (Assessed/Analysed) 549.938 462.442 2,749,000 2,311,631 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate Funding Risk Contingency (Assessed/Analysed) (A+C+D) 346,745 95th percentile Project Estimate (G+H) 2,658,376 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate Implementation Phase 95th percentile Estimate

Date of Estimate 25/07	07/2019 Cost Index (Qtr/Year)	1ST 2019
Estimate prepared by	Signed	
Estimate internal peer review by	Signed	
Estimate external peer review by	Signed	
Estimate accepted by QLDC	Signed	

Note: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form C Project Name:QLDC - STREETSCAPES- Camp Street **Detailed Business Case Estimate** Base Estimate (Base Estimate (including **Funding Risk** Description excluding Contingency Item Services Contingency Services Upgrade) Upgrade) Α Nett Project Property Cost Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 72,900 69,281 - QLDC Managed Costs 34,435 32,726 Total Pre-implementation 107.335 102.007 Implementation Phase Implementation Fees - Consultancy Fees 62.609 59.501 - QLDC Managed Costs 61,124 58,090 - Construction Monitoring Fees 6,261 5,950 Sub Total Base Implementation Fees 129,995 123,542 Physical Works **Environmental Compliance** 12,548 12,548 Earthworks 132,547 132,547 Removal of existing services 2a 0 excluded **Ground Improvements** 0 Drainage 0 0 4a Stormwater Renewals 39,395 excluded 459,443 Pavement and Surfacing 459,443 6 Bridges 0 Retaining Walls 8 Traffic Services 21,320 21,320 9 Service Relocations 103,634 103,634 9b Services - renewals 2,500 excluded 10 Landscaping 43,883 43,883 Accomodation Works 11 28,709 28,709 11a Traffic Management and Temporary Works 1.900 1,806 Preliminary and General 137,974 145,181 **Extraordinary Construction Costs** 13 248,161 261,123 Sub Total Base Physical works 1,252,183 1,190,025 Total for Implementation Phase Project Base Estimate (A+C+D) 1,489,513 1,437,108 (A+C+D) F Contingency (Assessed/Analysed) 372.487 359.382 1,862,000 1,796,490 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Nil Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate (A+C+D) 269,474 Funding Risk Contingency (Assessed/Analysed) (G+H) 2,065,964 95th percentile Project Estimate Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate

Date of Estimate 25/07/201	Cost Index (Qtr/Year) 1ST 2019
Estimate prepared by	Signed
Estimate internal peer review by	Signed
Estimate external peer review by	Signed
Estimate accepted by QLDC	Signed

Note: (1) These estimates are exclusive of escalation and GST.

Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name:QLDC - STREETSCAPES- Duke Street **Detailed Business Case Estimate** Base Estimate (Base Estimate (including **Funding Risk** Description excluding Contingency Item Services Contingency Services Upgrade) Upgrade) Α Nett Project Property Cost Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 38,500 31,017 - QLDC Managed Costs 18,186 14,651 Total Pre-implementation 56.686 45,668 Implementation Phase Implementation Fees - Consultancy Fees 33,065 26.638 - QLDC Managed Costs 3,307 2,664 - Construction Monitoring Fees 32,281 26,006 Sub Total Base Implementation Fees 68,653 55,308 Physical Works **Environmental Compliance** 12,298 12,298 Earthworks 53,228 53,228 Removal of existing services 2a 9,241 excluded **Ground Improvements** Drainage 9,446 9,446 4a Stormwater Renewals 42,784 excluded 145.141 Pavement and Surfacing 145,141 6 Bridges Retaining Walls 8 Traffic Services 106,904 106,904 9 Service Relocations 7,835 7,835 9b Services - renewals 31,275 excluded 10 Landscaping Accomodation Works 10.393 10,393 11 11a Traffic Management and Temporary Works 7.865 6,336 Preliminary and General 76,673 61,770 **Extraordinary Construction Costs** 13 148,224 119,413 Sub Total Base Physical works 661,308 532,763 Total for Implementation Phase 729,961 588,071 Project Base Estimate (A+C+D) 786,647 643,380 (A+C+D) F Contingency (Assessed/Analysed) 196.353 160.592 983,000 803,972 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Nil Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate (A+C+D) 128.636 Funding Risk Contingency (Assessed/Analysed) (G+H) 932,608 95th percentile Project Estimate Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate Implementation Phase 95th percentile Estimate

Date of Estimate 25/07	07/2019 Cost Index (Qtr/Year)	1ST 2019
Estimate prepared by	Signed	
Estimate internal peer review by	Signed	
Estimate external peer review by	Signed	
Estimate accepted by QLDC	Signed	

Note: (1) These estimates are exclusive of escalation and GST.

 $\ensuremath{\text{(2)}}\ \text{Project Development Phase Estimates are set to Nil as these are now sunk costs.}$

Project Estimate - Form C Project Name:QLDC - STREETSCAPES- Brian Smith Park **Detailed Business Case Estimate** Base Estimate (Base Estimate (including **Funding Risk** Description excluding Contingency Item Services Contingency Services Upgrade) Upgrade) Α Nett Project Property Cost Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 23,335 22,643 - QLDC Managed Costs 11,022 10,696 Total Pre-implementation 34.357 33.338 Implementation Phase Implementation Fees - Consultancy Fees 20,041 19,446 - QLDC Managed Costs 2,004 1,945 - Construction Monitoring Fees 19,565 18,985 Sub Total Base Implementation Fees 41,610 40,376 Physical Works **Environmental Compliance** 250 250 Earthworks 19,183 19,183 Removal of existing services 0 excluded 2a **Ground Improvements** 0 Drainage 0 0 4a Stormwater Renewals 8,304 excluded 57,870 Pavement and Surfacing 57,870 6 Bridges Retaining Walls 8 Traffic Services 0 0 9 Service Relocations 0 0 9b Services - renewals 0 excluded 10 Landscaping 194,455 194,455 Accomodation Works 11 0 0 11a Traffic Management and Temporary Works 0 0 Preliminary and General 46,471 45,093 **Extraordinary Construction Costs** 13 72,078 74,281 Sub Total Base Physical works 400,814 388,929 Total for Implementation Phase 429,305 Project Base Estimate (A+C+D) 476,781 469,681 (A+C+D) Contingency (Assessed/Analysed) 119.219 117,443 596,000 587,125 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Nil Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate (A+C+D) 93,940 Funding Risk Contingency (Assessed/Analysed) (G+H) 681,065 95th percentile Project Estimate Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate Implementation Phase 95th percentile Estimate

Date of Estimate 25/07/2019	Cost Index (Qtr/Year) 1ST 2019
Estimate prepared by	Signed
Estimate internal peer review by	Signed
Estimate external peer review by	Signed
Estimate accepted by QLDC	Signed

Note: (1) These estimates are exclusive of escalation and GST.

 $\ensuremath{\text{(2)}}\ \text{Project Development Phase Estimates are set to Nil as these are now sunk costs.}$

Project Estimate - Form C Project Name:QLDC - STREETSCAPES- Shortover Street **Detailed Business Case Estimate** Base Estimate (Base Estimate (including **Funding Risk** Description excluding Contingency Item Services Contingency Services Upgrade) Upgrade) Α Nett Project Property Cost Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 123,702 101,508 - QLDC Managed Costs 58,432 47,948 Total Pre-implementation 182.134 149.456 Implementation Phase Implementation Fees - Consultancy Fees 106.240 87.179 - QLDC Managed Costs 10,624 8,718 - Construction Monitoring Fees 103,721 85,112 Sub Total Base Implementation Fees 220,585 181,008 Physical Works **Environmental Compliance** 12,798 12,798 Earthworks 186,447 186,447 Removal of existing services 2a 8.094 excluded **Ground Improvements** Drainage 21,377 21,377 4a Stormwater Renewals 139,465 excluded 310.539 Pavement and Surfacing 310,539 6 Bridges Retaining Walls 8 Traffic Services 400,384 400,384 9 Service Relocations 107,652 107,652 9b Services - renewals 91,314 excluded 10 Landscaping 53,312 53,312 Accomodation Works 11 0 0 11a Traffic Management and Temporary Works 76.737 62,969 Preliminary and General 202,154 12 246,354 **Extraordinary Construction Costs** 13 470,326 385,942 Sub Total Base Physical works 2,124,801 1,743,576 Total for Implementation Phase 1,924,584 Project Base Estimate (A+C+D) 2,105,593 (A+C+D) F Contingency (Assessed/Analysed) 632,479 526.897 3,160,000 2,632,490 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Nil Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate (A+C+D) 421.198 Funding Risk Contingency (Assessed/Analysed) (G+H) 3,053,688 95th percentile Project Estimate Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate

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Note: (1) These estimates are exclusive of escalation and GST.

Implementation Phase 95th percentile Estimate

 $\ensuremath{\text{(2) Project Development Phase Estimates are set to Nil as these are now sunk costs.}}$

Project Estimate - Form C Project Name:QLDC - STREETSCAPES- Rees Street **Detailed Business Case Estimate** Base Estimate (Base Estimate (including **Funding Risk** Description excluding Contingency Item Services Contingency Services Upgrade) Upgrade) Α Nett Project Property Cost Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 228,247 188,840 - QLDC Managed Costs 139,660 115,548 Total Pre-implementation 367,907 304.388 Implementation Phase Implementation Fees - Consultancy Fees 214,602 177,551 - QLDC Managed Costs 21,460 17,755 - Construction Monitoring Fees 209,514 173,342 Sub Total Base Implementation Fees 445,576 368,648 Physical Works **Environmental Compliance** 13,198 13,198 Earthworks 363,050 363,050 Removal of existing services 2a 27,700 excluded **Ground Improvements** Drainage 42,303 42,303 4a Stormwater Renewals 295,122 excluded 1.029.018 1,029,018 Pavement and Surfacing 6 Bridges Retaining Walls 8 Traffic Services 182,140 182,140 9 Service Relocations 107,652 107,652 9b Services - renewals 91,314 excluded 10 Landscaping 188,715 188,715 Accomodation Works 11 58.501 58,501 11a Traffic Management and Temporary Works 227.179 187,957 Preliminary and General 411,714 497,629 **Extraordinary Construction Costs** 13 1,168,530 966,784 Sub Total Base Physical works 4,292,051 3,551,032 Total for Implementation Phase 3,919,680 Project Base Estimate (A+C+D) 5,105,534 4,288,327 (A+C+D) F Contingency (Assessed/Analysed) 1.276.466 1.072.151 6,382,000 5,360,478 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate Funding Risk Contingency (Assessed/Analysed) (A+C+D) 857.677 6,218,155 (G+H) 95th percentile Project Estimate Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate

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Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name:QLDC - STREETSCAPES- Queenstown Mall Detailed Business Case Estimate Base Estimate (Base Estimate (including **Funding Risk** Item Description excluding Contingency Services Contingency Services Upgrade) Upgrade) Nett Project Property Cost Α Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 59,812 53,330 - QLDC Managed Costs 36,597 32,631 Total Pre-implementation 96,409 85.961 Implementation Phase Implementation Fees - Consultancy Fees 56.236 50,142 - QLDC Managed Costs 5,624 5,015 - Construction Monitoring Fees 54,902 48,952 Sub Total Base Implementation Fees 116,762 104,108 Physical Works **Environmental Compliance** 12,398 12,398 Earthworks 98,322 98,322 Removal of existing services 4,360 excluded 2a **Ground Improvements** 0 Drainage 0 4a Stormwater Renewals 39,358 excluded 317,742 Pavement and Surfacing 317.742 6 Bridges 0 Retaining Walls 8 Traffic Services 87,700 87,700 9 Service Relocations 50,245 50,245 9b Services - renewals 34,378 excluded 10 Landscaping 76,126 76,126 Accomodation Works 11 0 0 11a Traffic Management and Temporary Works 62.076 55,349 Preliminary and General 116,270 130,402 **Extraordinary Construction Costs** 13 188,681 211,614 Sub Total Base Physical works 1,124,721 1,002,833 Total for Implementation Phase Project Base Estimate (A+C+D) 1,337,892 1,211,049 (A+C+D) F Contingency (Assessed/Analysed) 334.108 302,432 1,672,000 1,513,481 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate Funding Risk Contingency (Assessed/Analysed) (A+C+D) 242.157 95th percentile Project Estimate (G+H) 1,755,638 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate Implementation Phase 95th percentile Estimate

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Estimate accepted by QLDC	Signed

lote: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form C Project Name:QLDC - STREETSCAPES- Brecon Street **Detailed Business Case Estimate** Base Estimate (Base Estimate (including **Funding Risk** Item Description excluding Contingency Services Contingency Services Upgrade) Upgrade) Α Nett Project Property Cost Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 445,000 339,549 - QLDC Managed Costs 303,503 231,582 Total Pre-implementation 748,503 571132 Implementation Phase Implementation Fees - Consultancy Fees 435,033 331,944 - QLDC Managed Costs 425,033 324,314 - Consent Monitoring Fees 43,503 33,194 Sub Total Base Implementation Fees 903,569 689,452 Physical Works **Environmental Compliance** 48,503 48,503 1,161,510 Earthworks 1,161,510 Services - removal 35.954 excluded 3 **Ground Improvements** Drainage 113,608 113,608 4 Stormwater Renewals 963,318 excluded 839,891 5 Pavement and Surfacing 839,891 6 Bridges 0 7 Retaining Walls 320,715 320,715 8 Traffic Services 636,936 636,936 9 Service Relocations 761,795 761,795 9b Services - renewals 483,373 excluded 10 Landscaping 872,121 872,121 10a Accomodation works 19.000 19,000 11 Traffic Management and Temporary Works 457,866 349,366 Preliminary and General 655,691 859,324 **Extraordinary Construction Costs** 13 1,126,255 859,368 Sub Total Base Physical works 8,700,169 6,638,505 Total for Implementation Phase 9,603,738 Project Base Estimate (A+C+D) 10,352,241 8,017,409 2,070,759 (A+C+D) F Contingency (Assessed/Analysed) 1.603.722 12,423,000 9,621,131 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Nil Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate (A+C+D) 1,443,170 Funding Risk Contingency (Assessed/Analysed) 95th percentile Project Estimate (G+H) 11,064,301 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate

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Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name:QLDC - STREETSCAPES-Park Street Detailed Business Case Estimate Base Estimate (Base Estimate (including **Funding Risk** Description Item excluding Contingency Services Contingency Services Upgrade) Upgrade) Α Nett Project Property Cost Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 404,000 301,949 - QLDC Managed Costs 282,084 210,829 Total Pre-implementation 686.084 512,778 Implementation Phase Implementation Fees - Consultancy Fees 405.139 302,800 - QLDC Managed Costs 81,028 60,560 - Construction Monitoring Fees 244,598 182,812 Sub Total Base Implementation Fees 730,765 546,173 Physical Works **Environmental Compliance** 126,542 126,542 Earthworks 801,110 801,110 Removal of existing services 2a 39,892 excluded **Ground Improvements** Drainage 72,814 72,814 4a Stormwater Renewals 1,072,788 excluded Pavement and Surfacing 819.238 819,238 6 Bridges 555,000 555,000 Retaining Walls 938,883 938,883 8 Traffic Services 480,815 480,815 9 Service Relocations 252,586 252,586 9b Services - renewals 394,882 excluded 10 Landscaping 413,589 413,589 Accomodation Works 11 0 11a Traffic Management and Temporary Works 344.258 257,298 Preliminary and General 598,124 800,275 **Extraordinary Construction Costs** 13 990,113 740,009 Sub Total Base Physical works 8,102,785 6.056.008 Total for Implementation Phase Project Base Estimate (A+C+D) 9,519,634 7,148,353 (A+C+D) F Contingency (Assessed/Analysed) 1.904.366 1,430,000 11,424,000 8,578,353 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Nil Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate Funding Risk Contingency (Assessed/Analysed) (A+C+D) 1.372.537 95th percentile Project Estimate (G+H) 9,950,890 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate

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Implementation Phase 95th percentile Estimate

Project Estimate - Form C Project Name:QLDC - STREETSCAPES- Upper Breach Detailed Business Case Estimate Base Estimate (Base Estimate (including **Funding Risk** Description Item excluding Contingency Services Contingency Services Upgrade) Upgrade) Α Nett Project Property Cost Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 300,581 256,807 - QLDC Managed Costs 141,983 121,306 Total Pre-implementation 442,564 378.113 Implementation Phase Implementation Fees - Consultancy Fees 258.150 220,556 - QLDC Managed Costs 252,028 215,325 - Construction Monitoring Fees 25,815 22,056 Sub Total Base Implementation Fees 535,994 457,936 Physical Works **Environmental Compliance** 13,348 13,348 Earthworks 380,202 380,202 Removal of existing services 2a 25.140 excluded **Ground Improvements** Drainage 47,355 47,355 4a Stormwater Renewals 239,302 excluded Pavement and Surfacing 1,193,936 1,193,936 6 Bridges 0 Retaining Walls 8 Traffic Services 502,293 502,293 9 Service Relocations 302,908 302,908 9b Services - renewals 248,763 excluded 10 Landscaping 283,709 283,709 Accomodation Works 11 287,052 287,052 11a Traffic Management and Temporary Works 137.042 117,084 Preliminary and General 598,609 511,433 **Extraordinary Construction Costs** 13 903,356 771,800 Sub Total Base Physical works 5,163,016 4,411,121 Total for Implementation Phase 4,869,057 Project Base Estimate (A+C+D) 6,141,574 5,326,994 (A+C+D) F Contingency (Assessed/Analysed) 1.535.426 1.331.777 7,677,000 6,658,770 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Nil Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate (A+C+D) 1.065.403 Funding Risk Contingency (Assessed/Analysed) (G+H) 7,724,174 95th percentile Project Estimate Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate Implementation Phase 95th percentile Estimate

Date of Estimate 25/07/2019	Cost Index (Qtr/Year) 1ST 2019
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Project Estimate - Form C Project Name:QLDC - STREETSCAPES- Lower Beach Street Detailed Business Case Estimate Base Estimate (Base Estimate (including **Funding Risk** Description Item excluding Contingency Services Contingency Services Upgrade) Upgrade) Α Nett Project Property Cost Project Development Phase - Consultancy Fees Nil Nil Nil - QLDC Managed Costs Nil Nil Nil Total Project Development Nil Nil Nil Pre-implementation Phase - Consultancy Fees 354,000 312,226 - QLDC Managed Costs 240,799 212,383 Total Pre-implementation 594,799 524.609 Implementation Phase Implementation Fees - Consultancy Fees 344,664 303,991 - QLDC Managed Costs 34,466 30,399 - Construction Monitoring Fees 375,665 331,334 Sub Total Base Implementation Fees 754,795 665,724 Physical Works **Environmental Compliance** 39,466 39,466 Earthworks 502,180 502,180 Removal of existing services 2a 28.809 excluded **Ground Improvements** Drainage 70,855 70,855 4a Stormwater Renewals 304,759 excluded 1,605,619 1,605,619 Pavement and Surfacing 6 Bridges 0 Retaining Walls 8 Traffic Services 463,875 463,875 9 Service Relocations 50,245 50,245 9b Services - renewals 196,548 excluded 10 Landscaping 510,820 510,820 Accomodation Works 11 719.093 719,093 11a Traffic Management and Temporary Works 161.977 142,863 Preliminary and General 600,477 680,818 **Extraordinary Construction Costs** 13 1,558,220 1,374,340 Sub Total Base Physical works 6,893,284 6,079,833 Total for Implementation Phase 7,648,079 6,745,558 Project Base Estimate (A+C+D) 8,242,878 7,411,282 (A+C+D) F Contingency (Assessed/Analysed) 1.649.122 1.482.748 9,892,000 8,894,030 Project Expected Estimate (E+F) Nett Project Property Cost Expected Estimate Project Development Phase Expected Estimate Pre-implementation Phase Expected Estimate Implementation Phase Expected Estimate (A+C+D) Funding Risk Contingency (Assessed/Analysed) 1.423.045 95th percentile Project Estimate (G+H) 10,317,074 Nett Project Property Cost 95th percentile Estimate Project Development Phase 95th percentile Estimate Nil Pre-implementation Phase 95th percentile Estimate

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Implementation Phase 95th percentile Estimate



