Appendix M – Risk Register

Risk Register - Wakatipu Active Travel Network SSBC

STAGE 1 - RISK IDENTIFICATION					STAGE 2 - ANALYSIS OF UNCONTROLLED RISK										STAGE 3 - RISK CONTROLS AND ANALYSIS OF CONTROLLED RISK											STAGE 4 - RISK CLASS	Stage 5 - RISK ACCEPTANCE	
RISK DETAILS					Consequence Score						Uncontrolled Risk Score				Risk Controls	Consequence Score					Controlled Risk						
Risk ID	Date	Risk Title There is a chance that...	Risk Causes Because...	Risk Owner	Consequences Resulting in...	Political	Economic	Social	Technical	Legal	Environmental	Overall Consequence Score	Likelihood to occur during Project		Level of risk 1(Very low) to 25 (Very high)	Risk Control Option	Details Regarding Selected Control	Political	Economic	Social	Technical	Legal	Environmental	Overall Consequence Score	Likelihood to occur during Project	Level of risk 1(Very low) to 25 (Very high)	Risk Class (Very Low to Very high)	Responsibility for accepting the risk	Accepted by Name and Position
1. Financial																												
1.01		**Threat there is a lack of available funding for WATN.**	Competing business cases both locally and nationally for limited financial resources.	Wakatipu Way to Go	Project is not implemented or significantly scaled down such that it becomes ineffective. Significant delays to implementation.	1	5	3	4			5	75% to 95%	4	20	Mitigate	Stage WATN delivery by identifying highest priority links to be implemented first. i.e. routes prioritised that enhance safety, connectivity, deliverability (CBR) and where planned infrastructure works could provide cost efficiencies.	1	5	3	4			5	10% - 50%	10	Moderate		
1.02		**Threat that a lack of funding could result in a lower cost design leading to poorer outcomes and the need for a greater level of maintenance.**	The cause of the threat is a lack of capital and operational funding due to overall high project construction costs and/or competition for scarce funding resources.	Wakatipu Way to Go	The WATN project is ineffective at promoting modal shift.	2	4	3	4			4	50% - 75%	3	12	Mitigate	Stage construction to deliver high priority routes where the biggest benefits will be realised first. As opposed to a lower quality complete network. Investigate funding mechanisms for operation and maintenance of trails.	1	4	3	4			4	10% - 50%	8	Moderate		
2. Technical / Design																												
2.01		**Excessive costs to implement the active travel network.**	Due to the size (length) of the network, small changes to the design approach will be exacerbated when scaled.	Beca Ltd	Value engineered solutions that compromise too much on quality, leading to a less desirable outcome.	2	3	3	3			3	75% to 95%	4	12	Mitigate	Establish robust design philosophy early to ensure value for money is achieved. Involvement of quantity surveyor throughout design phases to prevent cost blowouts	2	3	3	3			3	50% - 75%	9	Moderate		
2.02		**There is an inadequate level of service on the primary routes following the implementation of the WATN.**	Inadequate path width due to an increased use of the shared path by many mode types - walkers, cyclists, scooter, segways and emobility devices etc.	Beca Ltd Wakatipu Way to Go	Community complaints, negative safety outcomes, congestion, poor modal shift and cost to upgrade the facilities.	2	2	3	3	2		3	50% - 75%	3	9	Eliminate	Identify routes where shared facilities are required to be divided/ separated to reduce conflict between user types on the active network.	2	2	3	3	2		3	10% - 50%	6	Low		
2.03		**Providing facilities that are disconnected.**	Not sufficiently identifying existing desire lines and routes and subsequently building facilities that are not continuous with the existing network and usage patterns.	Beca Ltd Wakatipu Way to Go	The reduction in uptake in walking and cycling due to an incoherent network.	2	3	2	3			3	50% - 75%	3	9	Mitigate	Undertake holistic approach to network planning, design and implementation to identify potential flaws or gaps resulting in a disconnected network.	2	3	2	3			3	10% - 50%	6	Low		
2.04		**Perception of poor personal safety on some of the active routes.**	Poor consideration of CPTED issues in the planning and design of routes. Issues may include setback from passive surveillance, poor lighting and exposed drop-offs or other hazards.	Beca Ltd	Uptake of modal change is lower than anticipated and potential security risks to the public.	2	2	3	4			4	50% - 75%	3	12	Mitigate	Complete CPTED assessment of routes to 'Ground truth' trails during planning/design to identify potential CPTED issues.	2	2	3	4			4	10% - 50%	8	Moderate		
3. Planning and Environmental																												
3.01		**New or upgraded routes negatively impacting on the landscape character and the natural environment.**	Proposed routes are built in sensitive environmental areas, near bodies of water or outstanding natural landscapes.	Beca Ltd	Landscape Visual Affects that impact on the landscape values of the Wakatipu basin. Negative impacts on stream/native bush habitat.	2	4	4	4	3	4	4	50% - 75%	3	12	Mitigate	Landscape Visual Assessment completed as part of the resource consent phase with landscape architect involved in the early design phases. Alternative routes/ mitigation measures identified at route planning phases	2	4	4	4	3	4	4	10% - 50%	8	Moderate		
3.02		**Threat that designed components across the routes may not be granted consent.**	Installations (i.e.. bridges across the waterways and whole new tracks across private land i.e.. Jacks Point and Lake Johnson - greenfields developments) may negatively impact on landscape character and the natural environment.	Beca Ltd	Visual impacts of the bridges and piers in the waterways leading to non consentability. Disconnection of primary routes due to works that may not be consented along major routes	2	3	3	4			4	50% - 75%	3	12	Mitigate	New routes are dependant on land use zone and rules of those zones. Consenting strategy is being completed to identify likely consents, landscape visual assessment requirements and mitigation requirements	2	3	3	4			4	10% - 50%	8	Moderate		
3.03		**Disruption to stakeholders adjacent to trail construction works and potential ongoing maintenance.**	Noise and vibration from construction activities (e.g. rock breaking, material compaction) in close proximity to residents and other stakeholders.	Wakatipu Way to Go	Frustrated stakeholders seeking alternative accommodation/compensation, ergo increased costs. Reputational damage to project and its sponsors.	2	1	4	1	2	2	4	75% to 95%	4	16	Mitigate	Identify likely areas of concern and consider design options to mitigate. Temporary activity managed through early engagement and advanced communications. To be addressed as part of construction contractor's contract and construction methodology.		1	4	1	2	2	4	50% - 75%	12	High		
3.04		**Threat of sediment discharge during construction.**	Sections of the routes are in close proximity to pristine bodies of water (creeks, rivers and lakes) and therefore are at risk of being affected by construction activities.	Wakatipu Way to Go	Environmental and ecological harm. Reputational damage to the project and its sponsors. Potential fines/abatement from ORC.	2	3	4	4	4	4	4	50% - 75%	3	12	Mitigate	To be addressed as part of construction contractor's contract and construction methodology.	2	3	4	4	4	4	4	Less than 10%	4	Low		
3.05		**Threat of hydraulic oil discharge from plant during construction and maintenance phases.**	Sections of the routes are in close proximity to pristine bodies of water (creeks, rivers and lakes) and therefore are at risk of being affected by construction activities.	Wakatipu Way to Go	Environmental and ecological harm. Reputational damage to the project and its sponsors. Potential fines/abatement from ORC.	2	3	4	4	4	4	4	10% - 50%	2	8	Mitigate	To be addressed as part of construction contractor's contract and construction methodology. Mitigation to include plant hydraulic oil to be biodegradeable to satisfy ORC requirements	2	3	4	4	4	4	4	Less than 10%	4	Low		
3.06		**Threat of active travel network design being inherently constrained.**	Existing environment/topography affecting path widths/grades and it being uneconomical for the WATN project to mitigate these issues.	Beca Ltd Wakatipu Way to Go	Bottlenecks or unattractive sections of track which dissuade potential active users of the WATN.	2	2	3	3			3	75% to 95%	4	12	Mitigate	Constraints to be identified and determination made as to their impact and risk level in terms of cost, property acquisition and constructability (including traffic management), which will feed into the longlist/shortlist/MCA process. Corridor typology and their risk levels that may provide solutions to these constraints to be identified as part of the option selection process.		2	3	3			3	10% - 50%	6	Low		
4. Procurement																												
4.01		**Post business case cost escalation.**	Lack of competent, available contractors and resources to deliver the WATN leading to a lack of market competition.	Wakatipu Way to Go	Budgets exceeded leading to incomplete/disconnected active travel network.	1	4		3			4	75% to 95%	4	16	Mitigate	Risk adjusted estimates. Allowing for contingency in costing	1	4		3			4	10% - 50%	8	Moderate		
5. Construction																												

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5.01		**Unreasonable traffic delays and congestion on the road network.**	Unforeseen construction issues requiring the closure of roads or detour of traffic (particularly for the State Highway corridors).	Wakatipu Way to Go	Disruption to public and businesses, reputational harm to project sponsors. Impacts on emergency services.	3	3	4	3	3		4	50% - 75%	3	12	Mitigate	Coordinating with other projects. Travel time monitoring. Address through conditions on construction contract. Contractor provides appropriate traffic management strategy and communications	3	3	4	3	3		4	10% - 50%	8	Moderate		
6. Public Relations and Stakeholders																													
6.01		**Threat of limited input/engagement from all of the project partners.**	Insufficient availability of key personnel and/or involvement of the correct personnel or change in personnel during the process.	Wakatipu Way to Go	Lack of buy-in to the process or outputs resulting in delayed decision making/approvals.	1	3	2				3	50% - 75%	3	9	Mitigate	Good documentation from business cases. Identify and align decision makers with hold points within WW2G and externally; ensure expectations and prior involvement are defined and documented. Provide clear communications on timeframes, review stages and delivery	2	3	2				3	10% - 50%	6	Low		
6.02		**Private landowners may not be accepting of land purchase for the WATN and there is a threat that this will lead to poor local connectivity across the routes.**	Landowners unwilling to provide access across properties for paths, connections to paths or for construction access.	Beca Ltd	Poor connectivity across the network resulting in poor outcomes. Potentially users taking undesirable crossing points exposing themselves to live traffic (on local roads and SH6). Potential bit-part network which will severely effect the accessibility and attractiveness of certain routes.	2	3	4	4	3		4	75% to 95%	4	16	Mitigate	Identify potential landowner crossing points for early engagement. Develop contingency routes where negative response received. Investigate landowner future development intentions. Where future land development intentions are proposed QLDC to enforce new rules/ easements for pathway alignments	2	3	4	4	3		4	50% - 75%	12	High		
6.03		**Threat of NZTA not being satisfied that the business case presents a compelling case for investment.**	NZTA's concerns not being adequately addressed in the business case and/or the business case not articulating the strength of the case, or there being limited evidence to justify investment.	Beca Ltd Wakatipu Way to Go	A reduced level or no funding for implementation of the active travel network.		4	3	4			4	10% - 50%	2	8	Mitigate	Determine NZ Transport Agency (funders) approval criteria early. Document and have regular meetings with the key personnel at NZ Transport Agency to keep them up to date with progress and direction of the business case		4	3	4			4	Less than 10%	4	Low		
6.04		**Stakeholder feedback and/or information from adjacent business case projects becoming available at a point too late in the process to inform the outcomes and compromising the robustness of the process.**	Timing of stakeholder engagement; Parallel projects in progress that may inform the business case and consideration of options e.g. outcome for SH6.	Beca Ltd Wakatipu Way to Go	Perceived lack of confidence in the process from stakeholders; Robustness of the business case is weakened (incl. basis for the definition of the preferred option). Potential for change in requirements.	2	3	4	4			4	50% - 75%	3	12	Mitigate	Identify interdependencies early, document provisional assumptions and validate as feedback/information becomes available. Assess impact of change and document in change register. Communication with other business case leaders throughout the decision making process	2	3	4	4			4	10% - 50%	8	Moderate		
6.05		**Threat that the implementation and upgrade of active travel routes across the Wakatipu basin does not achieve the desired uplift in cycling and walking.**	The WATN does not provide a competitive mode choice over private vehicle or public transport usage. This may be a result of cumulative factors (e.g. personal safety, length of trails, grades, condition/quality, lack of supporting infrastructure or end of trip facilities) or significant investment in another mode (e.g. public transport) making it less desirable to walk/cycle.	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that modal change does not occur and vehicle growth continues to put pressure on the wider road network	2	3	3	4			4	10% - 50%	2	8	Mitigate	Purpose of the project is to reduce reliance on private vehicles. Prioritise implementation/improvements to proposed routes based on greatest likelihood of uptake. Determine agreed social and economic criteria to measure success and regularly evaluate post implementation. Identify connections to Public transport facilities to enhance the multi-modal trips to take place		3	3	4			4	Less than 10%	4	Low		
7. Route Specific Risks: Package 1 - Stage 1																													
7.01		**A2 - Shotover Bridge to SH6** **Threat that the level crossing of SH6 does not provide a level of safety for pedestrians or cyclists using this crossing**	If the mid block crossing is not upgraded to reflect the new desire line this will cause significant crash risk for vehicles with pedestrian/ cyclists.	Beca Ltd Wakatipu Way to Go	The consequence of the threat is death or serious injury to pedestrians and cyclists	3	2	4	4			4	50% - 75%	3	12	Transfer	Maximise the visibility to the crossing from the road corridor in detailed design phase Sightlines and refuge island widths to be addressed as part of the SH6 works	2	3	3	4			4	Less than 10%	4	Low	Way to Go SH6 Design lead Reece Gibson WSP	
7.02		**A2 - Shotover Bridge to SH6** **Private landowners may not be accepting of land easement for the WATN and there is a threat that this will lead to poor connectivity**	Landowners unwilling to provide access across property for proposed pathway	Beca Ltd Wakatipu Way to Go	The consequence of the threat is poor connectivity across the wider route resulting in poor outcomes. Delays in programme Potentially users informally using the route without permission or a potential bit-part route which will severely effect the attractiveness of the route for potential users	2	2	3	4			4	10% - 50%	2	8	Mitigate	Early landowner engagement taking place. Future land development intentions are proposed - QLDC to enforce new rules/ easements for pathway alignment within future development		2	3	4			4	10% - 50%	8	Moderate		
7.03		**A2 - Shotover Bridge to SH6** **Tucker Beach Road presents a pinch point for the design and construction of a shared pathway**	The existing alignment of Tuckers Beach Road is narrow and there is a pinch point which requires widening to allow for shared pathway to be integrated adjacent to the corridor	Beca Ltd Wakatipu Way to Go	The consequence of the threat is safety concerns for vulnerable road users crossing Tucker Beach Road and using the shared path which may result in serious injury	3	2	4	4			4	10% - 50%	2	8	Mitigate	Painted road thresholds, slow speed environment (30km recommended) and advanced warning signs in place to alert drivers of upcoming crossing and adjacent pathway	3	2	3	4			4	Less than 10%	4	Low		

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7.04		**A3 - SH6 to Frankton Track** **Current design for this route is based on the proposed campground and road concept plans**	The proposed concept layout for newly formed roadway and campground has been provided by QLDC and may be subject to change as the design stages progress	Beca Ltd Wakatipu Way to Go	The consequence of the threat is the potential for a change of construction costs and reduction in level of service	1	3	2	3			3	10% - 50%	2	6	Mitigate	QLDC to incorporate the requirement for access to the waterfront on the west of the campground through the remaining campground design phases		3	3	4			4	Less than 10%	4	Low	QLDC	
7.05		**A3 - SH6 to Frankton Track** **Public concerns and complaints about proposed design adjacent to Frankton commercial centre**	Carparking loss to Gray Street and residential streets.	Beca Ltd Wakatipu Way to Go	The consequence of the threat is public complaints about the loss of carparking to the area adjacent to Gray Street commercial centre and objecting to the alignment	3	2	3	4			4	10% - 50%	2	8	Mitigate	Current concept design has included a reconfigured layout for Gray Street retains parallel parking. Further parking loss has been minimised to one side of the road where suitable	3	2	3	4			4	Less than 10%	4	Low		
7.06		**A3 - SH6 to Frankton Track** **Safety risks for pedestrians and cyclists at the Gray Street/ SH6 intersection**	Risk of pedestrians/ cyclists using the existing refuge island at Gray Street to cross SH6 rather than the signalised crossing	Beca Ltd Wakatipu Way to Go	The consequence of the threat is death or serious injury to pedestrians and cyclists	3	2	4	3			4	10% - 50%	2	8	Mitigate	High quality design of the pathway together with wayfinding signage to direct people through the bus interchange site to the signalised crossing	3	2	4	3			4	10% - 50%	8	Moderate		
7.07		**A7 - Jacks Point to Frankton** **Landowner who owns land underlying Coneburn Special Housing Area and adjacent to its may not be accepting of land easement/ purchase for the WATN and there is a threat that this will lead to poor connectivity**	Landowners unwilling to provide access across property for proposed pathway	Beca Ltd Wakatipu Way to Go	Poor connectivity between Jacks Point and Frankton resulting in poor outcomes. Potential bit-part network which will severely effect the accessibility and attractiveness of the route. Delays to programme.	2	3	3	4			4	50% - 75%	3	12	Mitigate	Potential landowner crossing points have had early engagement. Investigate landowner future development intentions. Where future land development intentions are proposed QLDC to enforce new rules/ easements for pathway alignments Property acquisition under the Public Works Act	2	3	3	4			4	Less than 10%	4	Low		
7.08		**A7 - Jacks Point to Frankton** **Space availability along SH6 corridor between Utilities corridor and the existing Kawarau Falls Bridge**	Space available is not suitable for accommodating the active travel path	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that a gap is created in the route and modal change does not occur. Vehicle growth continues to put pressure on the wider road network	2	3	3	4			4	10% - 50%	2	8	Mitigate	Property boundaries explored and space is available to shift SH corridor if required to accommodate the pathway. Once detailed survey is completed - on-site evaluation recommended to determine appropriate design response	2	3	3	4			4	Less than 10%	4	Low		
7.09		**A7 - Jacks Point to Frankton** **Archaeological assessment of culturally significant site adjacent to the Kawarau River**	Threat that the Archaeological assessment identifies material artefacts on the site of the bridge location	Beca Ltd Wakatipu Way to Go	The consequence of the threat is the bridge construction is stopped	3	3	3	4			4	10% - 50%	2	8	Mitigate	Early involvement by Iwi at detailed design including early Archaeological assessment undertaken. Design of a structure that touches the ground lightly to reduce ground works Onsite archaeologist during construction.	3	3	3	4			4	Less than 10%	4	Low		
7.10		**A7 - Jacks Point to Frankton** **CPTED issues along the route**	The path is isolated from public roads, residential areas and could present a perceived threat to social safety along the route.	Beca Ltd Wakatipu Way to Go	The consequence of the threat is poor active travel uptake on the route particularly in times of shortened daylight hours.	2	1	3	4			4	10% - 50%	2	8	Mitigate	Ground truth' trails during planning/design to identify potential CPTED issues. Lighting along the trail to increase visibility and sight distances for users after dark	2	1	3	4			4	Less than 10%	4	Low		
7.11		**A8 - Lake Hayes Estate to Frankton** **Culturally sensitive area adjacent to proposed bridge**	Path and bridge causes disruption and potential impacts on this culturally significant Maori settlement area.	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that there is significant cultural impacts on site. Any impacts made without engagement are also a reputational risk for the project	3	3	3	3			3	10% - 50%	2	6	Mitigate	Discussion with Iwi to be continued throughout future design phases. This will enable collaboration and an outcome with the least impact for the culturally significant area Indicative price factored into cost estimate for inputs, design and cultural impact assessment	3	3	3	3			3	Less than 10%	3	Low		

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7.12		**A8 - Lake Hayes Estate to Frankton** **CPTED issues along the route**	The path is isolated from public roads, residential areas and could present a perceived threat to social safety along the route.	Beca Ltd Wakatipu Way to Go	Poor active travel uptake on the route particularly in times of shortened daylight hours.	2	3	3	4			4	10% - 50%	2	8	Mitigate	Ground truth' trail during planning/design to identify potential CPTED issues. An alternative route with lighting via Frankton North is in place for concerned users to utilise after dark. This route will provide a connection for high school students who will primarily be using the trail in daylight hours year round		3	3	4			4	Less than 10%	4	Low		
7.13		**A8 - Lake Hayes Estate to Frankton** **Time delays due to land negotiations**	Easements required across private properties		The consequence of the threat is a difficult land acquisition easements and potential delay to the programme	3	2	2	2			3	10% - 50%	2	6	Mitigate	Early conversations with landowners during the business case stage have been carried out. Continue discussions early in Pre-implementation phase to negotiate agreements with the affected landowners The construction of A8 has been pushed to Package 1 - Stage 2 to allow for land negotiations to occur ahead of construction during the 2021-2024 timeframe	3	2	2	2			3	Less than 10%	0	Very Low		
8. Route Specific Risks: Package 1 - Stage 2																													
8.1		**B2 - Fernhill to Queenstown** **Steep grades**	Height differential between Fernhill and Queenstown causes a route that is too steep for pedestrians and cyclists		The consequence of the threat is there a lack of uptake of walking and cycling	2	3	2	3			3	50% - 75%	3	9	Mitigate	Detailed topographic survey completed and design investigation carried out at detailed design phase to understand an achievable grade for the trail	2	3	2	3			3	Less than 10%	3	Low		
8.2		**B2 - Fernhill to Queenstown** **Steep grades**	A design solution for the route requires high level of earthworks and retaining walls to achieve a smoother and shallower grade		The consequence of the threat is a greater impact on the environment (i.e.. woodland forest area including tree removal and bank stabilisation)	3	2	3	4		3	4	75% to 95%	4	16	Mitigate	Detailed topographic survey completed and design investigation carried out at detailed design phase to understand an achievable grade for the trail	3	2	3	4		3	4	10% - 50%	8	Moderate		
8.3		**B2 - Fernhill to Queenstown** **Constructability of the trail**	Constructability (and accessibility) constraints due to narrow trail entry and exit points		The consequence of the threat is the lack of ability to get construction vehicles into the woodland area	1	2	2	2			2	50% - 75%	3	6	Mitigate	Small machinery used for earthworks and retaining structures. Trail to be compacted gravel to reduce the need for construction machinery accessibility requirements as well as assist with slip resistance during icy conditions	1	2	2	2			2	10% - 50%	4	Low	'Small machinery used for earthworks and retaining structures. Trail to be compacted gravel to reduce the need for construction machinery accessibility requirements as well as assist with slip resistance during icy	
8.4		**B2 - Fernhill to Queenstown** **CPTED issues along the route**	The path is isolated from public roads, residential areas and could present a perceived threat to social safety along the route.	Beca Ltd Wakatipu Way to Go	Poor active travel uptake on the route particularly in times of shortened daylight hours.	2	1	3	4			4	10% - 50%	2	8	Mitigate	Ground truth' trails during planning/design to identify potential CPTED issues. Lighting along the trail to increase visibility and sight distances for users after dark	2	1	3	4			4	Less than 10%	4	Low		
8.5		**B2 - Fernhill to Queenstown** **Shared pathway on steep slopes**	Steep gradients could result in cyclists continuing to travel through trail at fast speeds	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that there are crashes between pedestrians and cyclists	2	3	2	3			3	50% - 75%	3	9	Mitigate	Tactile centre line installed for delineation of directional movement. Install signage and rumble strips to slow cyclists through the woodland pathway. Pull off areas to allow space for waiting/ passing near steeper sections. It is recommended these installations are identified and developed during detailed design phase	2	3	2	3			3	10% - 50%	6	Low		
8.6		**B3 - Frankton Track LoS Improvements** **High pedestrian and cycle numbers in peak seasons**	High volumes of cyclists and pedestrians using the track during peak seasons	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that there are crashes between pedestrians and cyclists	2	2	3	3			3	50% - 75%	3	9	Mitigate	Options to be explored to separate cyclists and pedestrians through use of a different surface treatment where space allows. Where pinch points are present rumble strips, painted centre line and change of surface to be constructed to highlight interaction zones Once detailed survey is completed and where space allows include waiting space and seating adjacent to the path for people to socialise out of the movement path	2	2	3	3			3	10% - 50%	6	Low		

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8.7		**B3 - Frankton Track LoS Improvements** **Wastewater pipe upgrade**	Timing of the waste water pipeline upgrade does not suit the proposed timing of the construction for the Frankton track upgrade	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that the route upgrade is delayed and improvements to the track cannot be made until a later date or the upgrade is completed ahead of the scheduled timing of the active travel route	2	3	3	4			4	10% - 50%	2	8	Mitigate	Frankton track construction to align with wastewater pipe upgrade Programme will be confirmed and communicated with the community should delays occur. Project prioritization to be revisited if the wastewater pipe upgrade is earlier than anticipated.	2	3	3	4			4	10% - 50%	8	Moderate		
8.8		**B3 - Frankton Track LoS Improvements** **Wastewater pipe upgrade**	Wastewater pipe is retained in its current position	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that the existing route widths are retained. The ability to separate cyclists and pedestrians may become unpractical with available space	2	2	3	3			3	75% to 95%	4	12	Accept	Frankton track construction to align with wastewater pipe upgrade Design cross section option A (3-4m shared pathway minimum) will be constructed and extra safety measures put in place to prevent collision between users including centre line, signage, additional rest areas, pinch point surface changes. Installations to be investigated at detailed design	2	3	3	4			4	50% - 75%	12	High		
8.9		**B3 - Frankton Track LoS Improvements** **Construction works adjacent to the lake**	Construction works adjacent to the lake may have environmental and landscape affects	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that there are potential environmental and landscape visual affects which result in delays for consenting	2	3	3	4		3	4	10% - 50%	2	8	Mitigate	Landscape Visual Assessment and AEE completed as part of the resource consent phase. Continued involvement of landscape architect throughout the early design phases. Mitigation measures identified early and integrated into the detailed design phase of the project	2	3	3	4		3	4	Less than 10%	4	Low		
8.10		**C2 - Brecon Street** **Construction timing**	Timing of Brecon Street upgrade not aligned with adjacent project construction (i.e.. Lakeview, Hotel development, Skyline redevelopment)	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that Brecon Street is upgraded prior to adjacent construction works and the streetscape becomes damaged	3	3	3	3			3	10% - 50%	2	6	Mitigate	Streetscape upgrade timing to be aligned with development along Brecon Street	3	3	3	3			3	10% - 50%	6	Low		
8.11		**C2 - Brecon Street** **Construction space availability and timing**	Constraints on the street corridors when construction is taking place particularly during high seasons around popular sites and attractions (i.e.. Skyline Gondola)	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that businesses are affected due to constrained access to their buildings/ sites	3	3	3	3			3	10% - 50%	2	6	Mitigate	Staged construction programme to maximise fringe season months (May and October). Avoid construction during January and February Continued engagement with the business owners and operators on Brecon Street throughout construction	3	3	3	3			3	Less than 10%	3	Low	Contractor to stage construction appropriately	
8.12		**C5 - Arthurs Point to QT** **Edith Cavell Bridge is the only connection for active modes**	The pinch point at the Edith Cavell Bridge requires cyclists to share the road with vehicles	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that crashes occur between vehicles and cyclists accessing the bridge	3	3	4	3			4	75% to 95%	4	16	Mitigate	Slow speed environment (30km/hr), raised tables, signage and red painted thresholds proposed to highlight the shared zone to car drivers	3	3	4	3			4	10% - 50%	8	Moderate		
8.13		**C5 - Arthurs Point to QT** **Robins Road Shared pathway**	Shared pathway in urban area could present high volumes of pedestrians and cyclists	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that crashes occur between pedestrians and cyclists on shared pathway	3	3	3	2			3	75% to 95%	4	12	Mitigate	Tactile centre line installed for delineation of directional movement. Install signage and rumble strips to slow cyclists along the pathway	3	3	4	3			4	Less than 10%	4	Low		
8.14		**C7 - Lake Hayes Estate to Shotover Bridge** **Wayfinding**	Connections to the trail from Shotover Country and Lake Hayes Estate are currently not easily identifiable and finding access to these trails can be difficult	Beca Ltd Wakatipu Way to Go	The consequence of the threat is that a non legible route will be a barrier for potential active travel network users	1	1	2	1			2	10% - 50%	2	4	Mitigate	Incorporate wayfinding signage and connections to the trail from adjacent street intersections as well as reserves	1	1	2	1			2	Less than 10%	2	Very Low		

0	Very High
4	High
9	Moderate
6	Low
0	Very Low

Appendix N – Property Strategy

Wakatipu Active Travel Network SSBC – Property Strategy

Document Status

Responsibility	Name
Author	Robyn Shephard
Reviewer	Mike Todd
Approver	

Revision Status

Version	Date	Reason for Issue
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Disclaimer

The information in this document is based on information that is readily available in the public domain and on alignments agreed by the Queenstown Lakes District Council, Otago Regional Council and the New Zealand Transport Agency. This document is a general strategy setting out the principles to procure land or interests where the purchase of those lands or interests are required for the project. It is acknowledged that some landowners may be willing to provide a right for nil consideration.

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Acronyms

Abbreviation	Term
AEE	Assessment of environmental effects
BCR	Benefit-cost ratio
CAPEX	Capital expenditure
DE	Design estimate
EEM	Economic evaluation manual
GPS	Government Policy Statement
HCV	Heavy commercial vehicle
IBC	Indicative Business Case
ILM	Investment logic map
IRS	Investment and revenue strategy
ITS	Intelligent transport systems
KPI	Key performance indicator
LGA	Local Government Act 1974 & amendments & regulations
LTMA	Land Transport Management Act
MCA	Multi Criteria Assessment
MVKT	Million vehicle kilometres travelled
NLTF	National Land Transport Fund
NLTP	National Land Transport Programme
NOR	Notice of requirement
NZTA (or the Agency)	The New Zealand Transport Agency
ONRC	One Network Road Classification
OPEX	Operating expenditure
ORC	Otago Regional Council
PWA	Public Works Act 1981
QLDC	Queenstown Lakes District Council
RAMM	Road Assessment and Maintenance Management
RLTS	Regional Land Transport Strategy
RMA	Resource Management Act 1991
RoNS	Road of national significance
SH(#)	State Highway (number)
SOI	Statement of intent
TA	Territorial Authority
TDM	Traffic demand management
WEBs	Wider economic benefits

1. Purpose

To provide a strategy that will enable the Queenstown Lakes District Council (referred to as the Acquiring Authority) to achieve the acquisition of either the fee simple or easements over identified parcels of land for investment in an active travel network around the Wakatipu Basin, all in a timely and cost-effective manner. This Property Strategy supports the Single Stage Business Case (SSBC) prepared for Queenstown Lakes District Council (QLDC) by Beca Ltd (Beca) for the Wakatipu Active Travel Network project.

The SSBC report contains a description of the project and outlines the process that has been undertaken including an option assessment using a Multi-Criteria Analysis to determine a preferred network. That information is not repeated in this report.

2. Background

Beca is preparing a SSBC outlining the proposal for investment in an active travel network within the Wakatipu Basin. This is in response to:

- The area experiencing significant growth, with the district's residential population projected to nearly double between 2018 and 2058.
- The impact of unprecedented growth in both resident and visitor numbers and the pressure this is placing on existing infrastructure, including the transport network.

There is a risk of the demand on the transport network compromising the function of the urban area and values identified by the community and visitors. For example, additional congestion giving rise to adverse effects on the environment such as reduced amenity. In planning for growth and the infrastructure to support it, there is an opportunity to facilitate improvements to the attractiveness and use of the active travel network and in turn reduce reliance on the private vehicle.

The existing but incomplete active travel network of trails, tracks and routes in the Wakatipu Basin attract a range of users from commuters to recreational users (including those seeking adventure and outdoor activity) with over 330,000 movements over an average 12-month period on the trails. They serve a wide range of individual needs from school aged children to the elderly, for walking, cycling and e-mobility. The opportunity for the development of an integrated active travel network has been identified in several recent studies of the area.

As part of the development of the SSBC, Beca has been engaged to develop a property strategy to help determine the processes and deliverables for the acquisition of either fee simple or easements or temporary occupation over parcels of land for development of the WATN network identify property and interests in land required to develop the preferred network.

The concept and preliminary design plans included as an appendix to the SSBC show a large extent of property titles potentially affected by the proposed works, some of which are in public ownership but the majority are private properties affected by the proposal. For property potentially affected along existing trails there is the opportunity in the detailed design phase during the next pre-implementation phase to look at opportunities to design the private land requirements out, particularly where these are of a minor nature, which a number are. It is therefore not anticipated that the Acquiring Authority would consider the purchase of any property interest required for the project any time prior to the preferred option being confirmed during the pre-implementation phase. Hence the property acquisition phase (including easements) of the project will effectively commence once the Active Travel Network routes are confirmed.

3. Key objectives of the property strategy

Objective 1 – Minimise, where practical, the land requirement identified for improvements on the existing trails, by designing out (where practicable) during detailed design work undertaken in the next stage of the project (pre-implementation).

- Deliver the balance between providing an optimal network in terms of width and facilities, against acquiring land or interest or additional interests where there are existing easements.

- Where these are agreeable to the landowner there will be less risk to the project timeline.

Objective 2 – Determine in the next pre-implementation phase, whether the fee simple or an easement provides the best protection for the project and a satisfactory outcome for the landowner. This will be achieved through:

- Analysing the impact on the balance of the adjoining property and the necessity to fence the route out of the adjoining land.

- Considering if the route running parallel with the Road ought to be made legal road to ensure maintenance and upkeep is undertaken in conjunction with any road maintenance.

- Consider the likelihood of future relocation of the route and the ease of varying or surrendering an easement versus having to dispose of and re-acquire substitute land.

Objective 3 – For those parts of the project determined as "design and build" or with a short time to construction commencement - acquire all property interests required for delivery of the project within the project timeframe. This will be achieved through:

- Formulating a staging plan showing what will be progressed in first, second, third or later stages.

- Ensuring all project property requirements, whether acquisition and / or easement, are captured within land requirement plans as part of detailed design undertaken during the pre-implementation phase of the project.

Following the business case findings will be the pre-implementation phase and conclusion of the detailed design, RMA and other approvals, which will determine the need for property acquisition (fee simple or confirming easements or temporary occupation). This will be achieved through:

- Engagement of a suitably qualified and experienced property acquisition service provider(s) for the pre-implementation and construction phases of the project.

- The purchase of properties or easements or temporary occupation from those owners who wish to agree early on a willing buyer willing seller basis through "good faith" negotiations.

- Timely commencement of formal PWA processes (for compulsory acquisition) for those owners whom are unwilling to sell (fee simple or easements) or allow entry.

Objective 4 - Achieve fair and reasonable outcomes for property owners and the Acquiring Authority. This will be achieved through:

- Building trust by treating all land owners openly, fairly and consistently.

- On-going good quality communication.

- Showing empathy but also recognising that the Acquiring Authority has responsibility to the wider ratepayer community to be fiscally prudent.

Objective 5 – Encourage developers whose properties are affected by the route option to vest, as part of their development contribution, the required interests in QLDC as a condition of their resource consent. This will be achieved through:

- The QDLC supporting the further subdivision and development of land where such development is consistent with the current zoning and/or district plan rules.

- With QLDC diligently keeping separate its powers and responsibilities as an Acquiring Authority under the PWA from its regulatory powers and responsibilities under the RMA and LGA, and always adhering to the legislative processes.

4. The project property requirement

At this stage the property requirements for the Wakatipu Active Travel Network project are indicative, being subject to final detailed design undertaken in the next pre-implementation phase of the project. Finalisation of the overall property requirement for the project will need to be informed over time through:

- The detailed design of the active travel routes undertaken during the pre-implementation phase (with a goal of minimising the land or interests required for the various stages of the project).

- The Acquiring Authority confirmation of final design of the route options.

- Property requirement for any other infrastructural works that arise as a consequence of the project (for example: toilets or shelters or e bike charging stations).

Pending confirmation of final property requirements (including easements), decisions around the need to purchase properties or property interests (or not) will be guided by the indicative land requirements and through discussions with the affected agencies.

5. Timing of property or easement purchases

The timing of property interest acquisitions will be influenced primarily by two factors.

Firstly from the Acquiring Authority's perspective, the critical path will be defined by the decision of when the project is to be physically commenced and how it is staged. The staging plan has been confirmed, with the route options in Stage 1 and Stage 2 of Packages 1 and Package 2.

Secondly, the start date of negotiations to effect the programme can be worked backwards from that date allowing sufficient time for the discussion with landowners and formalising of land acquisition and easements where owners are agreeable, but also allowing for the various notice periods that are required to complete compulsory acquisition (if required) and the removal of buildings and structures and termination of tenancies (if any).

The assumptions around land acquisition and easements are set out in Section 10 of this report.

For the Wakatipu Active Travel Network project, QLDC is already in discussions with a number of developer landowners, particularly on the Jacks Point to Frankton trail, regarding intent that the proposed trail is accommodated within the future land development.

Early purchase – rent back, deferred settlement

Where properties or easements are not required for the project works for some years, the Acquiring Authority needs to be mindful of clearly indicating this through written communication with affected property owners and at individual/group landowner meetings, to not raise expectations on the part of owners that the QLDC will consider early purchase.

This is less of a risk when the Acquiring Authority chooses not to designate a property.

If acquired ahead of construction, it may be possible:

- to rent back properties to the former owners (at market rent for sizeable parcels) for land acquired and protected by a Compensation Certificate, or
- to License back to adjoining owners (Bare Licence at nominal value) for small portions or easements acquired and protected by a Compensation Certificate, or
- to enter into purchase agreements with deferred settlement periods. This will give owners the time and space to look for an alternative property in the knowledge that an agreement with the Acquiring Authority for purchase of their property or interest has already been confirmed.

6. The acquisition process

We understand that the Queenstown Trails Trust has been liaising with some landowners directly and has arranged for a small number of landowners undertaking subdivision to vest an easement in gross in QLDC as part of the RMA subdivision consent and CCC process.

However, it would not be prudent for QLDC to rely on development occurring in order to complete the project.

Where subdivision or development is not currently occurring, then the property or easement acquisition, or temporary occupation for construction works (if any) will ordinarily be by way of purchase by agreement through good faith negotiations based on valuation advice. While these negotiations are conducted on a "willing buyer, willing seller" basis, the principles and entitlements to compensation under the Public Works Act 1981 (PWA) are deemed to apply (unless the property is on the market and the Acquiring Authority steps into the shoes of an open market purchaser, or unless the owner is undertaking a subdivision or development and vests the land or interest in QLDC in satisfaction of a RMA consent condition).

The definition of "Local Work", "Public Work" and "Work" in the PWA is very broad and would include a cycle / walking network intended for the use of the public.

Other than securing the interest in land via a RMA consent condition, the norm with property or interests acquisition is to endeavour to purchase property or interests by way of s17 PWA agreement (where property acquisition or interests are required ahead of construction).

However, once the landowner has been "notified" (s59 PWA) of a requirement for a public work, the Acquiring Authority will have the power to initiate the compulsory acquisition process under the PWA. While there is no requirement for the route to be designated, the Acquiring Authority will need to be able to satisfy the Environment Court (if such a challenge is made by a landowner), that it can satisfy the requirements in s24(7) of the PWA, being:

(a) ascertaining the objectives of the local authority:

(b) enquiring into the adequacy of the consideration given to alternative sites, routes, or other methods of achieving those objectives:

(c) in its discretion, send the matter back to the local authority for further consideration in the light of any directions given by the court:

(d) to decide whether, in its opinion, it would be fair, sound, and reasonably necessary for achieving the objectives of the local authority, for the land (including interest) of the objector to be taken:

Likewise where land (including an easement) is not required permanently for the project, Temporary Occupation must be negotiated with a landowner to permit entry on to the owners land to remove fences and trees and such like, and to reconstruct driveways and provide a safe working space for project works, and to subsequently reinstate fences, letterboxes etc being works solely for the benefit of the land owner, but which arise due to the project works. To not have permission to enter is tantamount to trespass.

Clearly it will be the Acquiring Authority's preference to acquire property or interests by agreement, but where the Acquiring Authority is unable to reach agreement with an owner or an owner refuses to sell, the Acquiring Authority will be required to revert to the compulsory acquisition process under the PWA; so as not to compromise project time frames.

The commencement of this process, (which is subject to statutory notices and timeframes), will need to be carefully planned, ensuring adequate time is allowed to ensure access to all property when required for the project. In addition to the Notice of Desire to Acquire (s18), it would be prudent for partial acquisitions and/or for easements, to also serve a s110 Notice to allow entry for Cadastral Survey, as a survey plan is a prerequisite to serving a Notice of Intention to Take (s23).

Additionally where pre construction entry is required for investigations (Geotech, contamination, etc) a notice under s111 of the PWA can be served to force entry to undertake the investigations. An owner can object to the District Court.

7. Compensation under the Public Works Act 1981

Property owners' entitlements to compensation are set out in Part V of the PWA. The underlying principle is that property owners are entitled to "full compensation" so that they are left in a no better or no worse position than they were before the public work commenced. This means that landowners will not be deprived of their property, or an interest in property, without fair compensation, but will not be compensated so as to make a profit from the public work.

Compensation for land (including an easement) taken for a public work is generally based on the current market value of the property interest that is acquired (ignoring the effect of any designation or requirement). This market value is normally determined through the engagement of registered valuers who provide advice as to expected price that the property would fetch if sold on the open market by a willing seller to an arm's length willing buyer, with no compulsion.

However, where the likely value is less than $10,000 (based on a desktop assessment) it is possible to reach a negotiated agreement without recourse to a formal compensation assessment. At times, with minor strips of partial acquisition land or an easement, the calculated compensation would be nominal, so to incentivise an owner to enter into negotiations, the Acquiring Authority can agree a Consideration, rather than a Compensation, amount.

Additionally, other experts may be required from time to time, depending upon the owner's activities on site, to assess compensation entitlements e.g. charted accountants or experts in the industry of the affected landowner.

In addition to the market value of the property interest that is acquired, under section 66 of the PWA owners are entitled to claim for the reimbursement of the reasonable professional fees of their advisors (valuers, lawyers, property experts), mortgage break costs (bank fees and penalty interest).

In the case of residential owner occupiers (principal place of residence), relocation costs and a payment of a minimum of $35,000 with up to another $15,000 is payable if certain criteria are met for the acquisition of a “notified dwelling”.

A “land loss” payment is available to other land owners (unless they have disentitled themselves) in the amount of 10% of the agreed land compensation amount up to $25,000.

In some instances, businesses occupying properties required for the project & owner occupied businesses may be entitled to compensation (relocation costs and any associated business loss) if their lease terms extend beyond the date of requirement for the property.

8. Risks

Risk identification and risk management will be an important area of focus throughout the life of the project. A comprehensive assessment of potential/perceived risks should continue to be undertaken from a property perspective, with the additional input of the property acquisition service provider.

Risk will need to be identified and managed at both a macro and micro level in the pre-implementation and construction phases of the project. Some of the more obvious risks that will exist from a property perspective are:

- Ensuring the correct parties and those with registered interests are part of the negotiations.
- Ensuring that there are no parties or occupiers that could raise a valid claim to compensation, but who are not part of the negotiations.
- Determining that owners have the ability to sell property or interests – eg: Maori Reservations are inalienable, charitable trusts with no power of sale, Crown owned land (administering agency may not wish to sell).
- Increasing property values – This is a risk over which an acquiring authority has no control and market forces will prevail.
- Decreasing property values – in a declining market, landowners may be reluctant to have their compensation assessments revised where negotiations are becoming protracted.
- Protracted negotiations with difficult and/or unhappy landowners – This can result in high acquisition costs and result in “bad press” with knock on effects to other owners. This can be mitigated through consistent and fair treatment of all owners and good quality communications.
- Property advocacy firms creating unrealistic owner expectations – it is prudent to request that owners discuss the appointment of professional advisors with the Acquiring Authority in advance to ensure the party the owner wishes to engage is appropriately qualified and experienced.
- Owners or lessees capitalising their property and/or occupancy fit-out in advance of acquisition - This can (but not always) have the effect of adding value to the property and hence the compensation assessed. While the Acquiring Authority has no power to stop this occurring, early engagement with owners and tenants will minimise such occurrences.
- Owners granting long term leases or tenancies to occupiers – Occupiers with leases or tenancies that extend beyond the project timeline will require relocation at the Acquiring Authority’s cost. Early discovery of lease or tenancy arrangements and early purchase of properties with upcoming lease terminations and /or renewals will give the Acquiring Authority control over any new lease or tenancy terms that are granted.

9. Approval of purchases

Assuming acquisition is via the PWA landowners will be invited to present an offer to the Acquiring Authority and all landowners will be advised that until accepted by or on behalf of the Acquiring Authority, the offer is not binding and that the owner should not enter into consequential arrangements in anticipation of their offer being accepted.

QLDC has the power to enter into unconditional agreements to acquire the property interests required for the Wakatipu Active Travel Network project. This fiscal responsibility of any authorised signatory is to be satisfied that the level of compensation agreed and other principal terms of the agreement are fair and reasonable to both parties.

In each instance, a request for the authorised signatory to sign an agreement to purchase property will be accompanied by a suitably detailed report providing the authorised signatory with sufficient comfort that all legislative and case law requirements have been adequately addressed. There will be an approved budget for property or easement acquisition, including both land or easement value and additional compensation matters.

A detailed record of cumulative property acquisition costs (both direct and indirect) should be maintained and monitored against the budgets, which will be reported to QLDC on a regular and ad hoc basis and will give the QLDC early warning of any potential property acquisition cost over-runs.

10. Purchase estimate

The number of property purchases (fee simple, easement, or entry for temporary occupation) required for the Wakatipu Active Travel Network project has been determined during the single stage business case and concept design stage of the project. At the detailed design stage the property requirements will be looked at more critically to properly determine what land or interest is definitively required for the project and the cost estimate will be modified accordingly. At this stage we have undertaken a costings exercise to identify what the property costs might be, taking into account Objective 1 above, to minimise the amount of land required as well as to minimise the effect on landowners, and taking into account what type of interest in the property will be acquired, and by what means.

For the cost estimates (including costs for property acquisition) see Appendix I: WATN Cost Estimate Cost.

In respect to the property acquisition cost estimates we have made the following assumptions:

- For Routes A2, A3, A7 and A8 in Stage 1 Package 1, and for Route C6 in Stage 2 of Package 1, we have assumed that Easements only will be acquired for the Trail (except one property on Route A7 where the Fee Simple may be required where that landowner owns land underlying Coneburn Special Housing Area and adjacent to it).
- For Route C5 in Stage 2 of Package 1, we have assumed the Fee Simple will be acquired as the trail adjoins the existing Road.
- There has been no allowance for temporary occupation to allow access for construction.
- For those interests purchased (rather than vested as a RMA consent condition), the purchase cost estimate is based on the ratable values of the properties as assessed at 1 July 2017.

- No account has been made for changes in value of the land due to more intensification or zoning post 1 July 2017 (all compensation costings are based on the Land Rating Value (except one parcel on route A7 which seemed inordinately low)).
- Alternatively, if assessed as nominal, a minimum level of Consideration of $2,000 has been suggested to incentivise an owner to enter into agreement. This has generally not been added to the sums as it is expected that the increase in this payment would be offset by the non-necessity on the landowner to get a compensation assessment.
- No allowances have been made for business interruption or business relocation costs (though there were no apparent affected properties that would qualify for this compensation).
- All costings are on the basis that the land and easements will be 'purchased' under the Public Works Act 1981.
- All costings are on the basis that the owners are agreeable to selling a grant of easement (that is: no compulsory acquisition is necessary to secure the right).
- The Easement land is assumed to be 5m wide.
- The compensation paid for an easement is generally 35% of the land value for THAT portion of land (upped to 50% for some of the sites depending upon impact).
- Where the Easement lies along or near a property boundary (except a river boundary), the additional Injurious Affection allowance is nil.
- Where the Easement passes through a property and severs sizeable parcels (and on the basis that the Trail is fenced – albeit with gates to pass and repass through the easement land) a sum of between 0.5% and 1% for injurious affection to the BALANCE land has been allowed.
- Sums of $3,000 per property where multiple parcels are required from one owner, or $5,000 where only one parcel is required, have been allowed for each of s66 (disturbance payments) and the Supplier costs to negotiate the purchases.
- No costings have been provided for land already held by QLDC (even if held in Trust).
- Landowners nowadays tend to be more informed of their rights and entitlements under the PWA, and can tend to engage more litigious advisors. No costs for compulsory acquisition or the associated litigation have been allowed in the costings.

11. Land entry agreements (pre construction)

Prior to construction, we anticipate the Project design team may require entry to all or parts of the project area to undertake site survey and geotechnical & contamination investigations to inform the developed and detailed design processes. This will require entry onto private property in advance of acquisition by the Acquiring Authority. In some of these instances Land Entry Agreements will need to be negotiated with those owners and we anticipate this would be done through the appointed property negotiators/advisors.

Should a landowner not be agreeable to Entry, notice can be served under s111 of the PWA to force entry. The owner can object to the District Court.

Additionally, landowners impacted by the works, but not having any land or interests acquired, may be required to enter into a Land Entry Agreement to allow the construction contractor on site to reinstate or reform driveways and such like. Entry on to private property without permission is trespass.

12. Management of property acquired

As properties or interests are progressively acquired they will need to be managed by QLDC until required for the project. Given that QLDC already have large managed property portfolios, properties acquired for the project could be managed by their respective property managers pending construction. Less management will be required where owners are allowed a Bare Licence over the required land or interest. During the construction phase of the project close liaison between the Construction Contract Manager and the Property Manager is required to ensure vacant possession is available in advance of construction start date.

13. Removal of Improvements

Prior to construction of the trails, vacant possession of all buildings, structures, gardens, paths and other encroachments, will be required so that arrangements can be made for their removal, disconnection of services and the like. Some structures will hold value for relocation to other sites, some will hold salvage value for re-use of materials and others will simply need to be demolished. Some of these structures or encroachments may be on land already owned by QLDC.

Consideration also needs to be given to improvements removed for temporary occupation of a privately owned site, but which must be reinstated post construction (may be cheaper to replace old with new in some circumstances).

Options for removal of improvements and structures are:

- Inclusion within the main Wakatipu Active Travel Network construction contract.
- Tender a separate contract for all the removal works as a single package.
- Tender contracts for removal based on pre-determined packages (e.g. residential versus commercial, or particular parts of the alignment).
- Tender individual contracts for each site.
- Request encroaching adjoining owners to remove the encroachments.

These options should be considered both in context of the anticipated return/cost of each as well as the project management and timeline risk. This will require some thought and analysis at a later stage of the project.

14. Disposal of surplus property or interests

While some properties may be only partially required for the project, because of the effect of the work, the Acquiring Authority may be required to purchase the entire property, or it may be fiscally sensible to do so to avoid a compulsory acquisition of part. Therefore, it is likely that there may be some surplus land available on completion of the project works.

Generally it is not recommended to undertake survey of the project area until the project works have been physically completed. Once works are complete, land no longer required can be defined by survey and decisions made as the optimum method for disposal, plus dealing with the creation of any easements that may be necessary to protect rights of access or other services.

Unless purchased by virtue of s34 of the PWA or on the open market, there will be a need to determine if any surplus land ought to be offered back to former owners.

There may also be opportunities to offer surplus property to adjoining owners “in exchange” but these will need to be considered on a case by case basis.

Before decisions are made on whether or not land is “surplus”, careful consideration should be given to whether there is any value in holding the land for another public work.

If an easement has been acquired, and is no longer required, the right can be voluntarily surrendered. It is highly unlikely that there would be any return to QLDC where an easement is voluntarily surrendered.

15. Adjacent property not required by the project

Some owners of a property located in close proximity to the Wakatipu Active Travel Network may consider that the project will diminish the value of their property and, as a consequence, form a view that the Acquiring Authority should be required to purchase their property or alternatively compensate them for loss in value.

The PWA and case law is quite clear in this regard in that, if no part(s) of these properties are required for the project, these owners have no entitlement to compensation under the PWA 1981; even if a loss in value could be supported by valuation. To do so would create and undesirable precedent unless there were sufficient mitigating factors setting the particular property apart from other owners (eg: the construction works completely sever legal access to the property).

The interests of these adjacent owners are protected by the RMA, including where RMA approvals are notifiable the right to make submissions. Where notifiable early engagement with adjacent owners will be crucial so that the Acquiring Authority can understand their individual concerns and work with them to incorporate appropriate mitigation measures into the project design and implementation documentation. Where not notifiable it will still be important, particularly during the construction phase to engage early with adjacent landowners around works.

16. Communication

During the next pre-implementation phase consultation should continue with landowners whose land or interest is wholly or partially required for the project. Landowners should be given opportunities to meet with property consultants, engineers, planners, and other experts, to better understand the processes.

17. Summary

This document provides a high level reference point for the processes and actions that will be required to successfully achieve the property (including easement) requirements of the Wakatipu Active Travel Network project. It is anticipated that it will be updated and refined in the next stages – pre-implementation and construction.

Wakatipu Active Travel Network - Location Options Study - Property Assessment - Route A3 & A4

Parcel ID	Sheet	Owner	Legal Description	Address	Record of Title	Area Ha	Fee Simple (FS) or Easement (E)	Area Required (ha)	Rating Valuations				Compensatio		
									Val Ref 1 July 2017	LV	IV	CV	Assessed Value of Property Required (using LV)	Sec 66 Estimate (legal & valuation)	Section 72 Estimate (10%. Min $250. Max $25,000)
	A3 sht 1	Department of Conservation - Reversion. Likely Queenstown Lakes District Council in Trust for a Recreation Reserve	Section 5 TN OF Blk XXXIII Town of Frankton	KAWARAU ROAD FRANKTON	na	3.1616	na	0.0490	29101-00201	$ 2,570,000	na	na	na	na	na
	A3 sht 1 & 2	Department of Conservation - Reversion. Likely Queenstown Lakes District Council in Trust for a Recreation Reserve	Section 6 TN OF Blk XXXIII Town of Frankton	KAWARAU ROAD FRANKTON	na	6.3409	na	0.0470	29101-00300	$ 4,180,000	na	na	na	na	na
	A3 sht 3	Trail wholly contained within existing legal road					na				na	na	na	na	na
	A3 sht 4	Department of Conservation - Reversion. Queenstown Lakes District Council in Trust for a Recreation Reserve	All affected land on route A4 Sheet 4 except Pt Section 3 SO 22046	Lake Ave to Shoreline Road	Various	na	na	na	na	na	na	na	na	na	na
	A3 sht 4	Queenstown Lakes District Council in Fee Simple for a Recreation Reserve	Pt Section 3 SO 22046	Adj Lake Ave	OT15D/599	na	na	na	na	na	na	na	na	na	na
	A4 sht 1	The Queenstown Lakes District Council	All affected land on route A4 Sheet 1	Sugar Lane		na	na	na	na	na	na	na	na	na	na
								0.0960					$ -	$ -	$ -
														allowance for contingency across	
														Tot	
														Total purchase costs including	

n Assessment			Comments
Other Comp (injurious affection)	Total Comp Est.	Costs to negotiate with owners	
na	na	na	Recreation Reserve Frankton Domain NZGZ 1957 p 1646. Sports Fields. Assume under control & admin by QLDC
na	na	na	Recreation Reserve Frankton Domain NZGZ 1957 p 1646. Golf course. Assume under control & admin by QLDC
na	na	na	
na	na	na	**Classified as recreation reserve. With the effect that land vests in Queenstown-Lakes District Council. NZGZ 2004 p 2816 & NZGZ 1991 p 1898 &**
na	na	na	**Formerly stopped Road. Not held for any particular purpose.**
na	na	na	**In 2012 reserve was classified as a Local Purpose (Marina and Accessway) Reserve Subject to the Reserves Act 1977**
$ -	$ -	$ -	
the route (15%)	$ -		
al compensation	$ -		
		$ -	Total Suppliers costs to negotiate acquisition
compensation	$ -		
	$ -	Rounded up	

Wakatipu Active Travel Network - Location Options Study - Property Assessment - Route A5

Parcel ID	Sheet	Owner	Legal Description	Address	Record of Title	Area Ha	Fee Simple (FS) or Easement (E)	Area Required (ha)	Rating Valuations				Assessed Value of Property Required (using LV)	Sec 66 Estimate (legal & valuation)
									Val Ref 1 July 2017	LV	IV	CV		
	20	DoC	Sections 3-7 BLK XVIII Town of Frankton				E		29101/21800	$101,000	$ -	$ -	na	na
	20	QLDC	Various Road corridors										na	na
								0.0000					$ -	$ -
														allowance for
														Total purchas

Compensation Assessment				Comments
Section 72 Estimate (10%. Min $250. Max $25,000)	Other Comp	Total Comp Est.	Costs to negotiate with owners	
na	na	na	na	Frankton Mill Site. Ordinance 1865 page 1293. Has Heritage Protection in the District Plan. Category 3. Trail already exists
na	na	na	na	
$ -	$ -	$ -	$ -	
ontingency across the route (15%)		$ -		
Total compensation		$ -		
			$ -	Total Suppliers costs to negotiate acquisition
e costs including compensation		$ -		
		$ -	Rounded up	

Wakatipu Active Travel Network - Location Options Study - Property Assessment - Route A7

Parcel ID	Sheet	Owner	Legal Description	Address	Record of Title	Area Ha	Fee Simple (FS) or Easement (E)	Area Required (ha)	Rating Valuations				Compensation Assessment						Comments
									Val Ref 1 July 2017	LV			Assessed Value of Property Required (using LV)	Sec 66 Estimate (legal & valuation)	Section 72 Estimate (10%, Min $250. Max $25,000)	Other Comp (injurious affection)	Total Comp Est.	Costs to negotiate with owners	
	1	Jacks Point Village Holdings No 2 Limited	Lot 8 Deposited Plan 498079	no details	737022	2.1991	E	0.0088	29132-90029	$3,500,000			$ 7,003	$ 3,000	$ 5,950	$ 52,500	$ 68,453	$ 3,000	Zoning? Commercial 8H? Latest sale $28,378,550 7 June 2017 for multiple properties
	1	Jacks Point Village Holdings No 2 Limited	Lot 9 Deposited Plan 498079	no details	737023	2.5067	E	0.0335	29132-90031	$ 4,000,000			$ 18,710	$ 3,000	$ 1,871	$ -	$ 23,581	$ 3,000	Latest sale $28,378,550 7 June 2017 for multiple properties
	1	Jacks Point Village Holdings No 2 Limited	Lot 201 Deposited Plan 498079	no details	737038	0.8454	E	0.0990	29132-90032	na			$ -	na	$ -	$ -		$ -	No rating value. Subject to a right of way (walkway) in gross over part marked QK and KD and a right of way (bridle trail) in gross over part marked QJ and KC all on DP 498079 in favour of Queenstown Lakes District Council created by Easement Instrument 6929597.8 - 30.6.2006
	1, 2 & 3	RCL Henley Downs Limited	Section 2 Survey Office Plan 530620	Woolshed Road	873699	19.4192	E	0.0560	29132-00613	$12,500,000	na		$ 12,616	$ 3,000	$ 1,262	$ -	$ 16,878	$ 3,000	
	2 & 3	Willow Pond Farm Limited	Lot 6 Deposited Plan 398514	Woolshed Road	392964	10.1760	E	0.0800	29132-00426	$ 125,000	$ 6,550,218	Adopted Rate	$ 18,023	$ 3,000	$ 1,802	$ -	$ 22,826	$ 3,000	Commercial 8H?? Land Valuation seems inordinately low. Suggest adopt rate similar to RCLHD land.
	4 & 5	RCL Henley Downs Limited	Lot 902 Deposited Plan 510675	404 Kingston Road, State Highway 6, Jacks Point, Queenstown (also fronts Woolshed Road)	801970	18.1235	E	0.1865	29132-00452	$ 11,700,000			$ 42,140	$ 3,000	$ 21,764	$ 175,500	$ 242,404	$ 3,000	commercial 8H???
	5	RCL Henley Downs Limited	Lot 908 Deposited Plan 510675	Woolshed Road	801976	3.2124	E	0.0215	29132-00464	$ 150,000			$ 351	$ 3,000	$ 250	$ -	$ 3,601	$ 3,000	commercial 8H??? Appears to follow creek/stream
	5	RCL Henley Downs Limited	Lot 904 Deposited Plan 510675	no details	801972	1.2579	E	0.0810	29132-00454	$ 750,000			$ 16,903	$ 3,000	$ 1,690	$ -	$ 21,593	$ 3,000	
	5 & 6	RCL Henley Downs Limited	Lot 8 Deposited Plan 498179	no details	737331	5.9113	E	0.1180	29132-00445	$ 6,000,000			$ 41,920	$ 3,000	$ 10,192	$ 60,000	$ 115,112	$ 3,000	
	6, 7 & 8	RCL Henley Downs Limited	Lot 9 Deposited Plan 498179	Woolshed Road	737332	31.1.7698	E	0.2815	29132-00444	$ 5,150,000			$ 1,627	$ 3,000	$ 5,313	$ 51,500	$ 61,440	$ 3,000	Commercial 8H???
	8, 9 & 10	James Douglas Paterson and Jane Scott Harvey Paterson	Lot 2 Deposited Plan 475609	Woolshed Road	655559	80.4020	E	0.4935	29132-00441	$ 4,840,000	86.1590	Rating valuation area (ha)	$ 9,703	$ 3,000	$ 8,230	$ 72,600	$ 93,533	$ 3,000	
	11, 12, 13 & 18	Remarkables Station Limited	Pt Lot 1 Deposited Plan 20511	284 Kingston Road, State Highway 6, Jacks Point, Queenstown	OT16C/1188	84.45.15	E	0.5335	29132-00201	$ 11,975,000	969.8276	Rating valuation area (ha)	$ 2,306	$ 3,000	$ 12,206	$ 119,750	$ 137,261	$ 3,000	
	13	Remarkables Station Limited	Lot 1 Deposited Plan 24791	SH 6	OT16C/1187	0.6929	E	0.0485	29132-00201	Included in rating value for above land			$ 2,407	$ 3,000	$ 250	$ 59,875	$ 65,532	$ 3,000	Included in rating value for above land
	13	F.S. Mee Development Company Limited	PARTS of Section 45 BLK XII Coneburn SD	SH 6	157	0.2628	FS	0.6350	29131/300 adjoins 29099-54714	$ 6,450,000	157.9687	Rating valuation area (ha)	$ 25,928	$ 3,000	$ 250	$ 32,250	$ 61,428	$ 3,000	Severed portions on western side of State Highway. Part of 158ha land holding. Adjoins 671ha land holding to the west. Purchase Fee Simple as near to Road.
	17	Queenstown Lakes District Council - Local Purpose (Esplanade) Reserve	Lot 3 Deposited Plan 300002		1032	na	na	na	na	na	na	na	$ -	$ -	$ -	$ -	$ -	$ -	Held by QLDC for Reserve
	18 & 19	F.S. Mee Development Company Limited	Pt Section 38 BLK XII Coneburn SD	SH 6	OT16D/923	15.2108	E	0.2620	29131-00300	Included in rating value for above land			$ 10,698	$ 3,000	$ 1,070	$ -	$ 14,767	$ 3,000	
	19	Department of Conservation - Crown Land Reserved from Sale (Marginal Strip)	CROWN Land Block XII Coneburn Survey District	no details	na	1.3223	E	0.0310	no details										No details of land value.
								2.9693					$ 210,335	$ 42,000	$ 72,100	$ 623,975	$ 948,410	$ 42,000	
														allowance for contingency across the route (15%)			$ 142,261		
																Total compensation	$ 1,090,671		
																		$ 42,000	Total Suppliers costs to negotiate acquisition
														Total purchase costs including compensation			$ 1,132,671		
																	$ 1,140,000	Rounded up	

Wakatipu Active Travel Network - Location Options Study - Property Assessment - Route C6

Parcel ID	Sheet	Owner	Legal Description	Address	Record of Title	Area Ha	Fee Simple (FS) or Easement (E)	Area Required (ha)	Rating Valuations				Assessed Value of Property Required (using LV)	Sec 66 Estimate (legal & valuation)
									Val Ref 1 July 2017	LV	IV	CV		
4749568	8	Perry Bruno Dean Noyce	Lot 4 Deposited Plan 483357	94 Littles Road, Queenstown	681859	9.0343	E	0.0260	29071-00306	$ 1,340,000	$ 1,040,000	$ 2,380,000	$ 1,350	$ 3,000
4253872	8	Perry Bruno Dean Noyce	Lot 1 Deposited Plan 341799	94 Littles Road, Queenstown	171982	2.2167	E	0.1235	29071-00303	$ 720,000	$ -	$ 720,000	$ 14,040	$ 3,000
	8	Little Stream Limited	Lot 9 Deposited Plan 483357	90 Littles Road, Queenstown	772253	3.3557	E	0.0075	29071/8848	$ 900,000	$ 5,000	$ 905,000	$ 704	$ 3,000
4749565	8, 9	Annesley Charles Wilkinson	Lot 1 Deposited Plan 483357	140 Littles Road, Queenstown	681856	4.2481	E	0.0750	29071-08831	$ 980,000	$ -	$ 980,000	$ 6,056	$ 3,000
	8, 9, 10, 11	HMQ (Department of Conservation)	Section 150 Block XIX Shotover Survey District	No address	Conservation purposes SO 22288 F41/42 & 8	18.0000	E	0.3265	29071-09100	$ 13,000	$ -	$ 13,000	$ 83	$ 3,000
4403999	10, 11	Anne Louise Allen, Murray Fletcher Allen and Anthony James Irvine	Lot 4 Deposited Plan 380890	202 Littles Road, Queenstown	323831	6.1781	E	0.0044	29071-08810	$ 1,090,000	$ 1,210,000	$ 2,300,000	$ 272	$ 3,000
4771025	10, 11	CP Trustees Limited Amanda Frances Erskine and Andrew Russell Erskine	Lot 15 Deposited Plan 489082	83 Moorhill Road, Qu	703885	4.5073	E	0.0800	29071-08841	$ 1,020,000	$ 13,000	$ 1,033,000	$ 6,336	$ 3,000
4441722	11	Amanda Spencer Fox Whitney Spencer Fox and Ellen Spencer Susman	Lot 5 Deposited Plan 388409	No address	361927	4.0548	E	0.1250	29071-08815	$ 1,020,000	$ -	$ 1,020,000	$ 11,005	$ 3,000
								0.7679					**$ 39,845**	**$ 24,000**
														allowance for
														Total purchas

Compensation Assessment				Comments
Section 72 Estimate (10%. Min $250. Max $25,000)	Other Comp	Total Comp Est.	Costs to negotiate with owners	
$ 250	$ -	$ 4,600	$ 2,500	Subject to a pedestrian easement over parts marked K and F on DP 521105 created by Easement Instrument 11038422.1 - 9.3.2018. Rural Zone. Use: Single Unit
$ 1,404	$ -	$ 18,444	$ 2,500	Appurtenant hereto is a right to convey water and a pedestrian easement created by Easement Instrument 11038422.1 - 9.3.2018 Rural Zone. Use: Vacant lifestyle
$ 250	$ -	$ 3,954	$ 4,000	**Subject to (in gross) a right of way (pedestrian) over part marked C, D, E and I on DP 504735 in favour of Quenstown Lakes District Council created by Easement Instrument 10666402.11 - 4.7.2017 Additional land required along southern boundary???**
$ 606	$ -	$ 9,661	$ 4,000	Rural Zone. Use: Vacant Lifestyle
$ 250	$ -	$ 3,333	$ 4,000	Rural Zone. Use: Passive Outdoor Sale May 1986 for $565,000
$ 250	$ -	$ 3,522	$ 4,000	Rural Zone. Use: Single Unit excluding Bach. Would be best to avoid this site entirely
$ 634	$ -	$ 9,970	$ 4,000	Rural Zone. Use: Vacant Lifestyle
$ 1,101	$ -	$ 15,106	$ 4,000	Rural Zone. Use: Vacant Lifestyle
$ 4,744	**$ -**	**$ 68,589**	**$ 29,000**	
ontingency across the route (15%)		**$ 10,288**		
Total compensation		**$ 78,877**		
			$ 29,000	**Total Suppliers costs to negotiate acquisition**
e costs including compensation		**$ 107,877**		
		$ 110,000	Rounded up	

Wakatipu Active Travel Network - Location Options Study - Property Assessment - Route A2

Parcel ID	Sheet	Owner	Legal Description	Address	Record of Title	Area Ha	Fee Simple (FS) or Easement (E)	Area Required (ha)	Rating Valuations				Assessed Value of Property Required (using LV)	Sec 66 Estimate (legal & valuation)
									Val Ref 1 July 2017	LV	IV	CV		
	1	Crown Land Reserved from Sale (Marginal Strip) Department of Conservation	CROWN Land Block II Shotover Survey District	Tucker Beach Road	NA	2.7949	E	0.0375	na	na	na	na	$ 1,500	$ 3,000
	2	Queenstown Lakes District Council Local Purpose Beautification Reserve	Lot 203 Deposited Plan 300099	Tucker Beach Road	1392	na	na	na	na	na	na	na	na	na
	2	Queenstown Lakes District Council Local Purpose Beautification Reserve	Lot 204 Deposited Plan 300099	Tucker Beach Road	2092	na	na	na	na	na	na	na	na	na
	4	Sarah Christine Ottrey and Jane Marie Ottrey Webster	Lot 25 Deposited Plan 461026	105 Ferry Hill Drive, Queenstown	605679	na	na	na	na	na	na	na	na	na
	4 & 5	Universal Developments Limited	Lot 2 Deposited Plan 497316	163 Frankton-Ladies Mile Highway, SH 6, Frankton, Queenstown	764774	8.9964	E & FS	0.2225	29071-47701	$ 3,150,000	$ 870,000	$ 4,020,000	$ 38,953	$ 6,000
								0.2600					**$ 40,453**	**$ 9,000**
														allowance for
														Total purchas

Compensation Assessment				Comments
Section 72 Estimate (10%. Min $250. Max $25,000)	Other Comp (injurious affection)	Total Comp Est.	Costs to negotiate with owners	
$ 250	$ -	$ 4,750	$ 4,000	Nominal sum applied for property value
na	na	na	na	Subject to the Reserves Act 1977
na	na	na	na	Subject to the Reserves Act 1977
na	na	na	na	**Subject to a right of way (Pedestrian and Cycleway) (in gross) over parts marked KB & KC on DP 461026 in favour of the Queenstown Lakes District Council created by Easement Instrument 9288032.9 - 18.4.2013**
$ 8,620	$ 47,250	$ 100,823	$ 7,000	416858 Gazette Notice declaring No. 6 State Highway (Blenheim to Invercargill) fronting the within land to be a limited access road - 21.1.1974 Subject to a right to convey water over part marked A on DP 497316 created by Easement Instrument 5385122.3. Rural Zone. **Suggest realigning this to follow the boundary at the southern end to avoid increased injurious affection by severing the land adjoining SH6. Owner may want part acquired for Road instead.**
$ 8,870	**$ 47,250**	**$ 105,573**	**$ 11,000**	
ontingency across the route (15%)		**$ 15,836**		
	Total compensation	**$ 121,409**		
			$ 11,000	**Total Suppliers costs to negotiate acquisition**
e costs including compensation		**$ 132,409**		
		$ 140,000	**Rounded up**	

Wakatipu Active Travel Network - Location Options Study - Property Assessment - Route A8

Parcel ID	Sheet	Owner	Legal Description	Address	Record of Title	Area Ha	Fee Simple (FS) or Easement (E)	Area Required (ha)	Rating Valuations				Compensatio		
									Val Ref 1 July 2017	LV			Assessed Value of Property Required (using LV)	Sec 66 Estimate (legal & valuation)	Section 72 Estimate (10%. Min $250. Max $25,000)
	1	Recreation Reserve Subject to the Reserves Act 1977 NZGZ 2009 p 3887 [Recreation Reserve vests in the Queenstown Lakes District Council subject to easements specified. NZGZ 2009 p 3897]	Pt Section 131 BLK III Shotover SD	Northern side of river	na	na	E	na	na	na			$ -	$ -	$ -
	1	Department of Conservation Crown Land Reserved from Sale (Marginal Strip)	CROWN Land Block III Shotover Survey District	Northern side of river	na	na	E	na	na	na			$ -	$ -	$ -
	1 to 9	QTN Farm Limited	Lot 3-4 Deposited Plan 349682	505 Chard Road, Queenstown	203506	1823.1515	E	1.3870	29072-05507	$9,650,000	1825.7230	Rating valuation area (ha)	$ 2,566	$ 5,000	$ 5,082
	9 to 13	F.S. Mee Development Company Limited	Section 37 BLK XII Coneburn SD		OT5B/516	43.2230	E	0.6015	29131-00300	$6,450,000	157.9687	Rating valuation area (ha)	$ 8,596	$ 3,000	$ 4,085
	13 & 14	Spencer Michael Mee (ex Elizabeth Rebecca Dickson, Jean Elizabeth Mee, Revell William Buckham, Spencer Michael Mee)	Section 39 BLK XII Coneburn SD		OT5B/518	14.2019	E	0.2520	29131-00101	$ 1,950,000			$ 12,110	$ 3,000	$ 1,211
	15 & 16	F.S. Mee Development Company Limited	Pt Section 38 BLK XII Coneburn	SH 6 & Boyd Road	OT16D/923	15.2108	E	0.1675	29131-00300	included in rating value above			$ 2,394	$ 3,000	$ 250
								2.4080					**$ 25,666**	**$ 14,000**	**$ 10,627**
															allowance for contingency across
															Tot
															Total purchase costs including

n Assessment			Comments
Other Comp (injurious affection)	Total Comp Est.	Costs to negotiate with owners	
$ -	$ -	$ -	Held by QLDC for Reserve
$ -	$ -	$ -	DoC will need to agree to allow trail and any works on site.
$ 48,250	$ 60,897	$ 5,000	**Title is subject to Part 4A Conservation Act 1987 (marginal strip reserved to the Crown on disposition from the Crown). Not defined by survey, but 20m strip does exist. Trail route appears to pass in and out of what would be the marginal strip. Costings assume trail is on landward side of marginal strip.**
$ 32,250	$ 47,931	$ 3,000	**Unformed Road along edge of River. No marginal strip or esplanade reserve laid out. Trail route appears to pass in and out of the property boundary.**
$ -	$ 16,321	$ 3,000	
$ -	$ 5,644	$ 3,000	
$ 80,500	**$ 130,793**	**$ 14,000**	
the route (15%)	**$ 19,619**		
al compensation	**$ 150,412**		
		$ 14,000	**Total Suppliers costs to negotiate acquisition**
compensation	**$ 164,412**		
	$ 170,000	**Rounded up**	

Wakatipu Active Travel Network - Location Options Study - Property Assessment - Route C5

Parcel ID	Sheet	Owner	Legal Description	Address	Record of Title	Area Ha	Fee Simple (FS) or Easement (E)	Area Required (ha)	Rating Valuations				Assessed Value of Property Required (using LV)	Sec 66 Estimate (legal & valuation)
									Val Ref 1 July 2017	LV				
	2 & 3	The Junction Hotel Limited	Section 1 Survey Office Plan 446319	461 Gorge Road, Queenstown	581649	0.2852	FS	0.0009	29107-17903	$ 1,000,000			$ 3,156	$ 3,000
	3	Her Majesty The Queen Department of Conservation Conservation purposes SO 22276 E41/18 & 19	Section 7 Survey Office Plan 446319	Gorge Road	OT10B/188	24.4635	FS	0.0380	na	$39,000	5.2690	Rating valuation area (ha)	$ 281	$ 3,000
	3	Carol Anne Campbell Richard Patrick Neale	Pt Section 11 BLK XIX Shotover SD	Gorge Road	OT18C/225	12.9221	FS	0.0220	29071-51104	$3,330,000	149.0143	Rating valuation area (ha)	$ 492	$ 3,000
	6 & 7	Carol Anne Campbell Richard Patrick Neale	Pt Section 16 BLK XX Shotover SD	Gorge Road	OT62/138	5.4356	FS	0.0550	29071-51104	including in above rating value			$ 1,229	$ 3,000
	7	Denis Joseph Columb Marilyn Ann Columb Mitchell & Mackersy Trust Company Limited	Section 6 Survey Office Plan 24761	Gorge Road	OT18D/475	0.1317	FS	0.0060	29107-11402	$ 1,500,000	14.2532	Rating valuation area (ha)	$ 631	$ 3,000
	9	Denis Joseph Columb Marilyn Ann Columb Mitchell & Mackersy Trust Company Limited	Section 2 Survey Office Plan 24761	Gorge Road	OT18D/475	0.1821	FS	0.0153	29107-11402	including in above rating value			$ 1,610	$ 3,000
	9	Queenstown Adventure Park (1993) Limited	Section 1 Survey Office Plan 24761	Gorge Road	OT18D/476	0.1224	FS	0.0050	29071-51302	$ 620,000	92.6268	Rating valuation area (ha)	$ 33	$ 5,000
	10	Queenstown Lakes District Council	Pt Section 13 BLK XX Shotover SD	Gorge Road, opposite end of unformed and unnamed Road	OT8B/519	na	na	na	na	na	na	na	$ -	$ -
								0.1422					**$ 7,433**	**$ 23,000**
														allowance for
														Total purchas

Compensation Assessment				Comments
Section 72 Estimate (10%. Min $250. Max $25,000)	Other Comp (injurious affection)	Total Comp Est.	Costs to negotiate with owners	
$ 316	$ -	$ 6,471	$ 5,000	Four separate very small areas impacted. Best to avoid if possible. If needed, add to Road corridor. Property is currently on the market.
$ 250	$ -	$ 3,531	$ 5,000	No valuation information, but have adopted adjoing DoC land rating value. Acquire 2 x portions of Fee simple and add to the Road. Would apply a nominal sum of around $2,000 rather than rely on land value.
$ 250	$ -	$ 3,742	$ 3,000	Acquire Fee Simple to add to Road. Would apply a nominal sum of around $2,000 rather than rely on land value.
$ 250	$ -	$ 4,479	$ 3,000	Acquire 2 x Fee Simple portions to add to Road. Would apply a nominal sum of around $2,000 rather than rely on land value.
$ 250	$ -	$ 3,881	$ 3,000	Acquire Fee Simple to add to Road. Would apply a nominal sum of around $2,000 rather than rely on land value.
$ 250	$ -	$ 4,860	$ 3,000	Acquire Fee Simple to add to Road. Would apply a nominal sum of around $2,000 rather than rely on land value.
$ 250	$ -	$ 5,283	$ 5,000	Acquire Fee Simple to add to Road. Would apply a nominal sum of around $2,000 rather than rely on land value.
$ -	$ -	$ -	$ -	held by QLDC
$ 1,816	**$ -**	**$ 32,248**	**$ 27,000**	
ontingency across the route (15%)		**$ 4,837**		
Total compensation		**$ 37,086**		
			$ 27,000	**Total Suppliers costs to negotiate acquisition**
e costs including compensation		**$ 64,086**		
		$ 70,000	**Rounded up**	

Wakatipu Active Travel Network - Location Options Study - Property Assessment - Route

Parcel ID	Sheet	Owner	Legal Description	Address	Record of Title	Area Ha	Fee Simple (FS) or Easement (E)	Area Required (ha)	Rating Valuations					
									Val Ref 1 July 2017	LV	IV	CV	Assessed Value of Property Required	Injurious Affection
4749568	8	Perry Bruno Dean Noyce	Lot 4 Deposited Plan 483357	94 Littles Road, Queenstown	681859	9.0343	E	0.0260	29071-00306	$ 1,340,000	$ 1,040,000	$ 2,380,000		
4253872	8	Perry Bruno Dean Noyce	Lot 1 Deposited Plan 341799	94 Littles Road, Queenstown	171982	2.2167	E	0.1235	29071-00303	$ 720,000	$ -	$ 720,000		
	8	Little Stream Limited	Lot 9 Deposited Plan 483357	90 Littles Road, Queenstown	772253	3.3557	E	0.0075	NA	NA	NA	NA	NA	
4749565	8, 9	Annesley Charles Wilkinson	Lot 1 Deposited Plan 483357	140 Littles Road, Queenstown	681856	4.2481	E	0.0750	29071-08831	$ 980,000	$ -	$ 980,000		
	8, 9, 10, 11	HMQ (Department of Conservation)	Section 150 Block XIX Shotover Survey District	No address	Conservation purposes SO 22288 F41/42 & 8	18.0000	E	0.3265	29071-09100	$ 13,000	$ -	$ 13,000		
4403999	10, 11	Anne Louise Allen, Murray Fletcher Allen and Anthony James Irvine	Lot 4 Deposited Plan 380890	202 Littles Road, Queenstown	323831	6.1781	E	0.0044	29071-08810	$ 1,090,000	$ 1,210,000	$ 2,300,000		
4771025	10, 11	CP Trustees Limited Amanda Frances Erskine and Andrew Russell Erskine	Lot 15 Deposited Plan 489082	83 Moorhill Road, Qu	703885	4.5073	E	0.0800	29071-08841	$ 1,020,000	$ 13,000	$ 1,033,000		
4441722	11	Amanda Spencer Fox Whitney Spencer Fox and Ellen Spencer Susman	Lot 5 Deposited Plan 388409	No address	361927	4.0548	E	0.1250	29071-08815	$ 1,020,000	$ -	$ 1,020,000		
								0.7679					$ -	

C6					
Compensation Assessment					Comments
Sec 66 Estimate	Section 72 Estimate	Other Comp	Total Comp Est.	Contingency	
		$ -	$ -	$ -	Subject to a pedestrian easement over parts marked K and F on DP 521105 created by Easement Instrument 11038422.1 - 9.3.2018. Rural Zone. Use: Single Unit
		$ -		$ -	Appurtenant hereto is a right to convey water and a pedestrian easement created by Easement Instrument 11038422.1 - 9.3.2018 Rural Zone. Use: Vacant lifestyle
NA	NA	NA	$ -	NA	**Subject to (in gross) a right of way (pedestrian) over part marked C, D, E and I on DP 504735 in favour of Queenstown Lakes District Council created by Easement Instrument 10666402.11 - 4.7.2017 Additional land required along southern boundary???**
		$ -	$ -	$ -	Rural Zone. Use: Vacant Lifestyle
		$ -	$ -	$ -	Rural Zone. Use: Passive Outdoor Sale May 1986 for $565,000
		$ -	$ -	$ -	Rural Zone. Use: Single Unit excluding Bach
		$ -	$ -	$ -	Rural Zone. Use: Vacant Lifestyle
		$ -	$ -	$ -	Rural Zone. Use: Vacant Lifestyle
$ -	$ -	$ -	$ -	$ -	

Appendix O – Consenting Strategy

Wakatipu Active Travel Network: Consenting Strategy

Prepared for Queenstown Lakes District Council
Prepared by Beca Limited

16 August 2019

Contents

Appendices

Revision History

Revision Nº	Prepared By	Description	Date
A	**Nicolle Vincent / Kristina Mead**	Preparation of Draft Consenting Strategy for Client Review	May/June 2019
B	**Nicolle Vincent / Kristina Mead**	Final Consent Strategy	August 2019

Document Acceptance

Action	Name	Signed	Date
Prepared by	**Nicolle Vincent / Kristina Mead**		15/08/2019
Reviewed by	**Fiona Blight**		16/08/2019
Approved by	**Dave Aldridge**		16/08/2019
on behalf of	Beca Limited		

Executive Summary

Beca Ltd (Beca) has been commissioned by Queenstown Lakes District Council (QLDC) to undertake a Single Stage Business Case (SSBC) for the Wakatipu Active Travel Network project to identify a preferred network of cycle / walking trails. The identified preferred network includes 12 routes connecting key destinations and involves upgrades to existing trails as well as new trails. The typologies, treatments and facilities vary over and between the routes depending on the expected user of the route and the nature of the surrounding environment.

This Consent Strategy is an appendix to the SSBC and identifies the statutory approvals that may be required to authorise the preferred network and recommends an approach for gaining these approvals. The Consent Strategy has been informed by an Environmental and Social Responsibility Screen based on concept and preliminary design plans for the preferred network. The SSBC recommends delivery staging for the preferred network and the consent strategy considers implementation of Package 1: Stages 1 and 2 (being those designed and delivered up to 2024). The consent strategy does not provide a specific approvals pathway for delivery beyond 2024 as specified in Package 2, although the likely consents required for the routes that make up this package have been identified.

The table below sets out a summary from the table in section 5.7 of the Consent Strategy of the likely approvals required for Package 1: stages 1 and 2, based on the concept and preliminary design plans[1].

Stage	Approvals Summary
1: A2 – Shotover Bridge to SH6	RMA approval likely required for earthworks Works within designated areas may require an Outline Plan or waiver to provide one Works pass through Reserve and Conservation areas, so approvals required in relation to that including a DOC concession
1: A3 – Frankton North	RMA approval possibly required for earthworks Works within designated areas may require an Outline Plan or waiver to provide one Works pass through Reserve area which is subject to a Reserve Management Plan, so approvals under Reserves Act will be required
1: A4 – Frankton Marina Upgrades	Unlikely to trigger an RMA approval An Outline Plan waiver should be sought for works located within road and reserve designation areas Approvals in relation to works being located on Reserve land will be required from QLDC Parks and Recreation team
1: A5 – Frankton South	Unlikely to trigger an RMA approval

[1] Excludes approvals that may be required under the National Environmental Standard for Contamination as this requires preliminary assessments to determine whether approval is required and is dependent on detailed design undertaken during the pre-implementation phase of the project.

	An Outline Plan waiver should be sought for works located within road and reserve designation areas Reserve area which is subject to a Reserve Management Plan, so approvals under Reserves Act will be required Works are in proximity to the scheduled Heritage item – Kawarau Falls Bridge
1: A7 – Jacks Point to Frankton	RMA approval likely required for earthworks including because the works may disturb and / or modify wāhi tapu May require an Outline Plan or waiver to provide one for works located in the SH6 designation An Archaeological Authority is required particularly for works at the northern end and as part of this collaborative engagement is required with Kāi Tahu A number of landowner approvals are required for the works
1: A8 – Lake Hayes to Frankton	Resource consent for the two bridges proposed across the Kawarau River, for earthworks (including because the works may disturb and / or modify wāhi tapu), and because located within an Outstanding Natural Landscape (relates to structures and particularly the bridges) Works pass through Reserve and Conservation areas, so approvals required in relation to that including a DOC concession
2: B2 – Fernhill to Queenstown	RMA approval possibly for earthworks in relation to retaining wall structures and for works within the dripline of Scheduled Tree 239 An Outline Plan waiver should be sought for works located within the three designation areas that the trail passes through DOC concession for works on a Scenic Reserve administered by DOC Approvals under the Reserves Act from QLDC Parks and Recreation and DOC
2: B3 – Queenstown to Frankton	RMA approval likely for earthworks in relation to retaining walls Approvals under the Reserve Act from QLDC Parks and Recreation for the 3 reserves through which the trail passes
2: C2 – Brecon Street	RMA approval unlikely for earthworks and in relation to works potentially within the dripline of Scheduled Tree 151 An Outline Plan for works located within road designation areas Works pass in close proximity to QLDC Local Purpose Reserve (Cemetery)
2: C5 – Arthurs Point to Queenstown	RMA approval likely for earthworks

	An Outline Plan waiver should be sought for works located within the QLDC carpark designation DOC concession for works within Scenic Reserve and other land administered by DOC Approval from QLDC Parks and Recreation for works within reserve
2: C7 – Lake Hayes to Shotover	Unlikely to require approval for earthworks Outline Plan or waiver for works within QLDC road designation Approval from QLDC Parks and Recreation for works within reserve Works are within close proximity to Heritage Feature 248 Hicks Cottage on Old School Road

Section 6.4 of the Consent Strategy provides advice on the approach to progress the above. Sections 5 and 6 of the Consent Strategy should be referred to for further information on the various approvals under the RMA and other legislation.

During the next pre-implementation phase of the project the detailed design undertaken will refine and change the SSBC design, and therefore the statutory authorisations required may also change. Additionally, as QLDC's Proposed District Plan progresses through the plan making process some of the rules may change - new rules may be included and others deleted. For these reasons it is recommended that this Consent Strategy is reviewed during the pre-implementation phase for Package 1 and again for Package 2.

Where routes are largely within the New Zealand Transport Agency (NZ Transport Agency) state highway designations or QLDC's roading designations, it is recommended that the boundaries of those designations be altered under the Resource Management Act 1991 (RMA) to incorporate the full extent of those particular routes. Where routes are not within existing designations, it is recommended resource consent be sought, as required, from QLDC. Additionally, resource consents will be required from ORC irrespective of any designation or QLDC resource consent.

Based on concept and preliminary design plans, it is anticipated resource consent will be required for the following activities for all routes and stages:

Otago Regional Council's Regional Plan for Water

- Erection or placement of a structure over water
- Disturbance of river and lake beds

Queenstown Lakes District Council's Operative District Plan (ODP)

- Earthworks
- Structures or buildings
- Structures passing across the surface of a lake or river
- Signage

Queenstown Lakes District Council's Proposed District Plan (PDP)

- Earthworks
- Structures or buildings
- Signage

Site specific assessments will be required to determine whether signs, works near protected trees or heritage items will require resource consent. This should be undertaken in the next pre-implementation phase of the project.

An Archaeological Authority will be required as there are many registered archaeological sites in proximity to the preferred network. A Preliminary Archaeological Assessment should be undertaken in consultation with Kāi Tahu during the next pre-implementation phase to determine which routes require an Archaeological Authority. Kāi Tahu have indicated that route A7 and A8 are of particular significance to local iwi as they traverse a wāhi tūpuna (ancestral landscape) known as the traditional settlement of Tititea. Kāi Tahu have requested that they be involved in the appointment of any archaeologist to undertake this work. It will be important to understand during the detailed design phase any Kāi Tahu requirements pre and during construction, including around construction methodology and cultural monitoring. Any Archaeological Authority should be obtained during the pre-implementation phase of the project so that it is approved and available before construction commences. Given the geographic extent of the project, a project specific Accidental Discovery Protocol should also be developed in consultation with Kāi Tahu.

Concessions will be required from the Department of Conservation for those parts of the preferred network that cross public conservation land.

Given the geographic extent of the project, there are likely to be parts of the preferred network that cross HAIL sites (sites identified on the Hazardous Activities and Industries List). A Preliminary Site Investigation will be necessary as part of the consenting work in the pre-implementation phase of the project to identify HAIL sites and establish whether there is a risk to human health and consequently whether resource consent is required under the National Environmental Standard for Assessing and Managing Contaminated Soils to Protect Human Health. Any resource consent would likely need to be supported by a Detailed Site Investigation.

Where routes are within reserves, approval will be required from QLDC for physical works. Where reserves are subject to Reserve Management Plans any substantial changes may trigger a comprehensive review of that Reserve Management Plan, which involves a public process.

Written approval will be required from QLDC and the NZ Transport Agency as Requiring Authorities prior to any works within any of their existing designations.

It is recommended that a number of technical assessments be commissioned in the pre-implementation phase to support the necessary resource consents, alterations to designation, and other approvals. An initial conservative estimate of costs for these assessments, and for preparing the applications for Package 1: stages 1 and 2 is provided within the Consent Strategy.

1 Introduction

Queenstown Lakes District Council (QLDC), the New Zealand Transport Agency (NZ Transport Agency) and Otago Regional Council (ORC) are working collaboratively as part of the Wakatipu Way to Go initiative, to create an active travel network in the Wakatipu Basin that is reliable, resilient and connects communities, encouraging residents and visitors of all ages and abilities to walk and cycle.

Beca Ltd (Beca) has been commissioned by QLDC to undertake a Single Stage Business Case (SSBC) for the Wakatipu Active Travel Network (the project) to identify a preferred network.

The Consent Strategy has been prepared by Beca as an appendix to the SSBC to identify the statutory approvals that may be required to authorise the preferred network and recommend an approach for gaining these approvals.

The key components of the Consent Strategy are:

- A brief overview of the project
- Identification of the project's consenting objectives
- A summary of the Environmental and Social Responsibility Screen
- Initial identification of the statutory approvals required
- Discussion of the preferred approvals pathway, including a summary of associated risks
- Review of the technical assessments required to support applications
- Estimated costs for preparing applications

The SSBC recommends delivery staging for the preferred network and the Consent Strategy considers implementation of Package 1: Stages 1 and 2 (being those designed and delivered up to 2024). The Consent Strategy does not provide a specific approvals pathway for delivery beyond 2024 as specified in Package 2, although the likely consents required for the routes that make up this package have been identified. During the next pre-implementation phase of the project the detailed design undertaken will refine and change the SSBC design, and therefore the statutory authorisations required may also change. Additionally, as QLDC's Proposed District Plan progresses through the plan making process some of the rules may change, while new rules may be included and others deleted. For these reasons it is recommended that this Consent Strategy is reviewed during the pre-implementation phase for Package 1 and again for Package 2.

This Consent Strategy has been informed by the following legislation and planning documents:

- Resource Management Act 1991
  - QLDC's Operative District Plan (ODP)
  - QLDC's Proposed District Plan (PDP)
  - ORC's Regional Plan: Water for Otago (Water Plan)
- Reserves Act 1977
- Conservation Act 1987
- National Environmental Standards for Assessing and Managing Contaminates in Soil to Protect Human Health 2011
- Heritage New Zealand Pouhere Taonga Act 2014

2 Project Scope

2.1 Preferred Network

The SSBC identifies a preferred network of cycle / walking trails around the Wakatipu Basin. The preferred network includes 12 routes connecting key destinations and involves upgrades to existing trails as well as new trails. The 12 routes have been classified as either primary, secondary or tertiary with preliminary design undertaken for primary routes and concept design for secondary and tertiary routes. The typologies, treatments and facilities vary over and between the routes, depending on the expected user of the route and the nature of the surrounding environment.

Table One below provides a summary description of the existing trail (if one exists) and the proposed trail for each of the routes which make up the preferred network.

Route	Classification	Existing Characteristics	Description of proposed option
Jacks Point to Frankton	Primary	No existing trail. Recreational riding on state highway or alternatively experienced riders via the existing trail that links Jacks Point to Kelvin Heights.	A new shared path from the Jacks Point and Hanley Farm subdivisions that largely follows an existing utility / pipe easement corridor across farmland, before joining SH6 west of Boyd Road. Follows along the western side of SH6 until separating at the Kawarau Bridge. Includes retaining walls alongside SH6.
Kelvin Heights to Frankton	Secondary	Existing commuter and recreational route along waterfront which has a steep grade, tight and narrow corners and is shared with pedestrians.	Combination of existing shared trail along the waterfront and an alternative on road cycling (greenway) along parts of Peninsula Road towards Frankton. Steeper gradients along the shared trail will be evened out. Speed humps along Peninsula Road.
Queenstown to Frankton	Primary	Existing popular commuter and recreational route, including on and off road sections. Off road sections are largely unsealed and shared with pedestrians.	Combination of on road cycling (greenway) at Queenstown end (Park Street) then upgrade of the existing separated trail, to provide a continuous shared path for both cyclists and pedestrians. Raised tables along Park Street. Retaining walls along shared path.
Lake Hayes Estate to Frankton	Primary	North: Existing separated commuter trail, crossing the Shotover River via the Old Shotover Bridge. South: No existing route	North: Combination of upgrade of the existing separated trail to provide a shared path, separated cycle lane on south side of SH6 (Frankton – Ladies Mile Highway), shared path over Old Shotover Bridge, and on road cycling along Jims Way (greenway), new

			shared path to the north west of SH6, crossing SH6 via refuge island, Shared path along eastern side of SH6. Retaining walls alongside shared path. South: New bridge to the south of Lake Hayes Estate over the Kawarau River. Shared path which largely follows paper road on south side of Kawarau River. New bridge over valley before short stretch of shared path along western side of Boyd Road, then new bridge over Kawarau River connecting to southern extent of Frankton.
Arthurs Point to Queenstown	Primary	Challenging commuter and recreational trail which is unsealed. On road cycling heading into Queenstown.	Short stretch of shared path from southern side of Edith Cavell Bridge before greenway along McMillan Road. Shared path along western side of George Road. As George Road heads into Queenstown, parts of route are separated cycle lane. New shared use bridge across waterway on south side of Robins Road. Shared path along Robins Road and within Memorial Park heading into Queenstown. Retaining walls along shared path.
Fernhill to Queenstown	Primary	Challenging commuter and recreational route primarily on roads.	Upgrades of on road separated cycle lanes. Greenway along Cameron Place before shared path along existing trail through Ben Lomond Scenic Reserve. Greenway along Thompson Street and Brunswick Street into Queenstown. Retaining wall along shared path.
Jacks Point to Kelvin Heights	Tertiary	Recreational trail which is largely off road with challenging topography.	Route alongside road heading west from Jacks Point then will utilise the existing trail north to Kelvin Heights with work to widen and lessen grade.
Arthurs Point to Frankton	Secondary	Combination of on road and off road recreational riding with challenging topography.	Route travels local roads heading north from Arthurs Point then new trail setback from north bank of Shotover River. New bridge over Shotover River then heading south towards eastern side of Lake Johnson before

			connecting to local roads north Frankton.
Arrowtown to Lake Hayes Estate	Secondary	Combination of on road and off road recreational riding.	Off road path alongside Arrowtown Lake Hayes Road, joining existing trail along eastern side of Lake Hayes, before off road path alongside SH6.
Arrowtown to Arthurs Point	Secondary	Recreational riding on road.	Largely off road path along north side of Malaghans Road, before going off road heading towards Arthurs Point / Shotover River.
Queenstown Town Centre	Internal Connections	On road cycling.	Upgrades to on road routes and existing trail through recreation reserve, including new bridge.
Frankton Connections	Internal Connections	North: Combination of existing off road cycle trail and on road cycling along SH6 and local roads. South: Combination of on road cycling and recreational off road.	North: Off road shared path on southside of SH6 (Frankton – Ladies Mile Highway) crosses SH6 (Kawarau Road) via existing signal controlled crossing. Stretches of shared path or greenway along local roads. South: Connection with shared path from Frankton beach waterfront, via existing underpass below Kawarau Road then along eastern side of Kawarau Road before greenway along local roads.

Table One: Route Descriptions

2.2 Implementation Approach

Design and delivery of the preferred network has been split into two distinct work packages. These packages and the staging within have been developed with Key Stakeholders based on a review of network groups, the proposed funding splits and desired strategic outcomes for the preferred network. The delivery programme has sought to take advantage of available funding and address existing safety of level of service issues on the existing network. It is noted that the routes specified in the delivery programme do not directly correspond with routes 1-12, but are sometimes partial or amalgamated routes.

It is anticipated the preferred network will be delivered over a 10-year period. Package 1: Stage 1 is expected to be delivered between 2019 and 2021, while Package 1: Stage 2 is expected to be delivered between 2021 – 2024. The timeframes align with the two National Land Transport Programme funding periods for this time. Package 2 will be delivered post 2024 and will be subject to further assessment.

3 Project Consenting Objectives

The consenting objectives for the project are:

- Facilitate a robust consenting process through continued integration between planning and design teams to limit, where practical, land take and to mitigate adverse effects;
- Minimising approval risks through engagement with statutory bodies throughout the design and consenting process during the pre-implementation phase of the project;
- Minimise approval risk around purchase of private property and gaining written consent from requiring authorities with existing designations for the land required for the preferred network;
- Work with Kāi Tahu, directly affected landowners, and key stakeholders (as relevant) to contribute to the design outcomes and development of mitigation strategies during the pre-implementation phase of the project;
- Obtain the necessary statutory approvals in time for staged delivery;
- To attain practicable, implementable, consent / designation conditions that are clear and that deliver the most optimal environmental outcomes.

4 Updated Environmental and Social Responsibility Screen

An Environmental and Social Responsibility Screen (Screen) was undertaken on the short list of options for the 12 routes to inform selection of the preferred network. The Screen is categorised into five topic areas: General, Natural Environment, Cultural and Historic Heritage, Landscape and Urban Design and Health and Wellbeing.

The Screen has been updated based on the concept and preliminary designs for Package 1: Stages 1 and 2. The updated Screen is contained as Appendix A to this Consent Strategy.

5 Required Approvals

The following statutory approvals are required for the Wakatipu Active Travel Network project based on a review of the preliminary designs for the primary routes and concept designs for the secondary and tertiary routes that make up the preferred network.

5.1 Queenstown Lakes District Council

QLDC's District Plan is currently under review, therefore consideration must be given to both the Operative District Plan (ODP) and the Proposed District Plan (PDP). All references to the PDP are to the Stage 1 and 2 Decisions Version, including chapters and maps. Notification of Stage 3 is expected in the 3rd quarter of 2019. As the PDP progresses through the plan making process some of the rules may change, while new rules may be included and others deleted.

5.1.1 Designations

A designation allows a requiring authority to undertake activities in keeping with their purpose of the designation, without the need to comply with the zone rules or obtain resource consent from QLDC (a designation has no implications on whether or not resource consent is required from ORC), provided the purpose and any conditions of the designation can be complied with. Instead, an outline plan or an

application to waive the requirement for an outline plan must be submitted to QLDC prior to the work commencing, pursuant to section 176A of the RMA.

The preferred network passes through and crosses a number of existing designations, as set out in the following table.

PDP Reference	Requiring Authority	Purpose	Conditions (PDP Reference)
All QLDC roads	QLDC	Road	No
State Highway network	NZ Transport Agency	To control, manage and improve the State Highway Network	Stretches of the State Highway network are subject to conditions
14	MoE	Education Purposes (Queenstown Primary School)	Yes, C.7
26	QLDC	Sewage Pump Station (Cedar Drive Waste Water Pump Station)	Yes, C.17
27	QLDC	Sewage Pump Station (Bayview Road Waste Water Pump Station)	Yes, C.17
29	QLDC	Multi-Purpose indoor and outdoor recreation cultural and conference complex	Yes, C.22
33	QLDC	Sewage Pump Station (Willow Place Waste Water Pump Station)	Yes, C.17
36	QLDC	Sewage Pump Station (Park Street Lift Waste Water Pump Station Kawarau Place)	Yes, C.17
83	QLDC	Local Purpose (Drainage) Reserve and Waste Water Pump Station	Yes, G
84	NZTA	State Highway Purposes	Yes, A
154	QLDC	Recreation Reserve (Motor Park) (Frankton Motor Park)	Yes, F
155	QLDC	Recreation Reserve	Yes, B
156	QLDC	Recreation Reserve (Frankton Domain)	No
159	QLDC	Recreation Reserve	Yes, B
165	QLDC	Frankton Marina Local Purpose Reserve	Yes, B
168	QLDC	Recreation Reserve (Lake Hayes showground, hall, domain)	Yes, B

PDP Reference	Requiring Authority	Purpose	Conditions (PDP Reference)
169	QLDC	Recreation Reserve and Tree Planting (Arrowtown-Lake Hayes Road)	Yes, B
179	QLDC	Recreation Reserve (Access to waterfront / Peninsula Road)	Yes, B
180	QLDC	Recreation Reserve (Jardine Park, Oregon Drive)	Yes, B
184	QLDC	Recreation Reserve and Esplanade Reserve (Lakeshore, Willow Place, Peninsula Road, Kelvin Peninsula.	Yes, B
185	QLDC	Recreation Reserve (Adjacent to Horne Creek Camp, park Street and Coronation Drive.	No
202	QLDC	Recreation Reserve	Yes, B
205	QLDC	Recreation Reserve (Queenstown Gardens)	Yes, B
210	QLDC	Queenstown Recreation Reserve (Corner Man, Camp, Isle and Boundary Streets)	Yes, B
222	QLDC	Tree Planting Reserve	No
226	QLDC	Recreation Reserve (Warren park, Queenstown)	Yes, B
248	QLDC	Recreation Reserve (Lake Esplanade)	Yes, B
258	QLDC	Local Purpose Reserve (Beautification) (Jims Way)	No buildings permitted
290	QLDC	Local Purpose Reserve (Beautification) (McTaggart Park, Glenda Drive, Wakatipu)	Yes, B (for LOT 13 DP322851)
320	QLDC	Local Purpose Reserve (Beautification)	No buildings permitted
333	QLDC	Sewage Pump Station (Arrowtown Lake Hayes Road Waste Water Pump Station 1)	Yes, C.65
343	QLDC	Recreation Reserve	Yes, B
371	QLDC	Roading Purposes	Yes, A
373	QLDC	Forestry Operations	Yes, C71

PDP Reference	Requiring Authority	Purpose	Conditions (PDP Reference)
469	QLDC	Water Pump Station (Lomond Crescent Water Pump Station – Lomond Crescent Road Reserve)	Yes, C.17
525	QLDC	Esplanade Reserve	No
535	QLDC	Recreation Reserve	Yes, B
545	QLDC	Recreation Reserve (Millbrook Cricket Ground)	Yes, B

Table Two: Existing designations through which the preferred network passes

It is considered the new or upgraded cycle / walking trails would meet the purpose of 'recreation', 'road' and 'state highway' designation purposes, subject to agreement of the requiring authorities, being QLDC and the NZ Transport Agency respectively. However, consideration will need to be given to both the conditions and the boundary of the designations. All QLDC roads are deemed to be designated for the purpose of road and are not subject to any conditions. Similarly, the NZ Transport Agency's designation for the state highway network allows for control, management and improvement of the network and only certain portions of the network are subject to conditions. However, QLDC's designations for recreation reserves are subject to 10 conditions, as set out in both the ODP and PDP and repeated in the following table:

Condition	
1 – Setback from Road	All structures and buildings shall be setback from the road boundary as follows: All Zones except Rural and Town Centre: 5m Rural Zones: 10m
2 – Separation from Neighbours	All structures and buildings shall be setback from internal boundaries as follows: All zones except Rural and Town Centre: 5m Rural Zones: 10m
3 – Height	No structure of building shall exceed the following maximum heights: All zones except Rural and Town Centre: 8m Rural Zones: 10m
4 – Recession Lines	Within Residential and Township Zones or on boundaries adjoining a residential zone, buildings shall not project beyond a building envelope constructed by a recession line inclined towards the site at the following angles and commencing at 2.05m above ground level at any given point along each internal boundary: Northern Boundary: 55 degrees Western and Eastern Boundaries: 45 degrees Southern Boundaries: 35 degrees

5 – Site Coverage	A single building shall not exceed 100m2 in total floor area. The combined total of all buildings on site shall not exceed a maximum of 5% of the total site area. These standards are exclusive of play equipment.
6 – Access and Parking	Shall be provided in accordance with the general Transport Rules.
7 – Surfacing	No more than 30% of the site area in all Zones except Rural and Town Centre and 20% of the site area in Rural Zones shall be covered by impervious surfaces including courts, footpaths, swimming pools, car-parking areas and/or areas under lease arrangements.
8 – Glare	All exterior lighting shall be directed away from adjacent properties and roads. No activity shall result in greater than a 2.5 lux spill, horizontal and vertical, of light on to any adjoining property in all zones except Rural and Town Centre, measured 2 metres inside the boundary of the adjoining property.
9 – Noise	Activities, other than outdoor recreation, shall be conducted such that the following noise levels are not exceeded at the boundary of the site: All Zones except Rural: during day time 40dB LAeq(15 min); during night time 30dB LAeq(15 min) Rural Zones: during day time 55dB LAeq(15 min); during night time 40dB LAeq(15 min)
10 – Hours of Operation	Where a site adjoins or faces a residential area no activities shall be conducted from the site between the hours of midnight and 7am.

Table Three: Conditions of Recreation Reserve Designations from ODP

Having regard to the above, there are likely to be instances where the preferred network passes through a designation for a recreation reserve but is unable to comply with the conditions, despite a trail being in accordance with the purpose of the designation. In particular setbacks of structures (retaining walls, boardwalks etc) from road or neighbour boundaries.

Where conditions of a designation cannot be met an alteration to the designation can be sought under section 181 (or subsequently s168/168A/171) of the RMA. An alteration to a designation could be sought to change the conditions of designations for recreation reserves to allow for cycle / walking trails and extend the boundaries of road or state highways to physically accommodate cycle / walking ways. Any alteration to remove conditions from recreational reserve designations will need to be discussed with QLDC Parks and Recreation, and the implications of the removal carefully thought through. Alternatively, a resource consent could be sought where works do not meet designation conditions, which may be a less problematic approval pathway.

The decision on whether or not the alteration is minor sits with QLDC as the Regulatory Authority. If QLDC determines the alteration is not minor, it will be treated like a new designation (s168/168A/171 RMA).

When an activity is not in accordance with the purpose of the designation (such as designations for pump stations or other infrastructure), then the rules of the underlying zoning apply and resource consent, if required, will need to be sought. Pursuant to s176(1)(b) of the RMA, written consent is required from a requiring authority to do anything in relation to designated land that would prevent or hinder the public work or project to which the designation relates. Therefore, written approval will be required from QLDC and NZ

Transport Agency as the requiring authorities for the designations through which the preferred network passes.

5.1.2 Resource Consents

Resource consents may be required from QLDC where designations are not (or cannot be) relied upon the authorise the preferred network. Various typologies, treatments and facilities utilised along and between the 12 routes that make up the preferred network. Despite these differences, all cycle / walking trails are all considered to fall within the ODP's definition of 'recreational activity':

> *"The use of land and/or buildings for the primary purpose of recreation and/or entertainment. Excludes any recreational activity within the meaning of residential activity"*

The PDP also defines the 'active travel network' and 'recreational tracks':

> *"The network of commuter and recreational trails, pathways, and footpaths that provide for transport modes that rely on human power, including electric bicycles, primarily walking and cycling, and includes those that are located within and outside of the road network."*
>
> *" a sealed or unsealed pathway or greenway within Council controlled reserves that is used for informal or organised recreational purposes such as walking, cycling, horseriding, or fitness."*

Construction of the new and upgraded trails will involve earthworks and may involve the erection of buildings / structures, which may require resource consent dependant on zoning.

The PDP's definition of 'building' is relevant for retaining walls, boardwalks and other associated structures:

> *"Shall have the same meaning as the Building Act 2004, with the following exemptions in addition to those set out in the Building Act 2004:*
>
> *a. fences and walls not exceeding 2m in height;*
>
> *b. retaining walls that support no more than 2 vertical metres of earthworks;*
>
> *c. structures less than 5m² in area and in addition less than 2m in height above ground level;*
>
> *d. ….."*

In addition, there may be other site-specific activities that require resource consent, such as works within the dripline of protected trees or the erection of signage.

The following table summarises the relevant rules of the ODP and PDP and considers whether resource consent is likely to be necessary, based on review of the concept and preliminary design plans. The below table does not consider all zones through which the preferred network passes, but instead focuses on the most common zones, being Rural General, Rural Lifestyle, Low Density Residential and High Density Residential in the ODP; and Rural, Informal Recreation, and Low Density Suburban Residential in the PDP. It is noted that a large portion of the preferred network falls within road corridors.

Chapter	Relevant rules	Comments
Operative District Plan		
Chapter 5: Rural Areas	Rule 5.3.3.1 states that any activity which is not listed as a prohibited, non-complying, discretionary or controlled activity and which complies with all the relevant site and zone standards is a permitted activity.	Recreational activities or walking / cycling trails are not listed and therefore are permitted, providing site and zone standard are complied with. Any retaining walls (of the dimensions considered to be a building), toilet

	Rule 5.3.3.3.i states that the construction of any building, except for those expressly permitted under Rule 5.3.3.2, is a discretionary activity. Rule 5.3.3.3.iv states that any structure which passes across the surface of any lake and river and is attached to the bank of any lake and river is a discretionary activity. Rule 5.3.3.3.xii states that any structure within 10 metres of a road boundary, greater than or equal to 5 metres in length, and greater than or equal to 1 metre in height and less than 2 metres in height requires resource consent as a discretionary activity.	blocks or other structures in the rural zone will require resource consent as a discretionary activity. Any bridges or boardwalks over water in the rural zone will require resource consent as a discretionary activity. Any structure within 10m of a road boundary will require resource consent as a discretionary activity.
Chapter 7: Residential Areas	Rule 7.5.3.1 states that any activity which is not listed as a prohibited, non-complying, discretionary or controlled activity and which complies with all the relevant site and zone standards is a permitted activity. Rule 7.5.3.4 states that any activity which is not a non-complying activity or prohibited activity, but does not comply with one or more site standards, is a discretionary activity. 7.5.6.2ii(a) and 7.5.6.2iii are site standards for minimum setbacks for buildings (of non-residential activities) from road boundaries and internal boundaries/neighbours.	Recreational activities or walking / cycling trails are not listed and therefore are permitted, providing site and zone standard are complied with. Any retaining walls (of the dimensions considered to be a building), toilet blocks or other structures may require resource consent as discretionary activity if setbacks cannot be achieved.
Chapter 8: Rural Living Areas	Rule 8.2.2.1 states that any activity which is not listed as a prohibited, non-complying, discretionary or controlled activity and which complies with all the relevant site and zone standards is a permitted activity. Rule 8.2.2.3v states that any structure within 10 metres of a road boundary, greater than or equal to 5 metres in length, and greater than or equal to 1 metre in height and less than 2 metres in height requires resource consent as a discretionary activity.	Recreational activities or walking / cycling trails are not listed and therefore are permitted, providing site and zone standard are complied with. Any structure within 10m of a road boundary will require resource consent as a discretionary activity.
Chapter 13: Heritage	Rule 13.2.3.1 states that alterations to Category 3 heritage structures (not including minor repairs) is a controlled activity.	Any alterations to heritage structures will require resource consent. The preferred network crosses the Kawarau Falls Bridge and the Old Shotover Bridge, which are Category 2 and 3 heritage structures respectively.

	Rule 13.2.3.2 states that alteration to Category 1 or 2 heritage structures is a discretionary activity. Rule 13.2.3.2 states that any works, including paving, within the drip line of a protected tree is a discretionary activity.	It is understood no physical works are proposed to these bridges and therefore resource consent is unlikely to be triggered under these rules. Any works within the dripline of protected trees will require resource consent as a discretionary activity.
Chapter 18: Signs	Signs are generally permitted in all zones under Rule 18.2.3, provided they do not exceed maximum sizes specified. Within the Open Space Zone, Jacks Point & Henley Downs Zone all signs require resource consent as either controlled (Rule 18.2.4) or discretionary (18.2.5) activities. Flashing signs are prohibited in all zones (Rule 18.2.6).	A case by case assessment will be required for all signage to determine whether resource consent is required, based on the size of the sign and the zoning. As flashing signs are prohibited under the ODP, resource consent could not be obtained for their placement.
Chapter 22: Earthworks	The Earthworks Chapter sets out site standards, beyond which resource consent is required for earthworks. The site standards relate to zoning and include volume; height of cut and fill and slope; setbacks from waterways; and other factors. Generally greater volumes of earthworks are permitted in rural areas compared to urban settings. Earthworks greater than 20m3 within 7m of a waterbody will require consent as a restricted discretionary activity, irrespective of zoning. Rule 22.3.2.2 states that earthworks associated cycling and walking tracks (including boardwalks) is a controlled activity in the Open Space Zone, irrespective of the volume.	Details of the earthworks associated with construction of the preferred network are unknown at this stage, however it is considered likely earthworks for the majority of the preferred network that falls outside of a road corridor will trigger resource consent as a restricted discretionary activity.
Proposed District Plan (Stage 1 and 2 Decisions Version)		
Chapter 7: Low Density Suburban Residential	Rule 7.4.11 states that activities not listed (in Table 7.4) are non complying. However, Chapter 29 takes permits the development of the active transport network and this takes precedence over zone rules which make activities not listed non complying or discretionary. 7.5.8 provides standards for setbacks of buildings from road (being 4.5m) and other	Development of the active transport network is permitted. Where retaining walls or other buildings cannot meet the minimum setbacks, they will require resource consent as restricted discretionary activities.

	boundaries (being 2m). 7.5.14 specifies a 7m setback from waterbodies.	
Chapter 21: Rural	Rule 21.4.11 states that the construction of any building, not provided for by any other rule, is a discretionary activity. Rule 21.4.22 states that recreation and/or recreational activities are permitted, providing all rules listed in the activity and standards table are complied with. Rule 21.7.1 states that any structure which is greater than 5 metres in length, and between 1 metre and 2 metres in height must be located a minimum distance of 10 metres from a road boundary, or resource consent is required as a restricted discretionary activity. Rule 21.15.8 states that any structures or mooring that passes across or through the surface of any lake or river or attached to the bank or any lake or river in those locations on the District Plan Maps where such structures or moorings are shown as being non-complying, is a non complying activity	Recreational activities are generally permitted in the Rural Zone. Any retaining walls (of the dimensions considered to be a building), toilet blocks or other structures in the rural zone will require resource consent as a discretionary activity. Structures within 10m of a road boundary may require resource consent as a discretionary activity depending on their size. Boardwalks or bridges may require resource consent as non complying activities where they are within such areas identified on the District Plan maps.
Chapter 25: Earthworks (Stage 2)	Rule 25.4.2 states that earthworks that exceed volume standards are restricted discretionary Rule 25.4.5. states that the following are discretionary activities: modify, damage or destroy a wāhi tapu, wāhi tūpuna or other site of significance to Māori whether identified on the Planning Maps or not that modify, damage or destroy a listed heritage feature within the setting or extent of place of a listed heritage feature Rule 25.4.6 Earthworks within a Statutory Acknowledgment Area, Tōpuni or Nohoanga identified on Planning Map 40 is a discretionary activity	Details of the earthworks associated with construction of the preferred network are unknown at this stage, however it is considered likely earthworks for the majority of the preferred network will trigger resource consent as a restricted discretionary activity at a minimum. Kāi Tahu have indicated a number of routes traverse sites of significance and any earthworks within these areas is likely to trigger resource consent as a discretionary activity.
Chapter 23: Historic Heritage	Rule 26.5.6 states that external alterations to Category 1 heritage features is a discretionary activity, while external	Any physical works to a heritage feature will require resource consent. The preferred network crosses the Kawarau Falls Bridge and the Old

	alterations to Category 2 and 3 heritage features is a restricted discretionary activity. Rule 26.5.8 provides for development within the setting or extent of heritage feature. New buildings and structures and earthworks requiring consent under Chapter 5 is a discretionary activity for Category 1 heritage features and restricted discretionary for Category 2 and 3 heritage features.	Shotover Bridge, which are Category 2 and 3 heritage structures respectively. It is understood no physical works are proposed to these bridges and therefore resource consent will not be required under Rule 26.5.6. During the pre-implementation phase it will need to be confirmed whether works (i.e. earthworks or retaining walls) on the approach to these bridges, and the Edith Cavell Bridge, will trigger resource consent under Rule 26.5.8.
Chapter 29: Transport	Rule 29.4.5 relates to transport activities outside a road and states that bus shelters, bicycle parking and development of the active transport network is permitted. Rule 29.4.14 relates to activities within a road and states that construction of new transport infrastructure and the operation, use, maintenance and repair of existing transport infrastructure is permitted.	Development of the active transport network is permitted as is the construction of new transport infrastructure a within a road. If Rule 29.4.14 remains unchanged once the PDP is operative, works within a road could be undertaken without the need to submit an outline plan.
Chapter 31: Signs	Rule 31.4.14 states that any sign associated with a road network activity on or above roads is a permitted activity. Rule 31.4.15 states that signs in or above pedestrian paths and cycleways are permitted provided they comply with the size standards for the zone.	Signs within the road corridor are permitted, while a case by case assessment will be required for other signage to determine whether resource consent is required, based on the size of the sign.
Chapter 32: Protected Trees	Rule 32.4.3 states that any works within the root protection zone of a protected tree is a discretionary activity.	Any works within the root protection zone of protected trees will require resource consent as a discretionary activity.
Chapter 38: Open Space and Recreation Zones (Stage 2) 38.9.27	Rule 38.9.27 states that recreational tracks (walking, horse and cycling tracks) are permitted in all Open Space and Recreation Zones, provided the activity complies with the standards. Rule 38.9.24 states that new buildings associated within a permitted activity and not otherwise listed (in Table 38.1) are permitted provided they comply with the standards. 38.10.4 provides standards for setbacks of buildings from Internal and Road boundaries	Recreational tracks are permitted in the Informal Recreation Zone and buildings (retaining walls) are also permitted, providing they meet setback standards. Where retaining walls or other buildings cannot meet the minimum setbacks, they will require resource consent as restricted discretionary activities.

	(being the setbacks from the adjoining zone). 38.10.5 specifies a 10m setback from waterways.	

Table Four: Summary of potential resource consent requirements under ODP and PDP

5.2 Otago Regional Council

Otago Regional Council's Regional Plan for Water considers the use, development and protection of freshwater resources of the Otago Region, the beds and margins of water bodies, and the issues associated with that use, development and protection. Of relevance are the rules relating to land use on lake or river beds.

Rule	Explanation	Comments
13.2 The erection or placement of a structure	Rules 13.2.1.7, 13.2.1.7A and 13.2.1.7B generally permit the erection or placement of any single span bridge or a boardwalk, provided certain criteria can be met. Larger bridges, or those that cannot comply with the specified criteria, will require resource consent as discretionary activities under Rule 13.2.3.1	A case by case assessment will be required to determine whether any of the new bridges proposed as part of the preferred network meet the criteria for permitted activities. It is likely resource consent will be required.
13.5 Alterations of the bed of a lake or river, or of a Regionally Significant Wetland	Rule 13.5.1.1 permits the disturbance of river or lake beds associated with the erection, placement, repair etc of any structure over that river or lake, provided certain conditions can be met, including a 10 hour duration for carrying out the works. Bed disturbance which cannot meet the conditions of Rule 13.5.1.1 will require resource consent as a discretionary activity under Rule 13.5.3.1.	The disturbance of river / lake beds associated with any new bridge or boardwalk will require resource consent as a discretionary activity. A case by case assessment will be required to determine whether resource consent is required.
14.4 Structures other than defences against water on the margins of lakes and rivers	Rule 14.4.1.1 provides for the erection or placement of any structure within 7 metres of the margin of a lake or the top of the bank of a river, as a permitted activity, provided it does not obstruct works to avoid natural hazards and ORC is notified of the works.	Consideration should be given to the design of any structure within 7m of a lake or river to ensure it does not affect ORC's ability to carry out works for the purpose of hazard avoidance or mitigation.

Table Five: Summary of potential resource consent requirements under ORC's Regional Plan for Water

5.3 Reserves Act 1977

The preferred network passes through land managed under the Reserves Act, including Recreation, Nature, Scenic and Local Purpose Reserves. The reserves are managed by QLDC or the Department of Conservation (DOC) and approval will be required from the relevant party for works within the reserves. In addition, some of the reserves are subject to Reserve Management Plans formulated under the Reserves Act, which provide for ongoing management and future development of the reserves. Any substantial change to the use, enjoyment, maintenance, protection, and preservation of such a reserve may trigger a

comprehensive review of that Reserve Management Plan under s41 of the Reserves Act. The review process includes notification of the updated Reserve Management Plan for public comment.

5.4 Conservation Act 1978

The preferred network passes through public conservation land. Concessions are required from DOC for use of public conservation land for reasons other than personal recreation.

5.5 NES for Assessing and Managing Contaminates in Soil to Protect Human Health 2011

Resource consent may be required for earthworks under the National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS). In particular, the NESCS applies to earthworks associated with sampling and disturbing soil on land where an activity or industry identified in the Ministry for Environment's Hazardous Activities and Industries List (HAIL) has been or is being undertaken. In these circumstances, the NESCS applies as well as the District Plan provisions.

Road reserves are not typically included in the Ministry for the Environment's HAIL, however, when works are being undertaken in the road reserve, the adjacent properties are investigated to determine if there has been a migration of contaminants from adjacent land in sufficient quantity that it could be a risk to human health or the environment.

A Preliminary Site Investigation will be necessary during the pre-implementation phase of the project to identify HAIL sites and establish whether there is a risk to human health and consequently whether resource consent is required under the NESCS. Any resource consent will likely need to be supported by a Detailed Site Investigation.

5.6 Heritage New Zealand Pouhere Taonga Act 2014

The Heritage New Zealand Pouhere Taonga Act makes it unlawful for any person to modify or destroy, or cause to be modified or destroyed, the whole or any part of an archaeological site without an Archaeological Authority issued by Heritage New Zealand.

An archaeological site is defined in the Heritage New Zealand Pouhere Taonga Act 2014 (HNZ Act) as any place in New Zealand (including buildings, structures or shipwrecks) that was associated with pre-1900 human activity, where there is evidence relating to the history of New Zealand that can be investigated using archaeological methods. An archaeological site may be recorded or unrecorded.

Where no known archaeological sites are present, works may be undertaken in accordance with an accidental discovery protocol. However, if an archaeological site is discovered during works, all works in the vicinity of the site must be stopped until an authority is obtained (including a 15 day stand down period after any authority is issued to allow for any appeal to be lodged). Where there are no known sites, but there is a high probability of sites being found, it is generally considered best practice to obtain an authority prior to construction works commencing.

A review of the New Zealand Archaeological Association's online archaeological site recording scheme (ArchSite) identifies many registered archaeological sites in proximity to the preferred network. Further, Kāi Tahu have identified a particular area of cultural significance, being a wāhi tūpuna (ancestral landscape) known as the traditional settlement of Tititea.

A Preliminary Archaeological Assessment will be required during the pre-implementation phase of the project to understand the likelihood of discovering archaeological remains along each route and whether Archaeological Authorities should be sought. It is important that the Preliminary Archaeological Assessment be undertaken in collaboration with Kāi Tahu, including the appointment of any archaeologist to undertake

this work. Collaborative working with Kāi Tahu should be instigated early in the next phase of the project, and should include (but not be limited to) understanding and agreeing any specific requirements around:

- Construction methodology and practices;
- Pre-construction investigations;
- Pre and during construction protocols and cultural monitoring requirements.

Any Archaeological Authority should as appropriate include the above agreed requirements. Additionally, a project specific Accidental Discovery Protocol should be developed in collaboration with Kāi Tahu.

5.7 Summary of Statutory Approvals Required for Package 1: Stages 1 and 2

The following table provides a summary of the likely approvals required for Package 1 based on a high-level desk based assessment of the concept and preliminary design plans. The table does not consider the likely requirements for Archaeological Authorities or consents under the NESCS as these will require preliminary assessments to determine whether approval is required and are dependent on detailed design undertaken during the pre-implementation phase of the project. Both have been addressed in earlier sections of this Consent Strategy.

Additionally, the table does not consider possible consenting requirements for signage and minor structures including toilet blocks, bike shelters or guard rales as these will require a case by case assessment dependant on size and location.

Appendix B summarises the likely approvals required for routes 1-12, including those routes, or parts thereof, which make up Package 2.

Route	ODP Zones	PDP Zones	Bridges, Retaining Walls	Earthworks	Designation	Conservation or Reserve Land	Other Notations
Package 1: Stage 1							
Route A2 – Shotover Bridge to State Highway 6	Rural General Road Corridor	Rural	There will be retaining walls and proposed guard rails along the route.	Likely to exceed zone standards	Passes through/in QLDC 258 (Local purpose reserve and 320 (Local Purpose Reserve) All QLDC Roads are designated for roading purposes NZTA State Highway Network	Passes through DOC protected land – Shotover River, Tuckers Beach	Route crosses Heritage Feature 22 (old Shotover Bridge) however it is unlikely to involve physical works on bridge itself. Consideration should be given to the setting of the bridge. Flashing warning signs on Tuckers Beach Road Includes bike stands, water fountains, beach seats and path users stop signs.
Route A3 – Frankton North	Rural General Low Density Residential Road Corridor Special Zone (Frankton Flats)	Informal Recreation Community Purposes Local Shopping Centre	None identified	Will possibly exceed zone standards	NZTA State Highway Network Passes through QLDC 29 (Multi-purpose indoor and outdoor recreation, cultural and conference complex) QLDC 154 (Recreation Reserve, Motor Park) QLDC 156 (Recreation Reserve) QLDC 155 (Recreation Reserve) All QLDC roads are designated for roading purposes.	QLDC reserves managed under the Sunshine Bay to Kelvin Heights Reserve Management Plan.	Goes through the Frankton motor Camp/Council Owned Campground
Route A4 – Frankton Marina Upgrades	Rural General Low Density Residential	Informal Recreation	None identified	Unlikely	Designation 165 (Frankton Marina Local Purpose Reserve) All QLDC Roads are designated for roading purposes.	Passes through QLDC reserve	
Route A5 – Frankton South	Rural General Road Corridor	Rural Informal Recreation	None identified	Unlikely	NZTA State Highway Network All QLDC Roads are designated for roading purposes.	Passes QLDC reserve, being Kawarau Falls Scenic Reserve managed under a Reserve Management Plan.	Within proximity to Heritage Feature 40 (Kawarau Falls Bridge), however unlikely to involve physical works on bridge itself. Consideration should be given to the setting of the bridge.
Route A7 – Jacks Point to Frankton	Resort Zone (Jacks Point) Rural General	Rural Jacks Point	Culverts / small bridge over creeks along route	Likely to exceed zone standards May modify wāhi tapu	New Zealand Transport Agency 84 (State Highway purposes) All QLDC roads are designated for roading purposes	Passes through DOC protected land- Kawarau River	Kāi Tahu have identified a particular area of cultural significance, being a wāhi tūpuna (ancestral landscape) known as the traditional settlement of Tititea.

Route	ODP Zones	PDP Zones	Bridges, Retaining Walls	Earthworks	Designation	Conservation or Reserve Land	Other Notations
Route A8 – Lake Hayes to Frankton	Rural General	Rural Rural Landscape	Four culverts along the route 2 x new bridge over Kawarau river New bridge over creek.	Likely to exceed zone standards. May modify wāh tapu	Passes through QLDC 159 (Recreation Reserve)	Passes through DOC Protected Land – Kawarau River Passes through QLDC Recreation Reserve	Within a landscape overlay (ONL and RCL). Kāi Tahu have identified a particular area of cultural significance, being a wāhi tūpuna (ancestral landscape) known as the traditional settlement of Tititea.
Package 1: Stage 2							
Route B2 – Fernhill To Queenstown	Low Density Residential Rural General High Density Residential Road Corridor	Informal Recreation Lower Density Suburban Residential Medium Density Residential High Density Residential Rural	Retaining wall in reserve land.	Will possibly exceed zone standards for retaining walls.	Passes through QLDC 248 (Recreation); 373 (Forestry Operations) and 469 (Water pump station). All QLDC Roads are designated for roading purposes.	Passes through DOC Protected Land: Ben Lomond Scenic Reserve (recreation). Under the Ben Lomond and Queenstown Hill Reserve Management Plan Passes through QLDC Recreation Reserve	Within a landscape overlay (ONL). Potentially in drip line of tree 239.
Route B3 – Queenstown to Frankton	Road Corridor High Density Residential Low Density Residential Rural General	Informal Recreation Lower Density Suburban Residential	Retailing wall along waterfront	Will possibly exceed zone standards for retaining walls.	Passes through QLDC 156 (Recreation Reserve); QLDC 165 (Frankton Marina Local Purpose Reserve) and QLDC 203 (Recreation Reserve) All QLDC Roads are designated for roading purposes.	Passes through QLDC Recreation Reserve (Frankton Recreation Reserve) Passes through QLDC Recreation Reserves.	Includes bench seats, bike stands and bike shelters along route.
Route C2 – Brecon Street	Road Corridor Queenstown Town Centre High Density Residential	Queenstown Town Centre High Density Residential	Retaining walls along route	Unlikely	All QLDC Roads are designated for roading purposes. Passes through / in close proximity to QLDC 213 (Cemetery)	Passes through / in close proximity to QLDC Local Purpose Reserve (Cemetery)	Works within dripline of protected tree 151
Route C5 – Arthurs Point to Queenstown	Road Corridor Rural General Visitor Accommodation Subzone Queenstown Town Centre	Informal Recreation Rural High Density Residential	Retaining walls, guard rails and culverts along route	Will likely exceed zone standards	Passes through QLDC 210 (Queenstown Recreation Reserve) and into QLDC 232 (Gorge Road Carpark) All QLDC Roads are designated for roading purposes.	Passes through QLDC Recreation Reserve (Queenstown Recreation Reserve) Passes through DOC Protected Land: Arthurs Point Gorge Scenic Reserve and Shotover River.	Within proximity to Heritage Feature 35 (Edith Cavell Bridge Arthur's Point), however does involve not involve works to bridge itself. Consideration should be given to the setting of the bridge.

Route	ODP Zones	PDP Zones	Bridges, Retaining Walls	Earthworks	Designation	Conservation or Reserve Land	Other Notations
	High Density Residential					Passes through DOC Protected Land: Conservation Area - McChesneys	Within a landscape overlay (ONL).
Route C7 – Lake Hayes to Shotover River	Road corridor Rural General Shotover Country Special Zone	Road Corridor Large Lot Residential A Informal Recreation	Retaining walls along route	Unlikely to exceed zone standards	Passes through QLDC 343 (Recreation Reserve) All QLDC Roads are designated for roading purposes.	Passes through QLDC Recreation Reserve	In close proximity to Heritage Feature 248 (Hicks Cottage, Old School Road)

Table six: Summary of Statutory Approvals Required for Package 1

6 Approvals Pathway

It is recommended a range of planning mechanisms be utilised for obtaining the relevant statutory approvals for the preferred network.

6.1 Designation Considerations

6.1.1 Outline plan

Where the entirety of a route falls within an existing designation for road or state highway purposes, an outline plan should be submitted to provide details of the cycle / walking trail. An outline plan is for information purposes only to the territorial authority, not open to public input and cannot technically be refused, although the territorial authority can request changes or recommend that outline plan is withdrawn. Depending on the typology / treatments proposed, the nature of the cycle / walking trail may be such that the QLDC, as the territorial authority, waives the requirement for an outline plan. This may be the case when only minor upgrades are proposed to existing cycle / walking trails within the existing road or state highway designation. Discussions with the QLDC Resource Consents team to determine if a waiver is appropriate is recommended and confirmation of this should be sought in writing.

An outline plan is typically required where the works would, if the designation was not in place and being relied on, trigger a resource consent. It is anticipated that some of the works proposed may not trigger the need to submit an outline plan, although as above this would need to be agreed with QDLC as the territorial authority.

If QLDC, as the territorial authority, considers an outline plan is required, then the recommendation is to submit a simple outline plan rather than a resource consent, as the outline plan cannot be refused.

6.1.2 Alteration to Designation

Where the majority of a route falls within an existing designation for road or state highway purposes, it is recommended that a NoR be sought to alter the boundaries of that designation to incorporate the full extent of the cycle / walking trail. An alteration does not require notification if it meets the following criteria:

- The effects on the environment of the alteration are no more than minor
- The alteration involves only minor adjustments to the boundary of the designation
- All directly affected land owners and occupiers provide their written approval
- The territorial authority (QLDC) and requiring authority agree with the alteration.

If an alteration cannot meet these criteria it is treated as a new designation which is likely to be a limited or publicly notified process. Should it be determined that an alteration does not meet the non-notified tests then an analysis of the risks of a notified designation versus resource consent process should be undertaken. Based on the concept and preliminary design plans, those routes largely contained within existing roading or state highways designations are able to accommodate the cycle / walking trail with only minor adjustments to the boundary of the designation. During detailed design in the pre-implementation phase, consideration should be given to minimising any land take, thereby limiting the extent of any boundary adjustment and reducing the number of directly affected land owners and occupiers. Proactive engagement will be required with directly affected land owners and occupiers.

Extending the footprint of road and state highway designations to incorporate a cycle / walking trail would provide security around construction, operation and ongoing maintenance of the cycle / walking trail. Once a designation is confirmed (or has interim effect) no person may do anything in relation to that land that would

hinder the cycle / walking way without the approval of the requiring authority. In addition, a designation provides for the following:

- The requiring authority can compulsorily acquire designated land under the Public Works Act 1981
- Owners of designated land can ask the Environment Court to direct the requiring authority to purchase or lease the designated land
- The requiring authority's intention for the designated land is clearly signalled to the local community.

Where a route falls within a designation for recreation reserve, an alteration to the designation could be sought to alter the boundaries where necessary and change the conditions of the designation to accommodate a cycle / walking trail. Despite a cycle / walking trail according with the purpose of designations for recreation reserves, changing the conditions to accommodate a cycle / walking trail is likely to be complicated. There may be wider implications for the reserve designation if the conditions are altered to accommodate the specifics of the active travel network. Early discussions with QLDC Parks and Recreation team will be imperative should this option be considered.

6.1.3 New Designation

A new designation could be sought for the purpose of a cycle / walking trail for those routes of the preferred network that are not contained within an existing road or state highway designation. However, this is not recommended as establishment of a cycle / walking track is generally permitted under both the ODP and PDP in most zones, with resource consents being required for earthworks and bridges/structures rather than the preferred network itself. It is anticipated that the majority of resource consents would be proceeded on a non-notified basis, while public or limited notification is more likely for designations.

While a designation can assist in the compulsory acquisition of land under the Public Works Act (PWA), QLDC as a Local Authority may not need to rely on a designation to compulsory acquire property under the PWA. Should the situation arise where compulsory acquisition is required then new designations should be explored in more detail.

6.1.4 Requiring Authority

Both QLDC and NZ Transport Agency are requiring authorities under the RMA. Case law establishes that land should only be designated for a public work if the requiring authority takes ultimate financial responsibility for it. Financial responsibility is not just limited to the purchase of land but also includes the construction of the public work, although it is noted the RMA provides for the transfer of rights and responsibilities of designations. In order to alter their respective road and state highway designations to provide for a cycle / walking trail, the QLDC or NZ Transport Agency must have financial responsibility for that portion the preferred network.

6.2 Resource Consent Considerations

The tables in section 5 of this report provide a summary of the likely resource consent requirements for Package 1: stages 1 and 2, based on the concept and preliminary design plans. The majority of the routes are likely to trigger resource consent and / or require an alteration to a road or state highway designation.

As stated in the section above it is anticipated that the majority of these resource consents would likely be processed on a non-notified basis as they relate to matters where mitigation can be provided to manage the adverse effects of the works, and it is likely that works can be contained and managed so that it can be determined that there are no adversely affected persons to the applications. Where works are on private land the written approval of the landowner (and potentially any occupiers over a duration of a year) will need to be obtained and submitted with the application in order for non-notification to be considered. This applies also to land administered by DOC for the Crown where the written approval of DOC will be required. It is also

recommended that written approval be obtained from QLDC Parks and Recreation and / or its Infrastructure team for works that are on reserve land or land designated for 3 Waters infrastructure.

Where works are to occur within or over rivers and lakes, such as new bridge crossings, it is anticipated that these resource consents could be limited or publicly notified. Further, where works affect a scheduled heritage item, engagement and the written approval of Heritage New Zealand will be required.

It is also noted that the requirements for resource consent under the NESCS remain unknown at this time and can only be determined following a Preliminary Site Investigation for the preferred network.

6.3 Other Approvals

As outlined in section 5 of this Consent Strategy, Archaeological Authorities and DOC Concessions will also be required. During the pre-implementation phase of the project it will be important to confirm these and undertake targeted engagement with the approval authorities on the proposed work. As stated earlier, where an Archaeological Authority may be required it is recommended this be obtained during the pre-implementation phase so that it is in place and available before construction starts. Obtaining an Archaeological Authority during construction can result in significant time delays and associated construction costs.

6.4 Bundling of Approvals

The Implementation Approach sets out how the preferred network is intended to be designed and delivered. It is understood that designs will be made available for Package 1: Stage 1 concurrently, meaning approvals could potentially also be sought concurrently for those routes. Seeking approval for all Stage 1 routes together will potentially result in cost efficiencies.

Based on current designs, routes A4 and A5 could proceed without the need to obtain resource consent or outline plan/alteration to designation (if QLDC Regulatory confirms no Outline Plan is required), as these works are generally limited to minor changes to existing trails.

The remainder of Stage 1 routes could be bundled together for consenting / designation purposes, including A2, A3, A7 and A8. However, this approach risks more contentious elements delaying approval for the remainder of the routes. An example would be the two new bridges over the Kawarau River in route A8 potentially resulting in notification of the application and consequential delays to processing timeframes. If all the works were bundled together then they would all be notified and subject to the longer processing timeframes and associated consenting risks. Because A7 is reliant on a number of landowner approvals this poses greater risks to obtaining the approvals. Alternatively, routes A2 and A3 could be bundled together for consenting / designation purposes, and A7 and A8 could be separately progressed. If the landowner approvals are all obtained in time then A7 could be bundled with A2 and A3. A8 because it contains the consenting risk that the bridges over the Kawarau River could be notified, should be progressed separately from the other approvals to limit delays across all works. f This would allow the remainder of the works (earthworks, minor structures, signs etc) to progress more quickly through the approval process.

Designs for Package 1: Stage 2 are likely to progress on a route by route basis, although there may be opportunities to bundle some of the routes. It is understood that any necessary approval associated with Streetscape works (routes C2 and C5) may be obtained separately and could be in place by the end of 2019/early 2020.

While the requirement for Archaeological Authorities and resource consent under the NESCS remains unknown at this stage, it is considered a global approach for construction of a cycle / walking trail would be appropriate. To counter the large geographic spread of the preferred network, a global application for an Archaeological Authority or consent under the NESCS could apply a risk based approach.

It is noted that many routes traverse designations (beyond road or state highway designations) and will require approval from the relevant requiring authority, in most instances being the QLDC Parks and Recreation or 3 Waters teams. These approvals should be sought as and when detailed design plans become available on a route by route basis.

A number of routes may require DOC concessions and approval from DOC or QLDC for works under the Reserves Act.

6.5 Risk Management

A number of potential risks associated with the statutory approval processes are identified below. It is recommended that these risks are revisited in the pre-implementation phase.

Risk	Measures to avoid / mitigate risk
Potential opposition from key stakeholders and directly affected landowners along the routes	Continue to engage with key stakeholders and directly affected landowners in accordance with Communication and Engagement Strategy During the pre-implementation phase undertake detailed design to minimise where practical private land take
QLDC determines alterations to designation require notification	Undertake pre application with QLDC to discuss expectations around alterations to designations Design to minimise property take where practical, thereby reducing additional land for inclusion in designation boundaries
QLDC or ORC determines resource consents require notification	Undertake pre application with QLDC and ORC to discuss expectations around resource consents Prepare resource consent applications on a route by route basis so that one contentious element does not affect processing of remainder of activity. Alternatively, bundle resource consent applications but remove contentious elements which may delay approval and seek approval for these separately (e.g. new bridges).
Onerous requests for further information from QLDC or ORC after lodgement of alterations to designation and resource consent applications	Undertake pre application with QLDC and ORC to discuss expectations around resource consents and alterations to designations
Receiving ‘unworkable’ conditions	Include draft conditions in applications and continue engagement with QLDC and ORC to achieve ‘workable’ conditions
Uncovering archaeological sites during construction, resulting in works stopping to allow archaeologists to investigate and an archaeological authority being sought and obtained.	Undertake a preliminary archaeological assessment during the pre-implementation phase of the project to determine where an archaeological authority should be sought. If any doubt seek an Authority during the pre-implementation phase so that it is available for implementation during the construction phase.

	Develop a project specific accidental discovery protocol in collaboration with Kāi Tahu.
Changes to the PDP over coming years	Continue to review and update this Consent Strategy in each phase of the project to review and confirm current rules and requirements under the PDP.

Table Seven: Key Statutory Approvals Risks

7 Required Scope of Technical Assessment

The following technical assessments may be required to support the approvals outlined in the preceding sections of this Consent Strategy. These should be reviewed and confirmed during the pre-implementation phase and agreed with relevant approvals authority prior to lodgement of any application.

Technical Assessment	Purpose of Assessment	Construction Effects	Operational Effects
Arboricultural Assessment	To assess the actual and potential effects of works within the tree root zone or dripline of any scheduled trees. Supporting technical assessment to resource consent.	Effects of machinery and earthworks working in the root zone and dripline of scheduled trees, including if any trimming or removal is necessary. Provision of mitigation measures for implementation during construction.	Confirm whether any effects likely to result during the operational phase of the project and whether there is any appropriate mitigation that could implemented.
Archaeological Assessment	High level assessment to better understand the likelihood of discovering unrecorded archaeological remains during construction and whether an Archaeological Authority should be obtained pre construction starting. This should be developed in collaboration with Kāi Tahu.	Potential impact on recorded and unrecorded sites.	None identified.
Construction Environmental Management Plan	Sets out how contractors will manage the construction works – the management and monitoring of the environmental effects generated from the construction works.	Construction related effects would include but not be limited to traffic, noise, dust and stormwater.	None identified.
Consultation and Engagement Summary	Provide a summary of consultation and engagement that has	How landowners and the community may be impacted during the	How landowners and the community may be impacted during the

Technical Assessment	Purpose of Assessment	Construction Effects	Operational Effects
	occurred during the pre-implementation phase to inform the assessment of environmental effects.	construction of the works and any specific mitigation measures required.	operational phase of the project including any positive effects.
Cultural Impact Assessment	To better understand Maori cultural values in the area the likelihood of impacting on cultural sites of significance.	Potential physical works impacts on waterways and sites or areas of cultural significance.	Opportunities for incorporation of Kāi Tahu values into the trails through the design undertaken during the pre-implementation phase.
Detailed Design Report including construction methodology	Factual description of the detailed design and proposed construction methodology for each route to support the alterations to designation, outline plans and resource consents.	N/A	N/A
Detailed Site Investigation (DSI) (required if determined by the PSI)	Site investigation to confirm extent of any contamination and methodology to contain or remove. Support an NES consent.	Human health and environmental effects from unmanaged land disturbance within contaminated land.	Protection of human health (the community).
Ecological Assessment	Assessment of actual and potential effects on ecology existing in any waterways affected by the works requiring a resource consent.	Protection of waterways from silt and sediment and construction machinery.	Mitigation for long term impacts on ecology in waterways affected by placement and use of any structures.
Geotechnical Assessment (including geology, hydrology and hydrogeology)	Support resource consent for any retaining structures and substantial earthworks.	Stability and retention of landforms during construction to avoid slips and failures affecting public and private property beyond the work site.	Confirmation of stability of landforms and retaining structures during operational phase.
Heritage Impact Assessment	Assessment of actual and potential effects of	Protection of Heritage features during the	Any permanent mitigation measures for

Technical Assessment	Purpose of Assessment	Construction Effects	Operational Effects
	works on any scheduled Heritage item including if works are within the Setting. Support RMA approvals and any approval required from Heritage New Zealand.	construction period from construction machinery and earthworks (in particular).	the Heritage item as a result of being impacted by the works.
Landscape and Visual Impact Assessment	Assessment of the actual and potential visual effects of any new bridges over the Kawarau or Shotover Rivers and for any retaining wall structures over 2m in height located in a landscape overlay area. Support to resource consent demonstrating that the landscape can absorb the change.	N/A	Mitigation measures to enable that the structures can be absorbed into the landscape resulting in less than minor visual effects.
Preliminary Site Investigation (Contaminated Land)	To understand the need for a Detailed Site Investigation ("DSI") and NES consent – desk top analysis to determine the likelihood of any contamination.	Human health and environmental effects from unmanaged land disturbance within contaminated land.	N/A

Table Eight: Technical Assessments Required in Support of Applications

8 Indicative Estimate of Costs

The below provides an indicative broad and conservative estimate of the cost to prepare and obtain the approvals required for the preferred network. For the purposes of this Consent Strategy, an indicative cost is provided for Package 1: Stage 1 based on the approach set out in Section 6.4, and then separately an indicative cost for each application type, or component that may support an application, along with indicative Council processing costs. As Package 1: Stage 2 is likely to have design progressed in different timeframes the second table below should be used to determine indicative costs based on the approvals identified and set out in the table in the Executive Summary and Section 5.

It is highly recommended that these cost estimates be reviewed, refined and confirmed during the pre-implementation phase of the project when the necessary approvals will be confirmed and prepared.

Package 1: Stage 1 Indicative Cost Estimate

Item	Estimated Cost (Excluding GST)
A4 and A5 No RMA approvals anticipated. Liaison required with QLDC Regulatory team around confirming Outline Plan waivers and with QLDC Parks and Recreation team around works within reserves.	$5,000
A2 and A3 Assessment of Effects on the Environment (preparation and post lodgement liaison Consent Authority) (Resource Consent Application – non-notified)	$10,000
A2 and A3 Consent Authority processing costs for non-notified resource consent	$5,000
A2 and A3 Outline Plan (small letter form) (preparation and post lodgement liaison Consent Authority)	$5,000
A2 and A3 Consent Authority processing costs for Outline Plan	$5,000
A2 and A3 Department of Conservation Concession (engagement / liaison with DOC and preparation of concession application information)	$10,000
A2 and A3 Reserves Act approval – liaison with QLDC Parks and Recreation team to obtain approval under Reserve Management Plans	$10,000

A7 Assessment of Effects on the Environment (preparation and post lodgement liaison Consent Authority) (Resource Consent Application – non-notified)	$10,000
A7 Consent Authority processing costs for non-notified resource consent	$5,000
A7 Outline Plan (small letter form) (preparation and post lodgement liaison Consent Authority)	$5,000
A7 Consent Authority processing costs for Outline Plan	$5,000
A7 Liaison landowners re written approvals for resource consent application	$5,000
A7 Archaeological Assessment including accidental discovery protocol	$15,000
A7 Archaeological Authority (liaison with Heritage New Zealand, preparation of the Authority application)	$5,000
A7 Engagement and collaborative working with Kāi Tahu on archaeological assessment and Authority (project and Kāi Tahu costs)	$15,000
A8 Assessment of Effects on the Environment (preparation and including post lodgement liaison Consent Authority, engagement with affected parties pre lodgement) (Resource Consent Applications / alterations or new designations – limited or publicly notified)	$80,000
A8 Consent Authority processing costs for limited or publicly notified resource consent	$25,000
A8 Department of Conservation Concession (engagement / liaison with DOC and preparation of concession application information)	$10,000
A8 Archaeological assessment, Authority and engagement should be combined and undertaken at the same time as A7	

Table Nine: Indicative Estimate of Costs for Package 1: Stage 1

Application and Associated Components Indicative Cost Estimate

Cost estimates for the Detailed Design Report are not included as this typically is costed separately as part of design work for the pre-implementation phase. Similarly, any geotechnical investigations and report will be part of the engineering design process. Additionally, not all of the below items and associated costs may not be required (i.e. notified resource consent / designation and others), depending on determination of the final approvals required.

Item	Estimated Cost (Excluding GST)
Alteration to designation (preparation and post lodgement liaison Consent Authority) (minor – non-notified)	$10,000
Arboricultural Assessment	$15,000
Archaeological Assessment including accidental discovery protocol	$15,000
Archaeological Authority (liaison with Heritage New Zealand, preparation of the Authority application)	$5,000
Assessment of Effects on the Environment (preparation and post lodgement liaison Consent Authority) (Resource Consent Application – non-notified)	$10,000
Assessment of Effects on the Environment (preparation and including post lodgement liaison Consent Authority, engagement with affected parties pre lodgement) (Resource Consent Applications / alterations or new designations – limited or publicly notified)	$80,000
Consent Authority processing costs for non-notified resource consent	$5,000
Consent Authority processing costs for limited or publicly notified resource consent	$25,000
Consent Authority processing costs for Outline Plan	$5,000
Construction Environmental Management Plan	$5,000
Consultation and Engagement Summary	$5,000
Cultural Impact Assessment	$5,000
Department of Conservation Concession (engagement / liaison with DOC and preparation of concession application information)	$10,000
Detailed Site Investigation (DSI) (required if determined by the PSI)	$40,000
Ecological Assessment	$25,000

Environmental Impact Assessment (for DOC Concession Application)	$5,000
Heritage Impact Assessment	$15,000
Landscape and Visual Impact Assessment	$40,000
Outline Plan (small letter form) (preparation and post lodgement liaison Consent Authority)	$5,000
Outline Plan (larger report form) (preparation and post lodgement liaison Consent Authority)	$10,000
Preliminary Site Investigation (Contaminated Land)	$30,000
Reserves Act approval – liaison with QLDC Parks and Recreation team to obtain approval under Reserve Management Plans	$10,000

Table Ten: Indicative Estimate of Costs

A

Appendix A – Updated Social and Environmental Screen

Wakatipu Active Travel Network: Updated Environmental and Social Screen

Prepared for Queenstown Lakes District Council
By Beca Limited

20 August 2019

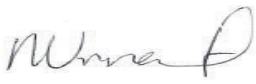
Creative people together transforming our world

Contents

Revision History

Revision Nº	Prepared By	Description	Date
A	Nicolle Vincent	First Draft	20 May
B	Kristina Mead	Draft for Internal Review	20 June
C	Nicolle Vincent	Updated Draft	20 June
D	Nicolle Vincent	Final Draft	20 August

Document Acceptance

Action	Name	Signed	Date
Prepared by	Nicolle Vincent		20/08/2019
Reviewed by	Kristina Mead / Alex Mills		20/08/2019
Approved by	Fiona Blight		20/08/2019
on behalf of	Beca Limited		

1 Introduction

Queenstown Lakes District Council (QLDC), the New Zealand Transport Agency (NZTA), and Otago Regional Council (ORC) are working together to create an active travel network in the Wakatipu Basin that is reliable, resilient and connects communities in a way that encourages residents and visitors of all ages and abilities to walk and cycle.

Beca Ltd (Beca) has been tasked with delivering a Single Stage Business Case (SSBC) for a preferred active travel network. The Environmental and Social Responsibility Screen (ESRS) is a high-level tool used to help understand the resource management implications of the shortlist to help inform the emerging preferred network.

This ESRS considers the proposed routes identified on the plans titled “Wakatipu Active Travel Network Routes 1 – 11” dated 12 December 2018 and “Wakatipu Active Travel Network Frankton Connections” dated 24 April 2019. The ESRS has been updated to take into account the delivery staging recommended for the preferred network in the SSBC for Package 1: Stages 1 and 2.

The following information sources have been relied upon to inform the ESRS:

- QLDC’s Operative District Plan
- QLDC’s Proposed District Plan Stage 1 and Stage 2 (Decisions Version)
- QLDC’s Online ArcGIS
- ORC’s Online Hazard Map

The purpose of the ESRS is to gather relevant information for each route and presents it in a table format for ease of reference.

As the ESRS is a high-level desk-based tool, a detailed planning assessment will be required once the preferred network has been established, having regard to details such route widths and exact positioning in proximity to the surrounding environment and sensitive receptors.

2 Routes 1 to 12

The SSBC identifies a preferred network of cycle / walking trails around the Wakatipu Basin. The preferred network includes 12 routes connecting key destinations and involves upgrades to existing trails as well as new trails. Screens for routes 1 to 12 are presented below.

2.1 Route 1: Jacks Point to Frankton

Operative Planning Maps: 13 Gibbston Valley, Cecil Peak and Wye Creek (insets); 31a Queenstown Airport; 33 Frankton

Proposed Planning Maps Decisions Version: 31 Lower Shotover; 31a Queenstown Airport; 33 Frankton; 41 Jacks Point and Hanley Downs; 13 Gibbston Valley, Cecil Peak and Wye Creek.

General	
Route Description	Jacks Point Commercial Area to Kawarau River
Surrounding Environment	The route follows along an existing utilities / pipe easement corridor / stream corridor, largely travelling though rural land and alongside SH6.
Zoning	ODP: Resort Zone (Jacks Point), Rural General Zone PDP: Rural, Jacks Point
Designations	The route travels through NZTA Designation 84. In this location Designation 84 provides for the realignment of SH6/Kingston Road, near its intersection with Boyd Road. All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	The route extends right up to the Kawarau River, without crossing over the bridge. Multiple small stream.
Hazards	The route is in close proximity to an identified landslide area and within areas of low to moderate liquefaction risk and passes by recently active fan bed.
Protected Trees	The route does not appear to pass by any protected trees,
Cultural and Historic Heritage	
Heritage Listing	Route comes up to the Kawarau Falls Bridge (Heritage Feature 40).
Landscape and Urban Design	
Landscape Overlays	Rural Character Landscape; Outstanding Natural Landscape (PDP)
Health and Wellbeing	
Open Space / Parks	None identified
Sensitive receptors	None identified
Potentially contaminated land	None identified

2.2 Route 2: Kelvin Heights to Frankton

Operative Planning Maps: 13 Gibbston Valley, Cecil Peak and Wye Creek (insets); 33 Frankton; 37 Kelvin Peninsula

Proposed Planning Maps Decisions Version: 33 Frankton; 37 Kelvin Peninsula

General	
Route Description	Kelvin Heights to Kawarau Falls
Surrounding Environment	The shared path largely travels the existing trail along the water front. While the green way follows Peninsula Road
Zoning	ODP: Low Density Residential; High Density Residential, Rural General PDP: Informal Recreation, Low Density Suburban Residential, High Density Residential
Designations CHECK	The shared path passes through Designations 179 and 184 which provide for recreation reserves and Designation 27 for a Sewage Pump Station. All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	The route follows along the waterfront for a majority of the trail.
Hazards	The shared path travels through an identified landslide area adjacent to the Kawarau River.
Protected Trees	The shared path is in close proximity to Protected Trees 169, 170 and 171.
Cultural and Historic Heritage	
Heritage Listing	The shared path is in close proximity to Historic Heritage Feature 241, a Snow Gum (Eucalyptus pauciflora). It comes up to but does not cross Kawarau Falls Bridge, which is Historic Heritage Feature 40.
Landscape and Urban Design	
Landscape Overlays	None identified
Health and Wellbeing	
Open Space / Parks	Part of the route is within a QLDC reserve managed area, under the Sunshine Bay to Kelvin Heights Reserve Management Plan, being the Kelvin Heights Waterside reserve.
Sensitive receptors	None identified
Potentially contaminated land	None identified

2.3 Route 3: Queenstown to Frankton

Operative Planning Maps: 32 Queenstown Hill, Gorge Road; 33 Frankton; 35 Queenstown; 37 Kelvin Peninsula

Proposed Planning Maps Decisions Version: 32 Queenstown Hill, Gorge Road; 33 Frankton; 35 Queenstown; 37 Kelvin Peninsula

General	
Route Description	Queenstown town centre to Frankton
Surrounding Environment	The route begins as a shared greenway along local roads, before adjoining the existing trail and continuing as a shared path along the waterfront, through to the Kawarau Falls Bridge.
Zoning	ODP: Rural General Low Density Residential, High Density Residential PDP: High Density Residential, Informal Recreation
Designations	The route runs through or adjacent to QLDC 36 (Sewage Pump Station), 156 (Recreation Reserve), 165 (Frankton marine Local Purpose Reserve), 202 (Public Reserve) and 525 (esplanade reserve). All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	The route travels along the Lake Wakatipu waterfront.
Hazards	The route is in close proximity or passes through identified landslide zones, including along the waterfront and alongside parts of SH6A. It is also within a low to possibility moderate zone for liquefaction and within a flood risk zone (rainfall) at the Frankton end of the track.
Protected Trees	The route is potentially in the drip line of tree 201.
Cultural and Historic Heritage	
Heritage Listing	The route is in close proximity to Historic Heritage sites 63 and 82, both historic cottages.
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	It adjoins Queenstown Gardens, following the existing trail and passes through recreation/reserve land. There is also a Community Facility Sub Zone along Park Street. It runs through areas outlined in the Sunshine Bay to Kelvin Heights Reserve Management Plan.
Sensitive receptors	None identified
Potentially contaminated land	None identified

2.4 Route 4: Lake Hayes to Frankton

Operative Planning Maps: 30 Lake Hayes; 31a Queenstown Airport; 33 Frankton

Proposed Planning Maps Decisions Version: 30 Lake Hayes; 31a Queenstown Airport; 33 Frankton; 30 A Shotover country and Lake Hayes Estate

General	
Route Description	Lake Hayes Estate to Frankton North
Surrounding Environment	The main route is a shared path along existing trail, then separated cycle lane alongside SH6 before turning back into a shared path and crossing over old Shotover bridge. Route 4 south travels along the other side of the river, crossing into Frankton and Lake Hayes Estate. Primarily this is via an 'unformed road'.
Zoning	ODP: Rural General Zone; Rural Lifestyle Zone; Bendemeer Zone, Shotover Country, Quail Rise PDP: Rural, Large Lot Residential, Informal Recreation
Designations	Through QLDC 343 (rec reserve); 258 (recn reserve); 290 (rec reserve). New Zealand Transport Agency State Highway Network. All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	Both routes cross either Shotover River or Kawarau River. The main route crosses over at the Old Shotover Bridge, while the south route utilises 2 new bridges. A small number of culverts are utilised in the south route. The routes travel adjacent to the Shotover or Kawarau River for a portion of the route.
Hazards	The main route is within a flood risk zone. The south route is within an identified landslip area.
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	The route is in close proximity to Heritage Feature 222, as it utilities the Old Shotover Bridge. There are no changes to be made to the bridge.
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape, along river/bridge
Health and Wellbeing	
Open Space / Parks	Both routes travel through DOC Public Conservation Land. The south route passes through public reserve land. The shared path is within QLDC's Memorial Park.
Sensitive receptors	None identified
Potentially contaminated land	None identified

2.5 Route 5: Arthurs Point to Queenstown

Operative Planning Maps: 31 Lower Shotover; 32 Queenstown Hill, Gorge Road; 39 Arthurs Point, Kingston

Proposed Planning Maps Decisions Version: 32 Queenstown Hill, Gorge Road; 35 Queenstown; 39 Arthurs Point, Kingston

General	
Route Description	Just outside of Arthurs Point to Queenstown
Surrounding Environment	The route begins just out of Arthurs Point, on the Queenstown side of the Edith Cavell bridge. It starts by travelling through a predominantly rural area before entering the business and residential zones in Queenstown. It begins as a shared path, before turning into separate pedestrian only paths and separated cycle lanes. As it goes through the Queenstown streets it goes back to a shared path and then back to being fully separated. It briefly travels through the Queenstown Recreation Reserve.
Zoning	ODP: Rural General, Business Zone, High Density Residential, Queenstown Town Centre, Visitor Accommodation Sub Zone PDP: Informal Recreation, Nature Conservation, Business mixed Use, High Density Residential
Designations	The route runs in close proximity to MoE designation 14, Queenstown Primary School; QLDC 222 for tree planting; QLDC 226 for a Recreation Reserve (Warren Park); QLDC 83 for Local Purposes (Drainage) Reserve and QLDC designation 210 (Queenstown Recreation Reserve).
Natural Environment	
Waterways	None identified
Hazards	The route passes through identified landslide and flood risk areas; and it is also, within low liquefaction risk zones and alluvial fan zones.
Protected Trees	The route is in close proximity to Protected Tree 247.
Cultural and Historic Heritage	
Heritage Listing	The route is in close proximity to the Edith Cavell Bridge (Heritage Feature 32).
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	The route is in close proximity to DOC Public Conservation Areas.
Sensitive receptors	None identified
Potentially contaminated land	None identified

2.6 Route 6: Fernhill to Queenstown

Operative Planning Maps: 34 Fernhill, Sunshine Bay

Proposed Planning Maps Decisions Version: 34 Fernhill, Sunshine Bay

General	
Route Description	Fernhill to Queenstown
Surrounding Environment	The route utilises local roads through residential areas, partially going though a scenic / recreation reserve.
Zoning	ODP: Low Density Residential Zone; Rural General Zone; High Density residential Zone PDP: Informal Recreation, Lower density suburban residential, medium density residential, high density residential
Designations	Passes through QLDC 248 (Recreation); 469 (Water pump station), in close proximity to QLDC 236 (Water Reservoir and Treatment) and 220 (Recreation). All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	None identified
Hazards	None identified
Protected Trees	The path is potentially in the dripline of protected tree 239.
Cultural and Historic Heritage	
Heritage Listing	None identified
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	The route goes through forest / a mountain biking park, which is a combination of DoC land and the Ben Lomond Reserve.
Sensitive receptors	None identified
Potentially contaminated land	None identified

2.7 Route 7: Jacks Point to Kelvin Heights

Operative Planning Maps: 13 Gibbston Valley, Cecil Peak and Wye Creek (insects); 37 Kelvin Peninsula

Proposed Planning Maps Decisions Version: 31a Queenstown Airport; 37 Kelvin Peninsula; 41 Jacks Point and Hanley Downs

General	
Route Description	Jacks Point Commercial Area to Kelvin Heights
Surrounding Environment	The route travels through residential and rural areas, partially along the lake front.
Zoning	ODP: Low Density Suburban Residential; Rural; Jacks Point; Rural General Zone; Lower Density Residential Zone PDP: Jacks Point, Rural, Lower Density Suburban Residential.
Designations	Passes through QLDC 180 (Recreation Reserve), QLDC 26 (Sewage Pump Station). All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	Some parts of the route in close proximity to Lake Wakatipu.
Hazards	Parts of the route are in an identified erosion risk area.
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	None identified
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape; Rural Character Landscape
Health and Wellbeing	
Open Space / Parks	The route travels through DOC Protected land along the waterfront. It is also partially within the Bayview Road to Yacht Club management area. It passes through Jardine Park, which is under the Kelvin Heights Reserve Management Plan.
Sensitive receptors	None identified
Potentially contaminated land	None identified

2.8 Route 8 Arthurs Point to Frankton

Operative Planning Maps: 29 Dalefield, Coronet Peak Road; 31 Lower Shotover; 31a Queenstown Airport; 39 Arthurs Point, Kingston

Proposed Planning Maps Decision Version: 29 Dalefield, Coronet Peak Road; 31 Lower Shotover; 31a Queenstown Airport; 39 Arthurs Point, Kingston

General	
Route Description	Arthurs Point to Frankton
Surrounding Environment	The route travels through residential, rural residential and rural areas, generally near Shotover River. Some parts utilise existing trails.
Zoning	ODP: Rural Genreal, Rural Lifestyle PDP: Rural, Wakatipu Basin Lifestyle Precinct, Wakatipu Basin Rural Amenity Zone, Business Mixed use, Medium Density Residential.
Designations	The route passes through QLDC 535; a recreation reserve on Hanson Road. All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	The route is generally in close proximity to the Shotover River. It crosses over the river via a new bridge.
Hazards	The route is within a potential flood hazard zone. Part of the route is also in close proximity to an identified landslip area.
Protected Trees	None identified.
Cultural and Historic Heritage	
Heritage Listing	The route apparently goes through or is in close proximity to a historic tunnel, however this is not recognised as being a Historic Heritage Feature.
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	The route is located either in, or in close proximity to DOC Public Conservation Areas, predominantly around Arthurs Point and the Shotover river. There are also recreation reserves along the Shotover River.
Sensitive receptors	None identified
Potentially contaminated land	None identified

2.9 Route 9: Lake Hayes Estate to Arrowtown

Operative Planning Maps: 26 Speargrass Flat, Millbrook; 30 Lake Hayes; 31 Lower Shotover; Queenstown Airport

Proposed Planning Maps Decisions Version: 26 Speargrass Flat, Millbrook; 27 Arrowtown; 30 Lake Hayes; 31 Lower Shotover; 31a Queenstown airport

General	
Route Description	From Arrowtown to Lower Shotover
Surrounding Environment	The route generally travels through residential and rural areas. Part of the route travels around the western bank of Lake Hayes and existing rural roads. Lake Hayes and its shores are a Wildlife Refuge and are covered in part by a Recreation Reserve and Wildlife Management Reserve administered by DOC.
Zoning	ODP: Rural General, Resort (Millbrook), Rural Residential, Low Density Residential PDP: Millbrook, Informal Recreation, Wakatipu Basin Rural Amenity, Wakatipu Basin Lifestyle Precinct; Rural Lifestyle.
Designations	The route passes alongside QLDC 545 (Millbrook Cricket Ground) and through QLDC 333 (Sewage Pump Station). Also passes through QLDC 168 and 169 (Recreation Reserve). All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	The route travels around the eastern bank of Lake Hayes.
Hazards	The route goes through identified areas of liquefaction and alluvial fan risk zones.
Protected Trees	Close proximity to tree 274.
Cultural and Historic Heritage	
Heritage Listing	The route is in close proximity to Heritage Items: 112, the McQuilkin Cottage and Stables (Original Part); 363 Walnut Cottage (Original Building); and 22, Robert Lee's Memorial Trough, Ladies Mile.
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	The route travels through a DOC Public Conservation Area adjoining Lake Hayes, and the Lake Hayes Wildlife Reserve, including the Lake Hayes Showground area.
Sensitive receptors	None identified
Potentially contaminated land	None identified

2.10 Route 10: Arthurs Point to Arrowtown

Operative Planning Maps: 10 Skippers, Macetown, Cardrona; 26 Speargrass Flat, Millbrook; 29 Dalefield, Coronet Peak Road.

Proposed Planning Maps Decisions Version: 10 Skippers, Macetown, Cardrona; 26 Speargrass Flat, Millbrook; 29 Dalefield, Coronet Peak Road.

General	
Route Description	Arthurs Point to Arrowtown.
Surrounding Environment	The routes generally travel through rural or rural residential areas. It generally follows local roads. IT finishes at the lower Shotover and passes through protected land at this area.
Zoning	ODP: Meadow Park Zone; Resort Zone; Rural General Zone PDP: Wakatipu Basin Rural Amenity Zone, Rural, Nature Conservation
Designations	All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	None identified
Hazards	Parts of the route are within identified potential low liquefaction risk zones and alluvial fans.
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	The route is in close proximity to Historic Heritage Features 57, a dwelling on Complex George Road; 84, 172 Arthurs Point (Original Part only); 302, explosive magazine, Malaghans Road, Arrowtown; 123, the Willowbrook Homestead; 124, Ben Lomond Station Homestead and 125, the Cockburn Homestead.
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	There is DoC land / Public Conservation Areas at the beginning and end of the route at Arthurs Point and Arrowtown.
Sensitive receptors	The shared path comes within in close proximity to an Open Cemetery on Durham Street, Arrowtown
Potentially contaminated land	None identified

2.11 Route 11: Queenstown Town Centre

Operative Planning Maps: 35 Queenstown; 36 Queenstown Central

Proposed Planning Maps: 35 Queenstown; 36 Queenstown Central

General	
Route Description	Queenstown Town Centre.
Surrounding Environment	The different parts of the route are within the residential and commercial area of central Queenstown.
Zoning	ODP: High Density Residential; Queenstown Town Centre; Rural General; Town Centre Special Character Area PDP: Community Purposes; Queenstown Town Centre; Medium Density Residential
Designations	QLDC 185 (Recreation Reserve), 205 (Recreation Reserve) 210 (Local Purposes). All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	A portion of the path travels along the Lake Wakatipu waterfront, with a small part travelling over a new bridge over Horne Creek.
Hazards	A portion of the route along the waterfront is within a flood risk zone.
Protected Trees	The route is in close proximity to Protected Tree 148 and 151.
Cultural and Historic Heritage	
Heritage Listing	The shared path passes by Queenstown Marine Parade, an area with Heritage Protection Orders and a number of Historic Heritage Features.
Landscape and Urban Design	
Landscape Overlays	None identified
Health and Wellbeing	
Open Space / Parks	Various sections of the routes pass through or in close proximity to recreational reserves. These are the Marine Parade Reserve – Council Walkway and Village Green Recreational Reserve. The route cuts through two Foreshore Management Areas, Marine Enterprises Wharf to town pier and Beachfront and Gardens.
Sensitive receptors	The route is located in close proximity to an Open Cemetery and the Queenstown Fire Station
Potentially contaminated land	None identified

2.12 Route: Frankton Connections North

Operative Planning Maps: 31a Queenstown Airport; 33 Frankton

Proposed Planning Maps: 31a Queenstown Airport; 33 Frankton

General	
Route Description	Frankton North
Surrounding Environment	The route begins as a shared path, predominately off road, before turning down Kawarau Road (SH6) and crossing over. It continues as a shared path through local roads, turning into an on-road greenway. It crosses Shoreline Road, where it becomes a shared path again. The surrounding environment consists of residential, open space and recreation and commercial uses.
Zoning	ODP: Special Zone; Rural General; Frankton Flats; Low Density Residential PDP: Local Shopping Centre; Community Purposes; Informal Recreation
Designations	Routes run through or adjacent to NZTA 84 (State Highway Purposes); QLDC 371 (Roading purposes); QLDC 29 (Multi-purpose indoor and outdoor recreation, cultural and conference complex); QLDC 154 (Recreation Reserve, Motor Park); QLDC 155 (Recreation Reserve). All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	Route comes down to the shores of Lake Wakatipu.
Hazards	Route is in close proximity to low risk liquefaction zones and at the waterfront, flooding risk zones.
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	The route is in close proximity to Historic Heritage Feature 47, Frankton Cemetery Walls and Gates.
Landscape and Urban Design	
Landscape Overlays	None identified
Health and Wellbeing	
Open Space / Parks	Runs through Community Purpose Zones which consists of the golf course/driving zone and parks. Also travels down to the waterfront.
Sensitive receptors	The route is located in close proximity to an open cemetery and pass through or are in close proximity to community recreation facilities including a swimming pool and golf course.
Potentially contaminated land	Route is in close proximity to potentially contaminated sites (next to the Frankton Cemetery and Queenstown airport).

2.13 Route: Frankton Connections South

Operative Planning Maps: 31a Queenstown Airport; 33 Frankton

Proposed Planning Maps: 31a Queenstown Airport; 33 Frankton

General	
Route Description	Frankton South
Surrounding Environment	The route begins as an underpass under the bridge. It comes up to road level with a 'c' bend, continuing as a shared path, until it goes down Robertson Street where it turns into an on-road greenway. It then continues into the Kawarau Falls Scenic Reserve.
Zoning	ODP: Rural General, Low Density Residential PDP: Rural; Informal Recreation, Lower Density Suburban Residential
Designations	NZTA 84 (State Highway Purposes). Planning Map 33 (PDP Decisions) shows the route going through or in close proximity to QLDC designation 551, however this does not appear on other All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	The route is within close proximity to the Kawarau River.
Hazards	The route is in close proximity to low risk liquefaction zones and also a landslide risk zone.
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	The route is in close proximity to Historic Heritage Features 32, the Frankton Mill Site, 40 Kawarau Falls Bridge and 49, Brunswick Flour Mill, Turbine and Stone buildings by Kawarau Falls Bridge.
Landscape and Urban Design	
Landscape Overlays	In close proximity to Outstanding Natural Landscape.
Health and Wellbeing	
Open Space / Parks	Route runs through Kawarau Falls Scenic Reserve, on the right had side of the Kawarau Falls Bridge.
Sensitive receptors	The route connects onto Boyes Crescent, which further down the street, the Remarkables Primary School is located.
Potentially contaminated land	None identified.

3 Package 1: Stages 1 and 2

Design and delivery of the preferred network has been split into two distinct work packages. It is noted that the routes specified in the delivery programme do not directly correspond with routes 1-12, but are sometimes partial or amalgamated routes. Screens have therefore been undertaken for Package 1: Stage 1 and 2 and these are presented below.

3.1 Stage 1 – Route A2 – Shotover Bridge to State Highway 6

Operative Planning Maps: 31 Lower Shotover

Proposed Planning Maps Decisions Version: 31 Lower Shotover

General	
Route Description	Route travels from the Old Shotover Bridge, down through Jims Way before meeting with SH6
Surrounding Environment	The surrounding environment consists of rural area and is in close proximity to State Highway 6. The route follows Jims Way, a shared space allowing for vehicles, pedestrians and cyclists, before transitioning into a gravel pathway and crossing the highway.
Zoning	ODP: Rural General, Road Corridor PDP: Rural
Designations	New Zealand Transport Agency State Highway (NZTA 84). All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	Close proximity to Shotover River
Hazards	In areas of flood risk due to rainfall, and nil to low liquefaction risk.
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	Historic Heritage Feature 22 (Old Shotover Bridge)
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	Shotover River and Tuckers Beach Reserve
Sensitive receptors	None identified
Potentially contaminated land	None identified.

3.2 Stage 1 – Route A3 – Frankton North

Operative Planning Maps: 33 Frankton

Proposed Planning Maps Decisions Version: 33 Frankton

General	
Route Description	The route utilises a combination of on road greenways and shared paths, as it runs from the State Highway, through local roads, down to Frankton Beach.
Surrounding Environment	Surrounding environment is a combination of residential, open space and recreation and commercial uses, as well as local roads, leading to the Frankton Waterfront
Zoning	ODP: Rural General, Low Density Residential, Road Corridor, Special Zone (Frankton Flats) PDP: Informal Recreation, Community Purposes.
Designations	NZTA State Highway All QLDC Roads are designated for Roading Purposes
Natural Environment	
Waterways	Travels at part along the Lake Wakatipu Shoreline.
Hazards	Low liquification risk at the water front.
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	Close proximity to Historic Heritage Feature 47 (Frankton Cemetery Wall and Gate.
Landscape and Urban Design	
Landscape Overlays	None identified
Health and Wellbeing	
Open Space / Parks	Runs through 'Community Purpose Zone' which consists of a golf course / driving zone and parks.
Sensitive receptors	Route is in close proximity to an open cemetery and goes through community recreation facilities.
Potentially contaminated land	Route in close proximity to 'potentially contaminated land' next to Frankton Cemetery.

3.3 Stage 1 – Route A4 – Frankton Marina Upgrades

Operative Planning Maps: 33 Frankton

Proposed Planning Maps Decisions Version: 33 Frankton

General	
Route Description	Upgrades at the Frankton Marina
Surrounding Environment	Residential and Marina.
Zoning	ODP: Rural General, Low Density Residential PDP: Rural
Designations	QLDC165 (Frankton Marina Local Purpose Reserve)
Natural Environment	
Waterways	Close proximity to Lake Wakatipu
Hazards	None identified
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	None identified
Landscape and Urban Design	
Landscape Overlays	None identified
Health and Wellbeing	
Open Space / Parks	None identified
Sensitive receptors	None identified
Potentially contaminated land	None identified

3.4 Stage 1 – Route A5 – Frankton South

Operative Planning Maps: 31a Queenstown Airport; 33 Frankton

Proposed Planning Maps: 31a Queenstown Airport; 33 Frankton

General	
Route Description	Frankton South
Surrounding Environment	The route begins as an underpass under the bridge. It comes up to road level with a 'c' bend, continuing as a shared path, until it goes down Robertson Street where it turns into an on-road greenway. It then continues into the Kawarau Falls Scenic Reserve. The route is predominately an existing path, however upgrades will be made to the Kawarau Road and Robertson Street areas.
Zoning	ODP: Rural General, Low Density Residential PDP: Rural; Informal Recreation, Lower Density Suburban Residential
Designations	NZTA 84 (State Highway Purposes). Planning Map 33 (PDP Decisions) shows the route going through or in close proximity to QLDC designation 551, however this does not appear on other All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	The route is within close proximity to the Kawarau River.
Hazards	The route is in close proximity to low risk liquefaction zones and also a landslide risk zone.
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	The route is in close proximity to Historic Heritage Features 32, the Frankton Mill Site, 40 Kawarau Falls Bridge and 49, Brunswick Flour Mill, Turbine and Stone buildings by Kawarau Falls Bridge.
Landscape and Urban Design	
Landscape Overlays	In close proximity to Outstanding Natural Landscape.
Health and Wellbeing	
Open Space / Parks	Route runs through Kawarau Falls Scenic Reserve, on the right had side of the Kawarau Falls Bridge.
Sensitive receptors	The route connects onto Boyes Crescent, which further down the street, the Remarkables Primary School is located.
Potentially contaminated land	None identified.

3.5 Stage 1 – Route A7 – Jacks Point to Frankton

Operative Planning Maps: 13 Gibbston Valley, Cecil Peak ad Wye Creek (inserts); 31a Queenstown Airport; 33 Frankton, 37 Kelvin Peninsula

Proposed Planning Maps Decisions Version: 13 Gibbston Valley, Cecil peak ad Wye Creek (inserts), 41 Jacks Point and Hanley Downs

General	
Route Description	Jacks Point commercial area to Frankton
Surrounding Environment	The route follows an existing utilities/pipe easement corridor/steam corridor, largely travelling through rural land and alongside SH6. The route crosses into Frankton via a new bridge (constructed as part of this route).
Zoning	ODP: Resort Zone (Jacks Point), Rural General PDP: Rural, Jacks Point
Designations	The route travels through NZTA Designation 84, which in this location provides for the realignment of SH6/Kingston Road, near its intersection with Boyd Road. All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	The route crosses the Kawarau River via a new bridge at the south of Frankton. The route also comes up but does not cross the Kawarau Falls Bridge.
Hazards	The route is in close proximity to an identified landslide area. It is also within areas of low to moderate liquefaction risk and passes through recently active fan bed.
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	Route comes up to the Kawarau Falls Bridge (Heritage Feature 40), but does not cross, terminating prior to the bridge.
Cultural Implications	An area of significance has been identified at the southern end of Frankton, encompassing a large area including the Kawarau River and areas of vegetation. Consideration must be given to the impact that a new track will have on this area.
Landscape and Urban Design	
Landscape Overlays	Rural Character Landscape, Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	
Sensitive receptors	Identified area of cultural significance
Potentially contaminated land	None identified

3.6 Stage 1 – Route A8 – Lake Hayes to Frankton

Operative Planning Maps: 30 Lake Hayes and 31 Lower Shotover

Proposed Planning Maps Decisions Version: 30 Lake Hayes, 30a Shotover Country and Lake Hayes Estate and 31 Lower Shotover

General	
Route Description	Route travels from the south of Lake Hayes, along the south side of the Kawarau River, to a new crossing into South Frankton.
Surrounding Environment	The surrounding environment consists of rural landscape, as it predominately travels along an existing paper road.
Zoning	ODP: Rural General PDP: Rural, Rural Landscape
Designations	None identified
Natural Environment	
Waterways	Crosses Kawarau River and there are a small number of culverts
Hazards	Within an identified landslip area
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	None identified
Landscape and Urban Design	
Landscape Overlays	Rural Character Landscape; Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	Doc Protected Land – Kawarau River, and Public Reserve Land at both ends of the route.
Sensitive receptors	None identified
Potentially contaminated land	None identified

3.7 Stage 2 – Route B2 – Fernhill to Queenstown

Operative Planning Maps: 34 Fernhill and Sunshine Bay

Proposed Planning Maps Decisions Version: 34 Fernhill and Sunshine Bay

General	
Route Description	Fernhill to Queenstown
Surrounding Environment	The route utilises local roads through residential areas, partially going though a scenic / recreation reserve.
Zoning	ODP: Low Density Residential Zone; Rural General Zone; High Density residential Zone PDP: Informal Recreation, Lower density suburban residential, medium density residential, high density residential
Designations	Passes through QLDC 248 (Recreation); 469 (Water pump station), in close proximity to QLDC 236 (Water Reservoir and Treatment) and 220 (Recreation). All QLDC roads are designated for road purposes.
Natural Environment	
Waterways	None identified
Hazards	None identified
Protected Trees	The path is potentially in the dripline of protected tree 239.
Cultural and Historic Heritage	
Heritage Listing	None identified
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	The route goes through forest / a mountain biking park, which is a combination of DoC land and the Ben Lomond Reserve.
Sensitive receptors	None identified
Potentially contaminated land	None identified

3.8 Stage 2 – Route B3 – Queenstown to Frankton

Operative Planning Maps: 31a Queenstown Airport, 33 Frankton, 35 Queenstown,

Proposed Planning Maps Decisions Version: 31a Queenstown Airport, 32 Queenstown Hill, Gorge Road, 33 Frankton, 35 Queenstown,

General	
Route Description	Route travels from the Queenstown centre, along the Lake Wakatipu waterfront and along to the Kawarau Falls Bridge.
Surrounding Environment	The surrounding environment consists of residential dwellings, rural/park like areas, and waterfront spaces. The route includes the Frankton Marina, where upgrades will have already occurred as a result of route A4.
Zoning	ODP: High Density Residential, Low Density Residential, Rural General PDP: High Density Residential, Informal Recreation
Designations	Through QLDC 156 (Recreation Reserve, 165 (Frankton Marina Local Purpose Reserve) and 203 (Recreation Reserve)
Natural Environment	
Waterways	Travels along the Lake Wakatipu Waterfront
Hazards	The route is in close proximity or passes through identified landslide zones, including along the water front and alongside parts of SH6A.
Protected Trees	Potentially in the dropline of Protected Tree 201
Cultural and Historic Heritage	
Heritage Listing	None identified
Landscape and Urban Design	
Landscape Overlays	None identified
Health and Wellbeing	
Open Space / Parks	Adjoins Queenstown Gardens, and passes through other areas of recreation or reserve, including running through areas outlined in the Sunshine Bay to Kelvin Heights Reserve Management Plan.
Sensitive receptors	None identified
Potentially contaminated land	None identified

3.9 Stage 2 – Route C2 – Brecon Street

Operative Planning Maps: 35 Queenstown

Proposed Planning Maps Decisions Version: 35 Queenstown

General	
Route Description	Brecon Street (Queenstown Central). Route travels from gondola down Brecon Street down to Man Street. Footpaths are widened and cyclists are located on the road in the same lane as vehicles.
Surrounding Environment	Commercial, residential and visitor accommodation
Zoning	ODP: Queenstown Town Centre, High Density Residential PDP: Queenstown Town Centre, Community Purposes
Designations	None identified
Natural Environment	
Waterways	None identified
Hazards	In an area identified as a probably low liquefaction risk.
Protected Trees	Within dripline of protected tree 151
Cultural and Historic Heritage	
Heritage Listing	Close to an area with a Heritage Protection Order 4.
Landscape and Urban Design	
Landscape Overlays	None identified
Health and Wellbeing	
Open Space / Parks	None identified
Sensitive receptors	Close proximity to cemetery
Potentially contaminated land	None identified

3.10 Stage 2 – Route C5 – Arthurs Point to Queenstown

Operative Planning Maps: 32 Queenstown Hill, Gorge Road, 35 Queenstown, 39a Arthurs Point, Kingston

Proposed Planning Maps Decisions Version: 32 Queenstown Hill, Gorge Road, 35 Queenstown, 39a Arthurs Point, Kingston

General	
Route Description	Route travels from the Edith Cavell Bridge just outside of Arthurs Point and travels through to Queenstown town centre.
Surrounding Environment	The route is surrounded by a combination or rural environments before entering the commercial area of Queenstown. It then travels through local streets and a park in the centre of the town. It utilises bridges crossing waterways on Robbins Road and into the carpark at Memorial Park.
Zoning	ODP: Rural General, Road Corridor, Visitor Accommodation Subzone. Business Zone, Queenstown Town Centre PDP: Informal recreation, Nature Conservation, Business Mixed Use, High Density Residential.
Designations	QLDC 210 (Queenstown Recreation Reserve) and 232 (Gorge Road Carpark)
Natural Environment	
Waterways	Close proximity to the Shotover River at Arthurs Point and near a small waterway on Robbins Road.
Hazards	Identified landslide and flood risk area, also low liquefaction risk zone and alluvial fan zone
Protected Trees	Potentially in close proximity to protected tree 168
Cultural and Historic Heritage	
Heritage Listing	Close proximity to Historic Heritage Feature 32 (Edith Cavell Bridge).
Landscape and Urban Design	
Landscape Overlays	Outstanding Natural Landscape
Health and Wellbeing	
Open Space / Parks	Goes through a small portion of Memorial Park.
Sensitive receptors	None identified
Potentially contaminated land	None identified

3.11 Stage 2 – Route C7 – Lake Hayes to Shotover River

Operative Planning Maps: 30 Lake Hayes, 31 Lower Shotover

Proposed Planning Maps Decisions Version: 30a Shotover Country and Lake Hayes Estate, 31 Lower Shotover

General	
Route Description	The route follows an existing track through the Shotover Country area. It then connects with the existing Lakes Hayes to Shotover Bridge path.
Surrounding Environment	The surrounding environment consists of newly built residential dwellings.
Zoning	ODP: Rural General, Shotover Country Special Zone PDP: Rural, Large Lot Residential A, Informal Recreation
Designations	None identified
Natural Environment	
Waterways	The route connects with the Lake Hayes to Shotover Bridge path. This connection is in close proximity to the Shotover River.
Hazards	In an area of possible liquefaction risk.
Protected Trees	None identified
Cultural and Historic Heritage	
Heritage Listing	Historic Heritage Feature 69 (Laurel Bank House)
Landscape and Urban Design	
Landscape Overlays	None identified
Health and Wellbeing	
Open Space / Parks	Goes through a number of reserve areas in Shotover Country
Sensitive receptors	None identified
Potentially contaminated land	None identified

4 Kawarau Water Conservation Order

On 23 October 1990, the Minister of Conservation applied for a water conservation order in respect of the Kawarau River and all contributing waters, in particular for the Kawarau River upstream of Lake Dunstan, and the Shotover and Nevis tributaries. The purpose of this Order (and its following amendments (2011 and 2013) is to protect, as far as practicable in their natural state, the Kawarau and its tributaries, the Shotover and Nevis Rivers, and provide recognition and protection for these outstanding characteristics.

Three relevant sections in Schedule 2 of the Order include:

Water to be protected	Outstanding Characteristics	Restrictions and prohibitions
Kawarau River mainstream from Scrubby Stream to Lake Wakatipu control gates (S133:940715 to S132:615707)	Wild and scenic characteristics; Natural characteristics, in particular the return flow in the upper section when the Shotover River is in high flood; Scientific values, in particular the return flow in the upper section when the Shotover River is in high flood; Recreational purposes, in particular rafting, jetboating and kayaking.	No damming allowed; Water quality to be managed to Class CR standard.
Shotover River mainstream (at or about S132:645720 to S114:542262)	Wild and scenic characteristics; Natural characteristics, in particular the high natural sediment load and active delta at confluence with Kawarau River; Scientific value, in particular the high natural sediment load and active delta at confluence with Kawarau River; Recreational purposes, in particular rafting, kayaking, and jet boating; Historical purposes, in particular goldmining.	No damming allowed; Water quality to be managed to Class CR standard.
Lake Wakatipu (from outlet at control gates (S132:615707) to confluences of Dart River (at or about S122:291916_ and Rees River (at or about S123:301915) and including whole lake)	Fishery; Scenic Characteristics; Scientific value, in particular water clarity and bryophyte community	Fish passage to be maintained; Water quality to be managed to Class AW, Class CR, Class F, and Class FS standards.

	Recreational purposes, in particular boating Significance in accordance with tikanga Maori, in particular sites at the head of the lake, and the legend of the lake itself.	

B

Appendix B – Likely Approvals required for routes 1-12

Route	ODP Zones	PDP Zones	Bridges, Retaining Walls	Earthworks	Designation	Conservation or Reserve Land	Other Notations
Route 1 – Jacks Point to Frankton	Resort Zone (Jacks Point) Rural General	Rural Jacks Point	Retaining wall within SH6 corridor.	Likely, exceeding maximum zone volumes.	Passes through NZ Transport Agency 84 (State Highway purposes). All QLDC Roads are designated for roading purposes.		Multiple small stream crossings using culverts. Within proximity to Kawarau Falls Bridge (Heritage Feature 40). Within an area of Rural Character Landscape and Outstanding Natural Landscape.
Route 2 – Kelvin Heights to Frankton	Rural General Low Density Residential High Density Residential	Informal Recreation Low Density Suburban Residential High Density Residential	None identified.	Likely, works within setbacks of waterways.	Passes through QLDC 184 (Recreation Reserve), 179 (Recreation Reserve), 27(sewage pump station). Close proximity to QLDC 33 (pump station). All QLDC Roads are designated for roading purposes.	Part of route is within a QLDC reserve managed under the Sunshine Bay to Kelvin Heights Reserve Management Plan. Approval required from QLDC Parks and Recreation.	Within close proximity to Lake Wakatipu, a Statutory Acknowledgement Area. Within proximity to Kawarau Falls Bridge (Heritage Feature 40).
Route 3 – Queenstown to Frankton	Rural General Low Density Residential High Density Residential	High Density Residential Informal Recreation	Multiple retaining walls.	Yes, works within waterway setbacks exceeding maximum volumes	Passes through QLDC 36 (Sewage Pump Station), 156 (Recreation Reserve), 165 (Frankton marine Local Purpose Reserve), 202 (Public Reserve) and 525 (esplanade reserve). All QLDC Roads are designated for roading purposes.	Part of route within a QLDC reserve managed under the Sunshine Bay to Kelvin Heights Reserve Management Plan.	Potentially in the dripline of Tree 201. Outstanding Natural Landscape.
Route 4 – Lake Hayes to Frankton	Rural General Rural Lifestyle Bendemeer Special Zone Shotover Country Quail Rise	Rural Large Lot Residential Informal Recreation Rural Lifestyle	Multiple retaining walls. Two new bridges over Kawarau River.	Likely works within waterway, exceeding maximum volumes.	Passes through QLDC 343 (recreation reserve); 258 (recreation reserve); 290 (recreation reserve) NZTA State Highway Network. All QLDC Roads are designated for roading purposes.	Passes through DOC Protected Land: Shotover River Marginal Strip / Tuckers Beach Marginal Strip / Kawarau River Marginal Strip.	Shared path via Old Shotover Bridge (Heritage Feature 222). Unlikely to involve physical works. Within a Rural Character Landscape.
Route 5 – Arthurs Point to Queenstown	Rural General Business High Density Residential Queenstown Town Centre	Informal Recreation Nature Conservation Business Mixed Use High Density Residential	Multiple retaining walls. New shared path next to an existing road bridge.	Likely, to have works within waterway setbacks exceeding maximum volume.	Passes through MoE 14 (Queenstown Primary School); MoE 15 (Wakatipu High School); QLDC 222 (tree planting); QLDC 226 (Recreation Reserve, Warren Park); QLDC 83 (Local Purposes - Drainage) Reserve,	Route is within QLDC's Recreation Ground. Managed under the Queenstown Recreation Reserve Management Plan.	Within a landscape overlay (ONL). Close proximity, but not within DoC land Close proximity to Protected Tree 247.

Route	ODP Zones	PDP Zones	Bridges, Retaining Walls	Earthworks	Designation	Conservation or Reserve Land	Other Notations
	Visitor Accommodation sub zone				QLDC 210 (Queenstown Recreation Reserve). All QLDC Roads are designated for roading purposes.		
Route 6 – Fernhill to Queenstown	Low Density Residential Rural General High Density Residential	Informal Recreation Lower Density Suburban Residential Medium Density Residential High Density Residential	Retaining walls in reserve land.	Likely to exceed zone standards.	Passes through QLDC 248 (Recreation); 469 (Water pump station). All QLDC Roads are designated for roading purposes.	Passes through DOC Protected Land: Ben Lomond Scenic Reserve (recreation). Under the Ben Lomond and Queenstown Hill Reserve Management Plan	Within a landscape overlay (ONL). Potentially in drip line of tree 239.
Route 7 – Jacks Point to Kelvin Heights	Low Density Suburban Residential Rural Jacks Point Rural General Lower Density Residential	Jacks Point Rural Lower Density Suburban Residential	Unknown based on concept plans.	Likely to exceed zone standards and setback from waterways.	Passes through QLDC 180 (Recreation Reserve), QLDC 26 (Sewage Pump Station)	DoC protected land along waterfront. Goes through Jardine Park, under the Kelvin Heights Reserve Management Plan.	Passes through ONL and RCL.
Route 8 – Arthurs Point to Frankton	Rural General Rural Lifestyle	Rural Wakatipu Basin Lifestyle Precinct Wakatipu Basin Rural Amenity Zone Business Mixed Use Medium Density Residential	New bridge over Shotover River. Extent of retaining walls unknown.	Likely to exceed zone standards and setback from waterway.	Passes through QLDC 535 (Recreation Reserve) All QLDC Roads are designated for roading purposes.	Passes through a couple areas of DoC land (Conservation Area – Big Beach / Shotover River; Marginal Strip – Shotover River; Conservation Area – Lower Shotover; Tucker Beach Recreation Reserve)	Within an Outstanding Natural Landscape (ONL).
Route 9 – Lake Hayes Estate to Arrowtown	Rural General Resort - Millbrook	Millbrook Informal Recreation Wakatipu Basin rural Amenity Wakatipu Basin Lifestyle Precinct Rural Lifestyle	Widening of an existing boardwalk along lake Hayes. Extent of retaining walls unknown.	Likely to exceed zone standards and setback from waterways.	Yes, passes alongside QLDC 545 (Millbrook Cricket Ground) and through QLDC 333 (Sewage Pump Station). Also passes through QLDC 168 (Recreation Reserve) and 169 (Recreation Reserve and Tree Planting Reserve).	Lake Hayes and its shores are a Wildlife Refuge and are covered in part by a Recreation Reserve and Wildlife Management Reserve administered by DOC.	Within a Landscape overlay (ONL), Passes by Heritage Feature 112.

Route	ODP Zones	PDP Zones	Bridges, Retaining Walls	Earthworks	Designation	Conservation or Reserve Land	Other Notations
					NZTA State Highway Network. All QLDC Roads are designated for roading purposes		
Route 10 – Arthurs Point to Arrowtown	Rural General Resort Meadow Park	Wakatipu Basin Rural Amenity Rural Nature Conservation	Extent of retaining walls unknown.	Likely to exceed the zone standards.	All QLDC Roads are designated for roading purposes.	Passes through DoC land at the lower Shotover.	Outstanding Natural Landscape
Route 11 – Queenstown Town Centre	Rural General	Community Purposes	New cycle bridge	Possibly, although predominantly within road corridor.	QLDC 185 (Recreation Reserve), QLDC 205 (Recreation Reserve). All QLDC Roads are designated for roading purposes.	Various sections of the routes pass through or are in close proximity to recreational reserves. These are the Marine Parade Reserve – Council Walkway and Village Green Recreational Reserve. The route cuts through two Foreshore Management Areas; Marine Enterprises Wharf to Town Pier and Beachfront and Gardens.	Multiple heritage items.
Route 12 – Frankton North	Special Zone Rural General Frankton Flats Road Corridor Low Density Residential	Informal Recreation Community Purposes	Unlikely	Likely to exceed zone standards	NZ Transport Agency 84 (State Highway Purposes) QLDC 371 (Roading purposes) QLDC 29 (Multi-purpose indoor and outdoor recreation, cultural and conference complex) QLDC 154 (Recreation Reserve, Motor Park) QLDC 155 (Recreation Reserve). All QLDC roads are designated for roading purposes.	QLDC reserves managed under the Sunshine Bay to Kelvin Heights Reserve Management Plan.	
Route 12 – Frankton South	Rural General Road Corridor	Rural Informal Recreation	Unlikely	Unlikely	NZ Transport Agency 84 (Highway Purposes). All QLDC Roads are designated for roading purposes.	(Kawarau Falls Recreation Reserve) This appears to not be designated, nor under a Reserve Management Plan.	Within proximity to Heritage Feature 40 (Kawarau Falls Bridge)

Route	ODP Zones	PDP Zones	Bridges, Retaining Walls	Earthworks	Designation	Conservation or Reserve Land	Other Notations

Appendix P – RSA Exemption Form

Road Safety Audit Exemption Form

NZ TRANSPORT AGENCY
WAKA KOTAHI

File reference

Project name Wakatipu Active Travel Network

Project stage Singe Stage Business Case

RCA Queenstown Lakes District Council

Brief project description and location:

Identification and development of an active travel network within the Wakatipu Basin. The aim of the Wakatipu Basin Active Travel Network (WATN) Single Stage Business Case (SSBC) is to provide strategic context and available evidence for investment in the development of an Active Travel Network for pedestrians, cyclists and e-mobility beyond the current partial network of trails, tracks and routes. The SSBC has investigated the existing problems and assesses options to define a preferred option for achieving the outcome of an integrated, legible, attractive and safe Active Travel Network.

Exemption rationale:

Key project partners including NZTA and QLDC agreed that a Road Safety Audit was not required for this Single Stage Business Case. Route specific audits will be prepared at detailed design stage.

Declaration:

Having checked the above project with reference to the relevant procedures as laid down in Road Safety Audit Procedures for Projects - Guidelines, 2013. I consider that the proposals will not have an adverse effect on the safety of road users over a significant period. Therefore I consider that an independent road safety audit is not required for this stage.

Recommended by (project manager):

Name Gabrielle Tabron

Position Project Manager

Signature

Date 03/07/19

Endorsed by (safety engineer):

Name Ulrich Glasner

Position Chief Engineer

Signature

Date 3/7/19

Appendix Q – Safety in Design (SiD) Risk Elements

Ref	Guideword	Hazard	Cause & Outcome	Existing controls, if any	Risk Matrix L	C	LR
1	**Construction Phase**						
C1.01	*Movement Direction*	Unstable Ground Conditions	Unstable ground conditions, which lead to workers and / or equipment falling e.g. excess water run-off hillside/ water seeping through the face, leading to slope failure and personnel injury.	Contractors mitigations - standard. Manage timing of construction, if possible, to mitigate against excess water run-off.	3	4	H
C1.02	*Movement Direction*	Unstable Ground Conditions	Unstable ground conditions, that lead to rockfall and slips onto work site, leading to personnel injury	Contractors mitigations - standard	5	4	E
C1.03	*Heights / Depths*	Working at Heights	Working at heights which leads to a fall/ personnel injury	Existing health and safety regulations. Constructor's mitigation - standard.	2	4	H
C1.04	*External safety interfaces*	Working near Water	Working near water, leading to personnel injury	Existing health and safety regulations. Constructor's mitigation - standard.	3	4	H
C1.05	*Heights / Depths*	Working at Heights	Working at depth/ deep excavations, leading to personnel injury	Check and assess groundwater levels, existing services and ground stability during design. Review at construction. Constructor's mitigation - standard.	3	4	H
C1.06	*Heights / Depths*	Confined Space	Working on existing structures with poor structural integrity i.e. historic tunnel, leading to personnel injury	Contractors mitigations - standard	3	5	E
C1.07	*Poor Ergonomics*	Heavy Lifting	Manual heavy lifting, moving grates etc., leading to personnel injury	Existing health and safety regulations. Constructor's mitigation - standard.	3	2	M
C1.08	*Size*	Confined Space	Pressure on construction accessibility - spatial constraints (pinch points) i.e. Narrow paths, across steep terrain and crossings, in particular the path from the coastline to Jack's Point (24% gradient), and towards new KFB bridge and alongside existing guard rail. Note: the existing guardrail along SH6 (between peninsula road to KFB) will need to be removed for construction in some places, leading personnel injury.	Remove sections of guardrail, and install temporary barriers, to create a construction zone. Deploy TMP. Standard contractor's mitigations - i.e. plant selection	3	4	H
C1.09	*External safety interfaces*	Utility Clashes	Clash with existing services (water, gas, high-pressure water, sewer, drainage, scruffy domes, man holes, telecommunications, power lines), leading to personal injury.	Dial before you dig. Consider location and level of existing services during design. Contractors mitigations - standard. Edge protection around deep manholes, confined space controls, lock out on diggers and height restrictions, identification with flags.	5	2	H
C1.10	*External safety interfaces*	Proximity to live Traffic	Proximity to traffic, in highspeed environments along state highway and local roads, leading to collision and / or personal injury	Review and identify potential clashes during design, eliminate or minimise. Constructor's mitigations - standard, i.e. Traffic Management Plan (TMP)	3	5	E
C1.11	*External safety interfaces*	Proximity to live Traffic	Clash with other road users, leading to personnel injury i.e. across private accessways, intersections, crossings, subdivision crossings currently under construction, shared path with roadways.	Constructor's mitigations - standard, i.e. Traffic Management Plan (TMP). Contractor to coordinate with other existing works.	3	3	H
C1.12	*External safety interfaces*	Proximity to live Traffic	Conflict with tourists/ drivers unfamiliar with road works, leading to personal injury	Constructor's mitigations - standard, i.e. Traffic Management Plan (TMP)	3	4	H
C1.13	*Environmental conditions*	Adverse Weather Conditions	Snow and icy weather conditions, prominent during winter, leading to personnel injury.	Contractors mitigations - standard. Manage timing of construction if possible, to mitigate against snow and icy conditions, typical in the QLDC area.	3	3	H
C1.14	*Environmental conditions*	Adverse Weather Conditions	Flooding, including overland flow and raised river/ lake level. Note, risk of flash flooding regarding the Shotover river, and Kawarau downstream from Shotover, leading to personnel injury.	During design, consideration of flood levels / gradients. Design criteria to design to required storm events.	2	4	H
C1.15	*Environmental conditions*	Adverse Weather Conditions	Large trees falling over e.g. Willows, leading to personal injury	Arborist assessment to identify trees at risk whilst clearing the area for construction	3	4	H

WAKATIPU ACTIVE TRAVEL NET PROPOSED & APPROVED MITIGATION MEASURES — Mitigated Risk & Resolution — **RESIDUAL RISK**

NETWORK-WIDE SAFETY AND D

Ref	Guideword	Hazard	Proposed Control (1 Eliminate, 2 Substitute, 3 Reduce, 4 Control)	L	C	LR	Risk Owner	Client Approved	Design Status	Date	Risk Owner	Action Required
1	**Construction Phase**											
C1.01	*Movement Direction*	Unstable Ground Conditions	Geotechnical investigations. Review implications of upstream activities on worksite. Contractor to install appropriate measures (i.e. barriers, harnesses etc), and have appropriately trained staff	2	3	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.02	*Movement Direction*	Unstable Ground Conditions	Geotechnical investigations. Design to consider rock fall, particularly around bluffs, look at alternative route options. Contractor to install appropriate measures.	3	3	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.03	*Heights / Depths*	Working at Heights	Reduce / minimise working at heights during design. Contractor to install appropriate measures (i.e. barriers, harnesses etc), and have appropriately trained staff	1	2	L	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.04	*External safety interfaces*	Working near Water	During design, review pathways near water and determine if best route i.e. maximum path widths and location of pathways adjacent to water bodies.	2	4	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.05	*Heights / Depths*	Working at Heights	During design, look at alternative route options and crossings. Additional monitoring during construction. Raising awareness and H&S risks during tender phase. Raise awareness in toolbox meetings.	2	4	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.06	*Heights / Depths*	Confined Space	Review of route location during design. Structural assessment / pre-condition survey, advising construction methodology.	2	5	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.07	*Poor Ergonomics*	Heavy Lifting	Review construction methodology and minimise size of new infrastructure, where possible, during design. Noting the size of equipment / plant available on site.	2	2	L	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.08	*Size*	Confined Space	Review route selection, constructability and staging of route development, to coincide with future roading development and access. Identify pinch points and review alternative path locations. Review and monitor TMP. Review methodology with contractor.	2	4	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.09	*External safety interfaces*	Utility Clashes	Review location / depth and vertical alignment/ finished level to minimise clash. Undertake test pits of high risk areas pre-construction, and amend design to minimise the risk of clashes. Liaise with local powerline authority about future plans of undergrounding network. Review stability of power poles, and location of pathway during design. Mark high risk areas onsite. Contractor to hold regular Toolbox sessions to heighten awareness around at risk areas.	2	2	L	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.10	*External safety interfaces*	Proximity to live Traffic	Route specific TMP. Additional separation i.e. temporary fencing / barriers, clear signage. Reduced speed limits. Communication strategy to inform community of works.	2	3	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.11	*External safety interfaces*	Proximity to live Traffic	Review and identify potential clashes during design, eliminate or minimise. Implement additional temporary traffic barriers and clear signage. Reduce speed limits. Communications Management Plan, to include liaison with key personnel/ property developers managing the construction of subdivision sites.	2	3	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.12	*External safety interfaces*	Proximity to live Traffic	Identify and consider tourist hotspots during design, review alternative routes. Implement additional temporary traffic barriers and clear signage. Reduced speed limits. Minimise distance and time of TMP deployed.	2	4	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.13	*Environmental conditions*	Adverse Weather Conditions	Managing programme to allow contingency and staging of construction to allow for inclement weather conditions	2	3	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.14	*Environmental conditions*	Adverse Weather Conditions	Monitor weather and put early warning processes in place. Advise contractor of potential flood areas. Contractor to provide appropriate flood mitigation.	1	4	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
C1.15	*Environmental conditions*	Adverse Weather Conditions	During design, look at alternative route options. Consider which trees need to be cleared during design and construction.	2	4	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route

Ref	Guideword	Hazard	Cause & Outcome	Existing controls, if any	Risk Matrix L	C	LR
2	**Operation & Maintenance Phase**						
O1.01	*Heights / Depths*	Steep terrain	Risk of user falls, due to terrain (exposed edges), particularly Kelvin Heights to Jacks Point route, leading to personal injury. Noting proximity to water.	Follow QLDC trails guide, 1.5m fall from height guidance methodology, through design process.	4	4	E
O1.02	*Movement Direction*	Unstable Ground Conditions	Unstable ground conditions, that lead to rockfall and slips onto pathway, leading to personal injury	Identify areas that need containment during design. Geotechnical investigation - standard construction procedures.	2	4	H
O1.03	*External safety interfaces*	Confined Space	Public access to jetties, marina, lake edge etc., across / adjacent pathways and crossing with multiple modes of transport, leading to personal injury. Noting the high number of tourists and number of people under the influence of rugs and alcohol in the local area. Noting the low speed environment around marina.	Review risk areas i.e. transport modelling / interaction with marina and other transport modes, through design.	4	3	H
O1.04	*Size*	Confined Space	Access constraints, i.e. for maintenance, dewatering of sumps etc., leading to personnel and public injury.	Operation / maintenance programme. Appropriate plant to suit spatial constraints.	3	3	H
O1.05	*Timing*	Poor maintenance	Poor maintenance over time, leading to deterioration of the assets and personal injury	Operation / maintenance programme. Reliant on public feedback to report any asset issues that require attention.	4	3	H
O1.06	*Egress / Access*	Inadequate connectivity	Conflict of path users due to number of connections and steep accessways, in particular across SH6A (anticipated this route will have the largest number of users), leading to personal injury	Noting, number of crossings are pre-determined. Integrating safe crossing points during design, considering desire lines.	3	4	H
O1.07	*Size*	Inadequate connectivity	Access constraints for users, sightlines / blind corners, sharp pinch points, snag items, narrow pathways, unfriendly terrain leading to personal injury. Note, likelihood likely to increase with uptake of users/ traffic volume and use electronic modal transport.	None identified	3	3	H
O1.08	*Egress / Access*	Lack of streetlighting	Lack of streetlighting is a risk to path users, leading to personal injury.	Review QLDC and NZTA lighting guidelines based on multiple model modes, and local environment, residents etc.	3	4	H
O1.09	*External safety interfaces*	Inadequate connectivity	Conflict of path users across private accessways, intersections and crossings, and shared path with roadways, leading to personal injury. (SIMILAR TO O1.06 NOTED ABOVE)	Review and identify potential clashes during design, eliminate or minimise. Noting, areas of good sight lines and low speed environments is acceptable.	3	3	H
O1.10	*External safety interfaces*	Proximity to live Traffic	Proximity to traffic, in highspeed environments along state highway and local roads, leading to collision and / or personal injury	Review and identify potential clashes during design, eliminate or minimise. Note: the guardrail currently in place is only there to stop snag items from causing problems for drivers, not designed to protect pedestrians from drivers.	3	5	E
O1.11	*Environmental conditions*	Adverse Weather Conditions	Surface conditions are hazardous, leading to personal injury (i.e. wet or icy-conditions)	Review surface treatments and grads during design, including structures, boardwalks, sealed paths etc.	4	3	H
O1.12	*External safety interfaces*	Inadequate connectivity	Conflict with other users of the shared path; interaction of pedestrian, cyclists, commuter bikers, high speed electronic modal transport, leading to personal injury. (SIMILAR TO O1.07 NOTED ABOVE)	No controls	3	3	H
O1.13	*External safety interfaces*	Confined Space	Proximity to large number of tourists overwhelming the pathway, leading to personal injury (SIMILAR TO O1.03 NOTED ABOVE)	No controls	4	2	M
O1.14	*External safety interfaces*	Conflict with stray wildlfe	Conflict with stray wildlife/ stock through rural areas, leading to personal injury	Currently fencing separating stock from path users.	2	2	L
O1.15	*Environmental conditions*	Adverse Weather Conditions	Large trees falling over e.g. Willows, leading to personal injury	Arborist assessment to identify trees at risk of falling in strong winds	3	4	H
O1.16	*Environmental conditions*	Adverse Weather Conditions	Snow and icy weather conditions, prominent during winter, leading to personal injury.	No controls	4	3	H
O1.17	*Environmental conditions*	Adverse Weather Conditions	Flooding, including overland flow and raised river/ lake level, leading to personal injury post event.	No controls	3	3	H

Key;

C= Consequence — 1) Low 2) Moderate 3) Significant 4) Major 5) Critical — **LR** Lev

L= Likelihood — 1) Rare 2) Unlikely 3) Possible 4) Likely 5) Almost Certain

(Note: minimum of 2 reviews per project)

WAKATIPU ACTIVE TRAVEL NET PROPOSED & APPROVED MITIGATION MEASURES — Mitigated Risk & Resolution — **RESIDUAL RISK**

NETWORK-WIDE SAFETY AND D

Ref	Guideword	Hazard	Proposed Control (1 Eliminate, 2 Substitute, 3 Reduce, 4 Control)	L	C	LR	Risk Owner	Client Approved	Design Status	Date	Risk Owner	Action Required
2	**Operation & Maintenance Phase**											
O1.01	*Heights / Depths*	Steep terrain	Review design standards in light of modal users i.e. self explaining pathways, noting increased use of e-bikes, which are travelling at speed and are heavier. Implementing speed restrictions through design i.e. gradient reversals. Clear signage on pathways.	2	4	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.02	*Movement Direction*	Unstable Ground Conditions	Monitoring risk areas, following construction, as part of routine maintenance. Design to consider rock fall, particularly around bluffs. Consider residual risk, look at alternative route options. Install catch fencing in at risk areas.	1	4	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.03	*External safety interfaces*	Confined Space	Review integration of pathway through specific areas, including the marina, at design. Clearly defined modal hierarchy. Consider number of public in the area and consult with the ferry services provider.	3	3	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.04	*Size*	Confined Space	Minimise the need for specialised maintenance plant, to access constrained areas, during design.	2	3	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.05	*Timing*	Poor maintenance	Design to consider maintenance requirements, and reduce cost implications where possible. Establish and communicate reporting channels, to raise maintenance issues. Ensure sufficient funding for maintenance.	2	3	M	Designer/ QLDC		Route Selection	20/02/19	Designer/ QLDC	To be considered at premliminary design phase, for each individual route
O1.06	*Egress / Access*	Inadequate connectivity	Provide increased number of accessways, if possible. Review existing accessways and improvements. Consider grade separation, in key locations to channel users. Integration with F2Q Business Case. Provide bike storage facilities along the base of the trail.	2	4	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.07	*Size*	Inadequate connectivity	Consider sightlines, design to slow traffic, early and clear signage notification.	2	2	L	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.08	*Egress / Access*	Lack of streetlighting	Lighting strategy to be developed for the network and implemented. Consideration of personal risk constraints - lighting visible on lakes edge. Provide sensor lighting from bollards.	2	3	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.09	*External safety interfaces*	Inadequate connectivity	Review and consider different design code requirements, for subdivision developments (QLDC and COP) and AustRoads cycle design guideline.	2	3	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.10	*External safety interfaces*	Proximity to live Traffic	Additional separation i.e. fencing / barrier, clear signage.	2	4	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.11	*Environmental conditions*	Adverse Weather Conditions	Review path geometrics. Application of non-slip surface treatments. Provide clear signage of hazards.	3	3	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.12	*External safety interfaces*	Inadequate connectivity	Review and identify network pinch points during design, and consider treatments e.g. line marking, clear signage etc	2	3	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.13	*External safety interfaces*	Confined Space		2	2	L	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.14	*External safety interfaces*	Conflict with stray wildlfe	Review and identify requirement for stock overpass.	1	2	L	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.15	*Environmental conditions*	Adverse Weather Conditions	During design, look at alternative route options. Consider which trees need to be cleared during design and construction. Consider track closures in the event of predicted storm.	2	4	H	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.16	*Environmental conditions*	Adverse Weather Conditions	During design, consideration of route location and slope gradients (both temporary and permanent), selection between shady and sunny locations and proximity to tree locations.	2	3	M	Designer		Route Selection	20/02/19	Designer	To be considered at premliminary design phase, for each individual route
O1.17	*Environmental conditions*	Adverse Weather Conditions	Identify and review at risk areas, and design to an agreed flood event. Monitor at risk areas, following an event	1	2	L	Designer/ QLDC		Route Selection	20/02/19	Designer/ QLDC	To be considered at premliminary design phase, for each individual route

Key;

C= Consequence

L= Likelihood

Notes:

L) Low M) Moderate H) High E) Extreme

Hazards / risks considered are those that are project / site specific, non-standard / bespoke designs, special processes, high hazard risks (e.g. non 'business as usual' hazards) that have been identified at the time of the review(s). Other risks will continue to appear during the design life of the project and should be assessed and managed by appropriate parties.

Appendix R – Economic Assessment Methodology Memo

WATN ECONOMICS MEMO

This document shows the approach, methodology, and main assumptions adopted for completing the Wakatipu Basin Active Travel Network (WATN) Single Stage Business Case (SSBC) economic appraisal. The appraisal was based on the NZ Transport Agency Economic Evaluation Manual (EEM), with the approach and assumptions agreed with the main stakeholders.

Assumptions and estimates have been adopted and used for this analysis and have been taken from the Wakatipu Basin Future Public Transport Demand/Capacity Analysis. This is further detailed in Appendix I.

General approach

The economic evaluation has been undertaken in accordance with the NZ Transport Agency Economic Evaluation Manual (EEM), as effective 1 July 2018. The methodology and main parameters were taken from it, although extra assumptions were adopted.

The general inputs for the economic evaluation are:

- Base Date of 1 July 2018;
- Time Zero of 1 July 2019;
- Discount rate of 6% applied to all annual benefits and costs;
- Analysis period of 40 years after inauguration;

The benefits for cycling facilities - which consists of travel time cost savings, safety benefits, health and environment benefits, and traffic reduction benefits - were calculated using the procedures detailed in the EEM, utilising SP-11 – Walking and cycling facilities.

A full procedures economic analysis was undertaken, incorporating the cycling trips estimation from the vehicle trip model that was used in the Wakatipu Basin Future Public Transport Demand/ Capacity Analysis developed by WSP Opus.

For the cycling routes, no walking benefits were estimated neither potential economic benefits originated in the increase in tourism and recreational activities. This is a conservative approach adopted as a consequence of the lack of information.

For the Town Centre projects (Upper Brecon St and Park St), safety benefits for pedestrians were estimated. The pedestrian flows were estimated using counts and forecasts for the peak period and an average day profile as explained afterwards. These projects are expected to have other benefits as amenity and economy impact through increase in tourism, but they were not measured.

Cycling demand estimation

The cycling facilities benefits were primarily based on the estimated number of cyclists using the facility. There are different methods for estimating the cycling trips, each having its advantages as well as its challenges:

1. Cycling model. A strategic active model can be developed that derives land use and network data to enable an objective measure of walk and cycle responses to infrastructure changes, demographic changes and to changes in other modes at a regional level.
2. EEM SP11 trip generator tool. This is based on estimation on the proximity of population to the cycling facility and using standardized parameters. This method mainly derives the demand from likelihood of population to cycle based on the NZ Census mode share data (provided on a regional level). This method, whilst relatively simple to use, does not provide a solution on dealing with routes that serve the same population catchment. Using a broad cycle regional mode share may not also be appropriate to be applied on some routes where the origin-destination zones are very close or very far away from one another.
3. Based on existing counts and project the growth forward based on an assumed growth profile. This appropriateness of this method would depend on quality of count data, whereby there's a risk of bias if the counts coincided with non-normal factors (e.g. poor weather or specific events) or does not account for seasonality factors. This method may also be difficult to account for changes in travel routes or patterns in response to infrastructure, land use or demographic changes.
4. Estimate cycling trips as a percentage of total trips between Origin-Destination zones. This method requires availability of a trips model and assumptions on the percentage of cycling trips between the origin-destination pairs.

Node to Node analysis was determined to be a viable methodological approach for assessing cycle trip estimation because local vehicle trip model information was available through the Wakatipu Basin Future Public Transport Demand/ Capacity Analysis study. This model provides detailed local information about the mobility patterns between zones, although without differentiating cycling trips. Based on the fact that this is local data it was decided then to use it for estimating cycling trips, instead of a generic estimation as the SP11 trip generator tool.

The first step was to set the Origin and Destination (OD) areas to be used in the evaluation, based on the zones connected by the proposed routes. These were: Queenstown, Frankton, Kelvin Heights, Arrowtown, Arthurs Point, Fernhill, Jacks Point and Lake Hayes. Once these were defined, the movements in all modes were estimated for each OD pair using the trip model. This matrix is the base data used for the trip estimation as it shows the mobility patterns between areas. This was replicated for the 3 model years available: 2016, 2028 and 2046, so it was possible to estimate a growth profile along the timeframe of the evaluation. Part of the trips were taken out of the data base as it was assumed that the length of those trips is too large for a portion of them to be cycled. This is equivalent to a 17% of the total trips.

Taking as a starting point the commute share value for Queenstown-Lakes District in the EEM (3.6%) it was assumed an individual commute share for each route, as their characteristics are very different: some of them are inside the urban area, other connecting conurbations and others closer to a leisure profile rather than a commuting corridor.

It was agreed previously with stakeholders that the targeted increase in active modes usage would reflect future commute shares. The future behaviour of users is hard to predict without a proper model, so it was necessary to look for sources of data for assuming a forecast. The Queenstown Integrated Transport Programme Business Case (QIT PBC) set a target of increasing alternative mode share from 15% currently to 30% in 2045. Therefore, all initial modal split estimates were assumed to be double by 2045 as the QIT PBC was the most reliable source available. This is a major assumption and its uncertainty represents a risk, as all the future benefits are based on these values. Consequently, its effects on the results were tested using a sensitivity analysis.

The adopted commute shares are as follows:

Route	1	2	3	4	5	6	7	8	9	10
2016	5.0%	3.6%	5.0%	5.0%	5.0%	3.6%	1.0%	3.6%	1.0%	0.5%
2028	7.5%	5.4%	7.5%	7.5%	7.5%	5.4%	1.5%	5.4%	1.5%	0.8%
2046	10.0%	7.2%	10.0%	10.0%	10.0%	7.2%	2.0%	7.2%	2.0%	1.0%

After estimating the cycling commuting trips, the non-commuter trips were estimated, even though these have a small contribution to total benefits. This was accomplished by assuming a commuting-non-commuting distribution of trips for each route based on their characteristics (type of nodes involved, job areas, distance). As an example, the link between Jacks Point and Kelvin Heights (Route 7) is likely to have only a small percentage of commute trips as it's not connected to major job areas and it's likely to attract more leisure trips. On the other end, the facility linking Queenstown centre with Frankton (Route 3) is expected to have a bigger share of commuters.

Route	1	2	3	4	5	6	7	8	9	10
Commuter	60%	40%	60%	40%	40%	60%	10%	40%	20%	10%
Non-commuter	40%	60%	40%	60%	60%	40%	90%	60%	80%	90%

It was assumed that in the Do Minimum scenario (DM) the commute share would remain constant over the period of analysis. The calculated trips in DM were used for estimating the new cycling trips generated by the facility and for calibration purposes: there were cycling counts available for some of the routes, so it was possible to compare the estimations with the current number of cyclists in each route. The counts were compared with the DM estimation for 2018.

Route	1	2	3	4	9
Count	126	274	827	397	117
DM model	143	307	1029	472	153
% extra trips	12%	11%	20%	16%	24%

The comparison suggests that the estimated numbers closely match with the counts and as such is deemed to be good enough considering to be used for further projection and economic evaluation.

It was also estimated the commute share for the sum of the routes for comparing against the EEM value. The estimated commute share for the DM was 3.4%, slightly below the 3.6% from the EEM that is based on the previous 2013 Census.

Town Centre projects estimation

For Upper Brecon St project, the project benefits are primarily the safety benefits for pedestrians. The current high demand in the area and the lack of an appropriate infrastructure (mainly north Cemetery Rd) results in pedestrian walking on the road. This is potentiated by the location of several parking places on the left hand of the street without a footpath.

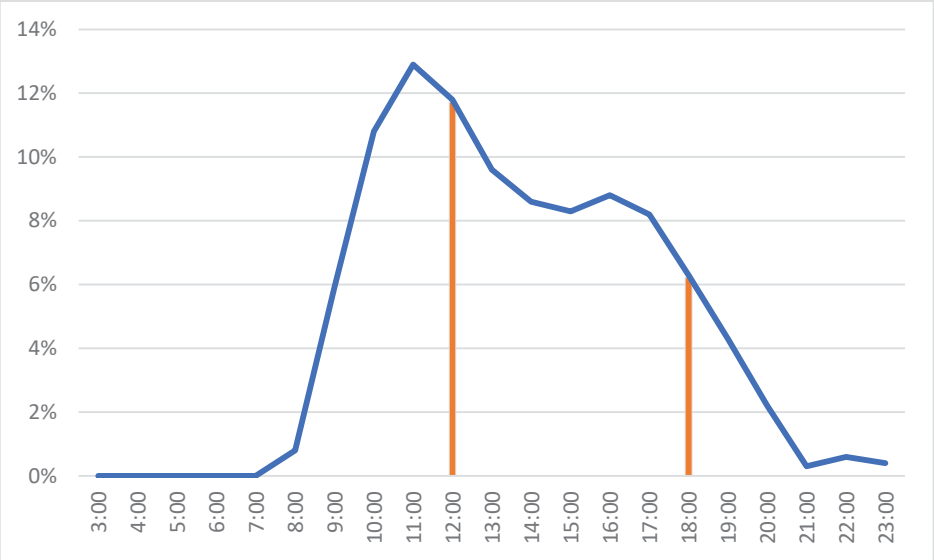
For pedestrian, existing and forecast flows were estimated using data provided by Stantec and based on counts in the Brecon St and Man St intersection. Forecast flows were produced based on existing observed data, using two approaches:

- An additive approach, where additional demand associated with known development is superimposed onto the network
- A multiplicative approach which uses factors derived from projected employment growth in the town centre to uplift demand

The existing and forecast flows during the peak period (12pm-18pm) obtained by this process were then expanded to daily averages using the Skyline Gondola ticket data. This approach was decided as the Gondola is the main trip attractor in the area, so its daily profile is considered an appropriate proxy variable.

Data provided by Skyline Enterprises illustrates the average hourly tickets sold by the Gondola in 2018/2019, as presented in the figure below. The period for which counts and forecast were available (12pm – 18pm) represents approximately 55% of the total.

Figure 1 – Sky Gondola tickets profile (average 2018/2019)



In the case of Park St, the closest pedestrian flow data available was from Hotops Rise (from the same source as the Brecon St ones). It was decided then to make small simultaneous counts on Hotops Rise and Park St during the peak hour of a weekday, for estimating the relation between the two flows. It was found that the pedestrian flow on Park St is approximately 32% of Hotops Rise's flow, and this relation was used for estimating Park St flows from Hotops Rise's.

The same daily profile as Brecon St was used as there was no better source.

Benefits

The benefits estimated were in accordance with the EEM's walking and cycling benefits methodology, based on Consumer surplus.

Health and environment benefits (HEB) of cycling were divided in two types (health benefits and road traffic reduction benefits) that are related to people that change modes from motorized vehicles to active modes, becoming physically active and reducing traffic. That means this type of benefits is generated only by those who start cycling because of the provision of the new facility. But not all those estimated as new daily trips are going to be active enough as for increasing their health level (and therefore generating social benefits). In the case of the non-commuters, only a portion of them will cycle enough for improving their active/inactive status. Conservatively, it was assumed that only the 20% of the non-commuter trips would generate social benefits (also considering the importance of the tourism in the area).

The provision of a cycling facility also generates an increase in safety for the users. This type of benefits is applied to both, new and existing users.

The facility will also provide the possibility of travel time reduction for those currently cycling. The increase in mean speed is accompanied by the increase in relative attractiveness because of the characteristics of the new infrastructure.

Assumption	No improvement	Improved cycleway
Mean speed (km/h)	10	12
Relative attractiveness	1.8	2.0
Average length cycled (km)	Variable per route	
Commute share %	Variable per route	
Cycling health benefits per cyclist-km (2008)	$1.30	
Cycling Safety benefits per cyclist-km (2008)	$0.05	
Cycling Traffic reduction benefits per cyclist-km (2008)	$0.10	
Update factor (2018)	1.21	

As discussed earlier, the benefits for Brecon St project would be derived solely from the pedestrian safety benefits The high demand in the area (mainly tourists) and the lack of an appropriate infrastructure for safe walking generate a risk for pedestrians and therefore a potential for improving.

It was decided not to consider health benefits as the vast majority of the pedestrians in the area are tourists, using the facility probably only once. The EEM recommends that "*Where a new facility eliminates or improves a site that is an impediment to safe walking, a benefit of $2.70 may be ascribed to pedestrians using the facility*". As safe walking is not completely precluded as there is footpath in one of the sides of the road, the benefit ratio was applied only at 50% ($1.35 per pedestrian).

In the case of Park St, the hazard for pedestrians is not as severe as in Brecon St. Therefore, a lowered benefit ratio was used ($0.675 per pedestrian).

Maintenance costs

Maintenance costs were estimated using standardized values. It was assumed an annual maintenance over the full length of the facility, resurfacing tasks on the sealed sections every 20 years and specific maintenance on bridges.

The assumptions adopted were:

- Annual maintenance: $2 per m of facility. Recurrence: yearly
- Resurfacing: $40 per m^2 of sealed facility. Recurrence: 20 years
- Bridges: 0.2% of capital costs. Recurrence: yearly after year 10

Appendix S – Multi Criteria Assessment Methodology

MULTI CRITERIA ASSESSMENT METHODOLOGY

The MCA is a tool to inform decision-making in an objective and suitably comprehensive and targeted way on the relative merits of particular options or choices. In this case, its focus is informing decisions on the preferred active travel network for the Wakatipu Basin. The MCA works in conjunction with evaluation of options against the investment objectives together with judgement and feedback from key stakeholders to determine the preferred network (including representatives of QLDC, NZ Transport Agency, ORC and QTT).

The NZ Transport Agency's draft guidance on MCAs states:

"Whilst important, the MCA is one of the tools to be used in selecting a preferred option and is just one aspect of the decision-making process. Investors may have other factors they consider alongside the option MCA when deciding on a preferred option. Please bear this in mind when applying this guidance."

The MCA therefore provides a platform for informed judgement, aided by drawing on additional information provided by key stakeholders and other sources, as well as applying judgement to each proposed solution.

Certain design elements for each of the options were developed through the process due to additional stakeholder feedback and public engagement. Each route includes a summary of these.

Community engagement was largely coordinated by QLDC as part of the Way to Go initiative. The key community engagement period ran from 1st April to 19th April 2019, although limited engagement did occur outside of this period. A range of different channels were used to introduce the project, invite attendance at one of the community engagement events and seek feedback. Feedback was sought through a number of methods including:

- In person;
- Online Survey (Survey Monkey);
- Email Submissions; and,
- Social Media.

Several key themes that were emerged through the community engagement process included:

- People value the unsealed tracks, as they enjoy the walking and cycling experience;
- Commuters to and from a destination valued the ability to be completely separate from traffic;
- Concerns include lack of signage and concern around sealing of tracks allowing e-mobility devices to travel at faster speeds;
- Concern about sealed tracks increasing e-mobility users speeds on the trails;
- There are barriers preventing people from cycling, including poor lighting, safety concerns, difficulty wayfinding, and track surfacing;
- The trails should integrate with public transport; and,
- Separated cycle ways would encourage kids to cycle. School programmes are needed to increase both kids and parent's confidence on the roads.

As well as some overarching themes there were some specific routes that were identified as requiring some design and interventions to incorporate the communities' concerns. These have been discussed on a route-by-route basis in Section 9.2 – Short-list Options Assessment.

1.1.1. Criteria

The shortlist of options taken forward for assessment were developed through a workshop process with key stakeholders to eliminate any longlist options that were non-viable due to known constraints.

The following section describes the criteria and considerations under each criterion in the assessment of shortlist options for each route to help explain the scope of what has been assessed. The criterion was circulated in advance of the MCA and agreed amongst the key stakeholders prior to the assessment.

Feedback on the criteria considered matters relating to the NZ Transport Agency's Investment Assessment Framework (IAF), which generally align.

Design Context

Safety

- To what extent will the option maintain or enhance actual/ perceived safety for pedestrians and cyclists?
- What risk is there of fatal or serious injuries?

Usability

- What is the ease of travel for users and to what extent is it affected by gradient, surfacing, widths and other factors?

Directness and Coherence

- To what extent does the option provide an ability to go from origin to destination directly?
- Does the alignment provide direct access to user's destinations?
- What constraints impede direct access and what impact does this have on travel times through the area for active modes?
- Is the route legible and coherent for users to navigate?

Connectivity and Integration

- Does the option provide for ease of access to services and amenities?
- How well does the option integrate with other transport modes?
- Does this option provide an opportunity for integration with adjoining developments / communities?
- Is the option part of or could it support a national or regional cycle or walking trail?

Attractiveness

- What types of users is this option likely to attract and how effective will it be in doing so?
- Is there a high level of amenity on the route that makes it attractive to use?

Social Safety

- Is the option inviting to users during the day and at night (during darkness)?
- Is it likely to be used, based on the level of activity and visibility of the route from the surrounding area?
- What is the impact on personal safety and security?
- Are there CPTED issues likely to arise out of the design?

Effects Context (Stakeholder and Community)

Stakeholder and Community

- Are there any anticipated objections from the community or stakeholders?

- What impact could the option have on parking and or access for business and/or residents?
- Does the option provide an opportunity to support existing businesses and provide the potential for economic development adjacent to or near the route?

Effects on the natural and cultural environment

- Does the option disturb previously undisturbed land?
- Are there any sites or areas of natural of cultural significance identified on the route?
- Is there potential for effects on natural and cultural features and areas of significance through construction and operation?

It should be noted that, at this stage, effects on the natural environment have been considered in the MCA (within the 'Stakeholder and Community and 'Natural and Cultural Effects' criteria) to identify the potential effects of the preferred network on cultural values and sites of cultural significance to Iwi. It is noted that there is a risk of not having knowledge of sensitive areas at this stage and it will be taken into consideration through the pre-implementation phases. An indicative assessment has been conducted to determine how the preferred network is likely to affect Kāi Tahu sites of significance. These are detailed in Figure 1 and further discussed on a route by route basis in Section 9.2.

Figure 1: Kai Tahu Impact Assessment

VALUE	IMPACT	ISSUES	OPPORTUNITIES
Wāhi Tūpuna	The routes and indicative crossing points adjoining the Kawarau River are in proximity to recognised wāhi tūpuna (ancestral landscapes) including: • Puahuru • Tititea • Oterotu • Tāhuna	Archaeological sensitivity is warranted. Accidental discovery protocol as baseline minimum.	Opportunity to reflect the historical significance of areas in design elements informed by cultural narratives
Wāhi Tapu	No known wāhi tapu are identified within the immediate vicinity of the proposed routes.		
Mahika Kai	Mahika kai (food and resource harvesting areas) are district wide	Mahika kai is a foundational value for Kāi Tahu and was a key issue within the treaty settlement process	Seek opportunities for enhancement and restoration of Mahika kai and provided for contemporary practices when possible
Ara Tawhito	Proposed east west routes along Frankton Ladies Mile Highway to Arrowtown- Lake Hayes Road follows route of a recognised Ara Tawhito (Traditional Trail route)	Archaeological sensitivity is required. Accidental discovery protocol as baseline minimum.	Opportunity to reflect the historical significance of areas in design elements informed by cultural narratives

Māori archaeology	There are a number or registered archaeological findings adjacent to the routes. In particular: • Frankton recreation reserve route • Ladies mile route near Grant road • Frankton track near Queenstown gardens	Archaeological sensitivity is required. Accidental discovery protocol as baseline minimum	Opportunity to reflect the historical significance of areas in design elements informed by cultural narratives
Nohoaka	There is a recognised nohoaka north of the proposed trail at Tuckers Beach	Unimpeded access is necessary. Cycle route should not take priority over fair and reasonable use of this nohoaka.	Opportunities to acknowledge significance of the area to Kāi Tahu
Statutory acknowledgement areas	Lake Wakatipu is a statutory acknowledgment area under the Kāi Tahu Settlement Act.	There are statutory obligations associated with proposals that will affect statutory acknowledgment areas	Opportunity to reflect the significance of areas in design elements and place-making interventions

Resilience

- Is the route in an area of potential hazards?
- Can the risk be avoided for users of the route?
- Do alternatives exist if a section of the route is closed?
- Does the route provide an alternative if the main road/ route is closed and to what extent?

Operational and Network Impacts

- What impact does the option have on the operation of the transport network?
- Will this option promote a shift in mode share?
- How well does this option provide links to other transport modes e.g. emergency vehicle access, and to what extent?
- Does the option affect accessibility by other modes to services/ amenities? (Social)

Cost and Risk

Ease and costs of construction

- Can capital costs for this option be funded?
- Are there any factors that might affect the ability to operate or maintain this option over its projected life without major additional costs?
- Is there an existing route available and are there benefits of maintaining the existing route?

Land requirements, easements and agreements

- Is land required for this option?
- How does land take affect the viability of this option?
- Is there potential for effects on other infrastructure?

Consentability

- What is the likelihood of this option requiring any consents and/or approvals?
- What level of complexity is there to any consent application and the extent to which this affects obtaining resource consent?

1.1.2. Alignment with Investment Objectives

Investment objectives have been identified in section 6.2 to identify the critical outcomes which is sought through investment in the active travel network. For clarity, the investment objectives are:

- To provide a sustainable, integrated transport system that results in an enhanced user experience and increased use of active modes;
- To support safe and secure journeys for walking and cycling; and
- To facilitate positive community and economic outcomes associated with improvements to the active travel network.

It was therefore prudent that criteria selection as part of the MCA reflected the sentiments and ambitions of the investment objectives to ensure that the shortlist assessment is well aligned to the wider investment objectives of the SSBC. Table 1 outlines how the criteria used within the MCA process contributes to an outcome well aligned to the three investment objectives.

Table 1: MCA Criteria Alignment with Investment Objectives

INVESTMENT OBJECTIVE	MCA CRITERIA CONTRIBUTION	RATIONALE
A sustainable, integrated transport system that results in an enhanced user experience and increased use of active modes	Directness/coherence, Connectivity/integration, Attractiveness, Operational and network impacts	Use of these criterion within the MCA assessment facilitates consideration of an options ability to provide coherence ad directness of route, its level of amenity, and its potential to attract new users and increase active travel mode share.
Safe and secure journeys for walking and cycling	Safety, Social safety, Usability	These criteria ensure that options are options are assessed based on their ability to enhance safety for pedestrians and cyclists, ensure that routes are scored based on the ease of travel, and its suitability of use at both day and night including provision of CPTED interventions.
Positive community and economic outcomes	Stakeholder and community, ease of construction and costs, property, Consentability,	Such criteria enable consideration of the options impact on the local community such as parking risks, its impact on the natural environment

	Environmental/cultural impacts	and whether the option is financially affordable and contributes increased accessibility for communities.

1.1.3. Scoring

The MCA includes the scoring of each option based on the outlined rational for scores, which can be found in Appendix F. The scoring of the options was on a sliding scale from -2 to +2 for each criterion. The scale includes half points to provide granularity to the scoring, which aligns closely with the NZ Transport Agency draft guidance for MCAs in Transport Business Cases, which recommends a seven points scale (-3 to +3).

The scoring for each of the criteria had input from a relevant specialist, who provided professional judgement in assessing each option. These scores underwent detailed review by key stakeholders to ensure consistency and provide a unanimously agreed criteria in which to develop a preferred network. The occupation of those that carried out the initial assessment is outlined in Table 2.

Table 2: Specialist Input into MCA scoring

Criteria	Specialist Input
Safety	Transport Engineer
Usability	Transport Engineer
Directness/ coherence	Landscape Architect
Connectivity/ integration	Landscape Architect
Attractiveness and social safety	Landscape Architect
Stakeholder and community	Planner
Effect on the natural/ cultural environment	Planner
Resilience	Planner
Operational and network impacts	Transport Engineer
Ease of construction and cost	Transport Engineer
Property	Planner
Consentability	Planner

Sensitivity testing has taken place to understand the effect of greater weighting being applied to a criterion. This generally shows that the findings regarding the preferred route are appropriate. Results of the sensitivity analysis are outlined in Section 9.4. The following considerations should be made regarding sensitivity testing process:

- The exercise has been a qualitative assessment, with specialist and key stakeholder input, rather than a quantification of benefits and costs, which will follow as part of the next steps;
- Weighted scores have not been relied on in determining the options to take forward for further investigation, based on feedback from the NZ Transport Agency[1], on the basis that scoring in the MCA is not necessarily comparable across criteria;
- An overall negative score does not reflect a negative outcome and may simply indicate that there are several matters to be addressed in design of the option. The ratings given to criteria should therefore be used as a comparison to inform decision-making but have not been the sole criteria that has determined the preferred network.
- Where combined scores are similar for more than one of the routes, both routes have been taken forward as preferred to the next stages of the project, reflecting more information that is required to enable the preferred route to be selected.

1.1.4. Assessment Assumptions

Specific assumptions were recorded against each option within the MCA to outline the outcome anticipated with each option and to understand the context to the scoring. The assumptions can be found within the MCA in Appendix G, with a summary of the matters covered below.

- Type of treatment;
- If the option utilises existing facilities or requires new/ upgraded infrastructure;
- What type of surface finish will be proposed;
- If the route will potentially undergo topographical changes during construction to provide an appropriate facility of an easier gradient;
- If existing facilities will have to be widened;
- If there are landowner issues or opportunities based on feedback from stakeholders; and
- If the Ministry of Business, Innovation and Employment (MBIE) has approved funding for improvements or new routes (via existing QTT Business Cases), the scoring against the criteria of 'Ease of construction and cost' reflects this.

[1] The validity of applying weightings to scores was discussed with stakeholders in a workshop held on the 14th December 2018.

Appendix T – Project Partner Feedback & Action Mastersheet

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Fix page numbering	General	Document layout and formattir	GHD	1. Fix page numbering in the final document	LOW	Greg	16/08/2019	√	100%
Amend GPS definition	General	Document layout and formattir	GHD	1. Amend definition to Government Policy Statement	LOW	Greg	17/08/2019	√	100%
Adopt single reference and apply through SSBC	General	Document layout and formattir	GHD	1. Find and replace terms in document and suggest use of a single name for the SSBC to avoid confusion.	LOW	Greg	18/08/2019	√	100%
Re=order appendices as they appear in document. Include table of appendices	General	Document layout and formattir	GHD	Re-order the appendices to follow the order they are mentioned in the document, and provide a contents page for the Appendices.	LOW	Greg	19/08/2019	√	100%
Review original scope. Provide rationale/explanation at front of document to clarify scope	General	Overall SSBC commentary	GHD	1. The SSBC focusses heavily on cycling with limited commentary on pedestrians and other active mode groups. Either need to explain in introduction the scope or add further information on other modes into each chapter.	HIGH	Greg	20/08/2019	√	100%
Incorporate customer insights into routes with greater stakeholder feedback within Strategic Case	General	Overall SSBC commentary	GHD	1. A general lack of customer insights weakens the case. It would be useful to show target audience and profile some potential existing/new users in the strategic case to support the quantitative evidence base.	HIGH	Greg	21/08/2019	√	100%
Confirm original scope. Incorporate non-infrastructure considerations into particular routes.	General	Overall SSBC commentary	GHD	Lack of commentary or reference to wider non-infrastructure responses e.g. TDM - cycle training, education, marketing and promotion, travel planning – need to state where this will be covered if not part of this SSBC scope. No mention of supporting facilities e.g. bike parking, bike hire etc. Cycle counter equipment.	HIGH	Greg	21/08/2019	√	100%
Change orientation of page	Background	Tables and figures	GHD	1. Consider inserting full page version of Figure 5 (landscape) to make the labels legible to the reader.	LOW	Greg	21/08/2019	√	100%
Add axis to graphs	Background	Tables and figures	GHD	1. Add axis labels to the graphs shown in Figure 8 and 9.	LOW	Greg	21/08/2019	√	100%
Remove one line for age group 40-50	Background	Tables and figures	GHD	Figure 8 includes two lines for age groups 40-50	LOW	Greg	21/08/2019	√	100%
Outline description of section 7 in report structure	Background	Context	GHD	1. Insert brief description of Section 7 to the Report Structure (pg3)	MEDIUM	Greg	21/08/2019	√	100%
Include new introduction heading to outline parallel projects	Background	Context	GHD	*1.* Insert a heading "Parallel Projects" into the Introduction chapter and provide a brief (1-2 sentence) overview of the scope of each parallel project e.g. *There are a number of parallel business cases under development in the Queenstown Lakes District that have been considered through the development of this SSBC.* Suggest a sentence or two on the following: *Frankton Qtown SSBC, Grant Rd to Kawarau Falls Bridge DBC, Lake Wakatipu Water Ferry serviced, Frankton Masterplan and ITG business case, Parking strategies for Qtown and Frankton DBC, Qtown TC DBC.*	MEDIUM	Greg	21/08/2019	√	100%
Add QTT description	Organisational overvie	Additional partners/co-investor	GHD	Consider adding a brief description of QTT in Section 4.	LOW	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Include reference to customer insights and census data evidence to support statement	Problems, Opportunities, Constraints	Problem statement 1	GHD	1. Page 15 – provide evidence that the current routes are not popular for commuters, school children, the elderly and others. This statement is not supported by evidence, potential to use journey to work census data or travel to school data, link to QTT usage in Figure 8? Or re-phrase statement if no available suitable evidence.	MEDIUM	Greg	21/08/2019	√	100%
Reference any customer insight data to support cause of PS 1	Problems, Opportunities, Constraints	Problem statement 1	GHD	1. Problem 1 is lacking any customer insight data to support this statement. Most of the evidence is anecdotal or subjective. Are there any LTP submissions that could bolster the evidence base, insights from Frankton Masterplan consultation?	MEDIUM	Greg	21/08/2019	√	100%
Include additional map showing severity of crashes from CAS	Problems, Opportunities, Constraints	Problem statement 1	GHD	Page 17 – would be useful to show geographic spread of crashes by severity (using CAS) to see if any patterns e.g. at intersections	MEDIUM	Greg	21/08/2019		Not Started
Remove assumption in text	Problems, Opportunities, Constraints	Problem statement 1	GHD	1. Page 18 – last para – Amend text to not make an assumption on why pedestrian was walking on the road – could state that there is no footpath in this location or current provision is poor? This is factually accurate rather than making an assumption that could be misleading.	MEDIUM	Greg	21/08/2019	√	100%
Amend cause to be lack of appropriate unfractured combined with geographical constraints. Include further crash data based on severity at intersections	Problems, Opportunities, Constraints	Problem statement 1	GHD	There is a disconnect between the cause (topography, surface, weather etc.) and the effect – modal conflict.	MEDIUM	Greg	21/08/2019	√	100%
Proved explanation to severity of crash data nationally and regionally	Problems, Opportunities, Constraints	Problem statement 1	GHD	1. It is unclear from the evidence how significant this issue is. Consider benchmarking the safety data against other NZ cities/towns to demonstrate the significance.	MEDIUM	Greg	21/08/2019	√	100%
Remove reference	Problems, Opportunities, Constraints	Problem statement 1	GHD	Page 19 – para 3 – suggest re-word – no evidence provided to support the statement "there is a high probability of injury when vehicles interact with pedestrians and cyclists".	MEDIUM	Greg	21/08/2019	√	100%
None	Problems, Opportunities, Constraints	Problem statement 1	GHD	To support the effect statement it would be beneficial to calculate the social cost of all the recorded active mode crashes.	MEDIUM	Greg	21/08/2019	√	100%
None	Problems, Opportunities, Constraints	Problem statement 1	GHD	Page 20 – consider a summary after each problem statement to highlight key evidence and reinforces the case for investment.	MEDIUM	Greg	21/08/2019	√	100%
None	Problems, Opportunities, Constraints	Problem statement 2	GHD	1. Include a map of key land uses/settlements to show how the ten routes have been developed to link these areas.	LOW	Greg	21/08/2019		Not Started
Include existing trail map to show coverage for cause of PS 2	Problems, Opportunities, Constraints	Problem statement 2	GHD	1. Include a map of the current active mode network to demonstrate that the existing network/infrastructure is not appropriate, has gaps etc.	LOW	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Source better quality image for figure 26	Problems, Opportunities, Constraints	Problem statement 2	GHD	1. Figure 26 image is blurry and would benefit from axis labels.	LOW	Greg	21/08/2019	√	100%
Provide explanation to what Orbus is	Problems, Opportunities, Constraints	Problem statement 2	GHD	Page 24 – suggest Orbus is referenced or an introduction is provided – unclear to the reader what Orbus refers to.	LOW	Greg	21/08/2019	√	100%
Amend figure 29 heading	Problems, Opportunities, Constraints	Problem statement 3	GHD	1. Amend Figure 29 heading	MEDIUM	Greg	21/08/2019	√	100%
Review if local air quality monitoring data is available. Include if available	Problems, Opportunities, Constraints	Problem statement 3	GHD	1. Suggest use air quality data from Queenstown monitoring site rather than national data.	MEDIUM	Greg	21/08/2019	√	100%
Make reference to any local health data available	Problems, Opportunities, Constraints	Problem statement 3	GHD	1. As above are there any local health indicators rather than using national data which is better as a comparator.	MEDIUM	Greg	21/08/2019	√	100%
Include customer insight info	Problems, Opportunities, Constraints	Problem statement 3	GHD	1. As above this section would benefit from customer insight data.	MEDIUM	Greg	21/08/2019	√	100%
Make reference to future growth and link to the effect of PS 3	Problems, Opportunities, Constraints	Problem statement 3	GHD	Problem 3 is lacking any commentary on the proposed future growth and the implications this will have on this problem. Suggest some additional commentary is provided to highlight that this problem needs to be addressed now. There is another opportunity here to link to wider business cases and cross-reference.	MEDIUM	Greg	21/08/2019	√	100%
None	Outcomes	KPIs	GHD	1. Consider refining measures to account for population growth e.g. counts of cyclists/peds as a proportion of the population. Otherwise difficult to link directly to the investment.	LOW	Greg	21/08/2019	√	100%
Include benefits alignment sub-heading that links to GPS priorities	Outcomes	KPIs	GHD	1. Need to demonstrate how these benefits are of high value to the organisations – suggest a link to the strategic priorities is included e.g. the benefits identified have strong alignment to the GPS strategic priorities of X and Y and RLTP priorities of A and B and QLDC priorities of ….	LOW	Greg	21/08/2019	√	100%
Include additional column showing baseline figure	Outcomes	KPIs	GHD	1. Table 11 – it would be helpful to include a column to show the baseline if available for each measure to help demonstrate the scale of the outcomes sought.	LOW	Greg	21/08/2019	√	100%
Amend definition of FSI to account for just active travel mode groups	Outcomes	KPIs	GHD	1. FSI crashes – suggest this is refined to active mode FSI crashes as a proportion of mode share to account for an increase in usage and to specific road user groups.	LOW	Greg	21/08/2019	√	100%
Include pedestrian mode share KPI	Outcomes	KPIs	GHD	Why has pedestrian mode share not been included as a measure? Suggest include along with cycle mode share.	LOW	Greg	21/08/2019	√	100%
Reference organisation source	Network Routes	Clarifications	GHD	Reference the top priority statement and attribute to an organisation if applicable.	LOW	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Include route maps as appendices?	Option selection	Lack of comparison to base opt	GHD	1. The key provided in the option diagrams from page 38 onwards is illegible, suggest a single page per option so the reader can interpret the key and the map.	LOW	Greg	21/08/2019	√	100%
Address	Option selection	Lack of comparison to base opt	GHD	1. Font consistency for each of the option descriptions (minor)	LOW	Greg	21/08/2019	√	100%
Provide a decryption of a do minimum opting for routes where applicable	Option selection	Lack of comparison to base opt	GHD	1. A do minimum options or base case description should be provided for each route e.g. currently no pedestrian provision is provided and cyclists travel on road with heavy vehicles and large traffic volumes, with no dedicated infrastructure or cycle lane markings……	HIGH	Greg	21/08/2019	√	100%
Outline how Routes 3 and 4 related to parallel business cases. What implications are there for progressing/not progressing?	Option selection	Lack of comparison to base opt	GHD	Investor will want to see how the recommended programme aligns with parallel business cases (route 3 and 4)	HIGH	Greg	21/08/2019	√	100%
Provide a do-minimum option where applicable. **Provided however scoring should be reviewed. Relevance questionable as scoring other than 0 not appropriate for many criteria as do-nothing means there is neither a benefit or disbenefit (e.g. cost, environmental). Scoring therefore may not be comparable between options.**	Option selection	Lack of comparison to base opt	GHD	1. An assessment of a do minimum option or base case should be provided for each route. This will also offset some of the negative option scores by demonstrating an improvement from the base case.	HIGH	Ryan	21/08/2019	√	100%
None **No action taken.**	Option selection	Lack of comparison to base opt	GHD	1. Does the MCA have to be quantitative? Could use a different scale to demonstrate majority of criteria are based on qualitative assessments e.g.	HIGH	Ryan	21/08/2019	√	100%
Include additional column for table outlining any changes to treatments arising out of consultation/stakeholder engagement	Preferred network	treatment types	GHD	1. Suggest inclusion of further clarification about how the different treatment types were decided upon for each section, and include a statement about any consultation or agreement that was reached to support the preferred treatment type for each option	HIGH	Emily	21/08/2019	√	100%
Amend table to include header at top of each table page	Preferred network	treatment types	GHD	Suggest the header row is repeated at the top of each page for Table 31	LOW	Greg	21/08/2019	√	100%
Include an economic assessment methodology memo to accompany the bullet points providing wider rationale for how cycle trips were determined	Economic case	Methodology	GHD	1. Suggest bullet points are reworded in section 11.1 (page 105) as these bullet points are unclear, and do not appear to reference how the number of cycle trips was arrived at from the trip model	HIGH	Jose/John	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Confirm against NZTA feedback the relevance/justification of assumptions used	Economic case	Methodology	GHD	1. Table 32 includes a number of assumptions that should be justified further as they appear aspirational based on strategic intent rather than tested and considered – in particular the assumptions around the new cyclist users	HIGH	Jose	21/08/2019	√	100%
Confirm with Jose if pedestrians have been factored. If not, provide rationale as to why	Economic case	Methodology	GHD	1. It is unclear how the number of pedestrians has been calculated and how these are factored into the estimate	HIGH	Jose	21/08/2019	√	100%
Provide economic evaluation memo further outlining methodology	Economic case	Methodology	GHD	Consider providing a separate Economic Evaluation memo as an appendix to enable more detail to be provided regarding the approach	HIGH	Jose	21/08/2019	√	100%
Include additional commentary after table 33 to demonstrate how existing model counts have been verified against existing counts	Economic case	Model verification	GHD	Include commentary regarding how the existing model has been verified against existing counts	MEDIUM	Jose	21/08/2019	√	100%
Jose to review if cyclist volumes can increase at same rate as trip volumes	Economic case	Cyclsit growth rate beyond 204	GHD	Consider increasing cyclist volumes at the same rate as trip volumes increase to maintain mode share.	LOW	Jose	21/08/2019	√	100%
Use area unit basis to calculate mode share. Refresh economic outputs	Economic case	cyclist demand estimate	GHD	1. For 2016 mode share values, calculate mode share on an area unit basis to apply to the routes rather than using the default TLA value or estimating.	HIGH	Jose	21/08/2019	√	100%
Use current and projected future year density to estimate cycle trips for new and existing users. Refresh economic outputs	Economic case	cyclist demand estimate	GHD	Use current and projected future year density to estimate cycle trips for new and existing users.	HIGH	Jose	21/08/2019	√	100%
Evaluate change in mode share between 2028 and 2046 and ensure consistency	Economic case	Cycle demand mode share grov	GHD	Reconsider the change in mode share between 2028 and 2046.	HIGH	Jose	21/08/2019	√	100%
Confirm against NZTA feedback if 3km cycle route length is correct	Economic case	Cycle route lengths	GHD	1. Consider reviewing the 2015-2018 New Zealand Household Travel Survey to examine if the average trip length has changed and get support from NZTA for an updated value or include as a sensitivity test.	MEDIUM	Jose	21/08/2019	√	100%
Check route lengths in spreadsheet against confirmed routes	Economic case	Cycle route lengths	GHD	Review route lengths for distances claimed.	MEDIUM	Jose	21/08/2019	√	100%
In economic assessment memo, include an an explanatio around assumtpinos used for orutes split over multiple years	Economic case	Benefits of routes split over mu	GHD	1. Provide assumptions regarding how routes split over multiple years of construction were proportioned for benefits.	MEDIUM	Jose	21/08/2019	√	100%
Address within economic assessment memo	Economic case	Benefits of routes split over mu	GHD	Provide context why route 3 includes 10% of annual benefit prior to construction.	MEDIUM	Jose	21/08/2019	√	100%
None	Economic case	New cyclist health benefits	GHD	1. Factor non-commuter new cyclists to exclude non-New Zealand residents.	HIGH	Jose	21/08/2019	√	100%
None	Economic case	New cyclist health benefits	GHD	Consider factoring the commuter new cyclists to exclude non-New Zealand residents.	HIGH	Jose	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Acknowledge that we have not accrued beenfits to tourism. Perhaps in separate memo	Economic case	Wider economic benefits for to	GHD	Acknowledge un-valued benefit to tourism through having pathways available and or attempt to assign a benefit.	LOW	Jose	21/08/2019	√	100%
Adjust EEM figure of cyclist beenfit cost	Economic case	Road traffic reduction rates	GHD	Use EEM figure of $0.10 per cyclist kilometre rather than the adjusted effective $0.085 per cyclist kilometre.	HIGH	Jose	21/08/2019	√	100%
Review routes that would result in significant beenfits to pedestrians. Check wheterh we can account for tem.	Economic case	No walking benefits	GHD	Consider where routes have been reduced in length or safety improvements make the pathway desirable to allow consideration of walking benefits.	LOW	Jose	21/08/2019	√	100%
Review if traffic model provides estiamted mode shit data	Economic case	Other benefits	GHD	1. If there is an available traffic model, (rather than a trip model), consideration should be given to modelling the estimated mode shift as an option do replace the travel time, vehicle operating costs, and emissions benefits.	LOW	Jose	21/08/2019	√	100%
In memo, provide explanation to how traffic reduction benefits have been accounted for	Economic case	Other benefits	GHD	Table 34 appears to imply that there are no benefits accrued for traffic reduction – consider the inclusion of an additional paragraph outlining how these benefits are taken into account (this should then link to table 36 which refers to 'road traffic reduction' which is otherwise not linked to)	LOW	Jose	21/08/2019	√	100%
Address	Economic case	Results alignment	GHD	1. Table 37 – column 4, row 1, second sentence; suggest this is re-phrased as in evidence section it is noted that a large number of non-injury crashes are not reported so contradictory statement.	MEDIUM	Greg	21/08/2019	√	100%
Address	Economic case	Results alignment	GHD	Table 37 – column 4, row 6; suggest further information is provided to support this statement – i.e. for routes that are on-road or run adjacent to the road are these subject to the same resilience issues as the road, and what mode the proposed routes are providing an alternate option for	MEDIUM	Greg	21/08/2019	√	100%
Address incocnsitencies between SSBC and cost estiamte report	Economic case	Cost estimate	GHD	1. There are a number of inconsistencies in the figures within the report and with the cost estimate appendix that should be reviewed and rationalised	HIGH	Tom	21/08/2019	√	100%
Assess whether 30%+ contigency figure can be used	Economic case	Cost estimate	GHD	1. A contingency of over 30% and/or a greater sensitivity upper bound range should be considered given there is no inclusion of property costs, no survey or existing services information, no geotechnical or pavement design information, no 3D design information, no structural design information (including potential retrofitting requirements to existing structures), and no attempt to consider cost escalation	HIGH	Tom	21/08/2019	√	100%
Assess whther main cost contigency can be increased to include contigency for future scope change	Economic case	Cost estimate	GHD	1. There is discussion of a further contingency to be held by QLDC for scope change (refer to the separate Estimate Report) – it is suggested this is included within the main contingency value to provide a full programme cost estimate	HIGH	Tom	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Follow up with NZTA whether it is likely that they will fund on-road maintenance. Include if they are	Economic case	Cost estimate	GHD	1. Maintenance costs of the on-road paths should be factored into the total whole of life costs for the programme – assuming these will be covered by existing maintenance budgets appears unrealistic	HIGH	Greg	21/08/2019	√	100%
Request bespoke cost estimate breakdowns for Qtown TC treetscape works	Economic case	Cost estimate	GHD	1. Queenstown Town Centre Streetscape costs are based on the same ratios as the remainder of the works, however are very different types of project and bespoke cost assessments should be considered	HIGH	Greg	21/08/2019	√	100%
Request bespoke cost estimate breakdowns for Qtown TC treetscape works and thwterh they incldue maintenace costs	Economic case	Cost estimate	GHD	1. Queenstown Town Centre Streetscape works do not appear to include maintenance costs or contingency	HIGH	Greg	21/08/2019	√	100%
Provide explanation to $0.5m maitnenace assumption	Economic case	Cost estimate	GHD	1. It is unclear what the do-minimum maintenance costs cover	HIGH	Greg	21/08/2019	√	100%
Account for how traffic management costs are accounted for	Economic case	Cost estimate	GHD	1. It is unclear how traffic management costs are included within the P+G amounts, as these will not be evenly distributed over on-road and off-road sites	HIGH	Jose	21/08/2019	√	100%
Outline assumed rates for key items in cost schedule	Economic case	Cost estimate	GHD	There are no typical rates provided for key items in the schedule, and there is no typical pavement section provided as guidance for the unsealed paths in particular (noting a '100 mm gravel surfacing' treatment is specified on routes A8, E1, and F1 which requires further consideration or description)	HIGH	Tom	21/08/2019	√	100%
Review whether upper bound value can be increased	Economic case	Sensitivity analysis	GHD	1. As discussed above consider increasing the upper bound value for the costs	MEDIUM	Jose	21/08/2019	√	100%
Review whtehr lower bound valeu can be reduced further	Economic case	Sensitivity analysis	GHD	The lower bound for the percentage of new commuters still appears high, particularly considering the potential impacts of seasonal variance on commuter numbers (note this isn't discussed in the report) – it is suggested that the lower bound is reduced	MEDIUM	Jose	21/08/2019	√	100%
Include further rationale/explanatino as to progressing from rotue sleectino to devlivery	Financial Case	Route clarity	GHD	1. In Figure 48 and Table 39 the numbering of the routes does not match earlier sections – a consistent approach should be adopted throughout the report or further clarity provided as to how the different numbering systems link (note table 40 reverts back to the previous numbering system)	MEDIUM	Greg	21/08/2019	√	100%
Include additional column for expected timeframe	Financial Case	Route clarity	GHD	Table 39 suggest an additional column is added to show expected timeframes for implementation	MEDIUM	Greg	21/08/2019	√	100%
Check cost estiamtes agianst those in cost estiamte report for consistency	Financial Case	Cost consistency	GHD	1. Review the figures stated in the report and provide further clarity where required to explain the differences in figures	MEDIUM	Greg	21/08/2019	√	100%
Include table referencing all maintenance assumptions and expected figure	Financial Case	Cost consistency	GHD	Provide clarity on the maintenance costs in section 12.1.4	MEDIUM	Greg	21/08/2019	√	100%
Assess how proerpty costs can be accountedfor. Simpel estimate or factor into contigency?	Financial Case	Property costs	GHD	Undertake further assessment into the likely property costs for the programme	HIGH	Robyn	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Project would not be eligible for TEFAR	Financial Case	Funding options	GHD	1. Provide comment on the potential eligibility for TEFAR funding within the report	HIGH	Greg	21/08/2019	√	100%
Address inconsitency. Fundign is to come from QLDC 100%	Financial Case	Funding options	GHD	1. Note Table 41, route A4 has an inconsistency whereby 100% of the funding is shown from QLDC but the text refers to 100% of the funding to come from NZTA	HIGH	Greg	21/08/2019	√	100%
Address text inconsistencies in table 41 where roteus are adjacent to SH's	Financial Case	Funding options	GHD	Review the funding split text in table 41 – in certain situations an increase in LoS adjacent to a state highway results in 100% funding from NZTA while in others the same justification results in 100% funding from QLDC; and in some cases providing an alternate route to local roads or improved usage for recreational cyclists is shown to be jointly funded by NZTA and QLDC which should be further clarified	HIGH	Greg	21/08/2019	√	100%
None	Commercial case	Procurement options	GHD	1. While ECI is mentioned in the introduction it is not considered further	LOW		21/08/2019	√	100%
Provide additional procurement approach to split devleiy of work based on on-road, off-road, and town cnetr works. Highlghit the beenfits/risks of this approach	Commercial case	Procurement options	GHD	1. Suggest consideration is given to procuring on-road, off-road, and town centre works differently owing to the different types of work involved for each	LOW	Greg	21/08/2019	√	100%
Include reference to how maintenance contractro can dleiver less complex work packages	Commercial case	Procurement options	GHD	1. Suggest consideration of utilising the maintenance contractor to undertake smaller and less complex works more efficiently	LOW	Greg	21/08/2019	√	100%
None	Commercial case	Procurement options	GHD	1. It is noted that Figure 49 does not discuss supplier panels that are covered in table 42	LOW		21/08/2019	√	100%
Elaborate on the design risks elemnts with a design and build approach	Commercial case	Procurement options	GHD	1. The wording in section 13.3 regarding the design risk apportionment in a design and build model should be reviewed and clarified	LOW	Greg	21/08/2019	√	100%
Include additioan lreference explaionign the risks assocaited with ECI	Commercial case	Procurement options	GHD	1. Section 13.3, last bullet point – it is noted that engaging contractors early to inform the design process (without a full ECI approach) can have challenges as it could be construed as giving certain contractors the advantage for future tenders	LOW	Greg	21/08/2019	√	100%
Remove reference to supplier panel	Commercial case	Procurement options	GHD	1. Section 13.3.1 and 13.4 – this text refers to the supplier panel, however the first paragraph in section 13.3 viewed supplier panels as insufficient – suggest this wording is clarified.	LOW	Greg	21/08/2019	√	100%
Clarify what KPIs would be used to assess performance of contractprs/suppleirs	Commercial case	Procurement options	GHD	1. Section 13.3.1 – it is recommended that the second paragraph wording is revised to provide more clarity on what the assessment KPI's referred to would cover, and how this would 'ensure future work packages are dependent on capacity and performance'	LOW	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Clarify what aprty the property risks sits with	Commercial case	Procurement options	GHD	1. Section 13.4 – suggest clarity is provided regarding where the property/land purchase risk sits (noting text is included about how the risk can be mitigated), and how the funding risk can be mitigated (rather than how this risk can be communicated)	LOW	Greg	21/08/2019	√	100%
Outline the pros and cons of the different payment options	Commercial case	Procurement options	GHD	1. Section 13.5 – further clarification is needed under this heading, noting alternate forms of payment as well as pros and cons for each	LOW	Greg	21/08/2019	√	100%
Address word inconsitencies	Commercial case	Procurement options	GHD	1. Review the wording throughout the section regarding the appointment of the Project Manager and Property Consultants (i.e. section 13.3.1 and table 43 compared with section 13.6)	LOW	Greg	21/08/2019	√	100%
Amend delivery timeframe table to shwo detaield design for stages 1 and 2 occuring parallel	Commercial case	Procurement options	GHD	1. Section 13.7 – consideration should be made regarding combining the detailed design and potentially consenting for both stages 1 and 2 in order to achieve efficiencies and consistency in these tasks	LOW	Greg	21/08/2019	√	100%
None	Commercial case	Procurement options	GHD	Section 13.8 – it is unclear how a lease arrangement would work for property requirements and suggest further text is provided to explain this	LOW		21/08/2019	√	100%
Include governance section headign to manageemnt case outlnieing the majro stakeholders invovled in delviery and review	Management case	General	GHD	1. No governance structure is provided, it is unclear which organisation will do what as part of the next steps and how this will be coordinated by the partners	LOW	Greg	21/08/2019	√	100%
Provide details on responsible party etc	Management case	General	GHD	1. Section 14.4 should be expanded to outline who will undertake this work, who will manage the register and how, and at what level this will be undertaken (i.e. project by project, or for the programme overall), etc…	LOW	Greg	21/08/2019	√	100%
Remove reference to Safe Roads Enterprise Risk Framework	Management case	General	GHD	1. Section 14.5 refers to the Safe Roads Enterprise Risk Framework which appears out of place without further clarification	LOW	Greg	21/08/2019	√	100%
Reference cost risk assocaied with property/land acquisition	Management case	General	GHD	1. Table 47 does not include the cost key risk associated with the property / land acquisition task	LOW	Greg	21/08/2019	√	100%
Include economic assessment risks	Management case	General	GHD	1. Table 47 does not include a risk that the assumptions used in the BCR are incorrect and that the programme does not deliver on the expected outcomes	LOW	Greg	21/08/2019	√	100%
Include other risks assocaited with procurement activities	Management case	General	GHD	1. In Table 47 the mitigation for the Procurement risk should consider more proactive actions such as market sounding activities	LOW	Greg	21/08/2019	√	100%
Include new headign with implementatino date	Management case	General	GHD	Table 48 does not contain any dates that the outcomes will be achieved by	LOW	Greg	21/08/2019	√	100%
Amend SiD review to incldue assessment of imapct of micromobiltiy users	Management case	Safety in design	GHD	1. The potential for the use of motorised micro-mobility devices on the paths should be considered (i.e. e-bikes, e-scooters)	MEDIUM		21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Amend SiD review to make reference to future growth in area and how this will imacpt future design	Management case	Safety in design	GHD	In 2046; there is predicted 6,000 daily cyclist trips between Frankton and Queenstown, this is approximately 600 cyclist/hour over a 10 hour day, or 10 cyclists per minute. On a 3 m wide shared path, cyclist congestion could start to play a factor in travel time and crashes. The design of the paths should be reviewed against predicted future use.	MEDIUM	Greg	21/08/2019	√	100%
Include next steps sub-heading	Management case	Safety in design	GHD	Suggest a recommendation and next steps section is added to articulate what decision is sought e.g. just funding for first tranche of works? Next step is to proceed to detailed design/pre-implementation?	MEDIUM	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
New exec summary. Better case for investment. Incorporate graphics and link to other business cases	Executive summary	Executive Summary Page 11	NZTA	Need to explain integration with other business cases and how this will support other projects. Doesn't have to be a lengthy discussion but needs to be mentioned/referenced eg to Programme Summary document.	Moderate	Greg	16/08/2019	√	100%
None	Executive summary	Figure 1 Page 12	NZTA	Is "A8" LHE to Frankton a QLDC project or QTT? If the latter, we can't fund it under current settings ie as QTT is not an approved organisation under the Land Transport Management Act 2003.	Minor	Greg	17/08/2019	√	100%
Remove ref to A1, A6, and B1	Executive summary	Figure 1 Page 12	NZTA	Reference to A1, A6, B1 should be removed.	Minor	Greg	18/08/2019	√	100%
Await decision from stakeholders	Executive summary	Figure 1 Page 12	NZTA	Third construction stage is confusing as it is in same 21-24 period as Second construction stage. For the Third construction stage, are you intending to construct all of this in 21-24 or apply for pre-implementation for some, construction for others?	Minor	Greg	19/08/2019	√	100%
Await decision from stakeholders	Executive summary	Figure 1 Page 12	NZTA	What actually is planned to be delivered 18-21 and then 21-24 stages – what exactly/routes are in and what are not (or what ones are being set aside at this time; walking and cycling improvements over $1m as part of RTIs might have to be dealt with via the WATN business case to ensure they get done; it's not very clear currently the way different parts of the document say things slightly differently and the classification of the implementation plan is different to the route numbers. It may be helpful to provide a separate plan for each construction phase (this will more clearly highlight what parts of each route will be provided within each timeframe).	Moderate	Greg	20/08/2019	√	100%
Include reference	Introduction	1.1 Page 13	NZTA	The SSBC "is an activity that was identified for further investigation through the NZTA endorsed Queenstown Integrated Transport Programme Business Case (QITPBC)".	Minor	Greg	21/08/2019	√	100%
Proved greater clarity around Loss gaps with specific routes	Introduction	1.2 Page 13	NZTA	Also about gaps in network and poor LoS in some locations. With respect to integration with other modes. How? Should be identified where and how this will occur.	Moderate	Greg	21/08/2019	√	100%
Reflect mode share gains/increases from implementation of network	Introduction	1.2 Page 13	NZTA	How much mode share for cycling can we expect? What is the gain? We need to understand numbers and mode share percentages.	Moderate	Greg	21/08/2019	√	100%
Include decision making process for approval	Introduction	1.2 Page 13	NZTA	Would be ideal for this business case to go through the normal delegation process without going to the Board, and inform the NZTA Board via CE report.	Minor	Greg	21/08/2019	√	100%
Clarify network scope	Introduction	1.2 Page 13	NZTA	If you are proposing $80m of expenditure for 18-24 period – putting the funding availability challenge to one side - if you tip over $50m you are into Board approval territory which I thought we were looking to avoid as that adds on considerably more time to the approval process.	Moderate	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Include new image for fig 2	Introduction	Figure 2 Page 15	NZTA	Figure is blurry.	Minor	Greg	21/08/2019	√	100%
Include reference to regional cycle trails. What are the impactions for WATN?	Background	2.1 Page 16	NZTA	Should also mention $26m NZCT project $ to link up Alexandra, Cromwell, Wanaka and Queenstown.	Minor	Greg	21/08/2019	√	100%
Include queens ton specific growth	Background	2.1.2	NZTA	It would be good if you could mention Queenstown-specific rather than District-wide growth figures.	Moderate	Greg	21/08/2019	√	100%
Include better quality image	Background	Figure 5	NZTA	Can't read this Figure.	Minor	Greg	21/08/2019	√	100%
Highlight high demand routes	Background	2.1.4 Page 18	NZTA	Be good to highlight the higher demand tracks on Figure 5 or reference them to Table 1.	Minor	Greg	21/08/2019	√	100%
Better links between cause and effect	Problems, opportunities, constraints	5.3.1 Page 27+	NZTA	We found the crash analysis confusing. I'm not sure what the conclusion was other than safety needs to be consideration in the design of all ped/cycling infrastructure.	Major	Greg	21/08/2019	√	100%
Link existing Loss gaps with low levels of cycling uptake	Problems, opportunities, constraints	Page 36	NZTA	First paragraph. Is it worth explaining here that gaps (or LOS gaps) have a significant impact on cycling uptake. While only addressing these gaps won't solve the full problem noted in the problem statements, it can lead to a more immediate increase in cycling.	Moderate	Greg	21/08/2019	√	100%
Confirm what town centre projects are in scope. Confirm cost estimates. Economic assessment to be competed for in scope TC projects. Update section 9.3	Shortlist assessment	Table 6 Page 36, section 9.3, Table 35	NZTA	Lack of information on BCR and LoS assessment for Queenstown Town Centre walking and cycling projects/ how that effects preferred network BCR and "First construction Stage", and a suggested plan that is defendable for dealing with the amenity/streetscaping elements versus what is traditionally funded through walking and cycling activity class (need to get a plan together on how to keep momentum on the walking and cycling elements of the TC Masterplan and resolve funding shares, but at the same time be mindful of current and likely funding constraints from the walking and cycling activity class: $28m plus another $48m is very significant contribution from a national perspective especially when you add several large projects planned for 21-24 from other parts of NZ, and particularly given the lack of information presented in the business case. We have had a strong steer from within the NZTA that NZTA co-investment would likely be restricted to good/functional LoS for walking and cycling in the town centre provided these projects could be demonstrated to be economic ie the project achieves a BCR of 1 or more. Any LoS provided over that agreed LoS would be the responsibility of the Council to fund. Our recommendation is that this issue is resolved before the WATN business case is submitted for endorsement and funding approval. We are happy to discuss this further and also seek wider advice from NZTA's walking and cycling advisors and Investment and Finance staff where required. A potential method to resolve	Major	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Review enosis on trip analysis for Shot over Bridge and amend to highlight limitations in data collection	Problems, opportunities, constraints	Table 8 and 9 Page 42	NZTA	The travel time analysis over the Shotover Bridge is misleading. This is the major constriction on the network which is not reflected in the travel time analysis. This is because the observation length was not long enough and did not include the entire queue length on either side of the bridge.	Minor	Greg	21/08/2019	√	100%
Highlight Frankton Rd as key connection between Qtown and Frankton	Problems, opportunities, constraints	Page 43	NZTA	No mention of importance of improving connections to and through Frankton and to Queenstown Town Centre via Frankton Road.	Minor	Greg	21/08/2019	√	100%
Highlight integrate with local PT network, articulations the network has for PT integration. Identify nearby schools - possibly include image where existing schools are	Problems, opportunities, constraints	5.3.3 Page 44	NZTA	Very little discussion about integration with PT. Important the business case leverages opportunities to make walking and cycling and PT more integrated and attractive overall. Similarly, not much in the way of discussion on connecting to schools – the document doesn't provide a sense of where schools are based in the SSBC. Should provide yearly figure for PT in Queenstown, gone from about 500K to 1.4m trips.	Moderate		21/08/2019	√	100%
PS 3 - incorporate any Queenstown-specific info in relation to health/inactivity.	Problems, opportunities, constraints	5.3.3 Page 46	NZTA	Anything Queenstown specific in terms of rates of activity/inactivity?	Minor		21/08/2019		On Hold
Addressed via stakeholder workshop	Problems, opportunities, constraints	5.4 Page 47	NZTA	What is the plan to fill the information gaps?	Minor		21/08/2019	√	100%
Table 11 - Confirm performance indicators with stakeholders. Include bassline info for each KPI. Ensure that KPI's and alignemnt with SSBC are consistent throguhout the document	Outcomes	Table 11 Page 49	NZTA	Performance indicators don't appear to match what we talked about (this will be more of an issue if the SSBC is endorsed as is, ensuring these are more appropriate will make post-implementation monitoring easier and more effective later)Need to be consistent with and able to insert the measures into the TIO performance measures template we sent. The programme **MUST** have baseline information. If there are some measures that don't have it, you need to outline how this will be obtained at the next phase. Can you set out the LoS increase for the LoS rating?	Major	Greg	21/08/2019	√	100%
Confirm with stakeholders the categorisation of route 4S - primary or secondary? Update table	Definitino of network routes	7 Page 50	NZTA	Route 4S is classified as "Secondary" but is included in the first tranche? Should it be Primary then? Need to explain why this route is being prioritised then.Ideally the route classification should line up with the descriptions used for the implementation plan, otherwise it is confusing. Similar Figure 30 refers to a route 4 when it should be 4S.	Minor	Greg	21/08/2019	√	100%
Re-word reference to landowner issues	Optino selection	Page 60	NZTA	Noting "landowner" issues, can we say that?	Minor	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Integrate adopted engagement approach and actions. Highlight integration with TDM and non-infrastructure measures. Include additonal references to wider business case and acitvities included (Masterplans, QITPBC)	Shortlist assessment	9.1 Page 61	NZTA	I don't recall the document being clear on the public engagement approach for pre-implementation phase? I think it would be worth highlighting in the document somewhere QLDC's approach to education programmes/cycle skills etc. And cycle parking/end of trip facilities given potential significant numbers on key routes into higher demand destinations?	Major	Greg	21/08/2019	√	100%
Confirm with stakeholders that bridge is too be funded under A7 programme? Provide greater clarity/justification for 4f as a prefer option	Shortlist assessment	9.2 Page 67	NZTA	The proposed bridge over the Kawarau River is the preferred, but scores poorly in the MCA – this doesn't correlate with what we discussed and there's no detail to support this change	Moderate	Greg	21/08/2019	√	100%
Re-work section 9.4 to clarify the outputs the sensitivity analysis	Shortlist assessment	9.4.1 Page 103	NZTA	Sensitivity Analysis. This section is very confusing, especially Section 9.4.6 – Scenarios. However, the conclusion remains the same that the preferred options are not particularly sensitive	Moderate	Greg	21/08/2019	√	100%
More effective dialogue is required explaining approach to determining preferred network and how this differs from delivery. Consider moving dleivery stgaing to a different opart of docuemtn (before fianncial case?) to introduce stagign approach	Preferred network	Table 30 Page 107	NZTA	Network Structure. It is really difficult to understand the way the routes have been compiled. Table 30 lists Routes 1-10 and the various components from the optioneering that are included eg. Route 4 (4a, 4b, 4c). However with the estimates and delivery staging (Table 48 & 49) the reference is to Sections A2 through to F1. For example it is difficult to understand where Section C7 sits. This needs to be clarified.	Major	Greg	21/08/2019	√	100%
Confirm treatment types with stakeholders for in-scope town centre projects	Preferred network	Table 31	NZTA	Treatment types for Queenstown Town Centre projects have not been presented in the business case? What does a good functional LoS look like for walking and cycling for these projects? Refer to comments above (feedback number 17.)	Moderate	Greg	21/08/2019	√	100%
Review treatment types. Confirm with stakeholder suitability of Park St as a greenway. Include references in SSBC that treatment and entailed design must be confirmed with NZTA walking and cycling advisor at detailed design stage	Preferred network	Table 31 Page 111	NZTA	There appears to be insufficient evidence of optioneering of actual options. For example: Jacks Point to Frankton will be a 3m chipseal (Page 111), compared to Frankton to Ladies Mile (interim solution) 2.5m compacted gravel. Not sure Park Street as a greenway is a great option considering the LOS provided along the lake front. High use QT to Frankton may be able to provide separation between peds/cyc in some locations, this should be considered even if that can't be provided for the full length. Suggestion of 'cycle calming' will not support increased uptake it suggests more effort is needed to design out conflict between cyclists and peds. **Add condition precedent to funding approval for implementation that treatment and detailed designs have to be agreed with NZTA walking and cycling advisor in pre-implementation/detailed design phase.**	Major	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Provide explanation in introduction to how car parking loss was determined or weighted. Is there any parking data we can pull in? **Parking occupancy/duration data unavailable. Would need to rethink treatment options assessment process to incorporate car parking loss weighting. To compare volumes of peds/cyclist to cars users affected by parking loss would require understanding from economics team as to projected volumes. Added difficulty due to lack of duration of stay data.**	Preferred network	Table 31	NZTA	Hard to know how carparking loss was weighted in treatment decisions. Is there sufficient data to understand car parking use (occupancy & duration)? Understanding this would enable comparison of the impacts associated with car parking removal and the ped/cyc trade-offs. It may be that the removal of 100 spaces adversely impacts on ~120 car park users, but the benefit could be to 400 peds/cyclists. Optimising active mode convenience and LOS will help to drive the mode shift QLDC seek. It should not be forgotten that the impact of parking loss can be mitigated through the provision of parking elsewhere (possibly even at PT hubs)?	Moderate	Greg	21/08/2019	√	100%
Amend to WSP Opus	Economic case	11.1 Page 121	NZTA	WSP Opus led the PT Demand model not Abley.	Minor	Greg	21/08/2019	√	100%
Clarify where the trip comparison numbers have been sourced from, how these were developed.	Economic case	Table 33 Page 123	NZTA	Not all routes have the expected number of peds/cyc detailed (see Page 123), this makes it difficult to have confidence that the treatment selection is appropriate to the anticipated volume (both the active mode and road based)? Similarly, we'd need to understand these figures to have confidence in the economics. Does not appear to match figures presented in the trails trust data. Why the discrepancies? Where do the trip comparisons numbers come from?	Moderate	Greg	21/08/2019	√	100%
Confirm network scope and construction stages with stakeholders. Amend delivery strategy as per agreement.	Financial case	12.1.2	NZTA	Projects scheduled from 2024 and beyond. We should park these projects for now as network needs and best practice can be expected to change. This could enable greater focus on the more immediate links	Moderate	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Clarify with stakeholders if we should be accounting for ped benefits. If so on what routes or just TC projects? Address other points in memo	Economic case	Table 32 Page 122 and 123	NZTA	Didn't quite follow some of the mode shift assumptions on Page 122/123 – these are fundamental for what will underpin the economics. In particular: 1) a. Future Modal Shift - The mode shift will occur because facilities are being provided, the gains therefore should reflect the speed of network delivery. Taking the approach detailed here will result in delayed benefits and a particularly conservative BCR 2) b. Table 32 doesn't seem to account for ped movements? 3) c. New Commuter Cyclists – how is this estimated for routes with no current cycling (e.g. LHE to Frankton), and how does this relate to the 'brave and fearless' and 'interested but concerned' ratio? 4) d. Page 123 "Commuters that were originally private vehicle drivers" – 25%, how did the rest of them travel? 5) e. Table 33 – what are the estimates for the other routes. This is key data that's missing. 6) f. What date does the Daily Model reflect? 2046 or opening	Minor	Greg	21/08/2019	√	100%
Economic assessment memo - explain thematizable behind 40 time horizon	Economic case	Table 34 Page 124	NZTA	We wonder how fair it is to assess the programme BCR using a 40year horizon. Projects that are delivered in year 5-10, will only deliver 30-35 years of benefit, this means that the assessment will capture all the costs but not the benefits.	Minor	Greg	21/08/2019	√	100%
Clarify with stakeholders Interscope in particular what construction phases to focus on	Economic case	Table 34 Page 124	NZTA	With the preferred network having a BCR of 1.1 (which excludes property, and the unknown unknowns which at this concept level could be considerable), the programme in its entirety may be uneconomic. This justifies that further work is needed outside the 'First Construction Stage' which has a BCR of 1.4,	Moderate	Greg	21/08/2019	√	100%
none	Economic case	Table 34 Page 124	NZTA	Design costs of $13.2M seems excessive (Page 124), not sure what the $15.2M 'Ongoing Costs' are for? These two numbers alone will not be helping the BCR.	Minor	Greg	21/08/2019	√	100%
Address inconsistencies	Economic case	Table 35 Page 126	NZTA	BCRs for each route are different to that calculated in the "JMA v3 Single Routes_Cycling Benefits" file. Routes 7-10 should be omitted from the programme BCR and noted as 'possible future routes but currently uneconomic'	Minor	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Update results alignment reflecting access as liveable cities	Economic case	11.5 Page 127	NZTA	Results Alignment should be assessed against Access "..liveable cities" criteria rather than "..thriving regions" as Queenstown is included as a major metro for investment purposes. As a result, results alignment will need to be redone. You can only claim a "High" for safety if you meet the high crash risk definition or there is substantive evidence of perceived safety risk. Typically, via a best practice survey. Should the results alignment actually be used to assess a full programme (for example LHE to Frankton doesn't address a very high predicted walking or cycling safety risk as there is currently no facility but as part of a programme it could satisfy this criteria)? This should be done by route. At least for those routes that are in the first 2 stages for implementation before 2024.	Minor	Ryan	21/08/2019	√	100%
A brief discussion will be added to the economics memo, comparing this assumptions with the relative attractiveness presented by the EEM	Economic case	Spreadsheet	NZTA	1. The calculations of future cyclist numbers in particular are based on assumptions of increases in mode share aligning with the targets in the QTT strategic plan. There is no discussion of the likelihood of these targets being met or exceeded, or how this may be influenced by facility design. While there is a brief section (11.4) on sensitivity analysis, this does not outline the risks or implications of the stated uncertainty in the variables tested, except to say that the testing shows that the assumptions are robust.	Minor			√	100%
To be corrected in BC	Economic case	Spreadsheet	NZTA	2. In table 32, the explanation of the number of commuters originally in private vehicles is in error. I believe it should read "…one in four new active mode trips were previously made as car drivers".	Minor			√	100%
To be corrected in BC	Economic case	Spreadsheet	NZTA	3. Reference is made in a number of places to a "positive" BCR when it is actually referring to a BCR greater than 1.0. A BCR of 0.1 is still positive, which means that there is a positive benefit, but being less than 1.0 means the calculated whole-of-period benefits are less than the whole-of-period costs. A BCR that is not positive means that there is either no benefit or negative benefit from implementing the improvement.	Minor			√	100%
It was assumed for keeping the estimation on a conservative side, as the modal share is only an estimation based on targets. The increase in commute share will be now reflected on the inauguration's year (To be discussed tomorrow)	Economic case	Spreadsheet	NZTA	4. Assumptions Tab – don't understand the rationale behind the commuter modal splits. I would have thought the 15% active mode share would be achieved once the facility has been provided, with growth then matching the growth in total travel demand. It appears the growth in the model has been smoothed out over the years to the 2046 horizon (it appears Tabs '1-10 Cycle Kms' supports this view). If I understand this correctly, then this approach results in two outcomes that will affect the BCR (on aggregate likely to provide a conservative BCR):	Minor			√	100%
Same as previous	Economic case	Spreadsheet	NZTA	- Benefits from projects delivered early in the programme won't capture a spike in active mode demand at project completion.	Minor			√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Annual Benefits are multiplied by 0 until the construction is finished	Economic case	Spreadsheet	NZTA	– Benefits from projects delivered late in the programme, accrue benefits before any work has taken place.	Minor			√	100%
Corrected	Economic case	Spreadsheet	NZTA	10 Single Routes Tab – It appears the Fernhill to Queenstown has used an average trip distance of 3.0km. The distance between Fernhill and the Queenstown centre is about 2.7km (this may be a better distance to use, unless it is considered that a significant flow would continue on to Frankton (if so, they should not be accounted for in Route 2 as the benefits will already have been recognised in Route 1)	Minor			√	100%
This tab is no longer used	Economic case	Spreadsheet	NZTA	Tab Total Cycle Kms (0-7km) – Primary is based on a 3.5km trip distance for all routes (see formula Cell B8) . The health benefits calculated in Row 22 (in this tab) appear to be based on the 3.5km figure for all routes (I'm not sure what the "0.5" figure in the Row 22 formula is representing).	Minor			√	100%
This tab is no longer used	Economic case	Spreadsheet	NZTA	Additionally, the Tab Output Total – Primary Routes appears to be based on 8 suburbs/clusters/routes. Not sure if the final figure (Cell L27) which is used in the Total Cycle Kms (0-7km) – Primary Tab to generate the health benefits, is meant to reflect only the primary routes?	Minor			√	100%
To be checked w/ design team	Economic case	Spreadsheet	NZTA	'3 Cycle Kms' forecasts a total cycle volume of around 5,000 cyclists per day. Given that this volume is significantly higher than that on the other routes, a higher LOS will be require particularly with regard to facility width and intersection capacity. Just an observation that this higher LOS may require significantly more investment on a per sqm than that of other routes.	Minor			√	100%
Solved with the separate staging spread	Economic case	Spreadsheet	NZTA	1-10 Model Tabs show benefits are accruing in Year 1. It's my understanding that we shouldn't account for any benefits while construction is taking place, as the activity can't occur until after it is completed. This is likely to have a minor impact on the BCR value.	Minor			√	100%
Yes	Economic case	Spreadsheet	NZTA	1-10 Model Tabs Column G accounts for the Health Benefits – Presumably, Column G also covers 'environment' benefits? If so, then it would appear that new users should attract $1.40 benefit per km (up to 3km) instead of the $1.30 presented in the formula (assuming that is the monetised value).	Minor			√	100%
No pedestrian benefits estimated	Economic case	Spreadsheet	NZTA	– Note as per previous discussions no allowance for pedestrian benefits have been accounted for.	Minor			√	100%
This is true. No longer needed as the me	Economic case	Spreadsheet	NZTA	1-10 Model Tabs Column I accounts for the Road Traffic Reduction Benefits. I don't have any issues here, but it may be worth just clarifying a small point. It's noted (Cells G2:I2) that "25% of commuters are drivers originally" yet the application of this 25% reduction in traffic volume has been applied to all commuter cyclists not just new (therefore it has the effect of providing a 50% benefit to the reduction in traffic volumes).	Minor			√	100%
It'll be accounted for in the TT benefits	Economic case	Spreadsheet	NZTA	1-10 Model Tabs there does not appear to be any allowance for Relative Attractiveness improvements for existing cyclists.	Minor			√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
It's only for sealed surfaces (comes from	Economic case	Spreadsheet	NZTA	2 - Model Tab Cell K6 appears to have a reduced length that will be subject to resurfacing (not sure why, is this because part of the path already exists?). Same occurs in Routes 4S and 6 which presumably will be surfaced.	Minor			√	100%
Check with cost estimators	Economic case	Spreadsheet	NZTA	7 – Model Tab does not appear to have any allowance for grading the unbound route, not sure if that is intentional but an annual maintenance cost of $10,826 may be quite low given accessibility constraints?	Minor			√	100%
Capital costs on that tab are old and no	Economic case	Spreadsheet	NZTA	BCR Summary Tab Capital Costs for Routes 1, 3, 4N & 5 (Cells G6:G12) seem a lot lower than the PV costs. Additionally these numbers don't seem to reflect what we see in the 'Model' tabs. Not sure this observation is material as the BCR has been calculated on the PV columns but I raise it in case it flows into other aspects of the programme.	Minor			√	100%
old and no longer used	Economic case	Spreadsheet	NZTA	BCR Summary Tab 'non-commuter health benefits' scenario. I don't quite follow the rationale for this scenario given that:	Minor			√	100%
old and no longer used	Economic case	Spreadsheet	NZTA	- BCRs calculated in the "Only Commuters health benefits" already accounts for a 20% 'non-commuter' health benefit (see Cells D:G on the Model Tabs).	Minor			√	100%
old and no longer used	Economic case	Spreadsheet	NZTA	- It's unclear why the PV costs (Cells H24:H36) would change for some routes between scenario testing the BCR with and without non-commuter health benefits? What would cause a change in the total delivery and maintenance PV cost?	Minor			√	100%
old and no longer used	Economic case	Spreadsheet	NZTA	Can't check the calculations in the PV Benefits and PV Costs columns as there are no formulas indicating the origin of these figures.	Minor			√	100%
Yes	Economic case	Spreadsheet	NZTA	This spreadsheet was hard to follow.	Minor			√	100%
Annual Benefits are multiplied by 0 until the construction is finished	Economic case	Spreadsheet	NZTA	CostStreams Tab, first costs seem to arise in 20/21 (see full spreadsheet, or "Cumulative Costs" Chart at the bottom of the sheet). This would appear at odds with Benefits Tab which seems to be tracking benefits from 2019 for all routes?	Minor			√	100%
One is single routes the other stages. T(	Economic case	Spreadsheet	NZTA	BCR Tab seems to give slightly different BCR figures compared to those in FILE: JMA v3 10 Single Routes_Cycling Benefits 'BCR Summary' Tab.	Minor			√	100%
Clarify what routes are being targeted for funding and what work packages and outline ongoing strategy for other routes. Include cashflows. Distinguish between NZTA-led projects and QLDC-led projects	Financial case	12 Page 130-	NZTA	As mentioned above, it is important to be clear on what routes are being funded in this approval and what is not, and state what will happen to the other identified routes ie reassessment expected... You need to have cash flows for 18-21 and 21-24 period for the relevant routes being put up for funding with funding shares: NLTF, QLDC, third party (if any) and QTT. Put these in a table. Note: it will be important to distinguish between NZTA-led projects and QLDC-led projects, and to show the cash flows for pre-implementation and implementation for each route (which we can then aggregate if we want to simplify the approval for QLDC and NZTA or keep individual routes identified).	Major	Ryan	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Clarify network scope and funding splits between partners. Clarify scope of funding to be soured by different organisations throughout financial case. Update table 39 to show split between organisations	Financial case	12 Page 130-	NZTA	Financial Case. Generally this is not well laid out or clear about the sources of funding (NZTA, QLDC, QTT). Table 39 could be improved to show split between organisations. We believe that C7 should be included in the first 2 stages as it provides a better connection to our 2 critical areas of Lake Hayes Estate and Shotover Country. Table 40 is a very confusing and adds little value. It is too complicated and there is no value in splitting amounts out in the way that it has been done. All we need to know are the expected estimate (incl. contingency) for Pre-Imp, sub-totals for Physical Works and MSQA and combined to give total Implementation phase. Then a total Expected Capital Cost at the bottom. Adding whole of life maintenance costs into this table only confuses things. That is better placed in Table 35 as a part of PV costs	Major	Emily	21/08/2019	√	100%
Review costs and risks assocaited with property/land acquisition for work packages up to 2024. Update property costs in SSBC and appendices to reflect new approach. Need indicative estimates or contingency.	Financial case	12.1.1 Page 131	NZTA	Property purchase/land acquisition cost: What is the level of risk and potential cost impact? **Is it significant or not?** Have you applied a contingency to cover this? We need to know the level of risk to the cost estimate.	Major	Greg	21/08/2019	√	100%
Clarify approach to to TC project costs	Financial case	12.1.2 and Figure 48 (Staging) Page 132	NZTA	Approach for Queenstown Town Centre pedestrianisation projects was discussed but is not demonstrated in the business case yet. More work to do here. Third construction phase C1-C4. Refer to comments for Table 6 Page 36/feedback number 17.	Moderate	Jose/John	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Clarify funding commitments and network scope with staeholders. Udpate fiinancial case	Financial case	12.4 Page 135	NZTA	This section is muddled. Basically there is a placeholder allocation for the rest of the 18-21 period for NZTA (Otago) and QLDC active travel pre-implementation and implementation. However, it is likely that we will be seeking approval for pre-implementation in 19/20 and with construction starting from 20/21 finishing in 23/24? So we would be effectively committing – if approved – some funding for the next period. In this period ie 18-21 we do have a placeholder of "likely" funding for pre-implementation and implementation totalling $12.5m but this is subject to the business case costings being finalised with the appropriate justification, and with the knowledge we will need more funding to be committed in the 21-24 period. There will also need to be a good/functional LoS proposal for the Town Centre (which demonstrates value for money) with any higher LoS being met by Council. These costs would need to be factored in. Again, we need to be mindful of funding pressures for the next period ie 21-24 with considerable expenditure expected as a result of several large walking and cycling projects from other parts of the NZ in 21-24 period being delivered	Moderate	Jose	21/08/2019	√	100%
Clarify funding commitmmetns and network scope with staeholders. Udpate fiinancial case	Financial case	Table 41 (page 137 onwards)	NZTA	Funding splits are a bit odd, I don't recall the number of projects indicated being assigned to NZTA (think there is still confusion in the table between funding split and FAR). It should be noted that any projects assigned to NZTA may be subject to further nationwide prioritisation. Need to re-work the funding splits as discussed at the previous meeting. NZTA projects 100%, QLDC project 100% (with 51% FAR). Also, be clear what projects are planned to be QTT. It may also be a good idea to consider QTT as a third-party funder on some routes. A potential split that is more defendable is: NZTA: A2, A3, A7 (could have QTT third party funding?), B3, D4 QLDC: A8, B2, C1-C4, C5, C7, D1, D2, D3 QTT: C6, E1, F1 For A8 the funding split could be QLDC led, NZTA 51% FAR with QTT third party contribution. This would mean the cost for the business case would be total project cost minus third party contribution. NZTA would co-fund 51% of the rest of the cost, QLDC 49%.	Major	Jose	21/08/2019	√	100%
Udpate SSBC relfecting jonit approach to delivery	Commercial/management cases	13 and 14	NZTA	Commercial Case and Management Case need to reflect that QLDC will not be the sole delivery agent. Include NZTA emphasis and approach	Minor	Jose	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Udpate SSBC reflecting joint approach to delivery. Outline a procurement methodology that is integrated with the W2G governance model.	Commercial case	13 and 14	NZTA	Commercial Case. This section is weak. There seems to be little acknowledgement throughout the section that the routes will be split into 2 organisations programme by the funding accountability split. Section 13.3 – There is no acknowledgement that the routes are most likely to be procured separately depending on which organisations programme (NZTA or QLDC) they sit within.	Major	Jose	21/08/2019	√	100%
Link idnetifiication of procuremntn options to risk exposure.	Commercial case	13.2 Page 147	NZTA	Sets out some of the aspects around procurement based on a contract value of $126M. The assessment of procurement options should be based on contract value as that is the risk exposure (noting some projects will be delivered by different organisations, and over different timeframes).	Minor	Jose	21/08/2019	√	100%
Be more specific in idnetifatino of routes - ref to dlivery items	Commercial case	13.4 Page 150	NZTA	It would be helpful for the risk assessment to have a focus not only on the programme, but also a more focused view on the more immediate delivery items as this will determine readiness and the ability to deliver	Minor	Jose	21/08/2019	√	100%
Schedule should be udpated to reflect routes, phases and cash flows	Commercial case	13.7 Page 151	NZTA	Schedule makes mention of going through the LCLR programme. Seems as though they're thinking they'll split off individual phases which won't meet funding requirements as I understand them. Only two projects in the RTIs would appear to qualify for LCLR. Schedule needs to be redone to reflect routes, phases and cash flows	Minor	Jose	21/08/2019	√	100%
Outline peropty requirements including costs and risks for each identified work package. Update proeprty strategy as per agreed approach to property costs	Commercial case	13.8 Page 151	NZTA	Section 13.8 and Appendix K - Property Strategy. This is very generic and is really just a summary of the general PWA process. The consultation section says there has been consultation with 10 landowners so surely there must be some analysis of property requirements. We would have expected to see at least a high level assessment of property requirements, no matter whether it was for outright acquisition of just the creation of an easement	Major	Jose	21/08/2019	√	100%
Update consenting strategy	Commercial case	13.9 Page 152	NZTA	Section 13.9 and Appendix L - Consenting Strategy. This is very detailed and generally well done. Good route by route assessment for consenting issues and also for the Environmental and Social Responsibility Screen. Good to have an assessment of consenting costs, but it would be nice to have summarised by route and have these clearly shown in the cost estimates. Also it would be good to have some commentary on the major consenting risks, particularly with regard to delivery timeframes	Minor	Jose	21/08/2019	√	100%
Refelct NZTA as delivery agent throughout management case	Management case	14 Page 153	NZTA	There is a general lack of acknowledgement that a substantial part of the programme will be delivered by NZTA.	Minor	Jose	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Outline major risks at a route by route level. Highlight specific conerns of Iwi. Update Risk Register	Management case	14.5 Page 156	NZTA	Risk register is very high level. We expect more detail at a route level.	Major	Jose	21/08/2019	√	100%
Explain how KPIs will be reported to the stakeholders	Management case	14.8.2 Page 158	NZTA	Need to ensure alignment with the KPIs mentioned above. Need to set out how this will be reported to QLDC and NZTA, other stakeholders	Moderate	Jose	21/08/2019	√	100%
Include baseline figures	Management case	Table 48 Page 159	NZTA	We need to know the baselines. Have the monitoring costs been built into the pre-implementation and implementation phases	Moderate	Jose	21/08/2019	√	100%
none	Appendices	Appendices	NZTA	Scanning through the Appendices (quickly as there are 378 pages and no contents page).		Jose	21/08/2019	√	100%
Request detailed breakdown of TC costs from QLDC	Cost estimate report	Cost estimate	NZTA	Would be good to get a breakdown of costs for the town centre works	Minor	Jose	21/08/2019	√	100%
Address inconsistencies	Cost estimate report	Cost estimate	NZTA	1. Total "pre-imp" costs based on PDF Page 22 of the WATN Cost Estimate Reports – R05 sit at around $4M. This is significantly different to the $13.2M indicated on PDF Page 124 of the business case report. I'm probably missing something here but I couldn't work out why these numbers were so far out?	Minor	Jose	21/08/2019	√	100%
Use DBE forms? Address report name	Cost estimate report	Cost estimate	NZTA	You are using PBE forms? Also you call the cost estimate document "Indicative cost estimate report"??	Minor	Jose	21/08/2019	√	100%
Need indidivual element breakdowns	Cost estimate report	Cost estimate	NZTA	Hard to decipher how you have built up the costs; no breakdown of square metres or lineal metres/quantities? Just give us accurate costs up to 2024. We are less interested in the outlying years/projects	Minor	Jose	21/08/2019	√	100%
Update table to reflect elemetn breadown for stage 1 and 2 packages	Cost estimate report	Cost estimate	NZTA	We would have expected to see some level of elemental breakdown at SSBC level, not just a lump sum for each item, at least for Stages 1&2 as these are likely to be in the first round of funding requests.	Minor	Jose	21/08/2019	√	100%
Request Way to Go brnading logo and include in SSBC	General	General comments	NZTA	Must brand the document "Wakatipu Way to Go".	Minor	Greg	21/08/2019	√	100%
none	General	General comments	NZTA	The investment objectives are a bit generic and could be worded with more specificity	Moderate	Greg	21/08/2019	√	100%
Better rationale for linking cause and effect for safety implcakitions	General	General comments	NZTA	I found the supporting evidence for safety not especially convincing. It makes some assumptions and joins up some dots I struggled with	Moderate	Tom	21/08/2019	√	100%
Update KPIs for community and environment. Confirm with stakeholders	General	General comments	NZTA	The KPI's for the community and environment benefits still need landing. They morph as the BC moves on and end up duplicating others by the end.	Major	Tom	21/08/2019	√	100%
Incorporate implcaitions for land use change arising out of the routes	General	General comments	NZTA	Taking a step back I was disappointed there wasn't more of a narrative on where and when land use change might occur relative to the routes' planned implementation.	Moderate	Tom	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
none	General	General comments	NZTA	I would think the very low BCR routes are a good fit for QTT funding, with the others variously split between QLDC and us	Minor	Greg	21/08/2019	√	100%
Address use of micromobiltyi and potential synergies/implications for WATN	General	General comments	NZTA	Also is Onzo and the like on the radar for Queenstown? No mention of these approaches in the document	Minor	Greg	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element		Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Request W2G banding from partners	Front page	Front page		QLDC	Needs W2G branding	Minor	Greg/Andrew	16/08/2019	√	100%
Reshape exec summary with additional commentary provided on the BCRs and the benefits of initial package	Exec summary	Exec summary		QLDC	Highlight that some elements are 5:1 or better, but the network is considered together.	Minor	Greg/Andrew	17/08/2019	√	100%
Use W2G branding and reference throughout SSBC	Introduction	Introduction		QLDC	Think we need to provide continuity by reference to W2G throughout. This will send an early message.	Moderate	Greg/Andrew	18/08/2019	√	100%
Concentrate text to highlight pedestrian and cyclist use of the trails	Background	2.1.3		QLDC	Is it active travel if it's main use is a hiking trail? Think this should identify walking / cycling only	Minor	Greg/Andrew	19/08/2019	√	100%
No micro mobility data could be sourced. Impacts and implications of uptake in micro mobility modes has been raised elsewhere	Background	2.1.4		QLDC	Micro-mobility? _ Any stats on scooters? Likely to be small segment but may grow.	Minor	Greg/Andrew	20/08/2019	√	100%
A better example could not be sourced	Problems, opportunities, constraints		5.3	QLDC	Better example of steep gradients	Minor	Greg/Andrew	21/08/2019		On Hold
Elaborate on existing transport network gaps particularly around public transport, integration with existing planned network.	Problems, opportunities, constraints	5.3.2 table 6		QLDC	How are we showing the gaps between networks especially PT. AT plays a crucial part in this.	Minor	Greg/Andrew	21/08/2019	√	100%
Reference F2Q/QTC business cases and parallel busuiness cases	Problems, opportunities, constraints	5.3.2 pg. 28		QLDC	Should include reference to F2Q/QTC business cases.	Moderate	Greg/Andrew	21/08/2019	√	100%
Provide additional commentary on the way in which the bus system, ferry services are integrated. Link to ferry businesscase work and relevant implications	Problems, opportunities, constraints	5.3.3 pg. 29		QLDC	How are the two modes integrated?	Minor	Greg/Andrew	21/08/2019	√	100%
Route has been updated to secondary	Definition of network routes	section 7 pg. 34		QLDC	Isn't this now a primary route? And it wasn't proposed by QLDC initially.	Minor	Greg/Andrew	21/08/2019	√	100%
Include additional section in SSBC outlining how the synergies and links with parallel business cases	Definition of network routes	section 7 pg. 35		QLDC	really missing integration with other business cases!	Major	Greg/Andrew	21/08/2019	√	100%
Update route option to include refence to links to ferry at Bayview	Shortlist assessment	9.2.2 pg. 53		QLDC	Need to include access to ferry at Bayview (option 2b)	Minor	Greg/Andrew	21/08/2019	√	100%
Update route risks/considerations for this route to reference water pipe and the need to remain	Shortlist assessment	9.2.3 pg. 66		QLDC	This has not been considered fully as a viable option due to the existing pipe needing to remain in place and an additional pipe required either within the Frankton Track or within SH6a. I don't think the communities concerns around safety of a shared path have been addressed.	Minor	Greg/Andrew	21/08/2019	√	100%

ACTION ITEM	Report Section	Report Element	Source	Comment	PRIORITY	OWNER	DUE	DONE	STATUS
Additino of lighting has been incoproated into design of some routes and is more fully detaield in the Cost Estimate report	Preferred network	Table 31 pg. 95	QLDC	Does lighting not feature as a treatment? Only mentioned as a mitigation measure on some routes	Moderate	Greg/Andrew	21/08/2019	√	100%
Link preferred network with parallel PT, active travel projects including proposed land use changes	Preferred network	Table 31 pg. 99	QLDC	Need to show interaction with other modes and known development. Old high school site may require crossings, PT stops, entrances to be amended / introduced. Need to demonstrate current awareness and not focus on single mode.	Moderate	Greg/Andrew	21/08/2019	√	100%
Delivery programme has been amended and no longer refers to construction stages	Preferred network	Table 39 pg. 156	QLDC	Why aren't the 4th, 5th, 6th stage costs listed?	Minor	Greg/Andrew	21/08/2019	√	100%
BC presents financials for a first to be dleviered by 2024. Additional commentary is provided on the steps for funding Package 2	Financial case	Figure 48 pg. 115	QLDC	Include all stages up to 2024? How are the rest dealt with?	Minor	Greg/Andrew	21/08/2019	√	100%
	Commercial case	13.3 pg. 173	QLDC	Is this to be a W2G project or not? If so the procurement approach will be decided on a programme level not just in this individual case. Accepted that early wins will need to be as simple as possible, and that later stage will be dependant of future decisions (i.e. 2024 LTP etc) but we need a clear picture.	Moderate	Greg/Andrew	21/08/2019	√	100%
	Commercial case	13.3.1 pg. 174	QLDC	Remove references to supplier panel	Minor	Greg/Andrew	21/08/2019	√	100%
	Commercial case	Table 43 pg. 174	QLDC	Why direct appointment?	Minor	Greg/Andrew	21/08/2019	√	100%
	Commercial case	13.4 pg. 175	QLDC	This should be tabulated.	Minor	Greg/Andrew	21/08/2019	√	100%
	Commercial case	13.7 pg. 176	QLDC	I assume this only relates to the RTI's?	Minor	Greg/Andrew	21/08/2019	√	100%
Re-work the Commercial Case based on feedback	Commercial case	13.8.2 pg. 177	QLDC	I wonder if this will be acceptable to NZTA or not?	Minor	Greg/Andrew	21/08/2019	√	100%
Section is reshaped to reflect both partners as delivery agents	Management case	14 intro pg. 178	QLDC	ORC? What about NZTA?	Minor	Greg/Andrew	21/08/2019	√	100%
Short term dleivery of routes has been proposed to be dleviered seperately by partners with a jonit apporach incorporated for later stages of construction	Management case	Table 45 pg. 178	QLDC	Assumption here is that this is delivered by QLDC and not W2G? Makes complete sense to utilise the existing QLDC PMO but this has not yet been agreed – and depends on the W2G approach to delivery across the wider programme..	Major	Greg/Andrew	21/08/2019	√	100%
Remove reference to key project members and generalise at a higher level in reference to W2G management	Management case	Table 46 pg. 183	QLDC	Complete contradiction with previous Project Roles section focussed on QLDC led delivery and this being NZTA delivery!	Moderate	Greg/Andrew	21/08/2019	√	100%
Expand and update the table to include information on how it should be funded and what is the process to reassess targets or shortcomings	Management case	14.8 pg. 186	QLDC	Who is responsible for benefits monitoring, how is it funded and what is the process to reassess any shortfalls. This also needs to be part of a wider monitoring strategy for QLDC and its partners. We need to be able to demonstrate success (benefits) to justify L/R/NLTP inclusions and priorities.	Major	Greg/Andrew	21/08/2019	√	100%

Appendix U – Peer Review Feedback & Actions

Queenstown Lakes District Council

Wakatipu Active Travel Network

SSBC review

July 2019

Table of contents

1. Introduction

As per GHDs offer of service issued to the Queenstown Lakes District Council (QLDC) on 24 June 2019, the aim of this review is to check that the Wakatipu Active Travel Network (WATN) Single Stage Business Case (SSBC) produced by Beca has been completed to an appropriate level of detail, has undertaken the appropriate steps for a SSBC.

The review is undertaken at a high level, and is focussed on identifying any fatal flaws by reviewing the assumptions made in the assessments and whether the outcomes from the assessments are well supported by the evidence. The review is not intended to be at a level to check the calculations undertaken in detail, obtain independent sources of supporting evidence, or to check the report for spelling and presentation issues for instance.

This review was undertaken based on SSBC information received from Beca dated 9 July 2019, and earlier meetings with Beca on 9 July and 14 June 2019 to discuss the WATN project.

2. Review Findings

2.1 General

2.1.1 Document layout and formatting - minor

- Page numbering issue following page 21 of the report

- Incorrect definition of GPS in glossary of terms

- Inconsistency between WATN SSBC and Active Travel Network (ATN) SSBC

- Ordering of appendices in the document, and an Appendix contents page

Recommendations	1. Fix page numbering in the final document 2. Amend definition to Government Policy Statement 3. Find and replace terms in document and suggest use of a single name for the SSBC to avoid confusion. 4. Re-order the appendices to follow the order they are mentioned in the document, and provide a contents page for the Appendices.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.1.2 Overall SSBC commentary - major

- The following observations are made regarding the SSBC overall

Recommendations	5. The SSBC focusses heavily on cycling with limited commentary on pedestrians and other active mode groups. Either need to explain in the introduction the scope or add further information on other modes into each chapter. 6. A general lack of customer insights weakens the case. It would be useful to show target audience and profile some potential existing/new users in the strategic case to support the quantitative evidence base. 7. Lack of commentary or reference to wider non-infrastructure responses e.g. TDM - cycle training, education, marketing and promotion, travel planning – need to state where this will be covered if not part of this SSBC scope. No mention of supporting facilities e.g. bike parking, bike hire etc. Cycle counter equipment.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.2 Chapter 2 - Background

2.2.1 Tables and Figures – Minor

- Figure 5 is difficult to read due to the scale, particularly the route labels

- Figures 8 and 9 would benefit from axis labels

Recommendations	8. Consider inserting full page version of Figure 5 (landscape) to make the labels legible to the reader. 9. Add axis labels to the graphs shown in Figure 8 and 9. 10. Figure 8 includes two lines for age groups 40-50
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.2.2 Context – Moderate

- Section 1.4 Report Structure is missing a description of Section 7.
- Given the significant amount of work underway in the QLDC area and the overlap, it would be beneficial to provide the investor with a brief overview of the parallel projects underway that are likely to influence this SSBC. This helps set the context for this investment as part of the wider programme underway in the area.

Recommendations	11. Insert brief description of Section 7 to the Report Structure (pg3) *12.* Insert a heading "Parallel Projects" into the Introduction chapter and provide a brief (1-2 sentence) overview of the scope of each parallel project e.g. *There are a number of parallel business cases under development in the Queenstown Lakes District that have been considered through the development of this SSBC.* Suggest a sentence or two on the following: - Frankton to Queenstown Single Stage Business Case - Grant Road to Kawarau Falls Bridge Detailed Business Case - Lake Wakatipu Public Water Ferry Service Detailed Business Case - Frankton Masterplan and Integrated Transport Programme Business Case - Parking Strategies for Queenstown and Frankton – Detailed Business Case - Queenstown Town Centre Detailed Business Case
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.3 Chapter 4 – Organisational Overview

2.3.1 Additional partner/co-investor – Minor

It would be beneficial to add the Queenstown Trails Trust as they are identified throughout the document as a key partner and potential co-investor in active mode infrastructure, however, without local context it is difficult to know who they are (a charity/advocacy group) or what this group does.

Recommendations	13. Consider adding a brief description of QTT in Section 4.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.4 Chapter 5 – Problems, Opportunities and Constraints

2.4.1 Problem Statement 1 – Moderate

- The evidence base does not fully demonstrate what the problem is that needs to be addressed (cause) or the scale of the problem (effect).

Recommendations	14. Page 15 – provide evidence that the current routes are not popular for commuters, school children, the elderly and others. This statement is not supported by evidence, potential to use journey to work census data or travel to school data, link to QTT usage in Figure 8? Or re-phrase statement if no available suitable evidence. 15. Problem 1 is lacking any customer insight data to support this statement. Most of the evidence is anecdotal or subjective. Are there any LTP submissions that could bolster the evidence base, insights from Frankton Masterplan consultation? 16. Page 17 – would be useful to show geographic spread of crashes by severity (using CAS) to see if any patterns e.g. at intersections. 17. Page 18 – last para – Amend text to not make an assumption on why pedestrian was walking on the road – could state that there is no footpath in this location or current provision is poor? This is factually accurate rather than making an assumption that could be misleading. 18. There is a disconnect between the cause (topography, surface, weather etc.) and the effect – modal conflict. 19. It is unclear from the evidence how significant this issue is. Consider benchmarking the safety data against other NZ cities/towns to demonstrate the significance. 20. Page 19 – para 3 – suggest re-word – no evidence provided to support the statement “there is a high probability of injury when vehicles interact with pedestrians and cyclists”. 21. To support the effect statement it would be beneficial to calculate the social cost of all the recorded active mode crashes. 22. Page 20 – consider a summary after each problem statement to highlight key evidence and reinforces the case for investment.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.4.2 Problem Statement 2 – Minor

- Suggest an introduction to the routes is required and how these have been selected. Either in the introduction chapter or at the start of problem 2.

Recommendations	23. Include a map of key land uses/settlements to show how the ten routes have been developed to link these areas. 24. Include a map of the current active mode network to demonstrate that the existing network/infrastructure is not appropriate, has gaps etc. 25. Figure 26 image is blurry and would benefit from axis labels. 26. Page 24 – suggest Orbus is referenced or an introduction is provided – unclear to the reader what Orbus refers to.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.4.3 Problem Statement 3 – Moderate

- Minor corrections and use of local data where available

Recommendations	27. Amend Figure 29 heading 28. Suggest use air quality data from Queenstown monitoring site rather than national data. 29. As above are there any local health indicators rather than using national data which is better as a comparator. 30. As above this section would benefit from customer insight data. 31. Problem 3 is lacking any commentary on the proposed future growth and the implications this will have on this problem. Suggest some additional commentary is provided to highlight that this problem needs to be addressed now. There is another opportunity here to link to wider business cases and cross-reference.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.5 Chapter 6 – Outcomes

2.5.1 Key Performance Indicators – Minor

- How growth will be accounted for in the benefit statements and KPI's. At the moment we could invest nothing, and cycling numbers are likely to increase due to population/visitor growth.

Recommendations	32. Consider refining measures to account for population growth e.g. counts of cyclists/peds as a proportion of the population. Otherwise difficult to link directly to the investment. 33. Need to demonstrate how these benefits are of high value to the organisations – suggest a link to the strategic priorities is included e.g. the benefits identified have strong alignment to the GPS strategic priorities of X and Y and RLTP priorities of A and B and QLDC priorities of …. 34. Table 11 – it would be helpful to include a column to show the baseline if available for each measure to help demonstrate the scale of the outcomes sought. 35. FSI crashes – suggest this is refined to active mode FSI crashes as a proportion of mode share to account for an increase in usage and to specific road user groups. 36. Why has pedestrian mode share not been included as a measure? Suggest include along with cycle mode share.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.6 Chapter 7 – Network Routes

2.6.1 Clarifications – Minor

- How was the desired outcome statement developed? Is this from a strategic document or workshop – “active transport is the top priority”

Recommendations	37. Reference the top priority statement and attribute to an organisation if applicable.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.7 Chapter 8– Option Selection

2.7.1 Lack of a comparison to base case option – Major

- No commentary is provided to justify why a base case or do-minimum option has not been included as a comparator. It is therefore difficult to determine what the existing treatment/route is for each of these corridors and how the options will improve the current provision.

- Commentary on emerging parallel projects – recommended programmes e.g. Frankton to Queenstown SSBC and Frankton MP PBC

Recommendations	38. The key provided in the option diagrams from page 38 onwards is illegible, suggest a single page per option so the reader can interpret the key and the map. 39. Font consistency for each of the option descriptions (minor) 40. A do minimum options or base case description should be provided for each route e.g. currently no pedestrian provision is provided and cyclists travel on road with heavy vehicles and large traffic volumes, with no dedicated infrastructure or cycle lane markings……. 41. Investor will want to see how the recommended programme aligns with parallel business cases (route 3 and 4)
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.8 Chapter 9 – Option Assessment

2.8.1 Lack of a comparison to base case option – High

- As above, no assessment of a base case or do-minimum option has been provided as a comparator. It is therefore difficult to determine what the existing treatment/route is for each of these corridors and how the options will improve the current provision.
- Need to explain how negative MCA scores (as preferred option) will be mitigated or addressed (see recommendation below as a suggested approach).

Recommendations	42. An assessment of a do minimum option or base case should be provided for each route. This will also offset some of the negative option scores by demonstrating an improvement from the base case. 43. Does the MCA have to be quantitative? Could use a different scale to demonstrate majority of criteria are based on qualitative assessments e.g.
Beca Response	
Client Response	
Action Taken	
Action Completed	

✓✓✓	Substantial positive effect
✓✓	Moderately positive effect
✓	Minor positive effect
-	Neutral
x	Minor adverse effect
xx	Moderate adverse effect
xxx	Substantial adverse effect

2.9 Chapter 10 – Preferred Network

2.9.1 Treatment types - Major

- It is unclear how the different treatment types have been chosen for assessment within Table 31, and what supporting information (i.e. costs, benefits, risks) or stakeholder engagement has been utilised to arrive at the preferred options

Recommendations	44. Suggest inclusion of further clarification about how the different treatment types were decided upon for each section, and include a statement about any consultation or agreement that was reached to support the preferred treatment type for each option 45. Suggest the header row is repeated at the top of each page for Table 31
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10 Chapter 11 – Economic Case

Note this review has considered assumptions and calculations made for the development of the economic evaluation. This evaluation used a vehicle trip model used in the Wakatipu Basin Future Public Transport Demand/ Capacity Analysis, review of that vehicle trip model is outside of scope. This evaluation of the economic case has only considered how construction and maintenance costs have been applied.

2.10.1 Methodology – Major

- Further clarification would be beneficial regarding the approach used regarding the methodology for the economic evaluation

Recommendations	46. Suggest bullet points are reworded in section 11.1 (page 105) as these bullet points are unclear, and do not appear to reference how the number of cycle trips was arrived at from the trip model 47. Table 32 includes a number of assumptions that should be justified further as they appear aspirational based on strategic intent rather than tested and considered – in particular the assumptions around the new cyclist users 48. It is unclear how the number of pedestrians has been calculated and how these are factored into the estimate 49. Consider providing a separate Economic Evaluation memo as an appendix to enable more detail to be provided regarding the approach
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.2 Model verification – Moderate

- Table 33 includes a comparison between the existing counts and modelled counts including interventions, however no comparison is made between the existing counts and the modelled outcomes without interventions to verify the robustness of the model.

Recommendations	50. Include commentary regarding how the existing model has been verified against existing counts
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.3 Cyclist Growth Rate beyond 2046 – Minor

- Between trip model years of 2028 and 2046 cyclist volume growth is linear but greater than trip growth as mode share increases.
- Beyond 2046, growth in cyclist volumes declines by 20% of the rate between 2028 to 2046 until cyclist volumes become steady. This levelling off of cyclist growth assumes a slight decline in mode share.
- If a decline in mode share is expected, then the above assumptions are fair, if not there will be a slight decrease in benefits (noting that the net present value of years 2047 to 2058 would have a small value).

Recommendations	51. Consider increasing cyclist volumes at the same rate as trip volumes increase to maintain mode share.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.4 Cycle demand estimate – Major

- Cyclist demand has been estimated at a proportion of trips for individual routes for model years. These proportions vary between 0.5% and 5% in 2016; and increase by 50% for 2028 and 100% for 2046.
    - Within Table 32, 1% is the lowest modal split used whereas within the calculations 0.5% is used for route 10.
- Only two routes appear to use the EEM prescribed baseline 3.6% Queenstown Lakes District Council mode share. There are limitations on the EEM prescribed baseline which a single mode share value to a diverse territorial local authority (TLA).
- The pure use of mode share for all trips within a number of zones does not reflect the EEM prescribed method for estimating cyclist volumes (new and existing) based on population density with proximity to the route.

Recommendations	52. For 2016 mode share values, calculate mode share on an area unit basis to apply to the routes rather than using the default TLA value or estimating. 53. Use current and projected future year density to estimate cycle trips for new and existing users.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.5 Cycle demand mode share growth without new project/programmes – Major

- Most routes are planned for construction before or shortly after 2028. Increasing mode share beyond 2028 is either: attempting to be overly optimistic, or claiming benefits of other post 2028 programmes not included in the construction cost to encourage an increase in cycling beyond population/trip growth.

Recommendations	54. Reconsider the change in mode share between 2028 and 2046.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.6 Cycle route lengths – Moderate

- EEM assumes the average cycle trip as 3 km based on 1997/98 New Zealand Travel Survey, and caps benefits. This value is a short period of time given typical cyclist speeds (particularly for commuter routes).

- Most routes proposed are significantly longer than 3 km, appearing to be approximately 6 km or longer. Only a few routes have considered benefits beyond their 3 km length.
- Route 6 (Fernhill to Queenstown) has been considered as 3 km in length for benefits, but is reported to be only 1.75 km.

Recommendations	55. Consider reviewing the 2015-2018 New Zealand Household Travel Survey to examine if the average trip length has changed and get support from NZTA for an updated value or include as a sensitivity test. 56. Review route lengths for distances claimed.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.7 Benefits of routes split over multiple construction years – Moderate

- Some routes are not completed in a single stage. These routes have had their benefits streams proportioned.
- Assumptions around the benefit proportions are not clearly linked to cost years.
- Route 3 benefits are proportioned over stage 1 (10%) and stage 2 (90%), but only has construction cost elements in year 2.

Recommendations	57. Provide assumptions regarding how routes split over multiple years of construction were proportioned for benefits. 58. Provide context why route 3 includes 10% of annual benefit prior to construction.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.8 New cyclist health benefits – Major

- New users have been identified as 20% of non-commuter cyclists and 50% of commuter cyclists and have been assigned health benefits.
- In Queenstown where a large portion of the population is a tourist visitor, the non-commuter cyclists will include a large number of tourists, which will not provide long term health benefits.
- Additionally given the large proportion of temporary migrant workers assumed to be in Queenstown, considering the full number to be eligible for long term health benefits could overstate the benefits.

Recommendations	59. Factor non-commuter new cyclists to exclude non-New Zealand residents. 60. Consider factoring the commuter new cyclists to exclude non-New Zealand residents.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.9 Wider economic benefits for tourism – Minor

- Construction of high quality pathways throughout the Wakatipu Basin would provide additional tourism opportunity (i.e. bike hire, extended length of stay, increased attraction to the area). This is a wider economic benefit not considered in the analysis.

Recommendations	61. Acknowledge un-valued benefit to tourism through having pathways available and or attempt to assign a benefit.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.10 Road traffic reduction rates – Major

- Road traffic reduction in the economic calculations has been calculated as cyclist kilometres travelled multiplied by 25%, $0.34, and 250 days.
    - 25% is the assumed vehicle trips reduced.
    - $0.34 is the new public transport reduction benefit per vehicle kilometre for “other” region on major urban corridors.
    - 250 is the number of “work days” per year adjusted for public holidays.
- The EEM provides a road traffic reduction of $0.10 per cyclist kilometre travelled, the value used is effectively $0.085 per cyclist kilometre.

Recommendations	62. Use EEM figure of $0.10 per cyclist kilometre rather than the adjusted effective $0.085 per cyclist kilometre.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.11 No walking benefits – Minor

- The benefit calculations have considered cycling benefits for paths.

Recommendations	63. Consider where routes have been reduced in length or safety improvements make the pathway desirable to allow consideration of walking benefits.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.12 Other benefits – Minor

- No consideration has been given to travel time, vehicle operating costs, or vehicle emissions outside of the limited traffic reduction calculation.
- Given that on some routes cyclists are proposed to account for 15% of all trips, consideration of large scale impacts to congestion should be included.
- If a traffic model existing outside of the trip assignment model, the effectiveness of the modelled mode shift considerations could be considered as an option to provide travel time, vehicle operating costs, and emissions reductions outside of the limited per kilometre rate.

Recommendations	64. If there is an available traffic model, (rather than a trip model), consideration should be given to modelling the estimated mode shift as an option do replace the travel time, vehicle operating costs, and emissions benefits. 65. Table 34 appears to imply that there are no benefits accrued for traffic reduction – consider the inclusion of an additional paragraph outlining how these benefits are taken into account (this should then link to table 36 which refers to 'road traffic reduction' which is otherwise not linked to)
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.13 Results alignment - Moderate

- The results alignment provided should be more clearly linked to evidence

Recommendations	66. Table 37 – column 4, row 1, second sentence; suggest this is re-phrased as in evidence section it is noted that a large number of non-injury crashes are not reported so contradictory statement. 67. Table 37 – column 4, row 6; suggest further information is provided to support this statement – i.e. for routes that are on-road or run adjacent to the road are these subject to the same resilience issues as the road, and what mode the proposed routes are providing an alternate option for
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.14 Cost estimate – Major

- The cost estimate contains a number of items that could be further addressed in order to provide additional confidence in the resulting BCR outputs

Recommendations	68. There are a number of inconsistencies in the figures within the report and with the cost estimate appendix that should be reviewed and rationalised 69. A contingency of over 30% and/or a greater sensitivity upper bound range should be considered given there is no inclusion of property costs, no survey or existing services information, no geotechnical or pavement design information, no 3D design information, no structural design information (including potential retrofitting requirements to existing structures), and no attempt to consider cost escalation 70. There is discussion of a further contingency to be held by QLDC for scope change (refer to the separate Estimate Report) – it is suggested this is included within the main contingency value to provide a full programme cost estimate 71. Maintenance costs of the on-road paths should be factored into the total whole of life costs for the programme – assuming these will be covered by existing maintenance budgets appears unrealistic 72. Queenstown Town Centre Streetscape costs are based on the same ratios as the remainder of the works, however are very different types of project and bespoke cost assessments should be considered 73. Queenstown Town Centre Streetscape works do not appear to include maintenance costs or contingency 74. It is unclear what the do-minimum maintenance costs cover 75. It is unclear how traffic management costs are included within the P+G amounts, as these will not be evenly distributed over on-road and off-road sites 76. There are no typical rates provided for key items in the schedule, and there is no typical pavement section provided as guidance for the unsealed paths in particular (noting a '100 mm gravel surfacing' treatment is specified on routes A8, E1, and F1 which requires further consideration or description)
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.10.15 Sensitivity analysis – Moderate

- The sensitivity analysis appears optimistic in certain areas that have a significant impact on the BCR, and consideration should be given to assessing the potential of a more negative outcome

Recommendations	77. As discussed above consider increasing the upper bound value for the costs 78. The lower bound for the percentage of new commuters still appears high, particularly considering the potential impacts of seasonal variance on commuter numbers (note this isn't discussed in the report) – it is suggested that the lower bound is reduced
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.11 Chapter 12 – Financial Case

2.11.1 Route clarity – Moderate

- The numbering of the routes changes in chapter 12 which causes confusion when trying to refer back to previous discussions

Recommendations	79. In Figure 48 and Table 39 the numbering of the routes does not match earlier sections – a consistent approach should be adopted throughout the report or further clarity provided as to how the different numbering systems link (note table 40 reverts back to the previous numbering system) 80. Table 39 suggest an additional column is added to show expected timeframes for implementation
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.11.2 Cost consistency - Moderate

- There appear to be inconsistencies in the cost figures used between the text in 12.1.3, table 39, and table 40
- In section 12.1.4 it is unclear what the ongoing maintenance costs refer to (i.e. annual, or total cost over 40 years)
- Note section 13.2 refers to a 'scale of the network' of $126m, which is inconsistent with section 12.

Recommendations	81. Review the figures stated in the report and provide further clarity where required to explain the differences in figures 82. Provide clarity on the maintenance costs in section 12.1.4
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.11.3 Property costs – Major

- Section 12.1.5 notes the large cost uncertainty relating to the property costs. In conjunction with the BCR sensitivity to the cost estimate it is recommended that further effort is put into understanding the likely scale of property costs for the programme (noting this may also impact on the implementation for individual projects).

Recommendations	83. Undertake further assessment into the likely property costs for the programme
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.11.4 Funding options - Moderate

- Section 12.4 does not refer to TEFAR funding, and the proposed programmes / projects eligibility for this funding from NZTA. (It is noted there is text in table 41 relating to potential FAR rates).

Recommendations	84. Provide comment on the potential eligibility for TEFAR funding within the report 85. Note Table 41, route A4 has an inconsistency whereby 100% of the funding is shown from QLDC but the text refers to 100% of the funding to come from NZTA 86. Review the funding split text in table 41 – in certain situations an increase in LoS adjacent to a state highway results in 100% funding from NZTA while in others the same justification results in 100% funding from QLDC; and in some cases providing an alternate route to local roads or improved usage for recreational cyclists is shown to be jointly funded by NZTA and QLDC which should be further clarified
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.12 Chapter 13 – Commercial Case

2.12.1 Procurement options – Minor

- Consideration of different forms of procurement appears inconsistent and this section should be reviewed for inconsistencies

Recommendations	87. While ECI is mentioned in the introduction it is not considered further 88. Suggest consideration is given to procuring on-road, off-road, and town centre works differently owing to the different types of work involved for each 89. Suggest consideration of utilising the maintenance contractor to undertake smaller and less complex works more efficiently 90. It is noted that Figure 49 does not discuss supplier panels that are covered in table 42 91. The wording in section 13.3 regarding the design risk apportionment in a design and build model should be reviewed and clarified 92. Section 13.3, last bullet point – it is noted that engaging contractors early to inform the design process (without a full ECI approach) can have challenges as it could be construed as giving certain contractors the advantage for future tenders 93. Section 13.3.1 and 13.4 – this text refers to the supplier panel, however the first paragraph in section 13.3 viewed supplier panels as insufficient – suggest this wording is clarified. 94. Section 13.3.1 – it is recommended that the second paragraph wording is revised to provide more clarity on what the assessment KPI's referred to would cover, and how this would 'ensure future work packages are dependent on capacity and performance' 95. Section 13.4 – suggest clarity is provided regarding where the property/land purchase risk sits (noting text is included about how the risk can be mitigated), and how the funding risk can be mitigated (rather than how this risk can be communicated) 96. Section 13.5 – further clarification is needed under this heading, noting alternate forms of payment as well as pros and cons for each 97. Review the wording throughout the section regarding the appointment of the Project Manager and Property Consultants (i.e. section 13.3.1 and table 43 compared with section 13.6) 98. Section 13.7 – consideration should be made regarding combining the detailed design and potentially consenting for both stages 1 and 2 in order to achieve efficiencies and consistency in these tasks 99. Section 13.8 – it is unclear how a lease arrangement would work for property requirements and suggest further text is provided to explain this
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.13 Chapter 14 – Management Case

2.13.1 General – Minor

- Revision based on the points raised should be considered to improve the management case

Recommendations	100. No governance structure is provided, it is unclear which organisation will do what as part of the next steps and how this will be coordinated by the partners 101. Section 14.4 should be expanded to outline who will undertake this work, who will manage the register and how, and at what level this will be undertaken (i.e. project by project, or for the programme overall), etc… 102. Section 14.5 refers to the Safe Roads Enterprise Risk Framework which appears out of place without further clarification 103. Table 47 does not include the cost key risk associated with the property / land acquisition task 104. Table 47 does not include a risk that the assumptions used in the BCR are incorrect and that the programme does not deliver on the expected outcomes 105. In Table 47 the mitigation for the Procurement risk should consider more proactive actions such as market sounding activities 106. Table 48 does not contain any dates that the outcomes will be achieved by
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.13.2 Safety in Design – Moderate

- The following design issues should be addressed in the safety in design register

Recommendations	107. The potential for the use of motorised micro-mobility devices on the paths should be considered (e.g. e-bikes, e-scooters) 108. In 2046; there is predicted 6,000 daily cyclist trips between Frankton and Queenstown, this is approximately 600 cyclist/hour over a 10 hour day, or 10 cyclists per minute. On a 3 m wide shared path, cyclist congestion could start to play a factor in travel time and crashes. The design of the paths should be reviewed against predicted future use.
Beca Response	
Client Response	
Action Taken	
Action Completed	

2.13.3 Recommendations / conclusions – Moderate

- No final chapter or concluding statement is provided in the report.

Recommendations	109. Suggest a recommendation and next steps section is added to articulate what decision is sought e.g. just funding for first tranche of works? Next step is to proceed to detailed design/pre-implementation?
Beca Response	
Client Response	
Action Taken	
Action Completed	

3. Conclusion

As outlined in the Introduction, GHD have reviewed the WATN SSBC in line with the agreed scope of works with QLDC.

GHD is happy to provide further commentary as required in order to assist in the closing out of the above comments and the WATN, and is happy to meet with either QLDC or Beca as required.

3.1 Scope and limitations

This report: has been prepared by GHD for Queenstown Lakes District Council and *may only be used and relied on by Queenstown Lakes District Council for the purpose agreed between GHD and the Queenstown Lakes District Council as set out in Section 1 of this report.*

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The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

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