Before the Expert Panel appointed under the Fast-track Approvals Act 2024

Under	the Fast-track Approvals Act 2024
And	
In the Matter of	an application for approvals by NZSki Limited to upgrade existing infrastructure at the Remarkables Ski Area, including a new passenger transport lift, carparking areas, and expanding the ski field into the adjacent Doolans Basin

Statement of Evidence of **Michael Christopher Rossiter** on behalf of NZSki Limited in response to Section 53 Comments

Transport

Dated: 3 November 2026

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INTRODUCTION

1. My full name is Michael Christopher Rossiter.

2. I am a Principal Transportation Engineer at Stantec New Zealand Limited (Stantec). I have held this position since 2013 and have been employed at Stantec (and TDG prior to its incorporation with Stantec) since 2006. Prior to joining TDG (now part of Stantec), I was employed as a Principal Systems Engineer and Technical Manager with BAE Systems in England.

3. I hold the academic qualifications of Bachelor of Science from the University of Exeter and Bachelor of Arts (Open) from the Open University, England.

4. I am registered as a Chartered Professional Engineer with Engineering New Zealand. I have over 40 years' engineering experience including 20 years' transportation engineering in New Zealand on a wide range of projects involving transportation engineering design, road safety audits, transportation planning and assessment.

5. My role includes preparing transportation assessment reports for resource consent applications and also providing transportation engineering services for many councils.[1] I have prepared expert transport evidence on behalf of councils and also for private developers in relation to a variety of land-use resource consent hearings, plan changes and also for applications under the Fast Track Approvals Act 2024 (**FTA**).

6. This statement is given as part of NZSki Limited's (**NZSki**) response to comments on the Remarkables Ski Area Upgrade and Doolans Expansion (**Project**) made under Section 53 of the FTA. Before providing comment on changes being sought to the proposed transport conditions, I have first provided comments on the following topics raised by each submitter:

    (a) New Zealand Transport Agency:

        (i) Queenstown Strategic Network Plan;

        (ii) effects on the State Highway;

        (iii) mode Shift;

        (iv) Temporary Traffic Management; and

[1] Hastings, Central Hawke's Bay, Gisborne, Palmerston North, Whanganui, Carterton, Upper Hutt, Tasman, Nelson, Buller, Waimakariri, Christchurch, Ashburton, Timaru, Clutha, Queenstown Lakes, Invercargill.

(v) SH6 / Remarkables Ski Area Access Road.

(b) Queenstown Lakes District Council (Appendices 1, 4 and 6):

(i) Te Tapuae Southern Corridor Structure Plan;

(ii) traffic generation and mode share;

(iii) intersection performance;

(iv) Ably Transport Assessment;

(v) wide area effects;

(vi) Temporary Traffic Management;

(vii) queuing;

(viii) infrastructure;

(ix) public transport; and

(x) funding.

(c) Kā Rūnaka:

(i) road safety;

(ii) congestion effects; and

(iii) traffic volumes.

7. My original findings are provided in full in the following:

(a) Remarkables Ski Area Expansion: Integrated Transport Assessment (**ITA**); and

(b) Remarkables Expansion Project: Transport Addendum.

8. I have also read the statements prepared by Ross Lawrence and Louise McQuillan for NZSki.

9. Although this is not an Environment Court proceeding, I confirm that I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023 (Part 9). This evidence has been prepared in accordance with the Practice Note, and I agree to comply with it when giving oral evidence.

NEW ZEALAND TRANSPORT AGENCY

Queenstown Strategic Network Plan

10. At the time that the ITA and Transport Addendum were prepared, there was some uncertainty about the long term configuration of the State Highway 6 (**SH6**) Southern Corridor and how this would be managed to address the recent and forecast growth in traffic volumes. The ITA and Transport Addendum relied on the Te Tapuae Southern Corridor Structure Plan (**TTSCSP**) and its proposed action plan, which QLDC adopted in September 2025. NZTA issued its Queenstown Strategic Network Plan (**QSNP**) in October 2026, and my response to comments takes this into account.

11. The focus of the QSNP for the Southern Corridor is stated as:

> *The focus is on targeted intersection and access improvements, northbound bus priority, service uplift and staged corridor management, while retaining longer-term options such as additional crossing capacity or offline public transport if growth and demand exceed what incremental measures can manage.*

12. The strategy anticipates incremental increases in capacity and also the introduction of higher frequency public transport services in conjunction with a northbound bus priority lane. The strategy identifies four-laning the highway as one option to increase capacity south of the Kawarau River. The strategy also anticipates rationalisation of accesses to SH6, with turning movements being consolidated at major intersections.

13. Although the QSNP does not set out the anticipated configuration of the highway, it does anticipate capacity upgrades on the Southern Corridor including potential four-laning and bus lanes where this can be justified. Based on the recent and anticipated growth on SH6 north of the Coneburn roundabout, I anticipate that there will be a need for SH6 to be widened to four lanes.

14. Although the TTSCSP included a specific commitment to upgrade the SH6 / Remarkables Ski Area Access Road intersection to a roundabout with funding and responsibility for implementation assigned to QLDC and NZTA,[2] the QSNP does not include any specific reference to the Remarkables Ski Area Access Road. In my opinion, it is still unclear what the long term configuration of SH6 will be, particularly in light of the proposed rationalisation of access, and therefore what improvements will be required at the intersection or how this would be funded.

[2] Short term action item 7 – within 3 years.

15. Since the Remarkables Ski Area Access Road is an existing private road rather than a public road, it is also unclear how the Remarkables Ski Area Access Road would be treated under any plan to rationalise access to the highway given that there are multiple accesses along the section of highway north of Coneburn. The QSNP defers any decision to an investment case but does not identify any timing for this. In the absence of that work being completed, I consider that there is uncertainty over the long term access arrangements and whether direct access to the highway would be retained as part of any rationalisation. I have inferred from the NZTA and QLDC comments that direct access to the highway is anticipated, but those comments make no reference to potential effects on the nearby private accessways.

Effects on the State Highway

16. Figure 1 and Figure 2 show the recent and forecast[3] daily traffic volumes on SH6 during the summer and winter north of the Remarkables Ski Area Access Road. During the winter, vehicle movements associated with the Remarkables Ski Area currently account for about 10% of all movements on the highway. This proportion will fall in the future if the recent rate of residential development continues.

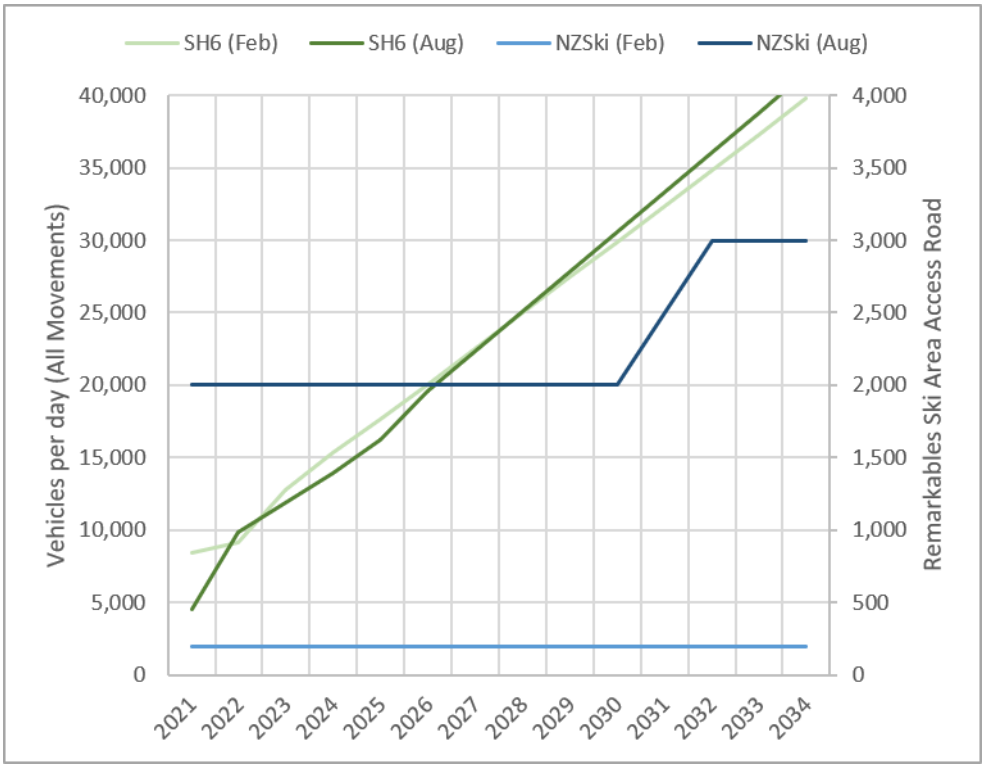


Figure 1: SH6 Traffic Volume Growth Pattern

[3] Future forecast is based on 300 new dwellings being constructed per annum. This is below the TTSCSP recent reported rate of 350 building consents per annum.

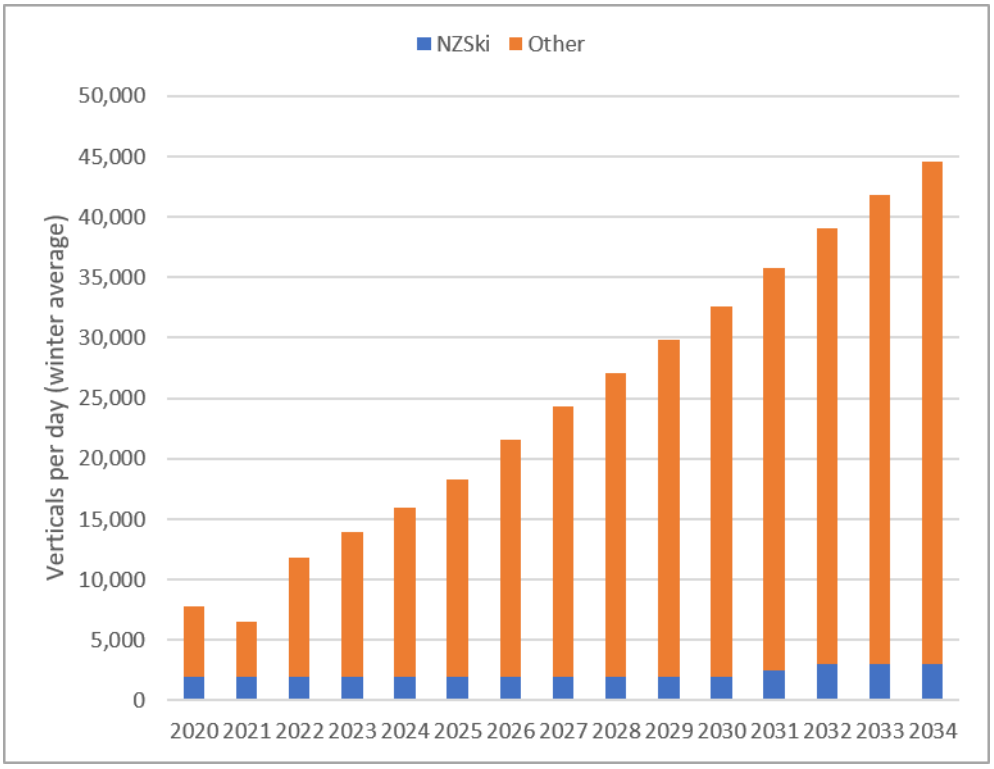


Figure 2: SH6 Traffic Volume Growth Pattern (winter season)

17. As reported in the ITA, the SH6 / Remarkables Ski Area Access Road intersection is operating at or above capacity during the winter, not due to any change in activity at the Remarkables Ski Area in recent years but due to the growth in traffic volumes on SH6. This is acknowledged in the NZTA comments[4] which identifies a need for improvements regardless of any future expansion.

18. I agree with NZTA that improvements to the SH6 / Remarkables Ski Area Access Road intersection are necessary. However, I consider that the form, timing and funding should reflect the fact that the need for improvements is being driven primarily by the growth in highway volumes rather than proposed expansion of the Remarkables Ski Area.

19. I was not involved in the development of the TTSCSP but understand that the intersection improvements proposed in the TTSCSP Short Term Action Plan were a reflection of the fact that an increase in intersection capacity was required because of the growth in highway volumes and was not due to any change in the Remarkables Ski Area activity.

[4] Paragraph 4.5, NZTA Memorandum, October 2026.

Mode Shift

20. Table 4-4 of the ITA documents the number of visitors travelling to the Remarkables Ski Area in 2025 by charter bus or the NZSki bus from Queenstown and Frankton. It indicates that 25% to 30% of all visitors used a bus. I understand from NZSki that the existing bus services operate with very high occupancy levels of 85% to 100%. In my opinion, this suggests that there is a latent, unmet demand for buses and that the mode share would be higher if NZSki was able to operate more buses.

21. As part of the Project, NZSki have adopted a goal to increase the mode share for visitors travelling to the Remarkables Ski Area to 50%[5] because it is not practical to expand the capacity of the upper car parking areas. Achieving that goal will involve NZSki or other providers operating more buses from Queenstown, potentially establishing new service routes, restricting parking supply and implementing controls on parking in the upper car parks such as minimum vehicle occupancy rates.

22. For clarity, I can confirm that the 50% mode share target is for travel to the Remarkables Ski Area from around the wider Queenstown area and does not include NZSki car park shuttles operating on the Remarkables Ski Area Access Road.

23. I agree with NZTA that the existing free parking at the Ski Area does not create a financial incentive to use buses. However, based on the reported occupancy levels of the NZSki buses, there is a latent demand for bus travel which is not being met which results in customers choosing to self-drive. I consider that this represents an operational matter for NZSki to address as part of its overall parking management strategy, which will form part of the overall travel demand management plan. I anticipate that a parking management strategy would include features such as:

    (a) Car park capacity control;

    (b) Vehicle occupancy controls; and

    (c) Car park shuttle operations

24. The implementation of the parking management strategy will operate in conjunction with the NZSki bus services. It will involve monitoring of car park occupancy levels and bus usage to refine the controls to influence visitor travel behaviour with the ultimate goal of meeting the target mode share.

[5] B.24A Remarkables Ski Expansion Integrated Transport Assessment, 15 May 2026, page 45.

Temporary Traffic Management

25. NZTA opposes the use of Temporary Traffic Management (**TTM**) as a means of providing operational capacity. I was not involved in establishing the current TTM arrangements, which require vehicles departing from the Remarkables Ski Area to turn left and then U-turn at the Coneburn roundabout before travelling north towards Frankton. Based on the analysis I completed for the ITA, this arrangement is now operating at capacity on busier days of the ski season due to increasing traffic volumes on the highway, and an alternative traffic management plan is required regardless of whether or not the Project is approved.

26. Since the Remarkables Ski Area operates for only four months of the year, the majority of its effects are temporary in nature. Although the operating period is longer than other major events in the District, the operating period is still comparable to or shorter than typical road improvement projects. Within the ITA, the option of implementing signal control at the highway intersection was investigated as a potential improvement to the existing TTM. That analysis demonstrated that a signal control could provide an appropriate level of service during the ski season and largely eliminate any effects on the Coneburn roundabout. Outside of the ski season, the signals could be either removed if this was a temporary installation or potentially turned off if this was a permanent installation.

27. Since visitor numbers at the Remarkables Ski Area are not expected to increase before the expanded ski area is operational, it will be several years before an increase to intersection capacity is required due to the changes in the Remarkables Ski Area activity. However, in the interim period, I consider that there is still a need for alterations to the existing traffic management. Since the development of a long term design solution will involve NZTA as the Road Controlling Authority, confirmation from NZTA that direct access to SH6 will be supported, multiple landowners and land purchase, I consider that it is unrealistic for a long term solution to be agreed and implemented prior to the 2027 ski season. On that basis, I consider that there is still a need for a Traffic Management Plan to address the seasonal effects of the Remarkables Ski Area on SH6 prior to implementation of the preferred long term solution, which I consider should be in place prior to opening of the expanded ski area.

28. Overall, I consider that a Ski Season SH6 Traffic Management Plan is required to manage the effects of the Remarkables Ski Area in both the interim period and potentially also in the longterm depending upon the form of any access improvements because of the seasonal change in traffic volumes.

29. If signals form the basis of a long term solution outside this FTA process, then since the Remarkables Ski Area only operates for part of the year, any signal controls will

need to account for their seasonal nature, which may require different, temporary operating behaviour during the ski season regardless of whether or not NZTA considers that Remarkables Ski Area activity meets their definition of a temporary activity.

SH6 / Remarkables Ski Area Access Road intersection

30. The ITA includes an analysis of a signalised control largely based on the existing two lane highway but with the addition of a right turn bay to demonstrate the viability of this as an intersection control option during the ski season. The installation of a signal control will introduce delays to through movements but will enable side road movements to occur safely. A key benefit of signal control is that it will enable right turn movements from the Remarkables Ski Area Access Road, reducing pressure on the Coneburn roundabout. However, I note that the already high and increasing volumes on the highway means that this does not represent an appropriate long term configuration for the intersection because it does not provide the increased capacity for through movement on SH6 which is being driven by development along the Southern Corridor. In my opinion, addressing the through movement capacity is not a matter for NZSki to resolve.

31. Appendix A to my evidence includes a drawing showing a concept design for a signalised intersection that would be consistent with my understanding of the expectations of the QSNP in terms of long term capacity requirements and would provide a good level of service. The concept design does not include any specific provision for a bus lane, as that is a matter for NZTA to address, not NZSki. The design would allow for implementation of a High Occupancy Vehicle (**HOV**) lane which provides another option for travel demand management on the highway. Again, I consider that this is a matter for NZTA to address rather than NZSki. Appendix B includes a SIDRA model output for a scenario based on about 10 years' growth in highway volumes plus the proposed expansion of the Remarkables Ski Area.

32. I note that the operation of the intersection is sensitive to the length of the full two lane approaches and two-lane departures because this influences driver behaviour at merge and diverge locations, which affects lane usage. Ultimately, the full benefits of any intersection capacity improvements will only be achieved if and when capacity constraints along the whole Southern Corridor are eliminated. This is a matter for NZTA to address, not NZSki. Until that occurs, the operation of the intersection will be influenced by the capacity constraints at the nearest major intersection to the north (Peninsula Road[6]) and the Coneburn intersection to the south as well as any two-lane sections of highway.

[6] prior to a second crossing of the Kawarau River being available.

33. I disagree with the NZTA position that the long term intersection improvements should be fully funded by NZSki. The annual growth in highway volumes is currently being driven by development that is outside of NZSki control and not generated by NZSki activity. While I agree that the expansion of the Ski Area should require intersection improvements as this will contribute to generating more vehicle movements on the network, in my opinion, the provision of long term capacity for through movement is not the responsibility of NZSki but should be funded via a cost share agreement with NZTA and QLDC. I also note that TTSCSP, adopted by QLDC in September 2025, states that QLDC and NZTA are responsible for improvements to the SH6 / Remarkables Ski Area Access Road intersection and that improvements would be undertaken within three years, that is, before 2028.

34. Appendix C includes a concept design drawing for safety improvements that could be undertaken in advance of the long-term solution being implemented. These involve widening of the SH6 carriageway to enable a right turn bay to be marked and formalisation of the left-turn out only arrangement that currently operates during the ski season only.

QUEENSTOWN LAKES DISTRICT COUNCIL – TRANSPORT (ABLEY)

Te Tapuae Southern Corridor Structure Plan

35. I agree that the TTSCSP was developed to manage development along the Southern Corridor prior to notification of the Remarkables Expansion Project. However, the TTSCSP is explicit in its recommendations for actions in the short term which include:

> *Construction of new roundabouts on the SH6 to serve the new Homestead Bay East development and convert of the SH6/Jack Hanley Drive and the SH6/Remarkables Access Road intersection into a roundabout.*

36. In my opinion, the action plan is also explicit in the responsibility for implementation of the improvements. On that basis, I consider that it was appropriate for the ITA to be reliant on network capacity improvements being made over time by QLDC and NZTA.

Traffic Generation and Mode Share

37. The forecast traffic generation included within the ITA is based on the NZSki travel mode share targets being achieved. As a target, I agree that there is no certainty on whether this target can be met. However, since there are constraints on how much vehicle parking can be provided within the Remarkables Ski Area, it is the total car

park capacity that will ultimately influence the volume of vehicle movements being generated.

38. NZSki do not have scope to expand the upper parking areas, and ultimately their capacity will reduce under the Project. This will require an expansion to the lower car parks. Car Park B and Boneyard Car Park are proposed to increase the capacity of the lower car parks.

39. In practice, I understand that the lower car park capacity will only be increased in stages and only as necessary to balance customer demand while maintaining capacity constraints to influence travel mode choice. This will form part of the NZSki Travel Demand Management Plan proposed under conditions TRANS.3. The Travel Demand Management Plan will set out controls and factors to influence travel mode choice and reduce private vehicle travel demands.

Intersection Performance

40. The ITA and Transport Addendum did not include any analysis of intersection performance for Stage 1 or Stage 2 because there was no certainty on the future configuration of the highway or preferred intersection configuration. Even now, the QSNP is vague on the future form of the corridor, timing of capacity improvements or how private accesses will be rationalised. As noted in the Abley report,[7] the Southern Corridor is over saturated at peak times and the levels of congestion means that any modelling based on the current highway configuration would provide little value.

41. Appendix B includes a SIDRA model output for a future year evening peak scenario with about 10 years' growth in state highway volumes and completed expansion of the Remarkables Ski Area. The analysis is based on SH6 being four laned north of the Coneburn intersection. As I have stated earlier though, the actual performance will be influenced by what capacity constraints exist on the highway.

Abley Transport Assessment

42. Abley has completed an analysis of travel times along the Southern Corridor using TomTom data. I do not dispute their analysis or the fact that there are long delays at various intersections and particularly at the Coneburn roundabout. I agree with their assessment that the highway volumes appear to have passed a 'tipping point' with travel demands now exceeding the capacity of intersections. This is not due to any change in NZSki activity and is entirely due to development growth along the Southern Corridor.

[7] Paragraph 49, Remarkables Ski Area Expansion FTAA S53 Transport Review, Abley.

43. This is directly relevant to the Remarkables Ski Area because of the existing TTM. This was introduced to improve safety and avoid the need for right turns across the highway when high volumes of traffic were present. However, this is now adversely affecting the Coneburn roundabout because of the increased development at both Coneburn and Park Ridge as well as further south.

44. While the economic assessment of the costs associated with queuing is outside my area of expertise, I do have the following observations:

    (a) The inclusion of Stage 1 and Stage 2 scenarios for 2026 in the Abley report is unrealistic as any increase in visitor numbers will not occur until 2030 at the earliest.

    (b) The calculation of delays is based on the existing TTM arrangements and I note that NZTA has indicated that they do not support continued use of this arrangement.

Wider Area Network Effects

45. Both the TTSCSP and QSNP identify existing and increasing capacity constraints along the Southern Corridor because of the ongoing development at Jacks Point, Homestead Bay, Hanleys Farm, Park Ridge and Coneburn. Together, these will trigger a need for significant upgrades to the state highway to provide additional capacity and also to support travel mode shift.

46. I agree with the Abley report that the primary effects of the Remarkables Ski Area traffic will be on SH6 between Coneburn and Frankton with any effects dispersing beyond that area. Within that area though, the pattern of vehicle movements generated by the Remarkables Ski Area will generally be in the opposite direction to commuter flows on the Southern Corridor at peak times because of its location outside the main employment centres. For example, on Kawarau Road the Remarkables Ski Area will generate southbound traffic in the morning with commuter traffic being northbound with this pattern reversing in the late afternoon.

Temporary Traffic Management

47. QLDC opposes the use of the existing TMP largely based on the advice of NZTA that Remarkables Ski Area activity does not meet the definition of a “temporary event”. In my opinion, this is a technicality over the naming of the Traffic Management Plan but does not alter what the plan needs to achieve. TMPs are approved for re-occurring events such as the Queenstown Marathon or Warbirds over Wanaka although I acknowledge that these are shorter duration. However,

TMPs are also required for any works on the highway which can vary in duration from days to years.

48. Regardless of the name, I consider that a traffic management plan is required to address the seasonal effects of the ski season until a permanent access solution has been implemented and potentially even after that depending upon the form of the solution. That is proposed here. However, I note that even with a permanent intersection solution, the operation is likely to operate in a different manner during the ski season compared with the rest of the year. Since a 'Ski season SH6 Traffic Management Plan' will be required in advance of the permanent solution, this will need approval from NZTA as the Road Controlling Authority.

Queuing

49. Abley has raised some concerns about the potential for queuing to occur back onto the highway during the peak arrival period or for queuing back from the highway to affect the operation of buses and shuttles. While the operational management of the car parks is a matter for NZ Ski, I note that the separation from the highway to the primary entry to the existing lower car is over 200 m and will be over 500 m to Car Park B or Boneyard Car Park. I consider that this will provide sufficient space for NZSki to manage arrivals to mitigate the risk of queuing back onto the highway. Monitoring arrival queues will need to form part of the Ski Season SH6 Traffic Management Plan.

50. The length of departure queues in the afternoon will be dependent upon the intersection operational controls that in place. As the Remarkables Ski Area Access Road is a private road, managing the movement of buses and shuttles is an operational matter for NZ Ski as it could adversely affect customer experience if this does not operate efficiently.

Infrastructure

51. The NZTA Planning Policy Manual (**PPM**) guidance on the configuration of private property access to a highway is largely focused on rural highways with daily traffic volumes of less than 10,000 vehicles per day (**vpd**). With daily traffic volumes on SH6 already well above this and with future volumes likely to be above 30,000 vpd, the preferred form of intersection that could be inferred from the PPM is a roundabout.

52. One potential concern with constructing a roundabout is that with the highly unbalanced flows that are present in the late afternoon to evening peak period, long queues would form on the side road because side road movement would be opposed by the dominant southbound movement. Since mitigating this effect would

involve metering signals on the northern approach, I consider that signalising the whole intersection would provide a more efficient long term outcome.

53. NZTA, in their paragraph 6.1 of their comments, have indicated that Coneburn roundabout to the south will be replaced by a signalised intersection[8] and I understand from earlier discussions that I have had with NZTA on other projects in relation to the Peninsula Road intersection that it would also be signalised in the future. Implementing signals at the Remarkables Ski Area Access Road as part of the long term solution would be consistent with these controls.

54. I agree with the Abley position that signals represent the most appropriate solution for the SH6 / Remarkables Ski Area Access Road if direct access to the highway is retained under the QSNP access rationalisation assessment and should be preferred to a roundabout.

55. Until a long term access solution is implemented, I consider that minor safety improvements should be implemented. This should include seal widening and marking of a right turn bay on SH6. A concept design for this is included in Appendix C.

QUEENSTOWN LAKES DISTRICT COUNCIL – PROPERTY AND INFRASTRUCTURE

56. Appendix 4 of the QLDC comments from the Property and Infrastructure (**P&I**) team largely raise the same concerns as those raised by Abley on transport matters in Appendix 1 of the QLDC comments. I consider that the key points to note are:

    (a) I agree that a signalised intersection is likely to be the most suitable intersection control for the Remarkables Ski Area Access Road in the long term if direct access to the highway is retained under the QSNP access rationalisation assessment because it would allow for safe departures from the side road which eliminates the need for traffic to be diverted south to the Coneburn roundabout.

    (b) I agree that a permanent access upgrade should be in place prior to any expansion of the ski area that contributes to increased visitor numbers compared with the current time. I understand that this will not be until the 2030 ski season at the earliest even if construction works started immediately. Since the access solution will need to take into account any recommendations on access rationalisation from the QSNP, I consider that the development of the detailed design, approval processes, land

[8] Paragraph 6.1, NZTA Comments.

acquisition and construction could take several years. On that basis, there is a need for a Ski Season SH6 traffic management plan to be established and agreed with NZTA in the interim period. I recommend that any minor works required to support the Ski Season SH6 traffic management plan are implemented as soon as reasonably practical. I am aware that the detailed design, approvals process and implementation may not be possible before the end of the NZTA's 2027 summer sealing season and so implementation is unlikely to be possible before 2028.

(c) I agree that the design of the permanent solution should take into account travel demands generated by other developments along the southern corridor but I disagree with the view that NZSki should fund increased through movement capacity or priority bus lanes at the intersection. It is also not the responsibility of NZSki to fund any alterations to other private accesses that may be required as part of any rationalisation of access points to the highway. These are required to address capacity constraints on the network generated by the QLDC approvals of development at Homestead Bay, Jacks Point, Hanley Farm, Park Ridge and Coneburn.

(d) I do not agree with the suggestion of implementing a cap on vehicle movements. I consider that this is impractical because NZSki cannot control the arrival times of private vehicles. In practice, I consider that there is already an indirect cap generated by the overall parking capacity. The existing NZSki operating procedures also close their road to new arrivals once the car parks are full. On that basis, I consider that a cap on parking supply would achieve the outcomes sought by P&I.

Public Transport

57. The proposed bus transfer hub was designed to allow the public transport service to travel into the hub and return to the highway. During consultation, Otago Regional Council (**ORC**) have raised concerns about potential operational challenges of NZSki buses using the same infrastructure as the public transport service. The concept design for the Remarkables bus transfer hub included a dedicated bus stop for the public transport buses that could operate independently of NZSki bus stops. ORC also indicated a preference for bus stops on the highway to avoid any delays due to turning at the intersection. Since any bus stops on the highway would create a pedestrian crossing demand, this would need to be accommodated at any signalised intersection so that this could occur safely. While this is possible, it would contribute to increased delays and queuing for other road users.

Intersection Funding

58. The QLDC P&I team appear to suggest that NZSki should be responsible for implementing transport upgrades to address its effects on the network, specifically at the SH6 / Remarkables Ski Area Access Road. I disagree with that position because the upgrades required now are not due to any change in activity at the Remarkables Ski Area but are due to traffic growth associated with land developments approved by QLDC.

59. Since the likely configuration of the permanent intersection solution could involve multiple approach lanes, bus lanes and may not include direct access to the highway, it will not be possible to construct this within the existing road corridor without some land acquisition. Since NZSki does not have Compulsory Acquisition rights like NZTA or QLDC, it may not be able to implement any agreed improvements without support from both NZTA and QLDC to acquire the necessary land. In my opinion, implementation of the intersection improvements should be subject to an equitable funding arrangement between NZTA, QLDC and NZ Ski that takes into account the relative volumes of ski related and non-ski related traffic as well as the seasonal nature of the ski season.

KĀ RŪNAKA

Road Safety

60. The ITA acknowledges the safety deficiencies that exist at the SH6 / Remarkables Ski Area Access Road. Despite this, there have been no injury crashes at the intersection. The ITA did not discuss safety improvements in detail because it was anticipated that existing deficiencies would be addressed as part of the longer term plan of upgrades to the highway. The ITA did include a recommendation for a right turn bay as part of short term works until a long term intersection configuration was implemented. Appendix C includes a concept design for safety works for the short term.

Congestion Effects

61. My analysis of the traffic volumes to the north and south the Remarkables Ski Area Access Road indicates that arrivals and departures are more dispersed in time than suggested by Mr Ellison. Figure 4-6 of the ITA shows the indicative arrival and departure patterns based on the count information recorded on SH6 over a one week period in early July 2025 during the school holiday period. The peak period of arrivals was 7:00 AM to 9:00 AM with a peak hourly flow of about 320 vehicles per hour (**vph**). About 50% of all arrivals occurred within a two hour period and 30 to 35% within the busiest hour. The peak period for departures occurs from mid-

afternoon, after 3:30 PM, with a peak hourly flow of about 300 vph on weekdays and over 400 vph at the weekend.

62. Even if the arrival volumes doubled which is not possible in practice because of the car park capacity constraints, hourly traffic volumes would be below the 1,000 vph suggested by Mr Ellison.

63. Regardless of the actual arrival and departure volume, I agree with Mr Ellison that the ski related traffic will contribute to localised congestion effects because the transport network is already operating at or above its capacity.

TRANSPORT CONDITIONS

64. I have reviewed the proposed changes to the transport conditions suggested by NZTA and QLDC and provide comments below. Where appropriate, I have described suggested amendments but have not proposed detailed wording since this is better dealt with the planning experts.

TRANS.1

65. The proposed change to the condition represents a significant simplification of the original condition. I agree with the proposed timing but consider that there may be a need for an information note to qualify “additional parking” because expansion to the lower parkin g areas is required to balance the reduced capacity of the upper parking area. As an alternative, it may be simpler to state “to increase total parking capacity to more than 1,360 spaces” to reflect the existing car parking capacity.

66. From a design perspective, I do not consider that the condition as proposed by QLDC is sufficiently prescriptive. As the QLDC comments largely direct the intersection upgrade to a signal rather than a roundabout, that potentially eliminates the need for any assessment but does not address the intent of the condition. For the condition to be useful, I consider that it will need to reflect the TTSCSP and QSNP in some way. If the intent is to establish a long term design solution, then the condition should set out the design parameters that will need to be met in more detail. As a minimum, I consider that this would include a design year, e.g. 2030 to reflect the Project opening date, but also provide flexibility to address any recommendations from the QSNP access rationalisation investment case.

TRANS 1A, TRANS 1B and TRANS 1C

67. In my opinion, the proposed conditions have too much overlap and do not create a clear outcome. I consider that the three conditions could be simplified to two: one to address traffic monitoring and one for a travel demand management plan. I do not

consider that Condition TRANS 1B as proposed is necessary because it could be combined with the QLDC proposed conditions TRANS 1A.

68. Proposed condition TRAN 1C could provide the basis of a visitor travel monitoring condition. I agree with this being an annual report but consider that this should be focused on factual reporting of information such as:

(a) monitoring of vehicle movements and available mode-share data in the ski season for example total numbers, average per day, 85th percentile, maximum. It may also be useful to consider separate analyses for weekdays and weekends;

(b) analysis of NZ Ski bus usage;

(c) analysis of charter bus usage and other service providers;

(d) analysis of parking demands and car park usage;

(e) analysis of travel mode share; and

(f) analysis of vehicle arrival and departure volumes.

69. The results of the visitor travel monitoring report will be required to inform alterations to the travel[9] demand management plan which would typically occur annually. I consider that the purpose of the travel demand management plan is to set out the operational targets and measures that will be undertaken by NZ Ski and could include:

(a) travel mode targets;

(b) NZ Ski bus services (routes, timetables, pricing);

(c) car park management controls such as vehicle occupancy controls, any car park booking system, car pooling or car park pricing;

(d) car park shuttle services;

(e) additional controls for high demand days.

70. While I agree with the travel demand management plan being provided to QLDC (and NZTA) for information purposes, I do not see a need for this to be approved or certified by QLDC.

[9] I prefer use of the word ‘Travel” in this context to “traffic”.

TRANS 2, TRANS 3 and TRANS 4

71. While I acknowledge the QLDC and NZTA position regarding the Temporary Traffic Management Plan, I consider that there is a need to implement an interim improvement until a long term upgrade has been designed, approved and implemented. I consider that conditions TRANS 2, TRANS 3 and TRANS 4 need to be modified to reflect this.

72. Since both NZTA and QLDC object to the term “Temporary”, I suggest that this is referred to as a “Ski Season SH6 Traffic Management Plan”. Regardless of the name, the intent of the plan is to manage the effects of ski season traffic and this should be prepared in accordance with the New Zealand Guide to Temporary Traffic Management (**NZGTTM**).

73. I anticipate that the Ski Season SH6 Traffic Management Plan will involve some minor safety works to widen the carriageway to allow a right turn bay to be marked on SH6. I suggest that the conditions are restructured broadly to achieve the following:

    (a) Prepare a Ski Season SH6 Traffic Management Plan for approval by NZTA.

    (b) NZSki to design and implement the works required to operate the Ski Season SH6 Traffic Management Plan noting that any alterations to the highway will have to go through the NZTA Carriageway Access Request process.

TRANS 2A

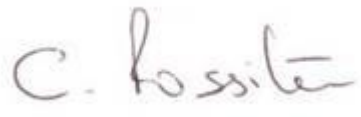
74. I suggest that the proposed TRANS 2A condition is reworded to reflect the actual parking capacity in line with my suggested change for TRANS 1.

TRANS 9, TRANS 10, TRANS 11, TRANS 12 and TRANS 13

75. I agree that these conditions could be replaced by revised conditions requiring a visitor travel monitoring report and a travel demand management plan.

TRANS 14

76. While QLDC have not commented on the proposed condition, the condition as proposed is effectively reliant on the existing access arrangements being in place. If a change in the access arrangements allowed for right turns to be completed safely outside of the ski season, then this condition would be redundant.



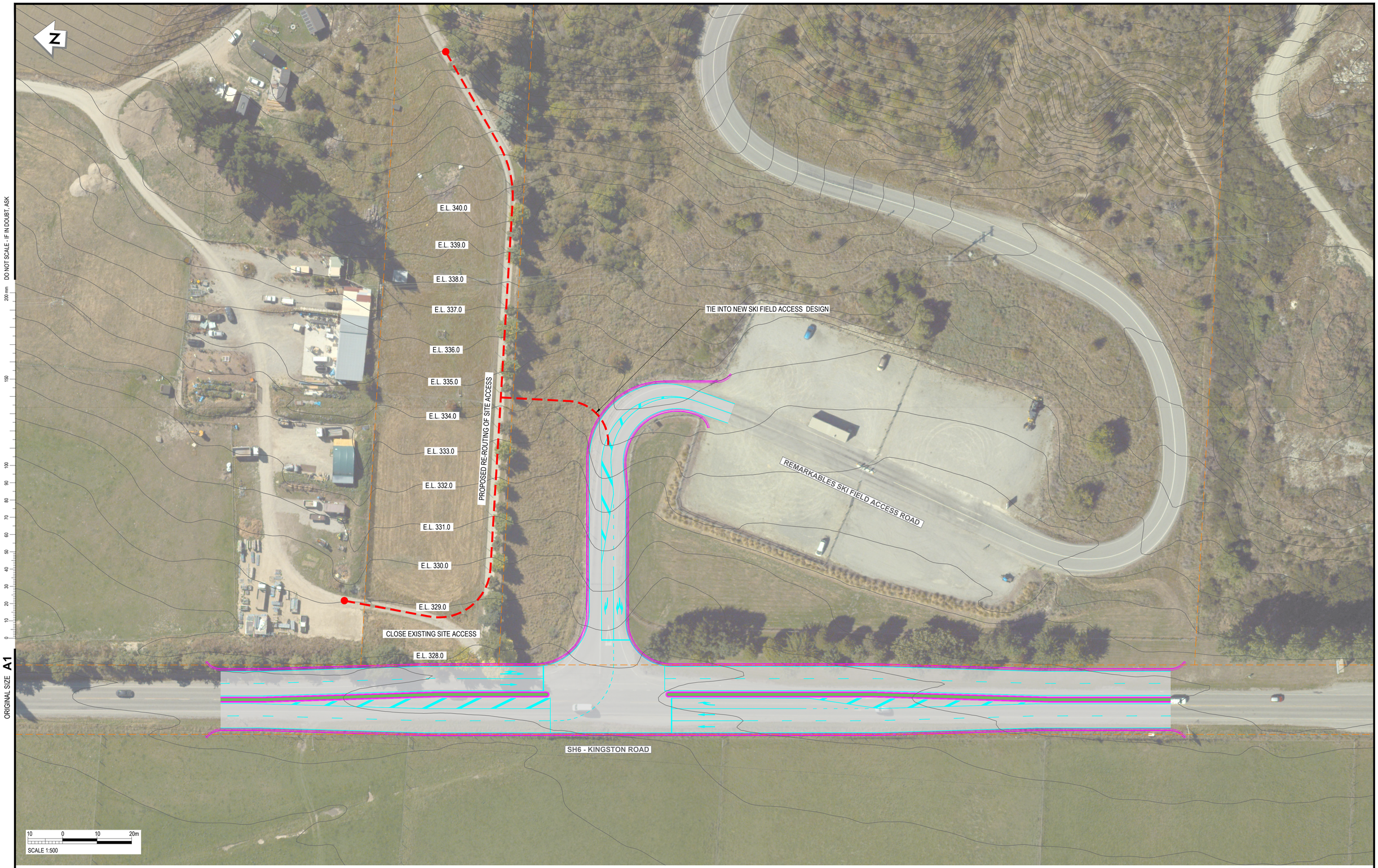
Chris Rossiter

3 November 2026

APPENDIX A: INTERSECTION CONCEPT DESIGN FOR CONSULTATION

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



NOT FOR CONSTRUCTION

REV	REVISIONS	DRN	CHK	APP	DATE
A	ISSUED FOR INFORMATION ONLY	AKJ	CR		02.26

SURVEYED		
DESIGNED	Chris Rossiter	02.2026
DRAWN	Alex Jagodzinski	02.2026
CAD REVIEW		
APPROVED		
PROF REGISTRATION:		

Stantec

Client:

NZ SKI
REMARKABLES FAST TRACK PROJECT

PROPOSED SIGNALISED INTERSECTION DESIGN

Status Stamp: **WORKING PLOT**

Date Stamp: **02.2026**

Scales: 1:500 @ A1 1:1000 @ A3

Drawing No.: 310104671-01-001-C001-FIG 2

Rev.: A

09/02/2026 1:11 PM

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V:\3102\promotion\NZSki\Remarkables Fast Track\transport\04_drawings\CAD

APPENDIX B: SIDRA MODEL OUTPUTS

LANE SUMMARY

Site: 101v [2025PM + 10yr - TMP - 2L Approaches (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

Signals plus 2 lane approaches
2025 + 10 year growth
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site User-Given Cycle Time)

Lane Use and Performance

	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh	Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
South: SH6 Kingston															
Lane 1	655	5.0	655	5.0	1322	0.496	100	7.3	LOS A	14.5	105.5	Full	500	0.0	0.0
Lane 2	655	5.0	655	5.0	1321[1]	0.496	100	7.4	LOS A	14.4	105.4	Full	500	0.0	0.0
Lane 3	25	0.0	25	0.0	111	0.224	100	59.3	LOS E	1.2	8.7	Short	60	0.0	NA
Approach	1335	4.9	1335	4.9		0.496		8.3	LOS A	14.5	105.5				
East: Ski Field Access															
Lane 1	263	2.0	263	2.0	330	0.796	100	49.4	LOS D	13.4	95.5	Short	60	0.0	NA
Lane 2	263	2.0	263	2.0	330	0.796	100	49.4	LOS D	13.4	95.5	Full	500	0.0	0.0
Approach	525	2.0	525	2.0		0.796		49.4	LOS D	13.4	95.5				
North: SH6 Frankton															
Lane 1	919	4.7	919	4.7	1092	0.841	100	22.6	LOS C	39.2	285.3	Full	500	0.0	0.0
Lane 2	921	5.0	921	5.0	1095	0.841	100	21.7	LOS C	39.3	286.7	Full	500	0.0	0.0
Approach	1840	4.9	1840	4.9		0.841		22.2	LOS C	39.3	286.7				
All Vehicles	3700	4.5	3700	4.5		0.841		21.0	LOS C	39.3	286.7				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Lane LOS values are based on average delay per lane.
Intersection and Approach LOS values are based on average delay for all lanes.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes.

Delay and stops experienced by drivers upstream of short lane entry have been accounted for.

Approach Lane Flows (veh/h)

South: SH6 Kingston

Mov. From S To Exit:	T1 N	R2 E	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	655	-	655	5.0	1322	0.496	100	NA	NA
Lane 2	655	-	655	5.0	1321[1]	0.496	100	NA	NA
Lane 3	-	25	25	0.0	111	0.224	100	0.0	2
Approach	1310	25	1335	4.9		0.496			

East: Ski Field Access

Mov. From E To Exit:	L2 S	R2 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	105	158	263	2.0	330	0.796	100	47.6	2
Lane 2	-	263	263	2.0	330	0.796	100	NA	NA
Approach	105	420	525	2.0		0.796			

North: SH6 Frankton

Mov. From N To Exit:	L2 E	T1 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	90	829	919	4.7	1092	0.841	100	NA	NA
Lane 2	-	921	921	5.0	1095	0.841	100	NA	NA
Approach	90	1750	1840	4.9		0.841			

	Total	%HV	Deg.Satn (v/c)
All Vehicles	3700	4.5	0.841

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

1 Reduced capacity due to a short lane effect. Short lane queues may extend into the full-length lanes.
Delay and stops experienced by drivers upstream of short lane entry have been accounted for.

Merge Analysis

	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec

There are no Exit Short Lanes for Merge Analysis at this Site.

Variable Demand Analysis

	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: SH6 Kingston				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
Lane 3	0.0	0.0	0.0	0.0
East: Ski Field Access				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: SH6 Frankton				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0

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APPENDIX C: CONCEPT DESIGN – INTERSECTION SAFETY IMPROVEMENTS

Sheet E400

LOT 1 DP 545527

LOT 1 DP 300643

LOT 2 DP 17411
NZSki Limited

LOT 1 DP 560833

345.0

342.5

340.0

337.5

335.0

332.5

330.0

327.5

325.0

LVO

SW

CUSTOMER FACILITIES AT TRANSPORT HUB TO BE UPGRADED

Existing fence line

Existing trees

Existing culvert (COS)

NEW ISLAND (GEOMETRIES TBC)

NEW MERGE & LEFT-HAND TURN ONLY LANE

NEW EDGE OF SEAL

RELOCATED DRAINAGE SWALE

Existing VMS sign

Existing edge of seal

Existing shoulder

Existing Stoney Creek entry widening

State Highway 6 Kingston Road

Existing fenceline

NEW PAINT MARKINGS TO SUIT

COACH VEHICLE TRACKING (12.6m)

NEW SEALED AREAS SHOWN HATCHED

NEW EDGE OF SEAL

Existing edge of seal

Existing shoulder

Existing road centreline

NEW RIGHT TURN BAY

LOT 2 DP 573262
Remarkables Station National Trust Limited

NOTES:
- Design assumes 100km/h speed limit
- Design guided by NZTA Traffic Control Devices Manual

WORK IN PROGRESS

SOUTHERN LAND
DEVELOPMENT CONSULTANTS

REVISION	DESCRIPTION	DATE
A	For Information	25/07/25
F	For Information	30/09/25
H	For Information	28/11/25

Level 2 Brownston House, 21 Brownston St., Wanaka, Ph: (03) 443 5577, Email: contact@southernland.co.nz, www.southernland.co.nz

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CSNZ THE CONSULTING SURVEYORS OF NEW ZEALAND
A DIVISION OF THE NEW ZEALAND INSTITUTE OF SURVEYORS

Remarkables Ski Area Upgrades & Doolans Basin Expansion
Transport - Existing Site
SH6 Intersection Overall

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nzski

SURVEYED	DATE	CHECKED	DATE
-	-	MB	07/03/25
DRAWN	DATE	APPROVED	DATE
AJHB/TN	28/11/25	AJHB	28/11/25

SCALE: 1:1,250 @ A3

DATUM & LEVEL: NZTM
LEVEL IN TERMS OF DVD58
ORIGIN OIT XI DP XXXXX RL = XXX.XX

DRAWING REFERENCE: A30043_E7

REVISION: H