Before the Independent Hearing Panel

In the Matter	of the Resource Management Act 1991 (**RMA**)
And	
In the Matter	of an application to the Central Otago District Council and Otago Regional Council for resource consent to establish and operate a gold mining activity at 1346 – 1536 Teviot Road, Millers Flat
Reference	RC230325 (Central Otago District Council) RM23.819 (Otago Regional Council)

Evidence of Logan Paul Copland on behalf Hawkeswood Mining Limited

Transportation

Dated 29 April 2024

Jeremy Brabant

Barrister

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Introduction

1. My full name is Logan Paul Copland. I am a Senior Transportation Planner at Abley Limited (Abley), a transportation, spatial and data intelligence professional services company. In addition to the above, I am also the Business Delivery Manager for Abley's South Island Land Development team.

2. I hold a Master of Planning Degree with distinction from the University of Otago, New Zealand. I am an Intermediate Member of the New Zealand Planning Institute.

3. I have six years' experience as a transportation professional, having worked as a transport planner / engineer since 2018.

4. In the first four years of my career, I was employed by the Dunedin City Council as a transport planner / engineer. In this role, I was regularly tasked with evaluating the effects of land development projects on the transportation network and providing transport advice on resource consent applications, plan changes and Notices of Requirement.

5. I have worked at Abley as a Senior Transportation Planner since July 2022. During my time at Abley, my work has primarily been focused on land development and transport design projects of varying types and scales. I provide advice to a range of public and private sector clients and have prepared numerous transportation assessments.

6. Following an RFI issued by Central Otago District Council (CODC) on 1 November 2022, I was instructed by Hawkeswood Mining Ltd in November 2022 to undertake a transportation assessment for a proposed gold mine near Millers Flat, Central Otago. I am familiar with the application site and wider area. I have visited the site and surrounds most recently on 27 April 2024.

7. Although this is not a hearing before the Environment Court, I record that I have read and agree to and abide by the Environment Court's Code of

Conduct for Expert Witnesses as specified in the Environment Court's Practice Note 2023. This evidence is within my area of expertise, except where I state that I rely upon the evidence of other expert witnesses as presented to this hearing. I have not omitted to consider any material facts known to me that might alter or detract from the opinions expressed.

Scope of Evidence

8. My evidence will address the following:

    - A summary of my Transportation Assessment Report dated 25 October 2023 (Revision C), including any changes.

    - A review of the revised site plans dated 22 April 2024 prepared by Overview Surveying. I note that these plans include further details on the proposed mine staging, as well as vehicle access provisions, and I have been asked to consider any associated effects of these changes on the adjacent Clutha Gold Cycle Trail (the cycle trail) and cycle safety.

    - A review of submission points where those submissions relate to transportation matters. For the avoidance of doubt, these submissions are made by the following parties:

        i. Culling Family Trust

        ii. Ministry of Education

    - A review of transportation matters raised in the CODC Section 42A Report.

Transport Assessment Report

9. I prepared the Transport Assessment Report dated 25 October 2023. The key findings of my assessment are summarised below in Paragraphs 10-20, including any changes.

10. In summary, my analysis of traffic generated by this proposal concluded that it can be safely and efficiently accommodated on Teviot Road. The current traffic flows on Teviot Road are very low at present, and the traffic generated by the proposed gold mine will be similarly low.

11. My analysis of traffic generation relied on information provided to me by the applicant. Principally, this includes a proposal to establish and operate an alluvial gold mine at 1344-1536 Teviot Road, Millers Flat, with up to 20 staff working on site each day. Mining is to occur over a duration of 10 years.

12. I have been advised that heavy vehicle movements will be limited to fuel deliveries and deliveries of other goods, such as heavy machinery parts. The applicant has advised that an average of four heavy vehicle movements per day is anticipated (two in, two out).

13. I have subsequently been advised that the maximum number of people onsite daily will need to be increased from 20 to 30, in order to ensure compliance / monitoring as required and to allow for site visitors and other contingencies. However, I understand that this is a conservative allowance. Additionally, I have been advised that some staff are likely to travel offsite for lunch each day. I have therefore revised my assessment of trip generation accordingly.

14. For assessment purposes I have assumed that one half of staff will leave the site for lunch (10), although I have assumed that they will carpool. I have applied a car occupancy rate of 2 people per vehicle. This leads to 10 vehicle movements during lunch time (5 departing and 5 arriving).

15. This results in a revised traffic generation scenario as shown below. As above, this is considered to be conservative since it assumes each person will arrive in individual vehicles and that the maximum number of people allowed for will be present each day. In reality, there is likely to be some degree of carpooling and a lower number of staff and visitors onsite each day.

Trip Generation Source	Time	Number of vehicle movements
Staff	Before 0700hrs	20 (in)
	After 1900hrs	20 (out)
	Midday (1200-1300hrs)	5 in and 5 out
Site visitors	Scattered throughout the day	10 in and 10 out
Heavy vehicle movements (diesel deliveries and machinery parts)	Scattered throughout the day	2 in and 2 out (assume truck and trailer units, equating to 20 equivalent car movements per day (ecm/d))
Totals	**N/A**	**74 (two-way)** **90ecm/d**

16. In terms of road safety, the reported crash history along the length of Teviot Road between Millers Flat Bridge and Jedburgh Street does not indicate that there would be any adverse safety effects arising from the proposal.

17. The site has two existing vehicle access points. These accesses are unsealed. The location of the mining activity within the site will change over the lifetime of the mine. I have recently been advised by the applicant that the southern access will be used up until Stage 3A. The northern access will then be used for the remaining period of the lifecycle (until the end of Stage 4). This is illustrated on the latest site plans dated 22 April 2024. In terms of use timeframes, I understand that the southern access will be in use for approximately the first third of the mine lifecycle, and the northern access will be used for the remaining two thirds.

18. My assessment originally concluded that the access ways should be upgraded in general accordance with Figure 12.2 of the Central Otago District Plan. Since reviewing the Section 42 Report and accounting for the revised traffic generation assessment above, I have revisited this recommendation. I discuss this later in Paragraphs 49-65 of my evidence.

19. My assessment concluded that the available sight distance to the north at the southern vehicle access does not comply with the minimum requirement in the Central Otago District Plan (District Plan) for an access onto an arterial road with a 100km/h speed limit, which is 280m. There is approximately 225-250m of sight distance. The sight distance is affected by the inside of a horizontal curve in Teviot Road. Although the sight distance does not comply with the District Plan, I assessed that it meets the safe stopping distance requirements as set out in Austroads Guide to Road Design Part 3. Accordingly, there is sufficient distance available for a vehicle to safely decelerate and stop should this be required to avoid a collision. Based on my assessment, I consider the sight distance is acceptable.

20. My Transport Assessment Report concluded, subject to conditions relating to access design that the proposal can be supported from a transport perspective. I remain of this view.

Review of Revised Plans

21. The site plans dated 22 April 2024 show that for Stages 1-3A, the cycle trail will remain in its current location as mining activity will be separated from the cycle trail during those stages. The current approximate cycle trail alignment is shown in red in Figure 1.

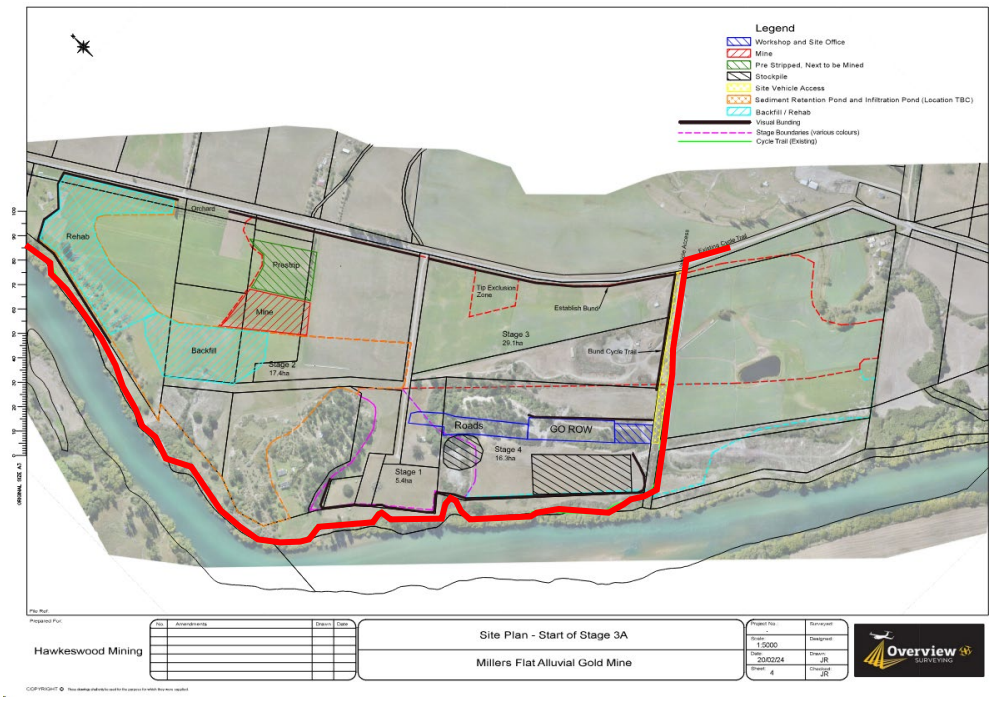


Figure 1: Stage 3A site plan showing existing cycle trail alignment

22. Cyclists are currently directed to cross Teviot Road immediately adjacent to the existing southern (right hand side in Figure 1) vehicle access to the site. Refer to Figure 2, which is a photograph taken from the southern vehicle access, with the cycle crossing on Teviot Road in view.

Figure 2: Teviot Road cycle trail crossing

23. Although there is limited separation between the vehicle access and cycle trail road crossing, inter-visibility between cyclists and vehicles turning into or out of the vehicle access and cyclists crossing Teviot Road is excellent. This is due to the cycle trail following the same alignment as the driveway and being at a similar level to the road carriageway.

24. The site plans dated 22 April show that during Stage 3B, pre-stripping of land adjacent to the southern paper road (where the current cycle trail is

located) will take place. In Stages 3 and 4, mining will take place over the top of that part of the current cycle trail alignment linking to Teviot Road. As such, the cycle trail will be temporarily re-routed to the north as part of Stage 3B. The proposed temporary alignment is shown in red in Figure 3. This temporary alignment will ensure that the cycle trail remains accessible throughout the duration of the mining life cycle. I understand this temporary alignment has been agreed with the Clutha Gold Charitable Trust, who are responsible for the operation of the cycle trail.

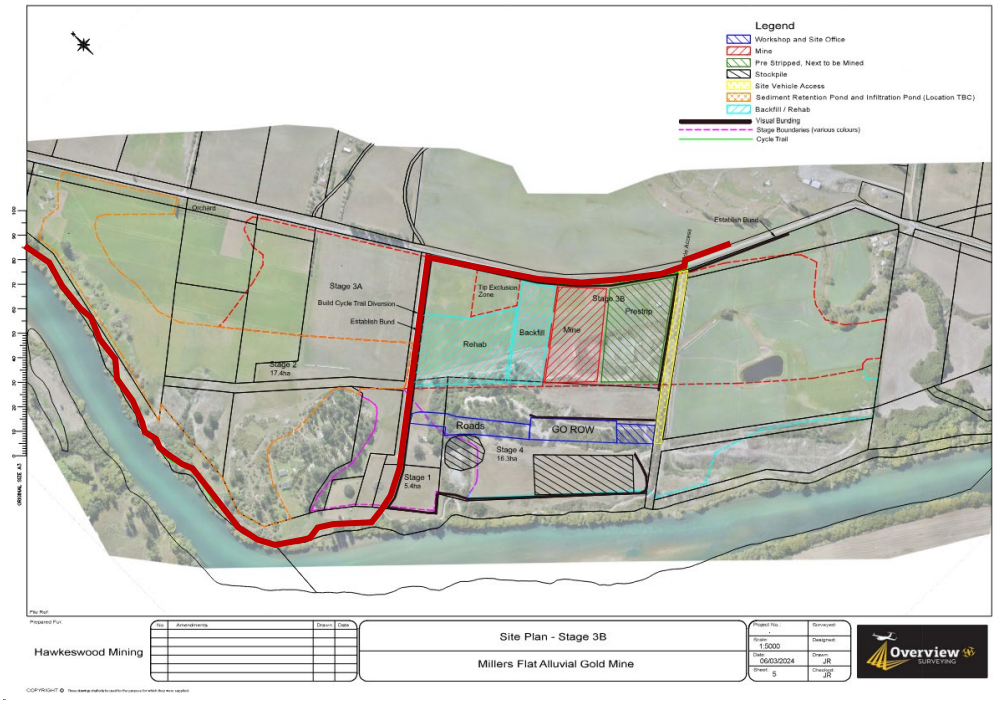


Figure 3: Stage 3B site plan showing re-routed cycle trail

25. I understand that it is intended that the temporary alignment of the cycle trail link to Teviot Road will be located on a combination of a Council paper road and private land, on the private property side of the Teviot Road boundary fence line.

26. The trail will be required to cross over the site's southern vehicle access before / after crossing Teviot Road. I recommend that the path meets / crosses the driveway at a right angle to ensure that visibility is maximised. Refer to Figure 4. I note that the required access upgrades will result in a wider crossing distance for cyclists as they cross Teviot Road. This will need to be considered as part of detailed design.

Figure 4: Suggested alignment of temporary cycle trail alignment at southern site access

27. The cycle trail will be reinstated to its original alignment at the end of Stage 4.

Matters raised by submitters

Culling Family Trust

28. Culling Family Trust has submitted in opposition to the application. Of relevance from a transportation perspective, is that the submission states "*the additional traffic associated with the mining operation will pose an unacceptable risk to cyclists and to other vehicle users".*

29. My revised traffic generation assessment, although conservatively high, concludes that the site will likely generate up to 74 vehicle movements per day (two-way). This is based on:

    - 20 staff operating from the site at any one time on a standard day shift[1], and each staff member driving to the site (as a worst-case scenario) will arrive/depart in a single occupant vehicle.

    - One half of those staff (10) driving to and from Ettrick at lunch time. In my view, it is highly likely that these staff will carpool. I have

[1]Operating hours will be Monday-Friday 0700hrs-1900hrs and Saturday 0700hrs-1300hrs. There will be no mining activity on Sundays or public holidays.

assumed a rate of 2 people per vehicle which I consider to be conservative.

- Occasional visits to the site (assumed 10 visits per day on average).

- I understand that heavy vehicle movements will be limited to fuel deliveries and other types of deliveries such as mining machinery parts. I note that up to 60,000 litres of diesel fuel will be stored onsite. This will reduce the number of off-site vehicle movements compared to a scenario where only a small amount of diesel was stored onsite, or if diesel was not stored onsite at all. I have been advised by the Site Manager that an average of two heavy vehicles will visit the site each day.

30. Based on these assumptions, I now conclude that the site would generate up to 74 trips per day (in and out i.e., 37 vehicles), with four of those (on average) being made by heavy vehicles.

31. Teviot Road is a two-lane / two-way road with a chip-seal surface and a dashed centreline. The carriageway is in the order of 6.0m-7.0m wide with narrow unsealed shoulders.

32. I have assessed the capacity of Teviot Road using Section 5.1.1 of Austroads Guide to Traffic Management Part 3: Transport Study and Analysis Methods. I calculate that Teviot Road has a traffic capacity of approximately 1,000 vehicles per lane per hour, based on Teviot Road having:

    - 3.25m wide traffic lanes,

    - No shoulders,

    - 10% of the average daily traffic (ADT) being made up of heavy vehicles, and

    - Level vertical geometry.

33. In my Transport Assessment Report, I assumed that all staff would arrive at the site within one hour, and then leave the site in a separate hour. Due to

shift timing this will not occur in network peak hours. However, adopting a conservative approach, even If this were to occur in the network peak hours[2], the peak hour flow on Teviot Road would increase from the current approximately 60 vehicles per hour (two-way) to approximately 80 vehicles per hour (two-way). This is one additional vehicle movement every three minutes on average which in my view is unlikely to be noticeable to other road users. I also note that the projected traffic flow of 80 vehicles per hour remains well below the capacity of Teviot Road which I estimate to be approximately 1,000 vehicles per hour based on the characteristics of the road.

34. In terms of road safety, my network crash analysis returned four reported crashes on Teviot Road between Millers Flat Bridge and Jedburgh Street between 2018-2023. One of these crashes resulted in minor injuries whereas the remaining three crashes did not result in any injuries. No crashes were reported along the site frontage, none resulted in death or serious injury, and none involved pedestrians or cyclists. In my view, the reported crash history does not raise any concerns or suggest that there is an underlying safety issue on Teviot Road at present. Teviot Road also has a 'low' personal[3] and collective[4] risk rating.

35. Given the good safety record on Teviot Road and the 'low' risk ratings, I consider the projected increase in traffic flows arising from the proposed gold mine is unlikely to lead to any significant increased risk to other road users (including cyclists).

Ministry of Education

[2] The shift start and end times do not coincide with the network peak hours.

[3] Personal risk is a measure of the risk of an individual dying or being seriously injured at a site. It is calculated by dividing Collective Risk by a measure of traffic volume exposure.

[4] Collective risk is a measure of the total estimated death and serious injury (DSi) casualty equivalents for a site. It is effectively a measure of the number of deaths and serious injuries that can be expected at a site over the next analysis period (typically five years). At a corridor level, Collective Risk is the total estimated DSi casualty equivalents derived from the intersection and midblock components divided by the length of the corridor. It is expressed as estimated DSi / km.

36. The Ministry of Education has made a neutral submission on the application. Of relevance from a traffic perspective is that they consider that that "*high heavy vehicle movements will likely be required over the duration of the 10-year mining period*"[5]. The Ministry of Education also say that these heavy vehicle movements will potentially result in "*traffic safety and traffic noise effects*"[6]. They also consider that "*there is potential for the proposed activity to adversely affect the rangatahi[7] and 11aiako[8] at Millers Flat School*"[9]

37. The Ministry of Education asserts that high heavy vehicle movements will likely be required over the 10-year mining period. That is incorrect. As noted in Paragraph 30 of my evidence, I anticipate that heavy vehicle traffic generation once the site is operational will be low and be on average two vehicles per day.

38. Although site establishment has already been completed, there may be occasions where larger vehicles (such as transporters) will need to access the site to deliver machinery or plant equipment. Should this be required, I expect that the transport operator will either ensure that their load is permitted, or obtain appropriate permits as required. If these vehicles are required to access the site, movement will be intermittent and temporary in nature.

39. In my Transport Assessment Report, I noted that according to Mobile Road, heavy vehicles make up 10% of the ADT of Teviot Road. Hence, the anticipated small increase in heavy vehicles arising from the proposal is unlikely to be noticeable to other road users.

40. Millers Flat School is located approximately 1.65km south-east of the proposed southern entrance to the proposed gold mine. Refer to Figure 5.

[5] Ministry of Education Submission, dated 16 February 2024

[6] Ministry of Education Submission, dated 16 February 2024

[7] Rangatahi is a te reo Māori word used to describe the youth or younger generations.

[8] Kaiako is the te reo Māori word for teacher.

[9] Ministry of Education Submission, dated 16 February 2024

Figure 5: Location of Millers Flat School relative to the application site.

41. Millers Flat School is a full primary school (years 1-8). The latest ERO report records that the school has a total roll of 28 students[10].

42. The school has frontage to Teviot Road. There are gravelled car parking areas adjacent to the school on both sides of the road. The southwestern side is used as 90-degree angle parking. The northeastern side of the road is used as parallel parking. There is signage on the boundary fence that directs vehicles to park outside the school gate. The school also has two driveways onto Teviot Road. There is signage at each driveway which indicates that the driveways are to be used by school buses only. Hence, school pickup and drop off typically occurs on Teviot Road.

43. The posted speed limit on Teviot Road as it passes the school is currently 50km/h. As part of a recent speed limit review, CODC proposed to implement a variable 30km/h speed limit in this location (during pick up and

[10] https://ero.govt.nz/institution/3771/millers-flat-school

drop off times). A Speed Limit Hearing was held on 03 April 2024, and, at the time of writing, the outcome is pending.

44. In terms of transportation effects on the school arising from traffic generated by the proposed gold mine, I note that the weekday operating hours for the mine are proposed to be 0700hrs-1900hrs. Hence, traffic generated by staff arriving and leaving the mine will not coincide with the peak pick up and drop off periods for the school (which are typically 0830hrs-0930hrs for the morning drop off and 1430hrs-1530hrs for the afternoon pickup).

45. Given the number of heavy vehicles generated by the mine will be low, the associated impacts on the road network (including Teviot Road as it passes the school) will be insignificant. However, in response to the concerns raised by the Ministry of Education, I have considered whether it may be appropriate to ensure that heavy vehicle movements are scheduled so as to not coincide with peak school pickup and drop off times.

46. As noted, the level of heavy traffic likely to be generated by the proposed goldmine is anticipiated to be low (four per day on average), and the existing traffic flows on Teviot Road already includes heavy vehicles (which may also use the road during school pick up and drop off times). On that basis, I do not consider that placing a restriction on heavy vehicle movements generated by the proposed gold mine is required. However, I understand that the applicant is willing to do so, and on the basis that this would ensure that new heavy traffic does not conflict with the school pick up and drop off period, I would not be opposed to such a condition.

47. Based on the above assessment and recommendation, I consider any traffic effects arising from the proposed gold mine on Millers Flat School will be acceptable.

48. I do not have the expertise to comment on noise effects, and so I defer to Mr Nevil Hegley, the noise expert acting for Hawkeswood Mining, in that regard.

The CODC Section 42A Report

Points of Difference

49. Paragraphs 141-146 of the Central Otago District Council Section 42A report discuss transportation matters. Council's engineer, Mr Dominic Haanen, generally concurs with my assessment of transport effects. However, there is a one minor point of difference relating to access design, which I discuss below.

50. Council's engineer considers that the standard of access should be in accordance with Figure 12.2 of the District Plan if both accesses are to be used concurrently, or Figure 12.3 of the District Plan if only one access is to be used at any one time. For ease of reference, these figures are included as Appendix A of my evidence. I note that Figure 12.2 shows the required standard for a low traffic generation access onto an arterial road, whereas Figure 12.3 shows the required standard for a high traffic generation access onto an arterial road.

51. I have not been able to find a clear distinction between low and high traffic generators, except in the standards for access to Rural Collector Roads (Rule 12.7.1(iv)). That standard indicates activities generating 30 or less vehicle movements equivalent are 'low' traffic generators, and activities generating more than 30 vehicle movements equivalent are 'high' traffic generators. Based on this distinction, given that I conservatively estimate the mine will generate up to 74 vehicle movements per day (and 90 vehicle movements equivalent), I agree with Council's engineer that the standard set out in Figure 12.3 is the required standard as per the District Plan. However, I do not consider in this scenario that Figure 12.3 is necessarily required for reasons I set out in Paragraphs 52-59 of my evidence.

52. In considering whether or not Figure 12.3 of the District Plan is the appropriate standard in this scenario, I have first reviewed the traffic flows of arterial roads as set out in Schedule 19.7 of the District Plan, using MobileRoad. These are:

    - Springvale Road (950vpd, 2016),
    - Dunstan Road (1900vpd, 2016),

- Ida Valley Road (550vpd, 2016),
- Cromwell-Bannockburn Road (1500vpd, 2020),
- Earnscleugh Road (1500vpd, 2022),
- Roxburgh East Road (850vpd, 2016),
- and Teviot Road (200vpd (adjacent to site accesses), 2016).

53. Since these roads are all classified as arterial roads, access to each of them is subject to the same standards for vehicle access. However, I highlight that Teviot Road has a notably lower daily traffic flow than each of those roads.

54. I have secondly consulted Appendix 5B of the NZTA Planning Policy Manual (The Manual), which sets out accessway standards and guidelines for state highways[11]. The Manual sets out three diagrams that are relevant to this scenario ('Diagrams C, D and E)'. These are included as Appendix B of my evidence.

55. 'Diagram C' of the Manual is very similar to Figure 12.2 of the District Plan. Neither of these standards have any road shoulder widening. This type of accessway is generally considered appropriate for low traffic generation accessways. As discussed in Paragraph 51, this type of accessway is not considered appropriate based on the revised traffic generation assessment for this activity.

56. 'Diagram E' of the Manual is very similar to Figure 12.3 of the District Plan. Both of these standards require road shoulder widening and tapers on both sides of the road on the approaches to the accessway in question. This design reduces the likelihood of through traffic on the major road being disrupted by traffic turning into an access way.

57. The Manual also provides a 'Diagram D' (special use access), of which there is no equivalent in the District Plan. 'Diagram D' has road shoulder widening,

[11] For the avoidance of doubt, Teviot Road is not a state highway.

but at a shorter length in comparison to 'Diagram E' / Figure 12.3 of the District Plan.

58. The Manual provides guidance for when these different access design treatments are generally appropriate. This is based on:

    - Type of traffic using the accessway (i.e., light vehicles and/or heavy vehicles)

    - Volume of traffic using the accessway (in equivalent car movements per day)

    - Volume of traffic using the frontage road / state highway

59. In a scenario where Teviot Road was a state highway, with the exception of the frequency of heavy vehicle movements per week (more than one), the proposed accessways to the mine would qualify with the requirements for a 'Diagram D' design based on Table App5B/4 of the Manual. However, since there is more than one heavy vehicle movement per week, a Diagram E access would be required based on the guidance, if Teviot Road was a state highway.

60. I have secondly consulted other District Plans in New Zealand to determine whether a design approach as generally detailed in 'Diagram D' has been adopted outside of Central Otago for Council controlled roads, and whether this may be an appropriate design for this activity given the low use of Teviot Road.

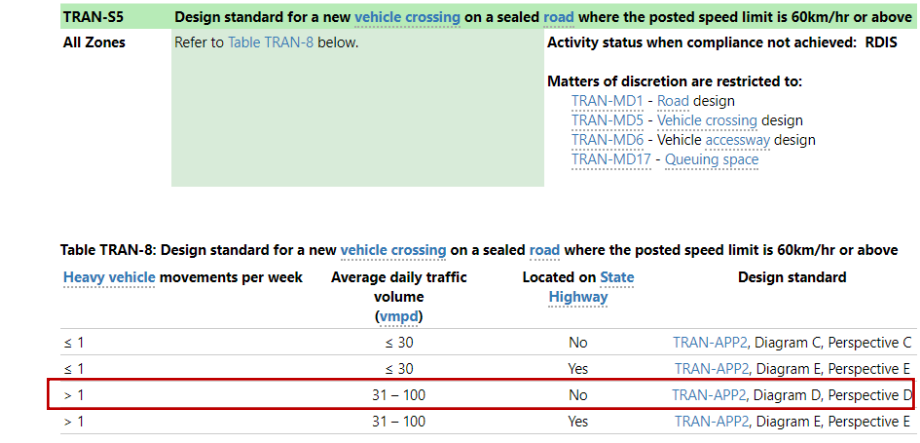
    - In the case of Dunedin, the Second Generation District Plan does not require any road shoulder widening for a vehicle access onto a rural high speed road that is not a state highway. Therefore, a lower standard than 'Diagram D' would be considered appropriate if the Teviot Road accessway was assessed in Dunedin.

    - In the case of Waimakariri, Rule TRAN-S5 of proposed District Plan would allow for a 'Diagram D' style access for the Teviot Road accessway if assessed in Waimakariri. Specifically, a 'Diagram D'

equivalent is appropriate in the proposed Waimakariri District Plan when (refer to Figure 6 below):

i. There is more than one heavy vehicle movement per week (as is the case for this activity), and

ii. The daily traffic volume at the access way is between 31 and 100 vehicle movements per day[12] (as is the case for this activity).



TRAN-S5	Design standard for a new vehicle crossing on a sealed road where the posted speed limit is 60km/hr or above	
All Zones	Refer to Table TRAN-8 below.	Activity status when compliance not achieved: RDIS Matters of discretion are restricted to: TRAN-MD1 - Road design TRAN-MD5 - Vehicle crossing design TRAN-MD6 - Vehicle accessway design TRAN-MD17 - Queuing space

Table TRAN-8: Design standard for a new vehicle crossing on a sealed road where the posted speed limit is 60km/hr or above

Heavy vehicle movements per week	Average daily traffic volume (vmpd)	Located on State Highway	Design standard
≤ 1	≤ 30	No	TRAN-APP2, Diagram C, Perspective C
≤ 1	≤ 30	Yes	TRAN-APP2, Diagram E, Perspective E
> 1	31 – 100	No	TRAN-APP2, Diagram D, Perspective D
> 1	31 – 100	Yes	TRAN-APP2, Diagram E, Perspective E

Figure 6: Vehicle crossing design requirements in proposed Waimakariri District Plan

61. Whilst I acknowledge that there are similarly other District Plans that adopt a similar approach to the Central Otago District Plan, the above illustrates that there are varying standards and thresholds that are applied when determining the appropriate standard for an accessway. Irrespective, while guidance is useful, accessways should be designed on a case-by-case basis, and this approach is supported by the Manual.

62. In my view, I consider that a 'Diagram D' access way would provide an appropriate transport design outcome, noting that:

- Teviot Road is not a state highway,

[12] This is also based on vehicle movements per day rather than ecm/d.

- Teviot Road has low traffic flows, particularly relative to other arterial roads identified in Schedule 19.7 of the District Plan,
- Teviot Road has an excellent road safety record,
- A large proportion of traffic movements at the accessways will occur outside of peak network times,
- Forward sight distances from through traffic to vehicles turning into the accessways are excellent,
- The total number of heavy vehicle movements using the accessway equates to approximately 4% of the total number of movements using the accessway, and it is also unlikely that these would occur during peak network times.

63. On this basis, under my direction, Abley staff have prepared concept level drawings to illustrate how this type of design could be accommodated at each access way. These are shown in Appendix C. These would need to be developed further as part of detailed design.

64. I note that in the case of the northern accessway, the concept designs show that shoulder widening on the site side of Teviot Road would encroach into private land. However, I understand the location of the road boundary has not been determined by a recent survey, and that it is possible that it is located in a different place than what is shown on the plans. Irrespective, given Council's engineer and I concur that trucks may cross the centreline when entering and exiting the northern accessway, and noting the sight lines are excellent, I consider that the extent of widening on the site side of the road could be reduced as part of detailed design, compared with what is shown in Appendix C. This would ensure that the widening does not need to encroach onto the property on the northern side of the accessway, which is not under the control of the applicant. Accordingly, it is appropriate that final layout of the access is determined as part of detailed design. Importantly, I am satisfied that an adequate access design can be achieved.

65. Appendix C also indicates that shoulder widening on the opposite side of each accessway would get close to / conflict with existing utility poles. The exact locations relative to the widening will need to be confirmed as part of detailed design. It is possible that the poles may need to be relocated or alternatively, a slightly reduced shoulder width could be considered as part of the design stage, so that the widening does not conflict with the poles.

Conditions

66. The Section 42A Report sets out recommended consent conditions. Conditions 18(a-c), 19 and 45 relate to transport matters.

67. Conditions 18(a-c) relate to access design matters. Given the applicant has confirmed that the northern and southern access ways will not be used concurrently, I consider that Conditions 18(a) and 18(b) are redundant, and should therefore be deleted.

68. Based on my analysis above, I recommend that Condition 18(c) is amended so that the access ways are required to be designed in general accordance with a 'Diagram D', and the Abley concept drawings dated 23 April 2024.

69. I consider Condition 19 to be appropriate, however, I suggest that this should be strengthened so that detailed engineering plans are required to be submitted to and approved by CODC prior to construction.

70. Condition 45 requires a traffic management plan to be prepared and submitted by the applicant if transportation of machinery onto or off the site affects the normal operating conditions of the transport network. I understand that this condition has been adopted from recommendations made in my Transport Assessment Report. In my view, it would be appropriate for this to be carried over as an Advice Note as opposed to a condition. Such a condition would be challenging to enforce, and since the exact requirements are not known at this stage, I suggest that this be addressed by the transport operators on an 'as required' basis. It is plausible that a traffic management plan may not be required, particularly if certain vehicle load types are permitted to operate on the road network or have obtained any required vehicle permits.

71. For the avoidance of doubt, and for completeness, I recommend the following conditions:

- The vehicle accesses shall be designed in general accordance with a 'Diagram D' accessway as per the Appendix 5B of the NZTA Planning Policy Manual, and as generally shown in the Abley concept drawings dated 23 April 2024.

- Detailed engineering plans for the access shall be submitted to and approved by CODC prior to construction.

- Prior to either access way being used to serve the mine site, they shall be upgraded in accordance with the approved engineering plans.

- Heavy vehicle movements associated with the mine shall be scheduled so as to not coincide with pick and drop off times at Millers Flat School, or be required access the mine via a part of the roading network that does not pass the school.

Conclusions

18 Based on my assessment, as well as consideration of submissions made and comments made in the Section 42A report, I remain of the view that subject to conditions, the proposal can be supported from a transport perspective.

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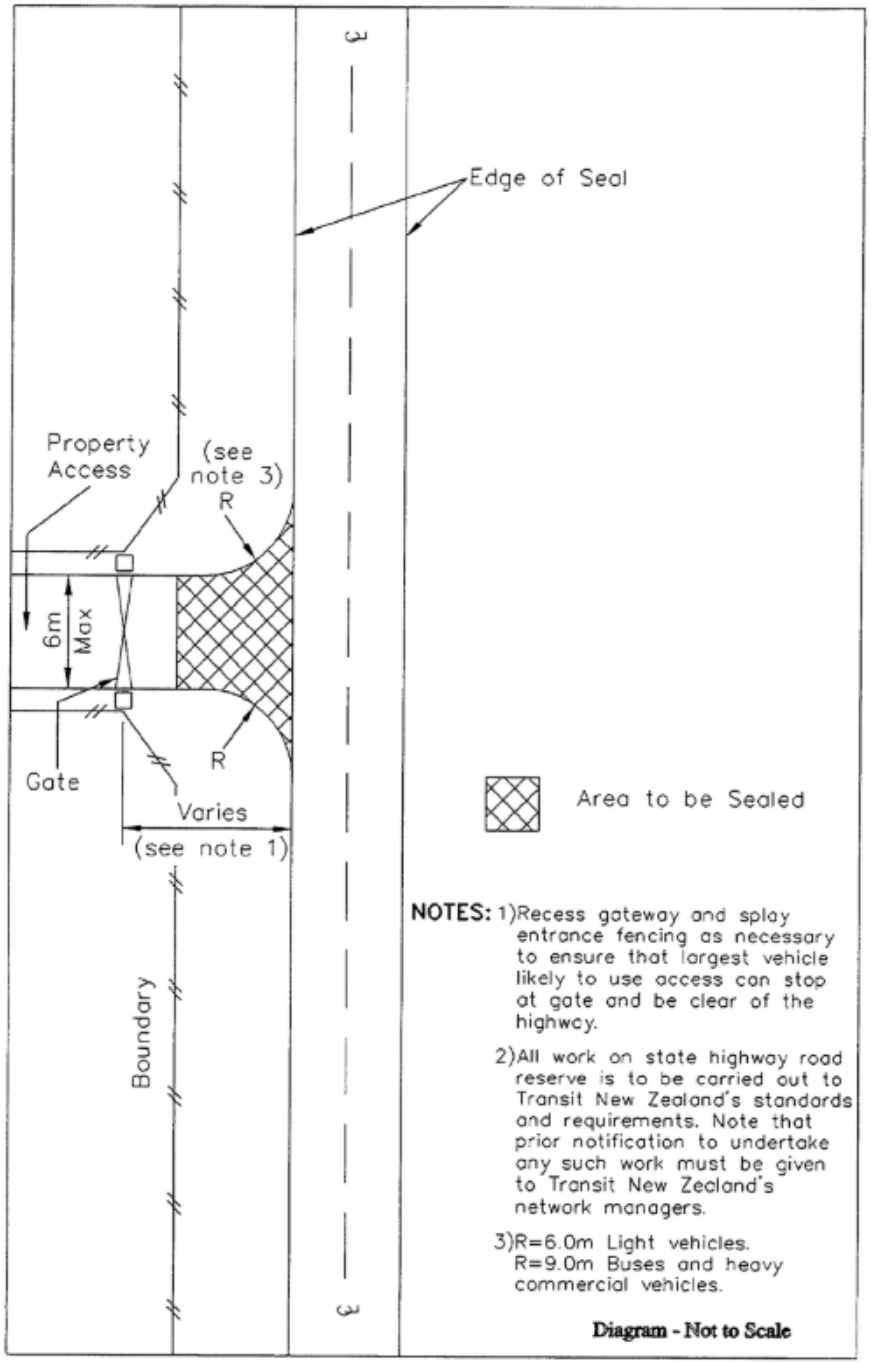
Logan Paul Copland

Dated 29 April 2024

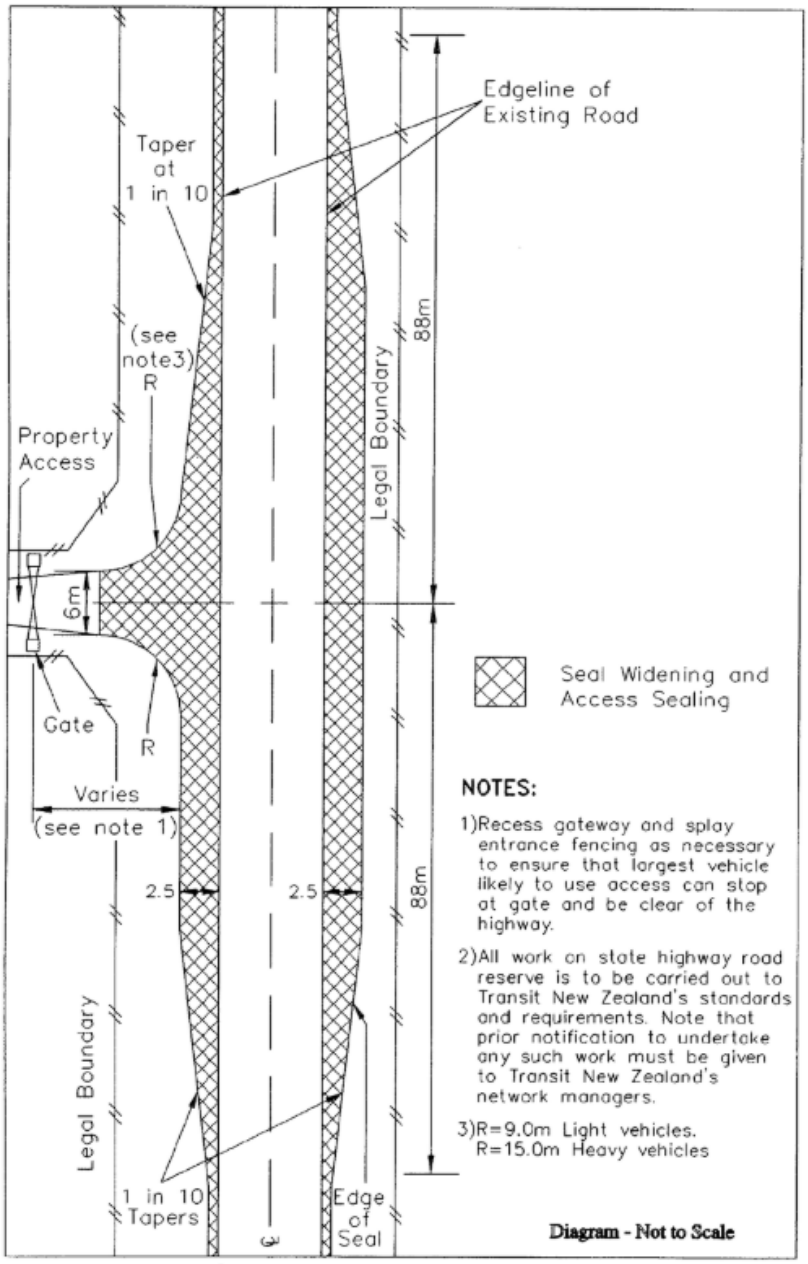
Appendix A CODC District Plan Figures 12.2 and 12.3

Figure 12.2 – Access Standard, Low Traffic Generation



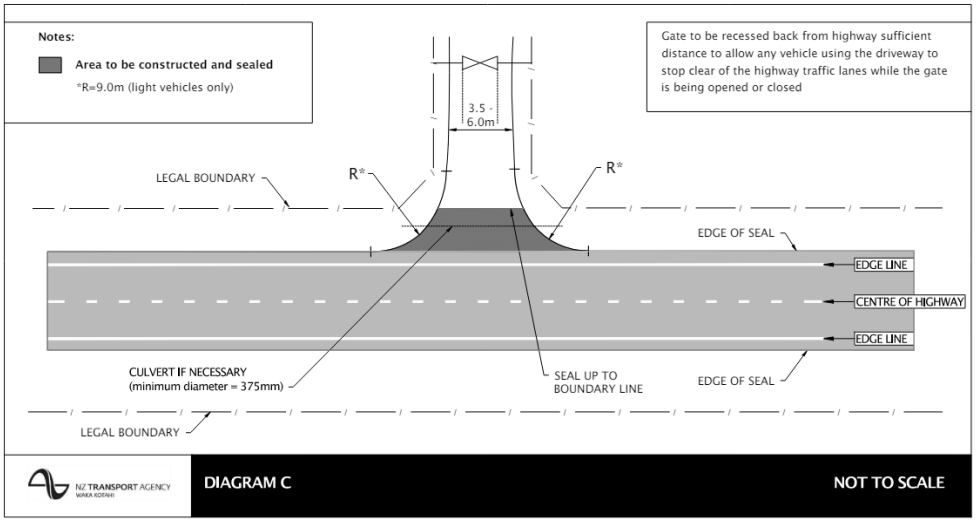
Source : Addendum to Part III– "Planning For a Safe and Efficient State Highway Network Under the Resource Management Act 1991" – Transit New Zealand, 3 March 1997.

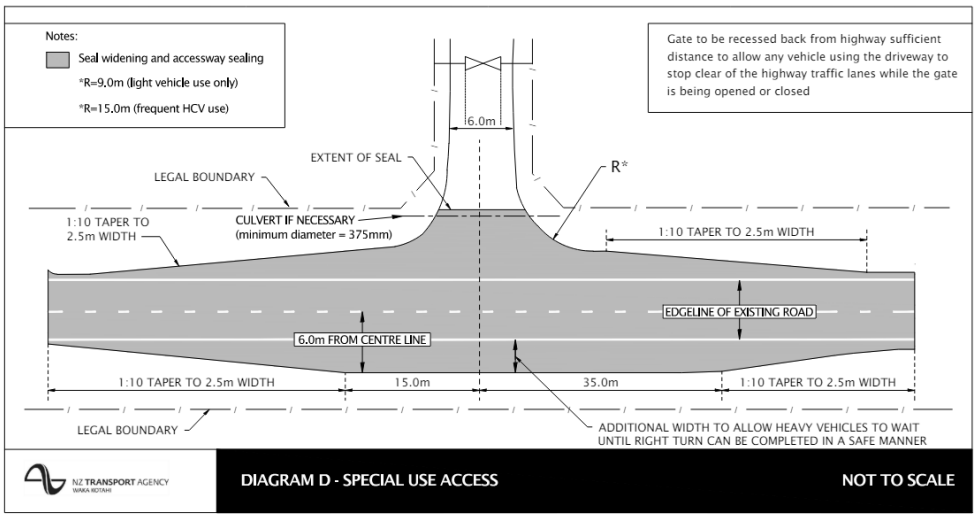
Figure 12.3 – Access Standard, High Traffic Generation



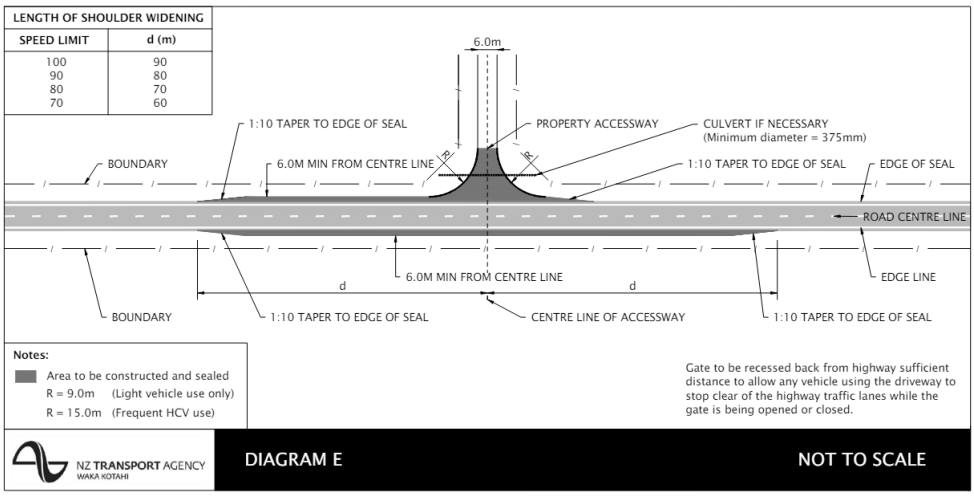
Source : Addendum to Part III- "Planning For a Safe and Efficient State Highway Network Under the Resource Management Act 1991" - Transit New Zealand, 13 November 1996.

Appendix B NZTA Planning Policy Manual Diagrams C, D and E





LENGTH OF SHOULDER WIDENING	
SPEED LIMIT	d (m)
100	90
90	80
80	70
70	60



Notes:

Area to be constructed and sealed
R = 9.0m (Light vehicle use only)
R = 15.0m (Frequent HCV use)

Gate to be recessed back from highway sufficient distance to allow any vehicle using the driveway to stop clear of the highway traffic lanes while the gate is being opened or closed.

NZ TRANSPORT AGENCY
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DIAGRAM E **NOT TO SCALE**

Appendix C Access Concept Designs