

Technical Specialist Memo – Contaminated land

To:

Maria Baring - Project Manager Regulatory Engineering, Auckland Council

From:

Ripul Sachdeva, Senior Traffic Engineer - Auckland Council

Qualifications &
Relevant
Experience:

I hold a Bachelor of Civil Engineering (2012) and a Master of Engineering Studies (2020), both from the University of Auckland, with a specialization in Transportation Engineering. I have 13 years of professional experience in civil and traffic engineering.

I am a Full Member of Engineering New Zealand. My professional experience includes preparing traffic engineering assessments for resource consent and Fast-track applications, and I have provided expert traffic engineering evidence before consent authorities and at Council hearings on numerous occasions.

Preparation in
Accordance
with the Code
of Conduct:

I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses ([Code](#)) and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conference, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.

Date:

1 July 2026

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:

Hunua Quarry Development

Fast-Track application number:

FTAA-2603-1185 (Council Reference BUN60464053)

Site address:

489 Hunua Road, Hunua

2.0 Executive Summary

I have reviewed the transport aspects of the application documentation, including Auckland Transport's (AT) memorandum dated 22 June 2026. My assessment focuses primarily on the internal operation of the proposed quarry roading network and access arrangements within the application site.

In addition, I have undertaken a high-level review of transport matters external to the site, including the surrounding road network and the interface between the quarry access and the existing public road network. This review is limited in scope, as AT has undertaken the detailed assessment of the wider transport network. I confirm that I agree with the transport issues and deficiencies identified in AT's assessment. Auckland Council has reviewed the substantive application for the Hunua Quarry Development and acknowledges that the proposal has the potential to generate adverse effects on the surrounding transport network and on road user safety. These matters have been comprehensively considered by AT. Subject to the matters identified in this memorandum and the recommended conditions of consent, I support the proposal from a traffic engineering perspective.

The application seeks to increase annual quarry production from approximately 2.94 million tonnes to a peak production of approximately 5.4 million tonnes, while extending the operational life of the quarry by approximately 50 to 81 years.

Based on the surveyed operational data, the existing quarry generates approximately 76 heavy commercial vehicle (HCV) movements during the AM peak hour and 64 HCV movements during the PM peak hour. Under the proposed development, HCV movements are anticipated to increase to approximately 161 movements during the AM peak hour (an increase of 85 movements) and 135 movements during the PM peak hour (an increase of 71 movements).

To accommodate the increased vehicle activity, the proposal includes the construction of a dedicated right-turn bay at the existing quarry access on Hunua Road. The proposal also includes the installation of Audio-Tactile Profile Markings (ATPM) (rumble strips) on the approach to the sharp bend near the quarry entrance, where two reported crashes occurred in 2023 and 2025, to improve driver awareness and road safety.

Auckland Council also acknowledges that Hunua Quarry has operated for over 100 years and is recognised as one of Auckland's three strategically significant aggregate sources, making an important contribution to the region's supply of construction materials.

3.0 Documents Reviewed

- Assessment of Environmental Effects and Application for Resource Consent – Hunua Quarry Development (AEE) prepared by Boffa Miskell, dated 30 March 2026
- Appendix B12.4.14: Traffic Assessment prepared by Commute Transportation Consultants, dated 26 March 2026
- “FTAA Hunua Quarry Development- Specialist Traffic Comments Response” prepared by Commute Transportation Consultants, dated 19 May 2026
- *Draft Conditions dated 19 May 2026.*

4.0 Additional Reasons for Consent Not included in AEE

There are no additional reasons for consent identified by AT that are not included in the AEE.

5.0 Specialist Assessment

During the review of the application, clarification and additional information were requested on the following transport-related matters:

1. Supporting plans demonstrating that the width of the internal haul roads, including any widening through bends, is sufficient to accommodate the simultaneous ingress and egress of the largest design vehicle (i.e. truck and trailer units).
2. Confirmation that the internal haul road will be sealed for a minimum distance equivalent to at least two truck-and-trailer lengths from the site access (or a greater sealed length where practicable).
3. Confirmation that any proposed lighting is limited to that required for the operational needs of the quarry and is designed to avoid light spill and adverse effects on neighbouring properties. Where applicable, supporting lighting information should be provided.

Following discussion with the processing planner, it was agreed that the proposed consent condition requiring the first 50 metres of the internal access road to be sealed (Condition 71) adequately addresses Item 2.

With respect to Item 1, I advised that additional information should be provided to enable an appropriate assessment of the internal haul road geometry. In particular, plans should identify the width of the temporary haul roads servicing each extraction stage and demonstrate how bends will be designed and treated to ensure the safe operation of truck and trailer units.

For Item 3, I agreed that confirmation should be sought regarding whether any additional lighting is proposed for the new haul roads and that any new lighting should comply with the relevant Auckland Unitary Plan lighting standards. While I considered that an updated lighting plan would be beneficial, particularly given the proposed operational timeframe of approximately 50–80 years, I acknowledged that this could be addressed as a note or through future detailed design rather than as a specific information requirement for the current application.

I also recommended that consideration be given to including a consent condition requiring the internal haul roads to be designed so that truck movements can be undertaken without reversing manoeuvres to access quarry material. In my opinion, minimising reversing movements represents good engineering practice and would assist in promoting the safe and efficient operation of the internal transport network.

The project lead and processing planner concluded that such a requirement was not within the scope of the resource consent, and this matter was subsequently considered by the Council processing planner. The project processing planner concluded that the design and operation of the internal haul roads fall outside the scope of matters that can reasonably be addressed through this consent, noting that the haul roads will be used solely by quarry operators and staff, with no public access. It was considered that the safe and efficient management of the internal haul road network is an operational matter that is appropriately managed by the quarry operator.

I acknowledge this conclusion and have not pursued the recommended condition further.

6.0 Recommendation

Draft Condition 50 – Lighting Plan

The applicant advised, in response to Council's preliminary request for further information, that additional consent conditions would be offered to address internal lighting. Emma Chandler recommended that the lighting condition be incorporated within the monitoring plan requirements, with a lighting plan to be prepared and submitted to Auckland Council for certification. This approach would ensure that the final lighting design demonstrates compliance with the relevant standards and would facilitate efficient monitoring of any future lighting-related issues.

I supported this approach and further recommended that the lighting plan be prepared and certified by a suitably qualified lighting engineer prior to submission to Auckland Council.

Draft Condition 76 – Material Deposited on Hunua Road

To minimise adverse effects on the surrounding road network and maintain road safety, I recommended that Draft Condition 76 be amended as follows (additional wording shown in bold |underline):

"Any material deposited onto Hunua Road must be removed **immediately or as soon as practically possible**. Roads must not be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of any stormwater drainage system, watercourses or receiving waters."

This amendment clarifies the expectation that any road cleaning activities are undertaken in a manner that protects the stormwater network and receiving environment while maintaining the safety and functionality of the public road.

7.0 Proposed Conditions and Conclusion

Auckland Council reviewed the applicant's draft consent conditions dated 19 May 2026. From a traffic engineering perspective, I recommended the inclusion of the following additional conditions.

Protection of Public Assets

Unless specifically authorised by this consent, the consent holder shall ensure that no damage occurs to public roads, footpaths, berms, kerbs, drains, reserves, or other public assets as a result of earthworks or construction activities. Should any such damage occur, Auckland Council shall be notified within 24 hours of its discovery. The consent holder shall be responsible for all costs associated with reinstating the affected asset.

Conclusion

I have reviewed the transportation aspects of the proposed Hunua Quarry Development, with particular emphasis on the internal quarry roading network, site access arrangements, and the interface with the public road network. I have also undertaken a high-level review of the potential effects on the surrounding transport network, noting that Auckland Transport has undertaken the detailed assessment of the wider road network and associated transportation effects.

Subject to the matters identified in this memorandum and the recommended consent conditions, I am satisfied that the proposed internal transport infrastructure can be designed and operated to support the quarry activities in a safe and efficient manner. I agree with Auckland Transport's assessment of the wider transport network and acknowledge the transport mitigation measures proposed by the applicant, including the right-turn bay at the quarry access and associated road safety improvements on Hunua Road.

While I recommended that additional consideration be given to the operational design of the internal haul roads to minimise reversing manoeuvres by heavy vehicles, it was ultimately concluded that these matters relate to internal quarry operations and are outside the scope of this resource consent. I acknowledge that position.

Overall, from a traffic engineering perspective, I support the proposal, subject to the recommended consent conditions and the implementation of the proposed transport mitigation measures.