## *Appendix B2: Technical Memorandum for Transport – Alternative to the Brynderwyn Hills*

# TECHNICAL MEMORANDUM

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| **To:** | Stacey Sharp & Blair Masefield, Beca (consultant planners) |
| **From:** | Nick Marshall, Transportation Strategy & Planning Lead, Whangarei District Council |
| **Subject:** | Transport Technical Memorandum - Alternative to the Brynderwyn Hills (FTAA-2603-1178) |
| **Date:** | 12 August 2026 |

## Executive Summary


1. This memo provides Whangarei District Council's specialist transport input on the Alternative to the Brynderwyn Hills (FTAA-2603-1178) (the Project) as lodged under the Fast-track Approvals Act 2024.
2. Overall, I consider the Project will deliver significant positive transport outcomes through improved safety, resilience, travel time reliability and efficiency along a strategic transport corridor of regional and national significance. The key transport effects relevant to Council's interests relate to:
    a. The interaction between the proposed State Highway and the local road network;
    b. Construction traffic effects on local roads, including those associated with heavy vehicle and quarry haulage movements;
    c. Changes in travel patterns through the Waipū township; and
    d. The future status and management of sections of the existing State Highway 1 corridor.
3. I generally agree with the Applicant's transport assessment and accept the proposed mitigation approach. I agree that potential effects on the local road network can be appropriately managed through existing corridor management processes, including via the Corridor Access Request (**CAR**) process and associated construction traffic management planning and ongoing engagement between the Applicant and Council.
4. No additional designation conditions or refinements to the Applicant's proposed designation conditions are sought to manage impacts on the local roading network.


## Section 1: Author Credentials

### 1.1. Statement of Qualifications and Experience

5. My name is Nick Marshall and I am the Transportation Strategy and Planning Lead at Whangārei District Council and a Chartered Engineering Technologist (CMEngNZ) with over 24 years' experience in

transportation engineering. My experience includes involvement in transport funding applications, Long Term Plan and Regional Land Transport Plan development, Activity Management Plan preparation, asset management, transport strategy and modelling, business case and programme development, transport input into resource consents, plan changes and private developments, and road safety investigations and education programmes.

### 1.2. Code of Conduct

6. I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses and agree to comply with it in the preparation of my assessments and participation in any subsequent expert or hearing processes. I confirm that the opinions expressed are within my respective areas of expertise and are my own, except where I have expressly relied on the work of others.

## Section 2: Approvals and Application Material Reviewed

### 2.1 Statutory Approval of Interest

7. From a transport perspective, Council's interests relate to the Notice of Requirement (designation) sought by the Applicant to construct, operate, maintain, and improve a State Highway and associated infrastructure.

### 2.2 Reference Documents

8. The following application documents have been reviewed and inform this technical memorandum:

   a. Substantive Application entitled: Substantive Application under the Fast-track Approvals Act 2024 – Volume A – Main Application, Alternative to the Brynderwyn Hills – Brynderwyn Hills section, prepared by NZTA Waka Kotahi, dated 2 April 2026, Revision A;

   b. Substantive Application entitled: Substantive Application under the Fast-track Approvals Act 2024 – Volume B – RMA Approvals, Alternative to the Brynderwyn Hills – Brynderwyn Hills Section, prepared by NZTA Waka Kotahi, dated 2 April 2026, Revision A;

   c. Design Drawings Vol A – Appendix D2 entitled: Brynderwyn Hills Section Indicative Typical Cross Section, prepared by NZTA Waka Kotahi, sheets RD-0101 – RD-0305, plan set dated 27 March 2026;

   d. Design Drawings Volume B – Appendix D2 entitled: Brynderwyn Hills Section Indicative Typical Cross Section, prepared by NZTA Waka Kotahi, sheets RD-0101 – RD-0305, plan set dated 27 March 2026;

   e. Assessment of Environmental Effects entitled: Assessment of Transport Effects, Alternative to the Brynderwyn Hills – Brynderwyn Hills section, prepared by NZTA Waka Kotahi, dated 2 April 2026 (henceforth referred to as AEE), Revision A;

   f. Schedule of impacted land entitled: Appendix G – Schedule of Owners and Occupiers of Land Adjacent to the Designation Boundary, prepared by NZTA Waka Kotahi, dated 24 March 2026; and

   g. Schedule of impacted land entitled: Appendix F – Schedules of Owners and Occupiers of Land Within the Proposed Designation, prepared by NZTA Waka Kotahi, dated 24 March 2026.

## Section 3: Technical Assessment

### 3.1 Transport Context

9. The Project proposes a new four-lane State Highway connection between Pukekāroro and Waipū as part of the wider Northland Corridor. The Project interfaces with a number of local roads and

communities within the Whangārei District, particularly in the vicinity of Waipū and the existing State Highway 1 corridor.

10. As Road Controlling Authority (**RCA**) for the local road network, Council's interest in the Project in regard to transport relate particularly to the effects on local roads that intersect with, connect to, or may otherwise be affected by the proposed State Highway. This includes consideration of road safety, network performance, asset management, construction traffic effects, and the future operation of the surrounding transport network.

11. In my review, particular consideration has been given to the interaction between the proposed State Highway and the local road network, including roads servicing Waipū and surrounding communities, together with any future changes to the status, function or management of sections of the existing State Highway 1 corridor following implementation of the Project.

## 3.2 Assessment of Effects

12. I have reviewed the Assessment of Transport Effects and supporting transport modelling prepared for the Project. Overall, I generally agree with the Applicant's conclusion that the Project will likely provide substantial transport benefits through improved safety, resilience, travel time reliability and efficiency on a strategic transport corridor of regional and national significance. The key effects are provided in the subheadings below:

**Improved Network Resilience**

13. I agree with the Applicant's conclusion that the Project will provide substantial transport benefits through improved safety, resilience, travel time reliability and efficiency on a strategic transport corridor of regional and national significance. The provision of an alternative route to the existing Brynderwyn Hills section of State Highway 1 will reduce the vulnerability of the corridor to natural hazard events and extended closures and improve connectivity between Northland and Auckland.

14. From a transport planning perspective, these resilience benefits are expected to support the reliable movement of people and freight and represent a significant positive outcome for both the local and regional transport network.

**Safety and Network Performance**

15. The Applicant concludes that the Project improves transport safety outcomes and I generally agree with that assessment. However, consideration is also required in relation to the safety performance of retained sections of the existing State Highway 1 corridor once traffic volumes reduce.

16. Whilst overall crash numbers are likely to reduce, lower traffic volumes and higher operating speeds on sections of the existing highway may alter the nature of crash risks experienced on those roads. In my view, ongoing consideration should be given to appropriate speed management and road environment treatments on retained sections of the corridor. I acknowledge that the responsibility for managing safety and network performance of the State Highway lies with the Applicant in their role as State Highway RCA.

17. On initial review, I queried whether the traffic modelling had adequately captured future travel demand associated with the improved connectivity between Auckland and Northland that is likely to arise as a result of the Project, including growth anticipated within the Marsden Point and Bream Bay area. I have since discussed this directly with transport representatives of the Applicant and consider that while this may influence future traffic demand on the local network, I do not consider it materially changes the overall conclusions reached in the transport assessment.

**Construction Effects**

18. The principal construction-related transport effects relate to heavy vehicle movements associated with earthworks and the transport of aggregate and construction materials to and along the local roading network. Final quarry supply locations have not yet been confirmed and some haulage routes may utilise local roads outside both the designation and State Highway network. Construction traffic has the potential to accelerate pavement wear and increase maintenance requirements on sections of the local road network. This is particularly relevant given the scale of the Project and the volume of material likely to be transported during construction.

19. In my opinion, these effects are capable of being appropriately managed through existing corridor management (CAR) processes, construction traffic management planning and ongoing engagement between NZTA and Council. Where local roads are subject to substantial construction traffic volumes, pre-construction and post-construction condition assessments provide an appropriate mechanism for identifying Project-related impacts on Council assets.

**Traffic Distribution and Intersection Arrangements in Waipū**

20. From a local road network perspective, the principal operational matters identified during my review relate to changes in travel patterns around Waipū, the interface between the proposed highway and retained sections of State Highway 1, and the future role of local roads connecting with the State Highway network.

21. Particular consideration was given to the proposed Waipū tie-in intersection and the relationship between this connection, Nova Scotia Drive, Shoemaker Road and the wider local road network. Depending on the final configuration of State Highway intersections, traffic travelling between the coastal route and the proposed highway may favour routes through Waipū township, potentially increasing traffic volumes within the village and affecting the operation and safety of local roads.

22. During review of the application, I noted that measures such as a Nova Scotia Drive roundabout, restrictions on turning movements at Shoemaker Road and median protection along State Highway 1 would assist in managing traffic movements, safety outcomes and travel demand within the wider network. These matters primarily fall within NZTA's responsibilities as RCA for the State Highway network.

**Future Ownership and Maintenance of Existing State Highway 1**

23. A further matter relevant to Council is the future status of portions of the existing State Highway 1 corridor once the Project becomes operational. At present, uncertainty remains regarding whether sections of the existing highway are revoked and the extent to which future maintenance responsibilities may transfer to Council.

24. Should sections of the corridor ultimately transfer to Council ownership, there may be implications for future operational expenditure and maintenance responsibilities. I acknowledge that these matters largely sit outside the scope of the fast-track consenting process but remain relevant to future discussions between the Applicant and Council.

**Overall Conclusions**

25. Overall, I consider that the Applicant’s transport assessment appropriately identifies and assesses the principal transport effects relevant to Council's interests. The Project is likely to provide significant positive transport outcomes through improved safety and resilience, while the key effects on the local road network principally relate to changes in travel patterns around Waipū, construction traffic impacts and future network management considerations.

26. Subject to implementation of the proposed mitigation measures and ongoing management through existing corridor management (CAR) processes, I consider the potential transport effects on Council's local road network can be appropriately managed.

## Section 4: Mitigation and Conditions

27. I have reviewed the proposed conditions relevant to transportation matters.

28. In general, I consider the proposed framework appropriately recognises NZTA's role as Road Controlling Authority for the State Highway network and Council's role as RCA for the local road network. The proposed reliance on the CAR process is generally supported as an appropriate mechanism for managing construction access and temporary occupation of local roads.

29. I do not recommend any additional designation conditions relating to operational transportation effects, however highlight for the Applicant that I consider that the following matters will be required to be addressed through the CAR process:

    a. Identification of proposed haulage routes where construction traffic is anticipated to utilise local roads for prolonged periods;

    b. Pre-construction condition surveys of local roads expected to experience significant construction traffic volumes;

    c. Post-construction condition surveys of those roads; and

    d. Remediation of any Project-related damage to local road assets attributable to construction activities.

30. Matters relating to State Highway intersection design, speed management, traffic control devices and future operation of the State Highway network are appropriately addressed through NZTA's statutory functions as RCA.

31. Overall, and on the basis of the above, I consider the proposed transport mitigation framework to be generally appropriate and that transportation effects on the local road network can be adequately managed through existing corridor management and asset management processes.