

Specialist Response Template – Fast-track Approvals Act 2024 – Substantive Application

Technical Specialist Memo - Stormwater

To:

Emma Chandler – Consultant Planner
Warwick Pascoe – Principal Project Lead

From:

Hillary Johnston – Consultant Specialist, Stormwater, Wastewater and Industrial Trade Activities, Specialist Input Unit, Resource Consents Department

Qualifications & Relevant Experience:

I hold the qualification(s) of Bachelor of Science in Environmental Science and Geography, and have 12 years of experience in regulatory stormwater assessments. I am a Certified Environmental Practitioner, a full member of the Environmental Institute of Australia and New Zealand, a member of WaterNZ, and an associate member of Engineering New Zealand. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation, and fast-track applications, and have appeared as an expert witness for Council before consent authorities and the Environment Court.

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 conferencing, 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:

31 July 2026

1.0 Application Description

Application and property details

Fast-Track project name:

Hunua Quarry Expansion

Fast-Track application number:

FTAA-2603-1185 (EPA reference)
BUN60464053 (Auckland Council reference)

Site address:

489 Hunua Road, Hunua

2.0 Documents Reviewed

The following documents have been reviewed in preparation of this memorandum:

- *Hunua Quarry Development, Substantive Application, Part B – Assessment of Environmental Effects and Application for Resource Consent – Version 1*, dated 22 June 2026, prepared by Boffa Miskell
- *Appendix B12.2b: Location Plan – Boffa Miskell Plans*, dated 27 March 2026
- *Appendix B12.3aa: Plans of the Proposal*, dated 27 March 2026
- *Appendix B12.4.5a & 5b: Ecological Assessment*, dated 28 March 2026
- *Appendix B12.4.6a & 6b: Mangapū Tributary Realignment – Preliminary Design and Effects Technical Report*, Revision G, dated 30 March 2026
- *Appendix B12.4.7: Erosion and Sediment Control Assessment Report, Hunua Quarry – Substantive Application under the Fast Track Approvals Act 2025*, Revision 2, dated 19 June 2026
- *Appendix B12.4.15: West Haul Road Culvert Design and Flood Risk Assessment*, dated 30 March 2026
- *Appendix B12.8.8: Hunua Quarry Management Plan*, dated March 2026
- *Appendix B12.9: Relevant Objectives, Policies and Statutory Assessment*, dated 30 March 2026
- *Appendix B12.10: Compliance Table for the Relevant Plans and Planning Instruments*
- *Appendix 4: Hunua Quarry Development, Graphic Supplement*, dated 16 March 2026
- *Resource Consent Conditions – Hunua Quarry: Symonds Hill Pit Development, Hunua Quarry Development [FTA368] Draft Applicant Condition Set*, dated 22 June 2026
- *Appendix 1: Request for Further Information Tracker*, dated 22 June 2026
- *Memorandum: Hunua Quarry – Auckland Council RfI*, dated 18 June 2026 and prepared by PDP

3.0 Additional Reasons for Consent Not included in AEE

The site is zoned *Special Purpose – Quarry Zone* and the expanded quarry footprint will extend into the adjoining *Rural – Mixed Rural Zone*. It is not subject to a Stormwater Management Area – Flow overlay.

Consent is sought as a **Discretionary Activity** under the National Environmental Standards for Freshwater (NES:F) Regulation 45A(4) for the taking, use, damming, or diversion of water within, or within a 100 m setback from, a natural inland wetland and under Regulation 45A(5) for the discharge of water into water within, or within a 100 m setback from a natural inland wetland.

The Applicant has applied for a private diversion and discharge of stormwater consent (referenced by Council as DIS60464131). Consent is sought as a **Discretionary Activity** under

E8.4.1 (A10). The Applicant has clarified that the entire quarry is considered impervious, including the quarry pit and haul roads.

The reasons for consent identified by the Applicant's Agents are agreed with.

The Application material does not identify whether any industrial or trade activities (ITA) are proposed within the expansion area, or confirm whether the proposed expansion includes any ancillary existing or future ITA (e.g. concrete batching or crushing). Notwithstanding this, it is noted that quarrying activities do not trigger consent under Chapter E33 of the AUP. Quarrying is not identified as a listed activity under Table E33.4.3, and the classification of *Recycling, recovery, reuse or disposal – Crushing, grinding or separation works* expressly excludes activities involving sand, gravel, rock or mineral products. On this basis, the proposed quarry expansion and associated extraction and processing activities do not require resource consent under Chapter E33. Confirmation of the nature and extent of any ancillary activities proposed within the expansion area would assist in confirming whether any additional consents are needed.

4.0 Specialist Assessment

Engagement

A site visit was undertaken to Hunua Quarry on the 4th February 2026. The Applicant's Team provided a comprehensive tour of the existing site operations including the existing quarry pit and associated sediment control ponds, a general indication of the expansion areas, and processing areas.

A response to preliminary Council RFI's was provided by the Applicant's Agent dated 22 June 2026. Responses within the tracking table (and supporting information) have been reviewed and considered as part of this assessment.

The proposed conditions of consent relating to the management of stormwater have been reviewed and refined based on discussion with the Applicant's Agents.

At the time of writing no additional further engagement or meetings with the Applicant's Team or Agents in relation to the management of stormwater have been undertaken.

Existing environment

Hunua Quarry is an established quarry that has operated in the area for over 100 years. Existing quarrying, processing, and associated activities are already undertaken on the site. The current proposal seeks to expand quarry operations into the Symonds Hill Pit area.

The proposed quarry expansion is located within the Mangapū Stream catchment. As described in the Application, stormwater runoff from the proposed quarry expansion will be managed, primarily through sediment retention ponds, and discharged to the Mangapū Stream.

Potential effects

Access to the expanded quarry area is proposed to be provided via new haul roads. The Stage 2 haul road will include two culverts, approximately 50 m and 75 m in length.

The primary contaminant of concern in relation to stormwater runoff is sediment (suspended solids). Potential sources of sediment are associated with overburden removal, stockpiling, the expansion of the quarry footprint, and vehicle and machinery movements.

The Application includes stream reclamation, stream diversion, and associated quarry development works resulting in the permanent removal of approximately 527 m of intermittent and permanent stream reaches and the realignment of approximately 1,200 m of the Mangapū Stream. The proposal will also result in the removal of approximately 0.22 ha of wetland habitat and the likely drainage of a further 0.23 ha of wetland extent.

Proposed mitigation

Stormwater

The management of stormwater effects associated with the proposed quarry expansion cannot be considered in isolation from the wider quarry water and environmental management frameworks. The proposed management of effects relies on an integrated approach incorporating stormwater treatment, erosion and sediment control, quarry dewatering, stream flow augmentation, and operational management measures implemented through management plans and proposed consent conditions.

The Application outlines that stormwater runoff generated from the proposed quarry expansion will be directed to erosion and sediment control devices, including sediment retention ponds, and treated prior to discharge to the Mangapū Stream. This includes stormwater runoff from existing and proposed haul roads associated with the quarry expansion.

Groundwater removed through quarry dewatering will be used for quarry activities including aggregate processing and dust suppression, with a proportion of water returned to the receiving environment to augment stream flows.

The augmentation of stream flow is proposed to maintain baseflow characteristics within the Mangapū Tributary and Mangapū Stream to mitigate the effects of quarry dewatering. The proposed consent conditions require augmentation of stream flows where monitoring identifies a reduction in flow, and include provision for ongoing monitoring and adaptive management of augmentation rates.

Operations will be managed in accordance with the Quarry Management Plan (QMP). The QMP put forward as part of the Application is a revision of the existing Hunua Quarry management

plan and has been updated to incorporate the proposed Symonds Hill quarry expansion, associated staging, progressive rehabilitation, and environmental management measures.

Flooding

Stage 2 Eastern Culvert

The AEE outlines that the eastern Stage 2 culvert is proposed within a permanent stream identified as being subject to High and Very High Flood Hazards and located within the 1% AEP floodplain. It is understood that the culvert has been designed to convey up to the 2% AEP event, with larger flood events attenuated behind the culvert, increasing the water level up to 300 mm upstream.

The Applicant has provided additional information indicating that the modelled 1% AEP flood level remains within the gullies. While the additional information reduces concern regarding overtopping of the gully margins, it does not fully demonstrate culvert performance under defined blockage scenarios or provide sufficient detail to confirm available freeboard to the haul road embankment crest during larger flood events.

Additional information should be provided to demonstrate the performance of the culvert under blockage conditions. Cross-sections showing the culvert configuration, modelled 1% AEP flood level, and available freeboard to the haul road crest should be provided. This information would clarify whether the predicted attenuated water remains confined behind the culvert within the gully system, or whether there is any increased risk of overtopping of the haul road embankment in larger events, leading to potential downstream flooding impacts.

Downstream Flood Impacts

The *Mangapū Tributary Realignment – Preliminary Design and Effects Technical Assessment* concludes that the proposed stream realignment will result in increases in flood levels of up to 50 mm within land owned by the Applicant and up to 15 mm within rural residential areas, with no effects on existing buildings. The Assessment is based on a preliminary channel design. Condition 65 of the proposed conditions of consent (dated 22/06) requires a further hydrological assessment to be undertaken based on the detailed design of the channel, prior to construction. While this provides an opportunity to confirm the hydraulic performance of the final design (prior to construction), consideration should be given to whether amendment to Condition 65 or a further condition requiring verification of flood effects based on as-built information following completion of the stream realignment, including confirmation that the final constructed channel achieves the anticipated flood level outcomes, would be appropriate. An additional Condition 65A has been suggested within Section 7 of this memo.

Natural wetlands

The proposal will result in the loss of approximately 0.22 ha of natural wetland habitat, with a further 0.23 ha of wetland habitat potentially affected through drainage associated with quarry

dewatering activities. The Application outlines that these effects are associated with the development of the Symonds Hill Pit and associated quarry infrastructure within the proposed quarry development area. In addition to wetland effects, the proposal includes the permanent loss of approximately 527 m of intermittent and permanent stream reaches and the realignment of approximately 1,200 m of the Mangapū Tributary.

The Applicant has proposed a mitigation and offset package to address effects on wetlands and streams. The extent of wetland and stream loss, and the adequacy of the proposed mitigation and offset and compensation package is assessed in detail by Council's ecological specialist.

5.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps. Preliminary comments on the Application were provided to the Applicant's Agents and have been partially addressed through the RFI tracking table and revised conditions dated 22 June 2026. These items were queried as part of the preliminary council RFI & associated consultation with the Applicant, however no response has been received at the time of writing. The need for minor clarifications remain which include:

- Confirmation of whether the application includes ancillary activities that would require consent under Chapter E33 of the AUP.
- Eastern culvert flood performance, including confirmation of upstream flood level effects during events great than the 2% AEP, with consideration of partial and full blockage scenarios and available freeboard to the haul road crest.
- Downstream flood impacts associated with the Mangapū Tributary realignment, including consideration of whether a condition requiring confirmation that the constructed channel achieves outcomes consistent with the preliminary flood modelling assessment would be appropriate.

6.0 Recommendation

Based on the information provided in the Application documents, and subject to minor clarifications outlined within this memo, I am satisfied that the proposed stormwater management approach is appropriate for the proposed quarry expansion, provided the Applicant complies with the proposed conditions of consent.

Accordingly, based on the information available, I support the application from a stormwater perspective.

7.0 Proposed Conditions

Comments on proposed conditions of consent (22 June 2026) are included as follows.

Note: Where a condition is not addressed within this assessment, it should be taken as having no comment or objection.

No.	Condition	SWWWITA Comment
115 (previously 105)	Water Quality Monitoring The Consent Holder must undertake the following monitoring during Earthworks following rainfall trigger event of 25mm in a 24 hour period and 15mm in a 1 hour period: (a) Visual inspections of all SRPs and DEB's; (b) Visual inspection of all receiving watercourses; (c) Manual inlet and outlet sampling from SRPs as detailed in Condition 106(c) <u>116(c)</u> .	16/06: Support inclusion however, there is no requirement for ongoing or routine stream quality monitoring during operations. Ongoing monitoring requirements are primarily focussed on groundwater abstraction effects, stream flow, and augmentation performance. 27/07: Comment dated 16/06 has been addressed by inclusion of Conditions 44 and 45. Reference to 106(c) will need revision and has been suggested.
44 (previously 105A)	Water Quality Monitoring and Management Plan The objective of the Water Quality Monitoring and Management Plan (WQMMP) is to outline the water quality monitoring requirements for the stream receiving environments to assess potential effects on water quality and enable appropriate management responses.	16/06: New condition suggested. 27/07: Addressed. Included as Condition 44.
45 (previously 105B)	The WQMMP must include: (a) A drawing showing the monitoring locations upstream and downstream of discharge points; (b) Details of the methodology for undertaking water quality monitoring; (c) The frequency of water quality monitoring; (d) The monitoring parameters to be tested, which must include turbidity (NTU), pH, and total suspended solids (mg/L); and (e) Details of the response actions to be implemented where downstream monitoring results indicate significant or sustained deviations in turbidity, pH, or TSS relative to upstream results that can be attributed to discharges from the site.	16/06: New condition suggested. WQMP typically also include the undertaking of baseline water quality monitoring to inform the establishment of monitoring parameters and trigger levels. If sufficient baseline data is not already available, this may be appropriate to also include. 27/07: Addressed. Included as Condition 45.
199-205 (previously 182-188)	Augmentation Water Quality Monitoring If monitoring required by Condition 182 <u>199</u> identifies an increase in the parameters listed in Condition 185 <u>202</u> caused by the exercise of this consent, the consent holder must prepare and submit to the Council a mitigation plan outlining mitigation measures to be implemented to address such effects.	Conditions 182-188 include monitoring requirements and performance criteria for augmentation water quality (temperature and dissolved oxygen). There are no explicit response requirements in the event this criteria is not met. It is recommend that consideration be given to including an additional condition in this respect. 27/07: Included within Condition 204, minor revisions required as suggested.

65	Downstream Flood Impacts Prior to finalising detailed design of the diversion channel, hydrodynamic modelling must be undertaken using the most up to date design to verify downstream flooding effects. Modelling outputs will need to demonstrate the following flood levels will not be exceeded: (a) 50mm in forested areas; and/or (b) Up to 15mm in rural residential area; and/or (c) No flooding effects on existing buildings.	16/06: It is understood that the modelling for the Mangapū Tributary Realignment has been undertaken based on a preliminary design for the realigned channel and that detailed design is still under development. Condition 65 included and will verify the outcomes of the detailed design of the channel prior to construction. 27/07: The Applicant's Agent should consider the appropriateness of a condition that would require the model to be rerun incorporating the finalised Channel design, to verify the effects of the downstream environment once the Channel has been constructed. Condition 65A has been suggested to address this.
<u>65A</u>	<u>Within 12 months of completion of the diversion channel, the Consent Holder must undertake hydrodynamic modelling based on the as-built survey of the completed channel and provide a verification report to Auckland Council. The purpose of the report shall be to confirm that the completed channel performs generally in accordance with the flood modelling undertaken under Condition 65 and that no material increase in downstream flooding effects has occurred as a result of the final constructed channel.</u>	