Technical Specialist Memo – Contaminated land

To:	Emma Chandler – Lead Planner & Warwick Pascoe – Principal Project Lead
From:	John Newsome and Maria Baring
Qualifications & Relevant Experience:	**John Newsome** • My name is John Newsome, and I currently hold one of the two Team Leader – Regulatory Engineering (South) positions with Auckland Council. • I hold a bachelor's degree in Earth Sciences from Waikato University. • I have 10 years' experience with a geotechnical engineering consultancy during the 1980s before joining Council in January 1991 as a development engineer. • I have nearly 35 years of professional experience in Resource Consents processing and other engineering aspects of land development with Manukau City Council and then Auckland Council and am familiar with a wide range of projects over this period. I have maintained my interest in geotechnical aspects of Auckland soil and provide advice to staff on projects as required. **Maria Baring** • My name is Maria Baring, and I currently hold the position of Project Manager at Auckland Council. • I hold a bachelor's degree in civil engineering from the University of San Carlos in the Philippines. I am a member of Engineering New Zealand [1010183]. • I am a project manager for premium applications at Regulatory Engineering South and have held this position for approximately three years. I was a senior development engineer prior and held the position for five years and a development engineer for eleven years. • I have approximately 19 years of professional experience in Resource Consents processing. In this position I have processed the following applications of a similar nature: • The major upgrade, including enabling works of State Highway 20A and associated local roads. • Earthworks and stormwater controls associated with the enabling works for the Manukau Rail at Hayman Park, Manukau City • Auckland Transport for Eastern Busway Stages EB2, EB3R, EB3C, and EB4L Link Road

	• Hindu Temple at 378 Ararimu Road, Drury
Preparation in Accordance with the Code of Conduct:	We confirm that we 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. We also agree to follow the Code when participating in any subsequent processes such as expert conferencing directed by the Panel. We confirm that the opinions we have expressed are within our area of expertise and are our own, except where we have stated that we are relying on the work or evidence of others, which we have specified.
Date:	27 July 2026

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Hunua Quarry
Fast-Track application number:	FTAA-2603-1185 (Council Reference BUN60464053)
Site address:	489 Hunua Road, Hunua

2.0 Executive Summary / Principal Issues

Geotechnical assessment review – John Newsome

The applicant's geotechnical assessment report gives me confidence that the author has a great understanding of the geology of the site, the characteristics and behaviour of materials in the quarry, and the effect of the proposed staged expansion works. In this regard I cannot see any issues or concerns from a geotechnical perspective should approval be given.

Other development engineering aspects – Maria Baring

The other main development engineering element of the proposal pertains to overland flow paths and

flooding. The provisions at H28.4 Special Purpose – Quarry Zone: H28.7.1 Matters of control (2) (b) (where outside the quarry pit), and E36 are considered relevant in this regard.

The application indicates that Stage 1 works will obstruct an existing watercourse, as the proposed earthworks are located within the watercourse corridor. The proposed earthworks and diversion of the watercourse have the potential to adversely affect flow conveyance and may increase the volume, extent, or frequency of flooding on surrounding properties.

The Flood Risk Assessment prepared by PDP (memorandum dated 30 March 2026) does not specifically consider the proposed Stage 1 diversion of the watercourse. However, PDP's subsequent update, 18 June 2026, requires detailed flood modelling to be undertaken during the detailed design phase to confirm that the proposal will not result in adverse flooding effects greater than those identified in the initial flood model, and offers a condition of consent requiring this.

3.0 Documents Reviewed

Part B: *Assessment of Environmental Effects and Application for Resource Consent – Hunua Quarry Development* (AEE) prepared by Boffa Miskell, dated 30 March 2026, and the following appendices specific to our area of expertise:

- Appendix B12.4.15 Flood Risk Assessment
- Appendix B12.3aa Plans of the Proposal_20260330
- Appendix B12.3ab Plans of the Proposal_20260330
- Appendix B12.3ac Plans of the Proposal_20260330
- Appendix B12.3ad Plans of the Proposal_20260330
- Appendix B12.3ae Plans of the Proposal_20260330
- Appendix B12.4.16 Hunua Quarry Development Geological and Resource Assessment_20260330
- Appendix B12.4.6a Mangapū Tributary Realignment – Preliminary Design and Effects Technical Report_20260330
- Appendix B12.4.6b Mangapū Tributary Realignment – Preliminary Design and Effects Technical Report_20260330
- Appendix B12.3c Written Approval_20260330
- Appendix B12.4.13 - Stream Crossing Report
- Appendix B12.8.7 - Stream Realignment Management Plan
- Appendix B12.7: Draft Conditions dated 9 June 2026
- Appendix B12.4.8: Geotechnical Assessment Report
- RFI Response memorandum prepared by PDP dated 18th June 2026 (Stormwater and Flooding)

4.0 Additional Reasons for Consent Not included in AEE

No additional consent is required.

5.0 Specialist Assessment

Geotechnical – John Newsome

From a geotechnical perspective, the provisions at H28.7.2 (2) of the AUP and E36.7.1 (4) of PC120 are relevant to the assessment of this application.

I have made myself familiar with this application and wish to comment specifically on the geotechnical aspects submitted. In particular, I have reviewed the Tonkin and Taylor Geotechnical Assessment Report dated March 2026 job number 1099889.1000 v5. This report gives me confidence that the author has a great understanding of the geology of the site, the characteristics and behaviour of materials in the quarry, and the effect of the proposed staged expansion works. In this regard I cannot see any issues or concerns from a geotechnical perspective, with respect to either internal bench stability within the quarry or external land stability outside the quarry footprint or subject site, should approval be given.

Whilst the report may not address the possibility of road works such as carriageway widening outside of the property, I don't foresee any particular concerns given the inherent overall stability of the greywacke rock mass present. Similarly with works to form the modified entranceway onto the site, there are no concerns regarding these works.

Streamworks and Overland Flow Path – Maria Baring

Earthworks are proposed within a mapped major overland flow path, being the Mangapū Stream Tributary. The applicant has commented that "the rules associated with overland flow paths do not apply to permanent streams as per definitions in the Auckland Unitary Plan and as modified by PC120." While I concur with this, consideration of potential adverse flooding effects from this diversion is still relevant and required.

A temporary bridge is proposed for a maximum period of five years to enable construction of the diversion channel and support progression of Stages 3 and 4 of the quarry development. The bridge will be located within the conveyance corridor of the watercourse.

The proposal also accommodates the reclamation of other tributaries and supporting minor overland flow paths within the quarry area.

The proposed earthworks and diversion of the watercourses and minor overland flow paths may adversely affect overland flow characteristics of the area or increase the potential volume or frequency of flooding on the surrounding site.

The *Mangapū Tributary Realignment – Preliminary Design and Effects Technical Report* [Appendix B12.4.6a and Appendix B12.4.6b] prepared by Boffa Miskell includes initial modelling for the 1% AEP 100 year flood event and identifies an overland flow path associated with the existing Mangapū Tributary alignment.

The PDP memo dated 18 June 2026 indicates that the proposed realigned channel is expected to perform similarly to, or slightly better than, the existing arrangement during smaller flood events. However, to fully assess the flood effects of the proposed stream realignment, detailed flood modelling will be required at the detailed design stage. A condition of consent has been offered requiring this. A condition of consent has also been proffered requiring a Stream Realignment Management Plan to be prepared, which includes a requirement for a refined hydrological assessment and methods for managing and diverting upstream flows. A minor amendment to this condition is recommended to make it clear that the methods for managing and diverting upstream flows should consider flooding matters as well as ecological.

Management of other minor overland flow throughout the site has not been commented on in the application, however I am satisfied that this can be adequately managed throughout works.

Overall, it is anticipated that with suitable management of all works any potential adverse flooding effects can be suitably managed and avoided. The offered conditions of consent pertaining to further flood modelling and the Stream Realignment Management Plan condition are considered appropriate to ensure management of these works is suitably undertaken throughout works, subject to minor amendments.

6.0 Section 67 Information Gap

We have not identified any Section 67 information gaps.

7.0 Recommendation

We have completed a high-level assessment based on the information available, and with additional /amended conditions as suggested below we support the proposal.

8.0 Proposed Conditions

The following comments have been provided based on the conditions document dated 14/07/2026.

A recommended condition was proposed by PDP Memorandum dated 18 June 2026 as follows:

" Prior to finalising the detailed design of the diversion channel, hydrodynamic modelling shall be undertaken using the most up to date design to verify the downstream flooding effects. The modelled final design must not result in adverse flooding effects greater than those indicated by the initial flood model levels stated in the Technical Report".

This has not been accommodated in the 14th July version of conditions as drafted by PDP, however an alternative is included at Condition 66:

66. 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.

This is considered appropriate.

The proposed Stream Realignment Management Plan (conditions 64 and 65) is considered appropriate and necessary to ensure the stream realignment is suitably managed. A minor amendment is, however, recommended to ensure this clearly requires detail on management of flooding/overland flow to avoid ponding and/or other adverse effects.

65. The SRMP must include the following

…

(e) methods for diverting upstream flows during the streamworks, including ***how upstream ponding and/or other adverse flooding effects up and downstream will be managed and avoided during works and*** *how sufficient …*

We support all other recommended conditions of consent and have no further comments.