

Geotechnical review register - comment summary sheet

Date	27/02/2026
Application number	BUN60459442
Application type	Resource Consent
Address	217 Kupe St, 106 Rukutai St, 95 Aotea St, Rukutai St Recreation Reserve, Aotea St Recreation Reserve
Reviewed document/s reference	Report titled "Substantive application for the Point Mission Bay to construct and operate a comprehensive retirement village (integrated residential development) on the s Kupe Street, 106 Rukutai Street, 95 Aotea Street, Rukutai Street Recreation Reserve, and Aotea Street Recreation Reserve, Orakei, Auckland", prepared by Bentley & Co. Lt November 2025.
	Drawings titled "The Point, 217 Kupe Street, Mission Bay, Auckland", prepared by CLC Consulting Group Ltd, Revision E, dated 13 November 2025.
	Drawings titled "The Point, Mission Bay", prepared by Warren and Mahoney Living New Zealand Ltd, Revision B, dated 8 November 2025.
	Report titled "The Point Mission Bay Geotechnical Assessment Report", prepared by Tonkin & Taylor Ltd, reference: 1098049 v4, dated 11 November 2025.

Reviewed by	JP/SB
Checked by	PM

Review outcome	Accepted
	For information only
	Unsatisfactory/Not accepted

Comment No.	Condition No.	Auckland Council Comments (27/02/2026)	Applicant Response (date)	
1		<p>Section 2.7 and 3.3 of the T&T report presents groundwater monitoring findings and assessment of groundwater effects, which makes the following conclusion:</p> <p><i>"Based on the monitoring undertaken, a design perched groundwater level has been adopted with a limiting pore water pressure of 30 kPa to represent the upper bound of observed transient perched conditions"</i></p> <p>The following points are noted from review of the groundwater information:</p> <ol style="list-style-type: none"> 1) The piezometer designs for BH01, BH02, BH05, BH06 were shallow standpipes (generally <6m) are underlain by generic backfill with no bentonite seal. As standpipe underfill is able to drain down to the inferred regional GWT, either recharge is greater than assumed (i.e. not short lived duration as inferred) or not truly 'perched' and intermittently connected with regional system (e.g. discontinuous leaky system). Lack of oxidation in the borehole core below the 'perched' GWT, indicates that it is likely permanently saturated the entire way (i.e. intermittent leaky system, not truly perched) and fully saturated conditions should be conservatively assumed below the upper most GWT. 2) Table 4.2 indicates 3 no. nested PZ (BH01, BH01a, BH02) for June 2025 monitoring, however the piezometer log for BH01a is not appended to the report. Shallow standpipes for both BH01 and BH02 extend from residual soils down into rock so it is unclear how the recorded data from these piezometers can be attributed to low pressure in 'perched' GWT only, when it is monitoring 2 systems with no consideration for interference between systems. 3) Groundwater pressures reported in Table 2.4: What depths or elevations are these pressures in relation to? It is unclear how the pressures relate to a 2 m response zone. There are no logger installation details provided to validate the recorded pressures (i.e. depth of installation, type and rating of logger). <p>From review of the presented information, there does not appear to be sufficient evidence of a "perched" groundwater system or that "groundwater pressures within these upper soil layers have fluctuated significantly over time".</p> <p>Further information is required to support the assumed perched groundwater system with limiting pore pressure of 30 kPa (i.e. commentary / response to points raised above). Alternatively, full saturation below the recorded upper groundwater levels should be considered for the geotechnical assessments.</p>		
2		<p>Section 3.3.4 presents an assessment of groundwater drawdown radius of influence (based on Theim-Dupuit Equation in accordance with Marinelli & Niccoli) and associated consolidation settlements.</p> <p>Please provide the supporting calculations for the consolidation settlements and radius of influence. We note the report 11.5 m radius of influence for 5 m of drawdown appears to be low.</p>		
3		<p>Section 3.5 and Appendix A of the T&T report presents an assessment of total ground settlements around the proposed excavations. Whilst Section 3.3.4 of the report explains how groundwater drawdown induced settlements have been determined, there is no explanation of how mechanical settlements due to wall deflection have been determined (and how these relate to the preliminary retaining wall analyses). Please clarify and / or provide further supporting information such as retaining wall analyses outputs (as mentioned in Section 3.4.4), mechanical settlement calculations, ground settlement profiles, etc.</p>		
4		<p>Section 3.5.2 of the T&T report states:</p> <p><i>"the proposed basement excavation is likely to have negligible effects (marginally "slight") on the neighbouring structures"</i></p> <p>Please clarify what is meant by the comment "marginally slight"</p>		
5		<p>Section 3.7 of the T&T report states:</p> <p><i>"Based on the preliminary development plans, a significant volume of earthworks will be required to form the finished levels across the site. This includes fill of up to 3.5 m thickness in the eastern parts of the site between Buildings 1 & 2"</i></p> <p>Please confirm if these recommendations in Section 3.7 remain applicable for the lodged civil plans (dated 13 Nov 2025).</p>		
6		<p>Section 3.7 of the T&T report states:</p> <p><i>"Areas of significant fill can result in consolidation settlement occurring within the underlying soils. This will be assessed during detailed design, with allowance for this settlement to occur prior to construction of the overlying buildings and/or pavements made within the construction programme where significant settlements are estimated. "</i></p> <p>Please provide analyses demonstrating that potential fill induced consolidation settlements will be within acceptable limits under the proposed new building platforms, or outlining measures to mitigate this geohazard.</p>		
7		<p>With regards to the landslide hazard risk assessment presented in Section 3.8 of the T&T report, please provide an annotated site plan and cross-section(s) depicting the location and extent (laterally and vertically) of the conceptual landslide hazard scenarios, as required for a complete EGM under Appendix 24.</p>		

8	With regards to the landslide hazard risk assessment presented in Section 3.8 of the T&T report, please provide justification of the likelihood category adopted for each landslide hazard scenario, including how the effect of climate change has been taken into account (Appendix 24, 3.1.2)		
9	T&T report Appendix A: Figure 1 Geotechnical Investigation Site Plan has no labels on the two cross-sections shown. One should be Cross-Section 1 and the other should be Cross Section 2. Please update this drawing to include labels for the two cross sections showing in Figure 1.		
10	T&T report Appendix A: Figure 4 is titled 'Rock Contour Isopach Site Plan'. This title is difficult to understand. A contour is a line of equal elevation while an isopach is a line of equal thickness. The same line is unlikely to be both a contour and an isopach. Please review and update this title as necessary.		
11	T&T report Appendix E - DRAFT Groundwater and Settlement Monitoring Contingency Plan Report: Definitions Alert Level states: <i>'Monitoring reaches a level close to, or equal to the design value, which is above the level where damage could occur, and requires review to assess the future trend'</i> What is the design value, and why would it be above the level where damage could occur, surely the design value should be below the level where damage could occur? Please clarify the definition for alert level and / or amend if necessary.		
12	T&T report Appendix E - DRAFT GSMCP Report: Table 1.1 'Potentially affected structures' This table makes no mention of 59 Te Arawa Street, yet the dwelling on this site is closer to proposed Building 5 than the dwelling on 104 Rukutai Street is to Building 4 (which is mentioned in the table). Please explain this situation.		
13	T&T report Appendix E - DRAFT GSMCP Report: Table 2.2 'Ground deformation mark trigger levels' proposes 10-15 mm for settlement alert levels and 20-25 mm for settlement alarm levels. The appended Construction Monitoring Instrumentation Plan (Figure 1) shows the proposed ground monitoring points (G1 to G12) to be located either between the 5 mm and 10 mm predicted ground settlement contour lines or outside of the 5 mm predicted ground settlement contour line. The proposed trigger levels therefore appear to be significantly greater than the assessed ground settlements and corresponding effects on the neighbouring properties. Please provide additional assessments or supporting information to demonstrate that the proposed trigger levels will remain within the assessed effects category, or amend the trigger levels to align with the predicted settlements.		
14	T&T report Appendix E - DRAFT GSMCP Report: Table 2.2 'Ground deformation mark trigger levels' Column 5 Differential Settlement Alert Level gives a limit of 1:450 between two ground monitoring marks (i.e., 0.127 degrees), while Column 6 Differential Settlement Alarm Level gives 1:550 between two ground monitoring marks (i.e., 0.104 degrees). This means the Alert Level differential settlement is larger than the Alarm Level, which does not make sense. Please clarify the discrepancy and amend the table as required.		
15	T&T Appendix E - DRAFT GSMCP Report: Section 4.2 'Response procedure if alarm levels are exceeded' states: Paragraph 5: <i>'Submit a written report, prepared by the SQEP responsible for overseeing the monitoring for certification by the team Leader Compliance Monitoring NW1, on the results of the condition survey(s), the mitigation measures implemented and any remedial works and/or agreements with affected parties within five working days of recommencement of works.'</i> and Paragraph 6: <i>'Not resume construction activities (or any associated activities, halted in accordance with paragraph (1) above, until any mitigation measures (recommended in accordance with paragraphs (4) or (5) above) have been implemented, to the satisfaction, to the satisfaction of a SQEP.'</i> Please explain the preferred sequence of events that is meant to occur based on these statements as the current drafting is not easy to understand.		
16	T&T report Appendix F - Proposed Conditions of Consent - Water Permit Design and Construction of basement and Retaining Walls Condition 3, states in part: <i>'...undertaken in accordance with the specifications contained in the report titles: "Geotechnical Assessment Report - The Point Mission Bay", prepared by Tonkin and Taylor, dated October 2025...'</i> This reference is different to the report of the same title submitted with the application except that the date of this report is November 2025. Please correct this reference.		
17	T&T report Appendix F - Proposed Conditions of Consent - Water Permit The Condition Survey required by Condition 10 must include the following says in part: (d) Photographic evidence of items (b), (c) and (d) via CCTV survey. This item (d) refers to itself. Please clearly explain what is intended by this sentence and re-word it if necessary.		