



1 March 2024

K200826-3

Goodland Group Limited  
PO Box 302247  
North Harbour  
Auckland

**GEOTECHNICAL RESPONSE TO COUNCIL SECTION 92 REQUEST FOR FURTHER INFORMATION - BUN60406128 (LUC60406129, SUB60406160), WAT60412104 & DIS60412103 PROPOSED SUBDIVISION - 2127 KAIPARA COAST HIGHWAY, MAKARAU**

**Introduction**

We confirm that we have received a copy of a Section 92 Request for Further Information (RFI) letter from Auckland Council (AC), dated 16 November 2023, and subsequent RFI email from Planning Plus Environmental Planning Consultants Limited (Planning Plus), dated 16 January 2024 with regard to the subject subdivision at 2127 Kaipara Coast Highway. KGA has been engaged to provide comment on Items 38 to 44 within the RFI letter, and Items 1 to 7 within the RFI email.

In generating this response, we have reviewed and referenced the following documents:

- Proposed scheme and earthworks drawings prepared by Crang Civil Consultants Limited (CCC), reference 1366, dated July 2023;
- The Ecological Section 92 RFI response letter prepared by Wildlands Limited (Wildlands), reference No. 5807b, dated January 2024; and,
- Our latest amended Geotechnical Investigation Report (GIR), reference No. K200826-1B, dated February 2024.

For reference, copies of the RFI letter and email are appended to the rear of this document.

**KGA Geotechnical Group Limited**  
***Supporting the Construction Industry since 1990***

7A William Pickering Drive | Albany | Auckland  
P O Box 302 361 | North Harbour | Auckland 0751  
09 478 6655

Unit 3, 201 Opawa Road | Hillsborough | Christchurch  
P O Box 7630 | Sydenham | Christchurch 8240  
www.kga.co.nz 03 343 5302

### **Response to 2023 RFI letter - Item 38**

*The wastewater site plans do not show all the surface waters that need to be considered under TP58. Please update the plans to show all surface waters including permanent and ephemeral streams, overland flow paths, ponds, wetlands, swamp, and stormwater drains. As part of your assessment, please give consideration to any minor overland flow paths shown on Auckland Council GeoMaps (these should be subject to a site-specific assessment). Please consider any stormwater management devices associated with the new accessways such as kerb and channel.*

Our amended GIR (reference K200826-1A) and corresponding KGA drawings, KGA 2 and KGA 2A to 2F, have been updated to include the requirements above. As discussed in Section 14.3 of our GIR, the surface waters (flow paths etc) have been taken from Wildland's Ecological Impact Assessment for the proposed development. The surface waters (flow paths etc) have been determined from a site-specific assessment. In addition, setbacks from kerb and channels of the proposed accessways have been implemented where preliminary wastewater fields are located upslope.

### **Response to 2023 RFI letter - Item 39**

*Please site the wastewater land disposal areas to be at least 20m from the nearest surface water. This is required to provide a level of conservatism. For example, setback distances must be measured from the edge of the stream bank rather than the centreline of a watercourse. Please provide updated plans/information in this regard.*

As per Section 14.3 of our GIR, the current assessment assumes an advanced secondary level of treatment. As per Table 5.2 of TP58, minimum recommended separation distances from surface water for a Soil Category 5 is 15m. In addition, the proposed Lots have a minimum 20m offset from the identified overland flow paths, which are planned to be completely revegetated. This results in the current wastewater dispersal areas to be offset from overland flow paths by a minimum 21.5m (1.5m offset from the boundary), we therefore consider the assumed 15m setback used in our assessment suitable.

In addition to above, Wildlands Ecological RFI report discusses stream widths in their response to Item 17. After a site walkover they have observed all streams onsite to be very narrow (30 to 60 centimetres). As such for preliminary assessment we consider using the centre line of the watercourses appropriate.

#### **Response to 2023 RFI letter - Item 40**

*The area upstream of the wetland areas northeast of the communal building appears to be low-lying swampy ground with elevated groundwater. This means the wastewater land disposal area from Lot 13 and the communal building do not comply with the minimum setback distance to surface water. Borelogs should be provided in this area to ensure the minimum setback to seasonal high groundwater table is achievable. Please apply for relevant consents for the communal building if permitted activity rules and standards cannot be achieved.*

As part of the response to this RFI, KGA has conducted 14 additional wastewater disposal area boreholes (WWAH1 to WWAH14) across the site to improve our understanding of the ground conditions where the initial subsurface investigation in the proposed wastewater dispersal areas was sparse. The boreholes were taken to an approximate depth of 1.2m below existing ground to confirm the potential presence of groundwater near surface. The location of the additional wastewater borehole logs is indicated on our Plans, Drawing No. KGA 1, 1A, 2, and 2A to 2F. The detailed borehole logs are presented within Appendix A of our amended GIR.

Wastewater boreholes WWAH8 (Communal dispersal area), WW AH8 (Lot 13 dispersal area), and WH AH9 (Lot 14) were drilled near to and/or within the proposed dispersal areas for Lot 13 and the Communal area. These boreholes indicate dry soils to a nominal depth of 1.0m (becomes dry to moist below), with no groundwater encountered. Notably, even considering a conservative 500mm increase for winter groundwater from the base of the boreholes, it remains over 600mm below current ground level, remaining compliant with TP58 separation distances.

#### **Response to 2023 RFI letter - Item 41**

*Please reassess the layout of Lot 4. Access to the building area should not be over the wastewater land disposal areas. Please provide updated plans.*

Our amended GIR (reference K200826-1B) and corresponding KGA drawings, KGA2 and KGA 2A, have been updated to include the requirements above.

### **Response to 2023 RFI letter - Item 42**

*The wastewater land dispersal area on Lot 2 appears to be located on wetland-type vegetation suggesting an elevated groundwater in this area. Please assess.*

As discussed in our response to Item 40, KGA has conducted 14 additional wastewater dispersal area boreholes (WWAH1 to WWAH14). Wastewater borehole WWAH3 was drilled within the proposed dispersal area of Lot 2. The borehole indicated dry to moist silt and clayey silt material to termination depth (1.2m), with no groundwater being encountered. As above, even considering a conservative 500mm increase for winter groundwater from the base of the borehole, it remains over 600mm below current ground level, remaining compliant with TP58 separation distances.

Onsite observations during our investigation did not suggest ponding or standing water near surface. In addition, Wildland's ecologists conducted further assessment of the wetland area immediately north of Lot 2 and have not identified any areas within the Lot 2 boundary as being significant wetland-type plant growth.

### **Response to 2023 RFI letter - Item 43**

*Some of the wastewater land disposal areas overlie areas of earthworks (Lot 9 to 11). TP58 states that 'fill may be poorly suited for land disposal of wastewater, depending on the composition and level of compaction. If this is the case, the proposed land disposal area should be relocated, the fill removed, or the land disposal system specifically designed to accommodate the soil constraints. Please relocated the wastewater land disposal areas off any soils subject to earthworks and/or compaction. Please provide further assessment in this regard/update plans.*

After review of CCC's latest subdivision earthwork plans, Lots 13 and 15 contain significant fill earthworks (Lots 9 to 11 are located in areas of cut earthworks). The areas of the potential wastewater dispersal located within the areas of proposed fill are highlighted (yellow hatch) on our Wastewater Dispersal Area Plan, Drawing KGA 2B, presented in Appendix A of our amended GIR. As discussed in our amended GIR, the wastewater dispersal assessment conducted as part of the Resource Consent application is preliminary only, with final layout and design to be confirmed during building consent detailed design for each Lot. Areas impacted by the fill earthworks will be highlighted in our Geotechnical Completion Report following completion of the site formation works.

Where wastewater fields are to be constructed within these fill areas, the designers will need to be the consider raised topsoil beds or alternate dispersal methods. The design will also need to take into account the potential for short circuiting along in the interface between the fill dispersal field material (appropriate restrictions/requirements will be placed on the Lots as part specific design at Building Consent stage). This could be reflected in the Auckland Council conditions.

#### **Response to 2023 RFI letter - Item 44**

*The vegetation within the wastewater land disposal areas is a fundamental component of the wastewater land treatment system. Plant species must be selected that are both water tolerant and have a high capacity for evapotranspiration to assist with the uptake and removal of contaminants. Appendix G in TP58 provides a list of suitable plant species. Please confirm the proposed landscape plant species within the wastewater land disposal areas are consistent with TP58.*

We note the above and confirm appropriate vegetation species will be planted within the wastewater land disposal areas. This must be a requirement at the detailed design stage.

#### **Response to 2024 RFI email – Item 1**

*Please provide a geomorphology plan to identify geomorphic features discussed in Section 2.2.*

Our amended GIR (reference No. K200826-1B) and corresponding KGA drawing, KGA1D, attached in Appendix A have been updated to include the requirements above.

#### **Response to 2024 RFI email – Item 2**

*Section 4.2 referenced a historical geotechnical report which is not presented in Appendix B. Please provide a copy of this report and include historical borehole information on the site plan and geological cross-sections.*

The referenced report prepared by KR Miller & Associates Report entitled “Geological Investigation of Aggregate Resources on the Goodlands Group Property, Makarau”, dated November 2004 has been included in Appendix B on our amended GIR. The machine boreholes MAK1 to MAK7 have been included on our Site Plan, Drawing No. KGA 1, and on the relevant cross-section (A-A’), presented in Appendix A of our amended GIR.

### **Response to 2024 RFI email – Item 3**

*It is noted that surcharge load was omitted in some section. Please apply suitable surcharge loads for proposed building platform and accessway in the slope stability analysis.*

A surcharge of 12 kPa has been added to the appropriate slope stability models. The revised assessment has been updated in our amended GIR (reference No. K200826-1B).

### **Response to 2024 RFI email – Item 4**

*The review found that Weathered Rock was not identified in the intrusive investigations. We require further evidence to substantiate the Weathered Rock unit shown in the slope stability models. If this could not be provided, the slope stability models would need to be updated to align with the intrusive testing results.*

Weathered rock was inferred from the results of the 2004 KR Miller & Associates Report. However, for conservatism the weathered rock material has been removed from all models except Cross-Section A-A', where it was observed in the quarry face. The revised assessment has been updated in our amended GIR (reference No. K200826-1B).

### **Response to 2024 RFI email – Item 5**

*Please clarify how the proposed wastewater dispersal fields have been considered in the slope stability analysis.*

The stability assessments conducted as part of our report are evaluating global stability of the proposed subdivision, with the models generally extending over 100m in horizontal distance. The effects of wastewater dispersal on subgrade generally extends to approximately 500mm below ground level. It should be noted that the dispersal rates are adopted to mitigate oversaturation of soils. As such, the current scale of the models are unsuitable for assessing the impacts of wastewater dispersal. Proposed wastewater dispersal areas identified are preliminary only, and will require detailed design and geotechnical assessment during building consent application for each individual Lot, as recommend in Section 15 of our amended GIR.

To satisfy this RFI item a critical case cross-section with a 30m wastewater dispersal area (lateral extent dispersing on 1 vertical on 3 horizontal slope (18 degrees) was prepared and assessed using the computer-based program “SLIDE 2” by RocScience.

In carrying out the analyses, the upper 500mm of material below the wastewater dispersal area was modelled assuming a fully saturated state (perched groundwater table with a soil  $H_u$  value of 1). The ground surface has been modelled utilising three separate case scenarios:

- Measured ground water conditions (based on a conservative 1.5m below existing ground, shallow than observed in our field investigations);
- Assumed raised groundwater conditions (which was modelled to reflect a hypothetical, critical case situation following a period of prolonged, intense rainfall; and,
- A seismic scenario using a horizontal peak acceleration of 0.19g.

For all scenarios modelled we have assessed potential circular and non-circular surfaces using the Spencer method of calculating the interslice forces. The geotechnical parameters used in the analyses are presented in Table 1 below:

**Table 1: Geotechnical parameters used in stability analyses.**

Stratum	Bulk Unit Weight $\gamma$ (kN/m <sup>3</sup> )	Effective Stress Parameters	
		Cohesion $c'$ (kPa)	Angle of Friction $\phi'$ (degrees)
Waitemata Group Soils	18	5	30
Inferred Dense Material	20	10	34

A summary of the Factor of Safety results from the analyses is presented in Table 2 below. For detailed results, the slope stability calculation has been attached to the rear of this letter.

**Table 2: Factor of Safety Results**

Cross-Section		Factor of Safety (FoS)		
		Measured Groundwater	Raised Groundwater	Seismic Loading
WW-WW' Critical Case Dispersal Field	Circular	1.7✓	1.6✓	1.0✓
	Non-Circular	1.7✓	1.6✓	1.0✓
<b>Council Accepted Minimum Factor of Safety</b>		<b>1.5</b>	<b>1.3</b>	<b>1.0</b>

✗ = unsatisfactory result,

✓ = satisfactory result

The results of the stability analyses indicate that the sloping ground have acceptable Factor of Safety results for all conditions in accordance with “Auckland Code of Practice for Land Development and Subdivision, Chapter 2: Earthworks and Geotechnical”, July 2022. As such, as a preliminary assessment we considered the proposed wastewater dispersal areas feasible.

**Response to 2024 RFI email – Item 6**

*It is understood that 0.12g was adopted for 1 in 150-year seismic event, however following CoP Version 2 ULS PGA should be used for the seismic assessment. Please update your analysis accordingly.*

The original report was submitted in 2021 prior to the standards change. However, the amended assessment has adopted a horizontal peak acceleration of 0.19g (required factor of safety of greater than 1.0). For conservatism, the models have also been assessed using effective strength parameters.

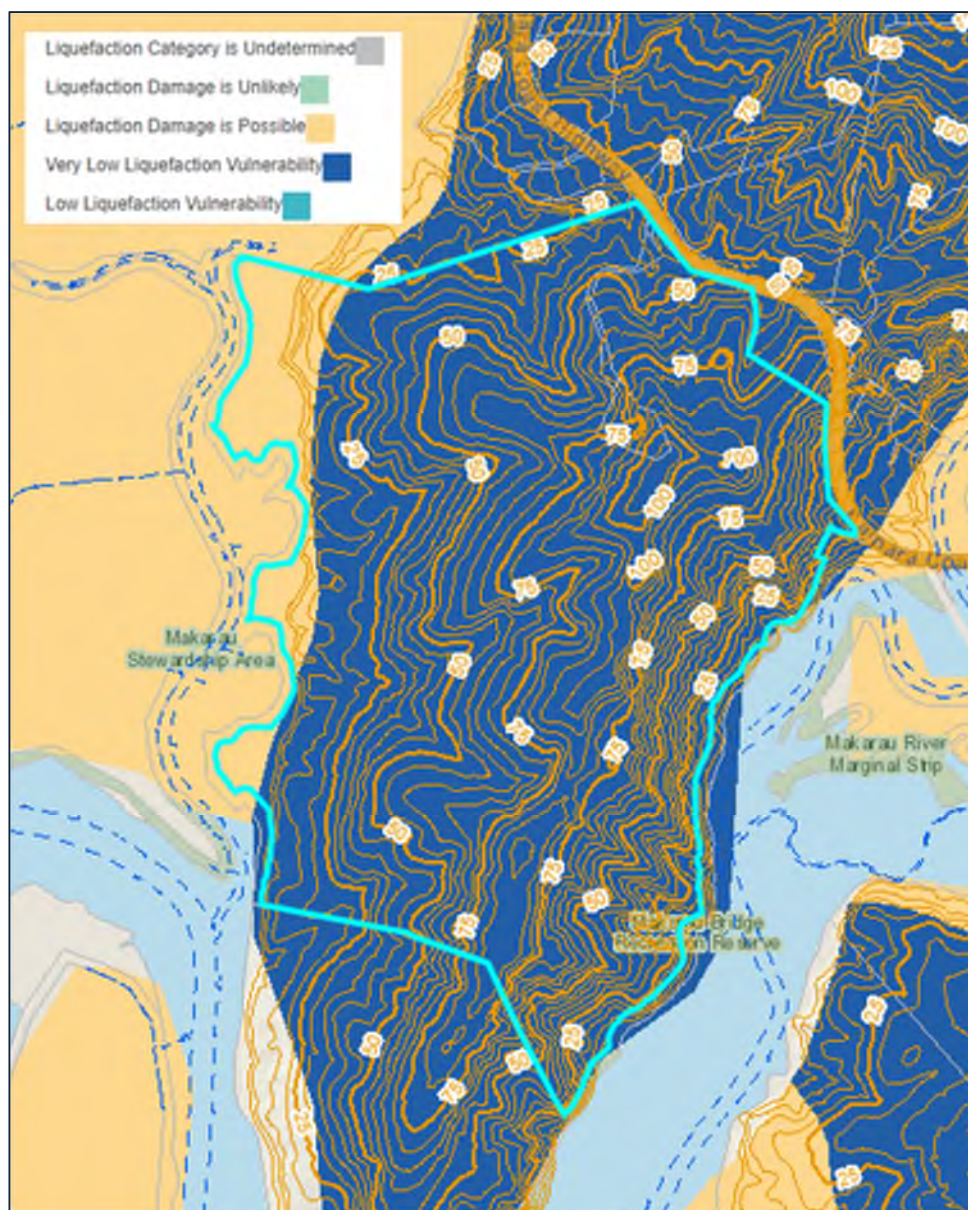
**Response to 2024 RFI email – Item 7**

*Please provide comments on liquefaction and lateral spreading risks.*

Soil liquefaction results from loss of strength during cyclic loading such as those imposed by earthquakes. Soils that are most susceptible to liquefaction generally consist of loose, saturated, uniformly graded sands and fine sands.

Based on the presence of the generally stiff to very stiff, cohesive, residual soils of the Waitemata Group underlying the site (within the upper 5m), we do not deem the underlying material to be at significant risk of liquefaction.

This is further verified by information presented on the Auckland Council GeoMaps web application which indicates the proposed development area of the site as being within an area of ‘very low’ risk of liquefaction damage, as indicated in Figure 1 below.



**Figure 1: Site Boundary location overlying the Liquefaction Vulnerability Areas sourced from Auckland Council GeoMaps web application (Not to Scale).**

## Conclusion

We trust that the above is sufficient to satisfy Items 38 to 44 within the 2023 RFI letter, and Items 1 to 7 within the 2024 RFI email provided to us. However, if you have any queries, please do not hesitate to contact the undersigned.

Yours faithfully,

p.p. KGA Geotechnical Group Limited



**Tom Rishworth**

BSc (Hons), MSc  
Engineering Geologist



**Tom Palastanga**

BSc (Hons), MEngSt (Hons), CMEngNZ, PEngGeol  
Principal Engineering Geologist



**Abilio Nogueira**

BE (Eng. Geol.), CMEngNZ, CPEng  
Director



**Yan Chan**

BE, ME, CMEngNZ  
Director

## Attachments:

Attachment A: S92 Letter

Attachment B: S92 Email

Attachment C: WW-WW' Slope Stability Calculations

16 November 2023

**Attention:**

The Urbanist Limited

Zoe Avery

Contact number: 021832908

Email address: [zoe@theurbanist.nz](mailto:zoe@theurbanist.nz)

Dear Zoe,

**Resource consent application – s92 Request for further information**

Application number(s):	BUN60406128 (LUC60406129, SUB60406160), WAT60412104 & DIS60412103
Applicant:	Abib (Oamaru) Limited
Address:	2127 Kaipara Coast Highway, Kakanui
Proposed activity(s):	<p>This application by ABIB Oamaru Limited (Applicant) relates to a proposal for this site of around 138ha to undertake a cooperative farming development to be held by up to 25 owners (Proposal) within Rural - Rural Coastal Zone, Kaipara South Head and Harbour Coastal Area and Rural, Rural Production Zone. The Proposal includes a subdivision to create 25 lots at an average size of approximately 3,675m<sup>2</sup>, each with a shared balance lot of approximately 128.9 hectares (ha) of farmland.</p> <p>Applications to discharge stormwater (E8) within 100m of wetlands and undertake earthworks and vegetation removal within 10m of wetlands (NES(FW)).</p>

**WAT60412104 (NES(FW)) & DIS60412103**

Thank you for the updated AEE received 8/10/2023 related to the additional consents and assessment noted in my s91 RMA letter dated 4/10/2022, and my letters of 7/12/2023 and 21/11/2023. This has allowed applications WAT60412104 (NES(FW)) & DIS60412103 (E8, stormwater discharge) to be accepted under s88 RMA, and be taken off hold.

These applications have been reviewed by Council specialists, and s92 RMA questions on these applications are included below. As discussed and requested previously, WAT60412104 & DIS60412103 will be processed together with BUN60406128. We understand that your request for public notification also applies to WAT60412104 (NES(FW)) & DIS60412103 (E8) and are proceeding on this basis.

I also note the Schedule 4 RMA assessment now submitted with the updated AEE thank you.

Section 92 RMA- BUN60406128 (LUC60406129, SUB60406160), WAT60412104 & DIS60412103

This letter is a request for further information that will help us better understand your proposal, including its effect on the environment and the ways any adverse effects might be mitigated.

**Requested information**

Planning

1. The Record of Title refers to the Conservation Act and protection of natural features. Please clarify what area this protects. The purpose of this request is to ensure that it is clear what natural areas on the site are already legally protected, and which are proposed for (new) legal protection.
2. Please note that the NZTA affected parties' approval contains a lapse date, being February 2024; it is unlikely that the application will be determined by this time. Please provide an updated approval.
3. The community building/ facilities form part of the proposal and requires consent. Please provide plans for the proposed building (site plan to scale, floor plans and elevations) and surrounding areas, and detail how this will operate and be managed. Please also provide details of the proposed servicing, and confirm this will be a permitted activity. Section 6 of the Design Guidelines is noted where it refers to kitchen, meeting room, bathrooms and 20 car parks. The plans in Attachment K of the LVEA are also noted but further information and assessment are required.
4. Please provide a Cultural Values Assessment from Ngā Maunga Whakahii O Kaipara Development Trust for the application. It is noted that you are having difficulties getting responses from Ngā Maunga Whakahii O Kaipara Development Trust, however a CVA is considered necessary to assess the application.
5. Please confirm that a current copy of the proposal has been provided to Manuhiri Kaitiaki Charitable Trust; some aspects of the proposal (for examples earthworks) do not appear to be the same as noted in the application documents.
6. Please provide copies of the e-mail/s to all iwi with an interest in the area, as noted in section 8.1 of the AEE.

7. Please confirm the management (including any stock grazing) and protection proposed for the Pa.
8. Please confirm if any works to trees within the legal road is proposed and demonstrate that rules and Standards in E17 are met.
9. Please provide details of the proposed signage.
10. Please confirm if any lighting (such as of the communal areas, roads etc) is proposed and demonstrate that rules and Standards in E24 are met. Comments regarding lighting on individual lots is noted thank you.
11. Please confirm that relevant standards in E11 and E12 are met. If not, please apply for the relevant consents.
12. As noted in previous correspondence and the AEE, the western extent of the site is indicated as containing Highly Productive Land and the National Policy Statement on Highly Productive Land is relevant. While assessment in the AEE is noted, please provide a detailed analysis in the context of the NPS- HPL, having regard to the language used in this document (such as “avoid”) and the limited exclusions present.
13. Please provide further assessment of rural productivity, including **how this will be maintained after the subdivision, and how reverse sensitivity will be managed**. The report from Hollis & Schofield is noted, but this focuses on productive uses after the subdivision is completed.
14. The application proposes a number of sites, and these are all significantly smaller than provided for in the zone. Please provide a detailed analysis of potential adverse rural character and amenity effects.

*Please note that the scale of the development in this location is a fundamental concern, both in terms of potential adverse effects and in relation to relevant objectives and policies.*

15. Please provide a plan that identifies all natural features on the site, the proposed earthworks, lot boundaries and roads. Crang Civil Plan 900 and the Wildlands Appendices are noted however this request seeks to understand what works are proposed in relation to each specific feature, associated setbacks etc.

*Please note similar questions from Council's Ecologist also; one plan could be supplied to address all questions.*

16. Please confirm the vegetation on site that meets the SEA threshold in the AUP(OP), identify this on the plans and confirm the size of these areas.

*Please note similar questions from Council's Ecologist also; one plan/ response could be supplied to address all questions.*

17. Please confirm the width of streams and watercourses on the site, as determined by a surveyor, and confirm if esplanade reserves are required to vest. The reference to the Ecological Impact Assessment is noted, but this report does not appear to assess these features in the context of potential esplanade reserves, or utilise surveying practises to confirm width.
18. The application proposes access via a series of JOAL. Please confirm how these are proposed to be managed, and how ongoing maintenance can be assured.
19. The Design Guidelines (section 3.5) refer to yard setbacks that are less, in some cases, than the AUP requires (noting also AUP(OP) definitions of front vs rear sites). The AEE refers to this on pages 28 and 29 and seeks consent as a non-complying activity. Can you please clarify what is sought in this regard and on what sites (for example construction of a single dwelling within yard setbacks once the new sites are created would typically be a restricted discretionary activity).
20. The application proposes fill retaining walls and fencing associated with the new access. It appears these would meet the AUP(OP) definition of "building" and are located within the front yard. Please confirm if consent is sought in this regard and provide the relevant assessment.
21. The Design Guidelines refer to accessory buildings. Is it also proposed that these would be located within the identified building platforms shown on the scheme plan?
22. Please confirm if any restrictions are proposed relating to additional dwellings on the balance site.
23. The Design Guidelines (section 6.6) refers to stream crossing associated with the pedestrian/cycle way. Please confirm the works proposed, and provide assessment demonstrating that this is a permitted activity.
24. The Engineering Report states that all private roads will be sealed. Please provide information on finishing, and provide rural character, visual and landscape assessment in this regard.
25. Please confirm that all works, including those associated with the entranceway construction, remain within the application site boundaries or the legal road. Figure 18 in the LVEA for example appears to indicate a retaining wall in another property.
26. Section 8.6 of the Ecological Impact Assessment refers to earthworks and vegetation removal close to stream and/ or wetlands. Please confirm which plans show these works, or provide a plan showing this.  
  
*Council's streamworks specialist has requested a similar plan; one response could be provided to address these questions.*
27. Section 8.6 of the Ecological Impact Assessment refers to mitigation planting. Please provide a planting and maintenance plan in this regard.
28. Section 8.14 of the Ecological Impact Assessment refers to restoration and revegetation. Please:

- Provide planting and maintenance plans for this planting,
- Provide an assessment of the restoration and planting proposed, and how this compares to the outcomes sought by the AUP(OP), including Standard E39.6.4.5.

*Please note similar questions from Council's Ecologist also; one plan/ response could be supplied to address all questions.*

29. The proposed walking and cycling paths appear to move within some of the proposed covenants. Are these paths to be excluded from the covenant areas? This is not indicated on the scheme plan. How will edge effects in this regard be managed, including potential weed incursion?
  30. The application refers to waste and recycling being managed by a private contractor. Figure 1 of the Design Guidelines is noted in this regard, but the area identified appears to be away from the internal road and it is unclear how residents and trucks will access this area safely, and be able to maneuver. It is also unclear how the communal waste area will be managed or what its appearance will be. Please clarify and provide relevant plans (including tracking curves).
  31. The AEE refers to a condition that only one dwelling may be on Lots 1-26 but goes on to state that this restriction does not relate to Minor Dwellings or Workers Accommodation. Noting the small sizes of these sites, please clarify why you consider a similar restriction for Minor Dwellings or Workers Accommodation is not required.
  32. The AEE, in conditions, seeks a lapse date of 10 years. Noting that the engineering report indicates earthworks are to be completed in the next earthworks season, please clarify why a 10 year timeframe is sought and is justified in this case.
- Note: This appears a considerable time for a project of this nature.*
33. The scheme plan refers to 26 new lifestyle sites but the landscape plans appear to indicate 25. Is this correct?
  34. The Kaipara Coast Landscape Architecture Plans and the scheme plans indicate the planted wastewater irrigation fields. The scheme plans don't appear to indicate that these areas are to be legally protected. Is that correct?
  35. Lots 9- 12 also appear to require access over Lot 158 but will not own part of this JOAL. The right of way easement is however noted. Was this intended?
  36. Lots 1- 8 also appear to require access over Lot 156 but will not own part of this JOAL. The right of way easement is however noted. Was this intended?
  37. Please confirm what the square to the south of Lot 14 on scheme plan SP495 is indicating.



43. Some of the wastewater land disposal areas overlie areas of earthworks (Lot 9 to 11). TP58 states that 'fill may be poorly suited for land disposal of wastewater, depending on the composition and level of compaction. If this is the case, the proposed land disposal area should be relocated, the fill removed or the land disposal system specifically designed to accommodate the soil constraints'. Please relocate the wastewater land disposal areas off any soils subject to earthworks and/or compaction. Please provide further assessment in this regard/ updated plans.
44. The vegetation within the wastewater land disposal areas is a fundamental component of the wastewater land treatment system. Plant species must be selected that are both water tolerant and have a high capacity for evapotranspiration to assist with the uptake and removal of contaminants. Appendix G in TP58 provides a list of suitable plant species. Please confirm the proposed landscape plant species within the wastewater land disposal areas are consistent with TP58.

## Ecology

45. The application proposes orchards adjacent to natural areas proposed for protection. Please advise the reason for these locations and provide assessment on the potential ecological effects of this co-locations.
46. The AEE refers to stock- proof fencing on the parent site boundaries. How is it proposed to prevent stock from within the site, such as that on the proposed sites or on the balance farm lot, entering the covenant areas?

Comment: It is noted that different fencing layout is shown on Attachment E from Kaipara Coast Landscape Architecture, titled Goodland Coastal Farm Plan.

47. A plan is requested as per E39.6.1.6 clearly identifying SEA areas and other areas of indigenous vegetation, wetlands, and watercourses on site.
48. Please provide an assessment of areas of vegetation proposed for protection that are already identified as SEA or areas meeting the factors for Significant Ecological Areas in Policy B7.2.2(1) and confirm the areas (m<sup>2</sup>) each of the areas within the site cover.
49. Please quantify how many lots would have had the potential to have been developed under the rural subdivision Rules E39.4.2(A16), (A17C) and or (A18) as per Table E39.6.4.4.1 and Table E39.6.4.5.1 through bush, wetland and revegetation protection at the site. It is acknowledged that this is not the basis the application is being applied under but does set the baseline for the provisions for subdivision that may be possible under the unitary plan rules. Limited in-situ subdivision is provided for under the Unitary Plan in rural zones.
50. While most of the vegetation appears to be correctly mapped there are some areas that a greater area is covered as mapping is shown at a course scale. One location noted is on the southern edge and northeastern end of wetland 11 (areas 15 and 16 in the ecological assessment) where wetland rushes are located beyond the mapped area. Correct vegetation extent is especially important in the case of wetlands where wastewater dispersal fields are proposed in proximity to these to ensure required offset is provided. Please provide updated plans and information.



51. While the encroachment area as a whole of the site has been indicated the earthworks area within 20m of wetlands and streams have not been quantified. The table in section 8.6 of the ecological report indicates earthworks within 10m of wetland but not within 20m. It also does not indicate earthworks within 20m of stream. Confirmation is required not just of encroachment areas but vegetation clearance and earthworks areas within these. Please provide this information and provide the relevant assessments.

52. Wetlands protected under rural subdivision rules of the AUP(OP) require a 20m setback as outlined by Note 3 for Table E39.6.4.4.1(3). As such it is expected that this setback is provided as far as possible for the development areas for both building footprints and wastewater dispersal fields, and roads. Please either amend the proposal or provide further justification and assessment of what's proposed.

Comment: Significant earthworks are required around wetland 13 and the number and location of lots and driveway location should be reconsidered in this area. Providing a greater setback means that some of the other lots may also need their location adjusted or the total number of lots reduced to better take into account the site constraints

53. Culvert 5 is proposed to be length of 12 metres. This is a wide length for one lot and much wider than the current crossing area. The width should be reduced particularly given the wetland located flush with the upstream end of the culvert which would likely be impacted by culvert of this length.

Please either amend the proposal or provide further justification and assessment of whats proposed.

54. Deer are known to be present in the area. Deer should also be added to pest control proposed at the site; please update.

55. Please advise if the existing driveway and associated culvert to the farm dwelling will be disestablished

## Archaeology

56. To safeguard the pa and associated sites on the property, please provide a Historic Heritage Management Plan that effectively outlines the requirements (or protocols) for the management and protection of the historic heritage /archaeological sites through the development and ongoing use of the property as a residential area and operational farm that includes substantial areas of vegetation

The Historic Heritage Management Plan should include (but is not limited to):

- Conservation recommendations for managing the pa site (Q10/1122) (fencing/ stock erosion, vegetation management and access);
- Protocols for the ongoing management of sites Q10/1124, Q10/1125; Q10/1123; Q10/1127, Q10/1128; Q11/1130 and Q10/1131 as part of revegetation areas; including protection mechanisms around access and ongoing vegetation management.
- Set timeframes for implementation, review and monitoring of the state and condition of all sites Q10/1122, Q10/1124, Q10/1125; Q10/1123; Q10/1127, Q10/1128; Q10/1129, Q11/1130 and Q10/1131 as well as agreed roles and responsibilities.

Without practical (straightforward) guidelines for the ongoing management, protection, and monitoring of the archaeological sites on the property, the development, revegetation and ongoing farming/use could adversely affect the condition of the archaeological sites, and their access, amenity and long-term survivability. The provision of a Heritage Management Plan will provide a structured and informed approach to the sites' management that will safeguard their stability and the integrity of the remaining features for present and future generations. A condition to this effect is provided at section 9.2.(e-f).

*Note: The Council's Heritage Unit agrees with the archaeological assessment recommendation that an HNZPT (2014) Archaeological Authority is required from Heritage NZ before any work can be carried out that may affect recorded and/or unrecorded archaeological sites. The applicant is advised to obtain this Authority.*

## Landscape & Visual

57. What is the proposed materiality of the retaining walls?
58. Section 5.1.1 of the LVA from Kaipara Coast Landscape Architecture discusses the potential adverse effect of the proposal on the ONL and on the HNCA. The LVA notes that (in particular) the values of the HNCA are linked to the unbuilt and rural / natural character of the landscape. Further, it was noted in Schedule 8 of there AUP that ". the peripheral modification associated with the reclaimed flats disrupts the sense of cohesion and intactness within the wider coastal environment.."

It is acknowledged that the proposed areas for development are separate from the ONL and HNCA, but it is questioned whether the development of a sequence of clusters of settlement, with associated infrastructure may have the potential to detract from the perceptual naturalness of the HNCA. Please provide further assessment in relation to this matter.

59. In 5.1.1, the LVA discusses the biotic / biophysical benefits that will be provided, notes that the perceptual elements of landscape character will be advantaged by the enhancement of the natural vegetation patterns. It opines that the enhanced vegetation patterns will enable the integration of the proposed development, and that this will be facilitated by the design guidelines. The relevant AUP(OP) provisions have a strong focus on the maintenance and enhancement of rural character, amenity values and biodiversity values. Given the existing pastoral character of the Harbour hinterland hills with very low existing density of development, the integration of built form, and landscape patterns associated with the domestic use of the landscape (including roading, accessory buildings and structures, gardens etc) is potentially challenging and some reliance is therefore placed on the guidelines achieving the stated objectives of the development.

The Design Guidelines explain that prior to Building Consent being lodged, the plans must be reviewed against the guidelines by a design review group.

A consent notice condition relating to the Design Guidelines is proposed in the AEE (and it is agreed that references to development controls would be necessary in a consent notice condition) however this approach would require review and approval by both the design review group and the Council.

- a) How is the design review group proposed to operate, and who will be on this group?
  - b) The language used in some aspects of the Design Guidelines enables a degree of flexibility and could result in different conclusions by the design review group and the Council. Is this your expectation (i.e. that this could occur) and that this could require individual future owners to obtain consents (such as 221 RMA variation)?
60. When considering the effect of the proposed built form and associated infrastructure on the character of the landscape, what assumptions were made in the LVA - ie, was the potential for a dwelling, minor household unit and accessory building (cumulatively up to the maximum allowable coverage of 500m<sup>2</sup>) on the majority of lots, as well as the subdivision roading / driveways, retaining walls, communal building and car park taken into account in the assessment?
61. The LVA determines that the landscape effect of the proposal will be very low, that the effect on the ONL and HNCA will be positive, that the effect on rural character will be very low, and that the potential adverse visual effect will be very low. Since the establishment of a vegetative structure on the Site is a key integrative and mitigative measure proposed in the application, will the level of adverse effect be very low (or positive) from the outset, or is a temporary elevated level of adverse effect anticipated? What will temporary effects be?

### Streamworks

62. The application reports that the culverts are a permitted activity. However insufficient information has been provided with the application to confirm this assessment. Please provide:

- Culvert designs in plan form
- Culvert design calculations
- Stream information (for assessment against Regulation 70(2) of the NES:FW)
- The location of all culverts
- An assessment of each culvert against the permitted activity condition of Regulation 70(2) of the NES:FW.
- An assessment of each culvert against the permitted activity standards associated with rule E3.4.1(A32).

This information is required to confirm the culverts are a permitted activity. Note that following the receipt of the requested information, should any individual culvert or the culverts cumulatively not meet the permitted activity rules, then an updated effects assessment will be required, and it is likely that measures would be required to address any identified effects.

In preparing your response to the above, you are advised to refer to the definition of culvert in the AUP and NES:FW, which does not cover such structures that have an inlet/outlet to wetlands.

Additional November 2023 comments: Multiple proposed culverts have inlets within wetlands. These structures are therefore inconsistent with the definition of a culvert from the AUP:OP and the NES:FW, and would therefore be considered as a pipe (and reclamation in terms of activity).

Notwithstanding the above point, the applicant's engineers have provided the requested assessment; however there is not the necessary supporting information to confirm compliance with the permitted activity condition of Regulation 70(2) of the NES:FW principally as the width of the streams has not been provided.

The collective length of the 'culvert' structures exceeds 30 m, this cumulative length, exceeds the permitted activity standard (E3.6.12(2)(a)) that relates to rule E3.4.1(A32) from the AUP:OP. IF these structure were to be considered as 'culverts' consent would therefore required under rule E3.4.1(A44). As a discretionary activity (for culverts) or non-complying (for new reclamation) under the AUP:OP it would be envisioned that a measure for address adverse effects is proposed as part of the application.

Response is required to these points and the various requests therein remain.

63. The application material shows a number of stormwater outfalls that are proposed; however there is no design information to confirm that these outfalls can be designed to the permitted activity standards associated with rule E3.4.1(A39).

Please provide the necessary design calculations to confirm the outfalls are a permitted activity; and a plan that shows the outfalls relative to the wetlands

November 2023 comments: A location plan has been provided; however the length of the erosion  
135 Albert Street | Private Bag 92300, Auckland 1142 | [aucklandcouncil.govt.nz](http://aucklandcouncil.govt.nz) | Ph 09 301 0101

protection at the outfall has not. Specific design information is required to support the response that has been provided by the applicant's engineers. As this relates to a reason for consent under the AUP:OP it is not considered appropriate to defer this detail to building consent stage.

Request remains.

64. Section 8.2 of the EclA refers to the reclamation of permanent and intermittent streams; yet reclamation has not been identified as a reason for consent or assessed in the AEE. Please clarify the nature of this activity.

November 2023 comments: In light of question 62 above, this request remains.

65. For all in-streamworks, please provide a streamworks methodology to confirm compliance with the relevant permitted activity standard that relates to such works being carried out in accordance with best practice erosion and sediment control measures to minimise any discharge of sediment.

November 2023 comments: Following the site visit it is considered this point needs to be considered in terms of the culvert removal and construction in respect to the potential to drain any up-gradient wetlands.

Request remains.

#### Regional earthworks

66. Please provide a construction methodology for the Sediment Retention Ponds (SRPs), that addresses how these sediment controls will be physically constructed on-site, including how these areas will be accessed. From the review of the application material it would appear that the earthworks that the SRPs would provide sediment control to would need to be completed or substantially advanced prior to their construction. Please clarify how SRPs will be constructed, given the earthworks they would be controlling are needed for their construction?

November 2023 comments: The response does not address the main purpose of this request and has not considered how the areas where SRP are proposed will be accessed in a manner that reduces the potential for erosion to occur and that minimises sediment generation.

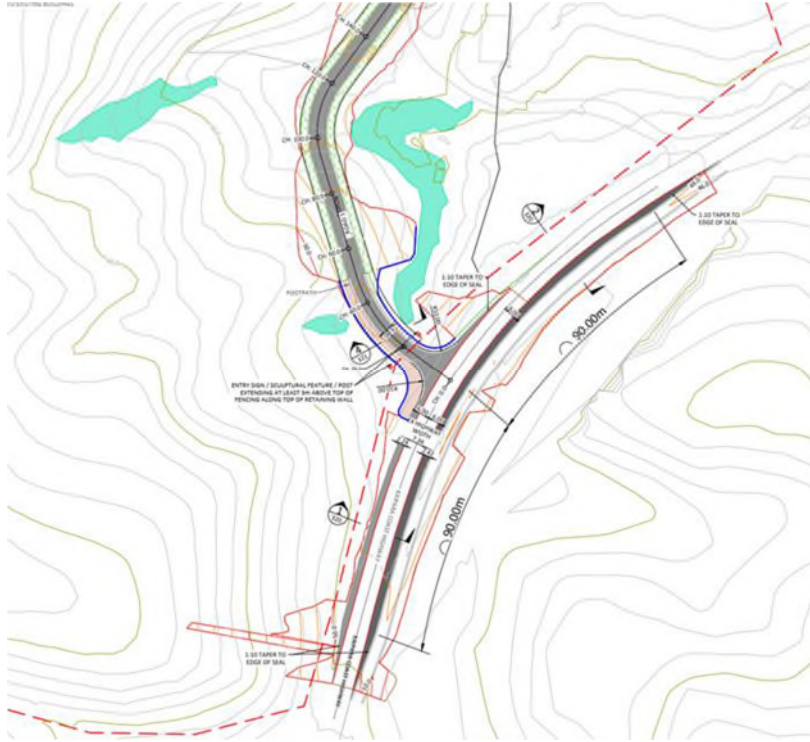
Request remains.

67. Please confirm how the access ways will be stabilised upon completion.

November 2023 comments: The response does not address the main purpose of this request. The request relates to the stabilisation of the access ways upon completion; and not the erosion control structure 'stabilised access way'.

Traffic

68. The response states that 221m and 210m of visibility is needed to the south and 'east' (north-east) respectively, but the drawing only shows a road alignment just beyond 90m in each direction. Based on this, the drawing is not sufficient to demonstrate that the required visibility is achieved. Please see below excerpt from Crang Civil Drawing C304 Revision A. Please update the plans.



69. Section 8.4.3 of the Commute Traffic Impact Assessment states that visibility is achieved in each direction and provides photos to show this. Looking south appears to be an over-vertical crest curve in the road which could conceal an approaching vehicle as it goes through the 'dip'. It is difficult to be certain from the photo as the upper part of the approaching car might still be visible (at night you would want to see enough of the vehicle to see the headlights).

Can Commute please confirm that they assessed that approaching vehicles did not disappear from view when they did their site visit and took the photo below.



The Traffic Assessment provided is noted as draft and is unsigned. Please provide a final version of this report.

70. Please confirm that section 8.4.1 of the Traffic Assessment is a typographical error or provide an updated assessment for State Highway 16.

## Development Engineer

As discussed, at this time I do not have feedback from Council's Development Engineer. I will provide this as soon as possible (I am hopeful of receiving it my mid next week) but expect this will raise further questions that require a response.

### **Providing the information**

Please provide this information in writing within 15 working days<sup>1</sup> (before 7 December 2023). If you will not be able to provide the information by that date, please contact me before then to arrange an alternative time. We will not work on your application any further until either you provide this information, or you state that you refuse to provide it.

**Note:** If you will require more than 15 working days to provide this further information, I will seek that you agree to an extension of time under [section 37](#) of the Resource Management Act 1991 (the RMA). This will enable appropriate time for me to undertake the necessary review of the information once provided.

### **Refusing to provide the information**

If you refuse to provide the information, or if you do not submit the information to us within 15 days (or by another other agreed time), the RMA requires that we publicly notify your application.<sup>2</sup>

If this happens, you will be required to pay the notification fee of \$20,000 in full before we proceed with the notification of your application.<sup>3</sup>

### **Next steps**

Once you have provided the requested information, I will review what you have provided to make sure it adequately addresses all of the points of this request.

In the application acceptance letter, I described the statutory timeframe for our decision on your application. The time for you to respond to this further information request will be excluded from this timeframe<sup>4</sup>. I will be able to give you an updated forecast on a decision date on request once you have provided the information requested above.

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<sup>1</sup> Section 92A(1) of the RMA

<sup>2</sup> Section 95C of the RMA

<sup>3</sup> Section 36AAB(2) of the RMA

## Not pursuant to section 92 of the RMA

The precedent assessment in the updated AEE is noted, however this remains a fundamental concern with this application.

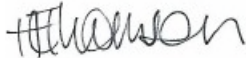
While the application does create some clear positive environmental effects, these appear to be significantly less than the AUP(OP) anticipates as part of rural subdivision. This is also a central concern.

As discussed on site, the overall scale of the development, the creation of 26 lifestyle sites in- situ in a rural location, and the degree of ecological benefit along with the impacts this has on consistency with relevant objectives and policies is of concern.

### Contact

If you have any queries, please contact me on [hannah@planningplus.co.nz](mailto:hannah@planningplus.co.nz) or 021 261 9966 and quote the application number above.

Yours sincerely,



**Hannah Thomson**  
**Consultant Planner**

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<sup>4</sup> Section 88C(2) of the RMA

**From:** Hannah Thomson <[hannah@planningplus.co.nz](mailto:hannah@planningplus.co.nz)>  
**Date:** Tuesday, 16 January 2024 at 2:59 PM  
**To:** Zoe Avery <[zoe@theurbanist.nz](mailto:zoe@theurbanist.nz)>  
**Subject:** BUN60406128 WAT60412104 & DIS60412103- 2127 Kaipara Coast Highway- Geotech RFI questions

Hi Zoe,

Sincere apologies for the delay with this feedback- I have received the following questions today. Can you please provide this information pursuant to section 92 RMA, and include on the overall s92 response.

1. *Please provide a geomorphology plan to identify geomorphic features discussed in Section 2.2.*
2. *Section 4.2 referenced a historical geotechnical report which is not presented in Appendix B. Please provide a copy of this report and include historical borehole information on the site plan and geological cross sections.*
3. *It is noted that surcharge load was omitted in some sections. Please apply suitable surcharge loads for proposed building platform and accessway in the slope stability analysis.*
4. *The review found that Weathered Rock was not identified in the intrusive investigations. We require further evidence to substantiate the Weathered Rock unit shown in the slope stability models. If this could not be provided, the slope stability models would need to be updated to align with the intrusive testing results.*
5. *Please clarify how the proposed wastewater disposal fields have been considered in the slope stability analysis*
6. *It is understood that 0.12g was adopted for 1 in 150 year seismic event, however, following CoP Version 2 ULS PGA should be used for the seismic assessment. Please update your analysis accordingly.*
7. *Please provide comments on liquefaction and lateral spreading risks.*

Again, apologies for the delay associated with this. I'm back from leave on Monday if you'd like to discuss.

Kins regards,

Hannah



**Hannah Thomson**

*Principal Planner/ Director*

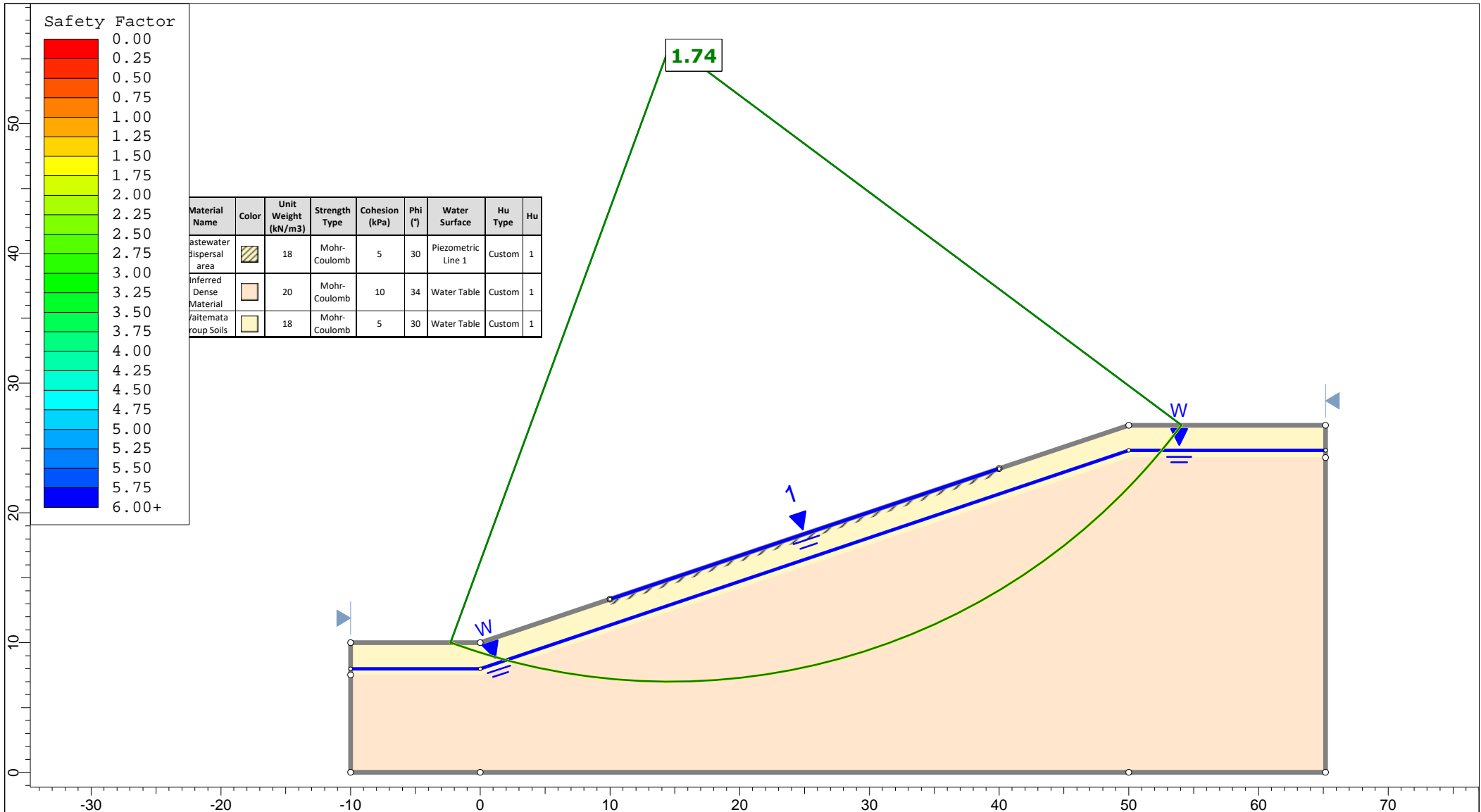
p: 09 4279966 m: 0212619966

a: PO Box 310 174, Red Beach. Auckland 0945

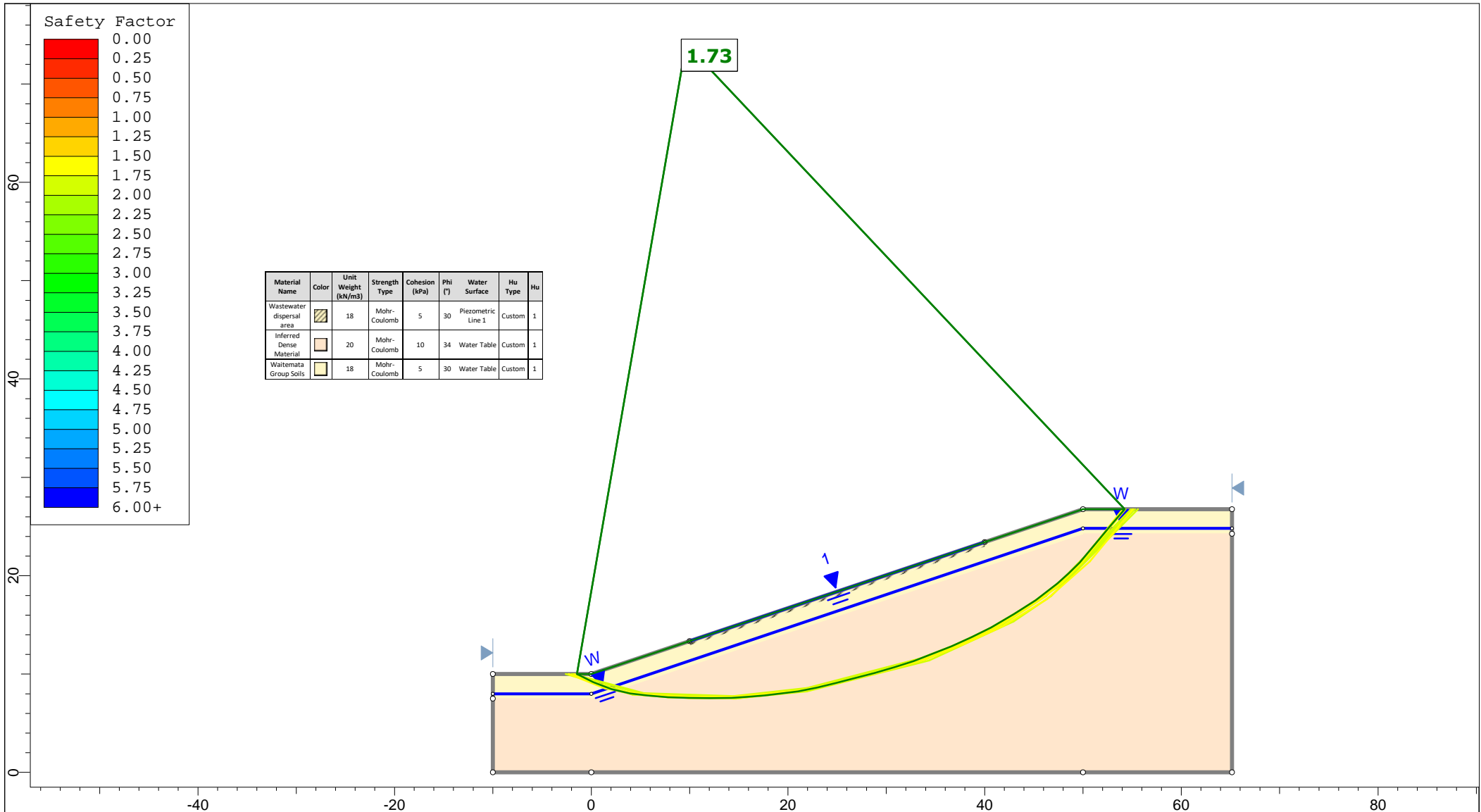
w: [www.planningplus.co.nz/](http://www.planningplus.co.nz/) e: [hannah@planningplus.co.nz](mailto:hannah@planningplus.co.nz)



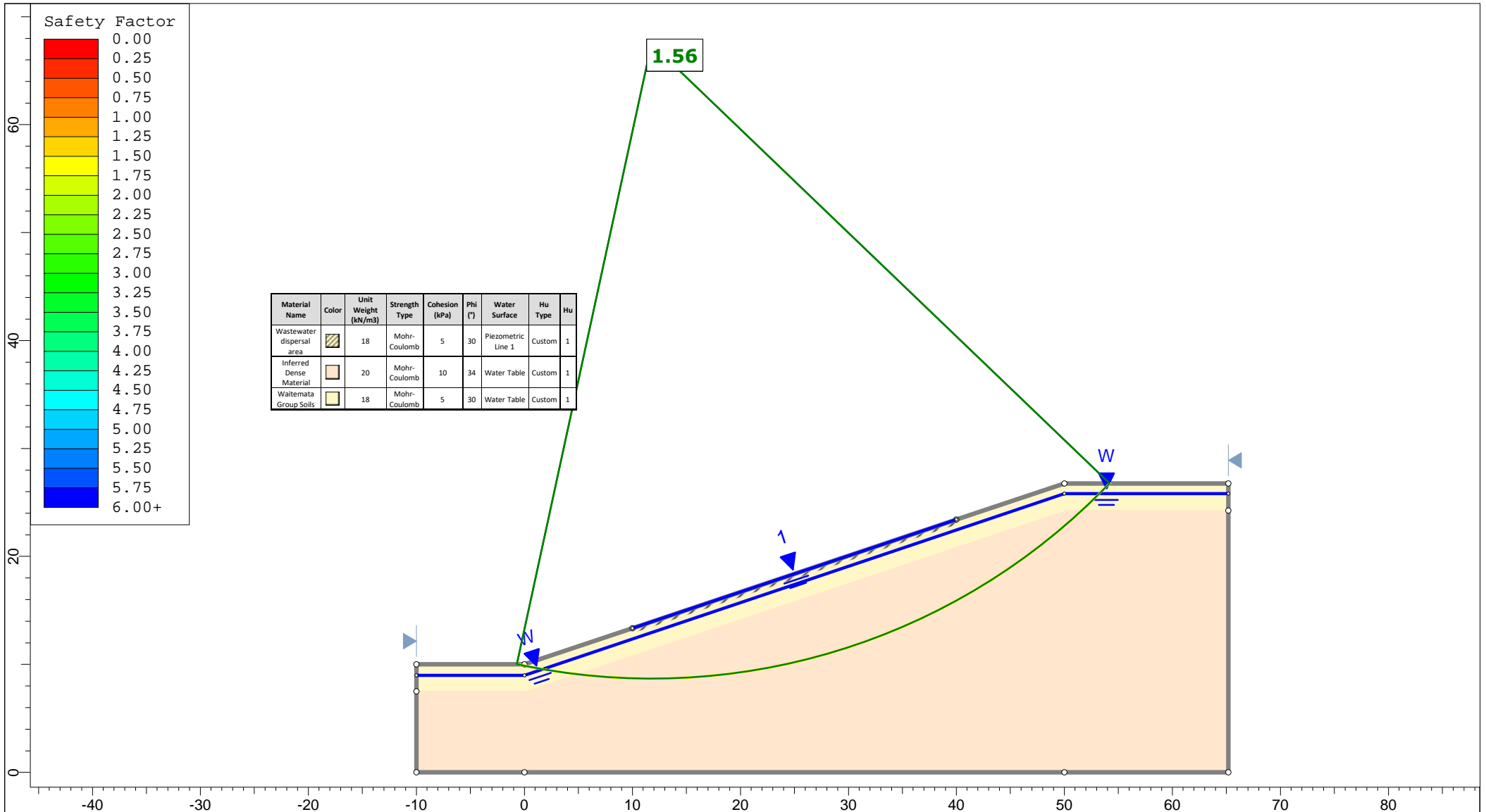
**Our office will close on 22 December 2023, reopening 8 January 2024.  
I will be on leave until 22 January 2024.**



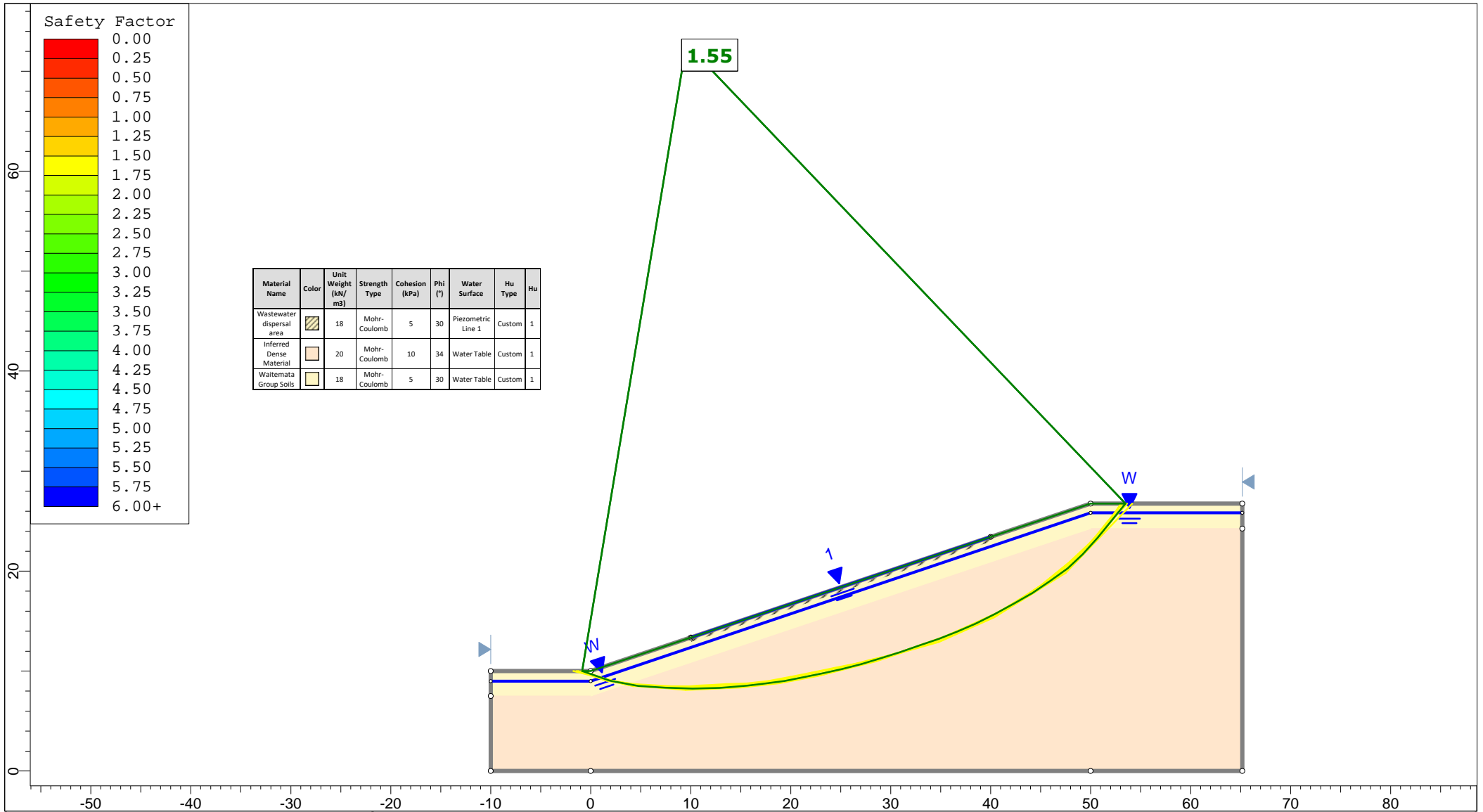
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	Group		Critical Case Wastewater Dispersal Area	Scenario	
	Drawn By		TR	Company	KGA Geotechnical Group Limited
	Date		27/02/2024, 12:11:36 pm	File Name	WW Slide.slm



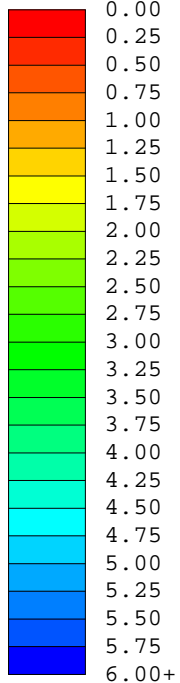
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	Drawn By		TR	Company	KGA Geotechnical Group Limited
	Date		27/02/2024, 12:11:36 pm	File Name	WW Slide.sldm



	Project		K200826-3 - Kaipara Coast Highway	
	Group		Critical Case Wastewater Dispersal Area	Scenario
	Drawn By		TR	Company
	Date		27/02/2024, 12:11:36 pm	File Name
			Run 3 - Raised Groundwater - Circular	KGA Geotechnical Group Limited
			WW Slide.slm	



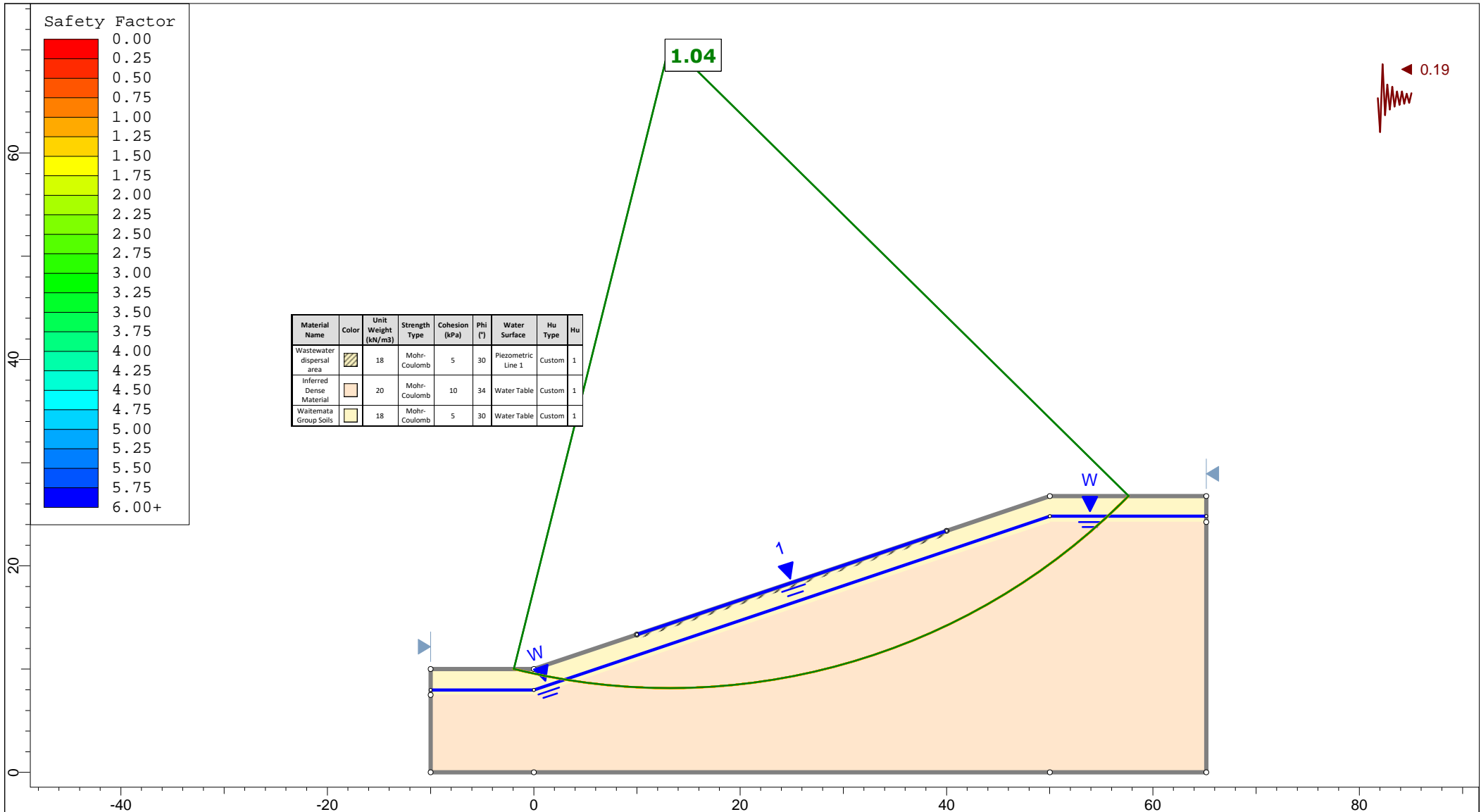
Safety Factor



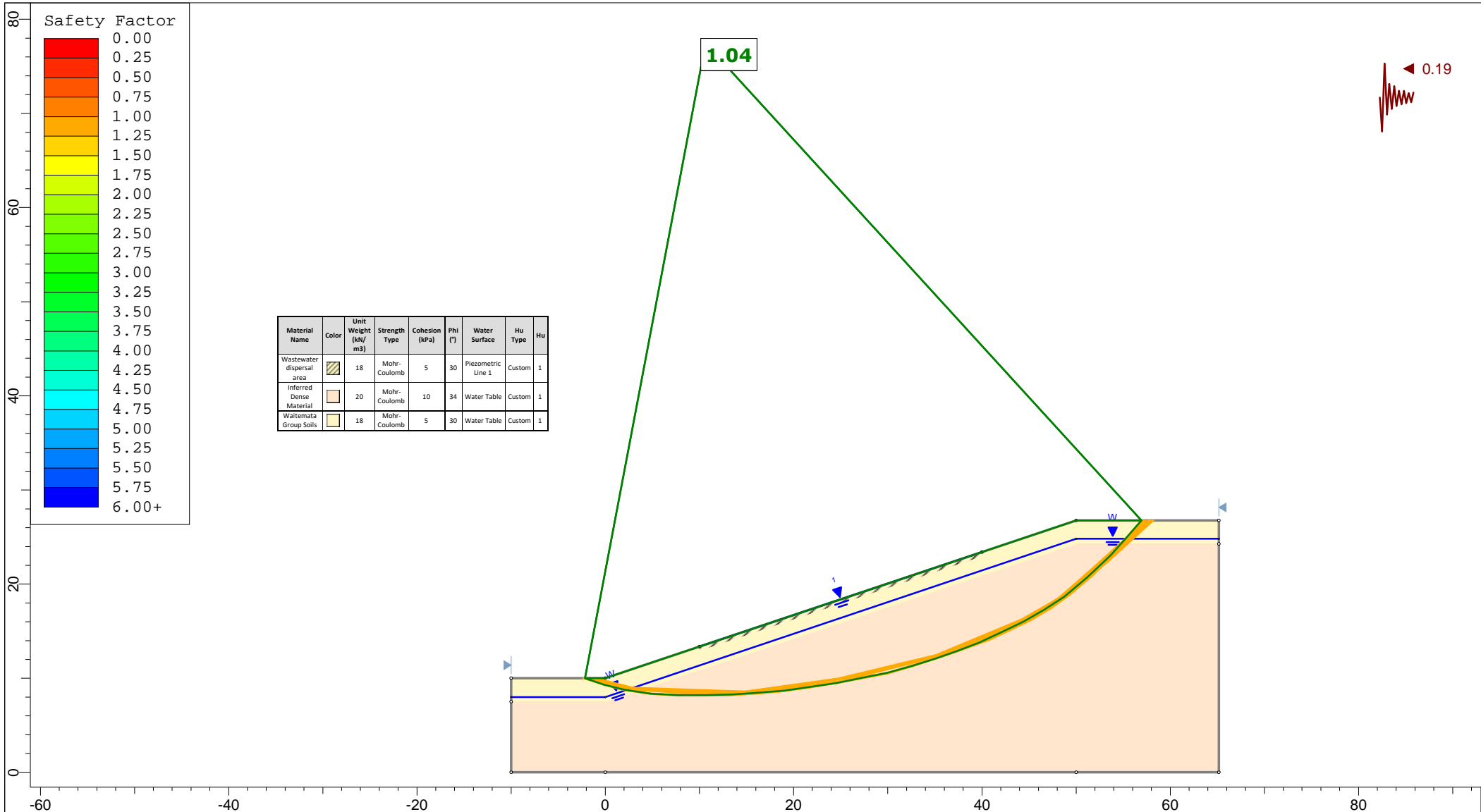
Material Name	Color	Unit Weight (kN/m <sup>3</sup> )	Strength Type	Cohesion (kPa)	Phi (°)	Water Surface	Hu Type	Hu
Wastewater dispersal area		18	Mohr-Coulomb	5	30	Piezometric Line 1	Custom	1
Inferred Dense Material		20	Mohr-Coulomb	10	34	Water Table	Custom	1
Waitemata Group Soils		18	Mohr-Coulomb	5	30	Water Table	Custom	1

1.55

	Project		K200826-3 - Kaipara Coast Highway	
	Group		Critical Case Wastewater Dispersal Area	Scenario
	Drawn By		TR	Company
	Date		27/02/2024, 12:11:36 pm	File Name
			Run 4 - Raised Groundwater - Non-Circular	KGA Geotechnical Group Limited
			WW Slide.slm	



	Project		K200826-3 - Kaipara Coast Highway		
	Group		Critical Case Wastewater Dispersal Area	Scenario	
	Drawn By		TR	Company	KGA Geotechnical Group Limited
	Date		27/02/2024, 12:11:36 pm	File Name	WW Slide.sld



	Project		K200826-3 - Kaipara Coast Highway	
	Group		Critical Case Wastewater Dispersal Area	Scenario
	Drawn By		TR	Company
	Date		27/02/2024, 12:11:36 pm	File Name
				Run 6 - Seismic - Non-Circular
				KGA Geotechnical Group Limited
				WW Slide.sldm