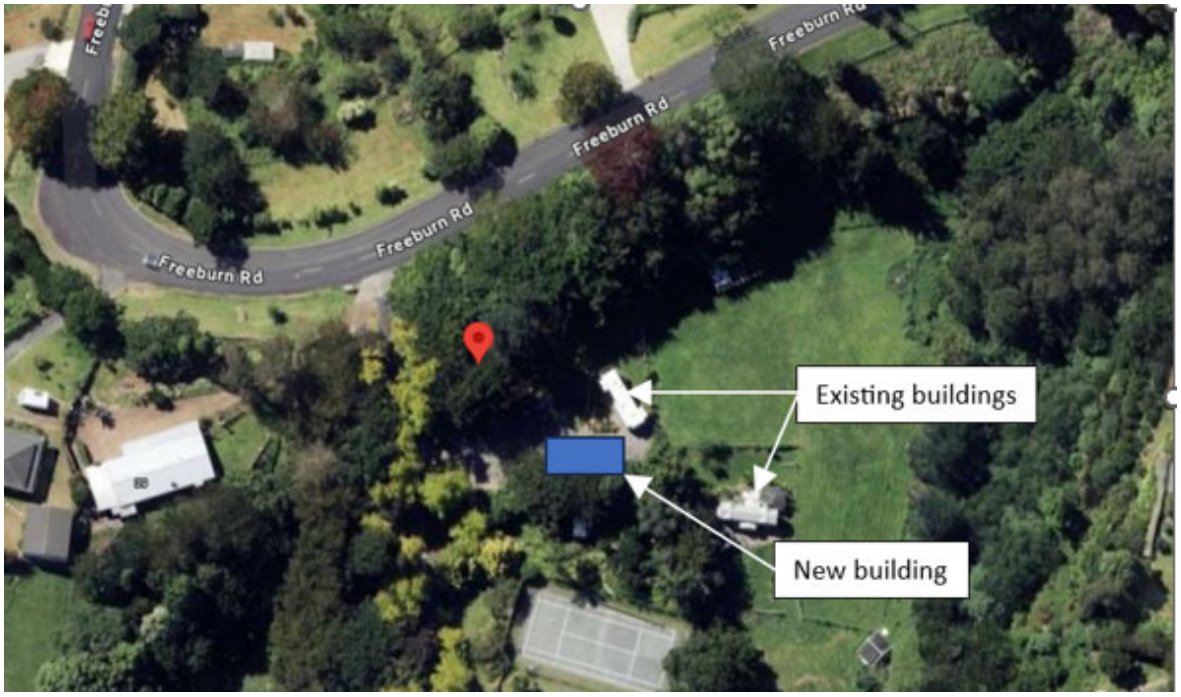
Determination 2025/031

The authority's decision to refuse to grant a building consent for building work to a relocated dwelling.

37B Freeburn Road, Pyes Pa, Tauranga

Summary

This determination examines an authority's decision to refuse to grant an application for a building consent for building work in relation to relocating and altering an existing dwelling under section 50. The determination evaluates whether the authority's reasons for refusing to grant the building consent were specific, clear and valid, particularly concerning the natural hazard provisions of the Act, and Clauses B1 Structure, E1 Surface Water and G13 Foul Water.



In this determination, unless otherwise stated, references to "sections" are to sections of the Building Act 2004 ("the Act") and references to "clauses" are to clauses in Schedule 1 ("the Building Code") of the Building Regulations 1992.

The Act and the Building Code are available at www.legislation.govt.nz. Information about the legislation, as well as past determinations, compliance documents (eg, Acceptable Solutions) and guidance issued by the Ministry, is available at www.building.govt.nz.

1. The matter to be determined

1.1. This is a determination made under due authorisation by me, Andrew Eames, Principal Advisor Determinations, for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment ("the Ministry").[1]

1.2. The parties to the determination are:

1.2.1. S Molloy and A Murdoch, the owners of the property who applied for this determination ("the owners")

1.2.2. Tauranga City Council, carrying out its duties as a territorial authority or building consent authority ("the authority").

1.2.3. N Panchia, a Chartered Professional Engineer involved with design of the anchor piles, and a party to this determination as a licensed building practitioner ("the pile design engineer")[2].

1.3. This determination arises from the authority's refusal to grant a building consent for building work related to the relocation and alteration of an existing dwelling.

1.4. The matter to be determined, under section 177(b) and 2(a) is the authority's decision to refuse to grant building consent BC340631. The determination considers the reasons for the authority's decision which are (in summary):

1.4.1. Failing to satisfy section 71 of Building Act 2004, as a lack of evidence to mitigate natural hazard on site (S.71 (e) slippage.)

1.4.2. Anchor piles fail to demonstrate compliance with Clause B1 Structure, specifically performance criteria B1.3.3(f) and (h)3.

1.4.3. Failure to comply with Clause E1(E1.3.1) for the discharge of surface water onto other properties and fails to comply with state means of compliance E1/VM1[4].

[1] The Building Act 2004, section 185(1)(a) provides the Chief Executive of the Ministry with the power to make determinations.
[2] Their involvement only relates to Matter 2: the anchor pile design issue.
[3] These refer to earthquake (f) and wind (h) loads
[4] Verification Method E1/VM1 – Surface Water, amendment 12, effective 2 November 2023

1.4.4. Failure to comply with clause G13 (G13.3.4); in relation to confirming the existing OSET (onsite effluent treatment) system is suitable for reuse with the proposed sitework and dwelling

1.5. Items outside of the matter to be determined include (but are not limited to):

1.5.1. Any decision by the authority regarding previous applications for building consent or granted building consents.

1.5.2. The compliance of the existing building to be relocated onto the owners' property.

2. General overview of background and building work

Note: I have provided summaries of the background, building work and submission that relate to each reason given for refusal in the relevant sections of the determination.

2.1. The proposed building work comprises installation of an existing dwelling, relocated from another site ("the relocated dwelling"), at the owners' property at 37B Freeburn Road ("the property") and construction of a new extension on the east side of the relocated structure . The property generally slopes downhill to the west.

2.2. The relocated dwelling is a single-storey timber-framed dwelling with lightweight roof and wall claddings. Excluding the new deck , the relocated dwelling is approximately 57m2 in area.

2.3. The proposed building work includes construction of new timber-piled foundations (using a combination of 4m-deep ordinary and anchor piles), installation of two new downpipes and belowground surface water drainage, and installation of new foul water plumbing and drainage.

2.4. A new swale is to be formed close to the south side of the relocated dwelling adjacent and parallel to part of the property's southern boundary (as shown in red rectangle in figure 3). It is intended to direct an existing overland flow path away from and around the relocated dwelling.

2.5. The ground level appears to have already been raised under and immediately adjacent to the proposed site for the relocated dwelling .

2.6. A number of reports provided with the building consent application refer to an intention to form a new driveway from Freeburn Road and to raise a large part of the existing ground by placing fill material northeast of the relocated dwelling. However, this work is not reflected in the more recent building consent plans , which indicate access will be via an existing driveway.

2.7. There are two additional existing buildings onsite at the property. However, it is not clear from the building consent plans whether either, or both, of these buildings are to be retained.

2.8. On 6 May 2024, the owners applied for building consent BC340631 to 'relocate an existing building with an extension'.

2.9. On 23 May 2024, the authority refused to grant the application for building consent under section 50.

General legislation for refusal of a building consent

2.10. Sections 49 and 50 concern an authority's decision to grant or refuse an application for a building consent (amongst other sections).

2.10.1. Section 49 requires a building consent authority to grant a building consent if it is satisfied on reasonable grounds that the building work will comply with the Building Code if it is completed in accordance with the documents that form part of the consent application.

2.10.2. Section 50 states that where an authority decides to refuse to grant an application for a building consent it must give the applicant written notice of the refusal and its reasons for it.

2.11. Previous determinations[5] have considered what is expected of an authority when refusing to grant a building consent, and I hold the same views. The requirement to provide reasons in writing gives an applicant notice of the particular issues that need to be resolved.

2.12. Therefore, it is important an applicant is given sufficiently explicit, specific, and valid reasons why an authority considers compliance with the Building Code has not been met (in accordance with section 49), so the applicant can consider what is required to address the issues and obtain building consent.

[5] For example, Determination 2021/027 *Regarding the authority's refusal to grant building consents for the construction of new residential dwellings* (16 December 2021) at paragraph 5.7; Determination 2023/007 *Regarding the authority's decision to refuse to grant a building consent for alterations to an existing building* (28 March 2023) at paragraph 5.11.

3. Reason 1 – Natural hazard - slippage

3.1. The authority's first reason for refusal was:

> The proposal fails to satisfy Section 71 of Building Act 2004, as a lack of evidence to mitigate natural hazard on site (S.71 (e) slippage.) The proposed earthwork design has changed since previously refused consent. The previous slope stability assessment identified instability risks and the analysis relied on the previous design slope which was to fill the site extensively to provide access and stabilize the slope. The applicant has not engaged their Geo-Professional to re-review the changes in design which have removed the filling from the site and therefore the eastern slope stabilization method.

Building work and background

3.2. See Paragraph 2.1 to 2.5, all of the proposed building work in BC340631 is considered relevant to this matter.

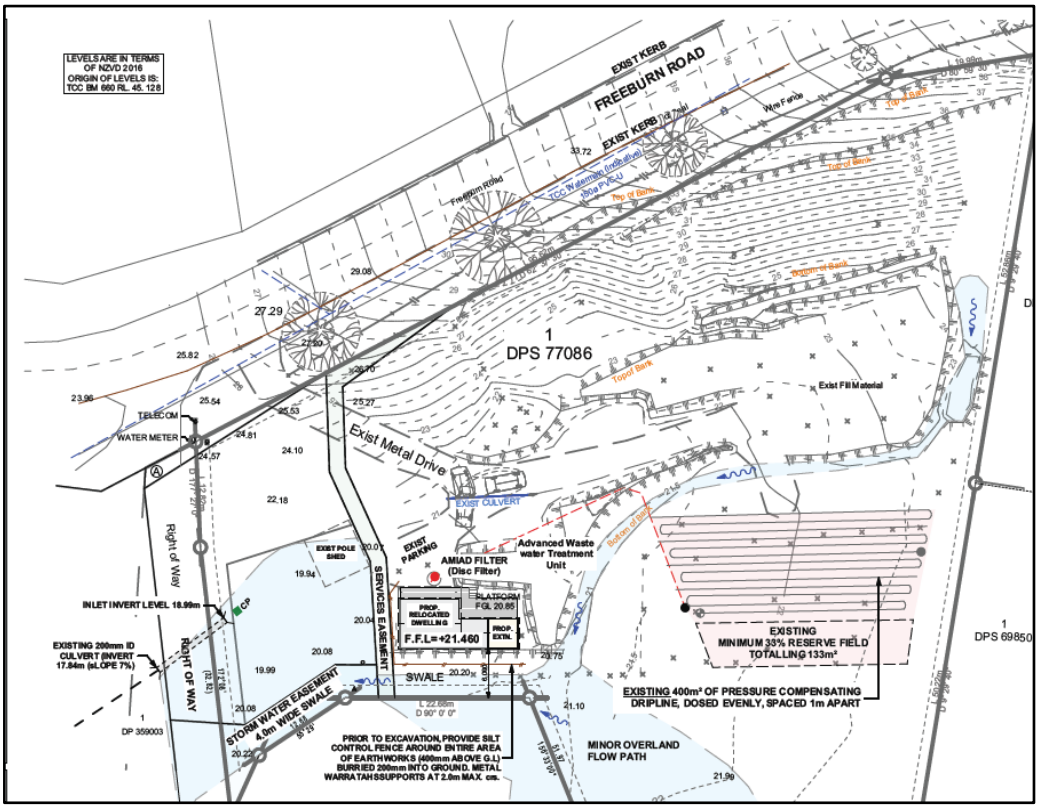
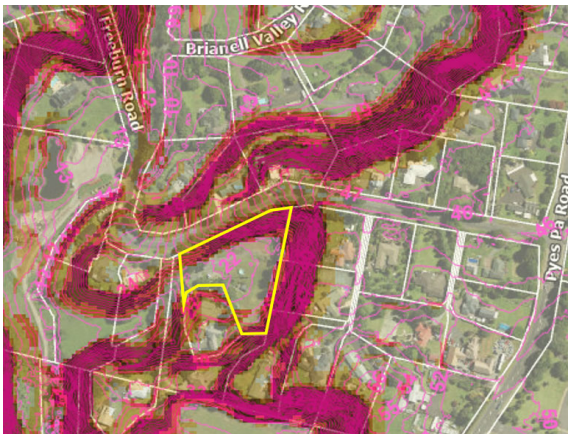
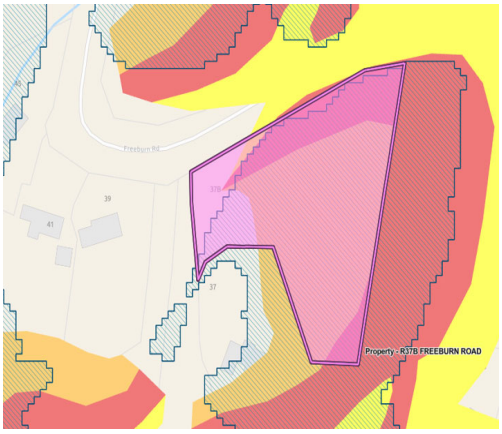


Figure 1: Site plan

3.3. The authority's maps[6] identify some areas of slope instability across the north, east, and south boundaries of the property:

[6] Accessed on 26 November 2024.





The areas of “high” slope instability on (“landslide susceptibility”) are represented by the pink / purple lines.	Legend: Natural Hazards Slopes and Relic Slips Slope 4:1 (pre-2023, Superseded) Slope Hazard Zones 2023 Failure Zone 2:1 Regression Zone 3:1 Runout Zone 4:1 Slope Hazard Zones Study Area Relic Slip Slope debris lobe showing evidence of recent or current activity Possible slope debris lobe Probable slope debris lobe Interpreted head scarp with poorly defined morphology Interpreted head scarp with clearly defined morphology

Figure 2: Hazard modelling information from the authority

3.4. The authority describes a “relic slip” as “areas affected by / ground features formed by a past landslide.”.

3.5. Several reports prepared by a company specialising in geotechnical engineering (“the geotechnical engineers”) on behalf of the owners, raise the issue of land instability at the property.

3.6. In a report dated 23 May 2022 , the geotechnical engineers noted:

3.6.1. The crest of the slope is identified as a probable relic slip scarp on the [authority maps].

3.6.2. An image from the [authority’s maps] showing the topography surrounding the site and including the steep eastern escarpment and relic slip features.

3.6.3. The steep escarpment along the site's eastern boundary…[is] considered to be at high risk of future instability based on historical evidence in the Tauranga region.

3.6.4. The proposed building platform is located outside the 1V:3H runout zone and on the outer edge of the 1V:4H zone. As the ground below the slope is flat or very gently sloping and there are no topographic features which may direct debris towards the proposed building, we consider that the risk of debris from this slope affecting the proposed dwelling is low.

3.6.5. The proposed building site is located outside the 1V:4H runout zone projected from the slope on the site's northern boundary and the building is also therefore unlikely to be affected by debris from this direction.

3.7. In a further addendum report from the geotechnical engineers it noted:

3.7.1. …the proposed building platform is located at the downslope extent of the 1:4 debris runout zone. As such, … the likelihood and risk of debris inundation on the proposed building is considered low.

3.7.2. In a further report from the geotechnical engineers, it noted a change in the pile foundation design but also included amended plans showing the same "New access to site" and "Proposed filled area…" to the north-east of the proposed relocated dwelling.

The owners

3.8. "The geotechnical assessment confirms there is no slippage hazard on the property in the location of the proposed building work".

3.9. "[The] building consent application is for the relocation of the existing dwelling with bedroom addition only, and the associated site works in this location only. [It] does not include other works which are considered in the wider property development".

The authority

The authority submits (in summary):

3.10. "The authority has clearly and explicitly set out the specific reasons for refusal in its letter".

3.11. The proposal "fails to satisfy Section 71 of Building Act 2004, as a lack of evidence to mitigate natural hazard on site (S71 (e) slippage.)".

3.12. "The previous slope stability assessment identified instability risks and the analysis relied on the previous design slope which was to fill the site extensively to provide access and stabilize the slope. The [owners have] not engaged their [geotechnical

engineer] to re-review the changes in design which have removed the filling from the site and therefore the eastern slope stabilization method".

3.13. "[T]he application failed to mitigate the natural hazard provisions in the Act because [the owners] had not engaged their [geotechnical engineer] to 're-review' the changes to a proposed earthworks design. This design was intended [to] stabilise the slope after a previous assessment of the slope on the property identified instability risks".

3.14. "The Geotechnical Assessments which accompany the [consent] application rely on a previous revision of the site plans, dated 16 February 2023 ... These plans propose an "engineered fill embankment" next to a "free draining gravel driveway" up to 5.5m high ... While Geotechnical Assessments would appear to conclude that [the] proposed design is suitable in terms of slope stability, this is contingent on the construction of the driveway embankment".

3.15. The updated plans provided with the consent application "do not include a driveway embankment... [I]n the absence of a geotechnical assessment which has had regard to the stability issues identified on the property more generally, insufficient provision has been or will be made to protect the land, building work, or other property referred to in s 71(1) from slippage".

3.16. The proposed building work "fails to avoid being captured by the natural hazard provisions" because "[t]he proposed extension to the existing dwelling, excluding any decking, will constitutes [sic] approximately 18.6% of the total floor area and will be used for sleeping… In addition ... the proposed works are likely to be affected by natural hazard conditions. ... the authority submits this meets the definition of a "major alteration".

3.17. "[T]he land on which the proposed works are to be carried out is situated … within close proximity to a slope hazard failure zone and relic slip zone ... The slope on the property [is] also considered at high risk of consequence ... this makes slippage a reasonable consequence ... [and] the land on which the proposed works are to be carried out is likely to be subject to a natural hazard".

3.18. "[C]onstruction of the piled building and the proposed extension are unlikely to accelerate the natural hazard on the property itself, [but] if slippage occurs and the piled building and extension are mobilised, the proposed works are likely to accelerate or worsen the impact of that natural hazard [on] other property".

3.19. "[T]he proposed design solution appears to be to have the building on a platform, [but] given the unpredictable nature of slippage, this is insufficient to mitigate or reduce any damage if the land becomes subject to slippage".

3.20. [T]he building will be inhabited, thereby posing a risk to life, and ... the proposal is not code-compliant ... [so] it would not be reasonable to grant a waiver or modification of the Building Code in respect of the natural hazard concerned".

Discussion

3.21. Under section 49(1), a building consent authority must grant a consent if it is satisfied that building work presented in the plans and specifications complies with the Code. However, if the building work is on land subject to a 'natural hazard' for the purposes of the Act, sections 71 to 74 ("the natural hazard provisions") must be applied by the authority concerned.

3.22. Section 71(1) provides that an authority must refuse to grant a building consent for certain types of building work on land that is subject to a natural hazard, while section 71(2) creates exceptions where subsection (1) does not apply.

> **71 Building on land subject to natural hazards**
>
> (1) A building consent authority must refuse to grant a building consent for construction of a building, or major alterations to a building, if –
>
> (a) The land on which the building work is to be carried out is subject or is likely to be subject to 1 or more natural hazards; or
>
> (b) The building work is likely to accelerate, worsen, or result in a natural hazard on that land or any other property.
>
> (2) Subsection (1) does not apply if the building consent authority is satisfied that adequate provision has been or will be made to –
>
> (a) Protect the land, building work, or other property referred to in that subsection from the natural hazard or hazards; or
>
> (b) Restore any damage to that land or other property as a result of the building work.

> **72 Building consent for building on land subject to natural hazards must be granted in certain cases**
>
> (1) Despite section 71, a building consent authority that is a territorial authority must grant a building consent if the building consent authority considers that –
>
> a) The building work to which an application for a building consent relates will not accelerate, worsen, or result in a natural hazard on the land on which the building work is to be carried out or any other property; and
>
> b) The land is subject or is likely to be subject to 1 or more natural hazards; and
>
> c) It is reasonable to grant a waiver or modification of the building code in respect of the natural hazard concerned.

3.23. Section 73 describes the conditions that must be included in a building consent when it is granted under section 72, including notification of the consent to the

Registrar-General of Land. Upon receiving the notification, the Registrar-General of Land must record on the property's record of title an entry confirming that a building consent has been granted under section 72 and the natural hazard to which it relates.

3.24. As has been previously discussed in Determination 2024/025[7] , one of the purposes of this entry on the record of title is to make prospective purchasers of land "aware that council would receive specific statutory immunity from liability in return for permission to undertake building work".

3.25. There does not appear to be a dispute here about whether the building work constitutes a 'major alteration' for the purpose of section 71(1) but for completeness I confirm these are major alterations.

3.26. The Act provides that the expression 'natural hazard' has the meaning given to it by section 71.[8] Section 71(3) states that 'natural hazard' means any of the circumstances specified in that section (I refer to these collectively as "the listed hazards"). These circumstances include erosion (including coastal erosion, bank erosion, and sheet erosion), falling debris (including soil, rock, snow and ice), subsidence, inundation (including flooding, overland flow, storm surge, tidal effects, and ponding) and slippage.

3.27. The natural hazard provisions provide for three outcomes. Building consent must be:

3.27.1. refused under section 71(1),

3.27.2. granted in the normal way (ie under section 49), or

3.27.3. granted under section 72, which gives rise to the building consent being made subject to the conditions specified in section 73.

3.28. Under section 71(1), a building consent authority must refuse to grant a building consent for the construction of a building, or major alterations to a building, if:

3.28.1. the land on which the building work is to be carried out is subject to one or more natural hazards, or

3.28.2. the building work is likely to accelerate, worsen, or result in a natural hazard on that land or any other property.

3.29. However, the Act goes on to provide exceptions to the requirement to refuse the building consent.

[7] Determination 2024/025 *An authority's decision to grant building consents under section 72* 97 Taranaki Street, Te Aro, Wellington. Issued 27 May 2024.
[8] Section 7.

3.30. According to section 71(2), building consent must be granted in the normal way (ie under section 49 without any section 73 conditions) if the building consent authority is satisfied that adequate provision has been, or will be, made to :

3.30.1. protect the land, the building work, and any other property from the natural hazard, and

3.30.2. restore any damage (if any) to that land or other property as a result of the building work.

3.31. Where adequate provision under section 71(2) cannot be made, section 72 provides another way for a building consent to be granted. According to this section an authority must grant a building consent if it considers that:

3.31.1. the building work to which an application for a building consent relates will not accelerate, worsen, or result in a natural hazard on the land on which the building work is to be carried out or any other property, and

3.31.2. the land is subject or likely to be subject to 1 or more natural hazards, and

3.31.3. it is reasonable to grant a waiver or modification of the Building Code in respect of the natural hazard concerned .

3.32. Conditions (as prescribed by the Act) must be applied to building consents granted under section 72. According to section 73, the building consent authority must include, as a condition of the consent, that it will give notice to the Registrar-General of Land (or another specified person).

3.33. The authority's concerns regarding the natural hazard of slippage are :

> The proposal fails to satisfy Section 71 of Building Act 2004, as a lack of evidence to mitigate natural hazard on site (S.71 (e) slippage.) The proposed earthwork design has changed since previously refused consent. The previous slope stability assessment identified instability risks and the analysis relied on the previous design slope which was to fill the site extensively to provide access and stabilize the slope. The applicant has not engaged their Geo-Professional to re-review the changes in design which have removed the filling from the site and therefore the eastern slope stabilization method.

3.34. To determine whether the Act requires the authority to grant the building consent under section 72, I must consider whether:

3.34.1. the land on which the building work is to be carried out is subject to or likely to be subject to one or more natural hazards for the purposes of section 71(1)(a), and

3.34.2. 'adequate provision' will be made to protect the land and building work for the purposes of section 71(2)(a).

3.1. The use of the term 'likely' has been discussed in previous determinations[9]. In Determination 2008/082[10] the discussion took into account a number of court decisions that had looked at the meaning of 'likely', and more recently, this discussion has been referred to in 2024/025. I continue to agree with the statements made in these determinations regarding the meaning of 'likely' in section 71.

3.2. Based on the information available from the authority's maps, and the reports provided by the geotechnical engineers, there is evidence to indicate some of the property is in an area subject to (or likely to be subject to) land instability (slippage). The authority refers to a 'relic slip' ie "areas affected by/ground features formed by a past landslide".

3.3. The parties do not dispute the likelihood of a natural hazard occurring on the property; the issue is "there is no slippage hazard on the property **in the location of the building work**" [my emphasis].

3.4. In considering the need to 'protect the land' for the purposes of section 71(2), it is the land intimately connected with the building or building work that is relevant.

3.5. Previous determinations[11] have discussed the provision of section 71(1)(a) "the land on which the building work is to be carried out ...". As discussed in Determination 2018/057 the meaning of 'land' in this context was considered in *Logan v Auckland City Council*[12]. In relation to natural hazards the court stated the meaning land can be different depending on the circumstances of the case.

3.6. The authority's maps identify the areas of the property most likely to be affected by any land instability are along the north, east and part of the south boundaries. Due to the size of the property, I do not consider it appropriate to identify the whole property as the land intimately connected to the building work.

3.7. The geotechnical addendum report indicates the proposed relocated dwelling is not being positioned in the mapped slip area and it is "outside the 1V:3H runout zone and on the outer edge of the 1V:4H zone"

[9] See for example determinations 2008/082, 2019/067 and 2024/025.

[10] Determination 2008/082 *Building consent for a storage shed on land subject to inundation at 58 Brookvale Lane, Taupiki* (5 September 2008).

[11] See Determination 2018/057 'Regarding the decision to grant a building consent subject to notification under section 73 for building work on land subject to natural hazards at 177 Fitzherbert East Road, Aokautere' and Determination 2021/004 'Regarding the proposed decision to grant a building consent conditional on a natural hazard being recorded on the property title for 76 Kaiteriteri-Sandy Bay Road, Kaiteriteri, Motueka'.

[12] *Logan v Auckland City Council (2000) 4 NZ ConvC 193, 184 (CA)*

3.8. The geotechnical engineer states:

> 3.8.1. ... the proposed building platform is located at the downslope extent of the 1:4 debris runout zone. As such, ... the likelihood and risk of debris inundation on the proposed building is considered low.

3.9. I consider the approach of identifying how proximate the natural hazard is to the building work is appropriate when considering how intimately connected the land under assessment is to the building work.

3.10. However, the authority has raised a valid view that the assessment appears to be based on a different situation from that presented in the building consent plans and specifications, such as where the authority highlights the risk assessment being "contingent on the construction of the driveway embankment", which is not shown on the plans and specifications.

3.11. I agree with the authority that contradictory information exists between the situation identified in the geotechnical report and that presented in the building consent documentation.

3.12. This leads to a lack of clarity in terms of the extent to which the authority can rely on the conclusions of this geotechnical report in relation to the building work presented in the plans and specifications.

3.13. The information in the building consent does not confirm that adequate provision is made to protect the land intimately connected with the building work in accordance with section 71(2), for the natural hazard of slippage (section 71(3)(e)). Therefore, this was grounds on which to refuse to issue the building consent.

4. Reason 2: The anchor piles

4.1. The authority's concerns regarding the anchor piles are :

> The proposed anchor piles fail to demonstrate compliance to Building Code clause B1, in particularly [sic] to performance criteria B1.3.3 (f) [earthquake] (h) [wind].

The relevant building work and background

4.2. The relevant work includes construction of new timber piled foundations, using a combination of 4-metre-deep ordinary and anchor piles[13], in association with the relocated dwelling and the new extension.

4.3. The application for building consent (Form 2) states the means of compliance with Clause B1 Structure is Acceptable Solution B1/AS1 and Verification Method

[13] These terms are defined in section 1.3 of NZS 3604:2011 *Timber-framed buildings*.

B1/VM1. These reference both NZS 3604:2011[14] ("NZS 3604") and NZS 3605:2021[15] ("NZS 3605"), and this corresponds with the information provided in the building consent plans and specifications.

4.4. The setting out of the eleven anchor piles is shown on plan A080. The anchor piles are specified to be 175mm specific engineering designed ("SED") , in 400mm diameter concrete , and a minimum 4m deep below cleared ground level.

4.5. Based on the dimensions provided on plans A300 and A400, the total length of the piles (from the top surface of the 100mm-thick concrete pile base to the connection to the 240mm-deep subfloor bearers) is a minimum of 4.11m (of which a minimum of 3.9m will be below ground level).

4.6. I have not seen any subfloor calculations that correspond with the eleven anchor piles.

4.7. The anchor piles are specified to be designed in accordance with NZS 3604. Specifications also refer to compliance of the anchor piles with NZS 3605. However, paragraph 4.1.2 of NZS 3605 states the maximum length of round or square house piles is 3.6m.

4.8. NZS 3604 does not specifically identify a maximum depth of an anchor pile below cleared ground level, but this can be deduced from paragraph 6.4.3.3 of NZS 3604 which requires piles to comply with NZS 3605.

4.9. The geotechnical engineers' report dated 30 January 2024 also refers to piles "extending to a depth of 4.0m below existing ground level to be founded in the underlying natural soils".

4.10. A Producer Statement – Design (PS1) has been provided by a chartered professional engineer. The PS1 is dated 10 July 2022, and it references building consent plans A080 and A300 (ie the versions dated 8 July 2022 and not the current versions dated 16 April 2024; the significant difference between the two versions is the different number of piles (9 and 11 respectively) and the depth of the piles (3.5m and 4.0m respectively)).

4.11. The PS1 states compliance with clauses B1 and B2, and B1/VM1. There are structural calculations, and these cite compliance with NZS 3101:2006, NZS 3604:2011, and NZS 3603:1993. They confirm the requirement for 3.5m-deep piles ie "to extend them past the non-engineered fill layer".

4.12. Regardless, the subfloor bracing calculations provided also don't align with the plans dated 8 July 2022; the calculations show a total of seven anchor piles, whereas the plan shows nine anchor piles for the relocated dwelling and extension.

[14] New Zealand Standard 3604:2011 *Timber-framed buildings*
[15] New Zealand Standard 3605:2001 *Timber piles and poles for use in building*

4.13. The PS1 also references the geotechnical engineers' report dated 23 May 2022; the report includes:

4.13.1. "Beneath the topsoil, non-engineered fill was encountered in all hand auger boreholes and extended down to depths ranging from 2.8m to 3.3m below cleared ground level".

4.13.2. "The existing non-engineered fill material does not meet the definition of 'good ground' as defined in NZS 3604:2011 as it contains organic inclusions and is variable in shear strength".

4.13.3. "All structural loads should therefore be supported on pile foundations extending to a depth of 3.5m below existing ground level, to found in the underlying natural soils".

4.13.4. "Any contribution from side adhesion should be ignored within the non-engineered fill".

Submissions

The owners

The owners submit (in summary):

4.14. "The foundations are specific engineered designed (SED) ... undertaken in accordance with the compliance documents NZBC/B1/VM1"

4.15. "The minimum bracing calculations provide for and demonstrate[the] anchor piles are solely proposed and required" and are detailed on the foundation plan "along with additional anchor piles than the minimum required".

4.16. The proposed piles comply with the requirements under NZS3604 and based on the SED, "the proposed anchor pile foundation design and details demonstrate compliance with NZBC/B1".

The Authority

The authority submits (in summary):

4.17. The proposal does not comply with Clause B1 Structure because the proposed anchor piles fail to demonstrate compliance with performance criteria B1.3.3(f) and B1.3.3 (h).

4.18. The foundation plans do not show bracing lines in each direction.

4.19. The anchor pile layouts shown within the foundation plan do not match the bracing calculations.

4.20. The proposed anchor piles appear to be into uncontrolled fill of depths up to 3.3 metres and the plans indicate “no associated lateral support.”

4.21. “[T]he application does not demonstrate the strength requirements set by section 4.3.1 of NZS 3605”.

The engineer

4.22. The engineer did not make submissions on the matter.

Discussion

4.23. In this case, the application for building consent indicates a means of compliance with Clause B1 Structure by adopting Acceptable Solution B1/AS1 (and B1/VM1). This references both NZS 3604:2011 and NZS 3605:2001 and corresponds with the information provided in the building consent plans and specifications. However, the design length of the anchor piles (at a minimum of 4.11m) exceeds the maximum of 3.6m stated in paragraph 4.1.2 of NZS 3605. Therefore, reliance on compliance with Acceptable Solution B1/AS1 is not demonstrated.

4.24. The application for building consent includes information about a specific engineering design for the anchor piles which is supported by a PS1 provided by a CPEng registered engineer. However, the PS1 pre-dates (10 July 2022) the building consent plans of 16 April 2024, and the PS1 and supporting documents are for a different design (ie; for a different number and depth of anchor plies); therefore, the PS1 cannot be relied on as part of an expert opinion to demonstrate compliance with Clause B1 Structure as an alternative solution.

4.25. I note the geotechnical engineers’ report dated 30 January 2024 does indicate consideration was given for minimum 4m-deep piles, and this was apparently confirmed in consultation with the structural engineer. However, I have received no supporting documentation (eg structural calculations or analysis) that demonstrates compliance is achieved using these longer piles.

4.26. The subfloor bracing for the relocated dwelling is reliant on the installation of 11 anchor piles. Therefore, I need to consider the ability of the proposed foundation design (using anchor piles) to resist horizontal loads, including earthquake and wind actions. A similar issue was discussed in previous determination 2024/007.

4.27. In this case, the full depth of the anchor piles is to be encased in concrete up to the cleared ground level. However, the geotechnical engineers have raised issues with the shear strength of the existing fill material which varies in depth from 2.8m to 3.3m below cleared ground level and “[a]ny contribution from side adhesion should be ignored within the non-engineered fill”. Therefore, it is not clear whether the design for the anchor piles to resist any horizontal loads was intended to ignore, or

include the effects of the existing non-engineered fill material in resisting any lateral earthquake and wind actions imposed on the concrete-encased anchor piles.

4.28. The test under section 49(1) relies on the provisions of the Building Code being met if the building work was completed in accordance with the plans and specifications that accompanied the application for building consent.

4.29. In this case, the plans and specifications do not demonstrate compliance with Clause B1 Structure to the extent required under section 49(1).

4.30. I note the authority only gave a general reference to clause B1 and performance criteria B1.3.3(f) and (h). While the authority's 'draft' request for further information provides more context regarding its concerns in relation to the proposed anchor piles, the specific items in that 'draft' request for information were not stated in the written notice.

4.31. In my view, the authority's reasons for refusal, as stated in the written notice, could have been more explicit, specific, and clear but there were grounds to refuse to issue the building consent.

5. Reason 3 – Surface water (clause E1.3.1)

5.1. The authority's concerns regarding surface water (clause E1.3.1) are:

> The proposed stormwater disposal system fails to demonstrate compliance to Building Code clause E1, in particularly [sic] to performance criteria E1.3.1, by propose [sic] discharging stormwater from building's runoff catchment area onto other properties without appropriate easement or known legal agreements, which may cause damage or nuisance to multiple other properties. The proposed design of on-site stormwater system also fails to provide calculations or evidences to show compliance to nominated E1/VM1.

Relevant building work

5.2. I have assumed the authority's reference to "building's runoff catchment area" refers to the roof of the relocated dwelling and the associated extension.

5.3. The building work includes installation of two new downpipes and below ground surface water drainage system in association with installation of the relocated dwelling and construction of the new extension at the property.

5.4. A new swale is to be formed close to the south side of the relocated dwelling adjacent and parallel to part of the property's southern boundary (shown by the red rectangle below).

5.5. The new swale appears to be intended for the purpose of re-directing all (or part) the existing overland flow path around the south side of the relocated dwelling (between the location of the dwelling and the nearby property boundary to the south of the swale).

5.6. It appears the ground level at the property has already been raised at and immediately adjacent to the proposed location for the relocated dwelling.

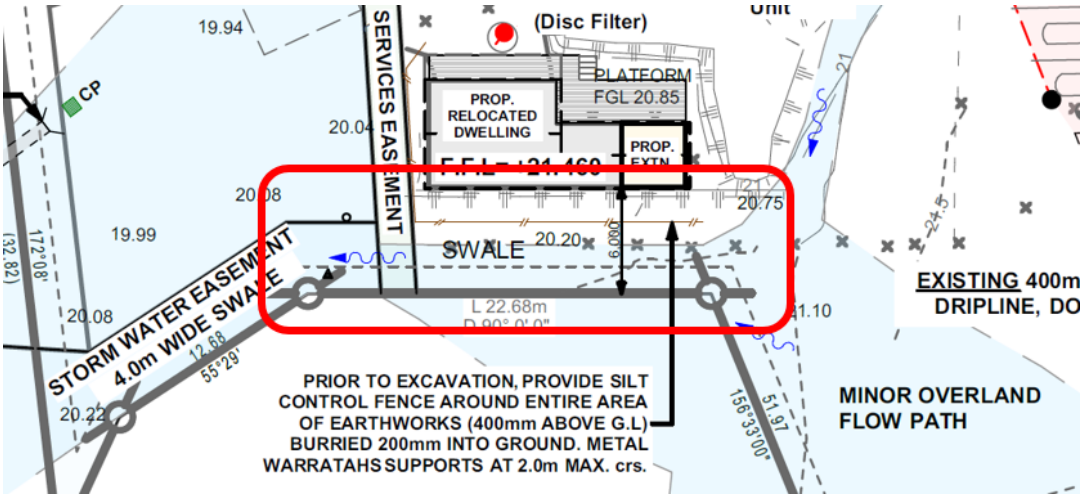


Figure 3: Swale

5.7. The surface water is being directed to an existing culvert located to the west side of the property.

Submissions

The Owners

The owners submit (in summary):

5.8. The stormwater assessment report provided demonstrates compliance with E1 Surface Water.

5.9. Disposal into the existing open drain does not constitute a nuisance or hazard.

5.10. The requirement for an "easement or known legal agreements is not a requirement under the Building Code that [the authority] is to consider".

5.11. The proposed design references E1/VM1 and E1/AS1[16] as being the means of compliance. Given the minor nature of the catchment area any drainage works proposed will fall under the minimum requirements with reference to E1/VM1 1.0.7.

[16] Acceptable Solution E1/AS1 (first edition, amendment 12, effective on 2 November 2023).

The authority

The authority submits (in summary):

5.12. The proposal does not comply with Clause E1, in particular performance requirement E1.3.1 as:

5.12.1. "It proposes to discharge stormwater from the property's runoff onto other properties without appropriate easement or known legal agreements, potentially resulting in damage or nuisance to other properties".

5.12.2. It fails to provide calculations or show compliance with the nominated means of compliance E1/VM1.

5.12.3. The land on which the building work is to be carried out is situated within an overland flow path. This will increase the potential stormwater runoff.

5.12.4. The design does not show flow velocity of the proposed stormwater drain.

5.12.5. The consent application "relies on a flood risk assessment ... which ... appears to be based off a previous revision of the site plans ... [and which] is of limited use in determining compliance with performance criteria E1.3.1 to the extent that it assesses the effects that raising the level of the building platform and filling the site will have on flood levels. It does not directly assess the risk of damage or nuisance to *other* properties where part of the OFP is not filled".

5.13. "While there is no strict requirement in the Building Code that a property must have an "appropriate easement or known agreement", the absence of any legal rights for proposed stormwater disposal squarely turns on the extent to which the owner is able to access and maintain.

Discussion

5.14. The relevant performance criteria is Clause E1.3.1:

> E1.3.1 Except as otherwise required under the Resource Management Act 1991 for the protection of other property, surface water, resulting from an event having a 10% probability of occurring annually and which is collected or concentrated by buildings or sitework, shall be disposed of in a way that avoids the likelihood of damage or nuisance to other property.

5.15. Surface water is defined in the Building Code as:

> All naturally occurring water, other than sub-surface water, which results from rainfall on the site or water flowing onto the site, including that flowing from a drain, stream, river, lake or sea.[17]

5.16. The objective of Clause E1 includes to "safeguard ... other property from damage, caused by surface water". Its functional requirement is "Buildings and sitework shall be constructed in a way that protects people and other property from the adverse effects of surface water."

5.17. "Other property" is defined in section 7 as:

> **other property –**
>
> (a) means any land or buildings, or part of any land or buildings, that are –
>
> (i) not held under the same allotment; or
>
> (ii) not held under the same ownership; ...

5.18. In considering the meaning of "likelihood" as it relates to clause E1.3.1, I have adopted the reasoning in *Auckland City Council v Selwyn Mews Ltd*[18] *("Selwyn Mews"*) where the Judge stated:

> [47]...In cl B1.3.3 "a low probability of becoming unstable or collapsing" means that the risk of such events is no more than an appreciable risk (as distinct from a slight risk) or is at most a low risk (as distinct from a very low risk)

5.19. As discussed in previous determinations[19], protection of "other property" is not limited to the protection of buildings and the land itself must also be protected from the likelihood of damage. Regarding "likelihood of damage" I refer to the reasoning in *Selwyn Mews*, where the Judge stated:

> [47]...In cl B1.3.6 "the likelihood of damage to other property" refers to a real and substantial risk of such damage

5.20. The term "nuisance" is not defined in the Act or Building Code. A previous determination[20] held that the term "nuisance" in clause E1.3.1 should not be given a narrow legal meaning and "there must be some significant nuisance effect before

[17] Clause A2 – Interpretation.
[18] District Court Auckland CRN2004067301-19, 18 June 2003, [2003] DCR 671.
[19] For example, Determination 2015/003 *Compliance of a retaining wall between two properties* (10 February 2015).
[20] Determination 2010/052 *Disposal of surface water collected behind a retaining wall* (12 July 2010), at [6.2.4].

there can be a breach of Clause E1.3.1". This was expanded on in Determination 2015/052[21], which said:

> [6.1.5] The term "nuisance" is not defined in the Act or the Building Code, and it appears only in Clauses E1.3.1 and G4.3.4.[22] The term "nuisance has a particular common law meaning which is 'the unreasonable interference with an individual person's use or enjoyment of land or of some right connected with that land'. The question of whether a nuisance is unreasonable is a question of fact and must be considered in relation to factors such as the nature of the harm and the locality in which it occurs, and the frequency, duration and intensity of the interference.
>
> [6.1.6] ... I am of the view that any nuisance has to be *unreasonable interference*; calling a nuisance a significant nuisance is simply reflecting the fact that it is not trivial or minor interference with a person's use and enjoyment, but must be an unreasonable or significant interference with that use or enjoyment.

5.21. Regarding the disposal of surface water, I hold the same view as discussed in previous determinations, that not all surface water needs to be so disposed of; only surface water resulting from an event with 'a 10% probability of occurring annually' or put another way, a storm or rainfall event of such severity that it only occurs once every 10 years.[23]

5.22. The relevance for this case being that an appropriate outfall is one that does not result in non-compliance with E1.3.1.

5.23. The application for building consent states the means of compliance with Clause E1 Surface water as Acceptable Solution E1/AS1 and Verification Method E1/VM1.

5.24. The first concern is the proposed discharge of surface water from the 'building's runoff catchment area onto other properties without appropriate easement or know legal agreements [sic]'.

5.25. Regarding the 'building's runoff catchment area', I have assumed the authority was referring to the roof of the relocated dwelling and extension. I have considered the design proposal, and I am of the view the disposal of surface water from the roof up to the point it reaches the existing culvert does comply with the stated means of compliance, ie Acceptable Solution E1/AS1.

5.26. Regarding the culvert, I note the resource consent issued by the authority states:

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[21] Determination 2015/052 *Regarding the compliance of proposed building work ... in respect of adjacent other property* (12 August 2015).

[22] Clause G4.3.4 – Contaminated air shall be disposed of in a way which avoids creating a nuisance or hazard to people and other property. Clause G4.3.4 is outside the matter for determination in this case.

[23] An 'appropriate outfall' was considered in Determination 2024/050 Regarding compliance with the Building Code and the issue of a code compliance certificate for building work associated with a new dwelling (September 2024).

> 'On site stormwater, from all impervious surfaces, shall be disposed to sealed drains or sumps and piped to the culvert near the shared access'.

5.27. The records of title for the owners' property, and those of several of the neighbouring properties to the south and southwest, do include some arrangements for rights to drain water.

5.28. If the authority had been clearer in their refusal on the reasons why their assessment had required further information related to the performance in Clause E1.3.1 (as they allude to in their submissions at it would have served to inform the owner more clearly of what information was required rather than it being about 'agreement'. This first part of reason given is confusing in placing emphasis on an 'agreement' from other property which can be read as potentially accepting damage or nuisance (which would not comply with E1.3.1). Instead, it could have outlined more clearly what the issue/s were which appear from submissions to be whether the outfall to other property/s is appropriate and provides reasonable access, linking Clause E1.3.3(a) and (d), (amongst others) to Clause E1.3.1.

5.29. A further concern for the authority was the 'proposed design of on-site stormwater system also fails to provide calculations or evidences (sic) to show compliance to nominated E1/VM1'.

5.30. What remains unclear in the documentation is the effects of the additional surface water from the roof of the dwelling being received at the existing culvert. For example, I have received no supporting information that considers whether the capacity of the existing culvert is exceeded (or not) by the additional surface water from the roof of the dwelling it that takes into account the volume and velocity of the surface water already being received in a 10% AEP event, or how this may impact (or not) the other (downstream) neighbouring properties in terms of avoiding the likelihood of nuisance or damage.

5.31. Although the PS1 refers to a means of compliance with Verification Method E1/VM1, the documentation provided with the application for building consent did not include site-specific calculations or analysis in support of the E1/VM1 design proposal.

5.32. I am also of the view the construction of the new swale is part of the building work, including the associated sitework, ie the earthworks preparatory to and associated with construction and alteration of the relocated dwelling and associated extension.

5.33. This work takes into consideration the existing raised building platform and the proposed finished floor level of the relocated dwelling. Combined with the design for the new swale, this has the intention of diverting the existing overland flow path around the proposed location of the relocated dwelling.

5.34. Although the design of the new swale appears to have considered the anticipated volume and velocity of the surface water being received at and passing through the

swale is a '100 year design storm' event, it is not clear whether this redirected surface water (collected and concentrated by the new swale resulting from an event having a 10% probability of occurring annually), avoids the likelihood of damage or nuisance to other property.

5.35. It is not clear how the other properties may be affected by the increased velocity of surface water through the new swale. The report from the civil engineer did not reference or include analysis regarding the requirements of clause E1.3.1.

5.36. In this case, the plans and specifications do not demonstrate compliance with Clause E1 Surface water to the extent that the test under section 49(1) requires, therefore there are grounds on which to refuse to issue a building consent.

5.37. I do note, the authority's reasons for refusal, as stated in the written notice, should have been more explicit, specific, and clear.

6. Reason 4 – Foul Water (Clause G13.3.4)

6.1. The authority's concerns regarding foul water disposal (clause G13.3.4) are :

> The proposal has shown lack of information to demonstrate compliance to Building Code clause G13, in particularly [sic] to performance criteria G13.3.4, as there is no information provided by suitably qualified person's [sic] to confirm that existing OSET system is suitable to be re-used for proposed sitework and building.

Relevant building work

6.2. The design layout for the proposed new sanitary plumbing and drainage (to the point it reaches the on-site foul water treatment unit) is detailed on plan A081.

6.3. The issue for the authority was the existing on-site effluent treatment system (OSET).

6.4. Plan A081 refers to the treated water from being disposed of to the existing **reserve** field [my emphasis]. However, plan A010 appears to indicate the treated water being disposed to the 'Existing….pressure compensating dripline' and the **not** the existing reserve field.

Submissions

The owner

The owner submits (in summary):

6.5. The OSET installed under a previous building consent[24] "for the existing on-site waste water system (sewer) on the property (which currently serves the temporary building) ... is referenced on the plans which the [relocated dwelling] is to connect onto".

6.6. "As there is a sewer connection available which the drainage system can and so shall connect with, adequate provision is provided for under G13.3.3".

6.7. "Given the [code compliance certificate] issued by [the authority] confirms the existing OSET system meets the Building Code ... this demonstrates compliance with G13 for the relocated building".

The authority

6.8. "[T]he letter of refusal demonstrates that the application fails to demonstrate compliance with the Building Code because the proposal lacks information demonstrating compliance with cl G13, in particular performance criteria G13.3.4.

6.9. "While the existing OSET system appears to have a consent and can accommodate the capacity for the proposed dwelling, the proposal includes earthworks [that] will be partially laid over the existing septic tank and disposal field of the OSET system ... this requires further assessment by and SQP before compliance with G13 is confirmed".

6.10. In a "request for further information in respect of the prior consent application, which involved identical works, the authority identified several compliance issues with the OSET system and requested that the design was reviewed ... [T]he owner has been on notice since October 2023 that it required further information in respect of the OSET system".

Discussion

6.11. The Building Code's requirements for foul water are contained in Clause. The objectives of this clause include safeguarding people from illness due to contamination and from loss of amenity due to odours or offensive matter.

[24] BC182272, dated 19 February 2020.

6.12. Clause G13.2 requires dwellings to have adequate foul water storage, treatment and disposal systems if no sewer is available. Clause G13.3.2 includes performance requirements for the drainage system to convey this foul water to an "appropriate outfall".

6.13. Clause G13.3.4 contains performance requirements for facilities that store, treat and dispose of foul water, including that they must be constructed with "adequate capacity" and also to avoid the likelihood of contamination of soils, ground water and waterways except as permitted under the RMA, avoid the likelihood of blockage and leakage, and avoid damage from "normal ground movement".

6.14. The application for building consent (Form 2) states the means of compliance with Clause G13 Foul water is based on Acceptable Solution G13/AS1 (sanitary plumbing) and G13/AS2 (drainage).

6.15. The authority has raised concerns regarding the 'existing OSET system' and compliance with clause G13.3.4. The authority did not state specifically which of the sub-clauses (a) to (k) of clause G13.3.4 were at issue. If the authority was concerned with one of more of the sub-clauses it did not make this clear or specific which makes the issue more difficult to work through.

6.16. The authority has also referred to the lack of a confirmation from a 'suitably qualified person'. This does not make clear the authority's concerns with what is shown on the plans and specification are and is not in of itself a reason to refuse to issue a building consent.

6.17. Regardless, I have been provided with insufficient and contradictory information in respect of the proposed building work.

6.18. For example, plan A081 refers to the treated water from the relocated building being disposed to the existing reserve field. However, plan A010 appears to indicate the treated water will be disposed to the '[e]xisting ... pressure compensating dripline' and not the existing reserve field. This contradiction is further supported by the authority's section 50 letter which refers to requiring confirmation the 'existing OSET system is suitable to be re-used', and not the reserve field.

6.19. Resource consent RC29503-01 refers to the 'existing wastewater field shall be removed' and certification of a 'new wastewater field' but it is unclear how this relates to the proposed building work as shown on plan A010.

6.20. Without these items being resolved it is difficult to understand how compliance is being achieved with G13.3.4 (a) and (c) amongst others.

6.21. In this case, the plans and specifications do not demonstrate compliance with the Building Code to the extent that the test under section 49(1) requires, therefore is grounds on which to refuse to issue a building consent.

6.22. the authority's reasons for refusal, as stated in the written notice, should have been more explicit, specific, and clear.

7. Conclusion

7.1. On reason 1 - the natural hazard of slippage – there were grounds on which to refuse to issue a building consent.

7.2. On reason 2 - the anchor piles – there were grounds on which to refuse to issue the building consent.

7.3. On reason 3 - the surface water works - there were grounds on which to refuse to issue the building consent.

7.4. On reason 4, the foul water system - there were grounds on which to refuse to issue the building consent.

7.5. I do note throughout the discussion sections that the reasons given by the authority in its written notice should have been more explicit, specific, and clear to better inform the applicant.

7.6. The information contained in this determination should be taken into account if another application for building consent is presented.

8. Decision

8.1. In accordance with section 188 of the Building Act 2004, I confirm the decision of the authority to refuse building consent BC340631.

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 01/07/2025

Andrew Eames

Principal Advisor Determinations