



Determination 2021/016

Regarding the decision to issue a notice to fix for a retaining wall at 252 South Head Road, Parkhurst, **Auckland**

Summary

This determination considers the authority's decision to issue a notice to fix relating to a retaining wall surrounding a tennis court in a rural location. In making this decision the determination will consider the south and west sections of the retaining wall and whether the building work done to these sections falls under clause 41 of Schedule 1 of the Act.

1. The matter to be determined

- 1.1 This is a determination under Part 3 Subpart 1 of the Building Act 2004 ("the Act") made under due authorisation by me. Katie Gordon, National Manager Determinations, Ministry of Business, Innovation and Employment ("the Ministry"), for and on behalf of the Chief Executive of the Ministry.¹
- 1.2 The parties to the determination are:
 - Y Ke, JL Ke, and Z Ke, the owners of the property (as trustees of a trust) at the time the notice to fix was issued and recipients of the notice to fix, and who applied for this determination ("the applicants")
 - Auckland Council, carrying out its duties as a territorial authority or building consent authority ("the authority").
- JL Ke and J Ke are also party to the determination, as the current owners of the 1.3 property. The property ownership changed during the determination process.²
- 1.4 I also consider that the engineer, Thurlow Consulting Engineers and Surveyors Ltd, is a person with an interest in this matter.
- The determination arises from the authority's decision to issue a notice to fix³ 1.5 (NOT21493839)⁴ for building work to construct a retaining wall around a proposed tennis court⁵. The authority believes that the construction of the south and west sections of the retaining wall required a building consent, and that as no building

¹ The Building Act and Building Code (Schedule 1 of the Building Regulations 1992) are available at www.legislation.govt.nz. Information about the legislation, as well as past determinations, compliance documents and guidance issued by the Ministry, is available at www.building.govt.nz.

² On 23 July 2020. JL Ke and J Ke authorised Y Ke (a trustee of the trust at the time the notice to fix was issued) to act on their behalf, and did not participate separately in the determination process.

³ Section 164 of the Act.

⁴ The issue of notice to fix NOT21493839 dated 13 June 2020 was preceded by two other notices to fix; these other notices are not considered in this determination.

⁵ Notice to Fix NOT21493839 listed eleven items of contraventions with section 40 of the Act, and five related to non-compliance with section 17 (all building work must comply with building code). This determination only relates to one specific item of contravention with section 40. All the other items listed in the 'notice to fix' are not considered in this determination.

- consent was applied for or granted, the applicants breached section 40 of the Act⁶. The applicants contend that no building consent was required for the wall, as it was exempt under clause 41 of Schedule 1 of the Act⁷, and that as such, the notice to fix as it pertains to just that retaining wall has been incorrectly issued.
- 1.6 Accordingly, the matter to be determined⁸ is the authority's exercise of its powers of decision in issuing the notice to fix for the building work to the south and west sections of the retaining wall. In deciding this matter, I must also consider the application of clause 41 of Schedule 1 of the Act, and whether a building consent was required for the building work.
- 1.7 This determination is limited to the matter outlined above. It does not consider the accuracy or completeness of the notice to fix, or any other aspects of the building work or its compliance with the Building Code including Clause F4 *Safety from Falling*.
- 1.8 The relevant sections of the Act are contained in Appendix A. Unless otherwise stated, references in this determination to sections are to sections of the Act, and references to clauses are to clauses of the Building Code.

2. The building work

- 2.1 The property that this determination relates to (Lot 1 DP 146114) is a large (3.2 hectare) roughly oblong parcel of land located in a rural area in the north-west of the Auckland region, close to Kaipara Harbour.
- 2.2 The applicants were the owners of the property at the time that the building work was carried out and when the notice to fix relating to that building work was subsequently issued. Although the applicants are no longer owners of the property, for ease of reference the property will be referred to as "the applicants' property" in this determination.
- 2.3 The area where the applicants' property is located is zoned 'rural production' in the Auckland Unitary Plan. The property is sloping on the north-west side, with the slope running initially quite steeply and then more gradually downwards from the property's south-eastern corner.
- 2.4 There are numerous buildings and structures on the property including, at the time that the current issue arose, a main dwelling, games room, sleepout, cabins, pool, changing room and a variety of deck areas.
- 2.5 The building work that is the subject of this determination relates to a timber pole retaining wall. The relevant sections of the wall have been constructed on the north east corner of the property where the applicants proposed to build a tennis court. This determination only considers the southern and western sections of this wall, where it is at its highest (refer to figure 1).
- 2.6 The area that has been excavated for the tennis court lies below (down-hill from) the main dwelling. The excavation occurred in two stages, with some of the land that was initially excavated subsequently reinstated to reduce the height of the retaining wall. The nearest structure to the retaining wall is an area of decking adjacent to the pool, which is 4m away from the western side of the wall. The nearest boundary,

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⁶ Section 40 – buildings not to be constructed, altered, demolished, ore removed without consent

⁷ Schedule 1 – exempted building work, Part 3 – building work for which design is carried out or supervised by chartered professional engineer, clause 41 – retaining walls

⁸ Under sections 177(1)(b) and 177(2)(f) or 177(3)(e) of the Act.

being the property's eastern boundary, is 13.4m away from the south-eastern corner of the wall. The disputed southern aspect of the wall is 10.6m away from the closest structure, being the veranda of the main dwelling.

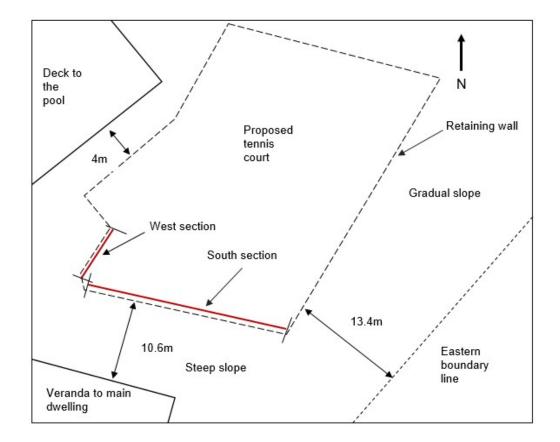


Figure 1: Site plan (not to scale)

- 2.7 The wall itself was originally intended to be constructed from 300mm diameter H5 treated poles, embedded to a depth of 2.6m at 1.7m intervals. Timber 150x50mm H5 treated rails were to span the poles, with a double layers of rails used on the bottom half of the wall, in areas where it is higher than 1m. However, the wall was not constructed as originally intended; the revised construction method that was used is detailed below at paragraph 3.10.
- 2.8 The area immediately behind the wall has been backfilled with drainage scoria, with a subsoil drain running at the base of this drainage trench to a discharge outlet.
- The wall's height varies around the perimeter of the excavated area, with its maximum height occurring on its southern and western aspects, where the maximum height is 1.5m (refer to figure 2). For much of its extent, the wall is less than 1m tall, and in places will be at the same level as the finished ground levels. The amount and slope of the land retained by the wall also varies, with the steepest slope occurring between the dwelling and the southern aspect of the wall, and adjacent to the top section of the wall's western aspect. These are also the areas where the wall is at its highest and that are of greatest concern to the authority. The engineer advises that at its steepest, the slope of the land above the wall is 1:3 (33°). This occurs behind the southern aspect of the wall, with the slope rising approximately 3m upwards, until it reaches the level building platform around the dwelling.



Figure 2: Complete retaining wall on the south west side, dated May 2020

3. The background

- 3.1 In 2019, the authority received a complaint that there was a 'large excavation' occurring on the applicants' property.
- 3.2 The authority visited the applicants' property on 16 September 2019. At this point the initial excavations for the tennis court had occurred, but a retaining wall had not yet been built. The excavation on the southern end of the proposed court had been done in two steps: the first step measuring approximately 1.4m deep, the second approximately 1.8m deep, giving a combined excavation height of 3.2m. In the south-western corner, the authority noted that the height of the excavated face was approximately 2.8m, and that in places the face was located only 300mm away from an existing driveway. The authority advised the applicant that the retaining wall would require a building consent.
- 3.3 On 24 September 2019, the authority issued a notice to fix (NOT21462495) to the applicants. The notice listed a number of contraventions and non-compliances with sections 17 and 40 of the Act, but did **not** mention the retaining wall that is the subject of this determination.
- 3.4 At some point, the applicant engaged an engineer to assist with matters relating to the retaining wall around the proposed tennis court. The engineer is a company of consulting civil and structural engineers and licensed cadastral surveyors.
- 3.5 On 15 October 2019, the engineer issued a producer statement PS1 Design⁹ for a 'New Timber Retaining Wall'. The PS1 confirmed that the engineer had been engaged to provide a 'Specific Engineering Design' for the retaining wall that is the subject of this determination; and that the PS1 confirmed compliance with Building Code Clause B1 Structure, and that the design conformed with *AS/NZS 1170* –

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⁹ A producer statement ("PS") is a professional opinion based on judgment and specialist expertise. It is not a product warranty or guarantee of compliance. Refer: https://www.building.govt.nz/projects-and-consents/apply-for-building-consent/support-your-consent-application/producer-statements/ (accessed on 13 May 2021)

Structural Design Action and NZS 3603 - Timber Structures Standard¹⁰. A certificate of design work attached to the PS1 confirmed that the engineer had 'supervised' the design work of the wall.

- 3.6 Also attached to the PS1 were structural calculations, plans and drawings for a new timber retaining wall, dated 14 and 15 October 2019. The calculations and plans show the existing excavated face of the land surrounding the proposed tennis court, and noted that the court is to be moved away from the existing dwelling, to retain the natural slope of the land, and that a timber retaining wall will be erected around the court's perimeter. The maximum height of land to be retained by the wall was 1.5m to 2m, and the calculations and design allowed for 'additional surcharge due to sloped ground profile' of 27 degrees.
- 3.7 I have not been provided with any exact information about when the retaining wall was constructed. However, photographs taken by the authority on 22 October 2019 show the face of the original excavation, now covered in polythene to protect it from the weather, but not yet retained by a wall. Inspection records provided by the engineer show that it inspected the excavation for the 'proposed retaining walls' on 6 November 2019 and the holes drilled for the retaining wall poles on 3 December 2019, and that at that stage the concrete footings for the walls had not yet been poured.
- 3.8 On 15 January 2020, the authority inspected the applicants' property to determine whether notice to fix NOT21462495 had been complied with. The inspection confirmed that there were still 'unauthorised works present on site' and that further work had been carried out without a building consent. This included the construction of the retaining wall that is the subject of the determination. Photographs taken during the visit show the retaining wall and the areas of backfilled land behind and alongside it, which had formed part of the initial excavation, but had now been reinstated. The authority advises that, at this visit, the contractor on site advised "the wall had been installed without the guidance of an engineer and no building consent had been lodged or approved" for it.
- Following this visit, on 16 January 2020, the authority issued a second notice to fix (NOT21478220) to the applicants. This notice replaced the earlier notice (see paragraph 3.3) and included (but was not limited to) the retaining wall that is the subject of this determination. The notice stated:

A retaining wall system approximately 1.5m high has been constructed, around the southern end of the proposed tennis court, supporting a slope surcharge and driveway to the north of the dwelling house (Contravenes exemption 20 of Schedule 1 of the Act – Retaining walls).

3.10 On 21 January 2020 the engineer conducted a 'final inspection' of the 'as-built' retaining wall. The engineer's inspection record confirms all the timber poles were at a spacing of 1200mm. Along the southern and western aspect of the wall the poles were 250mm in diameter. The height of the southern aspect of the wall was 1500mm from finished ground level to the top of the wall ("the retained height"). Along the western aspect of the wall the height varied between 1500mm and 900mm at the midpoint. The timber rails installed between the poles were 150mm x 50mm in size and were continuous over more than two spans between poles.

¹⁰ While the relevant amendment or year of these standards were not referenced in the producer statement, I assume they were the versions that were current at the time the producer statement was issued. As cited in Acceptable Solution and Verification Methods for Clause B1 Structure, Amendment 18, effective 27 June 2019, those were AS/NZS 1170 Part 0:2002 and Part 1:2002, and NZS 3603:1993.

3.11 On 31 January 2020, the engineer emailed the authority advising that it had been engaged by the applicants to provide engineering advice with respect to the unconsented building work on his property. The email referred to 'certain constructions that have been undertaken without the appropriate consents', and attached a PS4 – Construction Review dated 31 January 2020 for the timber retaining wall, stating that the wall had been constructed as 'an emergency work' and was 'necessary to establish stability and safety on site'.

- 3.12 The PS4 certified the wall's compliance with Clause B1 *Structure*. It noted that the engineer was unable to provide a producer statement with respect to Clause B2 *Durability*, as there was 'no effective verification method' for this clause, but that:
 - the timber used in the wall had been treated in accordance with Acceptable Solution B2/AS1¹¹
 - the concrete covers conformed with NZS 3101¹², and
 - the steel protection had been specified in accordance with AS/NZS 2312¹³.

The PS4 attached the two inspection records for the wall's construction, namely for the excavation dated 6 November 2019 and the holes for the poles dated 3 December 2019.

3.13 On 13 June 2020, the authority issued a third notice to fix (NOT21493839) to the applicants. This notice replaced the second notice to fix and, in its particulars of contravention, identified the retaining wall that is the subject of this determination, as follows:

Contrary to **s.40 of the Building Act 2004** (the Act), the following building works have been undertaken at 252 South Head Road, Parkhurst 0874, without first obtaining a building consent: ...

A retaining wall system approximately 1.5m high has been constructed, around the southern end of the proposed tennis court, supporting a slope surcharge and driveway to the north of the dwelling house. (Contravenes exemption 20 of schedule 1 of the Act – Retaining walls).

- 3.14 After the third notice to fix was issued, ownership of the property changed to the current owners on 23 July 2020.
- 3.15 The applicants applied for a determination and this was accepted by the Ministry on 14 July 2020. The Ministry issued several requests for further information to the parties, in order to clarify the scope of the matter to be determined. This was confirmed to the parties on 12 January 2021.

4. The submissions

4.1 The applicants' submissions

4.1.1 The applicants, acting through the engineer, made several submissions, both in support of the application and in response to the Ministry's requests for further information. The applicants also provided copies of plans, photographs, inspection reports, the PS1 and PS4 issued by the engineer, the correspondence between the parties, and other documents.

Ministry of Business, Innovation and Employment

¹¹ The documents detailed at paragraph 4.1.2 and contained in PS4 dated 31 January 2020, does no detail the version but at that time the relevant Acceptable solution was: Acceptable Solution B2/AS1, Timber treatment, Table 1A, dated 28 November 2019.

¹² New Zealand Standard NZS 3101: 2006 Concrete Structures Standard, Part 1, section 3.

¹³ AS/NZS 2312.2:2014 Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings

4.1.2 The main points from the applicants' submissions can be summarised as follows.

- The retaining wall is not more than 3m high.
- The applicants requested its engineer design the retaining wall around the tennis courts for 'safety reasons' and does not think there is any issue with its design.
 The engineer also prepared the topographical surveys and plans showing the wall's heights and clearances to other structures and boundaries, and certifies them as correct.
- The authority has 'erred in applying a notice to fix to the subject retaining wall which is clearly exempt under exemption 41 of schedule 1 of the Act'. The wall comes within clause 41 because it has been:
 - o designed and reviewed by a chartered professional engineer
 - o is in a rural area
 - o retains not more than 3m depth of ground.
- In addition, the distance between the wall and any legal boundary or existing building is at least the height of the wall, and the wall is not subject to any surcharge.
- The building work has been designed and constructed to comply with the Building Code, with a chartered professional engineer involved in the design and construction process. There should therefore have been no notice to fix issued for it, and the notice should be withdrawn.

4.2 The authority's submissions

- 4.2.1 The authority made several submissions in response to the application and the Ministry's information requests. The authority also provided copies of plans, photographs, the PS1 and PS4 issued by the engineer, and other documents.
- 4.2.2 The main points from the authority's submissions can be summarised as follows.
 - The retaining wall required a building consent and the owner and contractor were advised of this in late 2019. The wall has been constructed without a consent, so is in breach of section 40 of the Act.
 - The contractor who constructed the retaining wall has 'confirmed very clearly [that] an engineer had not been involved in its design'. In particular, at a site visit on 15 January 2020, the contractor advised the authority that 'the wall had been installed without the guidance of an engineer and no building consent had been lodged or approved'.
 - This lack of involvement by an engineer in the wall's design is 'corroborated' by the engineer's email of 31 January 2020, which 'raises doubt as to the engineering input into the design'.
 - The applicants' engineer was 'engaged to assess the code compliance of the wall'. While this is helpful, without engineering input into the wall's design before the wall was built, 'this work does not qualify for any of the exemptions provided for under part 3 of Schedule 1'.
 - The engineer has provided a PS4 and claims the works were carried out under urgency and his supervision, but has not applied for a certificate of acceptance for the retaining wall, as required by section 42.

Because the authority has not received any information about the retaining wall's
design or construction as part of a certificate of acceptance application, it has been
unable to assess the adequacy of its design. The applicants need to apply for a
certificate of acceptance, so that the authority can assess whether the 'unconsented
works will perform', and the applicants' engineer's opinion will help with this
process.

- The exemption in clause 41 of Schedule 1 is for retaining walls retaining not more than 3m depth of ground. Although the applicants' retaining wall is 1.5m high, along one aspect 'the slope above the wall at 45 degrees is such that the wall is supporting ground in excess of 3.0m high'. The wall also supports additional loads from the driveway, another retaining wall, and veranda in some places.
- Section 42A imposes general conditions and limits on building work exempt under Schedule 1, including the requirement in section 42A(2)(a) for the work to comply with the Building Code. From its initial assessment, the authority considers 'the wall is unlikely to be constructed to the building code for much of its length', due to the difficulty of making this design of retaining wall 'work for this situation'.

4.3 The engineer's submissions

- 4.3.1 The engineer has not made any submissions in its own right as a person with an interest. However, it has provided comments and documentation in its capacity as the applicants' agent, and these have been summarised above and taken into account in my decision.
- 4.3.2 A draft determination was issued to the parties for comment on 21 May 2021.
- 4.3.3 The applicants and the authority both accepted the draft determination without comment.

5. Discussion

- 5.1 The matter to be determined is whether the authority correctly exercised its powers of decision in issuing a notice to fix for building work undertaken not in accordance with section 40 of the Act.
- 5.2 The authority has issued three notices to fix, and each identified a number of contraventions and non-compliances with sections 17 and 40 of the Act. However, this determination only considers one aspect of the building work identified in the third notice to fix which is associated with the south and west sections of the retaining wall constructed in preparation for a proposed new tennis court (see paragraph 3.13).
- Whether the authority was correct to issue the notice to fix in relation to the south and west sections of retaining wall depends on whether the building work falls within the exemption in clause 41 of Schedule 1 of the Act ("clause 41"). If the building work is not exempt, then it required a building consent, and as no consent was applied for or granted, a notice to fix could be issued in respect of it. If, however, the work is exempt from the need for a building consent, then no notice to fix should have been issued for it, on these grounds.

5.4 Preliminary matters

5.4.1 In its correspondence, the authority raised the possibility that, because the building work had been carried out without a resource consent, it was in breach of the Resource Management Act 1991, and hence section 42A(2)(c) precluded it from being considered exempt. Previous determinations have considered the application of section 42A(2)(c)¹⁴, where it was concluded that building work would not lose its exempt status or require a building consent solely because it breached another enactment. This remains my view and applies equally to the applicants' building work.

5.4.2 I note also that, at present, the compliance of the retaining wall with the Building Code is not in dispute. Although the authority has reservations about the wall's construction, it has not yet fully assessed the wall for compliance. Accordingly, the wall's compliance does not form part of this determination.

5.5 The legislation

- 5.5.1 The relevant provisions can be found in sections 40 to 42A and Schedule 1 of the Act. These provisions are included in full in Appendix A.
- 5.5.2 Section 40 of the Act provides that building work is not to be carried out except in accordance with a building consent. Section 41 provides that building consent is not required in certain cases, including building work described in Schedule 1.
- 5.5.3 Section 42A elaborates on and attaches conditions to any building work for which building consent is not required under Schedule 1. The relevant provisions in the current case are:

42A Building work for which building consent is not required under Schedule 1

- (1) Despite section 40, subject to the conditions set out in subsection (2) and whether or not a building consent would otherwise have been required, a building consent is not required for building work in the following categories:
- (a) ...
- (b) ...
- (c) building work described in Part 3 of Schedule 1 if the design of the building work has been carried out or reviewed by a chartered professional engineer and the building work has been carried out in accordance with that design.
- 5.5.4 Schedule 1 then sets out the various categories of building work for which building consent is not required.
- 5.5.5 The notice to fix to which this matter relates stated that the retaining wall 'contravenes exemption 20 of schedule 1 of the Act retaining walls' (see paragraph 3.13). However, it is clear that the applicant contends that the building work has been undertaken under the auspices of clause 41, Part 3, of Schedule 1. As such, the evidence submitted to the Ministry by the applicant is in support of clause 41, not clause 20.
- 5.5.6 Clause 20, Part 1, Schedule 1 states

20 Retaining walls

Building work in connection with a retaining wall that—

¹⁴ See Determination 2016/009 Notices to fix and the refusal to issue a certificate of acceptance in respect of the conversion of a double garage over a boundary (23 March 2016) and Determination 2018/002 Decision to issue a notice to fix for a retaining wall (13 February 2018).

- (a) retains not more than 1.5 metres depth of ground; and
- (b) does not support any surcharge or any load additional to the load of that ground (for example, the load of vehicles).
- 5.5.7 It is clear that the southern aspect of the retaining wall does support an additional surcharge due to the slope of the ground extending from the dwelling down to the wall which the engineer describes as 1:3 (see paragraphs 2.9, 2.9 and figure 2). This precludes the possibility that the retaining wall could have been constructed in accordance with clause 20 of Schedule 1. As such, the notice to fix is correct in that the retaining wall does not meet the criteria in clause 20 of Schedule 1.
- 5.5.8 However, Part 3 of Schedule 1 applies to building work where the design is carried out or reviewed by a chartered professional engineer and the building work has been carried out in accordance with that design. Within part 3, clause 41 is the provision that the applicants have referred to in the current case as the exemption that applies.

41 Retaining walls

- (1) Building work in connection with a retaining wall in a rural zone, if—
- (a) the wall retains not more than 3 metres depth of ground; and
- (b) the distance between the wall and any legal boundary or existing building is at least the height of the wall.
- (2) In subclause (1), **rural zone** means any zone or area (other than a rural residential area) that, in the district plan of the territorial authority in whose district the building work is to be undertaken, is described as a rural zone, rural resource area, or rural environment, or by words of similar meaning.

5.6 The application of clause 41 to the retaining wall

- 5.6.1 Clause 41 contains three criteria that must be met if it is to apply to the building work for a particular retaining wall. These include:
 - the wall must retain not more than 3m depth of ground
 - the distance between the wall and any legal boundary or existing building must be at least the height of the wall, and
 - the property the building work has occurred on must be located in a rural zone, as defined in clause 41(2).
- 5.6.2 There is also the general criteria that applies by virtue of clause 41, Part 3 of Schedule 1, namely that the design for the building work is to have been carried out or reviewed by a chartered professional engineer and the building work carried out in accordance with that design.
- 5.6.3 Two of these criteria are clearly satisfied in relation to the applicants' wall. Firstly, the applicants' property, where the wall is located, is in the Rural Rural Production Zone in the Auckland Unitary Plan (see paragraph 2.3). Secondly, the wall has a maximum height of 1.5m, yet the closest boundary is 13.4m distant (at the wall's south-eastern corner), while the closest structure that might be considered a building (being the deck around the pool) is 4m distant from the wall's western aspect (see paragraph 2.6 and Figure 1).
- 5.6.4 It is the remaining two criteria the involvement of the engineer in the wall's design, and the depth of ground retained by the wall that the authority considers have not been satisfied, and I will now discuss each of these in turn.

5.7 The engineer's involvement in the wall's design and construction

5.7.1 The engineer is a chartered professional engineer, as required by section 42A(1)(c). However, the authority believes that the engineer was not sufficiently involved in the design of the wall early on for the building work to come within Part 3, and for the exemption in clause 41 to apply.

- 5.7.2 The authority's concerns appear to be based on its on-site communications with the contractor who constructed the retaining wall, and the engineer's email dated 31 January 2020, in which he advised that the wall had been constructed as 'an emergency works'.
- 5.7.3 Although I agree that there is some ambiguity in the engineer's email, since that date, further documents have come to light which I consider cast light on its meaning and can put the authority's concerns to rest.
- 5.7.4 In particular, it is clear that the engineer became involved in designing and reviewing both the design and construction work for the retaining wall before 15 October 2019. This is the date that the engineer produced the PS1 for the wall's design, which included plans showing the revised location for the wall, and structural calculations including the additional surcharges it would be subject to and the slopes it would retain. The PS1 is dated one month after the authority's inspection of 16 September 2019, at which it first noted the excavation for the tennis court (at that point unretained) and three weeks after it issued its first notice to fix on 24 September 2019, which made no mention of the specific retaining wall which is subject to this determination.
- 5.7.5 Photographs taken by the authority on 22 October 2019 show the excavated face of the land but the retaining wall had not been constructed at that time. This is after the PS1 for the retaining wall's design had been issued, although the authority was unaware of its existence at that stage. The engineer's inspection records show that the wall had still not been constructed on 6 November 2019 when it inspected the excavation, but that construction was underway on 3 December 2019 when it inspected the foundation holes for the poles.
- 5.7.6 The authority first became aware of the wall at an inspection on 15 January 2020, following which it issued its second notice to fix, this time including the retaining wall to the tennis court.
- 5.7.7 The engineer conducted a 'final inspection' of the completed wall on 21 January 2020, and issued a PS4 on 31 January 2020 certifying its compliance with Clause B1.
- 5.7.8 In my opinion, this sequence of events clearly demonstrates that the engineer was closely involved in supervising or reviewing the design of the retaining wall, and conducted on-site inspections during its construction. This is despite the verbal assurances given to the authority by the contractor which are not supported by the evidence in this case.
- 5.7.9 However, it is clear there are differences between the design of the retaining wall (see paragraph 2.7) and what has actually been constructed on site (see paragraph 3.10). For instance the design relied on 300mm diameter poles, but the engineer has confirmed 250mm diameter poles have been installed. Further, the design relies on the poles being installed at 1.7m centres, whereas the engineer measured the distance between the actual poles on site at 1.2m centres.
- 5.7.10 It is not clear what prompted these changes. Regardless, the engineer would have been aware of the change in the distance between the poles when it conducted the

site inspection on 3 December 2019. The engineer also noted in the inspection report of the same date that it had checked the diameter of the holes. This is a clear indication that the engineer was at least aware of the changes, and would not have passed the inspection, and issued the subsequent PS4 dated 31 January 2020 that confirms compliance with Building Code Clause B1 if it was not satisfied as to the 'as built' construction.

- 5.7.11 The authority did not have access to these documents when it issued its notices to fix. Now that they are available, I consider the engineer's references in its email to emergency works could be taken to mean the other unconsented works on the applicants' property, and the earthworks for the retaining wall identified by the authority at its site visit of 16 September 2019 (for which no resource consent had been obtained), that led to the issue of the first notice to fix. The engineer has confirmed in a subsequent correspondence that it was initially briefed solely in respect of the retaining wall around the tennis court, given the safety risks it posed and once the other areas of non-compliance had come to light.
- 5.7.12 Accordingly I conclude that the over-arching criteria for the building work to be considered exempt, as set out in section 42A(1)(c), has been satisfied for the applicants' retaining wall, in that "the design of the building work has been carried out or reviewed by a chartered professional engineer and the building work has been carried out in accordance with that design".

5.8 The depth of land retained by the wall

- 5.8.1 The other criteria that the authority considers is not fulfilled is the requirement in clause 41(1)(a) that "the wall retains not more than 3 metres depth of ground".
- 5.8.2 The authority appears to have concluded that this criteria is not met for two main reasons. Firstly, it considers that on the southern aspect of the retaining wall, 'the slope above the wall at 45 degrees is such that the wall is supporting ground in excess of 3.0m high'. Secondly, it states that at the top of the slope above the southern aspect of the wall, a smaller retaining wall, driveway and veranda are imposing a load or surcharge on the retaining wall, so it cannot be exempt.
- In my opinion, the authority's assessment is confusing two different requirements. The first requirement is the one in clause 41(1)(a) that the wall retains not more than 3 metres depth of ground. Whether this criteria is met, will depend, in part, on whether the slope of land above the wall is included within the 'depth of ground' being retained. In my opinion it is not.
- 5.8.4 The term 'depth of ground' is not defined in the Act. In my opinion, the plain meaning of the word 'depth' suggests that it is the measurement of the ground directly behind the wall, from the top of the wall to its base, which is relevant here. Had the slope of any ground above the wall needed to be taken into account, the word 'height' of ground or alternative phrasing would have been used in the Act. This alternate phrasing would indicate that the particular clause may include ground that was above what is already retained by a retaining wall. Equally, if clause 41 of Schedule 1 of the Act had intended to include the slope of any ground behind the wall it would have needed to have stated specific criteria regarding a minimum or maximum horizontal distance and slope of the ground to the rear of the wall that would needed to have been considered by the designer. The Act does not state any such parameters in clause 41 of Schedule 1.

5.8.5 The important distinction to make is that clause 20 of Schedule 1 includes specific reference to a wall that 'does not support any surcharge of any additional load of that ground', whereas clause 41 does not stipulate the same criteria.

- 5.8.6 The Ministry's guidance on exempt building work¹⁵ discusses both clause 20 and clause 41 of Schedule 1. Clause 20 creates an exemption for walls retaining not more than 1.5m depth of ground that do not support any surcharge or load additional to that of the ground. The guidance (at pages 191 to 193 inclusive) relates to walls that do not 'retain more than 1.5 metres (vertically) of ground'. An example of *additional load or surcharge* that such a wall may be subject to include 'sloping ground above the top of the retaining wall'. Such slopes are considered to impose a surcharge or load on the wall. Put another way, a 1.5m high retaining wall, with no land sloping above it (and subject to no other surcharge or additional load) would be exempt; a 1.5m high retaining wall, with land sloping above it would not be exempt. Both walls would fulfil the criteria in clause 20(a) to retain "not more than 1.5m depth of ground', but the second wall would not meet the criteria in clause 20(b) of not supporting any surcharge.
- 5.8.7 Similarly, in relation to clause 41 (at pages 194 and 195), the Ministry's guidance states that the clause 'exempts retaining walls designed or reviewed by a Chartered Professional Engineer of up to 3 metres and in a rural zone as long as they are not too close from the boundary or existing buildings'. The guidance clarifies that it is the height of the retaining wall, and the ground behind it, that is relevant, not the height of any slope above it.
- 5.8.8 This brings me to the second requirement that the authority is using to assess whether the criteria in clause 41(1)(a) has been met, namely the surcharge that it considers the wall is subject to. In my opinion, the existence or otherwise of a surcharge is not relevant for the purposes of clause 41. The restriction on surcharges derives from clause 20. No such restriction is specified for clause 41. This is likely to be because walls that are exempt under clause 41 must be designed with input from a chartered professional engineer, and it is reasonable to consider that an engineer would take any surcharge and additional loads into account. In this case, the engineer had confirmed, in an email dated 21 May 2020, that this is the case and the surcharge from the slope above the wall was taken into account in its design. This is supported by the fact that the slope of the land above the retaining wall is clearly included in the engineer's design calculations and noted in its final inspection report.
- 5.8.9 Accordingly, the existence of additional surcharges or loads is not something that needs to be taken into account for the purposes of clause 41(1)(a). The only issue is whether the wall retains ground of a depth of less than 3m, which in my opinion it does.

5.9 Conclusion

5.9.1 When the authority made its decision to issue the notice to fix (NOT21493839), it was correct in focusing on clause 20 of Schedule 1, rather than clause 41, on the basis of the evidence the authority had available at the time. This is because there was building work to the west and south sections of the retaining wall that didn't meet the criteria in clause 20 and the authority had been informed that the retaining wall had been installed without the guidance of an engineer. However based on

¹⁵ Ministry of Business, Innovation and Employment. (2020). *Building work that does not require a building consent: Exemptions guidance for Schedule 1 of the Building Act 2004* [fifth edition] (accessed on 17 May 2021), issued under section 175 of the Act.

evidence since provided by the applicants, I consider that the criteria of clause 41 have been met.

- 5.9.2 The applicants' wall has been constructed in a rural location, is not proximate to any boundary or existing building, retains approximately 1.5m depth of ground at its highest point, and has been designed and reviewed by a chartered professional engineer and the building work carried out in accordance with that design.

 Accordingly, the wall is exempt from the requirement to obtain a building consent, and the authority should reissue the notice to fix to remove any reference to it.
- 5.9.3 As the authority has pointed out, even though the retaining wall is exempt from requiring a building consent, it must still comply with the Building Code. The authority may choose to accept the applicants' engineer's opinion and certification that the wall complies. If, however, the authority continues to consider that the wall as designed and constructed does not comply with the Building Code, it can make its own compliance assessment of the wall. Such an assessment should be based on the evidence that the authority has before it, and any other relevant information it deems appropriate to request from the applicant.

However, on the basis of the information now before me, I conclude that the building work to construct the south and west sections of the retaining wall was exempt from the requirement to obtain building consent.

6. The decision

- 6.1 In accordance with section 188 of the Act, I determine the authority incorrectly included the building work to the south and west sections of the retaining wall in notice to fix NOT21493839.
- I modify the authority's decision to issue the notice to fix, NOT21493839, by removing the following item:
 - A retaining wall system approximately 1.5m high has been constructed, around the southern end of the proposed tennis court, supporting a slope surcharge and driveway to the north of the dwelling house. (Contravenes exemption 20 of schedule 1 of the Act Retaining walls).

Signed for and on behalf of the Chief Executive of the Ministry of Business, Innovation and Employment on 17 August 2021.

Katie Gordon National Manager, Determinations

Appendix A

The Building Act 2004

17 All building work must comply with building code

All building work must comply with the <u>building code</u> to the extent required by this Act, whether or not a building consent is required in respect of that building work.

Building consents

40 Buildings not to be constructed, altered, demolished, or removed without consent

- (1) A person must not carry out any building work except in accordance with a building consent.
- (2) A person commits an offence if the person fails to comply with this section.
- (3) A person who commits an offence under this section is liable on conviction to a fine not exceeding \$200,000 and, in the case of a continuing offence, to a further fine not exceeding \$10,000 for every day or part of a day during which the offence has continued.

41 Building consent not required in certain cases

- (1) Despite section 40, a building consent is not required in relation to—
- (a) ...
- (b) any building work described in <u>Schedule 1</u> for which a building consent is not required (see <u>section 42A</u>); or

42A Building work for which building consent is not required under Schedule 1

- (1) Despite <u>section 40</u>, subject to the conditions set out in subsection (2) and whether or not a building consent would otherwise have been required, a building consent is not required for building work in the following categories:
- (a) building work described in Part 1 of Schedule 1; or
- (b) building work described in Part 2 of Schedule 1 that is carried out by an authorised person (see subsection (3)); or
- (c) building work described in Part 3 of Schedule 1 if the design of the building work has been carried out or reviewed by a chartered professional engineer and the building work has been carried out in accordance with that design.
- (2) Subsection (1) is subject to the following conditions:
- (a) the building work complies with the building code to the extent required by this Act:
- (b) ...
- (c) the building work does not breach any other enactment:
- (d) ...

Schedule 1 Building work for which building consent not required

Part 1 Exempted building work

General

20 Retaining walls

Building work in connection with a retaining wall that—

- (a) retains not more than 1.5 metres depth of ground; and
- (b) does not support any surcharge or any load additional to the load of that ground (for example, the load of vehicles).

Part 3 Building work for which design is carried out or reviewed by chartered professional engineer

41 Retaining walls

- (1) Building work in connection with a retaining wall in a rural zone, if—
- (a) the wall retains not more than 3 metres depth of ground; and
- (b) the distance between the wall and any legal boundary or existing building is at least the height of the wall.
- (2) In subclause (1), rural zone means any zone or area (other than a rural residential area) that, in the district plan of the territorial authority in whose district the building work is to be undertaken, is described as a rural zone, rural resource area, or rural environment, or by words of similar meaning.